



December 2021

MTA Board Action Items



MTA Board Meeting

**2 Broadway
20th Floor Board Room
New York, NY 10004**

**Wednesday, 12/15/2021
10:00 AM - 5:00 PM ET**

1. PUBLIC COMMENT PERIOD

2. MTA OTHER BUSINESS

MTA 2022 Temporary Fare Promotions

MTA 2022 Temporary Fare Promotions - Page 5

3. MTA 2022 BUDGET ADOPTION MATERIALS (Action Items)(Budget Materials distributed separately and available in the Exhibit Book and MTA.Info)

Adoption of 2022 Budget and 2022-2025 Financial Plan (Available in the Exhibit Book and on MTA.Info) - Page 8

4. MTA Extension of Additional Death Benefits Related to COVID-19

MTA Extension of Additional Death Benefits Related to COVID-19 - Page 9

5. APPROVAL OF MINUTES

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MTAHQ

NYCT/MaBSTOA/SIRTOA/MTA Bus Company

MTA Metro-North Railroad

MTA Long Island Rail Road

MTA Triborough Bridge and Tunnel Authority

MTA Construction & Development

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6. COMMITTEE ON METRO-NORTH RAILROAD & LONG ISLAND RAIL ROAD

LIRR Procurements Report (no items)

MNR Procurements Report (no items)

MTA C&D Procurements Report

MTA C&D Procurements - Page 27

i. Non-Competitive (no items)

ii. Competitive

Competitive - Page 31

iii. Ratifications (no items)

7. COMMITTEE ON NYCT & BUS

Action Item

i. Service Changes: Bronx Local Bus Network Redesign

Bronx Local Bus Network Redesign Staff Summary - Page 34

NYCT & Bus Procurements Report

Procurement Cover, Staff Summary, and Resolution - Page 87

i. Non-Competitive (no items)

ii. Competitive

Competitive - Page 92

iii. Ratifications (no items)

iv. C&D Procurements

C&D Procurement Package - Page 97

8. COMMITTEE ON MTA BRIDGES & TUNNELS OPERATIONS

B&T Procurements (no items)

C&D Procurements

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9. COMMITTEE ON FINANCE

Action Item

i. Issue 2022 MTA and TBTA New Money Bonds, Bond Anticipation Notes, and Refunding Obligations; Reimbursement Resolution for Federal Tax Purposes

Authorization to Issue 2022 MTA and TBTA New Money Bonds, Bond Anticipation Notes, and Refunding Obligations; Reimbursement Resolutions for Federal Tax Purposes - Page 130

MTAHQ Procurements Report

MTAHQ Procurements - Page 170

i. Non-Competitive (no items)

ii. Competitive

MTAHQ Competitive Procurement - Page 173

iii. Ratification (no items)

iv. C&D Procurements Report

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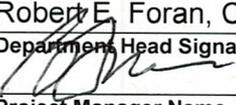
Real Estate Items

i. Real Estate Agenda and Staff Summaries

Real Estate Agenda and Staff Summaries - Page 186

10. FIRST MUTUAL TRANSPORTATION ASSURANCE CO (FMTAC) (no items)

11. EXECUTIVE SESSION

Subject MTA 2022 Temporary Fare Promotions	Date December 9, 2021
Department Office of the Chief Financial Officer	Vendor Name
Department Head Name Robert E. Foran, Chief Financial Officer	Contract Number
Department Head Signature 	Contract Manager Name
Project Manager Name	Table of Contents Ref #

Board Action					
Order	To	Date	Approval	Info	Other
1	MTA Board	12/15/21			

Internal Approvals			
Order	Approval	Order	Approval
1	CFO		
2	General Counsel		

Internal Approvals (cont.)							
Order	Approval	Order	Approval	Order	Approval	Order	Approval

Purpose

To obtain Board approval to launch four temporary fare promotions pertaining to travel on New York City Transit (NYCT), the MTA Bus Company (MTABC), the Staten Island Railway (SIR), Long Island Rail Road (LIRR) and Metro-North Railroad (MNR). The primary goals of these promotions are to: respond to post-pandemic travel patterns and attract customers now traveling less frequently than they were pre-pandemic; incentivize frequent customers to purchase ticket products that best suit their needs; expand customer adoption of OMNY and mobile ticketing; protect the finances of the MTA; and evaluate the impact of these promotions on operations. The MTA's aim is for these promotions to support the regional economic recovery and to encourage the return of customers to mass transit over the long term.

The three proposed temporary promotions for railroad customers are:

- Introduce a new discounted 20-trip ticket (20% off the regular peak fare price) on MTA eTix
- Offer an additional 10% discount on monthly tickets, beyond the significant discounts already offered
- Lower weekday off-peak fares for within NYC travel by expanding City Ticket from weekend to weekday for \$5.

The proposed promotion for subway, local bus and SIR customers is:

- Introduce the Weekly Best Fare feature on OMNY

The duration of these four promotions would be at least four months and may continue until the next permanent fare change process. During this time, the MTA will assess its impacts on operations, customer behavior and finances.

Discussion

The COVID-19 pandemic has had a devastating impact on the New York City region. While ridership has experienced a gradual recovery that mirrors the McKinsey projections built into the November 2021 Financial Plan, it remains well below the pre-pandemic level. At the same time, there have been significant changes in customer travel patterns. Most customers are currently traveling less frequently than they were pre-pandemic. At NYCT, while pay-per-ride travel has always been a significant share of ridership, it is an even greater portion now, and far less customers have been purchasing 7-day and 30-day unlimited passes, particularly the latter. On the railroads, there has been a similar move away from the purchase of unlimited passes.

Another significant trend has been the widespread adoption of OMNY and MTA eTix. OMNY was launched in May 2019, and after only 30 months the OMNY share of total subway/bus farebox revenue has grown to 19%. At the railroads, MTA eTix purchases now make up 50% of all ticket sales, up from 40% in 2019.

Proposed Railroad Promotions

New 20-Trip Ticket: To attract lapsed monthly ticket holders who no longer travel frequently enough to justify the purchase of a monthly ticket, or who may be uncertain about how frequently they will be commuting each month, the railroads would introduce a new 20-trip ticket that offers a 20% discount versus the price of two 10-trip peak tickets. Consistent with existing 10-trip tickets, the new 20-trip ticket would be offered for any trip to/from Zone 1. It would be valid for 60 days after date of purchase and be offered on MTA eTix only.

Sample - LIRR Zone 7

Sample - MNR Zone 4

Ticket Type	Fare	Cost Per Trip		Ticket Type	Fare	Cost Per Trip
Two 10-Trip Peaks	\$280.00	\$14.00		Two 10-Trip Peaks	\$255.00	\$12.75
20-Trip	\$224.00	\$11.20		20-Trip	\$204.00	\$10.20
Two 10 Trip Off Peaks	\$174.50	\$8.73		Two 10 Trip Off Peaks	\$166.00	\$8.30
Monthly	\$308.00	\$7.33		Monthly	\$278.00	\$6.62

Additional Discount on Monthly Tickets: Monthly tickets currently are discounted between 48% and 61% of the price of a comparable number of one-way peak tickets, depending on origin and destination. Monthly ticket discounts are deeper the longer the distance traveled. To incentivize frequent railroad customers to get back to purchasing a monthly ticket, the railroads would offer an additional 10% discount on all monthly tickets.

Sample - LIRR Zone 7

Sample - MNR Zone 4

Ticket Type	Fare	Cost Per Trip		Ticket Type	Fare	Cost Per Trip
Current Monthly	\$308.00	\$7.33		Current Monthly	\$278.00	\$6.62
Proposed Monthly	\$277.00	\$6.59		Proposed Monthly	\$250.00	\$5.95

Extend City Ticket Validity: Currently, City Ticket is priced at \$4.50 and valid for travel within the City Zone on weekends only. To attract customers to the Railroads who may have taken local or express buses or subways, this proposal would set the City Ticket fare to the price of the current one-way Atlantic Ticket (\$5.00) and extend its validity to include the weekday off-peak. Consistent with current policy, the City Ticket would be valid for travel on date of purchase only.

Sample - LIRR Zone 3-1

Sample - MNR Fordham – GCT

Ticket Type	Fare		Ticket Type	Fare
One Way Off Peak	\$7.75		One Way Off Peak	\$7.25
Proposed City Ticket	\$5.00		Proposed City Ticket	\$5.00

A key goal of these temporary promotions will be to evaluate their impacts on operations, the customer experience and farebox revenue. MTA will conduct all required Title VI analyses. The MTA expects to introduce these promotions on February 25, 2022 (in time for the pre-sale of monthly tickets) to coincide with the restoration of regular peak fares.

Proposed Subway and Bus Promotion

Introduce OMNY Best Fare Feature: OMNY offers the opportunity for the MTA to introduce a feature that would charge customers \$2.75 for the first 12 trips during a Monday-Sunday period, after which time all trips would be free until the following Monday. The benefit of this feature is customers do not need to pre-purchase a pass to get the benefits of an unlimited pass. This proposal would for the first time introduce a Weekly best fare feature to OMNY customers traveling on subways, local buses and SIR and guarantee that the customer never pays more than the cost of a 7-day unlimited MetroCard (\$33.00) for travel from Monday to Sunday. Customers would pay the \$2.75 pay-per-ride base fare for each of their first 12 linked trips during a Monday-Sunday period. All travel after the 12th linked trip would be free, and there would be no cap on the number of linked trips a customer could take during the seven-day period. Customers can get the benefits of an unlimited 7-Day Pass without having to pay upfront.

A key goal of this promotion would be to evaluate its impact on operations, the customer experience and farebox revenue. MTA will conduct all required Title VI analyses. The MTA expects to introduce the OMNY best fare feature in Spring 2022.

Impact on Funding

Given the uncertainty surrounding the pandemic and the pace of New York City's economic recovery, it is difficult to predict the financial impact of these promotions.

MTA staff estimates that the three railroad promotions could cost the MTA approximately \$3 million in lost revenue per month. The introduction of the 7-day best fare feature could cost the MTA between \$3 million and \$5 million in lost revenue per month. These revenue loss estimates do not include any revenue gains from induced trips, which would offset some of the loss.

Recommendation

It is recommended that the MTA Board approve this promotional package

Adoption of 2022 Budget and 2022-2025 Financial Plan

(Available in the Exhibit Book and MTA.Info)

Staff Summary

Subject AGREEMENTS WITH VARIOUS MTA UNIONS PROVIDING EXTENSION OF ADDITIONAL DEATH BENEFITS RELATED TO COVID-19
Department
Department Head Name Lisette Camilo, Chief Administrative Officer
Department Head Signature
Project Manager Name Paul Fama, Chief People Officer

Date December 15, 2021
Vendor Name N/A
Contract Number N/A
Contract Manager Name N/A
Table of Contents Ref. #

Board Action					
Order	To	Date	Approval	Info	Other
1	MTA Board	12/15/2021	X		

Internal Approvals			
Order	Approval	Order	Approval
1	Chief People Officer		
2	Chief Administrative Officer		
3	Chief Financial Officer		
4	General Counsel		
5	Acting Chair/CEO		

Purpose:

To obtain the Board's prospective approval of Agreements to be reached through collective bargaining with various MTA unions.

Discussion:

The MTA's heroic workforce has continuously provided critical transportation services during the pandemic, moving health care workers, first responders, and many other essential employees throughout the region. As of December 09, 2021, the agency has sadly lost 174 MTA employees due to COVID-19-related infections.

In April 2020 the MTA Board unanimously ratified the first-in-the-nation COVID-19 Family Benefits Agreement to provide payment of \$500,000 from the MTA to the spouse, beneficiary or estate of any worker who died as a result of COVID-19, in addition to providing health insurance for three years to the spouse and any dependent children (up to the age of 26).

Per their original terms, the supplemental death benefit agreements reached in April 2020 expired on April 13, 2021. In recognition of the ongoing toll of COVID-19 and to honor the heroic service of our colleagues, the MTA subsequently engaged with its Unions to discuss extension of these supplemental death benefits.

Those agreements extended the availability of the supplemental Family Benefits Agreement until August 31, 2021. Eligibility rules remained unchanged except an employee would relinquish eligibility for the supplemental benefits if an approved vaccine was made available to the employee and they were not vaccinated, unless the employee has a valid documented exception to vaccination. The vaccination requirement first went into effect on June 1, 2021. The agreements, with the vaccination requirement, were further extended by the Board in September 2021, until December 31, 2021. This Staff Summary requests the Board's adoption of a further extension under the same terms as those approved in September of this year until March 31, 2022 except the portion of the provision precluding payment where the deceased employee "did not receive a COVID-19 vaccine" is redefined to mean that payment is precluded unless the deceased employee is "fully vaccinated consistent with US CDC Guidelines, currently 2 weeks after their second dose in a 2-dose series, such as the Pfizer or Moderna vaccines, or 2 weeks after a single-dose vaccine, such as Johnson & Johnson's Janssen vaccine." Verbal agreement on the extension has been reached with the Transport Workers Union, representing the majority of represented employees at NYCT, and is currently being used as the template for discussions with the MTA's other bargaining units. In addition, the extension would apply to non-represented employees under equivalent terms, as with the original agreement.

Recommendation: It is recommended that the MTA Board prospectively approve extension of the earlier agreements through March 31, 2022 and authorize the Acting Chair, or his designee, to execute such agreements without further approval on the same terms with any certified representatives of MTA employees which have not yet executed such agreements. Further, the Acting Chair would be authorized to extend the supplemental benefits to the non-represented workforce under the same terms.

**Joint Minutes of the
Metropolitan Transportation Authority,
the New York City Transit Authority, the Manhattan and Bronx Surface Transit
Operating Authority, the Staten Island Rapid Transit Operating Authority, the
Metropolitan Suburban Bus Authority, the Triborough Bridge and Tunnel Authority,
the Long Island Rail Road Company, the Metro-North Commuter Railroad Company,
MTA Construction & Development, the MTA Bus Company and
the First Mutual Transportation Assurance Company
Regular Board Meeting
2 Broadway
New York, NY 10004
Wednesday, November 17, 2021
10:00 a.m.**

The following Board Members were present:

**Hon. Janno Lieber, Acting Chair & CEO
Hon. Andrew Albert
Hon. Jamey Barbas
Hon. Frank Borelli
Hon. Victor Calise
Hon. Lorraine Cortés-Vázquez
Hon. Michael Fleischer
Hon. Rhonda Herman
Hon. David Jones
Hon. Kevin Law
Hon. Robert W. Linn
Hon. David Mack
Hon. Haeda B. Mihaltses
Hon. Robert F. Mujica
Hon. Harold Porr, III
Hon. John Samuelson
Hon. Lawrence Schwartz
Hon. Neal Zuckerman**

The following alternate non-voting members were present:

**Hon. Gerard Bringmann
Hon. Norman Brown
Hon. Randolph Glucksman*
Hon. Vincent Tessitore, Jr.***

***Attended remotely**

Paige Graves, Acting General Counsel, Robert Foran, MTA Chief Financial Officer, Paul Fama, MTA Chief People Officer, Patrick Warren, Chief Safety Officer, Craig Cipriano, Interim President, NYCTA, Frank Annicaro, Acting President, MTA Bus, Robert Free, Senior Vice President - Operations, LIRR, Catherine Rinaldi, President, Metro-North Railroad, Daniel DeCrescenzo, President, TBTA, Jamie Torres-Springer, President, MTA C&D, Lisette Camilo, Administrative Officer, Shanifah Rieara Senior Advisor, Cate Contino, Assistant Director Government Affairs, also attended the meeting.

The Board of the Metropolitan Transportation Authority also met as the Boards of the New York City Transit Authority, the Manhattan and Bronx Surface Transit Operating Authority, the Staten Island Rapid Transit Operating Authority, the Metropolitan Suburban Bus Authority, the Triborough Bridge and Tunnel Authority, the Long Island Rail Road, the Metro-North Commuter Railroad Company, the MTA Capital Construction Company, the MTA Bus Company, and the First Mutual Transportation Assurance Company.

Unless otherwise indicated, these minutes reflect items on the agenda of the Board of the Metropolitan Transportation Authority, the New York City Transit Authority, the Manhattan and Bronx Surface Transit Operating Authority, the Staten Island Rapid Transit Operating Authority, the Metropolitan Suburban Bus Authority, the Triborough Bridge and Tunnel Authority, the Long Island Rail Road, the Metro-North Commuter Railroad Company, the MTA Capital Construction Company, and the First Mutual Transportation Assurance Company.

Acting Chair Lieber called to order the November 2021 Board meeting.

Acting General Counsel Paige Graves confirmed a quorum of the Board members in attendance, for the record.

A recorded audio public safety announcement was played.

1. PUBLIC SPEAKERS' SESSION.

The MTA Moderator announced that the following public speakers will speak both live virtually and in-person.

The MTA Moderator reminded public speakers of the rules of conduct, the two-minute speaking limit and that speakers will be alerted when 30 seconds remain to conclude their remarks.

The following public speakers commented (*live virtual comments):

Joe Kunzler, private citizen*
Charlton D'Souza, President, Passengers United*
Lourdes De La Cruz, TWU, Local 100
Alexandra Leflair, CIDNY
Aleta Dupree, private citizen*

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Mary Parisen Lavelle, CURES*
Lisa Daglian, Executive Director, PCAC
Bradley Brashears, PCAC
Jason Anthony, Amazon Labor Union*
Andy Pollack, Passengers United*
Kara Gurl, PCAC
Bruce Hain, private citizen
Valerie Joseph, BCID*
Sasha Blair-Goldensohn, Rise & Resist Elevator Action Group*
Michael Ring, Disabled in Action
Rachael Fauss, Reinvent Albany
Joseph Rappaport, Executive Director, BCID
Tramell Thompson, TWU, Local 100

Refer to the video recording of the meeting produced by the MTA and maintained in MTA records for the content of speakers' statements.

2. ACTING CHAIR LIEBER' S REMARKS.

Chair Lieber thanked the public speakers who spoke in person, and live virtual public speakers.

Chair Lieber thanked the Board members and welcomed new colleagues in attendance: MTA C&D President Jamie Torres-Springer, Chief Administrative Officer Lisette Camilo, and Senior Advisor Shanifah Rieara, all formerly New York City government employees.

Chair Lieber stated that, as stated at previous Board meetings, bringing back ridership is by far the MTA's top priority, and he is happy to report that October was another good month, with 130 million rides for the month—a 10% increase over September. Chair Lieber stated that the agency Presidents will provide more detail on ridership later in the meeting.

Chair Lieber stated that an equally positive element to the story is service and, as President Cipriano will report, on-time performance on the subways was higher last month than September—almost beating the agency's all-time best. In addition, Chair Lieber stated that customers' trips are faster overall now than before the pandemic, compared to October 2019—even with slightly longer wait times on the platforms due to the impact of crew shortages. Chair Lieber stated that the faster trips are attributed to the work that was done during COVID to replace and recalibrate signal timers, to re-evaluate speed limits, and otherwise to reduce track and signal-related delays and slowdowns.

Chair Lieber stated that postponing the fare increase and service reductions are other agency initiatives to bring back customers. As Governor Hochul announced on Monday, the federal COVID relief aid approved by Congress, which New York will receive after reaching a deal with New Jersey, will allow the MTA to postpone fare increases for at least six months, and hopefully beyond, and will also allow the MTA to eliminate the service reductions the agency had anticipated might be necessary to balance the budget in future years.

Chair Lieber thanked Senator Schumer and the entire NY delegation, and Governor Hochul for negotiating a compromise solution with the MTA partners in New Jersey and Connecticut to free up the money.

Chair Lieber stated that there remains a very substantial structural deficit in the MTA's budget in 2025, and CFO Robert Foran and Deputy CFO Jaibala Patel will provide the details during the presentation of the November Financial Plan. Chair Lieber stated that he has started discussions with the Governor's office and with key legislators about the actions needed at some point to address the MTA's budget challenges, but for right now the MTA's top priority is bringing riders back, which is why the business decision was made, for the time being, to postpone the fare increases and the prospect of service reductions.

Chair Lieber stated that the MTA is exploring several other strategies to bring more people back to transit, including aggressively promoting enrollment in the Fair Fares program—a program that provides low-income riders a 50% discount. The MTA will continue its talks with the City on this initiative and discuss setting high goals in terms of enrollment.

Chair Lieber stated that only approximately 30% of all eligible people are enrolled in the Fair Fares program, and as part of his discussions with Board member David Jones, who of course is the godfather of this initiative, the MTA has decided to use the federal poverty level to determine income eligibility for the program.

The MTA is working with the New York City Department of Transportation (“NYCDOT”) to accelerate bus service by adding bus lanes, busways and more, which is a matter of transit equity. Chair Lieber stated that throughout the city there are communities, which tend to be low-income communities and communities of color, where people rely on the buses as mass transit and the MTA must give these communities more and enhanced service.

The MTA and NYCDOT Commissioner Hank Gutman are working together to add bus lanes and bus ways and to quickly add cameras to do enforcement more aggressively to keep the bus lanes and busways open, which Chair Lieber stated is the only way the MTA will speed buses and deal with the fundamental equity issue.

Chair Lieber stated that, as was revealed in the customer survey, the MTA customers are concerned with safety, and as a result the MTA has been discussing with the New York City Police Department (“NYPD”), and other leadership organizations in city government, strategies to have a more visible NYPD presence in the system.

Chair Lieber stated that the MTA is also looking at new fare promotions to accommodate post-COVID schedules—where commuters might be going to the office less than five days a week, which is part of the MTA's fare strategies working group, a joint effort between the Board and the staff. Chair Lieber stated that a lot has been learned from the customer survey, and Sarah Meyer, Senior Vice President & Chief Customer Officer, will present the results of the survey later in the meeting.

Chair Lieber stated that during COVID the MTA made huge improvements to the system, and customers are noticing. Chair Lieber noted an article written by Winnie Hu at the New York Times on all the improvements made to the transit system since people were away. Ms. Hu's article cited the improvements to signals, work done in Times Square, on the Grand Central mezzanine, and in Penn Station, which was also mentioned during the public comment period. Progress is being made with respect to ADA access—the MTA is knocking out stations much faster than ever before, in addition to the OMNY initiatives, digital screens, and Chair Lieber stated that the MTA is glad that the N.Y. Times is noticing the progress.

Chair Lieber stated that it has also been a particularly exciting and historic month for the LIRR system. A couple of weeks ago, Governor Hochul joined the Chair on the first East Side Access (“ESA”) test trains to travel from Jamaica Station to Grand Central Terminal, which is currently anticipated to open by the end of 2022. Chair Lieber stated that the Capital Program for 2024 may have been on pause for a year when it was not certain if capital money would be available in the height of COVID, but the ongoing projects have not been neglected, and the ESA timeline is intact, and the MTA is committed to the project.

Chair Lieber stated that the 3rd Track project also continues to be on time and under budget and is one of the most complicated projects the MTA has ever done—MTA's model of a mega project. Last week, the MTA reopened Carle Place, that is the first station on the third track to be reconstructed as part of that great project.

Chair Lieber stated that yesterday the MTA cut the ribbon on the LIRR's first new station in at least 50 years—the new station in Elmont, just in time to run service for the Islanders' first game at the nearby UBS Arena. This commitment was made by the State of New York and by the Empire State Development Corporation, and the MTA was tasked with executing the commitment. The Chair stated that the procurement for this program was started at the beginning of COVID, and the MTA delivered the hugely high-profile project for Long Island on-time and on budget.

Chair Lieber stated that Governor Hochul's new Penn Station proposal, which has received a lot of positive attention since her announcement a couple weeks ago, is intended to fast track repairs to the existing Penn Station, prioritizing the facility New Yorkers utilize and will continue to use forevermore, because that is where riders connect to the subways, the LIRR tracks, and where the Metro-North Railroad trains, when they come in through the Amtrak Hell Gate line and use those tunnels under the East River, will ultimately end up connecting.

Chair Lieber stated that the Governor has said that she does not want to wait until after the Gateway Tunnels are completed in 2035, which will increase New Jersey Transit and Amtrak access to the City of New York, and which the State supports and is providing 25% of the funding, to complete the existing Penn Station project.

Chair Lieber stated that he has spoken about how the four-year hiring freeze, that began prior to COVID, put enormous pressure on the organization, and how the MTA's antiquated recruiting and compensation policies have made it hard to attract and retain talent. The Chair

stated that the MTA has massive attrition, and the organization needs to be able to compete with other employers and make the MTA an attractive place where people want to create their careers.

Chair Lieber stated that fortunately the MTA has resumed hiring—hundreds of future operators and conductors are currently in training classes and will be ready for service in the new year. The MTA’s budget plan has allowed for the resolution of many open labor contract negotiations and the implementation of a modest cost of living salary adjustment for the existing non-represented staff. Chair Lieber stated that, as indicated by Interim President Craig Cipriano, training has been expedited and the training facility capacity has been increased—training more people so that needed service can be delivered.

Chair Lieber stated that the MTA is also building out the new consolidated teams. The Chair stated that, as he stated previously, the transformation has been disruptive in some ways but now the organization is past the transformation phase and is working to make those new teams work. The MTA is welcoming new employees and bringing back its workforce to the office in the effort to create a cohesive, high-functioning organization, and Chair Lieber stated that he is thrilled to welcome Chief Administrative Officer Lisette Camilo, who will oversee this process.

With respect to the “Vax and Test” process, Chair Lieber stated that the organization is working out the kinks, and the good news is, so far, the MTA’s strategy appears to be working. The MTA’s vaccination rate continues to grow— with 70% of the workforce absolutely confirmed as receiving vaccinations, and it is believed that the number is closer to 80%, due to the intensive, statistically significant analysis that has been done of the people who have not registered their vaccination results. The MTA is making vaccinations and boosters available to its entire workforce and implementing testing for those who are, for whatever reason, not vaccinated, which has been implemented at 700 locations in the MTA system, allowing people to drop off their vials or other test materials.

Chair Lieber stated that the MTA’s COVID infection rate—well below 1% at this point, is below the statewide average, and the crewmembers are showing up for work. Chair Lieber stated that the goal is to deliver consistent service every day, and keep New York moving, and he thanked the Board for their continued engagement, support and encouragement throughout this challenging period and the last few months, as the organization moves through this transition.

Refer to the video recording of the meeting, produced by the MTA and maintained in MTA records, for the details of Acting Chair Lieber’s remarks.

3. RIDERSHIP AND CROSSINGS UPDATE.

New York City Transit Authority:

Craig Cipriano, Interim President, NYCT, reported that NYCT is carrying 4.8M riders across subways, buses and Paratransit, which is 60% of NYCT's 8M riders pre-pandemic. He reported that subway ridership continues to climb, peaking at over 3.3M and averaging 54% of pre-covid weekday ridership when compared to October 2019. He reminded everyone that NYCT was at just 50% last month in September.

Cipriano reported that following the large surge in September from school re-openings, bus ridership appears to have stabilized, and is slowly but steadily rising from 63 to 65 % of pre-covid levels. He reported that Paratransit ridership remains strong, noting that in October Paratransit had the highest daily trip count since the pandemic began.

Cipriano said the team is closely monitoring these trends as riders return to the system. He reported that ridership into and out of the Central Business District (CBD) stands at about 51% of normal ridership levels, just about at system-wide ridership levels. Cipriano said that this is the market that traditionally defines NYCT's capacity needs and is typically composed of riders commuting to office jobs. He informed that ridership within CBD stands at about 41% of normal ridership within the CBD, and represents a mix of tourist trips, suburbanites transferring to subways from major terminals, non-work trips, and includes people who both live and work or attend school south of 60th Street. Cipriano stated that while CBD is currently the market with the lowest share compared to pre-Covid ridership levels, it is also the fastest rebounding sector of them all. Cipriano conveyed that NYCT expects that as tourists and office workers continue to come back to the CBD, this market will continue to grow.

Cipriano reported that local trips within the outer-boroughs and long-distance trips between outer-boroughs are strong, at 65% and 64% respectively. He noted that this represents a mix of school, shopping and discretionary trips as well as essential non-office job trips.

Cipriano remarked that while many of these variables are beyond our control, performing great service is within our control. He noted some of the recent performance highlights, including improved weekday-on-time performance, which was 83% in October. He said that this was 3% better than last year and 2% better than two years ago.

Cipriano reported that NYCT has reduced total weekday delays over the last month by 8.3%, largely by decreasing delays attributed to internal causes such as track and signal failures. He said subway lines operate faster now at peak hours than they did before the pandemic, and faster than in 2019. He also reported that despite continuing crew shortages, service delivery improved from September to October by 1.5%.

Cipriano reported that Buses has returned to pre-Covid patterns. He said earlier in the pandemic, the Bronx bus routes retained the greatest share of riders, presumably because many of those riders were essential employees who used the bus for their essential trips. He noted that in recent months, Brooklyn and Queens has caught up. Cipriano stated that the same is true for express routes, which have also started returning to pre-Covid distributions. Cipriano

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said they had greatly lagged the local routes, but that in the fall we have seen the fastest growth as the office markets on those routes have come back to light. Cipriano reported that in regard to Paratransit, trip patterns have remained largely the same as they did pre-Covid.

Cipriano stated in closing that the NYCT team is acutely focused on delivering the best service across subways, buses and Paratransit to support the continued return of our riders.

Metro-North Railroad:

Metro-North President Catherine Rinaldi stated that, except for a bit of a drop off in early September due to the effects of Hurricane Ida on the region, Metro-North's decision to increase service at the end of August was the prudent move in anticipation of the region's returning to work.

For the month of October, Metro-North's daily ridership appears to have flattened out a little bit – although yesterday's ridership was the highest yet at 137,000 plus rides. Last week's ridership was up 1% from the prior week, 1.7% from two weeks ago, 2.9% from one month ago, 12.9% from the first week after Labor Day, 29.9% from the first week in August, and almost 34% from the first week in July.

With holiday season right around the corner, Metro-North believes it is unlikely that more offices are going to open in the next couple of weeks and does not forecast a weekday ridership increase trend until the beginning of 2022. Metro-North continues to monitor ridership on a daily basis, with data showing that it still has capacity overall – although it is monitoring individual trains for perceived capacity issues. Metro-North stands ready to respond to changes in ridership by increasing services as needed and travel options, as riders continue to return to the rails.

In the meantime, Metro-North remains focused on several strategies to welcome back its riders. Its TrainTime app, which tracks real time capacity on its trains, continues to help customers feel comfortable about getting back on board – by letting them see where the most seats are available on arriving trains and then spacing out and entering where they like. Metro-North recently announced the pairing of Apple watches with the TrainTime app, which gives customers with Apple watches the ability to have that data on their watches. This will soon also be available on Android watches. Daily cleaning and disinfection of trains is also a fundamental element of Metro-North's pandemic response and an important component of building and maintaining confidence in its system. Finally, Metro-North has Station Ambassadors at some of its busiest stations handing out masks to customers. Train crews are also handing out masks on board.

Metro-North is committed to responding to the concerns of its customers and is thrilled to be welcoming them back.

Long Island Rail Road:

Long Island Rail Road ("LIRR") Senior Vice President – Operations Rob Free, who spoke on behalf of LIRR President Phillip Eng, stated that for October ridership continued to creep up.

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For weekdays, LIRR was at 52% of pre-pandemic ridership. For November so far, weekday ridership is at around 50% of pre-pandemic ridership. Weekends remain strong, with Saturdays at 72% of pre-pandemic ridership and Sundays at 76% of pre-pandemic ridership.

In October, more than 3.9 million rides were taken on the system, which is an 8½% increase over September. Ridership trends are returning to normal in terms of the busiest periods during the rush hours, with the busiest period during the peak between 8 am and 9 am. LIRR has the capacity on its trains to accommodate customers during this hour and during the entire peak period. While some trains have higher customer counts and less available capacity than others, LIRR constantly monitors ridership using various methods such as train counters and load weight technology – which tells LIRR in real time what loading conditions are like on each train it operates. It uses this data to influence scheduling to ensure that it is able to provide the best service during these fluid times.

Customer safety is paramount, and LIRR wants the public to know that it is doing all that it can to make them comfortable taking mass transit. LIRR is continually monitoring and adjusting where it is able to do so in order to meet customer needs.

The ability to see real time information is available on customer smart phones via the LIRR Train Time app. In the app, customers can see their upcoming train and how many seats are available in each car before the train arrives in their station. This provides an opportunity for customers to reposition themselves so that they can board the train in a car with more seats available. The app also displays recent loading conditions for each scheduled train – allowing customers to choose the trip that best meets their needs. LIRR encourages customers to download the app and take a look for themselves.

Triborough Bridges and Tunnels Authority:

TBTA President DeCrescenzo stated that TBTA's traffic numbers remain strong as the region continues to recover from the COVID-19 pandemic. In October 2021, 28.2 million vehicles crossed TBTA facilities, which is 1.3% lower as compared to October 2019; the YTD traffic numbers are approximately 7.7% lower than 2019. Most TBTA facilities' traffic numbers are trending close to pre-pandemic levels, with a few exceptions. At the Hugh L. Carey Tunnel, traffic volumes surpassed 2019 levels by as much as 10% on some weekdays. This may be attributed to the recently implemented lane reduction on the Brooklyn-Queens Expressway as motorists divert to the tunnel and the post-Labor Day return-to-office/back-to-school traffic volumes. At the Throgs Neck Bridge there has been a 9.5% decline in vehicular traffic, most likely due to the ongoing deck replacement construction at that facility. Motorists have seemingly been diverting to the neighboring Bronx-Whitestone Bridge, where we have seen an increase in vehicular traffic since September 2021. As we approach the Holiday Season and associated Gridlock Alert days, TBTA will continue to monitor traffic patterns and communicate with motorists on changing conditions at our facilities.

Commissioner Fleischer inquired as to the status of congestion pricing. Dr. C. de Cerreño responded that the Environmental Assessment (EA) is moving forward, and 16 public meetings have been held with six focused on Environmental Justice issues. Three public meetings are

coming up in early December and meetings are being held with the Environmental Justice Technical Advisory Group and the Environmental Justice Stakeholder Working Group. The modeling is well under way and we are beginning to receive draft EA chapters. We expect that the draft EA will be released for public input in late May 2022. Acting Chair and CEO Lieber commented that the EA will be comprised of and summarize all of the material that has been collected through the extensive outreach and the modeling, and that the EA is the next major step forward in this process.

Board Member Law asked whether a correlation has been found between TBTA's traffic numbers and commuter rail/transit ridership that could quantify the percentage of former rail/transit riders who are now commuting by car versus continuing to work remotely. President DeCrescenzo referred to Sarah Meyer's upcoming report on the Customer Satisfaction Survey and COVID Study for all MTA Transit Services as likely providing some information responsive to Board Member Law's inquiry. President DeCrescenzo also responded that TBTA could look into performing such direct comparison and added that we have observed upticks in traffic during both the morning rush and the afternoon rush. The afternoon rush, however, appears to be extended due to changes in travel patterns and commuting trends that are no longer based on a typical 9-to-5 Monday through Friday work schedule. While traffic volumes are comparable to 2019, the volume seems heavier due to those changes in travel patterns and commuting trends.

Refer to the video recording of the meeting, produced by the MTA and maintained in MTA records for the details of the presentations and for the Board members' comments and discussion.

4. CUSTOMER SURVEY PRESENTATION.

Sarah Meyer, Senior Vice President & Chief Customer Officer, Office of Customer Communications, presented the results of the customer survey.

Refer to the video recording of the meeting, produced by the MTA and maintained in MTA records, for the details of Sarah Meyer's presentation and Board members' comments and discussion.

5. AUTOGATE ANNOUNCEMENT.

Quemuel Arroyo, Chief Accessibility Officer, provided details of the AutoGate pilot program.

Refer to the video recording of the meeting, produced by the MTA and maintained in MTA records, for the details of Quemuel Arroyo's presentation.

6. CHIEF FINANCIAL OFFICER PRESENTATION ON MTA 2022 FINAL PROPOSED BUDGET AND NOVEMBER FINANCIAL PLAN 2022-2025.

Acting Chair Lieber introduced MTA Chief Financial Officer Robert Foran who introduced the MTA 2022 Final Proposed Budget and November Financial Plan for 2022-2025. Jaibala

Patel, Deputy Chief Financial Officer, presented an overview of the November Financial Plan.

Acting Chair Lieber noted that the November budget presentation was for informational purposes only and that the Board would vote on the budget materials at the December 15, 2021 Board meeting.

Copies of the proposed budget and plan were distributed to Board members.

Following the presentation, the Chair thanked Robert Foran and Jaibala Patel, and invited Board discussion concerning the proposed budget and the financial plan.

Refer to the video recording of the meeting, produced by the MTA and maintained in MTA records, for the details of CFO Robert Foran's and Deputy CFO Jaibala Patel's presentation and Board members' comments and discussion.

7. APPROVAL OF MINUTES.

Upon motion duly made and seconded, the Board approved the Minutes of the MTA Regular Board meeting held on October 20, 2021.

Refer to the video recording of the meeting, produced by the MTA and maintained in MTA records for the details.

8. NEW YORK CITY TRANSIT AND BUS COMMITTEE.

A. NYCT Procurements.

Competitive Procurements: Upon motion duly made and seconded, the Board approved competitive procurements requiring a two-thirds vote (Schedule C in the Agenda) and a majority vote (Schedule G in the Agenda).

Details of the above items are set forth in staff summaries, copies of which are on file with the records of the meeting of the Board of MTA NYC Transit /Staten Island Rapid Transit Operating Authority /MTA Bus Company.

B. C&D Procurement.

Regarding Item No. 2 below, Board Member Calise inquired if the passageway will be made accessible as part of the work under Contract 37129. NYCT Acting President Cipriano stated that this is a design-build contract, and they were looking into whether ramps could be added. Acting Chair Janno Lieber committed to providing a follow-up response to Board Member Calise. Subsequently, but not part of the meeting, Board Member Calise was advised by C&D President Jamie Torres-Springer the existing passageway between 6th and 7th Avenues will be made fully accessible under the scope of this Contract.

Upon a motion duly made and seconded, the Board:

1. Adopted a resolution, pursuant to Public Authorities Law Section 1265-a.4.d and Article III(B)(4)(b) of the All Agency General Procurement Guidelines, declaring that competitive bidding is impractical and it is in the public's best interest to utilize a non-competitive procurement process for Contract S-48017 to evaluate the Communications Based Train Control ("CBTC") equipment supplied by newly approved CBTC Supplier, Mitsubishi Electric Power Products Inc., in revenue service on the Queens Boulevard Line East Project.
2. Approved the award of a publicly advertised, competitively solicited and negotiated design-build contract (A37129) for the Design and Construction of Accessibility Upgrades at the 14th Street Complex in the Borough of Manhattan to Citnalta-Forte JV in the amount of \$192,972,000 and a duration of 32.5 months.
3. Approved the award of a long-term elevator maintenance contract (connected with the award of A37129 listed above) to Mid-American Elevator Company, Inc. in the amount of \$5,205,085 and a duration of 15 years.

The details of the approved procurements are contained in a staff summaries and documentation filed with the records of this meeting.

9. **JOINT RAILROAD LONG ISLAND RAIL ROAD/METRO-NORTH RAILROAD COMMITTEE.**

Committee on LIRR.

A. Procurements: None

Committee on Metro-North Railroad.

A. Procurements: None

MTA Construction and Development Company ("C&D).

A. Procurements:

Upon a motion duly made and seconded, the Board:

1. Approved the award of a publicly advertised, competitively solicited and negotiated Public Works contract (6356) to Posillico Civil, Inc. to construct Phase 3B of Long Island Rail Road's Sandy Restoration and Resiliency Project for the Long Island City Storage Yard for the lump sum price of \$38,092,008 and for a duration of 670 days (Base Contract) plus 470 Days (Options).
2. Approved the award of Modification No. 26 to the Consultant Construction Management contract (PS819) for the East Side Access Project to Jacobs/LiRo Joint
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Venture for the not-to-exceed amount of \$27,966,042 for:

- Additional funding in the not-to-exceed amount of \$7,118,347 to cover the anticipated costs associated with the remaining thirteen months (i.e., December 1, 2021 – December 31, 2022) of a two-year option that was previously exercised by MTA Construction & Development Company.
 - The inclusion of an option for the period commencing on January 1, 2023 until final close-out of all East Side Access contracts for the not-to-exceed amount of \$7,154,542.
3. Approved the award of Modification No. 1 to the Program Management Consultant Services contract (PS877) for the New York Penn Station Long Island Rail Road Train Hall Renovation Project to WSP USA, Inc. for the not-to-exceed amount of \$27,966,042 to extend the contract term for an additional twelve-month period from January 23, 2023 to January 22, 2024

The details of the approved procurements are contained in the staff summaries and documentation filed with the records of this meeting.

10. TRIBOURGH BRIDGE AND TUNNEL COMMITTEE.

A. Procurements: None

11. MTA COMMITTEE ON FINANCE.

A. Action Items.

Upon motion duly made and seconded the Board approved the action items listed below. The specifics are set forth in the staff summaries and documentation filed with the meeting materials.

1. Approval of Municipal and Swap Advisors. Approved the appointment of the PRAG Team as general financial advisor relating to the issuance of MTA and TBTA bonds and other capital market activities, and Mohanty Gargiulo LLC to serve as an advisor on derivative transactions for a period of five years each and includes up to two annual renewals for each of the contracts.
2. Revised Advertising Standards. Approved and adopted the revised MTA Advertising Policy that includes revisions to the MTA's Advertising Standards.

B. Information Item.

1. 2020-2021 Station Maintenance Receivable. The Board was informed of the station maintenance billings and collections as of September 30, 2021. The specifics are set forth in the staff summaries and documentation filed with the meeting materials.

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C. Procurement Items.

Upon motion duly made and seconded the Board approved the procurement item listed below. The specifics are set forth in the staff summary and documentation filed with the meeting materials.

1. Guardian Service Industries, Inc. (New York, New York) – Custodial Services for Grand Central Terminal – No. 20211201. Approved a competitively negotiated, miscellaneous service contract for Guardian Services Industries Inc. to provide Grand Central Terminal custodial services with an option for engineering services (currently provided by Jones Lang LaSalle [“JLL”] employees).
2. Marsh USA, Inc. – All-Agency Master Broker Services – No. 16365. Approved an amendment to the Board-approved competitively negotiated personal services contract 16365 with Marsh USA, Inc. to replenish funds in the amount of \$3 million to cover master broker core services; substantial recovery claims/Federal Emergency Management Agency (“FEMA”) services including but not limited to forensic accounting; and other professional and expert services arising from the Superstorm Sandy, Covid-19, and hurricanes Isaias and Ida until the expiration date of the contract. Upon settlement of the recover claims, some of the administrative costs will be credited back to the MTA.
3. KD Analytical LLC – PROECTS Chemical Detection System – No. 1000076648. Approved a modification of a non-competitive miscellaneous services contract with KD Analytical LLC or continuous maintenance, support, and related services for five years (three-year base, plus two one-year options) at the estimated cost of \$6,165,163.

D. Real Estate Items.

Upon motion duly made and seconded the Board approved the real estate items listed below. Board Member Haeda Mihaltses recused herself from the vote on item # 3 below. The specifics are set forth in the staff summaries and documentation filed with the meeting materials.

Metro-North Railroad

1. Extension of the Board Policy Suspending the schedule for events in Vanderbilt Hall, Grand Central Terminal, N.Y.

Metropolitan Transportation Authority

2. Lease amendment with SLG Graybar Mesne Lease LLC in support of MTA Police Department training at 420 Lexington Avenue, Suite 616, N.Y.

New York City Transit Authority

3. An agreement with New York Arena Partners to rename the Elmont LIRR station to Elmont – UBS Arena.

12. COMMITTEE ON CORPORATE GOVERNANCE.

A. Action Item.

Upon motion duly made and seconded the Board approved the action item listed below. The specifics are set forth in the staff summary and documentation filed with the meeting materials.

1. Revisions to Board Committee Charters. Approved the revisions to the MTA Committee Charters for Capital Program Oversight (“CPOC”), New York City Transit/MTA Bus, Metro-North Railroad, Long Island Rail Road and Bridges and Tunnel. The revisions will create increased efficiency and minimize redundancies by having all MTA Construction and Development (“C&D”) procurement contracts, that require Board approval, be approved by CPOC instead of separately by each operating committee beginning in January 2022.

13. EXECUTIVE SESSION.

Upon motion duly made and seconded, the Board convened an Executive Session, pursuant to Section 105(1)(e) of the New York State Public Officers Law, to discuss matters relative to collective bargaining.

14. PUBLIC SESSION RESUMES. Upon motion duly made and seconded, the Board voted to resume the public session.

Upon motion duly made and seconded the Board approved the following collective bargaining agreements:

- 1) MTA Metro-North Railroad and the International Association of Machinists (IAM), covering approximately 280 Metro-North employees;
- 2) MTA Metro-North Railroad and the American Railway and Airway Supervisor Association (ARSA MoE), representing Foremen in the Maintenance of Equipment Department, covering approximately 210 Metro-North employees;
- 3) MTA Metro-North Railroad and the Association of Commuter Rail Employees, Division 16 (Signalmen), covering approximately 270 Metro-North employees;
- 4) MTA Metro-North Railroad and the Association of Commuter Rail Employees Division 37 (Power Directors), covering approximately 26 Metro-North employees; and
- 5) New York City Transit (NYCT) and the Doctors Council, Service Employees International Union (SEIU) Local 10MD, covering approximately 15 Physicians and Deputy Medical Directors.

15. ADJOURNMENT.

Upon motion duly made and seconded, the Board voted to adjourn the meeting at 1:00 p.m.

Respectfully submitted,

Susan Sarch
Vice President,
General Counsel and Secretary
Metro-North Railroad

Stephen N. Papandon
Acting Vice President,
General Counsel and Secretary
Long Island Rail Road Company

Mariel A. Thompson
Assistant Secretary
NYCTA

David K. Cannon
Assistant Secretary
MTA C&D

Julia R. Christ
General Counsel and
Corporate Secretary
TBTA

Victoria Clement
Assistant Secretary
MTAHQ

Contracts

David K. Cannon, Vice President

PROCUREMENT PACKAGE December 2021

PROCUREMENTS

The Procurement Agenda this month includes one action for a proposed expenditure of \$31.3M

Staff Summary

Subject		Request for Authorization to Award a Procurement Action			
Department		Contracts			
Department Head Name David K. Cannon, Vice President & Chief Procurement Officer					
Department Head Signature					
Board Action					
Order	To	Date	Approval	Info	Other
1	B&T Committee	12/13/21	X		
2	Board	12/15/21	X		

Date: December 10, 2021			
Internal Approvals			
	Approval		Approval
X	Deputy Chief Development Officer, Delivery	X	President
X	Deputy Chief Development Officer, Development	X	Executive Vice President & General Counsel

Purpose

To obtain the approval of the Board to award a procurement action and to inform the Metro-North and Long Island Rail Road Committees of this procurement action.

Discussion

MTA Construction & Development proposes to award a Competitive Procurement in the following category:

<u>Schedules Requiring Majority Vote</u>	<u># of Actions</u>	<u>\$ Amount</u>
F. Personal Services Contracts	<u>1</u>	<u>\$ 31,319,480</u>
	TOTAL 1	\$ 31,319,480

Budget Impact

The approval of this procurement action will obligate capital funds in the amount listed. Funds are available in the capital budget for this purpose.

Recommendation

This procurement action be approved as proposed. (The item is included in the resolution of approval at the beginning of the Procurement Section).

MTA Construction & Development

BOARD RESOLUTION

WHEREAS, in accordance with Sections 559, 2879 and 1265-a of the Public Authorities Law and the All Agency Procurement Guidelines, the Board authorizes the award of certain non-competitive purchase and public works contracts, and the solicitation and award of request for proposals in regard to purchase and public work contracts; and

WHEREAS, in accordance with the All Agency Procurement Guidelines, the Board authorizes the award of certain non-competitive miscellaneous service and miscellaneous procurement contracts, certain change orders to purchase, public work, and miscellaneous service and miscellaneous procurement contracts;

WHEREAS, in accordance with Section 2879 of the Public Authorities Law and the All-Agency Guidelines for Procurement of Services, the Board authorizes the award of certain service contracts and certain change orders to service contracts.

NOW, the Board resolves as follows:

1. As to each purchase and public work contract set forth in annexed Schedule A, the Board declares competitive bidding to be impractical or inappropriate for the reasons specified therein and authorizes the execution of each such contract.
2. As to each request for proposals (for purchase and public work contracts) set forth in Schedule B for which authorization to solicit proposals is requested, for the reasons specified therein, the Board declares competitive bidding to be impractical or inappropriate, declares it is in the public interest to solicit competitive request for proposals and authorizes the solicitation of such proposals.
3. As to each request for proposals (for purchase and public work contracts set forth in Schedule C for which a recommendation is made to award the contract), the Board authorizes the execution of said contract.
4. As to each action set forth in Schedule D, the Board declares competitive bidding impractical or inappropriate for the reasons specified therein, and ratifies each action for which ratification is requested.
5. The Board authorizes the execution of each of the following for which Board authorization is required: i) the miscellaneous procurement contracts set forth in Schedule E; ii) the personal service contracts set forth in Schedule F; iii) the miscellaneous service contracts set forth in Schedule G; iv) the modifications to personal/miscellaneous service contracts set forth in Schedule H; v) the contract modifications to purchase and public work contracts set forth in Schedule I; vi) the modifications to miscellaneous procurement contracts set forth in Schedule J.
6. The Board ratifies each action taken set forth in Schedule K for which ratification is requested.

DECEMBER 2021

LIST OF COMPETITIVE PROCUREMENTS FOR BOARD APPROVAL

Procurements Requiring Two-Thirds Vote:

Schedule C. Competitive Requests for Proposals (Award of Purchase/Public Work Contracts)
(Staff Summaries required for all items greater than \$1M)

- | | | | |
|----|---|---------------|--------------------------------------|
| 1. | Hitachi Rail STS USA, Inc
Contract No. 6398
1,098 Calendar days | \$ 31,319,480 | <u>Staff Summary Attached</u> |
|----|---|---------------|--------------------------------------|

MTA Construction and Development requests Board approval to award a publicly advertised and competitively solicited contract for design-build services for the Long Island Rail Road (“LIRR”) Queens Interlocking Signal System.

Schedule F Personal Service Contracts
Staff Summary

Item Number 1

Dept & Dept Head LIRR Business Unit, Andrew Wilson, Acting Chief Engineer						SUMMARY INFORMATION																									
Contracts Department Ian Goldrich, SVP and Deputy General Counsel						Vendor Name Hitachi Rail STS USA, Inc.	Contract Number 6398																								
Board Reviews						Description Design-Build Services for Queens Interlocking Signal System																									
<table border="1"> <thead> <tr> <th>Order</th> <th>To</th> <th>Date</th> <th>Approval</th> <th>Info</th> <th>Other</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>MNR & LIRR Joint Committee</td> <td>12/13/21</td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>Board</td> <td>12/15/21</td> <td>X</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>						Order	To	Date	Approval	Info	Other	1	MNR & LIRR Joint Committee	12/13/21	X			2	Board	12/15/21	X									Total Amount \$31,319,480	
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	Approval		Approval																												
X	Deputy Chief, Development	X	President																												
X	Deputy Chief, Delivery	X	Executive Vice President & General Counsel																												
						Renewal? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																									
						Procurement Type <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive																									
						Solicitation Type <input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:																									
						Funding Source <input type="checkbox"/> Operating <input type="checkbox"/> Capital <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Other:																									

Purpose/Recommendation

MTA Construction & Development (“C&D”) requests Board approval to award a publicly advertised and competitively solicited contract to Hitachi Rail STS, USA Inc. for design-build services for the Long Island Rail Road (“LIRR”) Queens Interlocking Signal System Project (“Project”) in the amount of \$31,319,480 and a duration of 1,098 Calendar days.

Discussion

Contract 6398 (“Contract”) will upgrade the LIRR Queens Interlocking Signal System located on LIRR’s Main Line east of Jamaica Station in Queens County, N.Y. where four active tracks support LIRR commuter service to and from New York City. Queens Interlocking is divided into five separate remote control interlockings that manage switching on the active tracks and provides switching access to LIRR’s new Elmont Station. The Contract provides for the design, fabrication, assembly, delivery, systems integration and testing of a new signal system for Queens Interlocking, including pre-wired central instrument locations (“CILs”), auxiliary huts, track cases, switches, signals and ancillary equipment. The Design-Builder will also set and secure the assembled CILs and auxiliary huts at the Project site. LIRR Force Account will install all wayside signal and switch equipment and connect all cables to the CILs and auxiliary huts.

A one-step Request for Proposal (“RFP”) process was conducted for this Contract. The requirements were publicly advertised in the New York State Contract Reporter, N.Y. Daily News, and on the MTA website. In response to the RFP, a single proposal was received from Hitachi Rail STS, USA Inc (“Hitachi”). A market survey was performed and other prospective proposers who initially expressed interest in the Project advised that they had workload issues, were unsure if they could meet the technical requirements, or preferred to serve in a subcontracting capacity. Hitachi has been the prime provider of signal equipment for the LIRR for well over a decade and other firms have been unwilling or unable to compete with them. This is an issue that C&D is aware of and trying to rectify.

Hitachi’s proposal was evaluated by a Selection Committee consisting of representatives from C&D and LIRR utilizing the following pre-established selection criteria: technical approach (including project organization), proposed staff experience, corporate experience and schedule. After review of the Hitachi proposal, the Selection Committee determined that Hitachi’s proposal demonstrated a thorough

Schedule F Personal Service Contracts**Staff Summary**

Item Number 1

Page 2 of 2

understanding of the scope and an efficient approach to the work, utilizing effective means and methods. Furthermore, Hitachi's experience in designing, fabricating, integrating and testing rail signal systems met and/or exceeded the RFP requirements.

Hitachi's proposal was in the amount of \$32,550,750. C&D entered into negotiations with Hitachi to address various cost-savings initiatives and scope clarifications. Thereafter, Hitachi was requested to reassess their price for any additional efficiencies or other cost-saving measures. As a result, Hitachi submitted a Best and Final Offer ("BAFO") that reduced the proposed price by \$1,231,270 (4%), resulting in a final negotiated price of \$31,319,480. C&D performed cost and price analysis on Hitachi's BAFO and the price was deemed to be fair and reasonable.

In connection with previous contracts awarded to Hitachi, Hitachi was found to be responsible notwithstanding Significant Adverse Information ("SAI") pursuant to all All-Agency Responsibility Guidelines, and such responsibility findings were approved by the MTA Deputy Chief Operating Officer in consultation with the MTA General Counsel in July 2021. No new SAI has been found relating to Hitachi and Hitachi has been found to be responsible.

D/M/WBE/SDVOB Information

The MTA Department of Diversity and Civil Rights (DDCR) has established a 22.5% DBE goal for the Contract. Although this is a design-build contract with some undefined scope, Hitachi is projecting to meet the required DBE goal requirements. Hitachi has not completed any MTA contracts with D/M/WBE goals, therefore, no assessment of the firm's D/M/WBE performance can be determined at this time.

Impact on Funding

Federal funding for this Project is included in the MTA's 2015-2019 Capital Program Budget.

Alternatives

There are no alternatives since C&D and the LIRR do not have the resources to undertake and complete this Project timely.

Service Changes: Bronx Local Bus Network Redesign

Judith McClain, Chief, Operations Planning, NYCT

Service Issue

The proposed Bronx Local Bus Network Redesign focuses on reimagining New York City's bus network to provide customer-focused routes, and faster and more reliable travel times. The redesigned Bronx local, limited, and Select Bus Service (SBS) bus network aims to meet the following network redesign strategies: simpler, more direct routes, balanced bus stops, enhanced connectivity, improved frequency on key routes, and expanded bus priority, with ten key corridors identified in the Bronx for bus priority street improvements.

More details, including the addendum to the proposed Final Plan and individual route profiles can be viewed at <https://new.mta.info/bronxbusredesign>.

Recommendation

Implement the Bronx Local Bus Network Redesign for local, limited, and SBS bus service.

Budget Impact

The Bronx Local Bus Redesign will increase the net annual operating cost of Bronx bus service by approximately \$2.7 million. This includes \$1.4 million of NYCT operating costs and \$738,000 of MTA Bus operating costs that will be implemented in the summer of 2022, and \$568,000 of NYCT annual operating costs that will be implemented in 2023. In addition, there will be one-time costs of \$1.6 million to train staff on the new routes and \$255,000 to change the bus stops.

Implementation Date

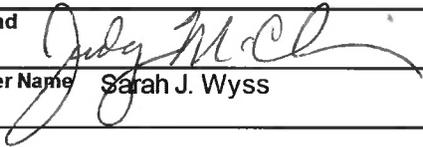
Implementation of most routing and schedule changes is proposed for summer 2022 with the following exceptions:

Due to the 18-month pause caused by the COVID-19 pandemic, Bx6 SBS implementation will be delayed until 2023 to coincide with the retirement of MetroCard, the full deployment of OMNY across the city, and the implementation of all-door boarding in 2023. The logistics and expense associated with installing and then uninstalling SBS off-board fare collection machines along the future alignment in Soundview for just one year would not be a prudent use of limited resources. The associated changes to the Bx5 and Bx6 Local schedules will also be postponed until 2023 when the Bx6 SBS realignment is implemented.

Some bus stop changes have been made in advance of the Bronx Local Bus Network Redesign Plan being implemented in conjunction with NYCDOT's bus priority projects. Additionally, bus stop changes will begin prior to the actual implementation date, as time is required for NYCDOT staff make the necessary changes for the proposed implementation date.

Staff Summary



Subject	Bronx Bus Network Redesign
Department	Operations Planning
Department Head Name	Judith McClain
Department Head Signature	
Project Manager Name	Sarah J. Wyss

Date	December 9, 2021
Vendor Name	N/A
Contract Number	N/A
Contract Manager Name	N/A
Table of Contents Ref #	N/A

Board Action					
Order	To	Date	Approval	Info	Other
1	President		X		
2	NYCT Comm		X		
3	Board		X		

Internal Approvals			
Order	Approval	Order	Approval
8	President	4	VP General Counsel
7	CFO	3	Dpty Chief, Mgmt & Budget
6	Acting SVP Buses	2	Director GCR
5	Chief Cust. Officer	1	Chief OP

Purpose

The purpose of this staff summary is to attain Board approval to implement the Bronx Local Bus Network Redesign for local, limited and SBS bus service. The redesigned bus network will better serve ridership demand while improving customers' commutes and overall service reliability via customer focused routes, and faster and more reliable travel times. The redesigned Bronx bus network has simpler, more direct routes, improved bus stop spacing, enhanced connectivity, improved frequency on key routes, and expanded bus priority. Each of these network redesign strategies will be explained in further detail under the Discussion section of this staff summary. More specifically, we have further strengthened our partnership with NYCDOT and have identified ten key corridors in the Bronx for bus priority improvements. Some corridors have already received priority treatments, some are underway, and others are forthcoming.

Discussion

Approximately 1.5 million residents live in the Bronx, with the borough's population increasing by just over six percent since 2010.

Prior to the COVID-19 pandemic the Bronx experienced roughly 675,000 bus boardings on an average weekday. Nearly 60 percent of Bronx residents rely on public transit for their daily commutes and at least 16 percent commute primarily by bus. There are 46 local, limited and SBS bus routes in the Bronx, with two operated by MTA Bus Company, the Bx23 and Q50 Limited.

An Existing Conditions Report was completed in February 2019. This report included market and service analyses that provided an in-depth examination of the following key data elements: population and employment demographics, travel patterns, ridership, transfer information, stop spacing, slow bus speeds, productivity performance metrics, financial performance, and service

reliability metrics. The Report, along with valuable information gathered from our customers through public outreach, was used to inform the decision making and overall process that created the Draft Plan.

This plan proposed 14 route alignment changes and two new routes. There were several key redesign strategies that were employed when developing the Draft Plan that have remained omnipresent through development and revisions to the proposed Final Plan:

- **Simplify the network** – more direct routes bring bus customers to key destinations faster, while routes that make a lot of turns and take roundabout paths are slower and less useful for customers. Streamlining routes may include shortening or splitting routes if customer volumes are low and multiple bus service options exist. Streamlined routes are often more reliable and efficient because they avoid congested areas and are easier to manage.
- **Enhance connectivity** – many bus customers, especially those in the Bronx, make transfers to reach their final destinations. This plan works to enhance east-west connectivity across the borough as well as inter-borough travel by facilitating transfers and reducing wait times for buses. Four routes will be extended and three will make key connections to subway stations.
- **Improve frequencies** – prioritizing an all-day frequent network is critical to getting customers to their destinations while allowing for easy, flexible travel. Frequent service allows customers to change plans and rely on the transportation network. This plan improves frequency on 11 routes along nine corridors.
- **Balance bus stops** - Each bus stop removed from a route saves an average of 20 seconds, but depending on location and time of day, each stop removed might save a minute or more travel time for everyone on the bus and makes bus service more reliable. These savings stem from buses not having to exit and re-enter traffic so often. New York City's bus stops are closer together than most other cities across the country and around the world, so the added travel time to the next closest bus stop is not typically long (averaging less than two extra minutes to reach). This plan proposes removing about 400 bus stops. Careful consideration has been given to each stop regarding ridership, distance between stops, transfers, community facilities, and local demographics.
- **Expand bus priority** – buses move hundreds of thousands of customers in the Bronx. Because of their importance in transporting people to/from and within the borough, NYCDOT has done extensive work to give buses preferential treatment on streets where appropriate to improve bus speeds and reliability. NYCDOT analyzed 46 corridors in the Bronx and Manhattan and selected ten of the highest-ranking corridors to implement a variety of bus priority treatments that speed up buses and allow the MTA to operate more frequent service. These improvements include new bus lanes, transit signal priority (TSP), bus boarders, and curb management.

The Draft Plan was released in May 2019 and was followed by an extensive round of outreach from June through September 2019. Public feedback was solicited via in-person open houses, in-person on-street pop up events, the MTA website, interactive surveys online, community board presentations, presentations to elected officials and other key stakeholders, and via our social media platforms. Multiple iterations and significant revisions were made to the Plan in response to feedback from the public, elected officials, and labor unions, resulting in the proposed Final Plan in October of 2019. The proposed Final Plan maintained most of the benefits of the original recommendations while responding to our customers' needs. Public input was solicited on the proposed Final Plan and adjustments to the Plan were shared with the public prior to the public hearing held in February 2020. One key change made prior to the

Staff Summary



public hearing was to remove changes to Express Bus Service from the proposed Final Plan. We will revisit Express Bus Service Redesign at a later time.

Due to the COVID-19 pandemic, the decision was made in March 2020 to pause the Bus Network Redesign initiative to ensure that resources were concentrated where they were needed most, specifically moving our essential workers as quickly and safely as possible. The project remained paused for approximately 18 months. In August 2021, Acting MTA Chair and CEO Janno Lieber and Interim New York City Transit President Craig Cipriano joined New York City Department of Transportation (NYCDOT) Commissioner Hank Gutman to announce many exciting bus initiatives, including the restart of the Bronx Bus Network Redesign. Since then, outreach efforts have included: a presentation to Bronx Borough President Ruben Diaz, Jr. and elected officials, a briefing for the Bronx Borough Board, sharing updates to the proposed Final Plan with transit advocates, presentations to interested community boards, and a virtual public meeting to culminate this customer-led project.

After constructive feedback from customers who attended the February 2020 public hearing or submitted written comments, and from those customers who spoke at our November 9, 2021, virtual public meeting or submitted written comments, we have completed the new Bronx Local Bus Network Final Plan, which includes alignment changes to 16 regular bus routes, two being new routes, to make them simpler and more direct, while expanding connectivity and strengthening key east-west corridors in the Bronx.

Originally, the proposed Final Plan called for alignment changes to the Bx28 and Bx34, making it more direct by avoiding circuitous segments and narrow, one-way streets when possible. However, strong community opposition demonstrated that the current alignments of the Bx28 and Bx34 are valuable and most preferred by existing bus customers. After field visits from agency staff members and hearing from members of the community during our February 2020 public hearing, it was agreed that these routes would no longer change and remain as-is. The proposed frequency improvements to the Bx28 are still planned.

The two new local bus routes are the Bx25 and the M125. The Bx25 will provide service from northern Co-op City to Allerton Avenue and Bedford Park. It will share the Allerton Avenue corridor with the Bx26, ensuring that Allerton Avenue maintains the same frequency levels it has today. The M125 is a new route being proposed with changes to the Bx15 and M100. The Bx15 will be shortened, terminating at The Hub, with the new M125 operating from The Hub to 125th Street in Manhattan, terminating in Manhattanville. The M100 will be shortened, terminating at Amsterdam Avenue and 125th Street. The new M125 will ensure customers have access between the Bronx and Manhattan, while reducing overall bus-on-bus congestion on 125th Street.

In addition to alignment changes, the Plan proposes bus stop removals to improve bus stop spacing, balancing the need to improve travel times with the need to serve our riders with mobility issues. Bus stop balancing changes will allow us to better match peer systems and improve spacing from every 882 feet to every 1,100 feet. The improved bus stop spacing will increase the time buses spend moving and, in turn, improve customers' commutes.

Schedule changes include frequency increases and decreases and extended service spans for certain routes. In the Central Bronx, where ridership is most concentrated, frequency increases are proposed on the following bus routes: Bx4, Bx4A, Bx6 Local, Bx11, Bx13, Bx18, and Bx41 SBS. In the Northeast Bronx, where ridership is also strong, frequency increases are proposed

on the following bus routes: Bx23, Bx28, Bx29, and Bx38. Frequency decreases are proposed for the following bus routes due to route alignment changes and ridership patterns: Bx5, Bx15, Bx15 Ltd, Bx26.

More specifically, the Bx5 operates along the Story Avenue corridor, which is proposed to also have Bx6 SBS service. The introduction of SBS service along the Story Avenue corridor will provide better service for customers traveling between Soundview and the western Bronx. As addressed earlier, due to the 18-month pause caused by the COVID-19 pandemic, Bx6 SBS implementation has been delayed until 2023 to coincide with the retirement of MetroCard, the full deployment of OMNY across the city, and all-door boarding on all bus routes in 2023. The logistics and expense associated with installing and then uninstalling SBS off-board fare machines along the future alignment in Soundview for just one year of use is not a prudent use of limited resources. The associated changes to the Bx5 and Bx6 Local schedules will also be postponed until 2023 when the Bx6 SBS realignment is implemented.

Similarly, Bx15 local and limited service is being adjusted to better meet ridership patterns with the route proposed to terminate at The Hub. The frequency of the Bx26 will decrease in Co-op City to enable the introduction of the new Bx25 that would serve northern Co-op City, better meeting the needs of customers.

Transfers are a crucial component of the redesign process. Two direct routes that work together to connect customers to their destinations are far more efficient than one meandering route that serves as a one-seat ride to the same destinations. Interconnected routes provide faster travel times and enable increased frequency. The Bronx Bus Network Redesign will result in some riders requiring an additional transfer to complete their trip. To ensure that these passengers do not have to pay an additional fare to transfer, we will seek to strategically add additional free transfers to the system.

A service equity analysis, conducted in accordance with Title VI of the Civil Rights Act of 1964 and related Federal Transit Administration guidance materials, found that the Bronx Bus Network Redesign proposal would not result in a disproportionate impact on either minority or below-poverty populations. More details, including updates since the Proposed Final Plan can be viewed at <https://new.mta.info/bronxbusredesign>.

Recommendation

Implement the Bronx Bus Network Redesign for regular bus service.

Alternatives

1. *Do nothing.* The status quo would be maintained, missing an opportunity to modernize the bus network and improve speed and reliability.

2. *Modify bus stops but not routes.* Maintain the existing route network but increase bus stop spacing as recommended by the Bronx Bus Network Redesign project. Some speed and reliability benefits would be gained from more efficient bus stop spacing, but no improvements would be made to the route structure.

3. *Modify routes but not bus stops.* Implement the new Bronx Bus Network for regular bus service and maintain existing average bus stop spacing. Some speed and reliability benefits would be gained from improved routing, but trips would continue to be slowed by excessive stopping.

4. *Consider less comprehensive changes.* Further study would be required to identify less impactful changes that could be made to individual routes without fundamentally altering the overall bus network.

Budget Impact

The Bronx Local Bus Redesign will increase the net annual operating cost of Bronx bus service by approximately \$2.7 million. This includes \$1.4 million of NYCT operating costs and \$738,000 of MTA Bus operating costs that will be implemented in the summer of 2022, and \$568,000 of NYCT annual operating costs that will be implemented in 2023. In addition, there will be one-time costs of \$1.6 million to train staff on the new routes and \$255,000 to change the bus stops. The additional operating budget will enable increased frequency on key routes, allowing for an extensive, all-day frequent network. The budget will also allow for expanded access, specifically extended service spans and route alignment changes that provide new connections.

Implementation Date

Implementation is planned for summer 2022.



Attachment 1:
Major Revisions to Bronx Bus Network Redesign Proposal for Regular Bus Service

Proposed Draft Plan (Released May 2019)

- **Bx4**
 - Increase weekday frequency to 15 minutes or better all-day, allowing for Westchester Avenue to be an 8 minutes or better corridor where the Bx4 and Bx4A overlap
- **Bx4A**
 - Shorten route to improve reliability where customers are riding most
 - Route would travel from Westchester Square to Southern Boulevard, using its current routing via Metropolitan Avenue and Westchester Avenue
 - Increase weekday frequency of Bx4A to 15 minutes or better all-day, allowing for Westchester Avenue to be an 8 minutes or better corridor where the Bx4 and Bx4A overlap
- **Bx6 Local**
 - Increase weekday frequency to 8 minutes or better all-day to maintain the current level of service to Hunts Point, with the proposed Bx6 SBS route no longer serving the area
- **Bx6 SBS**
 - Reroute to operate along Bruckner Boulevard, Bronx River Avenue, and Story Avenue, terminating at Turnbull Avenue and Pugsley Avenue
 - Bx6 SBS would no longer serve Hunts Point
 - The proposed routing change would make service more direct and would introduce additional connections for Bx6 customers
 - The addition of SBS to Story Avenue would provide a new, faster crosstown service for Soundview residents
- **Bx8**
 - Shorten route, moving its southern terminal to Layton Avenue and Dean Avenue
 - Discontinued southern segment of the route would be covered by a proposed extension of the Bx24
- **Bx11**
 - Streamline route to provide simpler, more direct service while improving crosstown connections
 - Route would serve East 174th Street (replacing a segment of the Bx36) and would terminate at the Parkchester 6 station, providing a new connection to the 6 train from Morrisania and giving customers along East 174th Street more direct crosstown service
 - Service near Jennings Street and West Farms Road would be provided by a proposed extension of the Bx35

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- Route would avoid the circuitous segments on Shakespeare Avenue, West 168th Street, and Ogden/Plimpton Avenue by traveling directly into Manhattan via Edward L. Grant Highway
- Service in this area would be provided by an extended Bx18
- Increase weekday frequency to 8 minutes or better all-day
- **Bx13**
 - Increase weekday frequency to 8 minutes or better all-day
- **Bx15**
 - Split into two routes
 - Bx15 Local would operate between The Hub and Fordham Plaza at all times, as it currently does on weekdays
 - Discontinued southern segment of the route would be covered by new M125 bus route, operating between The Hub and Manhattanville
- **Bx18**
 - Extend route to serve new section along West 168th Street and Shakespeare Avenue, replacing a segment of the Bx11
 - Increase weekday frequency to 20 minutes or better all-day
- **Bx22**
 - Increase weekday frequency to 8 minutes or better all-day
- **Bx23**
 - Increase weekday frequency to 8 minutes or better all-day, with a frequency of 3 minutes in the AM and PM peak periods
- **Bx24**
 - Streamline route in Country Club with new routing along Kennelworth Place, Ampere Avenue, and Stadium Avenue
 - Extend route to Locust Point, replacing southern segment of shortened Bx8
- **Bx26**
 - Terminate route at Asch Loop in Co-op City, with service between Asch Loop and Section 5 via the more frequent Bx23
- **Bx28**
 - Streamline route, with changes to both the eastern and western ends of route
 - In Co-op City, terminate route at Bay Plaza Mall, operating via Asch Loop
 - In Norwood and Bedford Park, discontinue service on Mosholu Parkway and Paul Avenue, streamlining the route by operating on Bainbridge Avenue and Bedford Park Boulevard
 - Increase weekday frequency to 8 minutes or better all-day
- **Bx29**
 - Shorten route, moving its northern terminal to Pelham Bay Park **6** station
 - Service between Co-op City and Pelham Bay Park would be provided by more frequent Bx23
- **Bx30**
 - Streamline route, with changes to both the eastern and western ends of route
 - In Co-op City, route would terminate at Dreiser Loop
 - Western routing would operate southbound via Boston Road, south of Gun Hill Road to the Pelham Parkway **2** **5** station, providing service along a corridor not previously served by NYCT

Staff Summary



- **Bx34**
 - Streamline route by discontinuing service along southern Bainbridge and Valentine Avenues
 - Service would be rerouted onto East 204th Street and Webster Avenue, with access to Fordham Road still provided
- **Bx35**
 - Extend route to bypass bus-congested Gladstone Square (less than 500 feet away) and serve West Farms Road, Jennings Street, and Bryant Avenue
 - This route alignment change would ensure customers on segment of current Bx11 still have coverage
- **Bx36**
 - Streamline route to travel from Soundview to Washington Heights via East Tremont Avenue instead of East 174th Street and East 180th Street
 - Route would still serve the West Farms and East Tremont neighborhoods, but without meandering via Boston Road
- **Bx38**
 - Discontinue route
 - Service between Sections 1-4 and Bartow Avenue in Co-op City would be provided via more frequent Bx23
 - Discontinuing this route will allow for these resources to be shifted to the Bx28
- **Bx40**
 - Streamline route to operate from Throgs Neck to Morris Heights via East Tremont Avenue and East 180th Street, allowing for a new connection to the ADA accessible E 180 St **2** **5** express station
 - Discontinued segment of route on East Tremont Avenue between Rosedale and Webster Avenues would be covered by a proposed reroute of the Bx36 the Bx36 Limited
 - Routing would allow most customers along East Tremont Avenue and East 180th Street to have simpler, more direct service, while avoiding some of the congestion of the West Farms Square area
 - Route would no longer meander through Throgs Neck, but would instead terminate at East Tremont and Harding Avenues
 - Increase weekday frequency to eight minutes or better all-day
- **Bx41 SBS**
 - Increase weekday frequency to eight minutes or better all-day
 - No alignment changes or stop removals are proposed for route
- **Bx42**
 - Route would no longer completely duplicate the Bx40 service along the Tremont Avenue and Burnside Avenue corridors
 - Its western terminal would be changed to Westchester Square
 - Service west of Westchester Square would be provided by increase all-day frequency on the Bx40
 - In Throgs Neck, the route would provide coverage service to Balcom and Pennyfield Avenues via one single route instead of two
 - Increase weekday frequency to 15 minutes or better all-day
- **Q50 Limited**

- Shorten route, moving its northern terminal to Pelham Bay Park 6 station
- Service between Co-op City and Pelham Bay Park would be provided by an enhanced Bx23 with increased frequency
- **M 100**
 - Shorten route, moving its southern terminal to Amsterdam Avenue and West 125th Street
 - Discontinued segment of the route would be covered by the M60 SBS, M101, and newly proposed M125
- **M 125**
 - Introduce new route that serves southern segment of current Bx15
 - Route would operate from The Hub to Manhattanville via 125 Street
 - Operate route at weekday frequency of 8 minutes or better all-day with same service span as Bx15 (24 hours)

Proposed Final Plan – Revisions following Draft Plan (released October 2019)

- **Bx4**
 - Move forward with Draft Plan proposal
 - Increase Saturday frequency to 20 minutes or better all-day
 - Increase Sunday frequency to 20 minutes or better all-day
- **Bx4A**
 - Move forward with Draft Plan proposal
 - Extend weekday service span to 5:30 AM – 12:00 Midnight in southwest direction and 5:30 AM – 1:00 AM in northeast direction
 - Increase Saturday frequency to 24 minutes or better all-day
 - Extend Saturday service span to 6:15 AM – 12:15 AM in southwest direction and 6:45 AM – 1:00 AM in northeast direction
 - Increase Sunday service to 24 minutes or better all-day
 - Extend Sunday service span to 7:15 AM – 12:15 AM in southwest direction and 6:45 AM – 1:00 AM in northeast direction
- **Bx5**
 - Decrease weekday frequency to 12 minutes or better all-day, due to introduction of Bx6 SBS service on Story Avenue
 - Decrease Saturday frequency to 13 minutes or better all-day, due to introduction of Bx6 SBS service on Story Avenue
 - Decrease Sunday frequency to 20 minutes or better all-day, due to introduction of Bx6 SBS service on Saturday Avenue
- **Bx6 Local**
 - Move forward with Draft Plan proposal
- **Bx6 SBS**
 - Move forward with Draft Plan proposal
- **Bx8**
 - Maintain route alignment as-is
- **Bx11**
 - Move forward with Draft Plan proposal

- Introduce 40-minute overnight service on weekdays, Saturdays, and Sundays, allowing for 24-hour service, seven days a week
- **Bx13**
 - Move forward with Draft Plan proposal
- **Bx15**
 - Move forward with Draft Plan proposal
 - Reduce midday and overnight weekday frequencies and increase evening frequency
 - Reduce Saturday overnight frequency
 - Reduce Sunday PM Peak and overnight frequencies
- **Bx18**
 - Move forward with Draft Plan proposal
 - Extend weekday service span to 5:00 AM – 1:00 AM in clockwise direction and 5:00 AM – 12:45 AM in counter-clockwise direction
 - Increase Saturday frequency to 20 minutes or better all-day
 - Extend Saturday service span to 5:00 AM – 12:30 AM in clockwise direction and 5:00 AM – 12:00 AM in counter-clockwise direction
 - Increase Sunday midday, PM Peak, and evening frequencies to 20 minutes or better
 - Extend Sunday service span to 5:00 AM – 12:45 AM in clockwise direction and 5:00 AM – 12:30 AM in counter-clockwise direction
- **Bx22**
 - Maintain route as-is
- **Bx23**
 - Increase weekday frequency to 6 minutes or better in peak periods and 20 minutes or better in off-peak periods
 - Increase Saturday frequency to 20 minutes or better in midday, PM Peak, and evening
 - Increase Sunday frequency to 20 minutes or better in midday and PM Peak
- **Bx24**
 - Maintain majority of existing alignment, with a minor change, eliminating a short, meandering segment within Country Club along Ohm Avenue, Griswold Drive, and Spencer Drive
- **Bx25**
 - Introduce new route serving Co-op City and the eastern Bronx
 - Outside Co-op City, the Bx25 will follow the same routing as the Bx26 along Allerton Avenue
 - Within Co-op City, the Bx25 will follow the same routing as the Bx38, traveling on Baychester Avenue and Co-op City Boulevard before terminating at the Bay Plaza Shopping Center in the eastbound direction
 - Route will split frequencies with Bx26, providing same frequency levels as today on Allerton Avenue
 - Weekdays at 24 minutes or better all-day
 - Saturdays at 30 minutes or better all-day
 - Sundays at 30 minutes or better all-day
 - Route will have same service spans as Bx26

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- Weekdays from 5:45 AM – 10:45 PM in westbound direction and 6:30 AM – 11:30 PM in eastbound direction
- Saturdays from 6:00 AM – 10:45 PM in westbound direction and 7:00 AM – 11:45 PM in eastbound direction
- Sundays from 6:30 AM – 10:15 PM in westbound direction and 7:15 AM – 11:15 PM in eastbound direction
- **Bx26**
 - Maintain route alignment as-is
 - Route will split service with Bx25, providing same frequency levels as today on Allerton Avenue and decreased frequency in Co-op City to accommodate introduction of the Bx25 in northern Co-op City
- **Bx28**
 - Maintain route alignment as-is in Co-op City and move forward with Draft Plan proposal in Norwood
 - Increase weekday frequency to 13 minutes or better all-day
 - When combined with maintained Bx38, weekday frequency is 8 minutes or better along Gun Hill Road
- **Bx29**
 - Move forward with Draft Plan proposal
- **Bx30**
 - Maintain route alignment as-is in Co-op City and move forward with Draft Plan proposal along Boston Road
- **Bx34**
 - Move forward with Draft Plan proposal
- **Bx35**
 - Move forward with Draft Plan proposal
- **Bx36**
 - Move forward with Draft Plan proposal
- **Bx38**
 - Maintain route as-is
 - Increase weekday frequency to 13 minutes or better all-day
 - When combined with maintained Bx28, weekday frequency is 8 minutes or better along Gun Hill Road
- **Bx40**
 - Streamline route to operate from Throgs Neck to Morris Heights via East Tremont Avenue and East 180th Street, allowing for a new connection to the ADA accessible E 180 St **2** **5** express station
 - Route would still operate as it does today along its southeastern portion
 - The schedule will not change, and it will have the same service span and frequency as today
- **Bx41 SBS**
 - Move forward with Draft Plan proposal
- **Bx42**
 - Streamline route to operate from Throgs Neck to Morris Heights via East Tremont Avenue and East 180th Street, allowing for a new connection to the ADA accessible E 180 St **2** **5** express station

- Route would still operate as it does today along its southeastern portion
- The schedule will not change, and it will have the same service span and frequency as today
- **Q50 Limited**
 - Maintain route alignment as-is during peak periods only
 - During off-peak periods route will terminate at Pelham Bay Park  station
- **M100**
 - Move forward with Draft Plan proposal
- **M125**
 - Move forward with Draft Plan proposal
 - Route will operate 24 hours at following frequencies:
 - Weekdays at 8 minutes or better all-day
 - Saturdays at 10 minutes or better all-day
 - Sundays at 12 minutes or better all-day

Final Plan – Implementation – Revisions Following Proposed Final Plan (released November 2021)

- **Bx5, Bx6 Local, Bx6 SBS**
 - Due to the 18-month pause caused by the COVID-19 pandemic, Bx6 SBS implementation has been delayed until 2023 to coincide with the retirement of the MetroCard and the full deployment of OMNY across the city
 - All-door boarding will be launched on all bus routes in 2023
 - The logistics and expense associated with installing and then uninstalling SBS off-board fare machines along the future alignment in Soundview for just one year of use is not a prudent use of limited resources
 - The associated changes to the Bx5 and Bx6 Local schedules will also be postponed until 2023 when the Bx6 SBS realignment is implemented
- **Bx28**
 - Maintain route as-is
 - Increase weekday frequency to 13 minutes or better all-day
 - When combined with maintained Bx38, weekday frequency is 8 minutes or better along Gun Hill Road
- **Bx34**
 - Maintain route as-is

Bronx Local Bus Network Redesign – Staff Summary Attachment 2

Summary of Public Comments from February 2020 Public Hearing Regarding Bronx Bus Network Redesign for Regular Bus Service

From October through December 2019, MTA NYC Transit presented the Bronx Bus Network Redesign Proposed Final Plan to all Bronx community boards and to those Manhattan community boards with service changes in their districts. A public hearing was held on February 20, 2020. Below is summary of the most common comments and concerns expressed by the public:

Comment: Increase service on the Bx10 bus route. The Bx10 regularly experiences overcrowding with buses often arriving bunched, two or more at a time. This issue has been observed during all times of day. The concern has been raised by customers and elected officials.

Response: Although at times individual Bx10 buses may be overcrowded, average loads do not indicate a need to increase service. Therefore, the Bx10 schedule will not change for now, although we will continue to monitor service levels. The Bx10 will have the same service frequency and span as it currently does. However, we will consolidate three percent (2 of 80) of the Bx10 stops, the average distance between stops from 977 to 989 feet. By removing these stops, we'll improve travel times and reliability along the route. We will continue to monitor ridership on the Bx10 as part of our regular bus schedule review process. If and whenever you observe bus bunching, please note the bus route, bus stop, and time of day, and contact us by calling 511 or providing the information on our website at <https://new.mta.info/customer-feedback> so that we can investigate the incident further.

Comment: Is my express bus service changing?

Response: Express buses are not included in the current proposed Bronx Bus Network Redesign; we will revisit the Express Bus network at a later time.

Comment: Why is my stop(s) being removed?

Response:

Bus stop balancing, which involves removing bus stops for better spacing between stops, will speed up bus service by reducing the number of times a bus must slow down, pull out of traffic, and stop, and then merge back into traffic. Bus stops that are spaced closely and underutilized were considered for bus stop consolidation, while paying attention to and with our main concern focus on minimizing inconvenience to customers. In making bus stop balancing proposals, we considered major employment, shopping, and medical centers, schools, ridership, topography, transfers to other buses and trains, resident demographics including concentrations of seniors and persons with disabilities, and other local conditions such as bus stop shelters and other amenities.

Comment: Maintain the Bx28 bus route as is.

Response: The proposed Final Plan called for streamlining of the Bx28, making it more direct by avoiding circuitous segments. However, customers and community members expressed strong value in the existing routing of the Bx28 over the proposed alignment change that was

outlined in the Draft and proposed Final Plans. After field visits from agency staff members and hearing from members of the community during our February 2020 public hearing, it was determined that the Bx28 routing will remain as-is. However, the proposed frequency improvements to the Bx28 are still planned.

Comment: Maintain the Bx34 bus route as-is

Response: The proposed Final Plan called for streamlining of the Bx34, making it more direct by avoiding circuitous segments and narrow, one-way streets. However, customers and community members expressed strong value in the existing routing of the Bx34 over the proposed alignment change that was outlined in the Draft and proposed Final Plans. After field visits from agency staff members and hearing from members of the community during our February 2020 public hearing, it was determined that the Bx34 routing will remain as-is.

Comment: Bx12 Service from Fordham Plaza to Webster Ave is overcrowded

Response: Although at times individual buses may be overcrowded, our ridership analysis of average loads on the Bx12 does not indicate a need to increase service. Therefore, the Bx12 routing and schedule will not change. However, the Final plan will consolidate two percent of Bx12 stops, which will improve the average distance between stops from 1,091 feet to 1,115 feet. By removing these stops, we'll improve travel times and reliability along the route. We will continue to monitor ridership on the Bx12 as part of our regular bus schedule review process. In addition, we are working with NYC DOT on a project to improve bus priority on Fordham Road, which will help improve service on the Bx12.

Comment: Bx35 and Bx11 wait times seem to have increased

Response: The Bx11 weekday schedule will be improved to 8 minutes or better all day. Additionally, due to the new route alignment along East 174 Street to Parkchester, the Bx11 will now have overnight service on both weeknights and weekends. Due to the routing change, ridership will be closely monitored, and schedules will be adjusted accordingly. The Bx35 schedule will not change. The Bx35 will have the same service frequency and span as it currently does. After the routing changes on these routes, ridership will be closely monitored, and schedules will be adjusted accordingly.

Comment: Why is there no SBS on Bx19?

Response: The SBS program is not currently expanding, as the SBS fare payment system will be replaced by OMNY by 2023. However, improvements are happening that bring SBS-like features to the Bx19. Bus lanes were installed on 149th Street in 2020, helping bus speeds on that busy part of the route. We have proposed to remove 11 stops along the Bx19 to improve both speed and reliability as part of the Redesign plan. Finally, all-door boarding with OMNY will begin on all local bus routes in 2023, which will greatly speed up boarding.

Comment: Why is there no SBS on Bx1/2

Response: The SBS program is not currently expanding, as the SBS fare payment system will be replaced by OMNY by 2023. Eight stops along the Bx1 and Bx2 will be removed, improving the average distance between stops from 861 feet to 890 feet for the Bx1 Local, from 1,523 feet to 1,584 feet for the Bx1 LTD, and from 821 feet to 848 feet for the Bx2. Together with the rollout of all-door boarding on all local buses in 2023, these bus stop improvements will give the

Bx1 and Bx2 more SBS-like features that should make the routes faster and more reliable for our customers.

Comment: What is or can be done to in regard to bus connections to Queens

Response: There are additional Bronx-Queens connections being considered as part of the Queens Bus Network Redesign Draft Plan.

Comment: Congestion on 149th and 3rd Ave is an issue

Response: In October 2020, NYCDOT completed a bus priority project on East 149 St, which included new bus lanes and transit signal priority. This project has helped speed up buses on that corridor.

Comment: Extend the Bx12 LCL from Sedgwick Ave/Webb Ave to Bailey/Heath Av

Response: There are no safe and accessible locations for a bus stop at Bailey Ave/Heath Ave.

Comment: Extend the Bx12 LCL to the business district on 225 St.

Response: This extension of about one mile would negatively impact reliability on the Bx12. Customers can transfer from the Bx12 to the Bx9 to reach 225 St.

Comment: Instead of rerouting Bx35 to West Farms Road, it should still serve 2/5 train at Simpson St station and merge with Bx27.

Response: The Bx35 routing will change as part of the larger redesign effort to improve crosstown service by streamlining the Bx11, Bx35, Bx36, Bx40, and Bx42. The new Bx35 will bypass the congestion at Gladstone Square to better serve West Farms Road, Jennings Street, and Bryant Avenue. This reroute supports the Bx11 service changes while improving reliability and coverage across all of the affected routes. The Bx27 routing will not change. The existing route connects to several important destinations and performs well.

Comment: Extend Bx5 to Crotona Avenue/Clairemont Parkway via Bx11 routing along West Farms Rd.

Response: The Bx5 routing will not change. Extending this route via Bx11 routing along West Farms Rd would add more distance, turns, and stops, making the buses slower and more unreliable than existing conditions. The existing route is relatively direct, operates in neighborhoods that are far from subway service, and connects to several important transfer points.

Comment: “Regarding transfer issues for former BX11 passengers, three legged transfers should be given between the westbound BX5 route and the westbound BX11 route and vice versa as well as between the eastbound BX5 route and my suggested proposed BX35/BX27 combo in both directions and vice-versa or if not combined than between the BX5 route and the BX35 westbound route and between the BX5 and the eastbound BX27 route as well as vice-versa.”

Response: We employ multiple strategies that ensure that some transfer connections remain “free.” In some cases, we can program our MetroCard technology to recognize trips that require an additional transfer. In other cases, we would train bus operators to provide transfers free-of-charge to or from specific routes. Our policy is that no rider should have to pay an additional transfer fare as result of the Bronx Bus Network Redesign.

Comment: Extend Bx11 further east to Westchester Square

Response: The Bx11 routing will change as part of an effort to simplify the Bx11, Bx18, Bx35, Bx36, Bx40, and Bx42 routes. The Bx11 will now serve East 174 Street and terminate in the eastbound direction at the Parkchester 6 Station. Customers can transfer to Bx4, Bx4A or 6 train to get to Westchester Square.

Comment: Extend Bx6 SBS proposed route from Pugsley Avenue/Lafayette Avenue to Lafayette Avenue/Hutchinson River Parkway (South) to provide connection to Q44 SBS and Q50 LTD at Hutchinson River Parkway and Bx22 at Castle Hill Ave.

Response: Doing this extension will add more turns, stops, and running time to Bx6 SBS, which goes against Redesign goals of creating straight direct routes with All Day frequent services. Customers will have the option of transferring to the Bx5 along Story Avenue to connect to Q44 SBS and Q50 LTD.

Comment: Extend proposed Bx29 to Westchester Square

Response: The Bx29 routing will change. The route will be shortened, with its western terminal moved to the Pelham Bay Park 6 station. Customers can transfer to Bx24 to reach Westchester Square.

Comment: The Final Plan does not include investments in better frequency or new service.

Response: This statement is not correct; the plan includes service investments in routing changes and greater frequency.

Comment: The Bronx needs better East-West Connection and Services

Response: One of the Bronx Network Redesign strategies is to enhance connectivity, which includes improving east-west connections in the Bronx. The Final Plan includes the following six route changes that help achieve this goal: Bx6 SBS to Soundview, Bx11 to Parkchester, Bx35 to West Farms, Bx25 from Northern Co-op City to Bedford Park, Bx30 to Boston Rd, and Bx40/42 to E 180 St.

Comment: There needs to be more service on the Bx7 and Bx10 buses due to overcrowding

Response: While there can be a gap in service that results in an overcrowded bus, average hourly loads on the Bx7 and Bx10 do not indicate there is problems with overcrowding. However, we conduct regular reviews of bus ridership, and we adjust service levels up or down in response to changing ridership patterns, including overcrowding where it is found.

Comment: The Bx30 does not need to serve Boston Rd south of Gun Hill Rd, because the Westchester Bee Line routes already provide local service there. Instead, the Bx30 should provide new service to Burke Ave and then to Gun Hill Rd which to maintain service to an ADA accessible subway station.

Response: The proposed routing of the Bx30 on Boston Rd will serve the ADA-accessible Pelham Parkway station, as well as provide new connections for Bx30 customers to the high-frequency Bx12 local and SBS routes.

Comment: Extend proposed Bx30 from Pelham Parkway/White Plains Road to Fordham Road/Grand Concourse at Fordham Plaza

Response: Customers can transfer to Bx12, Bx12SBS, and Bx22 to get to Fordham Plaza.

Comment: Merge Bx13 and Bx46 via East 149th St and Westchester Avenue, providing connections to the Hub

Response: Bx13 customers can transfer to Bx19 to reach the Hub, and Bx46 customers can transfer to the Bx4 or ②⑤ trains to reach the Hub. Merging these routes would add significant running time and turns, which would not adhere to Redesign goals of creating and maintaining straight, direct routes.

Comment: Keep the Q50 service to Co-op city as is.

Response: The Q50 Limited will now operate to and from Co-op City during weekday peak hours only (6:00 AM to 9:00 AM and 4:00 PM to 7:00 PM). During off-peak hours, the route will only operate to and from the Pelham Bay Park ⑥ station, where Co-op City bound customers can transfer to Bx12 or Bx23 to reach their destination.

Comment: Bx3 Short turn at West Kingsbridge Rd/University Ave extend to VA Hospital

Response: The Bx3 routing will not change. The route is already straight, direct, and connects to several important transfer points. Customers can transfer to Bx32 for service to the VA Hospital.

Comment: Shorten Bx9 by setting northern terminus at W 225 St/Broadway

Response: The Bx9 routing will not change. The Bx9 route already maintains high ridership and connects to several important destinations and transfer points.

Comment: Bx3 is unreliable and Bx9 has delays. Both need treatments

Response: Both routes have bus stop consolidation proposals which will help speed up buses and improve reliability. In addition, NYCDOT will implement bus priority treatments to University Ave and Fordham Rd in the future, which will help improve the bus operations of the Bx3 and Bx9, respectively.

Comment: More Service is needed for Northeast and Northwest Bronx areas

Response: There are multiple routing and schedule improvements proposed for service in the Northeast and Northwest Bronx, including on the Bx25, Bx28, Bx30, and Bx38.

Comment: The Bx15 is a reliable way for customers to get to Manhattan, especially when there are problems with the 2 and 5 trains on weekends. The route should continue to serve Manhattan, rather than creating the proposed M125 route for Manhattan service.

Response: The Bx15 currently experiences poor service reliability, with an average on-time performance of 40 percent, wait assessment of 67 percent, and Customer Journey Performance Time of 64 percent. This is largely due to congestion on the Bx15 as it travels on the 3rd and Willis Avenue Bridges and along 125th Street. The majority of current Bx15 customers (approximately 85 percent of pre-pandemic riders) travel solely along Third Avenue and do not travel beyond The Hub. These customers are impacted by the poor service that results from congestion south of the Hub. With the new M125 providing service to 125th Street instead of the

Bx15, the majority of Bx15 customers will benefit with improved reliability, while those riding to Manhattan will still have service.

Comment: Buses need better frequencies

Response: A major goal for this redesign was to create an all-day frequent bus network, especially on major corridors. We recognize that even though traditional rush hours still see our highest volume of riders, people go to work, school, and events at all different hours. This new network reflects that reality.

Comment: Why are there no more printed schedules at the bus stops?

Response: We made the decision to not post schedules in the Guide-A-Ride boxes at bus stops because our real-time data is much more accurate than printed schedules, especially with traffic conditions delaying buses and our dispatchers making adjustments in real-time in response. By not spending resources on updating bus stop schedules at thousands of stops city-wide, we can reallocate funds to maintain and improve bus service for our customers.

Surveys have found that 96% of New Yorkers have cell phones, with 80% owning smart phones. Therefore, the vast majority of customers are able to access real-time information via smartphone apps, by scanning a QR code at the bus stop, or by texting the bus stop code displayed at the stop. Customers may also call 511 to obtain real-time information. Those who prefer to view (and print out) the schedule can do so on the MTA website at <https://new.mta.info/schedules/bus>, or call 511 to request that a printed schedule be mailed to them.

Comment: What is the MTA doing to keep the buses clean and enforce cleanliness standards?

Response: Our crews remove trash, clean spills and biohazards, spot-clean seats, floors, and other surfaces, and disinfect common touchpoints. We use disinfectants that are Environmental Protection Agency registered.

Comment: Maintain all Bx29 bus stops

Response: The Bx29 is proposed to have 8 of 29 stops removed in order to improve bus stop spacing. For every bus stop removed, an average of 20 seconds of travel time is saved, improving bus service for the majority of customers.

Comment: Expand Select Bus Service (SBS) and bus priority

Response: The SBS program is not currently expanding, as the SBS fare payment system will be replaced by OMNY by 2023, when all-door boarding is also extended to all local buses. To continue to improve bus service, we are working with our partners at NYC DOT to expand bus priority on key Bronx corridors where it is most needed. These corridors include: West 181st Street/Washington Bridge, E.L. Grant Highway, University Avenue, 149th Street, Story Avenue, Tremont Avenue, Fordham Road, Gun Hill Road, and the Pelham Bay Park Station Area.

Comment: Improve bus stop amenities at every stop. Customers want the expansion of countdown clocks, bus shelters, and printed schedules at all stops serving Bronx bus routes.

Response: Countdown clocks and bus shelters are installed and maintained by NYC DOT, with input from local communities.

Comment: Enforce fares better

Response: Fare enforcement is an ongoing process and is not part of this proposal. However, with the full rollout of the OMNY system and retirement of the MetroCard in 2023, onboard fare enforcement will expand and improve because fare enforcement staff will be able to check all customers for proof of payment.

Comment: Buy newer buses/keep buses cleaner

Response: The MTA continues to purchase vehicles to update and upgrade its fleet. In addition, our crews remove trash, clean spills and biohazards, spot-clean seats, floors, and other surfaces, and disinfect common touchpoints. We use disinfectants that are Environmental Protection Agency registered.

Comment: Extend the Bx39 to the Soundview ferry terminal, like the Bx27.

Response: There is not sufficient room for articulated buses used on the Bx39 to layover and turnaround at the Soundview ferry terminal. Furthermore, there are no restroom facilities at the ferry terminal for operators to use. The MTA will continue to work with its partners at NYCDOT to make changes in the future if they become possible.

Comment: provide continuous service across 233 St with the Bx16. Replace the Bx16 in northern Wakefield with an eastward extension of the Bx34, and replace service on Baychester Avenue with a northern extension of the Bx19.

Response: There is not a strong enough demand for a direct route along E 233 St, which would require reconfiguring multiple other routes.

Comment: Extend the Bx46 to E 163 St to connect to the Bx6 SBS.

Response: The Bx46 is designed to provide service between the 6 subway and southern Hunts Point. There isn't sufficient ridership or demand to justify an extension anywhere beyond the subway.

Comment: Restore Bx20 service beyond just peak periods on weekdays.

Response: There is not sufficient ridership to justify expanding Bx20 service beyond the weekday peak periods.

Comment: Make the first northbound stop of the Bx13 at 149 St and Exterior Street/River Avenue, for an easier transfer from the Bx19.

Response: This idea will be considered as part of regular bus service planning.

Comment: Make various route extensions and alignment changes to the Bx1, Bx2, Bx3, Bx4, Bx7, Bx10, Bx11, Bx13, Bx20, Bx22, Bx32, and Bx34 routes as well as extend the span of these routes to run at all times.

Response: The changes do not match customer demand nor do they support where customers have told us they would like new bus connections and service. Furthermore, several recommendations would require a significant increase in resources the agency does not currently possess. Therefore, these routes will remain as they have been proposed in the Bronx Network Redesign Final Plan and Addendum Document. For more information about these routes, see the route profile page: <https://new.mta.info/bronxbusredesign/routes>.

Comment: Initiate a feasibility study of local shuttle bus service.

Response: The Bronx Road Operations team examines current traffic and bus service conditions to make decisions about when and where to “short turn” buses to ensure that adequate service is being provided along all routes in the Bronx.

Comment: Give more consideration to Bx1 bus schedules.

Response: Bx1 buses are scheduled to be every 12 minutes or more frequent on weekdays. For scheduled Bx1 frequencies see the Bx1 route profile: <https://new.mta.info/document/63121> or the current Bx1 schedule: <http://web.mta.info/nyct/bus/schedule/bronx/bx001cur.pdf>.

Comment: Maintain the current Bx29 route alignment.

Response: The Bx29 route alignment is being shortened at Pelham Bay Park because most customers get off the bus there to transfer to the 6 train or other buses. With this change, the Bx29 will be more reliable for City Island customers. Based on discussions with the community, we agreed to re-invest the savings made by this route alignment into providing overnight service on the Bx29, and into more frequent service on the Bx23 to make up for the loss of the Bx29 in Co-op City. For more information about the Bx29 route alignment changes, see the Bx29 route profile: <https://new.mta.info/bronxbusredesign/routes/bx29>

Bronx Local Bus Network Redesign – Staff Summary Attachment 3

Summary of Public Comments from November 2021 Virtual Public Meeting Regarding Bronx Bus Network Redesign for Regular Bus Service

Comment: Restore my bus stop(s).

Response: When analyzing each bus stop, the following factors were considered:

- In-depth analysis of bus stop usage
 - The number of customers boarding and alighting at the bus stop on an average weekday
 - Whether the stop is a key transfer point to other bus routes or nearby subway or rail services
- Demographics of customers
 - The density of seniors or persons with mobility issues
- Examination of surrounding land uses
 - the presence of community facilities, educational institutions, and/or medical facilities adjacent to the stop
- Identification of potential improvements to remaining bus stops to better accommodate customers

Bus stop balancing helps to speed up buses and increase reliability. Too many bus stops too close together dramatically slows the bus and worsens reliability. Improved spacing between stops will speed up bus service by reducing the number of times a bus must slow down, pull out of traffic, and stop, and then merge back into traffic. Bus stops that are spaced closely together and underutilized were considered for bus stop consolidation, while paying attention to and keeping our focus on minimizing inconvenience to customers.

Comment: Expand the Bx23 service span by starting service at 3:30 AM on weekdays and 4:30 AM on Saturdays to be consistent with the Q50 Limited start time and 24/7 Bx29 service.

Response: Overnight service to the Pelham Bay Park ⑥ Station and Co-op City will continue to be provided by Bx12 Local bus service. Due to proposed changes, ridership will be closely monitored, and schedules will be adjusted accordingly.

Comment: Express Bus Plan Proposals.

Response: Changes to Express Bus Service have been removed from the proposed Final Plan and will not move forward at this phase of the project. The Bronx Express Bus Redesign will be revised at a later time.

Comment: I would ask that you reconsider the stop at Pelham Bay ⑥ station as it's being moved and it might be better to leave it is for safety issues. There have been safety concerns in the past few months.

Response: The Bx12 SBS eastbound bus stop at the Pelham Bay Park ⑥ station will be safer for many customers, as those transferring from the subway station will not have to cross the street, as they do today to access the current stop.

Comment: Timelines on NYCDOT Bus Priority Projects.

Response: Below is a status update on those NYCDOT bus priority projects that directly benefit key bus corridors in the Bronx and Upper Manhattan:

- Completed
 - 149th Street
 - 181st Street
 - E.L. Grant Highway
- In Implementation
 - University Avenue (southern half)
 - Story Avenue
 - Pelham Bay Park 6 Station Area
- Forthcoming
 - University Avenue (northern half)
 - Fordham Road
 - Tremont Avenue
 - Gun Hill Road
 - Washington Bridge

For more information on these projects, please see pages five and six in the [Final Plan Addendum](#) or visit NYCDOT's Better Buses [homepage](#).

Comment: Concern that M125 will have the same issues as the current Bx15.

Response: The Bx15 is a major north-south route that operates in the Bronx and Upper Manhattan. It carried 34,300 customers on an average weekday pre-pandemic (currently 19,940), placing it as the fifth highest ridership route in the Bronx. The route currently experiences poor service reliability with an average on-time performance of 40 percent, wait assessment of 67 percent, and Customer Journey Performance Time of 64 percent. When operating southwest, the route experiences congestion as it travels from The Hub to the 3rd Avenue Bridge and again when it reaches 125th Street where there is significant bus-on-bus congestion. The Bx15 experiences the same congestion when operating northeast, traveling to the Bronx via the Willis Avenue Bridge.

We proposed with the Draft Plan and maintained in our Proposed Final Plan that the Bx15 should terminate at The Hub. The majority of current Bx15 customers (approximately 85 percent of pre-pandemic riders) travel solely along Third Avenue and do not travel beyond The Hub. The new M125 would continue to provide service between The Hub and 125th Street in Manhattan. Under the Proposed Final Plan, customers traveling to La Guardia Airport could take the M125 from The Hub to the M60 SBS or, the fastest option, customers could board a 2 or 5 train and transfer to the M60 SBS. There are additional options being considered as part of the Queens Bus Network Redesign Draft Plan, with information to come.

Additionally, under the Proposed Final Plan we have improved the frequency of service between The Hub and 125 St by providing an all-day frequency of 8-minutes for the M125 (southern segment of current Bx15).

By splitting the route in two and improving frequency, service reliability should improve and speed up travel times, while maintaining existing service for the majority of current Bx15 customers who do not travel beyond The Hub today.

Comment: Extend buses that travel along E 233rd Street in Woodlawn by moving the terminus in Norwood to Riverdale.

Response: The Bx16 and Bx34 bus routes operate along E 233rd Street and share a terminal adjacent to the Norwood-205 St D station in Norwood where key connections are available to the D train as well as the Bx10, Bx28, and Bx38 bus routes. Customers traveling between Woodlawn and Riverdale can do so by taking either the Bx16 or Bx34 and transferring to the Bx10.

Comment: Reverting the Bx28 and Bx34 bus routes to their original alignment will cause delays.

Response: The proposed Final Plan called for streamlining of the Bx28 and Bx34 bus routes, making the each more direct by avoiding circuitous segments and narrow, one-way streets. However, customers and community members expressed strong value in the existing routing of the Bx28 and Bx34 bus routes over the proposed alignment changes that were outlined in the Draft Plan and proposed Final Plan. After field visits from agency staff members and hearing from members of the community during our February 2020 public hearing, it was determined that the Bx28 and Bx34 routings will remain as-is.

Comment: Restore Draft Plan proposal of rerouting the Bx40 and Bx42 bus routes along Balcom Avenue.

Response: The Draft Plan proposal to realign the Bx40 and Bx42 bus routes in Throg's Neck was not included in the proposed Final Plan after hearing community concerns, investigating, and identifying operational challenges in providing through access on Balcom Avenue.

Comment: Q50 Limited plans are different under the Bronx and Queens Bus Network Redesigns.

Response: The Q50 Limited is an interborough bus route that has been examined under the Bronx Bus Network Redesign and will be built upon in the Queens Bus Network Redesign. The proposal to terminate the Q50 Limited at the Pelham Bay Park 6 station during off-peak periods (midday, overnight, and weekends) will be maintained with potential alignment changes proposed to the route along the portion that operates within Queens.

Comment: Concern about the Bx36 being removed from 174th Street.

Response: The Bx36 routing will change as part of the larger redesign effort to improve crosstown service by streamlining the Bx11, Bx35, Bx36, Bx40, and Bx42. The new Bx36 will still travel between Soundview and Washington Heights but will now operate on East Tremont Avenue instead of East 174 and East 180 Streets. The new routing will continue to serve the West Farms and East Tremont neighborhoods. However, it will avoid its existing indirect routing along Boston Road. Modified Bx11 and Bx40 routings will provide new crosstown service to riders on East 174 Street and on East 180 Street, respectively. For those customers that live in the Bronx River Houses, a rerouted Bx11 will serve East 174 Street and provide a new connection to the Parkchester 6 Station. If traveling from East 174 Street to East Tremont, customers can transfer from the Bx11 to the Bx19.

Comment: Leave Bx6 SBS alignment as it is today.

Response: To improve crosstown connections, Bx6 SBS service will be rerouted along Bruckner Boulevard, Bronx River Avenue, and Story Avenue to a new eastern terminal at Turnbull and Pugsley Avenues in Soundview. The route will no longer serve Hunts Point, which will continue to be served by Bx6 Local bus service. This new routing will introduce additional connections for Bx5 customers and will provide faster crosstown service along Story Avenue for Soundview residents.

To make up for the loss of the Bx6 SBS on Hunts Point Avenue, service on the Bx6 will increase from the Hunts Point Av 6 Station to Hunts Point Market. Frequencies along the rest of the route will remain the same as they are today. Where the Bx6 and Bx6 SBS overlap, the combined weekday frequency will also remain the same. Due to the Bx6 SBS routing change, ridership will be closely monitored, and schedules will be adjusted accordingly.

Comment: Leave Bx40 and Bx42 alignments as they are today (along Tremont all the way)

Response: The Bx40 and Bx42 routing will change as part of the larger redesign effort to improve crosstown service by streamlining the Bx11, Bx35, Bx36, Bx40, and Bx42. The Bx40 and Bx42 will still travel between Throgs Neck and Morris Heights but will now do so via East Tremont Avenue and East 180 Street. The rerouted Bx36 and Bx36 Limited service will replace the existing Bx40 routing on Rosedale and Webster avenues. This redesigned routing will provide more direct service along East Tremont Avenue and East 180 Street, while avoiding the congestion around West Farms Square. A new connection to the E 180 St **2****5** station—an accessible station—will provide access to subway service. Due to the routing changes, ridership will be closely monitored and schedules will be adjusted accordingly.

Comment: Increase Service on Bx7 (frequently used for 168th Hospital).

Response: Our ridership analysis for the Bx7 indicates that an increase in services is not warranted. The Bx7 schedule will not change. The Bx7 will have the same service frequency and span as it currently does. We will continue to monitor ridership on the Bx7 as part of our regular bus schedule review process.

Comment: M 100 should terminate near **A**B****C****D** lines to connect to an accessible station.**

Response: This option is being investigated, considering the constraints of street conditions and land use on the ability to operate service and lay over buses at a terminal.

Comment: The Bx5 experiences overcrowding.

Ridership: We will coordinate with our Road Control team to identify and monitor any operational challenges the Bx5 is experiencing, including overcrowding. Under the proposed Final Plan, Bx5 weekday and weekend service will receive a slight decrease in frequency to reallocate resources for the new Bx6 SBS extension along Story Avenue. With both the Bx5 and Bx6 SBS combined along Story Avenue during the weekday, service frequencies will be increased. Story Avenue will now have a bus scheduled every 3 minutes in the weekday AM peak, every 6 minutes in the midday, and every 4 minutes in the PM peak. Ridership will be closely monitored, and schedules will be adjusted accordingly.

Comment: Increase rush hour service for M100 and Bx7 from 168 to East 220th or Riverdale due to overcrowding during rush hours.

Response: Based on average hourly ridership numbers, an increase in rush hour service on the Bx7 and M100 is not warranted. These routes will continue to have the same service frequency and span as they currently do. We will coordinate with our Road Control team to identify and monitor any operational challenges the Bx7, M5, and M100 may be experiencing, including overcrowding due to unreliable service. Due to the routing change, ridership will be closely monitored, and schedules will be adjusted accordingly.

Comment: M100 should be extended along 125th street to 2nd Ave or at least 120th St.

Response: The new southbound terminal of the M100 will be at Amsterdam and West 125 Street. Due to congestion on 125 Street, which causes reliability issues throughout the route, and that fact that service on the 125 Street segment is duplicated by the M60 Select Bus Service, M101, and new M125 routes; the M100 routing along 125 Street will be discontinued. After the route change, ridership will be closely monitored, and schedules will be adjusted accordingly.

Comment: NYPD vehicles are parked illegally in bus lanes in the 52 Precinct, blocking the Bx41 Local and Bx41 SBS routes. This might happen with Bx6 SBS on Story Avenue.

Response: If and whenever you observe cars and other vehicles double parking at a particular stop on a bus route in a bus lane, please note the bus route, bus stop, and time of day and contact us by calling 511 or providing the information on our website at <https://new.mta.info/customer-feedback> so that we can investigate the incident further. We can work with our partners at NYPD to resolve the issue.

Comment: Bx30 map on page 120 of proposed Final Plan is upside down

Response: Please refer to our Route Profile page for the latest update.
<https://new.mta.info/bronxbusredesign/routes>

Comment: Need better connection between 13 Metro-North Stations and Bronx buses.

Response: Bronx local buses currently do and will continue to connect to Metro-North stations in the Bronx, including those newly proposed Metro-North stations in Co-op City, Morris Park, Parkchester/Van Nest, and Hunts Point. For more information about further Metro-North stations, please visit <https://pennstationaccess.info/overview>.

Comment: There should be a direct Bronx bus to LaGuardia Airport

Response: Under the proposed Final Plan, customers traveling to La Guardia Airport could take the M125 from The Hub to the M60 SBS or, the fastest option, taking any subway line in the Bronx and transferring to the M60 SBS. There are additional options being considered as part of the Queens Bus Network Redesign Draft Plan, with information to come.

Comment: Extend Bx2 and Bx17 to Jackson Heights via Woodside across the RFK Bridge

Response: The Bx2 and Bx17 route alignments will not change. The Bx2 bus route is already straight, direct, and connects to several important destinations and transfer points. Similarly, the Bx17 bus route connects to several important destinations and transfer points, including Fordham Plaza. Both bus routes provide north-south service to central Bronx customers and to

lengthen either route further would directly conflict with Network Redesign strategies and may lead to service reliability and performance issues. Presently, the Bx17 is among the more reliable bus routes in the Bronx system.

Comment: There should be a better connection between Bronx, Manhattan, and Queens by the RFK Bridge. Provide better transportation from the South Bronx to Randall's Island and extend to Queens.

Response: Connections to Randall's Island and Queens are made possible through the 125th Street corridor via transfer to the M35 and M60 SBS routes.

The following questions and answers are the summary of the questions asked and answered via Zoom Chat.

Comment: Will there be improvement on scheduling on the BX39 bus line? This line service is horrible

Response: Our ridership analysis for the Bx39 indicates that increased services is not warranted. The Bx39 schedule will not change. The Bx39 will have the same service frequency and span as it currently does. If you would like more information about the Bx39 route, please see this webpage on the Bx39: <https://new.mta.info/bronxbusredesign/routes/bx39> or this route profile describing the route and its bus stops: <https://new.mta.info/document/63761>. If you have specific concerns about the route you can comment here: https://mta-nyc.custhelp.com/app/comments_bronxbus

Comment: Why is the Redesign being done from a cost neutral perspective?

Response: It is not cost neutral. We will be investing in Bronx Bus Service.

Comment: Will the area of Hunts Point Avenue station on the (6) will have bus priority

Response: No, but the Bx6 SBS will benefit from new bus lanes that are coming to Story Avenue once the Bx6 SBS is rerouted to Story Av in 2023. The Bx6 and Bx6 SBS will continue to benefit from the existing bus lanes along the rest of the route.

Comment: Would there be an additional transfer from the Q50 to the Bx23 like if I take the Bx40 to the Q50 then the Bx23?

Response: We have heard from our customers that they are willing to transfer for faster, more reliable service but they are concerned over having to pay a second fare or take a crowded bus.

We also want to stress that we employ multiple strategies that ensure that some transfer connections remain "free." In some cases, we can program our MetroCard technology to recognize trips that require an additional transfer. In other cases, we would train bus operators to provide transfers free-of-charge to or from specific routes. Our policy: No rider should have to pay an additional transfer fare as result of the Bronx Bus Network Redesign.

Comment: With the 30 being on Boston, would the W60, 61 and 62 only have drop off to Fordham and pick up to White Plains and Portchester?

Response: The W60, W61, and W62 are Bee Line Bus routes and changes to those bus routes are the responsibility of Bee Line Bus Transit.

Comment: The BX11 is losing access to the Highbridge area where many seniors live. What will compensate for this loss?

Response: The Bx11 routing will change as part of an effort to simplify the Bx11, Bx18, Bx35, Bx36, Bx40, and Bx42 routes. By streamlining routes, reducing the number of turns, avoiding slow speed segments, and improving stop spacing, customers will see improved reliability and bus speed. The Bx11 will now serve East 174 Street and terminate in the eastbound direction at the Parkchester 6 Station. The extended Bx35 will serve Jennings Street and West Farms Road. To allow the Bx11 to travel directly into Manhattan via Edward L. Grant Highway, the extended Bx18 will replace the existing Bx11 service to Shakespeare Avenue, West 168 Street, Ogden Avenue, and Plimpton Avenue. If you would like more information about the Bx11 route, please see this webpage on the Bx11: <https://new.mta.info/bronxbusredesign/routes/bx11>; or this route profile describing the route and its bus stops: <https://new.mta.info/document/63536>.

Comment: Why is the Bx15 bus being split the new M125 bus is going to have the same issue as the Bx15 bus?

Response: The Bx15 is a major north-south route in the Bronx that carried more than 30,000 customers on an average weekday pre-pandemic (currently about 20,000). The route currently suffers from poor service reliability with an average on-time performance of 40 percent, wait assessment of 67 percent, and Customer Journey Performance Time of 64 percent. The route experiences congestion as it travels from The Hub to the 3rd Avenue Bridge and again when it reaches 125th Street where there is significant bus-on-bus congestion. It experiences the same congestion heading back to the Bronx via the Willis Avenue Bridge.

We proposed with the Draft Plan and maintain in our Proposed Final Plan that the Bx15 would terminate at The Hub. The new M125 would provide service between The Hub and 125th Street in Manhattan. Under the Proposed Final Plan, customers traveling to La Guardia Airport could take the M125 from The Hub to the M60 SBS or, the fastest option, taking the 2 or 5 train and transfer to the M60 SBS. There are additional options being considered as part of the Queens Bus Network Redesign Draft Plan, with good things to be shared soon. Under the Proposed Final Plan, we have improved the frequency for the M125 (southern segment of current Bx15). By splitting the route in two and improving frequency, service reliability should improve and speed up travel times. In addition, the majority of current Bx15 customers (approximately 85 percent pre-pandemic and currently approximately 58 percent) do not travel beyond The Hub today.

Comment: Were further routes considered to Queens and Brooklyn, such as buses targeting LaGuardia Airport employees?

Response: Under the Proposed Final Plan, customers traveling to La Guardia Airport could take the M125 from The Hub to the M60 SBS or, the fastest option, is to catch the 2 or 5 train and transfer to the M60 SBS. There are additional options being considered as part of the Queens Bus Network Redesign Draft Plan, with good things to be shared soon.

Comment: Will the Bx36 stops be removed from 180th stops between west farms and Webster Avenue?

Response: Yes, under the proposed plan the Bx36 will still travel on East Tremont Avenue instead of East 174 and East 180 Streets. The new routing will continue to serve the West

Farms and East Tremont neighborhoods. However, it will avoid its existing indirect routing along Boston Road. Modified Bx11 and Bx40 routings will provide new crosstown service to riders on East 174 Street and on East 180 Street, respectively. The plan is subject to MTA Board approval. If you would like more information about the Bx36 route, please see this webpage on the Bx36 <https://new.mta.info/bronxbusredesign/routes/bx36>: or this route profile describing the route and its bus stops: <https://new.mta.info/document/63756>. Information on the Bx40 can be found here <https://new.mta.info/bronxbusredesign/routes/bx40> and on the Bx11 here <https://new.mta.info/bronxbusredesign/routes/bx11>

Comment: What changes are being proposed for the BX 28 and BX38 on Gun Hill Road?

Response: After field visits from agency staff members and hearing from members of the community during our February 2020 public hearing, it was agreed that Bx28 would no longer change and remain as-is. The proposed frequency improvements to the Bx28 are still planned. Additionally, the Draft Proposal to discontinue Bx38 service will not be implemented. More information can be found here <https://new.mta.info/bronxbusredesign/routes/bx28> and here <https://new.mta.info/bronxbusredesign/routes/bx38>

Comment: Is there a route redesign affecting the Bx11 and Bx18 lines?

Response: Yes, both Bx11 and Bx18 will be rerouted. More information can be found here <https://new.mta.info/bronxbusredesign/routes/bx11> and here <https://new.mta.info/bronxbusredesign/routes/bx18>

Comment: What are the enforcement practices for keeping bus lanes clear? Every time I am on the bus on Fordham or 125th there are always double parked cars and electric scooters, rendering the bus lanes inoperable and negating any potential times savings.

Response: We work closely with our partners at NYCDOT and NYPD to improve bus lane enforcement. City streets, including bus lanes and bus stops, are managed by NYCDOT. They use stationary cameras to help enforce bus lanes along SBS routes. Meanwhile, NYPD uses Traffic Enforcement Agents to enforce the rules of the road. In addition, MTA has a program of on-bus cameras to enforce bus lanes, called ABLE. ABLE is currently active on seven routes, but in the next two years we will be greatly expanding the program. In conjunction with new NYCDOT cameras, 85% of existing bus lanes will be camera-enforced by the end of 2023.

If you observe cars and other vehicles double parking at a particular stop on a bus route, please note the bus route, bus stop, and time of day and contact us by calling 511 or providing the information on our website at <https://new.mta.info/customer-feedback> so that we can investigate the incident further. We can work with our partners at NYPD to resolve the issue.

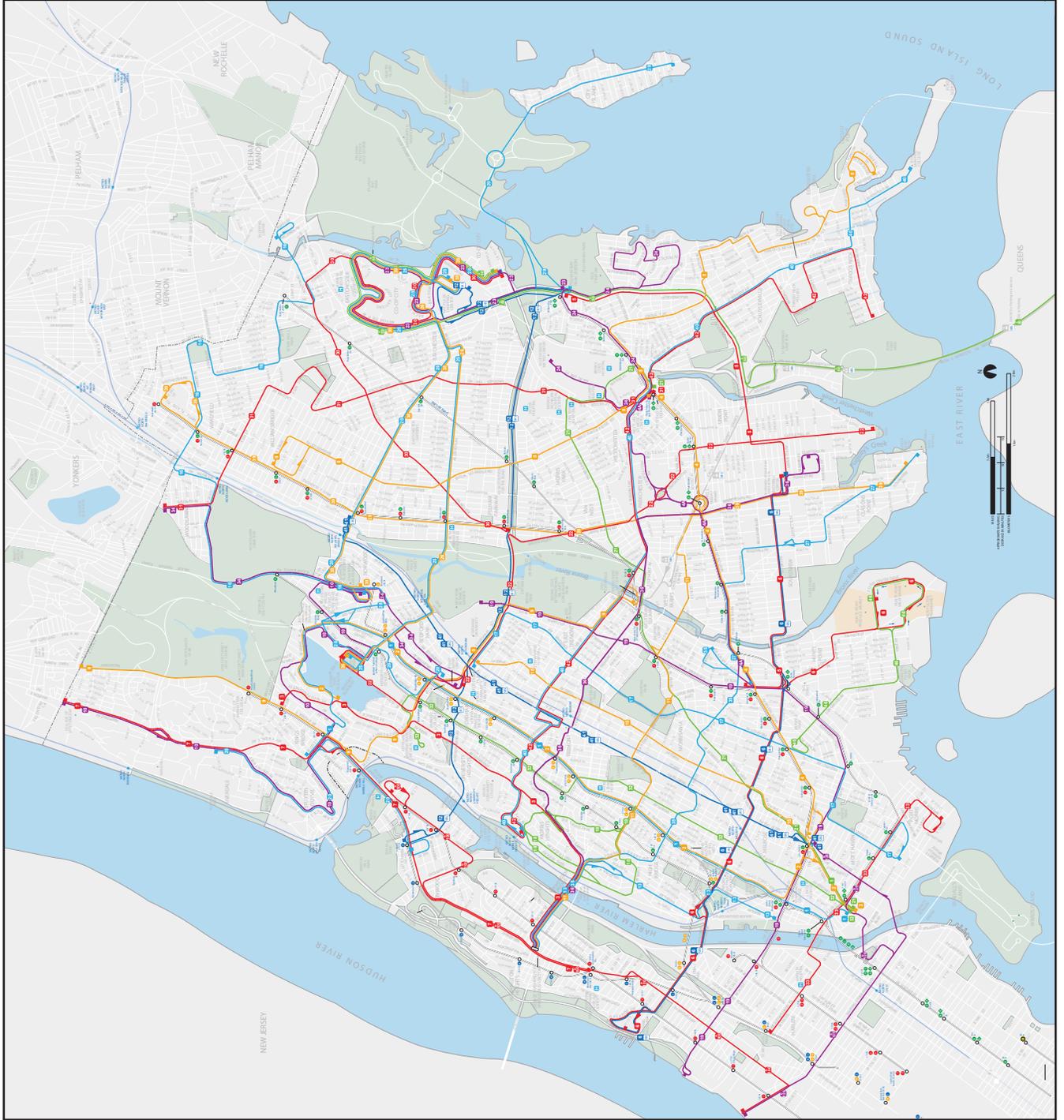
Bronx Bus Network Redesign Staff Summary



Attachment 4: Maps

Full Borough System Map

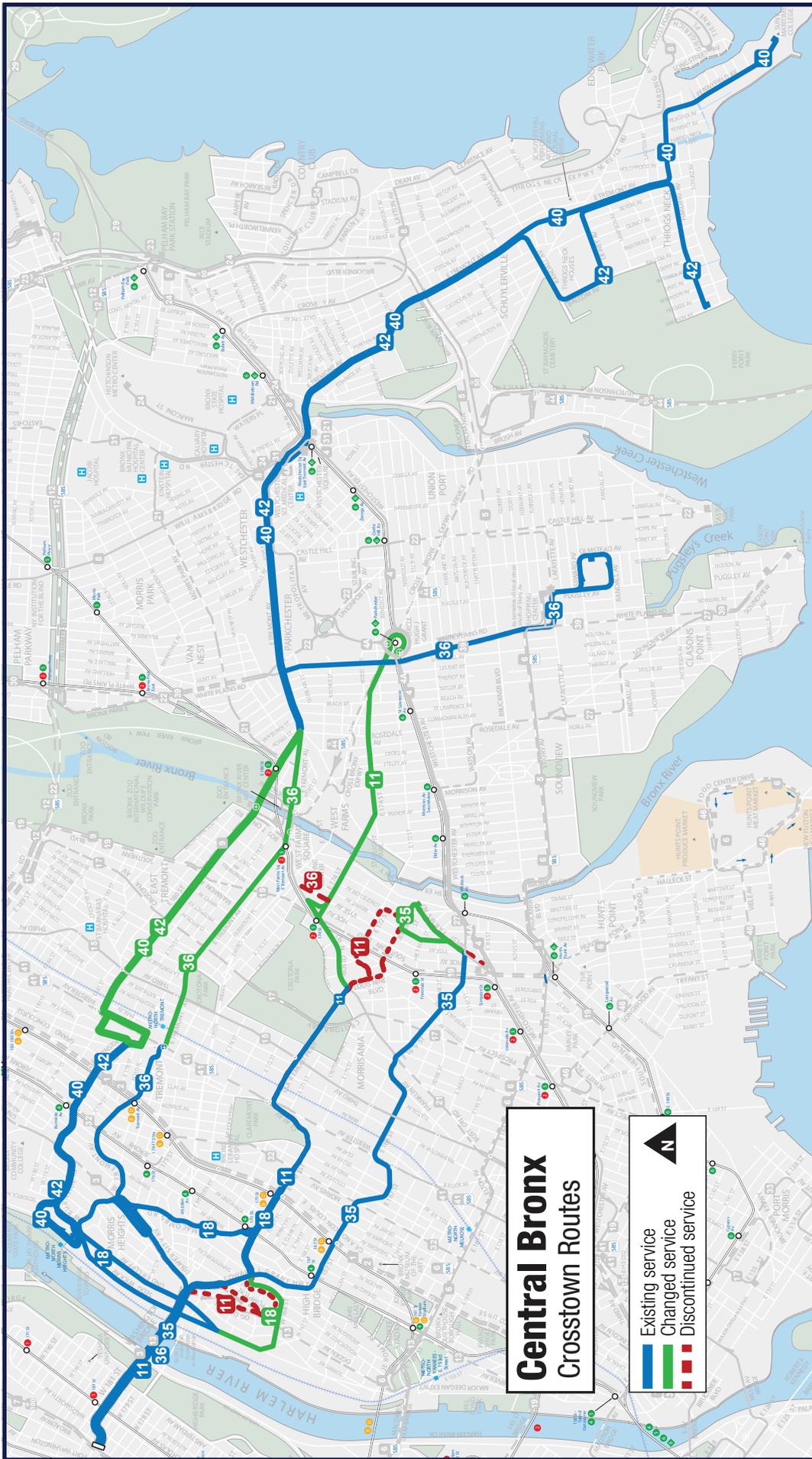
Bronx Local Bus Map - Post Redesign Implementation



Bronx Bus Network Redesign

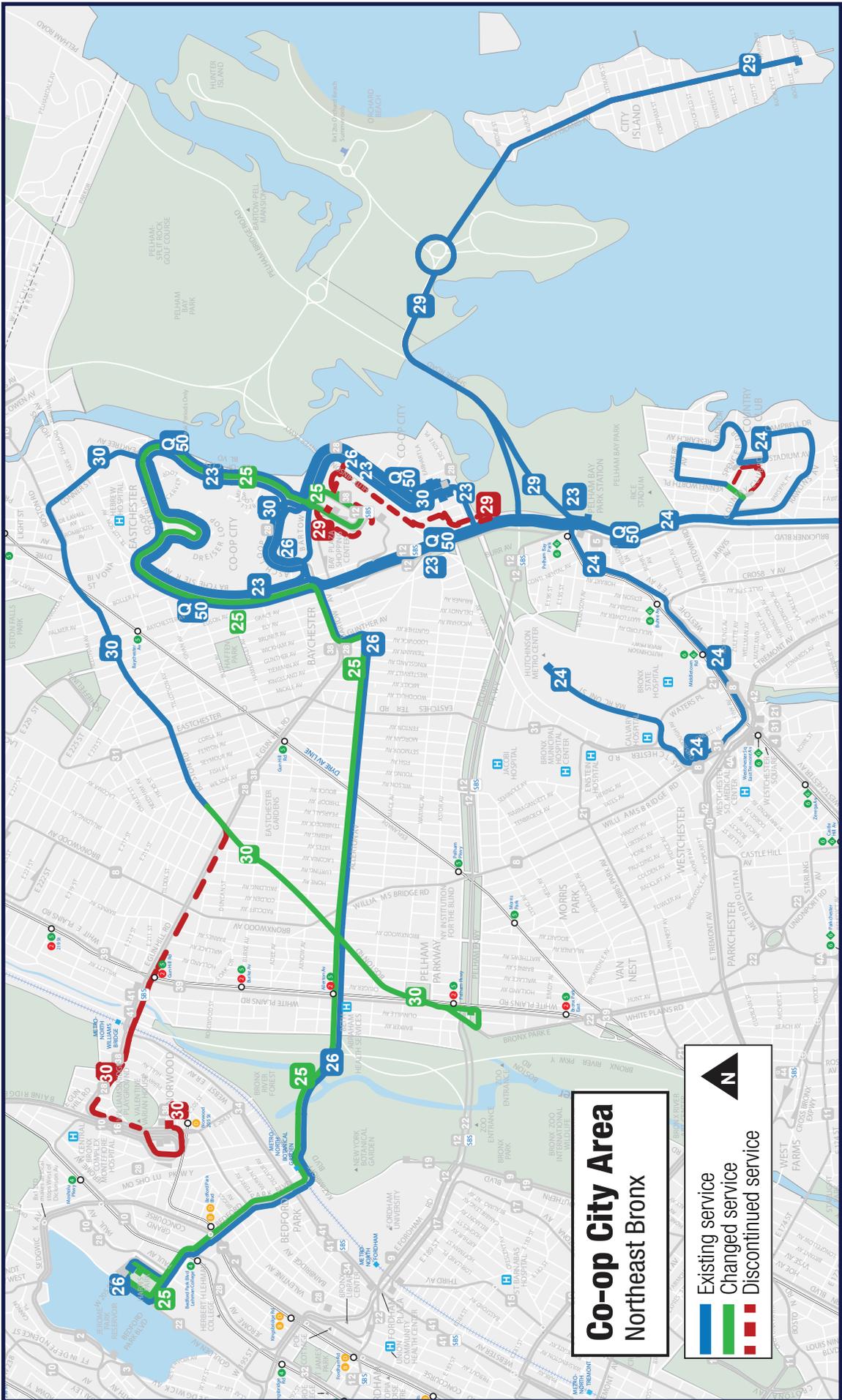


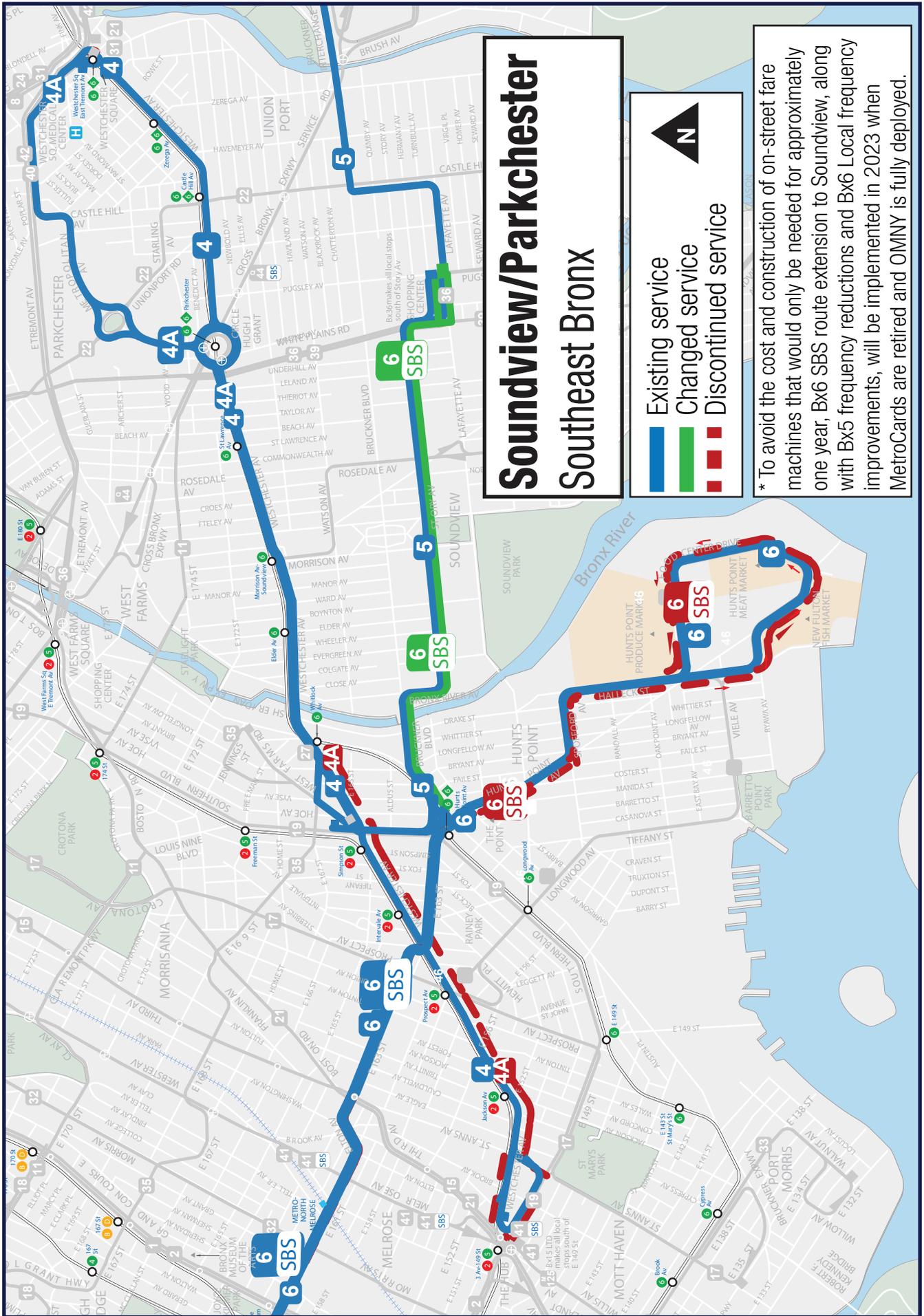
Neighborhood Maps



**Central Bronx
Crosstown Routes**

- Existing service
- Changed service
- Discontinued service

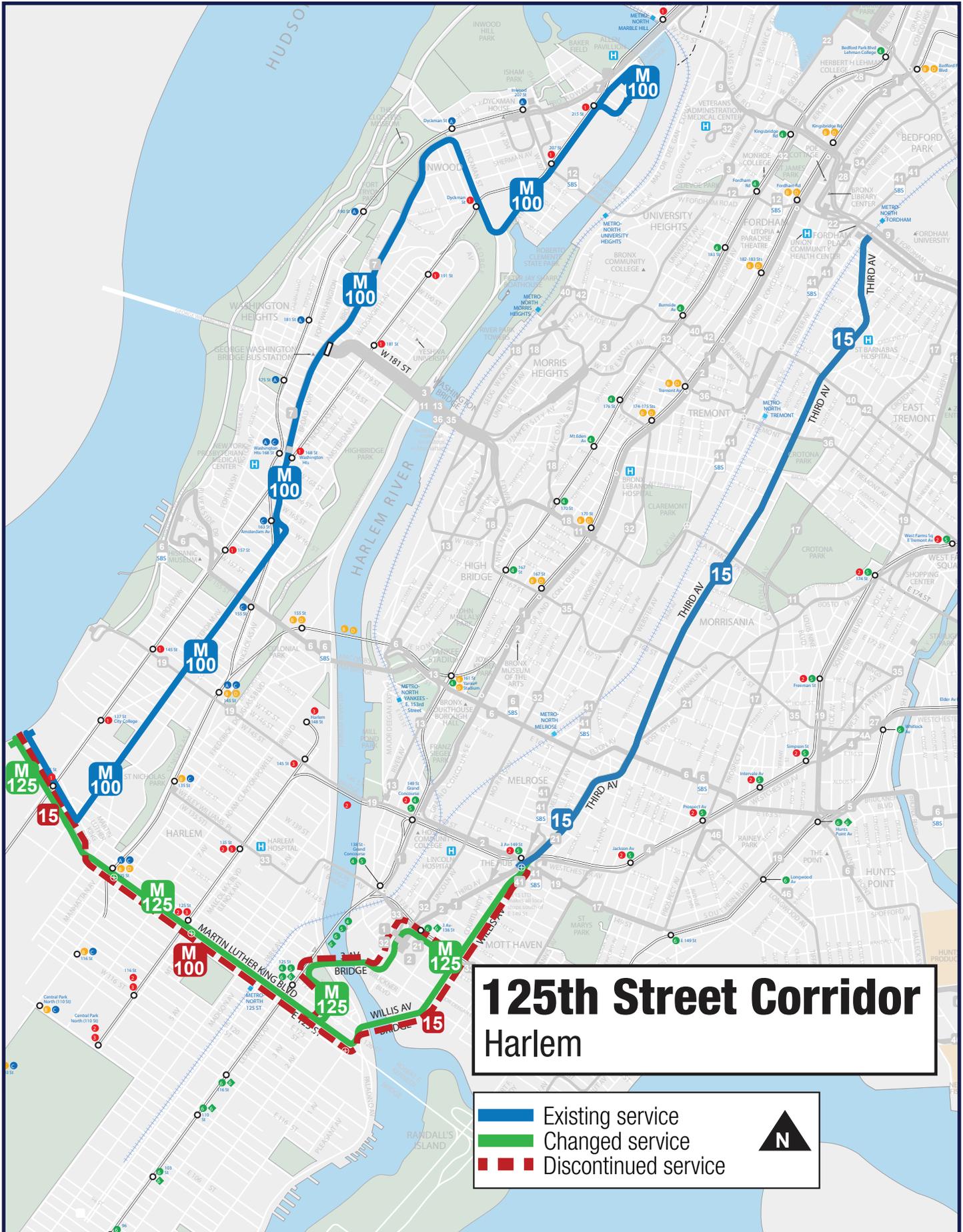




Soundview/Parkchester Southeast Bronx

- █ Existing service
- █ Changed service
- █ Discontinued service

* To avoid the cost and construction of on-street fare machines that would only be needed for approximately one year, Bx6 SBS route extension to Soundview, along with Bx5 frequency reductions and Bx6 Local frequency improvements, will be implemented in 2023 when MetroCards are retired and OMNY is fully deployed.



125th Street Corridor Harlem

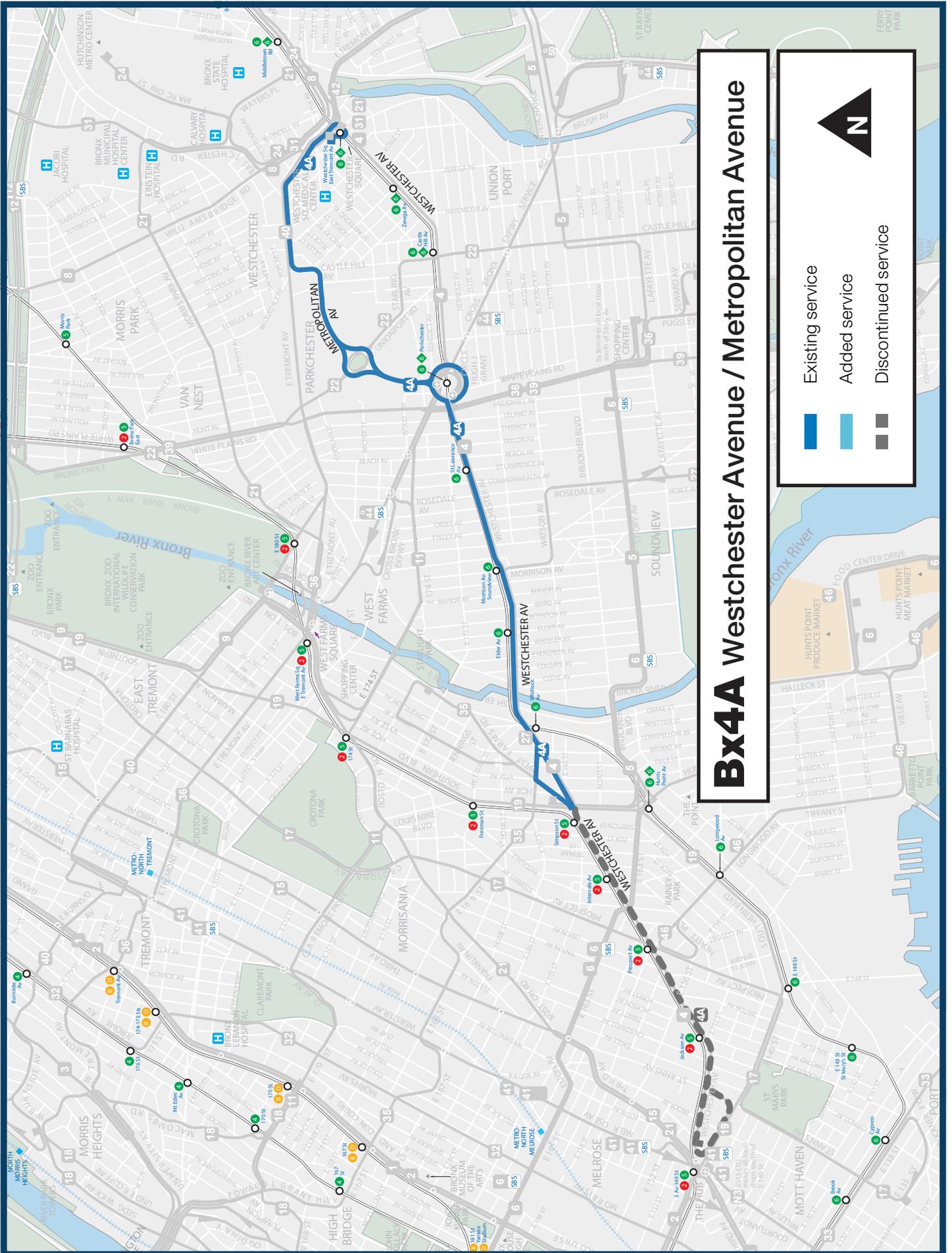
- █ Existing service
- █ Changed service
- █ Discontinued service

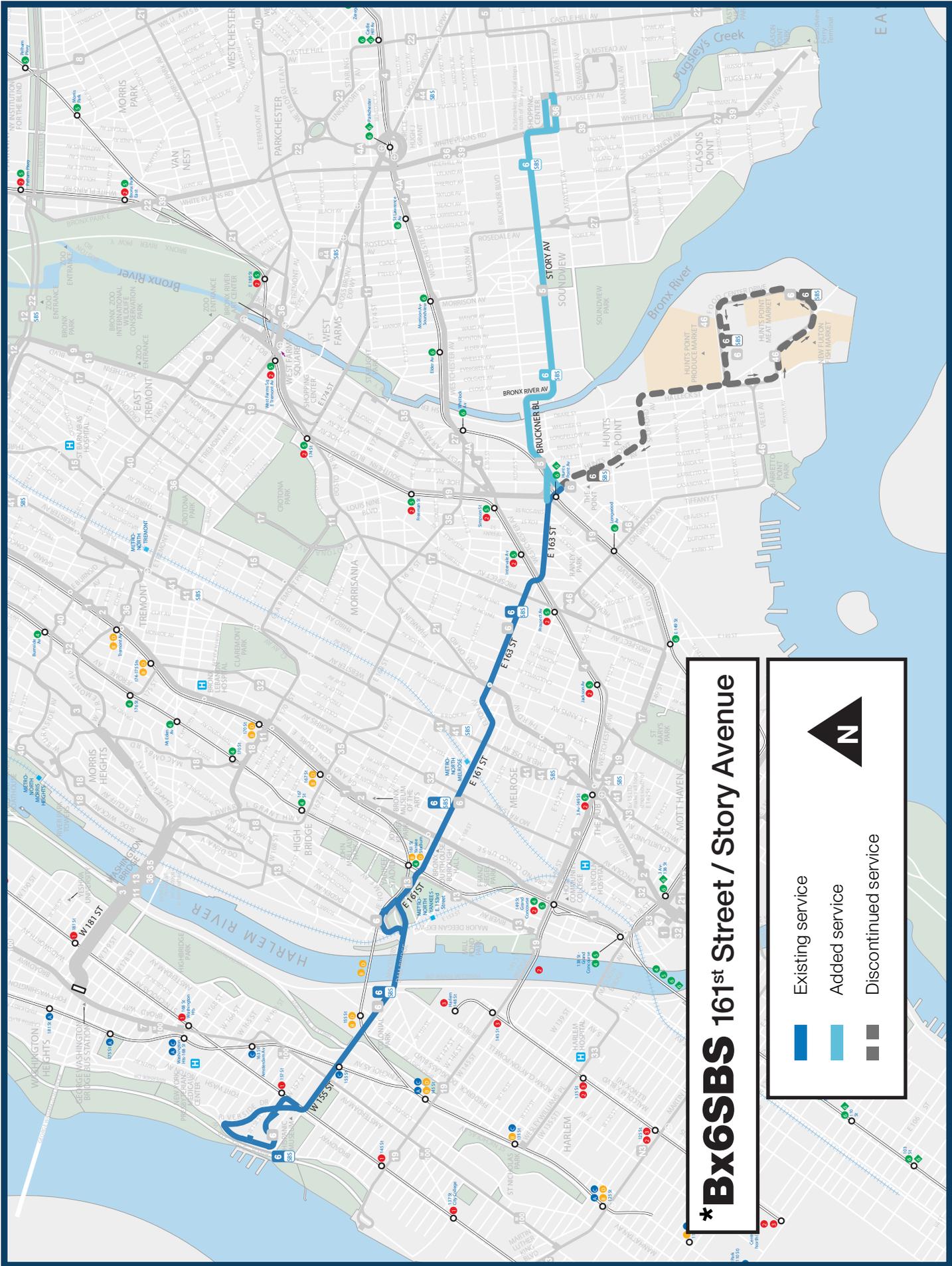


Bronx Bus Network Redesign



Individual Route Maps with Alignment Changes

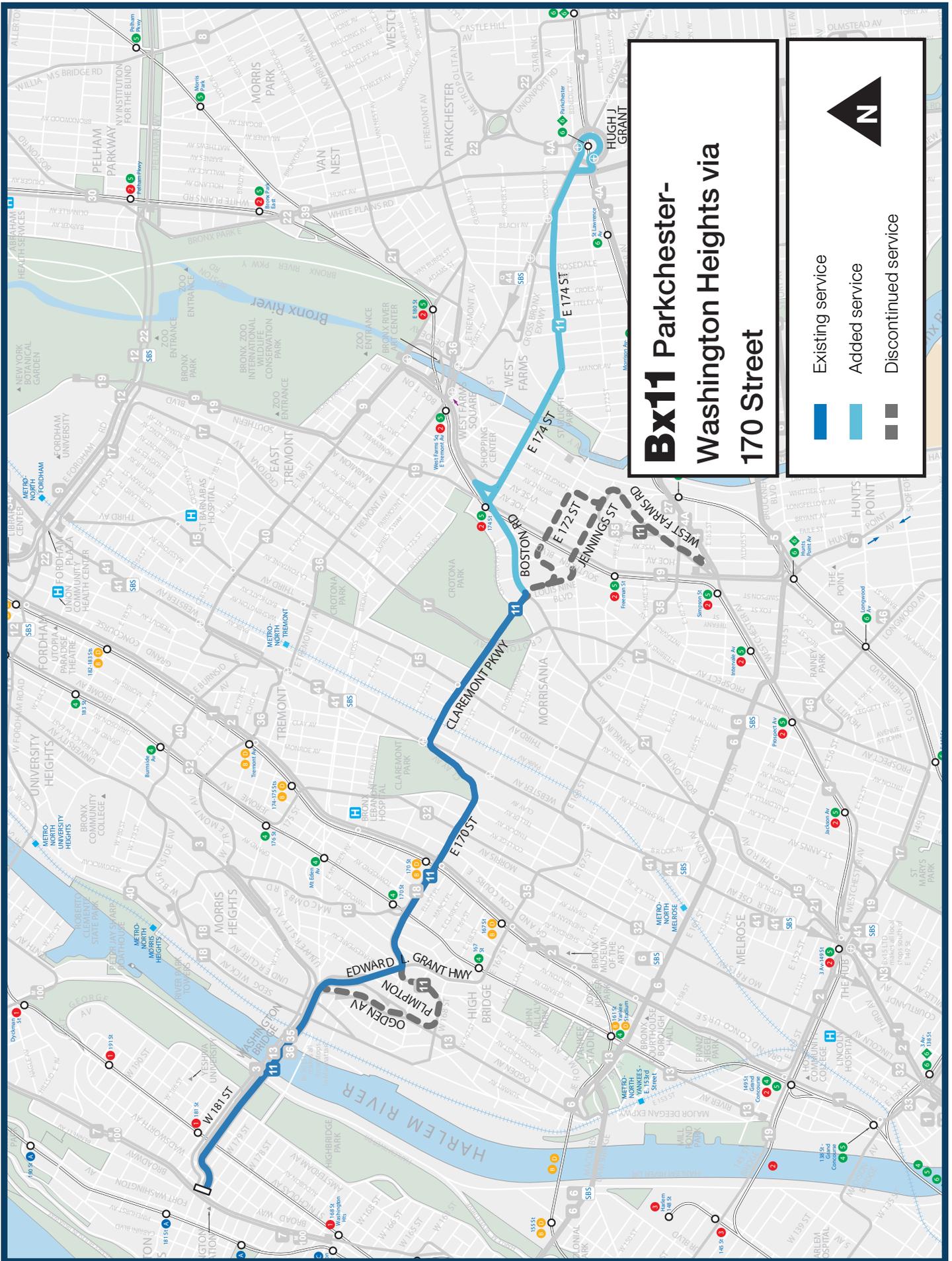


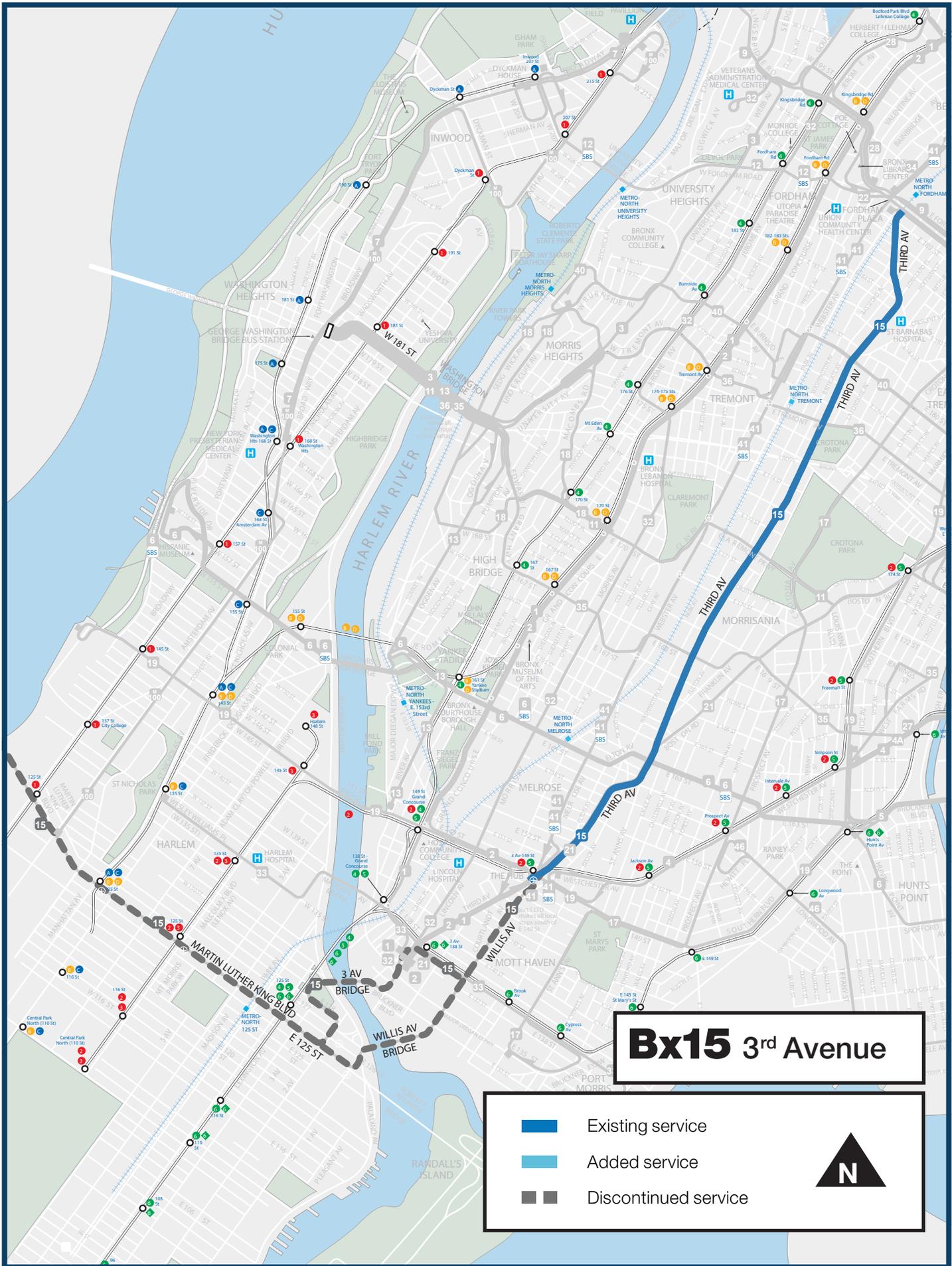


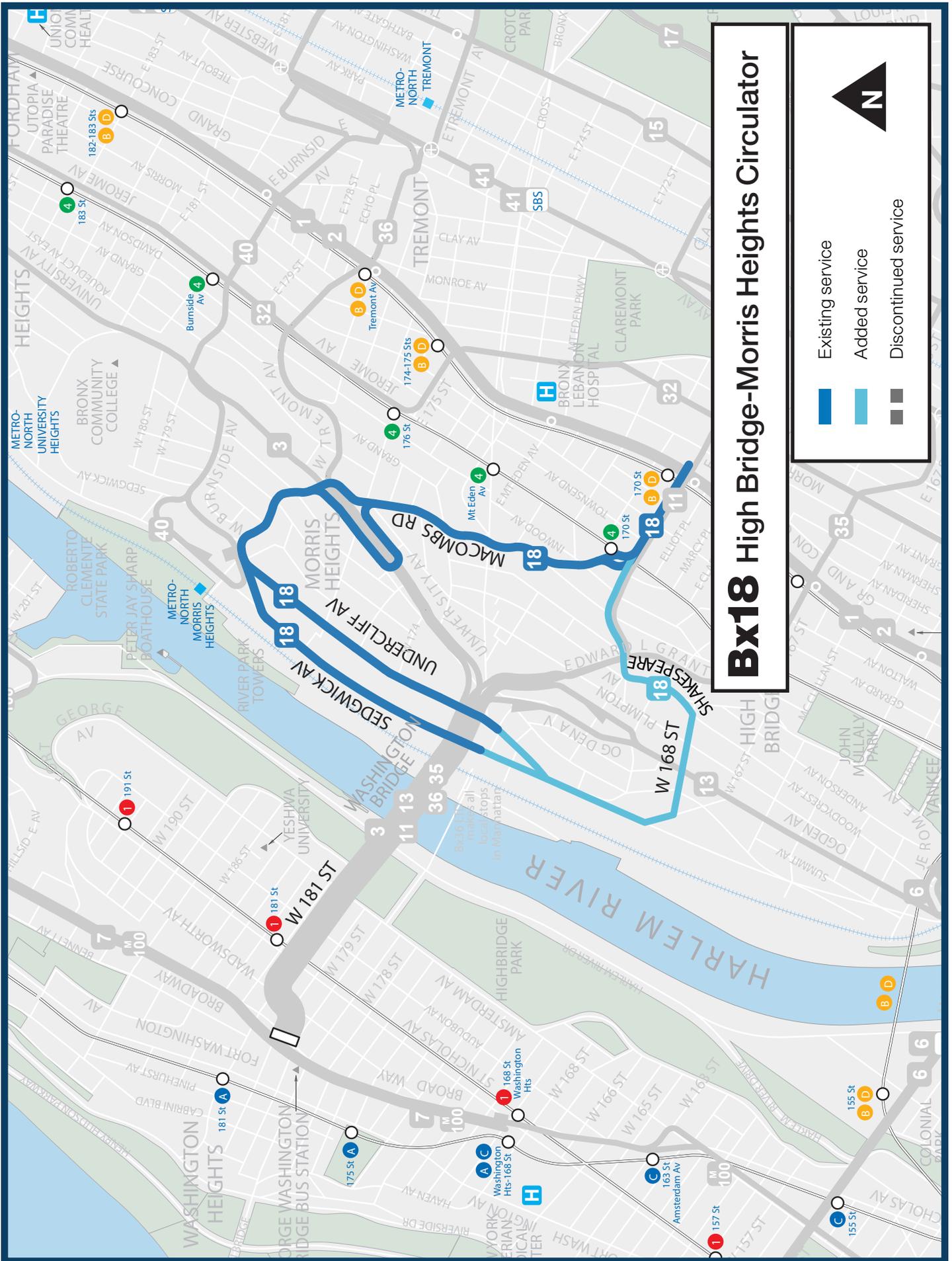
*** Bx6 SBS 161st Street / Story Avenue**

Existing service
 Added service
 Discontinued service

*Bx6SBS route changes have been postponed until 2023 when MetroCards are retired and OMNY is fully deployed.



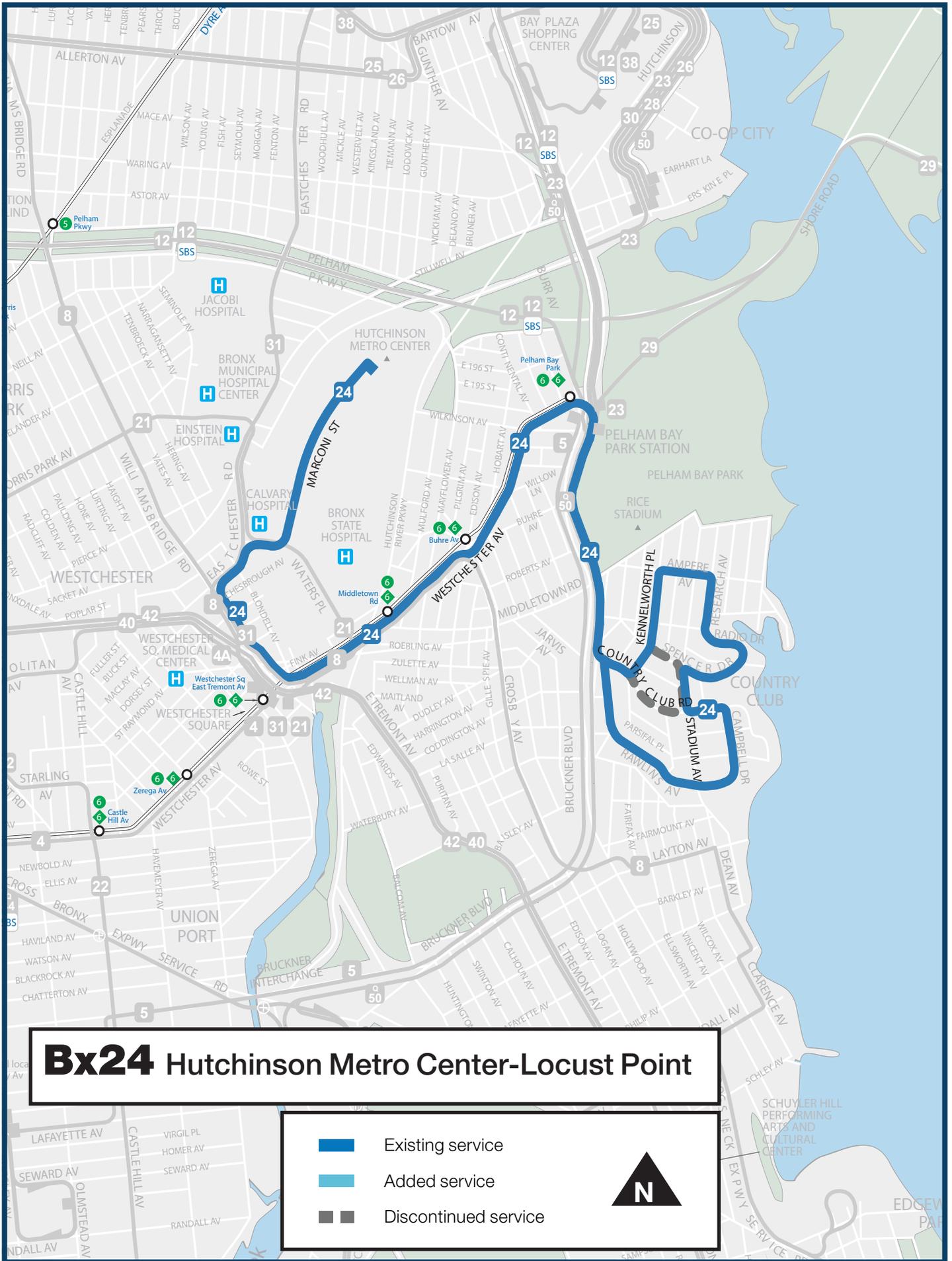


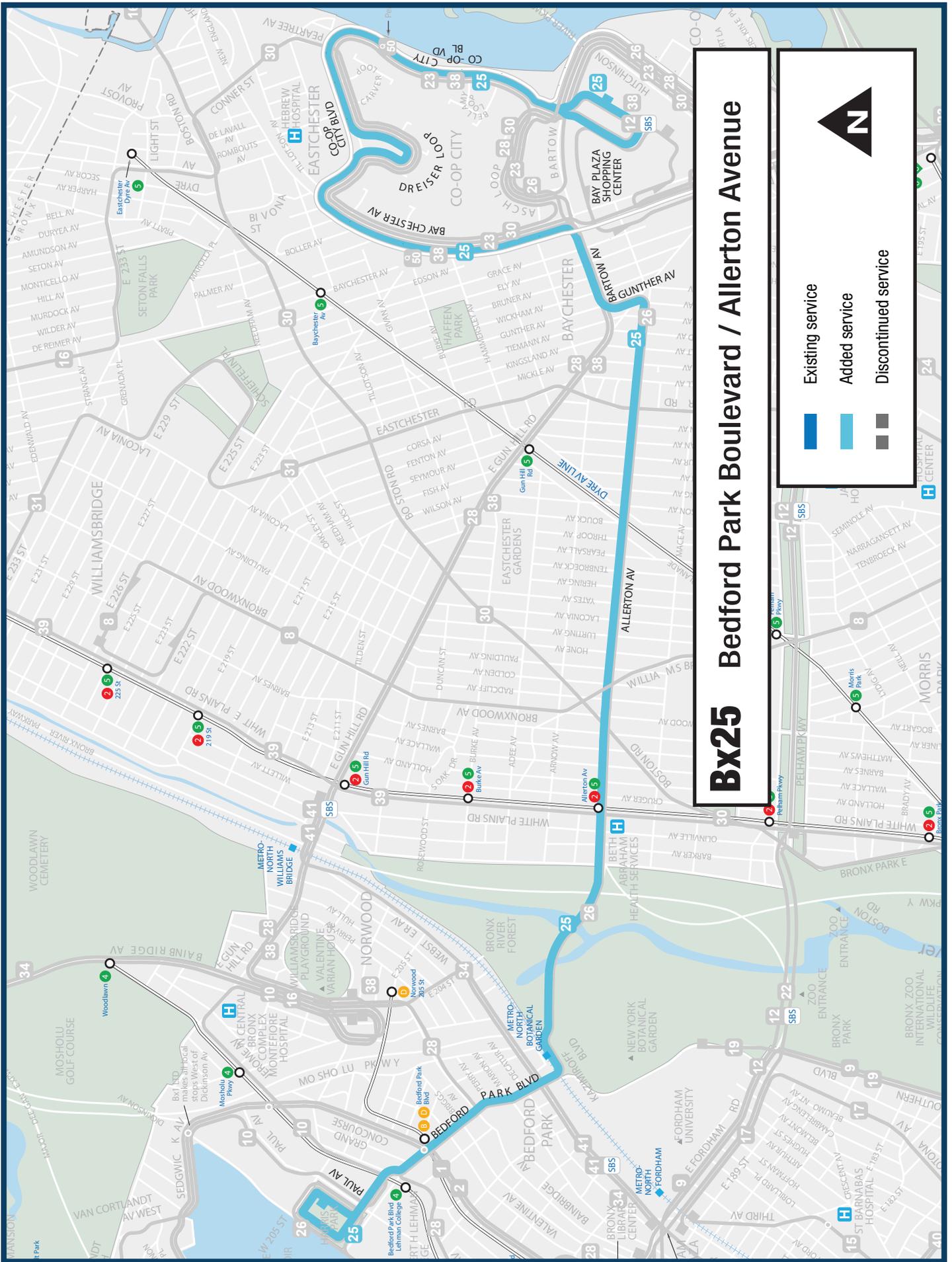


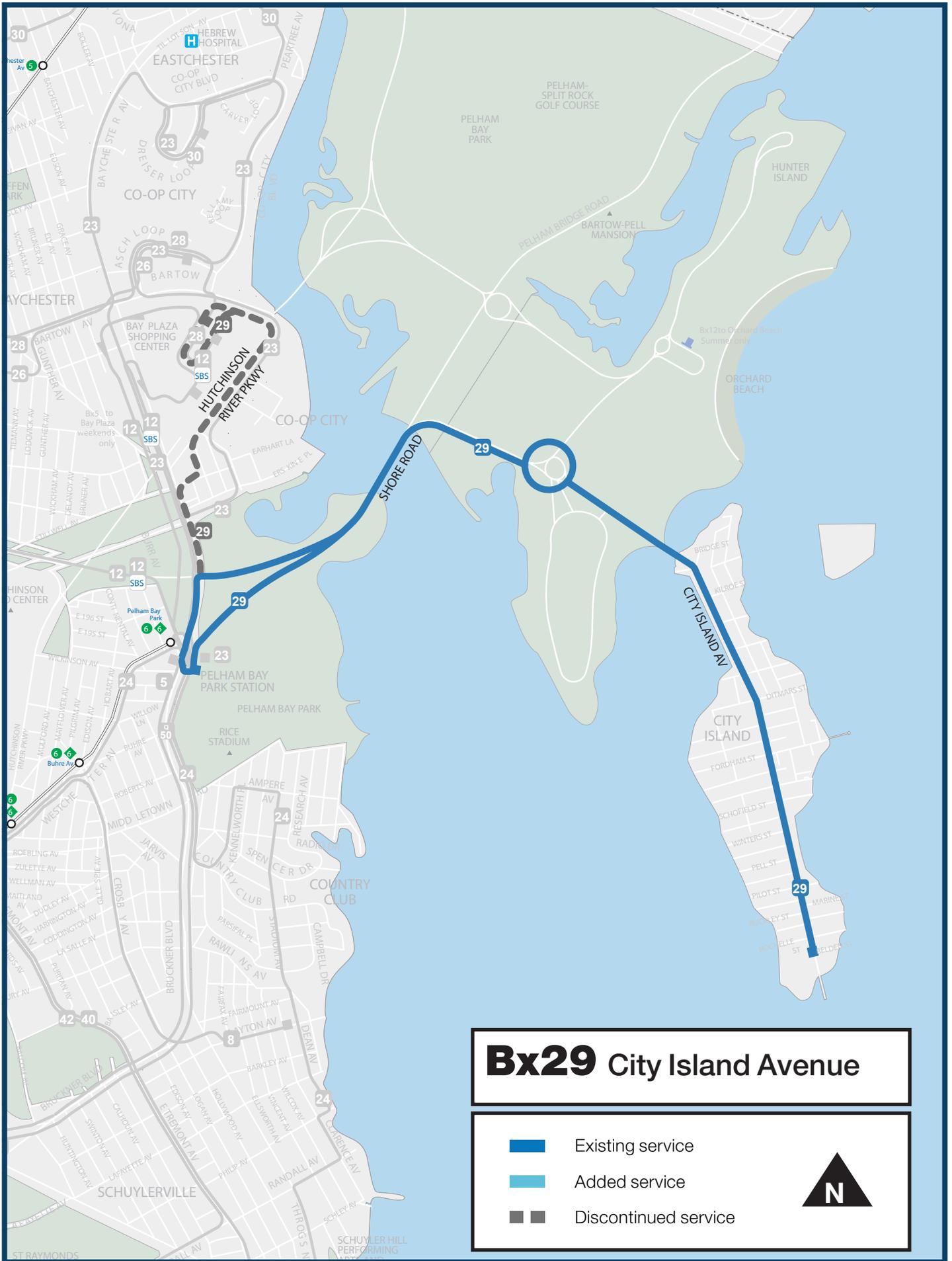
Bx18 High Bridge-Morris Heights Circulator

■ Existing service
■ Added service
■ Discontinued service

▲
 N



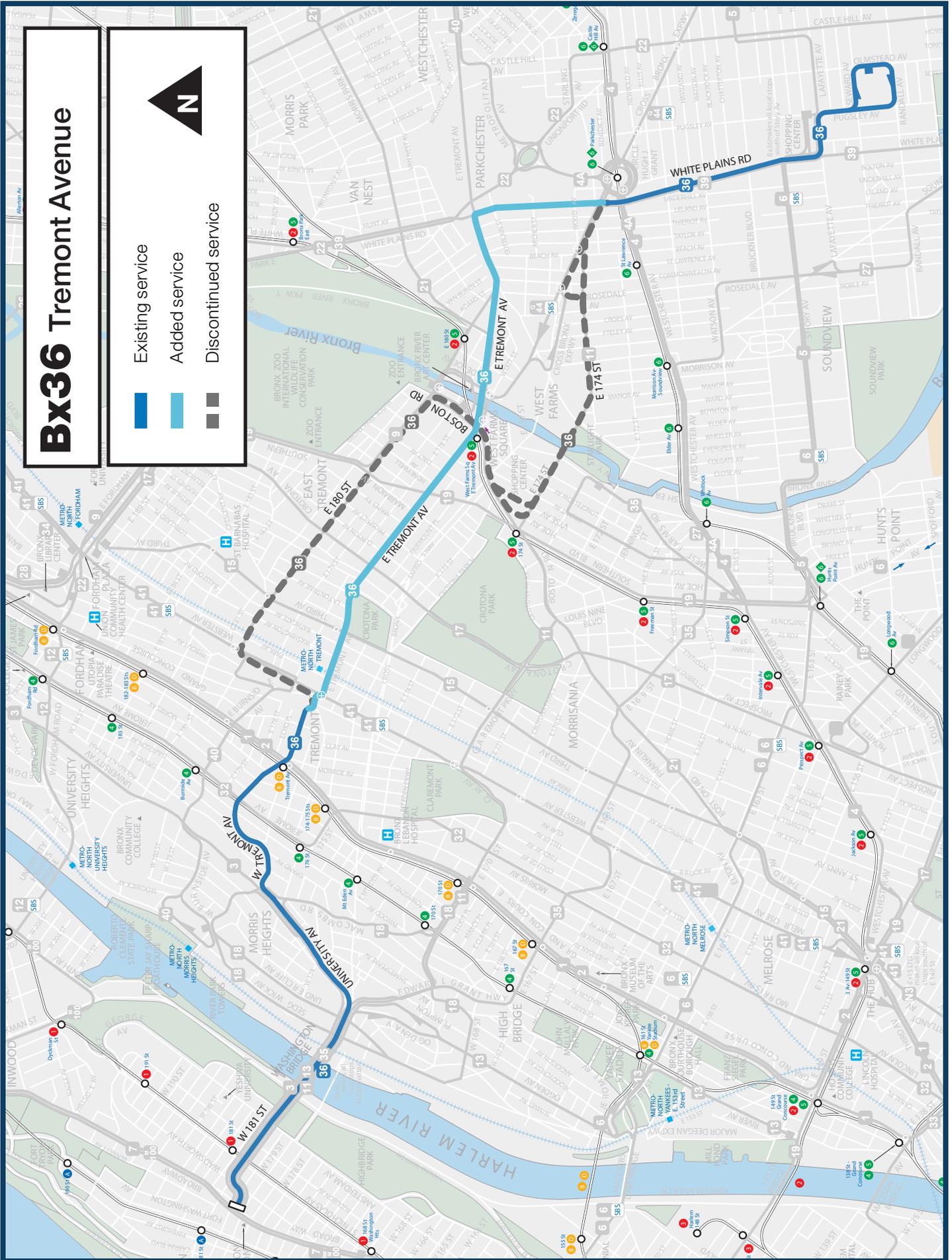


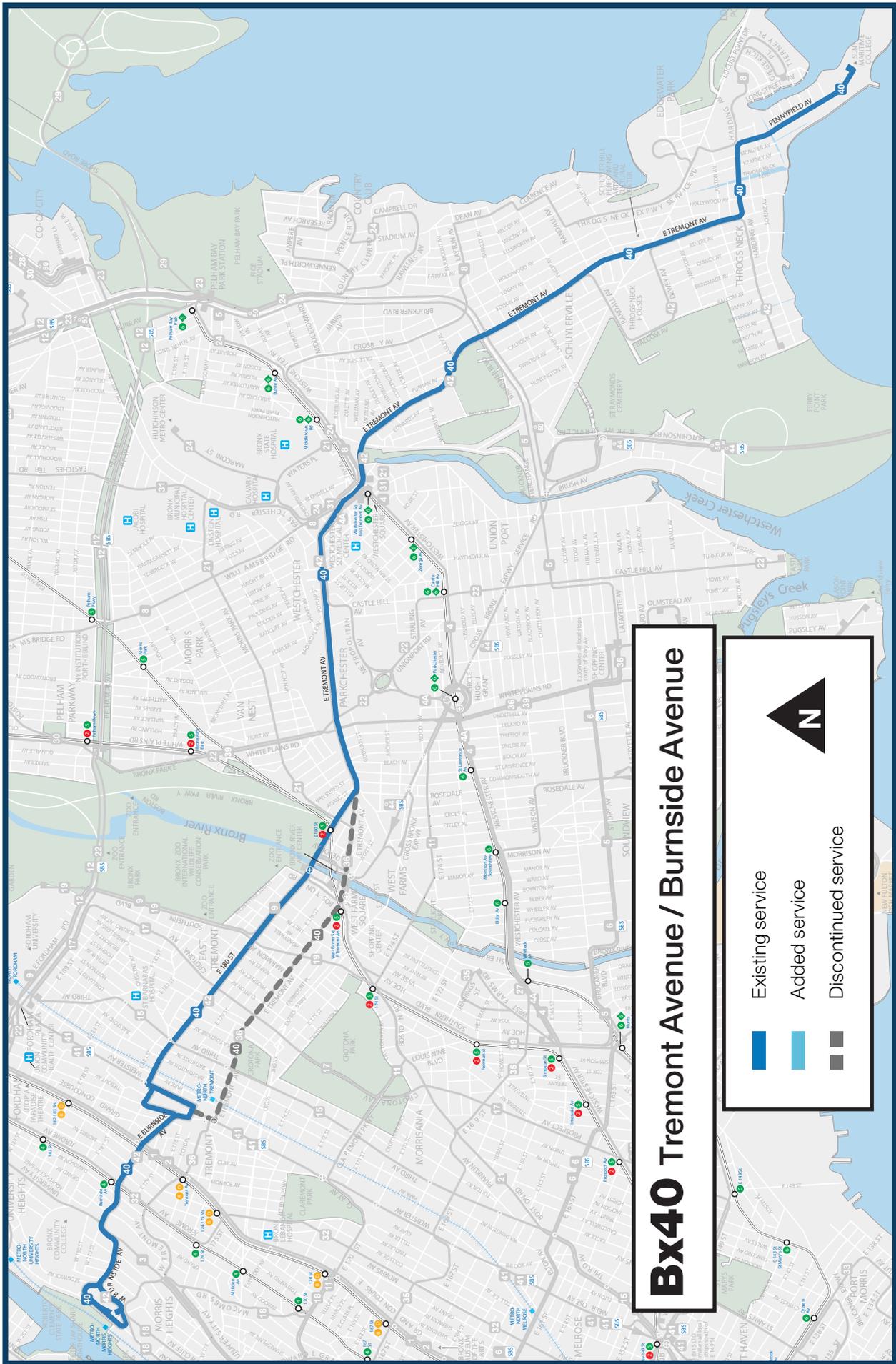


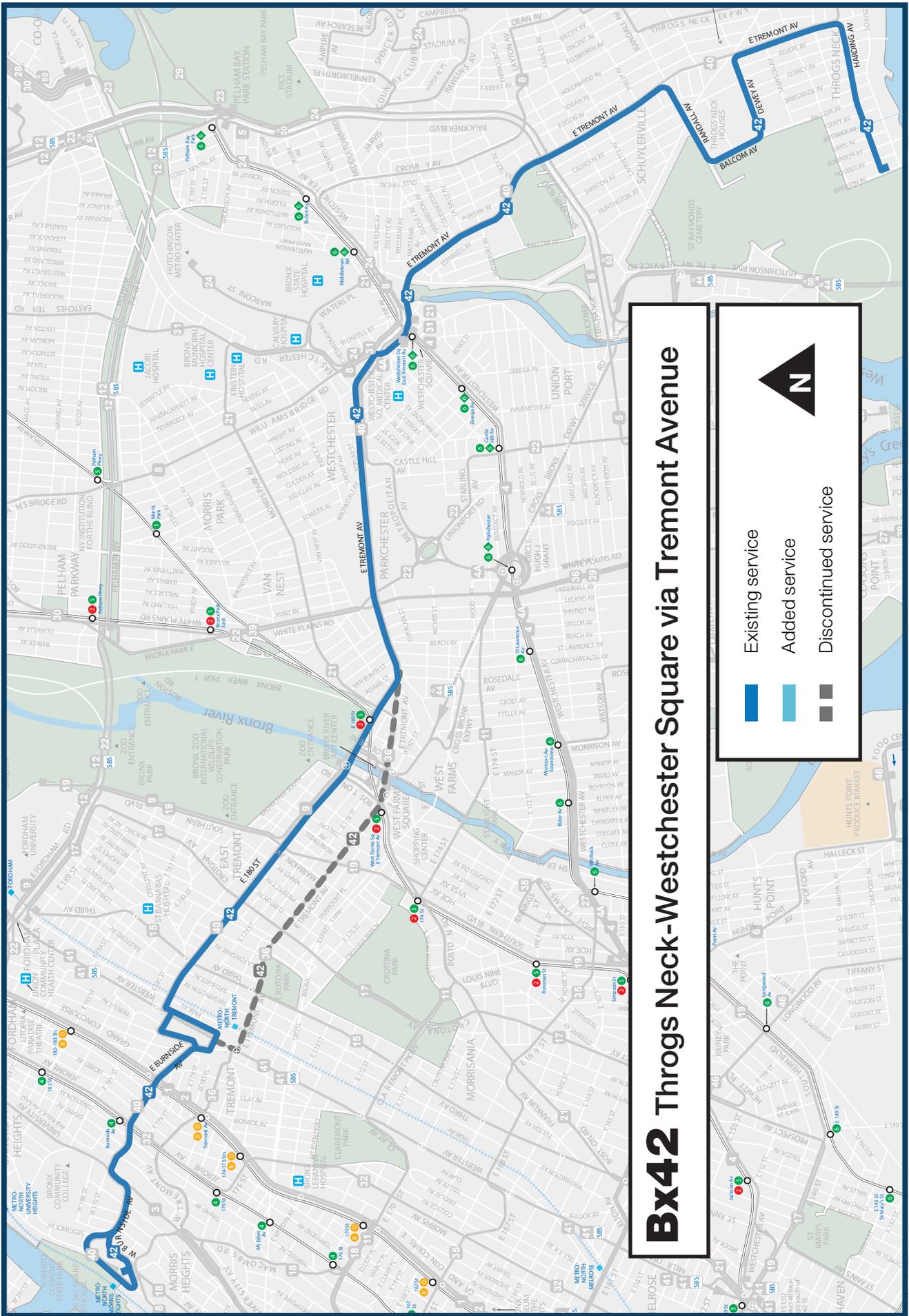


Bx36 Tremont Avenue

-  Existing service
-  Added service
-  Discontinued service







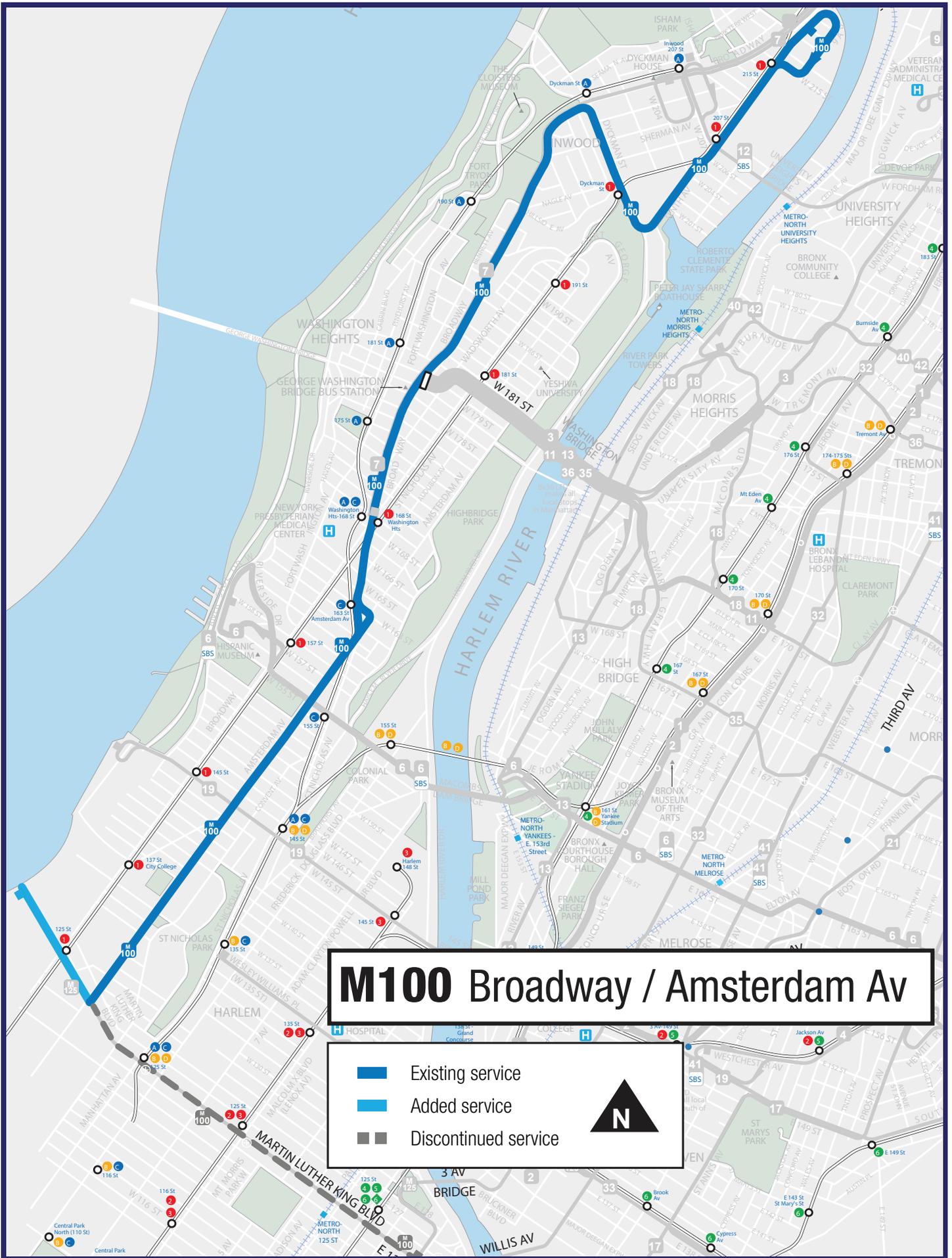
Bx42 Throgs Neck-Westchester Square via Tremont Avenue

Existing service

Added service

Discontinued service

N



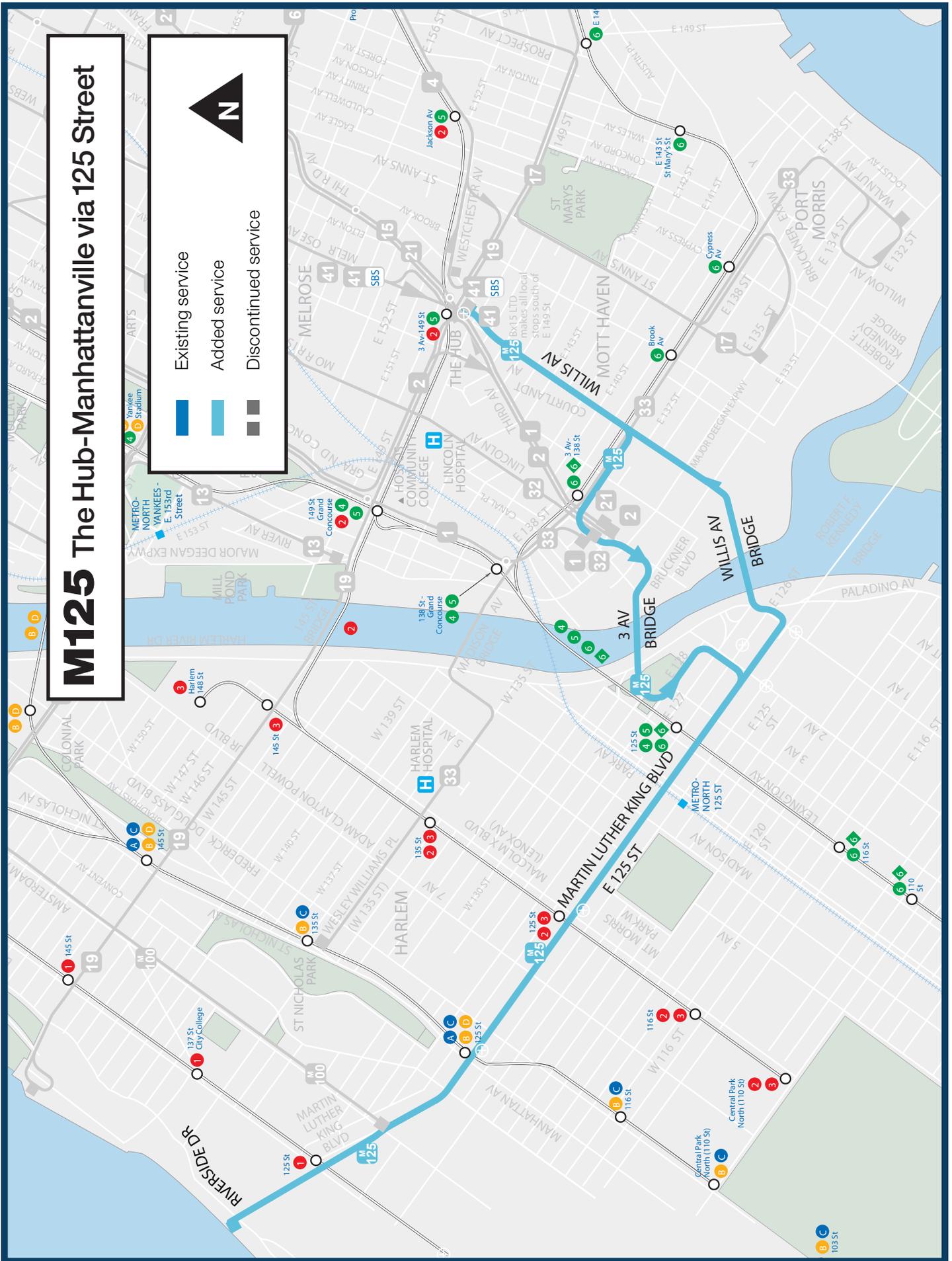
M100 Broadway / Amsterdam Av

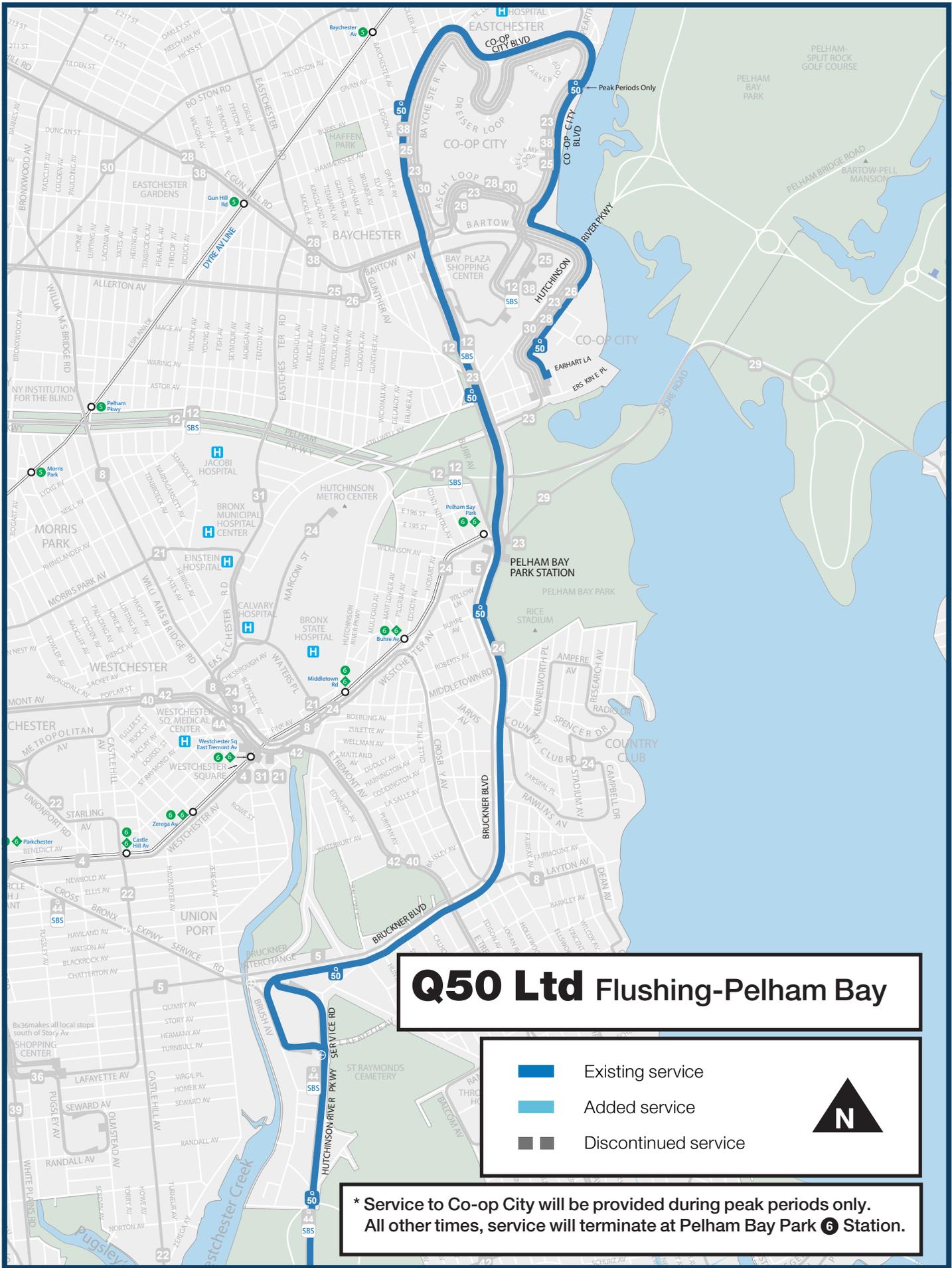
- Existing service
- Added service
- Discontinued service



M125 The Hub-Manhattanville via 125 Street

-  Existing service
-  Added service
-  Discontinued service





Q50 Ltd Flushing-Pelham Bay

- █ Existing service
- █ Added service
- █ Discontinued service



* Service to Co-op City will be provided during peak periods only.
 All other times, service will terminate at Pelham Bay Park 6 Station.



New York City Transit Procurements

Louis A. Montanti, MTA Deputy Chief Procurement – Operations



This month, MTA Bus Company proposes the award of 135 low-floor, 40-foot diesel buses to Nova Bus (US) Inc. The buses will be very similar to the bus pictured above from an earlier Nova contract and will feature current customer amenities including USB charging ports, Wi-Fi, and customer information screens. In addition, the buses will comply with all regulatory requirements in regards to safety, emissions, and accessibility. This project is funded with a Federal Transit Administration (FTA) grant.

PROCUREMENTS

The Procurement Agenda this month includes 2 actions for a proposed expenditure of \$110.7M.

Subject	Request for Authorization to Award Various Procurements				
Department	Procurement & Supply Chain – NYCT				
Department Head Name	Louis A. Montanti				
Department Head Signature					
Project Manager Name	Rose Davis				
Board Action					
Order	To	Date	Approval	Info	Other
1	Committee	12/13/21			
2	Board	12/15/21			

December 8, 2021			
Department			
Department Head Name			
Department Head Signature			
Internal Approvals			
	Approval		Approval
	President NYCT		Pres. MTA Bus/SVP DOB
	Acting COO, NYCT	X	Subways
	Capital Prog. Management	X	Diversity/Civil Rights
X	Law		

Internal Approvals (cont.)							
Order	Approval	Order	Approval	Order	Approval	Order	Approval

PURPOSE

To obtain approval of the Board to award various contracts and purchase orders, and to inform the NYC Transit Committee of these procurement actions.

DISCUSSION

NYC Transit proposes to award Noncompetitive procurements in the following categories: None

MTA Capital Construction proposes to award Noncompetitive procurements in the following categories: None

MTA Bus Company proposes to award Noncompetitive procurements in the following categories: None

NYC Transit proposes to award Competitive procurements in the following categories:

<u>Procurements Requiring Two-Thirds Vote:</u>	<u># of Actions</u>	<u>\$ Amount</u>
Schedule C: Competitive Requests for Proposals (Award of Purchase and Public Work Contracts)	1	\$ 87.5 M

Schedules Requiring Majority Vote:

Schedule G: Miscellaneous Service Contracts	1	\$ 23.2 M
SUBTOTAL	2	\$ 110.7 M

MTA Capital Construction proposes to award Competitive procurements in the following categories: None

MTA Bus Company proposes to award Competitive procurements in the following categories: None

NYC Transit proposes to award Ratifications in the following categories: None

MTA Capital Construction proposes to award Ratifications in the following categories: None

MTA Bus Company proposes to award Ratifications in the following categories: None

SUBTOTAL	2	\$ 110.7 M
TOTAL	2	\$ 110.7 M

COMPETITIVE BIDDING REQUIREMENTS: The procurement actions in Schedules A, B, C, and D are subject to the competitive bidding requirements of PAL 1209 or 1265-a relating to contracts for the purchase of goods or public work. Procurement actions in the remaining Schedules are not subject to these requirements.

BUDGET IMPACT: The purchases/contracts will result in obligating funds in the amounts listed. Funds are available in the current operating/capital budgets for this purpose.

RECOMMENDATION: That the purchases/contracts be approved as proposed. (Items are included in the resolution of approval at the beginning of the Procurement Section.)

BOARD RESOLUTION

WHEREAS, in accordance with Sections 1265-a and 1209 of the Public Authorities Law and the All-Agency General Contract Procurement Guidelines, the Board authorizes the award of certain noncompetitive purchase and public work contracts, and the solicitation and award of requests for proposals regarding purchase and public work contracts; and

WHEREAS, in accordance with the All-Agency Service Contract Procurement Guidelines and General Contract Procurement Guidelines the Board authorizes the award of certain noncompetitive miscellaneous service and miscellaneous procurement contracts, certain change orders to purchase, public work, and miscellaneous service and miscellaneous procurement contracts, and

WHEREAS, in accordance with Section 2879 of the Public Authorities Law and the All-Agency Service Contract Procurement Guidelines, the Board authorizes the award of certain service contracts and certain change orders to service contracts.

NOW, the Board resolves as follows:

1. As to each purchase and public work contract set forth in annexed Schedule A, the Board declares competitive bidding to be impractical or inappropriate for the reasons specified therein and authorizes the execution of each such contract.
2. As to each request for proposals (for purchase and public work contracts) set forth in Schedule B for which authorization to solicit proposals is requested, for the reasons specified therein, the Board declares competitive bidding to be impractical or inappropriate, declares it is in the public interest to solicit competitive request for proposals, and authorizes the solicitation of such proposals.
3. As to each request for proposals (for purchase and public work contracts) set forth in Schedule C for which a recommendation is made to award the contract, the Board authorizes the execution of said contract.
4. As to each action set forth in Schedule D, the Board declares competitive bidding impractical or inappropriate for the reasons specified therein and ratifies each action for which ratification is requested.
5. The Board authorizes the execution of each of the following for which Board authorization is required: (i) the miscellaneous procurement contracts set forth in Schedule E; (ii) the personal service contracts set forth in Schedule F; (iii) the miscellaneous service contracts set forth in Schedule G; (iv) the modifications to personal/miscellaneous service contracts set forth in Schedule H; (v) the contract modifications to purchase and public work contracts set forth in Schedule I; and (vi) the modifications to miscellaneous procurement contracts set forth in Schedule J.
6. The Board ratifies each action taken set forth in Schedule K for which ratification is requested.

DECEMBER 2021

LIST OF COMPETITIVE PROCUREMENTS FOR BOARD APPROVAL

Procurements Requiring Two-Thirds Vote:

C. Competitive Requests for Proposals (Award of Purchase and Public Work Contracts)
 (Staff Summaries required for items estimated to be greater than \$1,000,000.)

- | | | |
|---|---------------------|---|
| <p>1. Nova Bus (US) Inc.
76 months from Notice of Award
Contract # B40673</p> | <p>\$87,454,071</p> | <p><u>Staff Summary Attached</u></p> |
| <p>Furnish and Deliver 135 Low-Floor 40-Foot Diesel Buses.</p> | | |

Procurements Requiring Majority Vote:

G. Miscellaneous Service Contracts
 (Staff Summaries required for items estimated to be greater than \$1,000,000.)

- | | | |
|---|---------------------|---|
| <p>2. Gramercy Park Physical Therapy, P.C.</p> | <p>\$3,182,120</p> | <p><u>Staff Summary Attached</u></p> |
| <p>3. Feigi Taub Halberstam Audiology & Speech Pathology, P.C.</p> | <p>\$7,458,620</p> | <p>↓</p> |
| <p>4. Theradynamics Rehab Management, LLC</p> | <p>\$12,515,664</p> | <p>↓</p> |
| <p>Five years with an option to extend up to two years
Contract #s TBD</p> | | |
| <p>Award of three, 5-year estimated quantity miscellaneous service contracts for Eligibility Assessment Services.</p> | | |

Staff Summary

Item Number 1			
Department, Department Head Name: Office of MTA Deputy Chief Procurement, Louis A. Montanti			
Internal Approvals			
Order	Approval	Order	Approval
1	Materiel		
2	Law		
3	CFO		
4	DDCR		
5	President		

SUMMARY INFORMATION	
Vendor Name Nova Bus (US) Inc.	Contract No. B40673
Description Furnish and Deliver 135 Low-Floor 40-Foot Diesel Buses	
Total Amount: \$87,454,071	
Contract Term (including Options, if any) 76 Months from Notice of Award (inclusive of delivery of the buses and provision of warranty support)	
Option(s) included in Total Amount? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Renewal? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Procurement Type <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Noncompetitive	
Solicitation Type <input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:	
Funding Source <input type="checkbox"/> Operating <input checked="" type="checkbox"/> Capital <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Other:	

Purpose

To request that the Board, pursuant to Public Authorities Law, Section 1265-a, subdivision 4(g), approve the federally funded purchase of 135 low-floor 40-foot diesel buses as well as related items such as spare parts, special tools and equipment, technical documentation, and training from Nova Bus (US) Inc. (“Nova”) in the total estimated amount of \$87,454,071 for MTA Bus Company (“MTABC”).

Discussion

On January 21, 2021, the Board adopted a resolution authorizing the use of the competitive Request for Proposals (“RFP”) in lieu of competitive bidding to award a contract for the purchase of 50 low-floor 40-foot diesel buses with an option for an additional 85 buses for MTABC.

The solicitation was advertised in April 2021, at which time eight bus manufacturers were directly contacted. Pursuant to the statutory framework, the selection criteria, listed in descending order, were as follows: Overall Project Cost, Delivery, Overall Quality of Proposer and Product, and Other Relevant Matters. Selection Committee (“SC”) members were drawn from NYC Transit Department of Buses (“DOB”), Procurement, Office of Management & Budget, and Operations Planning.

Two diesel bus manufacturers, New Flyer of America, Inc. (“New Flyer”); and Nova attended the pre-proposal conference held on April 7, 2021. Initial proposals were received on June 2, 2021, from New Flyer and Nova.

Oral Presentations and negotiations were conducted on a series of dates spanning from August 2021 through September 2021. Negotiations centered on pricing, delivery, alternate proposals, exceptions/deviation/clarifications to the technical specifications, and the terms and conditions. During the negotiation period, funding for the option buses became available; due to MTABC’s urgent need for these buses and in an effort to achieve additional savings, Procurement has combined the base and option bus quantities in the request for Best and Final Offers (“BAFOs”).

Staff Summary

BAFOs for 135 low-floor 40-foot diesel buses, were received from Nova and New Flyer on November 29, 2021. The SC reviewed the BAFOs in accordance with the evaluation criteria and unanimously recommended an award of the 135 low-floor 40-foot diesel buses to Nova.

The award to Nova will consist of \$86,929,200 (\$643,920 per bus) for 135 low-floor 40-foot diesel buses; \$49,148 for diagnostic tools, and manuals; \$344,551 for an estimated thirty-two (32) training classes; and \$131,172 for capital spares for a total award amount of \$87,454,071, which is \$9,303,385 or 9.62 percent below Nova's initial proposal of \$96,757,456 and \$1,461,618 or 1.64 percent lower than DOB's estimate of \$88,915,689. Procurement, DOB, and NYC Transit's Cost Price Analysis Unit have determined the final price to be fair and reasonable.

The 135 buses are scheduled to begin being delivered in November 2022 and be completed in March 2023, for an overall period of 16 months from Notice of Award. The above delivery schedule is based on the assumption that Notice of Award will be issued on or before December 31, 2021.

Nova will comply with the Federal Transit Administration's ("FTA") Buy America requirement of 70 percent.

The contract resulting from this procurement has been evaluated to determine the necessity and appropriate scope, if any, of cybersecurity requirements, including any requirements under federal, state, and local law and regulations. Any applicable cybersecurity requirements, to the extent required, have been included in the contract terms and conditions.

M/W/DBE Information

Transit Vehicle Manufacturers ("TVM") is a program whereby the FTA pre-approves vehicle manufacturers to bid or propose on federally funded vehicle procurements based on established guidelines to ensure Disadvantaged Business Enterprises participation. As this contract will be federally funded, the TVM program applies. Nova has furnished its TVM Certification of Compliance with DBE Regulations in accordance with FTA guidelines.

Impact on Funding

This contract will be funded with 80 percent FTA funds and 20 percent New York City funds. Funds for this procurement have been approved in the MTA 2015–2019 and 2020–2024 Capital Programs. A WAR certificate will be secured prior to award.

Alternatives

There are no alternatives. There is no reason to believe that conducting another solicitation will result in a better outcome.

Recommendation

It is recommended that the Board, pursuant to Public Authorities Law, Section 1265-a, subdivision 4(g), approve the federally funded purchase of 135 low-floor 40-foot diesel buses as well as related items such as spare parts, special tools and equipment, technical documentation, and training from Nova in the total estimated amount of \$87,454,071 for MTABC.

Schedule G: Miscellaneous Service Contracts



Item Numbers: 2-4

Vendor Names (Locations) Gramercy Park Physical Therapy, P.C., Floral Park, NY Feigi Taub Halberstam Audiology & Speech Pathology, P.C., d/b/a Omni Rehab, Brooklyn, NY Theradynamics Rehab Management, LLC, Woodbury, NY	Contract Numbers TBD TBD TBD	Renewal? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No									
Description Eligibility Assessment Services for Paratransit and Reduced-Fare	Total Estimated Amount: <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;"></td> <td style="text-align: right;">Base</td> <td style="text-align: right;">\$16,133,768</td> </tr> <tr> <td></td> <td style="text-align: right;">Options</td> <td style="text-align: right;"><u>\$ 7,022,636</u></td> </tr> <tr> <td></td> <td style="text-align: right;">Total</td> <td style="text-align: right;">\$23,156,404</td> </tr> </table> <p>Gramercy Base: \$2,267,800; Options: \$914,320 Omni Base: \$5,184,608; Options: \$2,274,012 Theradynamics Base: \$8,681,360; Options: \$3,834,304</p>			Base	\$16,133,768		Options	<u>\$ 7,022,636</u>		Total	\$23,156,404
	Base	\$16,133,768									
	Options	<u>\$ 7,022,636</u>									
	Total	\$23,156,404									
Contract Term (including Options, if any): Five years with an option to extend up to two years	Funding Source <input checked="" type="checkbox"/> Operating <input type="checkbox"/> Capital <input type="checkbox"/> Federal <input type="checkbox"/> Other:										
Option(s) included in Total Amount? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> n/a	Requesting Dept./Div., Dept./Div. Head Name: Department of Buses, Frank Annicaro Department of Operations Support, Michael Ellinas Division of Revenue Control, Maria Cannizzaro										
Procurement Type <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Noncompetitive											
Solicitation Type <input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:											

Discussion:

NYC Transit is seeking Board approval to award three five-year, estimated quantity, miscellaneous service contracts with each including an option to extend the term for up to two additional years, for Eligibility Assessment Services to Gramercy Park Physical Therapy, P.C. (“Gramercy”), Feigi Taub Halberstam Audiology & Speech Pathology, P.C. D/B/A Omni Rehab (“Omni”) and Theradynamics Rehab Management, LLC D/B/A Excellence Rehab & Physical Therapy, P.C. (“Theradynamics”), in the combined total estimated amount of \$23,156,404 (\$16,133,768 for the base awards and \$7,022,636 for the option years). The Board is also requested to authorize the Assistant Deputy Chief Procurement Officer, MTA to approve the exercise of these option years if deemed advantageous to the authority once funding becomes available.

NYC Transit provides origin-to-destination, demand responsive, shared-ride paratransit service for disabled individuals who meet the eligibility criteria set forth in the Americans with Disabilities Act. This service is provided through Access-A-Ride, which is managed and operated by the Paratransit Division of the Department of Buses (“Paratransit”). NYC Transit also operates a reduced-fare program managed and operated by the Operations Support, division of Revenue Control, Reduced Fare Unit (“Reduced-Fare”), that complies with all federal and state regulations regarding special-fare programs for senior citizens and persons with specific disabilities. Both Paratransit and Reduced-Fare share these contracts due to similarities in their respective scopes of work. These contracts provide both groups with an independent eligibility recommendation based on an assessment of an applicant’s disability and how it may or may not prevent their use of fixed-route transportation. NYC Transit aims to provide assessment centers throughout the five boroughs of New York City. Licensed medical staff (trained by Paratransit’s Eligibility Determination Unit) evaluate applicants via an interview and/or performance of a functional assessment and provide a detailed report to the respective division (Paratransit or Reduced Fare) of their findings.

In July 2021, Request for Proposal (“RFP”) 354071 was competitively solicited to continue the eligibility assessment process. A pre-proposal teleconference was held August 11, 2021. Procurement conducted an extensive outreach resulting in a total of 17 firms requesting the RFP. On September 10, 2021, five proposals were received: A.G. Urgent Care, P.C., Gramercy, Icahn School of Medicine at Mount Sinai (“Mount Sinai”), Omni, and Theradynamics.

The evaluation criteria for this RFP, listed in descending order of importance, are as follows: Technical Qualifications including Proposer's knowledge and relevant experience, demonstrated ability of proposed project manager and all other key personnel, quality and size of the proposed facilities including location, Proposer's approach to staffing and workload management, proposed start-up, experience of Proposer's past performance on similar work, Proposer's approach to diversity practices, Overall Price, and Other Relevant Matters. The Selection Committee ("SC") members were drawn from Paratransit, Reduced-Fare, the Department of the Chief Financial Officer, and Procurement.

Following the SC's review of written proposals, A.G. Urgent Care, P.C. was eliminated, as it failed to demonstrate that it possessed the experience and resources necessary to perform the work. Oral Presentations were held with the remaining four proposers during September 2021, followed by site visits during the week ending October 8, 2021. After oral presentation and site visits, the SC determined that the remaining proposers, Gramercy, Mount Sinai, Omni and Theradynamics, were technically qualified and were invited to participate in negotiations.

Negotiations focused on the Proposers' demonstrated ability to perform the work, including experience and project management teams, qualifications of the proposed staffing, quality of the proposed facility and its suitability for the work, as well as overall price.

Pricing for this service is based on a per-assessment rate. Pricing is fixed for the first three years of the base contract, however, Proposers were given the opportunity to provide different pricing for years four and five of the base term, as well as for both Option years. The price proposal was restructured from that of the prior contracts by introducing quantity tiers, mitigating risk for both the Proposer and NYC Transit. Lower quantity tiers allow proposers to be paid a higher per-assessment rate during any period when the Authority might need to decrease the quantity of assessments. Conversely, the higher quantity tiers offer lower pricing, allowing a form of volume discount for the Authority.

Best and Final Offers ("BAFOs") were received from all four proposers on November 17, 2021, and were presented to the SC for consideration on November 19, 2021. The SC unanimously recommended awards to: Gramercy, operating a location in Staten Island; Omni, operating a location in Brooklyn; and Theradynamics, operating locations in the Bronx and Queens. The SC unanimously voted to forgo awarding a Manhattan facility.

Through negotiations, final pricing from Gramercy, Omni and Theradynamics for the base and option periods are considered fair and reasonable.

The Eligibility Assessment Services contract has been evaluated to determine the necessity and appropriate scope, if any, of cybersecurity requirements, including any requirements under federal, state and local law and regulations. Any applicable cybersecurity requirements, to the extent required, have been included in the contract terms and conditions.

The Department of Diversity and Civil Rights ("DDCR") has established goals of 15% WBE and 15 % MBE for this contract. All proposers submitted Utilization Plans to meet the required 30% MWBE goal. None of the proposers have completed MTA contract with goals; therefore, no assessment of the MWDBE/SDVOB performance can be determined at this time.

The NYC Transit Controller's Office performed a financial review of all proposers and based on the criteria used found that there is reasonable assurance that Gramercy, Omni, and Theradynamics are financially qualified to perform this contract.

Impact on Funding

Total funding for Paratransit and Reduced Fare, for the base and option periods, in the amount of \$23,156,404 is available in the Operating Budget.

Contracts

David K. Cannon, Vice President



Proposed Stair Entrance and Elevator at 68th Street.

The above rendering depicts a new stairway entrance and elevator for the 68th Street-Hunter College Station in Manhattan. This month's package includes an item for a new contract for the design and construction of accessibility upgrades that will bring the 68th Street-Hunter College Station on the Lexington Avenue Line in the Borough of Manhattan into ADA compliance.

PROCUREMENTS

The Procurement Agenda this month includes eight (8) actions for a proposed expenditure of \$550M.

Subject Request for Authorization to Award Procurement Actions					
Department Contracts					
Department Head Name & Title David K. Cannon, Vice President & Chief Procurement Officer					
Department Head Signature <i>David K. Cannon</i>					
Board Action					
Order	To	Date	Approval	Info	Other
1	NYCT & Bus Committee	12/13/21	X		
2	Board	12/15/21	X		

Date: December 10, 2021			
Internal Approvals			
	Approval		Approval
<i>MK</i>	Deputy Chief Development Officer, Delivery	<i>JCS</i>	President
<i>[Signature]</i>	Deputy Chief Development Officer, Development	<i>[Signature]</i>	Executive Vice President & General Counsel

Purpose

To obtain the approval of the Board to award two procurement actions and, to inform the New York City Transit and Bus Committee of these procurement actions.

Discussion

MTA Construction & Development proposes to award a Non-Competitive Procurement in the following category:

<u>Schedules Requiring Two-Thirds Vote</u>	<u># of Actions</u>	<u>\$ Amount</u>
A. Non-Competitive Purchases & Public Work Contracts	1	\$ 62,653,936
	SUBTOTAL 1	\$ 62,653,936

MTA Construction & Development proposes to award Competitive Procurements in the following category:

<u>Schedules Requiring Two-Thirds Vote</u>	<u># of Actions</u>	<u>\$ Amount</u>
C. Competitive Requests for Proposals (Award of Purchase/Public Work Contracts)	7	\$487,320,652
	SUBTOTAL 7	\$487,320,652
	TOTAL 8	\$549,974,588

Budget Impact

The approval of these procurement actions will obligate capital and operating funds in the amounts listed. Funds are available in the capital and operating budgets for these purposes.

Recommendation

The procurement actions be approved as proposed. (The items are included in the resolution of approval at the beginning of the Procurement Section.)

MTA Construction & Development

BOARD RESOLUTION

WHEREAS, in accordance with Sections 1265-a and 1209 of the Public Authorities Law and the All Agency Procurement Guidelines, the Board authorizes the award of certain non-competitive purchase and public works contracts, and the solicitation and award of request for proposals in regard to purchase and public work contracts; and

WHEREAS, in accordance with the All Agency Procurement Guidelines, the Board authorizes the award of certain non-competitive miscellaneous service and miscellaneous procurement contracts, certain change orders to purchase, public work, and miscellaneous service and miscellaneous procurement contracts;

WHEREAS, in accordance with Section 2879 of the Public Authorities Law and the All-Agency Guidelines for Procurement of Services, the Board authorizes the award of certain service contracts and certain change orders to service contracts.

NOW, the Board resolves as follows:

1. As to each purchase and public work contract set forth in annexed Schedule A, the Board declares competitive bidding to be impractical or inappropriate for the reasons specified therein and authorizes the execution of each such contract.
2. As to each request for proposals (for purchase and public work contracts) set forth in Schedule B for which authorization to solicit proposals is requested, for the reasons specified therein, the Board declares competitive bidding to be impractical or inappropriate, declares it is in the public interest to solicit competitive request for proposals and authorizes the solicitation of such proposals.
3. As to each request for proposals (for purchase and public work contracts set forth in Schedule C for which a recommendation is made to award the contract), the Board authorizes the execution of said contract.
4. As to each action set forth in Schedule D, the Board declares competitive bidding impractical or inappropriate for the reasons specified therein, and ratifies each action for which ratification is requested.
5. The Board authorizes the execution of each of the following for which Board authorization is required: i) the miscellaneous procurement contracts set forth in Schedule E; ii) the personal service contracts set forth in Schedule F; iii) the miscellaneous service contracts set forth in Schedule G; iv) the modifications to personal/miscellaneous service contracts set forth in Schedule H; v) the contract modifications to purchase and public work contracts set forth in Schedule I; vi) the modifications to miscellaneous procurement contracts set forth in Schedule J.
6. The Board ratifies each action taken set forth in Schedule K for which ratification is requested.

DECEMBER 2021

LIST OF NON-COMPETITIVE PROCUREMENTS FOR BOARD APPROVAL

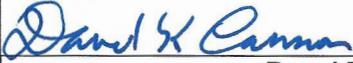
Procurements Requiring Two-Thirds Vote:

Schedule A. Non-Competitive Purchases and Public Work Contracts

(Staff Summaries required for items estimated to be greater than \$1M)

- | | | | |
|----|---|---------------|--------------------------------------|
| 1. | Mitsubishi Electric Power Products Inc.
Contract No. S48017
55 Months | \$ 62,653,936 | <u>Staff Summary Attached</u> |
|----|---|---------------|--------------------------------------|

MTA Construction and Development requests Board approval to award a Non-Competitive contract for Communication Based Train Control Equipment for the Queens Boulevard Line - East Project.

Dept. & Dept Head Signals & Train Control Business Unit/Daniel Creighton, VP & Program Executive						SUMMARY INFORMATION	
Contracts Department David K. Cannon, VP & Chief Procurement Officer 						Vendor Name Mitsubishi Electric Power Products Inc.	
						Contract Number S48017	
						Description Communication Based Train Control ("CBTC") Equipment Contract for the Queens Boulevard Line "East" ("QBL East") Project	
						Total Amount \$62,653,936	
						Contract Term 55 Months	
						Option(s) included in Total Amount? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
						Renewal? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
						Procurement Type <input type="checkbox"/> Competitive <input checked="" type="checkbox"/> Non-competitive	
						Solicitation Type <input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:	
						Funding Source <input type="checkbox"/> Operating <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Federal <input type="checkbox"/> Other:	
Board Reviews							
Order	To	Date	Approval	Info	Other		
1	NYCT & Bus Committee	12/13/21	X				
2	Board	12/15/21	X				
Internal Approvals							
	Approval		Approval				
	Deputy Chief, Development		President				
	Deputy Chief, Delivery		Executive Vice President & General Counsel				

Purpose/Recommendation

MTA Construction & Development ("C&D") requests Board approval to award a Non-Competitive contract for Communication Based Train Control ("CBTC") Equipment for the Queens Boulevard Line - East ("QBL East") Project to Mitsubishi Electric Power Products Inc. ("Mitsubishi") in the amount of \$62,653,936 and a duration of 55 months.

Discussion

Contract S-48017 (the "Contract") is for designing, manufacturing, testing, and commissioning of new CBTC wayside zone controllers (the "CBTC Equipment") at four (4) stations on the Queens Boulevard F line. The signal systems at the four stations, (Jamaica -179th St., 169th St., Parsons Blvd., and Briarwood) will be upgraded from a fixed block relay-based system to a CBTC system with solid state interlockings. The upgrade of the signal system to CBTC will allow trains to run at a greater speed and at closer distances, providing more efficient and responsive service to New York City Transit ("NYCT") passengers on the F line. The CBTC Equipment furnished under this Contract will be supplied to a CBTC installation contractor that will be solicited under a separate competitively bid contract.

Prior to April 2020, NYCT had only two approved suppliers of CBTC equipment, Thales Ground Transportation Systems ("Thales") and Siemens Mobility, Inc. ("Siemens"). In April 2020, Mitsubishi was qualified as a third CBTC supplier after successfully demonstrating its CBTC equipment at the MTA's Integrated Test Facility and Culver Test Track. This Contract will provide NYCT an opportunity to evaluate Mitsubishi's production quality and performance as well as Mitsubishi's ability to efficiently validate and commission its CBTC Equipment in a revenue service environment.

The QBL East Project was selected for Mitsubishi because it is the first CBTC project to be procured after Mitsubishi's qualification as a CBTC supplier and because QBL East is an ideal environment for the evaluation of Mitsubishi's CBTC Equipment. The entire Project consists of four stations at the tail-end of the F line, with no intersecting or adjacent lines. In addition, trains with existing CBTC carborne equipment already run on the F line so the wayside CBTC equipment to be supplied by Mitsubishi under this Contract can be easily tested. In addition to providing NYCT with an opportunity to test and evaluate Mitsubishi's performance on a revenue

service line, this Contract will also provide Mitsubishi with the engineering, project management and track training experience to be able to compete with Siemens and Thales for future NYCT CBTC projects, lowering the cost of future CBTC equipment contracts.

In November 2021, the Board adopted a resolution, pursuant to Public Authorities Law § 1265-a.4.d, authorizing this non-competitive procurement in the public's interest, so that C&D can evaluate this new source for CBTC equipment.

Mitsubishi will be required to adhere to NYCT's CBTC system safety program throughout the duration of the Contract. Prior to substantial completion and deployment of Mitsubishi's CBTC equipment in revenue service, the equipment must obtain full CBTC system safety certification from NYCT.

Mitsubishi initially submitted a cost proposal for this Contract of \$98,635,922. Following negotiation that focused on technical scope clarification and significant cost reduction, Mitsubishi submitted a revised cost proposal for \$62,653,936. C&D's independent estimate for this Contract is \$60,165,771. Based on Mitsubishi's commitment to the 55 month Contract duration and because Mitsubishi's final proposal is only 4% over C&D's independent estimate, Mitsubishi's proposal is fair and reasonable.

In connection with previous contracts awarded to Mitsubishi, Mitsubishi was found to be responsible, notwithstanding significant adverse information pursuant to the All-Agency Responsibility Guidelines and such responsibility finding was approved by the MTA Managing Director in consultation with the MTA General Counsel in March 2019. No new significant adverse information has been found relating to Mitsubishi and Mitsubishi has been found to be responsible.

D/M/WBE/SDVOB Information

DDCR has established a 0% MBE/WBE/SDVOB goal for this Contract due to the lack of M/WBE/SDVOB firms in the marketplace.

Funding

The funding source for this Contract is MTA's 2020-2024 Capital Program.

Alternatives

This project represents the ideal opportunity and location to evaluate Mitsubishi and its newly approved CBTC equipment with the goal of increasing competition by introducing a third supplier into the mix. The alternative is the use of a competitive Request for Proposal process, however, without previous experience with this product on NYCT facilities and because of various non-recurring start-up costs that Mitsubishi would incur, they would be unable to reasonably compete with Siemens and Thales, both of whom have decades of experience on NYCT CBTC projects.

DECEMBER 2021

LIST OF COMPETITIVE PROCUREMENTS FOR BOARD APPROVAL

Procurements Requiring Two-Thirds Vote:

**Schedule C. Competitive Requests for Proposals (Award of Purchase/Public Work Contracts)
(Staff Summaries required for all items greater than \$1M)**

2&3.	MLJ Contracting Corp./TC Electric JV Contract No. A37135 978 Calendar Days	\$242,400,000	<u>Staff Summary Attached</u> ↓
	Modern Elevator Installations, Inc. Contract No. To Be Determined Fifteen Years	\$ 9,069,985	↓

MTA Construction & Development requests Board approval to award a publicly advertised and competitively solicited contract for the design and construction of accessibility upgrades at eight stations throughout New York City and the award of a long-term elevator maintenance contract.

4&5.	Forte-Citnalta JV Contract No. A36164 1,080 Calendar Days	\$101,750,000	<u>Staff Summary Attached</u> ↓
	Mid-American Elevator Company, Inc. Contract No. To Be Determined Fifteen Years	\$ 3,027,395	↓

MTA Construction and Development requests Board approval to award a publicly advertised and competitively solicited contract for the design and construction of accessibility upgrades at the 68th Street-Hunter College Station in the Borough of Manhattan and the award of a long-term elevator maintenance contract.

6.	Citnalta-Forte, Joint Venture Contract No. A37679 1,308 Calendar Days	\$ 72,272,272	<u>Staff Summary Attached</u>
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MTA Construction and Development requests Board approval to award a publicly advertised and competitively solicited contract for the design and construction of Grand Central Subway Station mezzanine finishes, escalator replacement & structural repairs.

7.	ECCO III Enterprises, Inc. Contract No. A37691 679 Calendar Days	\$ 30,381,000	<u>Staff Summary Attached</u>
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MTA Construction and Development requests Board approval to award a publicly advertised and competitively solicited contract for design and construction services for Flushing-Main Street Station circulation improvements.



Schedule C Competitive Requests for Proposals (Award of Purchase/Public Work Contracts)

Staff Summary

Item Numbers 2 & 3

Dept & Dept Head Stations Business Unit/Barney Gray					
Contracts Department David K. Cannon, Vice President & Chief Procurement Officer <i>David K Cannon</i>					
Board Reviews					
Order	To	Date	Approval	Info	Other
1	NYCT & Bus Committee	12/13/21	X		
2	Board	12/15/21	X		
Internal Approvals					
	Approval		Approval		
	Deputy Chief, Development	<i>JL</i>	President		
<i>MK</i>	Deputy Chief, Delivery	<i>[Signature]</i>	Executive Vice President & General Counsel		

SUMMARY INFORMATION	
Vendor Name 1. MLJ Contracting Corp./TC Electric JV 2. Modern Elevator Installations, Inc. (Elevator Maintainer)	Contract Number A37135 (D/B) TBD (Maintenance)
Description Design-Build Services for Accessibility Upgrades – Package 2	
Total Amount 1. A37135 Award: \$ 242,400,000 2. Maintenance Award: \$ 9,069,985 3. Stipend Payments: \$ 750,000	
Contract Term 1. A37135 978 Calendar Days 2. Maintenance Contract 15 Years	
Option(s) included in Total Amount? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Renewal? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Procurement Type <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive	
Solicitation Type <input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:	
Funding Source <input checked="" type="checkbox"/> Operating** <input checked="" type="checkbox"/> Capital* <input checked="" type="checkbox"/> Federal* <input checked="" type="checkbox"/> MTA**	

*Design-Build Contract **Maintenance Contract

Purpose/Recommendation

MTA Construction & Development (“C&D”) requests Board approval to award a publicly advertised and competitively solicited contract for the design and construction of accessibility upgrades at eight stations throughout New York City (the "Project") to MLJ Contracting Corp./TC Electric JV in the amount of \$242,400,000 and a duration of 1,068 calendar days. Board approval is also sought to award a long-term elevator maintenance Contract to Modern Elevator Installations, Inc. in the amount of \$9,069,985 and a duration of 15 years. In accordance with MTA policy regarding the use of design-build contracts, and to enhance competition and defray proposal costs, this solicitation includes a stipend of \$250,000 to be paid to each unsuccessful proposer whose proposal met the defined proposal standards. Accordingly, approval is also requested to pay stipends totaling \$750,000 to the three unsuccessful proposers.

Discussion

Contract A37135 (“the Contract”) is one of a series of Americans with Disabilities Act (“ADA”) projects in support of the MTA’s commitment to make stations accessible. The Contract includes the installation of eleven (11) new elevators that will provide full accessibility at the following elevated, open cut and below ground subway stations: Westchester Square Station on the Pelham Line (6 train); Eighth Avenue Station on the Sea Beach Line (N train); 181st Street Station on the Eighth Avenue Line (A train); Woodhaven

Boulevard Station on the Jamaica Line (J/Z trains); Court Square Station on the Crosstown Line (G train); and Queensboro Plaza Station on the Astoria and Flushing Lines (N/W/7 trains). Work at each station generally includes the design and construction of one to three new elevators per station; electrical power and station communications systems upgrades where necessary; relocation of existing public and transit utilities; replacement, relocation and/or addition of staircases from street to mezzanines and mezzanines to platforms; and reconstruction of platform edges and/or reconstruction of ADA boarding areas. In addition, the work will include replacement of five existing elevators that have reached the end of their useful lives at the Marcy Avenue Station on the Jamaica Line (J/M/Z trains), and at the Flushing Avenue Station on the Jamaica Line (J/M/Z trains). The work also includes state of good repair scope at Woodhaven Boulevard Station on the Jamaica Line (J/Z trains) and Westchester Square Station on the Pelham Line (6 train).

In addition, C&D will enter into a separate long-term Elevator Maintenance Contract for all maintenance, repairs, tests and inspections, callbacks and emergency services required to ensure optimum performance and longevity for all the elevators and ancillary equipment, except for the single new elevator that will be installed at the Eighth Avenue Station on the Sea Beach Line. The new elevator for the Eighth Avenue Sea Beach Line will be maintained by MTA's in-house forces, as the elevator on the opposite side platform is already maintained by MTA's in-house forces. In order to ensure long-term, optimum performance of the elevators covered by the Maintenance Contract, the procurement was structured to require continuity between the design and installation of the elevator equipment, and the subsequent maintenance thereof. Only the elevator manufacturer or installer is eligible for the award of the Maintenance Contract. The goal is to ensure that the Design-Builder works in concert with its elevator subcontractor to choose sufficiently robust equipment that would not only withstand the rigors of the New York City Transit ("NYCT") system, but that would also take into consideration the elevator subcontractor's ultimate responsibility for a performance-based, long-term maintenance contract. The term of the Maintenance Contract includes a "ramp-up" period during which elevators placed in service prior to Substantial Completion of the Design/Build Contract will be maintained; a fifteen-year maintenance period, commencing with achievement of Substantial Completion of the Design/Build Contract; and finally, two 5-year option periods, exercisable at MTA's discretion.

A two-step procurement process was conducted for these contracts. In Step 1, a Request for Qualifications was advertised resulting in the submission of six (6) Statements of Qualification, which were evaluated against the pre-established Threshold Criteria (addressing completeness, timeliness, capacity, responsibility, and financial capability) and Substantive Evaluation Criteria (addressing key personnel and organization, project approach, prior experience, past performance, financial strength, and diversity compliance). The following four (4) firms were selected to receive the Request for Proposal ("RFP") in Step 2:

- Citnalta-Scalamandre-Forte (Tri-Venture) ("CSF TV")
- ECCO III Enterprises - Railroad Construction, JV ("ECCO III-RCC JV")
- MLJ Contracting Corp./TC Electric JV ("MLJTC2")
- Skanska USA Civil Northeast, Inc. ("Skanska")

Each of the selected firms submitted a technical and price proposal in response to the RFP. The Selection Committee, consisting of representatives from C&D and New York City Transit, first reviewed the technical proposals and heard oral presentations from each of the respondents. The Selection Committee evaluated the technical proposals using the pre-established selection criteria which assessed proposers' design and construction approach, overall project schedule, maintenance approach for elevators, management plan, experience, record of performance, safety and quality, diversity practices and other relevant matters. The Selection Committee determined that all four teams submitted proposals that were responsive and acceptable.

The Selection Committee next opened the cost proposals which were as follows: CSF TV - \$432,444,713 (Maintenance: \$10,123,000); ECCO III-RCC JV - \$324,255,000 (Maintenance: \$8,836,655); MLJTC2 - \$242,400,000 (Maintenance: \$8,613,875); and Skanska - \$284,950,000 (Maintenance: \$8,270,245). For the installation and the long-term maintenance of the elevators, CSF TV proposed Mid-American Elevator Co. and the others proposed Modern Elevator Installations, Inc. ("Modern").

Based upon its review of the technical and cost proposals, the Selection Committee determined that the proposals submitted by MLJTC2 and Skanska presented a superior combination of technical approach, cost and schedule and unanimously recommended that both firms be invited in for negotiations.

Negotiations with MLJTC2 and Skanska included discussions of the proposed design and construction approach, project schedule, overall cost and clarification of the design/build requirements. A Post-Proposal Addendum was issued to both firms revising the Elevator Maintenance Terms and Conditions to address the basis for formulating the price proposal and a revised Schedule E-3 was issued. Following negotiations, a Best and Final Offer ("BAFO") was requested from MLJTC2 and Skanska. The results of the BAFOs were as follows:

Staff Summary

Item Numbers 2 & 3

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- MLJTC2 \$242,400,000 (Maintenance: \$9,069,985)
- Skanska \$284,950,000 (Maintenance: \$8,746,220)

After review of the BAFOs, the Selection Committee unanimously recommended MLJTC2 for award of the Design-Build Contract and Modern for the award of the long-term Maintenance Contract. The Selection Committee determined that MLJTC2's proposal offered the best overall value considering the strength of their technical proposal, their understanding of the work, their lowest proposed cost and reductions to schedule, which will minimize the impact of the work on MTA's customers. The Contract also includes incentives for the early completion of the Work, as well as liquidated damages for Design-Builder caused delays to achieving Contract milestones including Substantial Completion. MLJTC2 and Modern's prices are considered fair and reasonable.

MLJ Contracting Corp. and Modern have been found to be responsible.

In connection with previous contracts awarded to TC Electric LLC ("TC"), TC was found to be responsible, notwithstanding significant adverse information pursuant to the All-Agency Responsibility Guidelines and such responsibility finding was approved by the MTA Interim Executive Director in consultation with the MTA General Counsel in April 2017. No new significant adverse information has been found relating to TC and TC has been found to be responsible.

DBE/MBE/WBE/SDVOB Information

The MTA Department of Diversity and Civil Rights ("DDCR") has established a 22.5% DBE goal for the Design/Build Contract. Although this is a design-build contract with some undefined scope, MLJTC2 is projecting to meet the required DBE goal requirements. MLJTC2 has not completed any MTA contracts with DBE/MBE/WBE goals, therefore no assessment of their DBE/MBE/WBE performance can be determined at this time. MLJ and TC have individually achieved their assigned DBE/MBE/WBE goals on previously completed MTA contracts.

DDCR has established a 0% MBE/WBE/SDVOB goal for the Maintenance Contract due to the lack of MWBE/SDVOB firms in the marketplace. Meetings are being coordinated with the MBE/WBE/SDVOB community to establish certified firms in the areas of elevator and escalator maintenance. Modern has not completed any MTA contracts with DBE/MBE/WBE goals, therefore, no assessment of their performance can be determined at this time.

Impact on Funding

Funding for the design and construction of accessibility upgrades at eight stations throughout New York City, and stipends for the three unsuccessful proposers are included in the NYCT portion of the MTA's 2020-2024 Capital Program. This Contract will be funded, in part, with Federal funds. Funding for the maintenance contract is included in the NYCT operating budget.

Alternatives

None recommended. Currently, MTA lacks available in-house technical personnel to perform the scope of work associated with this Contract.

Dept & Dept Head Stations Business Unit/Barney Gray

Contracts Department David K. Cannon, Vice President & Chief Procurement Officer 

Board Reviews

Order	To	Date	Approval	Info	Other
1	NYCT & Bus Committee	12/13/21	X		
2	Board	12/15/21	X		

Internal Approvals

	Approval		Approval
	Deputy Chief, Development		President
	Deputy Chief, Delivery		Executive Vice President & General Counsel

SUMMARY INFORMATION

Vendor Name 1. Forte-Citnalta JV 2. Mid-American Elevator Company, Inc. (Elevator Maintainer)	Contract Number A36164 (D/B) TBD (Maintenance)
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Description Design-Build Services for Accessibility Upgrades at the 68th St-Hunter College Station
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Total Amount	
1. A36164 Award:	\$ 101,750,000
2. Maintenance Award:	\$ 3,027,395
3. Stipend Payments:	\$ 1,200,000

Contract Term	
1. A36164	1,080 Calendar Days
2. Maintenance Contract	15 Years

Option(s) included in Total Amount?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A
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Renewal?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
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Procurement Type	<input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive
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Solicitation Type	<input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:
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Funding Source	<input checked="" type="checkbox"/> Operating** <input checked="" type="checkbox"/> Capital* <input checked="" type="checkbox"/> Federal* <input checked="" type="checkbox"/> MTA*
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*Design-Build Contract **Maintenance Contract

Purpose/Recommendation

MTA Construction & Development ("C&D") requests Board approval to award a publicly advertised and competitively solicited contract for the Design and Construction of accessibility upgrades at the 68th Street-Hunter College Station in the Borough of Manhattan (the "Project") to Forte-Citnalta JV in the amount of \$101,750,000 and a duration of 1,080 calendar days. Board approval is also sought to award a long-term elevator Maintenance Contract to Mid-American Elevator Company, Inc. in the amount of \$3,027,395 and a duration of 15 years. In accordance with MTA policy regarding the use of design-build contracts, and to enhance competition and defray proposal costs, this solicitation includes a stipend of \$300,000 to be paid to each unsuccessful proposer whose proposal met the defined proposal standards. Accordingly, approval is also requested to pay stipends totaling \$1,200,000 to the four unsuccessful proposers.

Discussion

Contract A36164 ("the Contract") is one in a series of Americans with Disabilities Act ("ADA") projects in support of the MTA's commitment to make stations accessible. The contract includes the installation of three (3) new elevators and other ADA improvements that will bring the 68th Street-Hunter College Station on the Lexington Avenue Line (6 trains) into ADA compliance. The Contract will also include reconstructing existing stairs, constructing new ADA boarding areas and platform edging, extending the platforms to accommodate the new elevators, and repairing walls, floors, beams and ceilings.

In addition, C&D will enter into a separate long-term Elevator Maintenance Contract for all maintenance, repairs, tests and inspections, callbacks and emergency services required to ensure optimum performance and longevity of the elevators and ancillary equipment. In order to ensure long-term, optimum performance of the elevators, the procurement was structured to require continuity between the design and installation of the elevator equipment, and the subsequent maintenance thereof. Only the elevator manufacturer or installer is eligible for the award of the Maintenance Contract. The goal is to ensure that the Design-Builder works in concert with its elevator subcontractor to choose sufficiently robust equipment that would not only withstand the rigors of the New York City Transit (“NYCT”) system, but that would also take into consideration the elevator subcontractor’s ultimate responsibility for a performance-based, long-term Maintenance Contract. The term of the Maintenance Contract includes a fifteen-year maintenance period, commencing on achievement of Substantial Completion of the Design/Build Contract and two 5-year option periods, exercisable at MTA’s discretion.

A two-step procurement process was conducted for these contracts. In Step 1, a Request for Qualifications was advertised resulting in the submission of seven (7) Statements of Qualifications which were evaluated against pre-established Threshold Criteria (addressing completeness, timeliness, capacity, responsibility, and financial capability) and Substantive Evaluation Criteria (addressing key personnel and organization, project approach, prior experience, past performance, financial strength, and diversity compliance). The following five (5) firms were selected to receive the Request for Proposal (“RFP”) in Step 2:

- Forte-Citnalta JV (“FCJV”)
- John Civetta & Sons, Inc. (“Civetta”)
- John P. Picone, Inc. (“Picone”).
- MLJ Contracting Corp./TC Electric JV (“MLJTC2”)
- Railroad Construction Company, Inc. (“RCC”)

Each of the selected firms submitted a technical and price proposal in response to the RFP. The Selection Committee, consisting of representatives from C&D and NYCT, first reviewed the technical proposals and heard oral presentations from each of the respondents. The Selection Committee evaluated the technical proposals using the pre-established selection criteria which assessed proposers’ design and construction approach, overall project schedule, maintenance approach for elevators, management plan, experience, record of performance, safety and quality, diversity practices and other relevant matters.

The Selection Committee next opened the cost proposals which were as follows: FCJV - \$98,888,000 (Maintenance: \$3,027,395); Civetta - \$87,247,500 (Maintenance: \$3,027,395); MLJTC2 - \$116,270,496 (Maintenance: \$1,765,910); Picone - \$101,231,234 (Maintenance: \$1,765,910); and RCC - \$91,500,000 (Maintenance: \$1,765,910); For the installation and the long-term maintenance of the elevators, FCJV and Civetta proposed Mid-American Elevator Company, Inc. (“Mid-American”) Each of the other three teams proposed Modern Elevator Installations, Inc.

Based upon its review of the technical and cost proposals, the Selection Committee determined that the proposal from FCJV presented a superior combination of technical approach, cost and schedule. The Selection Committee also determined that, due to their lower costs, Civetta and RCC should be invited to a scope clarification meeting in order for the Selection Committee to understand whether their respective proposals contemplated all aspects of the Project and ensure they understood the scope requirements. Upon the conclusion of the scoping meetings, the Selection Committee determined that the proposals of both RCC and Civetta did not demonstrate a thorough understanding of the scope requirements or present suitable prior-project experience when compared to other proposers. Neither Civetta’s nor RCC’s proposals demonstrated favorable experience in completing similar types of work (as compared to other proposers), their proposed key personnel lacked relevant experience and their proposals did not demonstrate an understanding of the Project requirements. Based on the technical superiority of FCJV’s proposal and Civetta’s and RCC’s shortcomings, the Selection Committee unanimously recommended that FCJV, the highest ranked technical proposer, be invited in for negotiations. MLJTC2 was determined to be out of the competitive range and Picone submitted the lowest ranked technical proposal.

Negotiations with FCJV included discussions of the proposed design and construction approach, project schedule, overall cost and clarification of the design/build requirements. A Post-Proposal Addendum was issued to FCJV clarifying certain areas of the project requirements and design criteria as well as revising the Elevator Maintenance Specifications to address risk sharing. Following negotiations and the scope clarification meetings, a Best and Final Offer (“BAFO”) was requested from FCJV who provided a BAFO in the amount of \$103,588,000. This increased BAFO reflected FCJV’s adjustments regarding utility work clarified during negotiations.

A second round of negotiations was held with FCJV and included extensive discussions on the utility work and the steel repair required under this Contract. Following the second round of negotiations, a revised BAFO was requested from FCJV. C&D and FCJV agreed on a lump sum price of \$101,750,000 for the Design-Build Contract and \$3,027,395 with Mid-American for the long-term Maintenance Contract.

The Selection Committee unanimously recommended FCJV for award of the Design-Build Contract and Mid-American for the award of the long-term Maintenance Contract. The Selection Committee determined that FCJV's proposal offered the best overall value considering the strength of their technical proposal, their understanding of the work, and the cost of their proposal. The Contract also includes incentives for the early completion of the Work, as well as liquidated damages for Design-Builder caused delays to achieving Substantial Completion. FCJV and Mid-American's prices are considered fair and reasonable.

FCJV and Mid-American has been found to be responsible.

DBE/MBE/WBE/SDVOB Information

The MTA Department of Diversity and Civil Rights ("DDCR") has established a 22.5% DBE goal for the Design/Build Contract. Although this is a design-build contract with some undefined scope, FCJV is projecting to meet the required DBE goal requirements. FCJV has not completed any MTA contracts with DBE/MBE/WBE goals, therefore no assessment of their DBE/MBE/WBE performance can be determined at this time. Forte and Citnalta have individually achieved their assigned DBE/MBE/WBE goals on previously completed MTA contracts.

DDCR has established a 0% MBE/WBE/SDVOB goal for the Maintenance Contract due to the lack of MBE/WBE/SDVOB firms in the marketplace. Meetings are being coordinated with the MBE/WBE/SDVOB community to establish certified firms in the areas of elevator and escalator maintenance. Mid-American has not completed any MTA contracts with DBE/MBE/WBE goals, therefore, no assessment of their performance can be determined at this time.

Impact on Funding

Funding for the design and construction of accessibility upgrades at the 68th Street-Hunter College Station, and stipends for the four unsuccessful proposers are included in the NYCT portion of the MTA's 2020-2024 Capital Program. This Contract will be funded, in part, with Federal funds. Funding for the Maintenance Contract is included in the NYCT operating budget.

Alternatives

None recommended. Currently, MTA lacks available in-house technical personnel to perform the scope of work associated with this Contract.

Dept & Dept Head Name: Stations Business Unit, Delivery/Barney Gray						SUMMARY INFORMATION	
Contracts Department: David K. Cannon, VP & Chief Procurement Officer 						Vendor Name Citnalta-Forte, Joint Venture	
Board Reviews						Contract Number A37679	
Order	To	Date	Approval	Info	Other	Description Design-Build Services for Grand Central Subway Station Mezzanine Finishes, Escalator Replacement & Structural Repairs on the Lexington & Flushing Lines	
1	NYCT & Bus Committee	12/13/2021	X			Total Amount 1. A37679 Base: \$ 69,638,272 2. A37679 Option: \$ 2,634,000 3. Stipend Payments: \$ 400,000	
2	Board	12/15/2021	X			Contract Term 1,308 Calendar Days	
Internal Approvals						Option(s) included in Total Amount? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Order	Approval	Order	Approval			Renewal? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
	Deputy Chief, Development		President			Procurement Type <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive	
MK	Deputy Chief, Delivery		Executive Vice President & General Counsel			Solicitation Type <input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:	
Funding Source <input type="checkbox"/> Operating <input checked="" type="checkbox"/> Capital <input checked="" type="checkbox"/> Federal <input type="checkbox"/> State							

Purpose/Recommendation

MTA Construction and Development ("C&D") requests Board approval to award a publicly advertised and competitively solicited contract for the design and construction of Grand Central Subway Station mezzanine finishes, escalator replacement & structural repairs to Citnalta-Forte, Joint Venture in the amount of \$72,272,272 and a duration of 1,308 calendar days. This sum includes an option in the amount of \$2,634,000 which C&D intends to exercise concurrently with the issuance of the Notice of Award. In accordance with MTA policy regarding the use of design-build contracts, and to enhance competition and defray proposal costs, this solicitation includes a stipend of \$200,000 to be paid to each unsuccessful proposer whose proposal met the defined proposal standards. Accordingly, approval is also requested to pay stipends totaling \$400,000 to the two unsuccessful proposers.

Discussion

Contract A37679 (the "Contract") is for the replacement of eight (8) existing escalators that are at the end of their useful life that service the Flushing Line and Grand Central. In addition, this Contract will address the leaks at the mezzanine level of the Lexington Avenue line at Grand Central. For the adjacent ventilator, which has been the source of the leaks in the mezzanine, work will consist of crack and spall repairs as well as steel beam repairs. To finish the mezzanine, the existing suspended ceiling will be removed, exposing the concrete underneath the ceiling which will be painted and serve as the new ceiling, and new lighting fixtures and new signage will be installed. In addition, the existing fare array will be expanded with new turnstiles and new vending machines. The Contract also includes an option for the demolition of the existing stairwell at the east end of the Flushing Line platform, and construction of a new, widened stairwell. The MTA may exercise the option in its sole discretion within ninety (90) days of NTP, but intends to exercise the option concurrently with the issuance of the Notice of Award.

A two-step procurement process was used for this Contract. In Step 1, a Request for Qualifications was advertised resulting in the submission of four (4) Statements of Qualifications which were evaluated against preestablished Threshold Criteria (addressing completeness, timeliness, capacity, responsibility, and financial capability) and Substantive Evaluation Criteria (addressing key personnel and organization, project approach, prior experience, past performance, financial strength, and diversity compliance). The following three (3) firms were selected to receive the Request for Proposal (RFP) in Step 2:

- Citnalta-Forte Joint Venture (“CFJV”), A Joint Venture consisting of Citnalta Construction Corp and Forte Construction Company
- Halmar International LLC (“Halmar”)
- MLJTC2 (“MLJTC2”), A Joint Venture consisting of MLJ Contracting Corp. and TC Electric LLC

Each of the three (3) selected firms submitted a technical and price proposal in response to the RFP. The Selection Committee, consisting of representatives from C&D and New York City Transit, first reviewed the technical proposals and heard oral presentations from each of the respondents. The Selection Committee evaluated the technical proposals using the pre-established selection criteria which assessed proposers’ design and construction approach, overall project schedule, management plan, experience, record of performance, safety and quality, diversity practices and other relevant matters. The Selection Committee determined that all three teams submitted comprehensive technical proposals that were deemed responsive and acceptable.

The selection committee next opened the cost proposals which were as follows: CFJV – \$73,220,001; Halmar – \$75,189,437; and MLJTC2 – \$100,800,000 inclusive of the option work. Negotiations were conducted with all three proposers and included detailed discussions of the proposed design and construction approach, project schedule, and overall cost. Following negotiations, it was determined that MLJTC2’s proposed cost of \$100,800,000 was outside of the competitive range and its price proposal contained price assumptions inconsistent with the RFP documents. Best and Final Offers (“BAFOs”) were requested from CFJV and Halmar. The results of the BAFOs were as follows:

- CFJV \$72,272,272.00
- Halmar \$74,213,719.96

These BAFOs included the cost of the option work, which are as follows: CFJV - \$2,634,000 and Halmar - \$3,460,000.

After review of the BAFOs, the Selection Committee unanimously recommended CFJV for award of the Contract. The Selection Committee determined that CFJV’s proposal offered the best overall value considering the strength of their technical proposal, their lowest proposed cost and reductions to schedule, which will minimize the impact of the work on MTA’s customers. The Contract also includes incentives for the early completion of the Work, as well as liquidated damages for Design-Builder caused delays to achieving Contract milestones, including Substantial Completion. The negotiated cost of \$72,272,272 is considered fair and reasonable.

CFJV has been found to be responsible.

DBE/MBE/WBE/SDVOB Information

The MTA Department of Diversity and Civil Rights (“DDCR”) has established a 22.5% DBE goal for the Design/Build Contract. Although this is a design/build contract with some undefined scope of work, CFJV is projecting to meet the required 22.5% DBE goal. CFJV as a joint venture and individually have achieved their assigned DBE/MBE/WBE goals on previous completed MTA contracts.

Impact on Funding

Funding for the base contract work is included in the New York City Transit portion of the MTA’s 2020-2024 Capital Program and will be funded, in part, with Federal funds. Funding for the option work is included in the New York City Transit operating budget, and will be reimbursed by a private developer.

Alternatives

None recommended. Currently, MTA lacks available in-house technical personnel to perform the scope of work associated with the Design/Build Contract.

Dept & Dept Head Name: Stations Business Unit, Delivery/Barney Gray						SUMMARY INFORMATION																			
Contracts Department: David K. Cannon, VP & Chief Procurement Officer 						Vendor Name ECCO III Enterprises, Inc																			
Board Reviews						Contract Number A37691																			
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:10%;">Order</th> <th style="width:15%;">To</th> <th style="width:15%;">Date</th> <th style="width:15%;">Approval</th> <th style="width:10%;">Info</th> <th style="width:10%;">Other</th> </tr> </thead> <tbody> <tr> <td style="text-align:center;">1</td> <td>NYCT & Bus Committee</td> <td style="text-align:center;">12/13/2021</td> <td style="text-align:center;">X</td> <td></td> <td></td> </tr> <tr> <td style="text-align:center;">2</td> <td>Board</td> <td style="text-align:center;">12/15/2021</td> <td style="text-align:center;">X</td> <td></td> <td></td> </tr> </tbody> </table>						Order	To	Date	Approval	Info	Other	1	NYCT & Bus Committee	12/13/2021	X			2	Board	12/15/2021	X			Description Design-Build Services for Flushing-Main Street Station Circulation Improvements	
Order	To	Date	Approval	Info	Other																				
1	NYCT & Bus Committee	12/13/2021	X																						
2	Board	12/15/2021	X																						
Internal Approvals						Total Amount 1. A37691 Award: \$ 30,381,000 2. Stipend Payments: \$ 300,000																			
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:10%;">Order</th> <th style="width:20%;">Approval</th> <th style="width:10%;">Order</th> <th style="width:20%;">Approval</th> </tr> </thead> <tbody> <tr> <td style="text-align:center;"></td> <td>Deputy Chief, Development</td> <td style="text-align:center;"></td> <td>President</td> </tr> <tr> <td style="text-align:center;"></td> <td>Deputy Chief, Delivery</td> <td style="text-align:center;"></td> <td>Executive Vice President & General Counsel</td> </tr> </tbody> </table>		Order	Approval	Order	Approval		Deputy Chief, Development		President		Deputy Chief, Delivery		Executive Vice President & General Counsel	Contract Term 679 Calendar Days		Option(s) included in Total Amount? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A									
Order	Approval	Order	Approval																						
	Deputy Chief, Development		President																						
	Deputy Chief, Delivery		Executive Vice President & General Counsel																						
						Renewal? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																			
						Procurement Type <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive																			
						Solicitation Type <input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:																			
						Funding Source <input type="checkbox"/> Operating <input checked="" type="checkbox"/> Capital <input checked="" type="checkbox"/> Federal <input type="checkbox"/> State																			

Purpose/Recommendation

MTA Construction and Development (“C&D”) requests Board approval to award a publicly advertised and competitively solicited contract for design and construction services for Flushing-Main Street Station circulation improvements to ECCO III Enterprises, Inc. in the amount of \$30,381,000 and a duration of 679 calendar days. In accordance with MTA policy regarding the use of design-build contracts, and to enhance competition and defray proposal costs, this solicitation includes a stipend of \$100,000 to be paid to each unsuccessful proposer whose proposal met the defined proposal standards. Accordingly, approval is also requested to pay stipends totaling \$300,000 to the three unsuccessful proposers.

Discussion

Contract A37691 (the “Contract”) will rehabilitate four (4) existing street stairwells and add four (4) additional street stairwells which will increase the number of street-to-mezzanine stairwells from five (5) to a total of nine (9) at the Main Street and Roosevelt Avenue entrance to the Flushing-Main Street Station. The Work also includes the reorientation of four (4) existing mezzanine-to-platform stairwells with new stairs and the construction of four (4) new mezzanine-to-platform stairwells for a total of twelve (12) mezzanine-to-platform stairwells at the Main Street mezzanine level. In order to accommodate the new stairwells, the Main Street mezzanine will be expanded and will include a new fare array. In addition, the Work will include state-of-good-repair improvements at the platform level including repairs to the platform edges, walls, ceilings, and column bases. The Flushing-Main Street Station is currently ADA accessible.

A two-step procurement process was conducted for the Contract. In Step 1, a Request for Qualifications was advertised resulting in the submission of seven (7) Statements of Qualification which were evaluated against the pre-established Threshold Criteria (addressing completeness, timeliness, capacity, responsibility, and financial capability) and Substantive Evaluation Criteria (addressing key personnel and organization, project approach, prior experience, past performance, financial strength, and diversity compliance). The following four firms were selected to receive the Request for Proposal (RFP) in Step 2:

- ECCO III Enterprises, Inc. (“ECCO”)
- Fos Development (“Fos”)
- John Civetta & Sons, Inc. (“Civetta”)
- J-Track LLC (“J-Track”).

Each of the four (4) selected firms submitted a technical and price proposal in response to the RFP. The Selection Committee, consisting of representatives from C&D and New York City Transit, first reviewed the technical proposals and heard oral presentations from each of the respondents. The Selection Committee evaluated the technical proposals using the pre-established selection criteria which assessed proposers’ design and construction approach, overall project schedule, management plan, experience, record of performance, safety and quality, diversity practices and other relevant matters, including whether the proposals properly accounted for the New York City Department of Transportation’s Office of Construction Mitigation and Coordination stipulations (“DOT OCMC Stipulations”) phasing requirements. The selection committee next opened the cost proposals which were as follows: Civetta – \$31,413,500; ECCO – \$30,576,000; Fos – \$29,601,021; and J-Track – \$37,888,000.

Although all four proposers submitted technical proposals that were initially deemed acceptable overall, the Selection Committee subsequently determined that the phasing plans submitted by Fos and Civetta were not compliant with the DOT OCMC Stipulations and that ECCO and J-Track’s proposals presented the ideal combination of technical approach, cost, and schedule. Accordingly, the Selection Committee recommended that ECCO and J-Track be invited for negotiations.

Negotiations were conducted with ECCO and J-Track and included detailed discussions of the proposed design and construction approach, project schedule, and overall cost. Following negotiations, Best and Final Offers (“BAFOs”) were requested from ECCO and J-Track. The results of the BAFOs were as follows:

- ECCO \$30,381,000
- J-Track \$32,480,000

After review of the BAFOs, the Selection Committee unanimously recommended ECCO for award of the Contract. The Selection Committee determined that ECCO’s proposal offered the best overall value considering the strength of their technical proposal, their lowest proposed cost and reductions to schedule, which will minimize the impact of the work on MTA’s customers. C&D and ECCO agreed on ECCO’s BAFO lump sum price of \$30,381,000 for the Contract. The agreed upon price takes into consideration reduced overhead costs associated with schedule reductions and an alternate approach (through Alternative Technical Concepts) to the configuration of mezzanine-to-platform stairs, which will eliminate the need to construct an independent footing under the existing platform and reconstruction of a portion of the platform. The agreed upon price is considered to be fair and reasonable.

ECCO has been found to be responsible.

DBE/MBE/WBE/SDVOB Information

The MTA Department of Diversity and Civil Rights (“DDCR”) has established a 22.5% DBE goal for the Design/Build Contract. Although this is a design/build contract with some undefined scope of work, ECCO is projecting to meet the required 22.5% DBE goal. ECCO has achieved its DBE/MBE/WBE goals on previously completed MTA contracts.

Impact on Funding

Funding for the design and construction of circulation improvements and stipend for the three unsuccessful proposers are included in the New York City Transit portion of the MTA’s 2020-2024 Capital Program. This Contract will be funded, in part, with Federal funds.

Alternatives

None recommended. Currently, MTA lacks available in-house technical personnel to perform the scope of work associated with the Design/Build Contract.

Schedule C Competitive Requests for Proposals (Award of Purchase/Public Work Contracts)
 Staff Summary
 Items No. 8

Dept & Dept Head					
Stations Business Unit/Barney Gray					
Contracts Department					
David K. Cannon, Vice President & Chief Procurement Officer 					
Board Reviews					
Order	To	Date	Approval	Info	Other
1	NYCT & Bus Committee	12/13/21	X		
2	Board	12/15/21	X		
Internal Approvals					
	Approval		Approval		
	Deputy Chief, Development		President		
	Deputy Chief, Delivery		Executive Vice President & General Counsel		

SUMMARY INFORMATION	
Vendor Name	Contract Number
Forte Construction Corp.	E30643
Description	
Design-Build Services for Systemwide Escalator Replacements	
Total Amount	
1. E30643 Award:	\$ 28,420,000
2. Stipend Payment:	\$ 150,000
Contract Term	
900 Calendar Days	
Option(s) included in Total Amount? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Renewal? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Procurement Type	
<input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive	
Solicitation Type	
<input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:	
Funding Source	
<input type="checkbox"/> Operating <input checked="" type="checkbox"/> Capital <input checked="" type="checkbox"/> Federal <input type="checkbox"/> MTA	

Purpose/Recommendation

MTA Construction & Development (“C&D”) requests Board approval to award a publicly advertised and competitively solicited contract for the design and construction services to replace two escalators at 161st Street Yankee Stadium Station and two escalators at DeKalb Avenue Station (the “Project”) to Forte Construction Corp. in the amount of \$28,420,000 and a duration of 900 calendar days. In accordance with MTA policy regarding the use of design-build contracts, and to enhance competition and defray proposal costs, this solicitation includes a stipend in the amount of \$150,000 to be paid to each unsuccessful proposer whose proposal met the defined proposal standards. Accordingly, C&D requests that the Board also approve the payment of a stipend to the one unsuccessful proposer for a total amount of \$150,000.

Discussion

Contract E30643 (the “Contract”) is for the replacement of escalators at the 161st Yankee Stadium Station and the Dekalb Avenue Station which have reached the end of their useful lives. The Contract also includes replacing equipment in the escalator machine rooms at each Station and “state of good repair” work in the vicinity of the escalators, such as replacing tile finishes on the walls, adding new handrails to the existing stairwells adjacent to the escalators and replacing existing lighting with new LED lighting.

A two-step procurement process was conducted for this contract. In Step 1, a Request for Qualifications was advertised resulting in the submission of three (3) Statements of Qualification which were evaluated against the pre-established Threshold Criteria (addressing completeness, timeliness, capacity, responsibility, and financial capability) and Substantive Evaluation Criteria (addressing key personnel and organization, project approach, prior experience, past performance, financial strength, and diversity compliance). All three (3) firms were selected to receive the Request for Proposal (“RFP”) in Step 2:

- AD Tech Enterprises Ltd. (“AD Tech”)
- Forte Construction Corp. (“Forte”)
- Navillus Tile, Inc. (“Navillus”)

In response to the RFP, two (2) teams, Forte and Navillus submitted technical and price proposals. AD Tech elected not to submit a proposal. The Selection Committee, consisting of representatives from C&D and New York City Transit, first reviewed the technical proposals and heard oral presentations from each of the respondents. The Selection Committee evaluated the technical proposals using the pre-established selection criteria which assessed proposers’ design and construction approach, overall project schedule, management plan, experience, record of performance, safety and quality, diversity practices and other relevant matters. The Selection Committee next opened the cost proposals which were as follows: Forte - \$28,820,000 and Navillus - \$33,475,000

Based upon its review of the technical and cost proposals, the Selection Committee determined that the proposal from Forte presented a superior combination of technical approach, cost and schedule. The Selection Committee determined that Forte displayed a strong understanding of the project objectives, scope of work, design deliverable and the required construction elements. Their past experience on similar projects, including projects containing escalator work, demonstrated that they had the necessary experience and qualifications to complete this project on time and within budget. In contrast, the Selection Committee determined the proposal submitted by Navillus lacked clarity in identifying potential design and construction risks and how to mitigate these risks. Moreover, during the oral presentations, Navillus did not have their Project Management Team present, and their Executive Team was unable to answer specific questions regarding the Work. After review and consideration of both proposals, the Selection Committee unanimously recommended that only Forte be invited for negotiations.

Negotiations with Forte included discussions of the proposed design and construction approach, project schedule, overall cost, and clarification of the key personnel needed on the project. As a result of negotiations, Forte offered a Best and Final Offer (“BAFO”) which provided an overall price reduction of \$400,000, and the final cost of \$28,420,000.

The Selection Committee unanimously recommended Forte for award based on the strength of their technical proposal, which included a strong understanding of the Project, the risks inherent to the Project and how to mitigate those risks and a competitive schedule. The Contract also includes incentives for the early completion of the Work, as well as liquidated damages for Design-Builder caused delays to achieving certain Contract Milestones, including Substantial Completion. Forte’s price is considered to be fair and reasonable.

Forte has been found to be responsible.

DBE/MBE/WBE/SDVOB Information

The MTA Department of Diversity and Civil Rights (“DDCR”) has established a 22.5% DBE goal for the Design/Build Contract. Forte has committed to a goal of 11.44% due the lack of DBE firms in the marketplace and the limited sub-contractible elements. Forte has committed to maximize DBE participation on this Contract. Forte has achieved its DBE/MBE/WBE goals on previously completed MTA contracts.

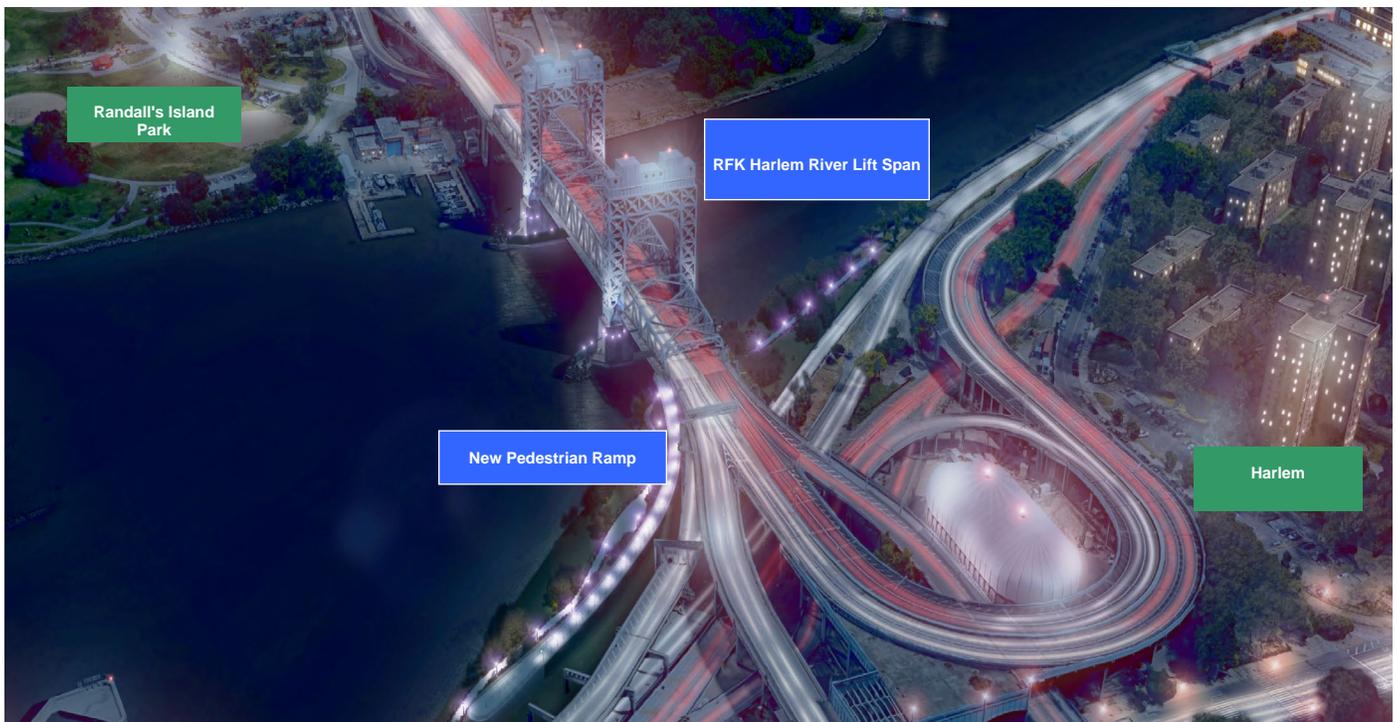
Impact on Funding

Funding for the design, construction and replacement of two escalators at 161st Street Yankee Stadium Station and two escalators at DeKalb Avenue Station, and stipends for the one unsuccessful proposer is included in the NYCT portion of the MTA’s 2020-2024 Capital Program. This contract will be funded in part, with Federal funds.

Alternatives

None recommended. Currently, MTA lacks available in-house technical personnel to perform the scope of work associated with this Contract.

**PROCUREMENT PACKAGE
December 2021**



Pictured above is a rendering of an aerial night time view of the Harlem River Lift Span of the Robert F. Kennedy Bridge ("RFK"). This month's package includes an item for a new contract that includes the design and construction of a new pedestrian walkway from the Harlem River Lift Span to the Manhattan Greenway Harlem River Project.

PROCUREMENT

The Procurement Agenda this month includes three (3) procurement actions for a proposed expenditure of \$98.7M.

Staff Summary

Subject		Request for Authorization to Award Procurement Actions			
Department		Contracts			
Department Head Name		David K. Cannon, Vice President, Contracts			
Department Head Signature		<i>David K. Cannon</i>			
Board Action					
Order	To	Date	Approval	Info	Other
1	B&T Committee	12/13/21	X		
2	Board	12/15/21	X		

Date: December 2, 2021			
Internal Approvals			
	Approval		Approval
<i>MR</i>	Deputy Chief Development Officer, Delivery	<i>JTB</i>	President
<i>D</i>	Deputy Chief Development Officer, Development	<i>[Signature]</i>	Executive Vice President & General Counsel

PURPOSE:

To obtain the approval of the Board to award several procurement actions and to inform the Bridges and Tunnels Committee of these procurement actions.

DISCUSSION:

MTA Construction & Development proposes to award Competitive Procurements in the following category:

<u>Schedules Requiring Two-Thirds Vote</u>	<u># of Actions</u>	<u>\$ Amount</u>
C. Competitive Requests for Proposals (Award of Purchase/Public Work Contracts)	3	\$ 98,723,000
TOTAL	3	\$ 98,723,000

Budget Impact:

The approval of these procurement actions will obligate capital funds in the amount listed. Funds are available in the capital budget for this purpose.

Recommendation:

These procurement actions be approved as proposed. (The items are included in the resolution of approval at the beginning of the Procurement Section).

MTA Construction & Development

BOARD RESOLUTION

WHEREAS, in accordance with Sections 559, 2879 and 1265-a of the Public Authorities Law and the All Agency Procurement Guidelines, the Board authorizes the award of certain non-competitive purchase and public works contracts, and the solicitation and award of request for proposals in regard to purchase and public work contracts; and

WHEREAS, in accordance with the All Agency Procurement Guidelines, the Board authorizes the award of certain non-competitive miscellaneous service and miscellaneous procurement contracts, certain change orders to purchase, public work, and miscellaneous service and miscellaneous procurement contracts;

WHEREAS, in accordance with Section 2879 of the Public Authorities Law and the All-Agency Guidelines for Procurement of Services, the Board authorizes the award of certain service contracts and certain change orders to service contracts.

NOW, the Board resolves as follows:

1. As to each purchase and public work contract set forth in annexed Schedule A, the Board declares competitive bidding to be impractical or inappropriate for the reasons specified therein and authorizes the execution of each such contract.
2. As to each request for proposals (for purchase and public work contracts) set forth in Schedule B for which authorization to solicit proposals is requested, for the reasons specified therein, the Board declares competitive bidding to be impractical or inappropriate, declares it is in the public interest to solicit competitive request for proposals and authorizes the solicitation of such proposals.
3. As to each request for proposals (for purchase and public work contracts set forth in Schedule C for which a recommendation is made to award the contract), the Board authorizes the execution of said contract.
4. As to each action set forth in Schedule D, the Board declares competitive bidding impractical or inappropriate for the reasons specified therein, and ratifies each action for which ratification is requested.
5. The Board authorizes the execution of each of the following for which Board authorization is required: i) the miscellaneous procurement contracts set forth in Schedule E; ii) the personal service contracts set forth in Schedule F; iii) the miscellaneous service contracts set forth in Schedule G; iv) the modifications to personal/miscellaneous service contracts set forth in Schedule H; v) the contract modifications to purchase and public work contracts set forth in Schedule I; vi) the modifications to miscellaneous procurement contracts set forth in Schedule J.
6. The Board ratifies each action taken set forth in Schedule K for which ratification is requested.

DECEMBER 2021

LIST OF COMPETITIVE PROCUREMENTS FOR BOARD APPROVAL

Procurements Requiring Two-Thirds Vote:

Schedule C. Competitive Requests for Proposals (Award of Purchase/Public Work Contracts)
(Staff Summaries required for all items greater than \$1M)

- | | | | |
|-----------|---|---------------------|--------------------------------------|
| 1. | Walsh, Construction Co. II, LLC
Contract No. RK-23/RK-83
Two Years | \$45,558,000 | <u>Staff Summary Attached</u> |
|-----------|---|---------------------|--------------------------------------|

MTA Construction and Development requests Board approval of the award a publicly advertised and competitively solicited Public Works contract for Design-Build Services for a New Pedestrian Walkway and Fender Rehabilitation at the Robert F. Kennedy Bridge.

- | | | | |
|-----------|---|---------------------|--------------------------------------|
| 2. | E-J Electric Installation Co.
Contract No. HH-36
Two Years and Four Months | \$34,950,000 | <u>Staff Summary Attached</u> |
|-----------|---|---------------------|--------------------------------------|

MTA Construction and Development requests Board approval to award a publicly advertised and competitively solicited Public Works contract for Design-Build Services for Electrical Power Resiliency, Utility and Building Improvements at the Henry Hudson Bridge.

- | | | | |
|-----------|---|---------------------|--------------------------------------|
| 3. | Kiewit Infrastructure Company
Contract No. MP-09
Two Years | \$18,215,000 | <u>Staff Summary Attached</u> |
|-----------|---|---------------------|--------------------------------------|

MTA Construction and Development requests Board approval to award a publicly advertised and competitively solicited Public Works contract for Design-Build Services for the Replacement of Tower Elevator Systems and Miscellaneous Repairs at the Marine Parkway-Gil Hodges Memorial Bridge.

Dept & Dept Head Name: B&T Business Unit/Joe Keane, PE, Sr. VP and Chief Engineer <i>Joe Keane</i>					
Contracts Department Brian A. Walsh, Acting VP and Chief Procurement Officer <i>Brian Walsh</i>					
Board Reviews					
Order					
1	To	Date	Approval	Info	Other
2	B&T Committee	12/13/21	X		
	Board	12/15/21	X		
Internal Approvals					
	Approval		Approval		
<i>M</i>	Deputy Chief, Development	<i>JJS</i>	President		
<i>MAK</i>	Deputy Chief, Delivery	<i>[Signature]</i>	Executive Vice President & General Counsel		

SUMMARY INFORMATION	
Vendor Name Walsh, Construction Co. II, LLC	Contract Number RK-23D/RK-83
Description Design-Build Services for New Pedestrian Walkway and Fender Rehabilitation at the Robert F. Kennedy Bridge	
Total Amount 1. Award \$ 45,558,000 2. Stipend Payments \$ 360,000	
Contract Term Two (2) Years	
Option(s) included in Total Amount? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Renewal? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Procurement Type <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive	
Solicitation Type <input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:	
Funding Source <input checked="" type="checkbox"/> Operating <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Federal <input type="checkbox"/> Other:	

PURPOSE/RECOMMENDATION

Construction and Development (C&D) is seeking Board approval to award a publicly advertised and competitively solicited Public Works contract (the "Contract") for Design-Build Services for a New Pedestrian Walkway and Fender Rehabilitation at the Robert F. Kennedy Bridge to Walsh Construction Co. II, LLC in the lump sum amount of \$45,558,000 and a duration of two (2) years. In accordance with MTA policy regarding the use of design-build to enhance competition and defray proposal costs, this solicitation includes stipends in the amount of \$90,000 to be paid to each unsuccessful proposer whose proposal met defined proposal standards. Accordingly, approval is also requested to pay stipends totaling \$360,000 to the four (4) unsuccessful proposers.

DISCUSSION

The work under Contract RK-23D/RK-83 generally consists of the following:

Project RK-23D - Design and Construction of a New Pedestrian Walkway.

RK-23D will restore the north walkway connection from the RFK Bridge, Harlem River Lift Span to the Borough of Manhattan. This project follows the recently completed Project RK-23C for the new connector ramp for vehicular traffic to the Northbound Harlem River Drive. Project RK-23D will be coordinated with The City of New York for its future construction of the Manhattan Greenway Harlem River Project. C&D's construction of the north walkway must be completed by March 2023, which is the time the City intends commence its construction and C&D Delivery may no longer have access to the site.

Project RK-83 - Design and Construction for Replacements and Upgrades to the Harlem River Lift Span (HRLS) Timber Fender System. RK-83 will upgrade the fender system to meet current American Association of State Highway and Transportation Officials (“AASHTO”) Guide Specification standards for vessel collision design criteria and to adhere to C&D’s efforts to improve facility safety. Additionally, structural and other safety upgrades will be performed to address critical state of good repair needs identified during the NY State Biennial Bridge inspections. Lastly, the concrete approach piers, inclusive of Pier 58 at the HRLS tower are to be rehabilitated and restored.

These two (2) projects are bundled together, as both require access to the same shoreline area under the Manhattan Approach to the HRLS. This shoreline area is to be developed by the New York City Economic Development Corporation (“NYCEDC”) into a waterfront park starting in April 2023. In coordination and per agreement with the NYCEDC, all construction in this area is to be completed by the end of March 2023 to provide unobstructed NYCEDC access. In addition, pursuing the combined projects under one design-build contract will maximize efficiencies and minimize support costs, while ensuring that critical infrastructure is completed while access to the necessary staging area remains available.

A 2-Step procurement process was conducted for the Contract. In Step 1, a Request for Qualifications (“RFQ”) was advertised resulting in the submission of twelve (12) Statements of Qualifications, which were evaluated against preestablished selection criteria addressing: relevant experience/record of performance for the Design-Build team, technical and managerial capacity and general responsibility. The following six (6) firms were deemed qualified to receive the RFP in Step 2.

- DeFoe Corp. (“DeFoe”)
- D’Onofrio Restani, JV (“D’Onofrio Restani”) – A Joint Venture consisting of D’Onofrio General Contractors Corp. and Restani Construction Corp.
- Kiewit Infrastructure Co. (“Kiewit”)
- Trevcon Construction Co. (“Trevcon”)
- Tully Construction Co. (“Tully”)
- Walsh Construction Co. II, LLC (“Walsh”)

In response to the RFP, five (5) firms submitted proposals: DeFoe - \$55,207,000; D’Onofrio Restani - \$61,350,000; Trevcon - \$46,213,270; Tully - \$55,179,000; and Walsh - \$45,558,000.

The proposals were evaluated by a Selection Committee (“SC”) consisting of representatives from C&D Delivery and B&T’s Maintenance Department utilizing preestablished selection criteria set forth in the RFP addressing the proposers’ price, design-build technical approach; schedule; design-build experience; design-build team; record of diversity practices and performance; and management approach.

Technical Proposals were evaluated by the SC prior to evaluation of the price proposals. All five (5) technical proposals were responsive and deemed technically acceptable by the SC. After combining technical and price evaluations, the SC unanimously recommended Walsh as the highest rated firm whose proposal best optimized the design-build process efficiencies as compared to the other proposers and provided the best value to the MTA. The recommendation is based on several factors: (i) the technical proposal provides an innovative alignment of the new pedestrian ramp with slight curvature adjustments that reduce the number of new piers required and reduces the need for cantilevered pier bents at Pier 2 and 3; (ii) the proposed technical solution maintains the aesthetic requirements of the Project; (iii) the proposed fender layout is more robust, utilizing Fiber Reinforced Polymer composite piles and walers, which is safer for small watercraft, will deflect floating debris and requires less maintenance; (iv) Walsh’s proposal demonstrated a superior understanding of the project technical specifications and risks; (v) an achievable proposed schedule; and (iv) submission of a competitively priced proposal.

Walsh submitted a proposal in the amount of \$45,558,000 and a schedule of two (2) years. Negotiations with Walsh included discussions concerning the technical requirements, design assumptions, schedule, coordination of work with other contractors on the bridge and Walsh’s construction approach. Negotiations resulted in the parties agreeing to a contract price totaling \$45,558,000. The negotiated price is considered fair and reasonable.

Walsh is deemed to be a responsible contractor.

D/M/WBE/SDVOB INFORMATION

The MTA Department of Diversity and Civil Rights (DDCR) has established 15% MBE, 15% WBE and 6% SDVOB goals on this contract. Although this is a design-build contract with some undefined scope, Walsh is projecting to meet the required M/WBE/SDVOB goal requirements. Walsh has achieved the assigned D/M/WBE goals on previous MTA Contracts.

IMPACT ON FUNDING

Funding in the amount of \$45,558,000 is available in the 2020-2024 Capital Program, under Projects RK-23D Task D04888 (\$19,575,000) and RK-83, Task D04540 (\$22,483,000) and the Operating Budget in the amount of \$3,500,000. Stipend funding in the aggregate amount of \$360,000 under Tasks D04911, D04912, D04913 and D04914 (\$90,000/each).

ALTERNATIVES

None are recommended. Currently, C&D does not possess the in-house technical personnel to perform the scope of work associated with the Design-Build Contract.

Dept & Dept Head Name: B&T Business Unit, Joe Keane, PE, Sr. VP and Chief Engineer <i>Joe Keane</i>					
Contracts Department Brian A. Walsh, Acting VP and Chief Procurement Officer <i>Brian Walsh</i>					
Board Reviews					
Order	To	Date	Approval	Info	Other
1	B&T Committee	12/13/21	X		
2	Board	12/15/21	X		
Internal Approvals					
	Approval		Approval		
<i>P</i>	Deputy Chief, Development	<i>JOS</i>	President		
<i>NR</i>	Deputy Chief, Delivery	<i>[Signature]</i>	Executive Vice President & General Counsel		

SUMMARY INFORMATION	
Vendor Name E-J Electric Installation Co.	Contract Number HH-36
Description Design-Build Services for Electrical Power Resiliency, Utility and Building Improvements at the Henry Hudson Bridge	
Total Amount	
1. Award	\$ 34,950,000
2. Stipend Payments	\$ 260,000
Contract Term Two (2) years, four (4) months	
Option(s) included in Total Amount? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Renewal? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Procurement Type <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive	
Solicitation Type <input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:	
Funding Source <input type="checkbox"/> Operating <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Federal <input type="checkbox"/> Other:	

PURPOSE/RECOMMENDATION

Construction and Development (C&D) is seeking Board approval to award a publicly advertised and competitively solicited Public Works contract (the "Contract") for Design-Build Services for Electrical Power Resiliency, Utility and Building Improvements at the Henry Hudson Bridge (HHB) to E-J Electric Installation Company in the lump sum amount of \$34,950,000 and a duration of two years (2) years, four (4) months. In accordance with MTA policy regarding the use of design-build to enhance competition and defray proposal costs, this solicitation includes a stipend in the amount of \$65,000 to be paid to each unsuccessful proposer whose proposal met defined proposal standards. Accordingly, approval is also requested to pay stipends totaling \$260,000 to the four (4) unsuccessful proposers.

DISCUSSION

The work under Contract HH-36 is for electrical redundancy and upgrades for the HHB facility. The scope is to perform design and construction services to include: (i) upgrade the Dyckman Street substation for additional power redundancy, inclusive of a new substation enclosure, primary and secondary feeders, 750KVA transformer, current transformer cabinets, metering, and electric service equipment to provide a redundant back-up power supply for the HHB facility; (ii) remove and replace the existing Kappock Street substation 750KVA transformer and associated electrical equipment; (iii) upgrade the existing fire alarm system at both the Dyckman and Kappock Street substations to conform to NYC fire codes; and (iv) perform electrical, mechanical and other upgrades to the HHB facility building and maintenance garage.

A 2-Step procurement process was conducted for this contract. In Step 1, a Request for Qualifications ("RFQ") was advertised resulting in the submission of fourteen (14) Statements of Qualifications, which were evaluated against preestablished selection criteria addressing record of performance for the Design-Build team, technical and managerial capacity and general responsibility. The following five (5) firms were selected to receive the Request for Proposal ("RFP") in Step 2:

- E-J Electric Installation Company ("E-J")
- FOS Development Corp ("FOS")

- Hellman Electric, LLC (“Hellman”)
- TAP Electrical Contracting Service, Inc. (“TAP”)
- TC Electric (“TC”)

In response to the RFP, all five (5) firms submitted proposals: E-J - \$36,622,151; FOS - \$35,173,415; Hellman - \$37,563,300; TAP - \$40,694,800; and TC - \$36,736,000.

The proposals were evaluated by a Selection Committee (“SC”) consisting of representatives from C&D Delivery and B&T’s Maintenance Department utilizing preestablished selection criteria set forth in the RFP addressing the proposers’ price, technical approach, qualifications of firm, team organization, schedule, and record of diversity practices.

The SC reviewed the technical proposals, observed the oral presentations on October 22, 2021 and subsequently reviewed the price proposals submitted by each proposer. All five (5) technical proposals were deemed technically acceptable by the SC. After combining technical and price evaluations, the SC unanimously recommended E-J as the highest rated firm whose proposal provides the best value to the MTA and best optimized the design-build process efficiencies as compared to the other proposers based on several factors: (i) the technical proposal provided a simplified, pre-fabricated structure, which meets C&D’s and code requirements resulting in overall price savings; (ii) superior understanding of the project technical requirements, goals and associated risks; (iii) an aggressive, achievable proposed schedule; (iv) the most complete understanding to effectively coordinate the Work, utilizing three (3) design teams working separately on major and distinct parts of the Project; and (v) submission of a competitively priced proposal.

E-J submitted a proposal in the amount of \$36,622,151 and a schedule of two (2) years, four (4) months, which shall become the Contract Substantial Completion date and is eight (8) months shorter than the RFP requirement. Negotiations with E-J included discussions concerning the technical requirements, design assumptions, coordination of work with other contractors and construction approach. Through negotiations the parties agreed to a contract price totaling \$34,950,000. The negotiated price is considered fair and reasonable.

In connection with previous contracts awarded to E-J, E-J was found to be responsible, notwithstanding significant adverse information pursuant to the All-Agency Responsibility Guidelines and such responsibility finding was approved by the MTA Managing Director in consultation with the MTA General Counsel in August 2018. No new significant adverse information has been found relating to E-J and E-J has been found to be responsible.

D/M/WBE/SDVOB INFORMATION

The MTA Department of Diversity and Civil Rights (DDCR) has established 15% MBE, 15% WBE and 6% SDVOB goals on this contract. Although this is a design-build contract with some undefined scope, E-J is projecting to meet the required M/WBE/SDVOB goal requirements. E-J has achieved the assigned D/M/WBE goals on previous MTA Contracts.

IMPACT ON FUNDING

Funding in the amount of \$34,950,000 is available in the 2020-2024 Capital Program, under Project HH-36, Task D04474 (\$34,950,000) and the Operating Budget in the amount of \$3,000,000. Stipend funding in the aggregate amount of \$260,000 is available under Tasks D04902, D04903, D04904 and D05002 (\$65,000/each).

ALTERNATIVES

None are recommended. Currently, C&D does not possess the in-house technical personnel to perform the scope of work associated with the Design-Build Contract.

Dept & Dept Head Name: B&T Business Unit, Joe Keane, PE, Sr. VP and Chief Engineer <i>Joe Keane</i>					
Contracts Department Brian A. Walsh, Acting VP and Chief Procurement Officer <i>Brian Walsh</i>					
Board Reviews					
Order	To	Date	Approval	Info	Other
1	B&T Committee	12/13/21	X		
2	Board	12/15/21	X		
Internal Approvals					
	Approval		Approval		
<i>⓪</i>	Deputy Chief, Development	<i>JOS</i>	President		
<i>MLJ</i>	Deputy Chief, Delivery	<i>[Signature]</i>	Executive Vice President & General Counsel		

SUMMARY INFORMATION	
Vendor Name Kiewit Infrastructure Company	Contract Number MP-09
Description Design-Build Services for Replacement of Tower Elevator Systems and Miscellaneous Repairs at the Marine Parkway-Gil Hodges Memorial Bridge	
Total Amount	
1. Award	\$ 18,215,000
2. Stipend Payments	\$ 100,000
Contract Term Two (2) Years	
Option(s) included in Total Amount? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Renewal? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Procurement Type <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive	
Solicitation Type <input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:	
Funding Source <input checked="" type="checkbox"/> Operating <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Federal <input type="checkbox"/> Other:	

PURPOSE/RECOMMENDATION

Construction and Development (C&D) is seeking Board approval to award a publicly advertised and competitively solicited Public Works contract (the "Contract") for Design-Build Services for Replacement of Tower Elevator Systems and Miscellaneous Repairs at the Marine Parkway-Gil Hodges Memorial Bridge (MPB) to Kiewit Infrastructure Company in the lump sum amount of \$18,215,000 and a duration of two (2) years. In accordance with MTA policy regarding the use of design-build to enhance competition and defray proposal costs, this solicitation includes a stipend in the amount of \$50,000 to be paid to each unsuccessful proposer whose proposal met defined proposal standards. Accordingly, approval is requested to pay stipends totaling \$100,000 to the two (2) unsuccessful proposers.

DISCUSSION

The work under Contract MP-09 is for the replacement of the two (2) tower elevator systems and for miscellaneous repairs at the MPB. The goals of the Project are to provide cost effective solutions to replace and modernize the tower elevator systems; perform miscellaneous rehabilitation; enhance the overall safety of the bridge and its two (2) towers; deliver the project safely, on schedule and within budget.

A 2-Step procurement process was conducted for this solicitation. In Step 1, a Request for Qualifications ("RFQ") was advertised resulting in the submission of four (4) Statements of Qualifications, which were evaluated against preestablished selection criteria addressing record of performance for the Design-Build team, technical and managerial capacity and general responsibility. The following three (3) firms were selected to receive the Request for Proposal ("RFP") in Step 2:

- Kiewit Infrastructure Company ("Kiewit")
- MLJ Contracting Corp. ("MLJ")
- Skanska Koch, Inc. ("Skanska")

In response to the RFP, all three (3) firms submitted proposals: Kiewit - \$18,567,000; Skanska - \$20,579,030; and MLJ - \$25,966,000.

The proposals were evaluated by a Selection Committee (“SC”) consisting of representatives from C&D Delivery and B&T’s Maintenance Department utilizing preestablished selection criteria set forth in the RFP addressing the proposers’ price; design-build technical approach; schedule; design-build experience; key personnel; management approach and record of diversity practices.

The SC reviewed the technical proposals, observed the oral presentations on October 27, 2021 and subsequently reviewed the price proposals submitted by each proposer. All three (3) technical proposals were deemed technically acceptable by the SC. After combining technical and price evaluations, the SC unanimously recommended Kiewit as the highest rated firm whose proposal best optimized the design-build process efficiencies as compared to the other proposers based on several factors: (i) a strong understanding of the Scope of Work, inclusive of providing several detailed, preliminary drawings; (ii) realistic lead times for procuring the elevator systems and span lock equipment; (iii) an aggressive achievable proposed schedule; (iv) demonstrated experience with rack and pinion elevator installations in a marine environment; and (v) submission of a competitively priced proposal

Kiewit submitted a proposal in the amount of \$18,567,000 and a schedule of two (2) years, which shall become the Contract Substantial Completion duration (6 months shorter than the RFP requirement). Negotiations with Kiewit included discussions concerning the technical requirements, design assumptions, schedule, elevator fabrication and long lead time material acquisitions. Negotiations resulted in the parties agreeing to a reduced Contract price totaling \$18,215,000, which is considered fair and reasonable.

In connection with previous contracts awarded to Kiewit, Kiewit was found to be responsible notwithstanding Significant Adverse Information (“SAI”) pursuant to all All-Agency Responsibility Guidelines, and such responsibility findings were approved by the MTA Chairman and Chief Executive Officer in consultation with the MTA General Counsel in November 2020. No new SAI has been found relating to Kiewit, and Kiewit has been found to be responsible.

Kiewit is deemed to be a responsible contractor.

D/M/WBE/SDVOB INFORMATION

The MTA Department of Diversity and Civil Rights (DDCR) has established 12% MBE, 12% WBE and 1% SDVOB goals on this contract. Although this is a design-build contract with some undefined scope, Kiewit is projecting to meet the required M/WBE/SDVOB goal requirements. Kiewit has achieved the assigned D/M/WBE goals on previous MTA Contracts.

IMPACT ON FUNDING

Funding in the amount of \$17,190,000 is available in the 2020-2024 Capital Program under Project MP-09, Task D04672 and the Operating Budget in the amount of \$1,025,000. Funding for the two (2) stipends in the amount totaling \$100,000 is available under Project MP-09, Tasks D04673 and D04674.

ALTERNATIVES

None recommended. Currently, C&D does not possess the in-house technical personnel to perform the scope of work associated with the Design-Build Contract.

Staff Summary

Subject Authorization to Issue 2022 MTA and TBTA New Money Bonds, Bond Anticipation Notes, and Refunding Obligations; Reimbursement Resolutions for Federal Tax Purposes
Department Finance
Department Head Name Robert E. Foran, Chief Financial Officer
Department Head Signature
Project Manager Name Patrick J. McCoy, Deputy Chief, Financial Services

Date December 15, 2021
Vendor Name
Contract Number
Contract Manager Name
Table of Contents Ref #

Board Action					
Order	To	Date	Approval	Info	Other
1	Finance Comm.	12/13/21			
2	Board	12/15/21			

Internal Approvals			
Order	Approval	Order	Approval
1	Legal	2	Chief of Staff

PURPOSE:

The MTA Finance Department is seeking MTA and TBTA Board authorization and approval of the necessary documentation to issue new money bond anticipation notes (BANs) and bonds to finance (i) up to \$1.8 billion of capital projects set forth in approved transit and commuter capital programs, (ii) MTA working capital projects in amounts to be authorized from time to time by the MTA Board, (iii) up to \$500 million of capital projects set forth in approved MTA Bridges & Tunnels capital programs, and (iv) up to \$305 million to finance costs of the TBTA central business district tolling program. If needed, MTA working capital borrowings will require additional approval of the MTA Board. In addition, the MTA and TBTA Boards periodically adopt reimbursement resolutions to maintain the ability of MTA and MTA Bridges and Tunnels to finance capital projects in the capital improvement programs and for the TBTA central business district tolling program on a tax-exempt or tax-advantaged basis, consistent with Federal tax law. The MTA Finance Department also seeks adoption of the consolidated supplemental resolutions to preserve the ability to finance certain capital projects on a tax-exempt or tax-advantaged basis. The MTA Finance Department will report to the Board on the status of the proposed debt issuance schedule, the results of each note and bond issue and planned note and bond issues.

In previous years the TBTA and MTA Boards have approved separate supplemental resolutions for new money bonds, BANs, refunding obligations, parity reimbursement obligations and expenditure reimbursements for each of MTA’s and TBTA’s respective credits. Commencing in 2022, the multiple annual supplemental resolutions for MTA’s Transportation Revenue obligations, Dedicated Tax Fund obligations and certain working capital borrowings will be consolidated into a single annual supplemental resolution, and the multiple annual supplemental resolutions for TBTA’s general resolution senior and subordinate obligations, payroll mobility tax obligations, City sales tax bonds and borrowings for the central business tolling project will be consolidated into a single annual supplemental resolution. The MTA Finance Department believes the consolidated supplemental resolutions will streamline this annual process and lessen the administrative burden on staff.

DISCUSSION:

MTA and TBTA Board approval is sought for the following two resolutions, documents and activities in connection with the issuance of bonds and/or BANs in an aggregate principal amount necessary to finance, as applicable, (i) capital

Staff Summary

projects for the transit and commuter systems (up to \$1.8 billion) set forth in approved capital programs and MTA Bridges & Tunnels (up to \$500 million), (ii) certain MTA working capital projects in amounts to be authorized from time to time by the MTA Board, and (iii) costs of the TBTA central business district tolling program:

- Multiple credit supplemental resolution authorizing MTA new money bonds, bond anticipation notes, refunding obligations and parity reimbursement obligations for transit and commuter programs and/or working capital purposes (collectively, “MTA Obligations”), including providing for the following:
 - Issuance of new money bonds and bond anticipation notes in an amount sufficient to produce net proceeds of up to \$1.8 billion (excluding obligations issued to refinance such new money bonds and bond anticipation notes) in one or more series from time to time, necessary to finance MTA transit or commuter capital programs (less amounts issued for such purposes under the TBTA Multiple credit supplemental resolution), or to retire such obligations when due, plus accrued interest, applicable issuance costs and any original issue discount,
 - Issuance of refunding obligations without limitation to refund and/or refinance other outstanding obligations that meet the Board adopted policy on refundings,
 - Issuance of new money bonds and bond anticipation notes in amounts to be authorized from time to time by the MTA Board necessary to finance MTA working capital projects (including deficit borrowings from lost revenues and increased costs from COVID-19) in one or more series from time to time, or to retire such obligations when due, plus accrued interest, applicable issuance costs and any original issue discount,
 - Issuance of MTA Obligations in competitive or negotiated public sales, by direct placement or in connection with a revolving credit or other loan agreement,
 - Issuance of MTA Parity Reimbursement Obligations and other Parity Debt in an amount sufficient to secure any Credit Facilities entered into in connection with the issuance of MTA Obligations, and
 - Reimbursement of expenditures for MTA capital programs.
- Multiple credit supplemental resolution authorizing TBTA senior and subordinate new money bonds, bond anticipation notes, refunding obligations and parity reimbursement obligations (collectively, TBTA Obligations”) for TBTA capital projects, MTA transit or commuter capital programs and costs of the central business district tolling program, including providing for the issuance of the following:
 - Issuance of up to \$500 million of TBTA general resolution senior and subordinate new money bonds and bond anticipation notes (excluding obligations issued to refinance such new money bonds and bond anticipation notes) in one or more series from time to time, necessary to (i) finance capital projects of TBTA, and (ii) retire TBTA bond anticipation notes when due, plus accrued interest, applicable issuance costs and any original issue discount,
 - Issuance of new money bonds and bond anticipation notes in an amount sufficient to produce net proceeds of up to \$1.8 billion (excluding obligations issued to refinance such new money bonds and bond anticipation notes) in one or more series from time to time, necessary to finance MTA transit or commuter capital programs (less amounts issued for such purposes under the MTA Multiple credit supplemental resolution), or to retire such obligations when due, plus accrued interest, applicable issuance costs and any original issue discount,
 - Issuance of refunding obligations without limitation to refund and/or refinance other outstanding obligations that meet the Board adopted policy on refundings,
 - Issuance of new money bonds and bond anticipation notes of up to \$305 million (excluding obligations issued to refinance such new money bonds and bond anticipation notes) in one or more series from time to time, necessary to finance or refinance the costs of the central business district tolling program pursuant to a previously approved resolution of TBTA,
 - Issuance of TBTA Obligations in competitive or negotiated public sales, or by direct placement,

Staff Summary

- Parity Reimbursement Obligations and other Parity Debt in an amount sufficient to secure any Credit Facilities entered into in connection with the issuance of TBTA Obligations, and
- Reimbursement of expenditures for each of the bridge and tunnel capital improvement program, the MTA capital program and the central business district tolling program.

With respect to the above-referenced financial transactions, MTA and TBTA Board approval, as applicable, is sought:

(a) delegating authority to the Chairman, the Chair of the Finance Committee, the Chief Financial Officer or the Deputy Chief, Financial Services of MTA to award the obligations either pursuant to competitive bid or to members (or entities related to such firms) of the Board-approved MTA underwriting syndicate or authorized purchasers under a federal or State of New York program and to execute and/or deliver in each case, where appropriate:

- Notices of Sale and bid forms,
- Purchase Agreements with underwriters and other authorized purchasers,
- Direct Purchase Agreements,
- Revolving Credit Agreements or other Loan Agreements,
- Official Statements and other disclosure documents,
- Continuing Disclosure Agreements and related filings,
- Remarketing Agreements and Firm Remarketing Agreements,
- Dealer and Broker/Dealer Agreements,
- Issuing and Paying Agent and Tender Agent Agreements,
- Credit Facilities and related Parity Reimbursement Obligations and Parity Debt,
- Related Subordinated Contract Obligations,
- Escrow Agreements, and
- Investment Agreements.

Any such documents will be in substantially the form of any document previously entered into by MTA or TBTA for previous issues, with such changes as approved by any one or more of the foregoing officers.

(b) authorizing such officers to terminate, amend, supplement, replace or extend any such documents, including Credit Facilities (and related Parity Reimbursement Obligations and Parity Debt), as they shall deem advisable, and to take such other actions as may be necessary or desirable to effectuate the issuance of the new money bonds and BANs and other financial transactions set forth above, on behalf of MTA, TBTA or other MTA subsidiaries and affiliates.

ALTERNATIVES:

There are no viable funding alternatives to meeting the bond funded portion of approved capital programs.

RECOMMENDATION:

The MTA and TBTA Boards approve the above-referenced resolutions and documents and all other actions described above, including the execution and delivery of such other documents, and the taking of all other actions, from time to time deemed necessary or desirable by such officers in connection therewith. The authorization to issue the bonds and bond anticipation notes and take other related actions hereunder shall continue in effect without any further action by the MTA and TBTA Boards until the adoption by the MTA and TBTA Boards of subsequent bond supplemental resolutions relating to 2023 BANs and bond issues (except that rollover 2022 BANs and bonds may still be issued to refinance 2022 BANs outstanding at any time, and the authorization to issue obligations to finance the central business district tolling program shall continue until modified or repealed) unless (a) the MTA and TBTA Boards shall have confirmed the effectiveness of this authorization for an additional period, or (b) the MTA and TBTA Boards shall have modified or repealed this authorization.

METROPOLITAN TRANSPORTATION AUTHORITY

**MULTIPLE CREDIT AND SERIES 2022 SUPPLEMENTAL RESOLUTION AUTHORIZING
OBLIGATIONS, OBLIGATION ANTICIPATION NOTES AND REFUNDING OBLIGATIONS**

Adopted December 15, 2021

MULTIPLE CREDIT AND SERIES 2022 SUPPLEMENTAL RESOLUTION AUTHORIZING OBLIGATIONS, OBLIGATION ANTICIPATION NOTES AND REFUNDING OBLIGATIONS

BE IT RESOLVED by the Board of Metropolitan Transportation Authority (the “Issuer”), as follows:

ARTICLE I

DEFINITIONS AND STATUTORY AUTHORITY

Section 1.01. Supplemental Resolution. This Multiple Credit and Series 2022 Supplemental Resolution Authorizing Obligations, Obligation Anticipation Notes and Refunding Obligations (the “Supplemental Resolution”) is supplemental to, and is adopted in accordance with Article II, Article A-II and Article A-VIII of the Applicable Resolutions described below.

Section 1.02. Definitions.

1. All capitalized terms which are used but not otherwise defined in this Supplemental Resolution shall have the same meanings, respectively, as such terms are given in the Applicable Resolution.

2. In this Supplemental Resolution:

“Applicable Project(s)” shall mean the Applicable Transit and Commuter Project and Applicable Working Capital Project, and any other project permitted to be financed under any other Applicable Resolution from time to time.

“Applicable Resolution(s)” shall mean the Applicable Transit and Commuter Resolutions and the Applicable Working Capital Resolutions.

“Applicable Transit and Commuter Project(s)” shall mean the DTF Transit and Commuter Project in the case of the DTF Resolution and the Resolution Transportation District Project in the case of the TRB Resolution, and any transit or commuter project permitted to be financed under any other Applicable Resolution from time to time.

“Applicable Transit and Commuter Resolution(s)” shall mean each of the following resolutions of the Issuer, as applicable:

- a. the DTF Resolution;
- b. the TRB Resolution; and
- c. any other resolution adopted by the Issuer with the expectation that obligations may be issued thereunder during the term of this Supplemental Resolution for the Applicable Transit and Commuter Projects permitted to be financed or refinanced under this Supplemental Resolution, as such Supplemental Resolution may be amended or supplemented from time to time.

“Applicable Working Capital Project(s)” shall mean the purposes for which the Issuer may issue bonds, notes or other obligations in accordance with the MTA PMT Resolution or any other resolution or

trust indenture, trust agreement or other financing agreement for deficit or working capital purposes by resolution of the Board from time to time.

“Applicable Working Capital Resolution(s)” shall mean each of the following resolutions of the Issuer, as applicable:

- a. the MTA PMT Resolution; and
- b. any other resolution adopted by the Issuer with the expectation that obligations may be issued thereunder during the term of this Supplemental Resolution for the Applicable Working Capital Projects permitted to be financed or refinanced under this Supplemental Resolution, as such Supplemental Resolution may be amended or supplemented from time to time.

“Authorized Officer” shall include the officers designated as such in the Applicable Resolution, and, if not designated therein, the Chairman, the Chair of the Finance Committee, the Chief Financial Officer or the Deputy Chief, Financial Services, as well as any officer duly designated as “Acting” in said officer’s capacity, except that, for the purposes of any delegation set forth herein that does not expressly include any Assistant Secretary, “Authorized Officer” shall not include any Assistant Secretary of the Issuer.

“Board” shall mean, when used with respect to the Issuer, the board of the Issuer acting as such pursuant to the provisions of the Issuer Act.

“Bond Counsel” shall mean Nixon Peabody LLP, Orrick, Herrington & Sutcliffe LLP, D. Seaton and Associates, P.A., P.C., Bryant Rabbino LLP or any other attorney or firm of attorneys of nationally recognized standing in the field of law relating to the issuance of obligations by state and municipal entities, selected by the Issuer.

“Code” shall mean the Internal Revenue Code of 1986, as amended, and regulations thereunder.

“Continuing Disclosure Agreement” has the meaning set forth in Section 2.11.

“Cross-Credit Obligations” shall mean indebtedness or other obligations issued or incurred by the Issuer or any other Related Entity as described in clause (iii) of the definition of “Capital Costs” under the Applicable Resolution, but excluding Obligations.

“DTC” means The Depository Trust Company.

“DTF Resolution” shall mean the resolution adopted by the Issuer on March 26, 2002, entitled “Dedicated Tax Fund Obligation Resolution”, as heretofore supplemented and amended.

“Loan Facility” shall mean a loan agreement, line of credit, revolving credit agreement or similar facility.

“MTA PMT Resolution” shall mean the resolution adopted by the Issuer on November 18, 2020, entitled “Payroll Mobility Tax Obligation Resolution”, as heretofore supplemented and amended.

“Noteholder”, “Holder” or “Holder of Notes”, or any similar term, means any person who shall be the registered owner of any Outstanding Series 2022 Note or Notes.

“Notice of Sale” shall mean the form of Notice of Sale to be distributed with the Preliminary Official Statement, hereinafter defined, and published in the event of a competitive sale of any Series 2022 Obligations.

“Official Statement” means a final official statement, offering circular or other disclosure document of the Issuer.

“Preliminary Official Statement” means a preliminary official statement, offering circular, or other disclosure document of the Issuer.

“Purchase Agreement” means a bond purchase agreement, note purchase agreement, Loan Facility, continuing covenant agreement or similar agreement.

“Series 2022 Bonds” shall mean Series 2022 New Money Bonds and Series 2022 Refunding Obligations.

“Series 2022 New Money Bonds” shall mean the Series 2022 New Money Transit and Commuter Bonds and the Series 2022 New Money Working Capital Bonds.

“Series 2022 New Money Notes” shall mean the Series 2022 New Money Transit and Commuter Notes and the Series 2022 New Money Working Capital Notes.

“Series 2022 New Money Transit and Commuter Bonds” shall mean the Bonds issued for Applicable Transit and Commuter Projects authorized by Article II of this Supplemental Resolution in one or more Series or subseries, subject to redesignation as hereinafter provided.

“Series 2022 New Money Transit and Commuter Notes” shall mean the Notes (including Obligation Anticipation Notes) issued for Applicable Transit and Commuter Projects authorized by Article II of this Supplemental Resolution in one or more Series or subseries, subject to redesignation as hereinafter provided.

“Series 2022 New Money Working Capital Bonds” shall mean the Bonds issued for Applicable Working Capital Projects authorized by Article II of this Supplemental Resolution in one or more Series or subseries, subject to redesignation as hereinafter provided.

“Series 2022 New Money Working Capital Notes” shall mean the Notes (including Obligation Anticipation Notes) issued for Applicable Working Capital Projects authorized by Article II of this Supplemental Resolution in one or more Series or subseries, subject to redesignation as hereinafter provided.

“Series 2022 Notes” shall mean the Series 2022 New Money Notes and the Series 2022 Refunding Obligations.

“Series 2022 Obligations” shall mean the Series 2022 Bonds, the Series 2022 Notes and the Series 2022 Refunding Obligations.

“Series 2022 Refunding Obligations” shall mean the bonds, notes (including Obligation Anticipation Notes) and other obligations authorized by Article II of this Supplemental Resolution that are Refunding Obligations and Obligations for the purpose of refunding Cross-Credit Obligations in one or more Series or subseries, subject to redesignation as hereinafter provided, and *provided*, unless otherwise provided by the Board, any Series 2022 Refunding Obligations issued pursuant to this

Supplemental Resolution shall be issued in compliance with any Board policies relating to the issuance of refunding bonds as may be in effect from time to time and any Series 2022 Refunding Obligations may be issued pursuant to this Supplemental Resolution to restructure principal amortization within the maturity limits permitted by law.

“TBTA” means the Triborough Bridge and Tunnel Authority.

“TBTA Multiple Credit and Series 2022 Supplemental Resolution” shall mean the supplemental resolution adopted by TBTA on the date of adoption of this Supplemental Resolution authorizing the issuance of bonds, notes and other obligations for various purposes during 2022, as supplemented and amended from time to time.

“TRB Resolution” shall mean the resolution adopted by the Issuer on March 26, 2002, entitled “General Resolution Authorizing Transportation Revenue Obligations”, as heretofore supplemented and amended.

“Trustee” shall have the meaning set forth in the Applicable Resolution.

Section 1.03. Authority for this Supplemental Resolution. This Supplemental Resolution is adopted pursuant to the provisions of the Issuer Act and the Applicable Resolutions.

ARTICLE II

AUTHORIZATION OF SERIES 2022 OBLIGATIONS

Section 2.01. Principal Amount, Designation and Series. (a) Pursuant to the Applicable Transit and Commuter Resolutions and in order to finance, as applicable, Capital Costs for Applicable Transit and Commuter Projects, (i) Series 2022 New Money Transit and Commuter Bonds, and (ii) Series 2022 New Money Transit and Commuter Notes, which may be issued in one or more Series or subseries and from time to time, entitled to the benefit, protection and security of the Applicable Transit and Commuter Resolutions are hereby authorized to be issued in an aggregate principal amount not exceeding the principal amount necessary so that, after giving effect to any net original issue discount and underwriters’ discount from the principal amount (but without giving effect to any net original issue premium as determined to be advisable by an Authorized Officer in connection with the marketing of the Series 2022 Obligations), the amount to be deposited in the Proceeds Account created under the Applicable Transit and Commuter Resolution pursuant to, or otherwise applied to effectuate the purposes of, Section 2.02 and Section 3.01 of this Supplemental Resolution (exclusive of any amount deposited therein or otherwise applied pursuant to a Certificate of Determination to pay accrued interest, capitalized interest (unless otherwise provided in a Certificate of Determination, other than with respect to Series 2022 Refunding Obligations) or any Costs of Issuance of the Series 2022 Obligations), shall not exceed the amount or amounts determined in one or more Certificates of Determination to be necessary to effectuate the purposes set forth in Section 2.02 hereof; *provided, however*, that the sum of Series 2022 New Money Transit and Commuter Bonds plus Series 2022 New Money Transit and Commuter Notes issued to finance Capital Costs for the Applicable Transit and Commuter Projects, together with any similar bonds, notes or other obligations issued by TBTA in accordance with the TBTA Multiple Credit and Series 2022 Supplemental Resolution to finance projects that would be Applicable Transit and Commuter Projects under the Applicable Transit and Commuter Resolutions, shall not exceed \$1.8 billion at any one time Outstanding (but, for purposes of clarification, not including any Series 2022 Obligations or any similar bonds, notes or other obligations issued by TBTA in accordance with the TBTA Multiple Credit and Series 2022 Supplemental Resolution issued to refinance Series 2022 New Money Transit and

Commuter Notes or other Series 2022 Obligations that previously also refinanced Series 2022 New Money Transit and Commuter Notes as authorized by Section 2.01(f) hereof).

(b) The Board may authorize, by amendment or supplement, during the period of effectiveness of this Supplemental Resolution, from time to time, pursuant to the Applicable Working Capital Resolutions and in order to finance, as applicable, Applicable Working Capital Projects, (i) Series 2022 New Money Working Capital Bonds, and (ii) Series 2022 New Money Working Capital Notes, which may be issued in one or more Series or subseries and from time to time, entitled to the benefit, protection and security of the Applicable Working Capital Resolutions.

(c) The Issuer is hereby authorized to issue Series 2022 Refunding Obligations under any Applicable Resolution for the purposes permitted under such Applicable Resolution without limitation as to principal amount for the purposes provided in Section 2.02 hereof.

(d) The Series 2022 Obligations shall be designated as, and shall be distinguished from the Obligations of all other Series by the title or titles set forth in one or more Certificates of Determination.

(e) The Series 2022 Notes may be issued in the form of a Loan Facility.

(f) The authority to issue the Obligations and Obligation Anticipation Notes and take related actions granted under previous resolutions of the Issuer shall continue in full force and effect. The authorization to issue the Series 2022 Obligations and take other actions hereunder shall continue in effect without any action by the Issuer until the adoption by the Board of a subsequent supplemental resolution relating to 2023 new money financings and refundings; *provided, however*, the authorization to issue the Series 2022 Obligations to refinance the Series 2022 Notes authorized hereunder shall continue in effect until all of such Series 2022 Notes have been refinanced by Series 2022 Bonds.

(g) Nothing in this Supplemental Resolution is intended to preclude the issuance of Series 2022 Refunding Obligations as refunding obligations in accordance with Section 203 of the Applicable Resolution.

(h) The Issuer hereby covenants and agrees for the benefit of the Holders and Beneficial Owners of the Series 2022 Notes that it will maintain issuance capacity pursuant to the Applicable Resolution to issue Bonds or additional Obligation Anticipation Notes in an amount sufficient to pay the principal of and interest on the Series 2022 Notes when due.

Section 2.02. Purposes. The purposes for which the Series 2022 Obligations are issued shall be set forth in one or more Certificates of Determination and may include (a) with respect to the Series 2022 New Money Bonds and Series 2022 New Money Notes (i) the payment of all or any part of the Capital Costs, including Costs of Issuance relating to the applicable issuance, and (ii) the payment of principal of, redemption premium, if any, and interest on Outstanding Series 2022 Notes all to the extent and in the manner provided in this Supplemental Resolution, and (b) with respect to Series 2022 Refunding Obligations, the refunding, refinancing, restructuring or payment, including by purchasing, exchanging or tendering therefor, of all or any portion of any Outstanding Obligations or Parity Debt or Cross-Credit Obligations deemed advisable by an Authorized Officer in accordance with the Applicable Resolutions.

Section 2.03. Dates, Maturities, Principal Amounts and Interest. The Series 2022 Obligations, except as otherwise provided in the Applicable Resolutions, shall be dated the date or dates determined in the related Certificate of Determination. The Series 2022 Obligations shall mature on the date or dates and in the year or years and in the principal amount or amounts, and shall bear interest at the

rate or rates per annum, if any, specified in or determined in the manner provided in the related Certificate of Determination. The Series 2022 Notes shall be subject to redemption prior to maturity as provided in the Certificate of Determination.

Section 2.04. Interest Payments. The Series 2022 Obligations shall bear interest from their date or dates and be payable on such date or dates as may be determined pursuant to the related Certificate of Determination. Except as otherwise provided in the related Certificate of Determination, interest on the Series 2022 Obligations shall be computed on the basis of twelve (12) 30-day months and a 360-day year.

Section 2.05. Denominations, Numbers and Letters. Unless otherwise provided in the related Certificate of Determination, the Series 2022 Obligations shall be issued in fully registered form without coupons in the denomination of \$5,000 or any integral multiple thereof. The Series 2022 Obligations shall be numbered and lettered as provided in the related Certificate of Determination.

Section 2.06. Places of Payment and Paying Agents. Except as otherwise provided in the related Certificate of Determination, principal and Redemption Price of the Series 2022 Obligations shall be payable to the registered owner of each Series 2022 Obligation when due upon presentation of such Series 2022 Obligation at the principal corporate trust office of the applicable Trustee. Except as otherwise provided in the related Certificate of Determination, interest on the registered Series 2022 Obligations will be paid by check or draft mailed on the interest payment date by the applicable Paying Agent, to the registered owner at his address as it appears on the registration books or, at the option of any Owner or Holder of at least one million dollars (\$1,000,000) in principal amount of the Series 2022 Obligations, by wire transfer in immediately available funds on each interest payment date to such Owner or Holder thereof upon written notice from such Owner or Holder to the related Trustee, at such address as such Trustee may from time to time notify such Owner or Holder, containing the wire transfer address (which shall be in the continental United States) to which such Owner or Holder wishes to have such wire directed, if such written notice is received not less than twenty (20) days prior to the related interest payment date (such notice may refer to multiple interest payments).

Section 2.07. Sinking Fund Installments. Except as otherwise provided in the related Certificate of Determination, the Series 2022 Bonds, if any, determined in the related Certificate of Determination shall be subject to redemption (a) in part, by lot, (b) pro rata (in the case of Series 2022 Bonds issued as Taxable Obligations), or (c) otherwise as determined in accordance with the Applicable Resolution, on each date in the year or years determined in the related Certificate of Determination at the principal amount thereof plus accrued interest up to but not including the date of redemption thereof, from mandatory Sinking Fund Installments which are required to be made in amounts sufficient to redeem on each such date the principal amount of such Series 2022 Bonds.

Section 2.08. Redemption Prices and Terms. The Series 2022 Bonds may also be subject to redemption prior to maturity, at the option of the Issuer, upon notice as provided in Article A-IV of the Applicable Resolution, at any time as a whole or in part (and by lot within a maturity, or otherwise as determined in accordance with Section A-404 of the Applicable Resolution, if less than all of a maturity is to be redeemed), from maturities designated by the Issuer on and after the date and in the years and at the Redemption Prices (expressed as a percentage of principal amount) determined in the related Certificate of Determination, plus accrued interest up to but not including the redemption date.

Section 2.09. Sources of Payment for Series 2022 Notes Issued as Obligation Anticipation Notes.

(a) The principal of and interest on the Series 2022 Notes issued as Obligation Anticipation Notes may be payable solely from (i) the proceeds of any other Series 2022 Notes issued for the same purposes as such Obligation Anticipation Notes, (ii) the proceeds of the Series 2022 Bonds issued for the same purposes as such Obligation Anticipation Notes, and (iii) the proceeds of notes or other evidences of indebtedness or any other amounts (which other amounts are not pledged under the Applicable Resolution), in each case if and to the extent such amounts may lawfully be used to make such payments. The interest on the Series 2022 Notes issued as Obligation Anticipation Notes may also be payable from amounts available for transfer pursuant to Sections 504(b) and 505.3 of the TRB Resolution and Sections 504.3 and 505.3 of the DTF Resolution, or similar sections of other Applicable Resolutions, as applicable, for the payment of Subordinated Indebtedness as defined therein.

(b) There are hereby pledged to the payment of principal and interest on the Series 2022 Notes issued as Obligation Anticipation Notes (i) the proceeds of other Series 2022 Notes issued to refinance such Series 2022 Notes issued as Obligation Anticipation Notes, and (ii) the proceeds of the Series 2022 New Money Bonds issued to refinance such Series 2022 Notes issued as Obligation Anticipation Notes, and such pledge has priority over any other pledge thereof created by the DTF Resolution or the TRB Resolution, including Section 501 thereof, or a similar section of other Applicable Resolutions. There is also hereby pledged to the payment of interest on the Series 2022 Notes issued as Obligation Anticipation Notes amounts available for transfer pursuant to Sections 504(b) and 505.3 of the TRB Resolution and Sections 504.3 and 505.3 of the DTF Resolution, or similar sections of other Applicable Resolutions, as applicable, for the payment of Subordinated Indebtedness in accordance with and subject to the limitations contained in the Applicable Resolution. Proceeds and amounts described in clause (iii) of Section 2.09(a) hereof may be pledged to the payment of principal and interest on the Series 2022 Notes issued as Obligation Anticipation Notes to the extent set forth in a Certificate of Determination.

Section 2.10. Delegation to an Authorized Officer. 1. There is hereby delegated to each Authorized Officer, subject to the limitations contained in this Supplemental Resolution, the following powers with respect to the Series 2022 Obligations:

(a) to determine whether and when to issue any (i) Series 2022 New Money Bonds, the amount of the Series 2022 New Money Bonds to be applied to finance Capital Costs or other uses as provided in Section 2.02 hereof, and the amount of the proceeds of the Series 2022 New Money Bonds estimated to be necessary to pay the Costs of Issuance of the Series 2022 New Money Bonds and capitalized interest, if any, (ii) Series 2022 New Money Notes, the amount of the Series 2022 New Money Notes to be applied to finance Capital Costs or other uses as provided in Section 2.02 of this Supplemental Resolution and the amount of the proceeds of the Series 2022 New Money Notes estimated to be necessary to pay the Costs of Issuance of the Series 2022 New Money Notes and capitalized interest, if any, and (iii) Series 2022 Refunding Obligations constituting Refunding Obligations or Obligations issued to refund Cross-Credit Obligations, and to determine the amount of the proceeds of the Series 2022 Refunding Obligations to be applied to refunding purposes as well as the specific Obligations or Parity Debt or Cross-Credit Obligations, or portions of either to be refunded and the date or dates, if any, on which such refunded obligations shall be redeemed, and the amount of the proceeds of the Series 2022 Refunding Obligations estimated to be necessary to pay the Costs of Issuance of the Series 2022 Refunding Obligations;

(b) to determine the purpose or purposes for which the Series 2022 Obligations are being issued, which shall be one or more of the purposes set forth in Section 2.02 of this Supplemental Resolution;

(c) to determine the principal amounts of the Series 2022 Obligations to be issued for the purposes set forth in Section 2.02 of this Supplemental Resolution and whether such principal amounts constitute a separate Series or a subseries of Series 2022 Obligations, which principal amounts (and the aggregate of all such Series and subseries) shall not exceed the principal amounts permitted by Section 2.01 of this Supplemental Resolution, and with respect to Series 2022 Bonds, to determine Accreted Values and Appreciated Values, if applicable;

(d) to determine the maturity date and principal amount of each maturity of the Series 2022 Obligations and with respect to Series 2022 Bonds, the amount and due date of each Sinking Fund Installment, if any;

(e) to determine the date or dates which the Series 2022 Obligations shall be dated and the interest rate or rates of the Series 2022 Obligations or the manner of determining such interest rate or rates; provided, however, that (i) any Series 2022 New Money Bonds issued as fixed rate Tax-Exempt Obligations shall be subject to a maximum interest rate of not greater than 10% per annum, any Series 2022 New Money Bonds issued as fixed rate Taxable Obligations shall be subject to a maximum interest rate of not greater than 12% per annum, any Variable Interest Rate Obligations issued as Tax-Exempt Obligations shall be subject to a maximum interest rate of not greater than 15% per annum, any Variable Interest Rate Obligations issued as Taxable Obligations shall be subject to a maximum interest rate of not greater than 18% per annum and any Parity Reimbursement Obligations shall be subject to a maximum interest rate of not greater than 25% per annum, or, in each such case, such higher rate or rates as determined by the Issuer's Board, and (ii) the true interest cost (as calculated by the officers of the Issuer executing any Certificate of Determination, which calculation shall be conclusive) on the Series 2022 Notes bearing a fixed rate of interest shall not exceed 4.00% per annum and for Series 2022 Notes bearing interest at a variable interest rate shall not exceed a rate equal to SIFMA or another short-term index generally accepted in the marketplace chosen by an Authorized Officer and set forth in the Certificate of Determination, in each case, plus 4.00% and any default rate or equivalent rate shall not exceed the sum of 4.00% plus either a specified prime rate or the federal funds rate;

(f) to determine the Redemption Price or Redemption Prices, if any, and the redemption terms, if any, for the Series 2022 Obligations; provided, however, that if the Series 2022 Obligations are to be redeemable at the election of the Issuer, the Redemption Price (except in the case of taxable Series 2022 Obligations) shall not be greater than one hundred three percent (103%) of the principal amount of the Series 2022 Obligations to be redeemed, plus accrued interest thereon up to but not including the date of redemption and in the case of Series 2022 Obligations issued as Taxable Obligations the Redemption Price may be determined pursuant to provisions relating to pro rata redemption and/or make-whole redemption;

(g) to determine whether the sale of any or a portion of the Series 2022 Obligations shall be conducted on either a negotiated or competitive bid basis and, as applicable, to determine the purchase price for the Series 2022 Obligations to be paid by the purchaser or purchasers referred to in one or more Purchase Agreements or a bank direct purchase agreement, the purchase price for the Series 2022 Obligations to be paid by the winning bidder, if such sale is conducted by competitive bid pursuant to a Notice of Sale, in either case as such document is described in Section 2.11 of this Supplemental Resolution, which may include such original issue discount and original issue premium as shall be determined in the related Certificate of Determination; provided, however, that, in the case of Series 2022 Bonds sold on a negotiated basis (and not competitive sale), the underwriters' discount reflected in such purchase price shall not exceed (i) \$10.00 for each one thousand dollars (\$1,000) principal amount of the Series 2022

Bonds and; (ii) \$3.50 for each one thousand dollars (\$1,000) principal amount of the Series 2022 Notes;

(h) to take all actions required for the Series 2022 Obligations to be eligible under the rules and regulations of DTC for investment and trading as uncertificated securities, to execute and deliver a standard form of letter of representation with DTC and, notwithstanding any provisions to the contrary contained in this Supplemental Resolution, to include in the related Certificate of Determination such terms and provisions as may be appropriate or necessary to provide for uncertificated securities in lieu of Series 2022 Obligations issuable in fully registered form;

(i) to determine whether to issue all or any portion of the Series 2022 Obligations as Tax-Exempt Obligations, Taxable Obligations, Put Obligations, Variable Interest Rate Obligations or as any other form of Obligations or Obligation Anticipation Notes permitted by the Applicable Resolution or this Supplemental Resolution and any matters related thereto, including (i) the terms and provisions of any such Series 2022 Obligations, (ii) the selection of remarketing agents, tender agents, calculation agents, auction agents, dealers, bidding agents or any other agents or parties to ancillary arrangements and the terms of any such arrangements, and (iii) the methods for determining the accrual of Debt Service;

(j) to determine the advisability, as compared to an unenhanced transaction, of obtaining one or more Credit Facilities, to select a provider or providers thereof and to determine and accept the terms and provisions and price thereof, to determine the items to be pledged to the Series 2022 Obligations from those permitted by Section A-203 of the Applicable Resolution, and to determine such other matters related thereto as in the opinion of the officer executing the related Certificate of Determination shall be considered necessary or appropriate and to effect such determinations by making any changes in or additions to this Supplemental Resolution required by Credit Facility providers, if any, or required by a Rating Agency in order to attain or maintain specific ratings on the Series 2022 Obligations, or relating to the mechanisms for the repayment of amounts advanced thereunder or payment of fees, premiums, expenses or any other amounts, notices, the provision of information, and such other matters of a technical, mechanical, procedural or descriptive nature necessary or appropriate to obtain or implement a Credit Facility with respect to the Series 2022 Obligations, and to make any changes in connection therewith. Such changes may include, but are not limited to, the making of any additional covenants with Holders or other parties deemed necessary or appropriate by the officer executing any Certificate of Determination;

(k) to determine that Series 2022 Refunding Obligations comply with all Board policies relating to the issuance of refunding obligations in effect at the time of such determination;

(l) to make such changes to the form of this Supplemental Resolution as may be required by a Rating Agency in order to attain or maintain specific ratings on the Series 2022 Obligations;

(m) to make such changes to the form of this Supplemental Resolution as may be necessary or desirable in order to cure any ambiguities, inconsistencies or other defects;

(n) to determine whether to (i) enter into an escrow agreement or other arrangement in connection with the issuance of Refunding Bonds, including the selection of escrow agents, verification agents and the manner of determining specified matters relating to the defeasance of

the refunded obligations and (ii) purchase SLGs or open market securities and the form and substance thereof and any related investment agreement, and to determine the application of any amounts released in connection with any such refunding; and

(o) to determine any other matters provided for herein, or permitted by the provisions of the Applicable Resolutions, including the election and determination of matters relating to Tax-Exempt Obligations, and to determine matters relating to the payment or defeasance of Obligation Anticipation Notes, including preparation of any documentation therefor.

2. Any Authorized Officer shall execute one or more Certificates of Determination evidencing the determinations made pursuant to this Supplemental Resolution and any such Certificate of Determination shall be conclusive evidence of the determinations of such Authorized Officer, as stated therein. More than one Certificate of Determination may be delivered to the extent more than one Series or subseries of Series 2022 Obligations are delivered from time to time, or other authority is exercised under this Supplemental Resolution from time to time and each such Certificate of Determination shall be delivered to the related Trustee concurrently with the authentication and delivery of the respective Series or subseries of Series 2022 Obligations by such Trustee or other documentation. Determinations set forth in any Certificate of Determination shall have the same effect as if set forth in this Supplemental Resolution.

3. Any such Authorized Officer may exercise any authority delegated under this Supplemental Resolution from time to time following issuance of any Series 2022 Obligations, as appropriate for any purposes, including to remove or replace Trustees under Applicable Resolutions as permitted by the Applicable Resolution, provided such substitute Trustee meets the requirements of the Applicable Resolution; to change interest rate modes or auction periods; to obtain or terminate one or more Credit Facilities, including substitute or additional Credit Facilities; to enter into one or more bank direct purchase agreements or similar instruments providing for the private placement of Series 2022 Obligations with financial or governmental entities; to appoint new or additional agents or other parties deemed appropriate to a particular form or mode of Series 2022 Obligation or Series 2022 Obligation Anticipation Note or manner of sale; to enter into one or more remarketing agreements, firm remarketing agreements, continuing disclosure agreements or other agreements in connection with the remarketing of any Series 2022 Obligations; if any Series 2022 Obligations shall consist of multiple subseries, to change the principal amounts and number of the individual subseries or to combine one or more subseries into a single Series or subseries; or, if any Series 2022 Obligations consist of a single Series or subseries, to divide such Series or subseries into two or more subseries and to determine the principal amount of such subseries. In connection with the remarketing, by negotiated sale, competitive bid or direct or private placement, of any Series 2022 Obligations, any such Authorized Officer is hereby authorized to make public and to authorize the use and distribution by remarketing agents or other appropriate parties of a remarketing circular (including a preliminary remarketing circular), or other disclosure document, in substantially the form most recently executed or delivered by the Issuer in connection with the remarketing of Obligations or Obligation Anticipation Notes to the extent applicable, with such changes, omissions, insertions and revisions as such Authorized Officer shall deem advisable. Any Authorized Officer shall execute one or more amendments to the applicable Certificate or Certificates of Determination evidencing the determinations made pursuant to this paragraph and any such amended Certificate of Determination shall be conclusive evidence of the determinations of such Authorized Officer, as stated therein.

Section 2.11. Sale of Series 2022 Obligations. Each Authorized Officer is hereby authorized either (i) to sell and award all or any portion of the Series 2022 Obligations through a competitive bidding process to purchasers meeting the requirements of one or more Notices of Sale to be

published in order to give notice of the competitive sale of the Series 2022 Obligations; (ii) to sell and award all or any portion of the Series 2022 Obligations through a negotiated sale to the purchasers who are referred to in the Purchase Agreement and who shall be selected from the then current list of approved underwriters or shall be an approved governmental lender under a federal or State program; (iii) to sell and award all or any portion of the Series 2022 Obligations through a direct sale to the financial or governmental institution or institutions selected by the Authorized Officer who shall be referred to in the continuing covenant, direct purchase or similar agreement; or (iv) to issue all or any portion of the Series 2022 Notes in the form of a Loan Facility to any financial or governmental institution or institutions selected by the Authorized Officer. Each Authorized Officer is hereby authorized to sell and award the Series 2022 Obligations to the purchasers referred to in the preceding sentence in the case of a bond purchase agreement or note purchase agreement, in substantially the form most recently executed or delivered by the Issuer, to the extent applicable, in connection with the sale of Obligations or Obligation Anticipation Notes, or, with respect to a continuing covenant, direct purchase or similar agreement, containing bank facility terms and provisions (including, without limitation, increased costs, term-out, events of default and remedies) in substantially the form set forth in a letter of credit reimbursement agreement most recently executed or delivered by the Issuer to the extent applicable, including, if applicable, that the requirement that the Loan Facility issuer or direct purchaser offer to the Issuer a term-out provision of no less than five years, with such revisions to reflect the terms and provisions of the Series 2022 Obligations as may be approved by the Authorized Officer executing the Purchase Agreement. Each Authorized Officer is hereby authorized to agree to the selection of the representative of the underwriters or the other purchasers or facility providers as referred to in the Purchase Agreement or Agreements and to execute and deliver the Purchase Agreement or Agreements for and on behalf and in the name of the Issuer with such changes, omissions, insertions and revisions as may be approved by the Authorized Officer executing the Purchase Agreement or Agreements, said execution being conclusive evidence of such approval and concurrence in the selection of the representative of the underwriters.

If it is determined that any sale of Series 2022 Obligations shall be conducted on a competitive bid basis, each Authorized Officer is hereby further authorized to conduct the sale and award of the Series 2022 Obligations on the basis of a competitive bid, pursuant to the terms of a Notice of Sale, in a form, including any limitations on permitted bidders and a description of the basis for determining the winning bidder or bidders, determined by such Authorized Officer. Each Authorized Officer is hereby authorized to conduct such competitive sale of the Series 2022 Obligations in a manner consistent with this Supplemental Resolution and to utilize the services of the Authority's financial advisor and the services of an electronic bidding service, as such Authorized Officer shall determine, and the execution by such Authorized Officer of a letter of award shall be conclusive evidence of such award.

Each Authorized Officer is hereby authorized to make public and to authorize the use and distribution by said purchasers or other appropriate parties of a Preliminary Official Statement in connection with each public offering or any direct or private placement of the Series 2022 Obligations, in substantially the form most recently executed or delivered by the Issuer in connection with the sale of Obligations or Obligation Anticipation Notes of the Issuer to the extent applicable, with such changes, omissions, insertions and revisions as such officer shall deem advisable, said distribution being conclusive evidence of the approval of such changes, omissions, insertions and revisions. The Issuer authorizes any of said officers to deliver a certification to the effect that such Preliminary Official Statement or Official Statement, if deemed necessary or appropriate, together with such other documents, if any, described in such certificate, was deemed final as of its date for purposes of Rule 15c2-12 of the Securities and Exchange Commission as applicable.

Each Authorized Officer is hereby authorized to make public and to authorize distribution of an Official Statement in substantially the form of each Preliminary Official Statement or the most recently

executed and delivered Official Statement if there is not a Preliminary Official Statement to the extent applicable, with such changes, omissions, insertions and revisions as such Authorized Officer shall deem advisable, to sign such Official Statement and to deliver such Official Statement to the purchasers of such issue of the Series 2022 Obligations, such execution being conclusive evidence of the approval of such changes, omissions, insertions and revisions.

Notwithstanding the preceding two paragraphs, however, each Authorized Officer may make public and authorize the use and distribution of a final Official Statement in connection with the public offering of the Series 2022 Obligations meeting the requirements of the preceding two paragraphs and may deem such Official Statement final as of its date for purposes of Rule 15c2-12 of the Securities and Exchange Commission.

Each Authorized Officer is hereby authorized to execute and deliver for and on behalf and in the name of the Issuer, to the extent determined by such Authorized Officer to be necessary or convenient, a Continuing Disclosure Agreement, substantially in the form of the Continuing Disclosure Agreement most recently executed and delivered by the Issuer to the extent applicable, with such changes, omissions, insertions and revisions as such Authorized Officer shall deem advisable (the "Continuing Disclosure Agreement"), said execution being conclusive evidence of the approval of such changes, omissions, insertions and revisions.

The proceeds of each good faith deposit, if any, received by the Issuer from the purchasers of each issue of the Series 2022 Obligations under the terms of the related Purchase Agreement or Notice of Sale may be invested by the Issuer pending application of the proceeds of such good faith deposit for the purposes provided in Section 2.02 of this Supplemental Resolution at the time of the issuance and delivery of such Series 2022 Obligations.

Each Authorized Officer (including any Assistant Secretary of the Issuer) is hereby authorized and directed to execute, deliver, amend, replace or terminate any and all documents and instruments (including any remarketing agreements, dealer agreements, broker dealer agreements, tender agent agreements, escrow agreements, auction agency agreements, any investment agreements or arrangements, or any reimbursement agreements or documents or instruments relating to a Credit Facility deemed appropriate to a given form or mode of an Obligation) and to do and cause to be done any and all acts necessary or proper for carrying out each Purchase Agreement or Notice of Sale, each Continuing Disclosure Agreement, the terms of any Credit Facility or other such agreement or arrangement, and the issuance, sale and delivery of the Series 2022 Obligations and for implementing the terms of the Series 2022 Obligations and the transactions contemplated hereby or thereby.

When reference is made in this Supplemental Resolution to the authorization of an Authorized Officer to do any act, such act may be accomplished by any of such officers individually.

Section 2.12. Forms of Series 2022 Obligations and Trustee's Authentication Certificate.

(a) Subject to the provisions of the Applicable Resolution, the form of registered Series 2022 Bonds, and the related Trustee's certificate of authentication, shall be substantially in the form set forth in Exhibit One (or any analogous attachment or reference thereto) to the Applicable Resolution including, if necessary, any changes to comply with the requirements of DTC or the provisions of this Supplemental Resolution or the related Certificate of Determination.

(b) The form of registered Series 2022 Notes, and the certificate of authentication, shall be of substantially the form and tenor provided in any Certificate of Determination.

Section 2.13. Appointment of Trustees and Paying Agents.

(a) With respect to the Series 2022 Bonds, unless otherwise provided by any Certificate of Determination, The Bank of New York Mellon, as successor in interest to JPMorgan Chase Bank, N.A., shall be the Trustee under each of the Applicable Resolutions and the Paying Agent for the Series 2022 Bonds.

(b) With respect to the Series 2022 Notes, there is hereby delegated to any Authorized Officer executing any Certificate of Determination the right and authority to appoint any trustee, paying agent, fiscal agent or other agent with respect to the Series 2022 Notes deemed advisable by such Authorized Officer and to determine the terms and provisions of any arrangements with any such parties.

Section 2.14. General Provisions. As and to the extent provided in any Certificate of Determination, the provisions of Articles A-III, IV, A-IV, A-VII, A-IX and A-XI of the Applicable Resolution (or similar provisions of Applicable Resolutions hereafter added) may apply equally to the Series 2022 Notes as though set forth in full herein but with each reference to Bonds being a reference to Series 2022 Notes, except as affected by the terms hereof and the procedures of the Securities Depository; provided that the Authorized Officer executing any Certificate of Determination may, in the alternative, set forth in any Certificate of Determination provisions relating to any such matters as deemed necessary or appropriate by such Authorized Officer.

ARTICLE III

DISPOSITION AND ALLOCATION OF SERIES 2022 OBLIGATION PROCEEDS

Section 3.01. Disposition and Allocation of Series 2022 New Money Bond Proceeds. Except as otherwise provided under Applicable Resolutions hereafter added or as otherwise provided in any Certificate of Determination, any proceeds of the sale of the Series 2022 Bonds, other than accrued interest and capitalized interest, if any, shall be deposited, simultaneously with the issuance and delivery of a series or subseries of the Series 2022 Bonds, or shall otherwise be disposed of or applied pursuant to the related Certificate of Determination in accordance with the Applicable Resolution, as follows:

(a) such proceeds shall be (i) deposited in the Series 2022 Bond Proceeds Account, which is hereby established in the Proceeds Fund for each such series or subseries, and applied to the payment of Capital Costs or the payment of principal of and redemption premium, if any, and interest on the Series 2022 Notes or (ii) otherwise applied to the payment of such amounts; and

(b) the balance of such proceeds shall be (i) deposited in the Series 2022 Costs of Issuance Account, which is hereby established in the Proceeds Fund for each such series or subseries, and applied to the payment of Costs of Issuance, or (ii) otherwise applied to the payment of Costs of Issuance.

Section 3.02. Disposition of Series 2022 Note Proceeds. Except as otherwise provided under Applicable Resolutions hereafter added or as otherwise provided in any Certificate of Determination, the proceeds of the sale of the Series 2022 Notes shall be deposited in the Series 2022 Note Proceeds Account which is hereby established in the related Proceeds Fund and applied pursuant to the related Certificate of Determination to the payment of Capital Costs, including any Costs of Issuance and accrued and capitalized interest, and the payment of principal of and interest on Outstanding Series 2022 Notes.

Section 3.03. Disposition of Refunding Obligation Proceeds. Except as otherwise provided under Applicable Resolutions hereafter added or as otherwise provided in any Certificate of Determination, any proceeds of the sale of the Series 2022 Refunding Obligations, other than accrued interest, if any, shall be deposited, simultaneously with the issuance and delivery of a series or subseries of the Series 2022 Refunding Obligations, or shall otherwise be disposed of or applied pursuant to the related Certificate of Determination as follows:

(a) such proceeds shall be (i) deposited in the Series 2022 Refunding Obligations Proceeds Account, which is hereby established in the Proceeds Fund for each such series or subseries, and applied to the refunding of any Obligations, Parity Debt or Cross Credit Obligations, or portions of any of them, in accordance with Section 2.02 hereof or (ii) otherwise applied to such refunding; and

(b) the balance of such proceeds shall be (i) deposited in the Series 2022 Refunding Obligations Costs of Issuance Account, which is hereby established in the Proceeds Fund for each such series or subseries, and applied to the payment of Costs of Issuance, or (ii) otherwise applied to the payment of Costs of Issuance.

Section 3.04. Accrued Interest. Unless otherwise provided in the related Certificate of Determination, the accrued interest and capitalized interest (excluding capitalized interest on Series 2022 Refunding Obligations), if any, received on the sale of the Series 2022 Obligations shall be deposited in the Debt Service Fund created under the Applicable Resolution.

ARTICLE IV

TAX COVENANTS AND DEFEASANCE

Section 4.01. Tax Covenants Relating to the Series 2022 Obligations. The Issuer covenants that, in order to maintain the exclusion from gross income for Federal income tax purposes of the interest on the Series 2022 Obligations issued as Tax-Exempt Obligations, the Issuer will satisfy, or take such actions as are necessary to cause to be satisfied, each provision of the Code necessary to maintain such exclusion. In furtherance of this covenant, the Issuer agrees to comply with such written instructions as may be provided by Bond Counsel. In furtherance of the covenant contained in the preceding sentence, the Issuer agrees to continually comply with the provisions of any “Arbitrage and Use of Proceeds Certificate” or “Tax Certificate” to be executed by the Issuer in connection with the execution and delivery of any Series 2022 Obligations issued as Tax-Exempt Obligations, as amended from time to time.

Notwithstanding any other provision of the Applicable Resolution to the contrary, upon the Issuer’s failure to observe, or refusal to comply with, the above covenant (a) the Owners or Holders of the Series 2022 Obligations, or the Trustee acting on their behalf, shall be entitled to the rights and remedies provided to Owners or the Trustee under Section 702 (or other analogous provision) of the Applicable Resolution (as though such provisions related to Series 2022 Notes rather than Bonds), and (b) neither the Owners of the Obligations or notes of any Series or holders of any Parity Debt (other than the Owners of the Series 2022 Obligations or the Trustee acting on their behalf), nor the Trustee acting on their behalf, shall be entitled to exercise any right or remedy provided to the Owners, the Parity Debt holders, the Trustee or Noteholders under the Applicable Resolution based upon the Issuer’s failure to observe, or refusal to comply with, the above covenant.

The provisions of the foregoing covenants set forth in this Section shall not apply to any Series 2022 Refunding Obligations, including any subseries thereof, which the Issuer determines pursuant to the applicable Certificate of Determination to issue as Taxable Obligations.

Section 4.02. Defeasance. In the event the Issuer shall seek, prior to the maturity or redemption date thereof, to pay or cause to be paid, within the meaning and with the effect expressed in the Applicable Resolution, all or less than all Outstanding Series 2022 Obligations issued as Tax-Exempt Obligations and the provisions of Section 4.01 hereof shall then be of any force or effect, then, notwithstanding the provisions of Article A-XI (or other analogous provision) of the Applicable Resolution, the Series 2022 Obligations issued as Tax-Exempt Obligations which the Issuer then seeks to pay or cause to be paid shall not be deemed to have been paid within the meaning and with the effect expressed in Section A-1101 (or other analogous provision) of the Applicable Resolution unless (i) the Issuer has confirmed in writing that the Owners or Holders of the Series 2022 Obligations issued as Tax-Exempt Obligations which the Issuer then seeks to pay or cause to be paid will continue, after such action, to have the benefit of a covenant to the effect of the covenant of the Issuer contained in Section 4.01 hereof or (ii) there shall have been delivered to the related Trustee an Opinion of Bond Counsel to the effect that non-compliance thereafter with the applicable provisions of the Code will not affect the then current treatment of interest on the Series 2022 Obligations issued as Tax-Exempt Obligations in determining gross income for Federal income tax purposes.

ARTICLE V

REIMBURSEMENT

Section 5.01. Capital Program Reimbursement.

(a) The Issuer intends to finance Applicable Transit and Commuter Projects consisting of capital assets, whether in the nature of personal or real property, which are used for transit, commuter or transportation purposes as more fully described in the capital programs adopted periodically by the Issuer (the “Capital Programs”).

(b) The Issuer desires to finance Applicable Transit and Commuter Projects through the issuance of tax-exempt debt or tax-advantaged debt, if available, and other sources as described in the approved Capital Programs, including moneys derived from the Issuer and its affiliates and subsidiaries, and expects to reimburse expenditures made from such other sources with proceeds of such tax-exempt or tax-advantaged debt.

(c) The statements contained in this Section 5.01 with respect to the reimbursement of the expenditures described in the following paragraph are intended to be statements of official intent as required by, and in conformance with, the provisions of Treasury Regulation Section 1.150-2(e).

(d) The expenditures in connection with the Applicable Transit and Commuter Projects to be reimbursed pursuant to this Supplemental Resolution have been incurred and paid not more than 60 days prior to the date this Supplemental Resolution (or any amendment of or supplement to this Supplemental Resolution, as applicable) is adopted or will be incurred and paid after the date this Supplemental Resolution (or any amendment of or supplement to this Supplemental Resolution, as applicable) is adopted in connection with the Applicable Transit and Commuter Projects.

(e) The Issuer reasonably expects that the maximum principal amount of tax-exempt or tax-advantaged debt (including bonds, commercial paper and bond anticipation notes) to be issued by the Issuer subsequent to the date hereof to pay Applicable Transit and Commuter Project expenditures in 2022 (whether directly or as a reimbursement), in addition to amounts previously authorized by other resolutions intended to be statements of official intent as required by, and in conformance with, the provisions of Treasury Regulation Section 1.150-2(e), is \$1.8 billion, which is the amount set forth in Section 2.01 of this Supplemental Resolution (plus associated financing costs).

TRIBOROUGH BRIDGE AND TUNNEL AUTHORITY

**MULTIPLE CREDIT AND SERIES 2022
SUPPLEMENTAL RESOLUTION AUTHORIZING OBLIGATIONS, OBLIGATION
ANTICIPATION NOTES AND REFUNDING OBLIGATIONS**

Adopted December 15, 2021

**MULTIPLE CREDIT AND SERIES 2022
SUPPLEMENTAL RESOLUTION AUTHORIZING OBLIGATIONS, OBLIGATION
ANTICIPATION NOTES AND REFUNDING OBLIGATIONS**

BE IT RESOLVED by the Board of Triborough Bridge and Tunnel Authority (the “Issuer”), as follows:

ARTICLE I

DEFINITIONS AND STATUTORY AUTHORITY

Section 1.01 Supplemental Resolution. This Multiple Credit and Series 2022 Supplemental Resolution Authorizing Obligations, Obligation Anticipation Notes and Refunding Obligations (the “Supplemental Resolution”) is supplemental to, and is adopted in accordance with, each of the Applicable Resolutions described below.

Section 1.02 Definitions.

1. All capitalized terms which are used but not otherwise defined in this Supplemental Resolution shall have the same meanings, respectively, as such terms are given in the Applicable Resolutions.

2. In this Supplemental Resolution:

“Applicable Bridge and Tunnel Project(s)” shall mean the financing of TBTA Facilities in the case of the Senior Resolution and the Subordinate Resolution, and any bridge or tunnel project permitted to be financed under any other Applicable Resolution from time to time.

“Applicable Bridge and Tunnel Resolution(s)” shall mean each of the following resolutions of the Issuer, as applicable:

- (1) the Senior Resolution;
- (2) the Subordinate Resolution; and
- (3) any other resolution adopted by the Issuer with the expectation that obligations may be issued thereunder during the term of this Supplemental Resolution for the Applicable Bridge and Tunnel Projects permitted to be financed or refinanced under this Supplemental Resolution, as such Supplemental Resolution may be amended or supplemented from time to time.

“Applicable CBD Tolling Project(s)” shall mean the financing of the Central Business District Tolling Program in the case of the CBD Tolling Resolution, and any Central Business District Tolling Program project permitted to be financed under any other Applicable Resolution from time to time.

“Applicable CBD Tolling Resolution(s)” shall mean each of the following resolutions of the Issuer, as applicable:

- (1) the CBD Tolling Resolution; and
- (2) any other resolution adopted by the Issuer with the expectation that obligations may be issued thereunder during the term of this Supplemental Resolution for the Applicable CBD Tolling Projects permitted to be financed or refinanced under this Supplemental Resolution, as such Supplemental Resolution may be amended or supplemented from time to time.

“Applicable Project(s)” shall mean the Applicable Bridge and Tunnel Project, the Applicable CBD Tolling Project and the Applicable Transit and Commuter Project, and any other project permitted to be financed under any other Applicable Resolution from time to time.

“Applicable Resolution(s)” shall mean the Applicable Bridge and Tunnel Resolution(s), the Applicable CBD Tolling Resolution(s) and the Applicable Transit and Commuter Resolution(s).

“Applicable Transit and Commuter Project(s)” shall mean the financing of the TBTA Transit and Commuter Project in the case of the Senior Resolution and the Subordinate Resolution, and any transit or commuter project permitted to be financed under any other Applicable Resolution from time to time.

“Applicable Transit and Commuter Resolution(s)” shall mean each of the following resolutions of the Issuer, as applicable:

- (1) the Senior Resolution;
- (2) the Subordinate Resolution;
- (3) the PMT Resolution;
- (4) the City Sales Tax Resolution; and
- (5) any other resolution adopted by the Issuer with the expectation that obligations may be issued thereunder during the term of this Supplemental Resolution for the Applicable Transit and Commuter Projects permitted to be financed or refinanced under this Supplemental Resolution, as such Supplemental Resolution may be amended or supplemented from time to time.

“Authorized Officer” shall include the officers designated as such in the Applicable Resolution, and, if not designated therein, the Chairman, the Chair of the Finance Committee, the Chief Financial Officer of the MTA or the Deputy Chief, Financial Services of the MTA, as well as any officer duly designated as “Acting” in said officer’s capacity, except that, for the purposes of any delegation set forth herein that does not expressly include any Assistant Secretary, “Authorized Officer” shall not include any Assistant Secretary of the Issuer.

“Board” shall mean, when used with respect to the Issuer, the board of the Issuer acting as such pursuant to the provisions of the Issuer Act.

“Bond Counsel” shall mean Nixon Peabody LLP, Orrick, Herrington & Sutcliffe LLP, D. Seaton and Associates, P.A., P.C., Bryant Rabbino LLP or any other attorney or firm of attorneys of nationally recognized standing in the field of law relating to the issuance of obligations by state and municipal entities, selected by the Issuer.

“CBD Tolling Resolution” shall mean the resolution adopted by the Issuer on December 18, 2019, entitled “CBDTP Second Subordinate Revenue Resolution Authorizing CBDTP Second Subordinate Revenue Obligations (Central Business District Tolling Program)”, as heretofore supplemented and amended.

“City Sales Tax Resolution” shall mean the resolution adopted by the Issuer on September 15, 2021, entitled “Special Obligation Resolution Authorizing Sales Tax Revenue Obligations (TBTA Capital Lockbox – City Sales Tax)”, as heretofore supplemented and amended.

“Code” shall mean the Internal Revenue Code of 1986, as amended, and regulations thereunder.

“Continuing Disclosure Agreement” has the meaning set forth in Section 2.11.

“Cross-Credit Obligations” shall mean indebtedness or other obligations issued or incurred by the Issuer or any other Related Entity as described in clause (iii) of the definition of “Capital Costs” under the Applicable Resolution, but excluding Obligations.

“DTC” means The Depository Trust Company.

“Loan Facility” shall mean a loan agreement, line of credit, revolving credit agreement or similar facility.

“MTA Multiple Credit and Series 2022 Supplemental Resolution” shall mean the supplemental resolution adopted by MTA on the date of adoption of this Supplemental Resolution authorizing the issuance of bonds, notes and other obligations for various purposes during 2022, as supplemented and amended from time to time.

“Noteholder”, “Holder” or “Holder of Notes”, or any similar term, means any person who shall be the registered owner of any Outstanding Series 2022 Note or Notes.

“Notice of Sale” shall mean the form of Notice of Sale to be distributed with the Preliminary Official Statement, hereinafter defined, and published in the event of a competitive sale of any Series 2022 Obligations.

“Official Statement” means a final official statement, offering circular or other disclosure document of the Issuer.

“PMT Resolution” shall mean the resolution adopted by the Issuer on March 17, 2021, entitled “Payroll Mobility Tax Obligation Resolution”, as heretofore supplemented and amended.

“Preliminary Official Statement” means a preliminary official statement, offering circular, or other disclosure document of the Issuer.

“Purchase Agreement” means a bond purchase agreement, note purchase agreement, Loan Facility, continuing covenant agreement or similar agreement.

“Senior Resolution” shall mean the resolution adopted by the Issuer on March 26, 2002, entitled “General Resolution Authorizing General Revenue Obligations”, as heretofore supplemented and amended.

“Series 2022 Bonds” shall mean Series 2022 New Money Bonds and Series 2022 Refunding Obligations.

“Series 2022 New Money Bonds” shall mean the Series 2022 New Money Bridge and Tunnel Bonds, the Series 2022 New Money CBD Tolling Bonds and the Series 2022 New Money Transit and Commuter Bonds.

“Series 2022 New Money Bridge and Tunnel Bonds” shall mean the Bonds issued for Applicable Bridge and Tunnel Projects authorized by Article II of this Supplemental Resolution in one or more Series or subseries, subject to redesignation as hereinafter provided.

“Series 2022 New Money Bridge and Tunnel Notes” shall mean the Notes issued for Applicable Bridge and Tunnel Projects authorized by Article II of this Supplemental Resolution in one or more Series or subseries, subject to redesignation as hereinafter provided.

“Series 2022 New Money CBD Tolling Bonds” shall mean the Bonds issued for Applicable CBD Tolling Projects authorized by Article II of this Supplemental Resolution in one or more Series or subseries, subject to redesignation as hereinafter provided.

“Series 2022 New Money CBD Tolling Notes” shall mean the Notes issued for Applicable CBD Tolling Projects authorized by Article II of this Supplemental Resolution in one or more Series or subseries, subject to redesignation as hereinafter provided.

“Series 2022 New Money Notes” shall mean the Series 2022 New Money Bridge and Tunnel Notes, the Series 2022 New Money CBD Tolling Notes and the Series 2022 New Money Transit and Commuter Notes.

“Series 2022 New Money Transit and Commuter Bonds” shall mean the Bonds issued for Applicable Transit and Commuter Projects authorized by Article II of this Supplemental Resolution in one or more Series or subseries, subject to redesignation as hereinafter provided.

“Series 2022 New Money Transit and Commuter Notes” shall mean the Notes (including Obligation Anticipation Notes) issued for Applicable Transit and Commuter Projects authorized by Article II of this Supplemental Resolution in one or more Series or subseries, subject to redesignation as hereinafter provided.

“Series 2022 Notes” shall mean the Series 2022 New Money Notes and the Series 2022 Refunding Obligations.

“Series 2022 Obligations” shall mean the Series 2022 Bonds, the Series 2022 Notes and the Series 2022 Refunding Obligations.

“Series 2022 Refunding Obligations” shall mean the bonds, notes (including Obligation Anticipation Notes) and other obligations authorized by Article II of this Supplemental Resolution that are Refunding Obligations and Obligations for the purpose of refunding Cross-Credit Obligations in one or more Series or subseries, subject to redesignation as hereinafter provided, and, *provided*, unless otherwise provided by the Board, any Series 2022 Refunding Obligations issued pursuant to this Supplemental Resolution shall be issued in compliance with any Board policies relating to the issuance of refunding bonds as may be in effect from time to time and any Series 2022 Refunding Obligations may be issued pursuant to this Supplemental Resolution to restructure principal amortization within the maturity limits permitted by law.

“Series 2022 Transit and Commuter Capital Cost Bonds” means the Series 2022 New Money Bonds and any similar bonds issued by MTA in accordance with the MTA Multiple Credit and Series 2022 Supplemental Resolution to finance projects that would be Applicable Transit and Commuter Projects under the Applicable Transit and Commuter Resolutions.

“Series 2022 Transit and Commuter Capital Cost Notes” means the Series 2022 Notes and any similar notes issued by MTA in accordance with the MTA Multiple Credit and Series 2022 Supplemental Resolution to finance projects that would be Applicable Transit and Commuter Projects under the Applicable Transit and Commuter Resolutions.

“Subordinate Resolution” shall mean the resolution adopted by the Issuer on March 26, 2002, entitled “2001 Subordinate Revenue Resolution Authorizing Subordinate Revenue Obligations”, as heretofore supplemented and amended.

“Trustee” shall have the meaning set forth in the Applicable Resolutions.

Section 1.03 Authority for this Supplemental Resolution. This Supplemental Resolution is adopted pursuant to the provisions of the Issuer Act and the Applicable Resolutions.

ARTICLE II

AUTHORIZATION OF SERIES 2022 OBLIGATIONS

Section 2.01 Principal Amount, Designation and Series. (a) Pursuant to the Applicable Transit and Commuter Resolutions and in order to finance, as applicable, Capital Costs for Applicable Transit and Commuter Projects, (i) Series 2022 New Money Transit and Commuter Bonds, and (ii) Series 2022 New Money Transit and Commuter Notes, which may be issued in one or more Series or subseries and from time to time, entitled to the benefit, protection and security of the Applicable Transit and Commuter Resolutions are hereby authorized to be issued in an aggregate principal amount not exceeding the principal amount necessary so that, after giving effect to any net original issue discount and underwriters’ discount from the principal amount (but without giving effect to any net original issue premium as determined to be advisable by an Authorized Officer in connection with the marketing of the Series 2022 Obligations), the amount to be deposited in the Proceeds Account created under the Applicable Transit and Commuter Resolution pursuant to, or otherwise applied to effectuate the purposes of, Section 2.02 and Section

3.01 of this Supplemental Resolution (exclusive of any amount deposited therein or otherwise applied pursuant to a Certificate of Determination to pay accrued interest, capitalized interest (unless otherwise provided in a Certificate of Determination, other than with respect to Series 2022 Refunding Obligations) or any Costs of Issuance of the Series 2022 Obligations), shall not exceed the amount or amounts determined in one or more Certificates of Determination to be necessary to effectuate the purposes set forth in Section 2.02 hereof; *provided, however*, that the sum of Series 2022 Transit and Commuter Capital Cost Bonds plus Series 2022 Transit and Commuter Capital Cost Notes issued to finance Capital Costs for the Applicable Transit and Commuter Projects shall not exceed \$1.8 billion at any one time Outstanding (but, for purposes of clarification, not including any Series 2022 Transit and Commuter Capital Cost Bonds or Series 2022 Transit and Commuter Capital Cost Notes issued to refinance Series 2022 Transit and Commuter Capital Cost Notes or other Series 2022 Obligations that previously also refinanced Series 2022 New Money Transit and Commuter Notes as authorized by Section 2.01(g) hereof).

(b) Pursuant to the Applicable Bridge and Tunnel Resolutions and in order to finance, as applicable, Capital Costs for Applicable Bridge and Tunnel Projects, (i) Series 2022 New Money Bridge and Tunnel Bonds, and (ii) Series 2022 New Money Bridge and Tunnel Notes, which may be issued in one or more Series or subseries and from time to time, entitled to the benefit, protection and security of the Applicable Bridge and Tunnel Resolutions are hereby authorized to be issued in an aggregate principal amount not exceeding the principal amount necessary so that, after giving effect to any net original issue discount and underwriters' discount from the principal amount (but without giving effect to any net original issue premium as determined to be advisable by an Authorized Officer in connection with the marketing of the Series 2022 Obligations), the amount to be deposited in the Proceeds Account created under the Applicable Bridge and Tunnel Resolution pursuant to, or otherwise applied to effectuate the purposes of, Section 2.02 and Section 3.01 of this Supplemental Resolution (exclusive of any amount deposited therein or otherwise applied pursuant to a Certificate of Determination to pay accrued interest, capitalized interest (unless otherwise provided in a Certificate of Determination, other than with respect to the Series 2022 Refunding Obligations) or any Costs of Issuance of the Series 2022 Obligations), shall not exceed the amount or amounts determined in one or more Certificates of Determination to be necessary to effectuate the purposes set forth in Section 2.02 hereof; *provided, however*, that the sum of the Series 2022 Bridge and Tunnel Capital Cost Bonds and Series 2022 Transit and Commuter Capital Cost Notes issued to finance Capital Costs for the Applicable Bridge and Tunnel Projects shall not exceed \$500 million at any one time Outstanding (but, for purposes of clarification, not including any Series 2022 Bridge and Tunnel Bonds or Series 2022 Bridge and Tunnel Notes issued to refinance Series 2022 Transit and Commuter Capital Cost Notes).

(c) The Issuer has previously authorized the issuance of bonds, notes and other obligations pursuant to the Applicable CBD Tolling Resolutions in order to finance, as applicable, Capital Costs for Applicable CBD Tolling Projects, and this Supplemental Resolution does not impact the continuing effectiveness of that authorization.

(d) The Issuer is hereby authorized to issue Series 2022 Refunding Obligations under any Applicable Resolution for the purposes permitted under such Applicable Resolution without limitation as to principal amount for the purposes provided in Section 2.02 hereof.

(e) The Series 2022 Obligations shall be designated as, and shall be distinguished from the Obligations of all other Series by the title or titles set forth in one or more Certificates of Determination.

(f) The Series 2022 Notes may be issued in the form of a Loan Facility.

(g) The authority to issue the Obligations and Obligation Anticipation Notes and take related actions granted under previous resolutions of the Issuer shall continue in full force and effect. The authorization to issue the Series 2022 Obligations and take other actions hereunder shall continue in effect without any action by the Issuer until the adoption by the Board of a subsequent supplemental resolution relating to 2023 new money financings and refundings; provided, however, the authorization to issue the Series 2022 Obligations to refinance the Series 2022 Notes authorized hereunder shall continue in effect until all of such Series 2022 Notes have been refinanced by Series 2022 Bonds.

(h) Nothing in this Supplemental Resolution is intended to preclude the issuance of Series 2022 Refunding Obligations as refunding obligations in accordance with Section 203 of the Applicable Resolution.

(i) The Issuer hereby covenants and agrees for the benefit of the Holders and Beneficial Owners of the Series 2022 Notes that it will maintain issuance capacity pursuant to the Applicable Resolution to issue Bonds or additional Obligation Anticipation Notes in an amount sufficient to pay the principal of and interest on the Series 2022 Notes when due.

Section 2.02 Purposes. The purposes for which the Series 2022 Obligations are issued shall be set forth in one or more Certificates of Determination and may include (a) with respect to the Series 2022 New Money Bonds and Series 2022 New Money Notes (i) the payment of all or any part of the Capital Costs, including Costs of Issuance relating to the applicable issuance, and (ii) the payment of principal of, redemption premium, if any, and interest on Outstanding Series 2022 Notes, all to the extent and in the manner provided in this Supplemental Resolution, and (b) with respect to Series 2022 Refunding Obligations, the refunding, refinancing, restructuring or payment, including by purchasing, exchanging or tendering therefor, of all or any portion of any Outstanding Obligations or Parity Debt or Cross-Credit Obligations deemed advisable by an Authorized Officer in accordance with the Applicable Resolutions.

Section 2.03 Dates, Maturities, Principal Amounts and Interest. The Series 2022 Obligations, except as otherwise provided in the Applicable Resolutions, shall be dated the date or dates determined in the related Certificate of Determination. The Series 2022 Obligations shall mature on the date or dates and in the year or years and in the principal amount or amounts, and shall bear interest at the rate or rates per annum, if any, specified in or determined in the manner provided in the related Certificate of Determination. The Series 2022 Notes shall be subject to redemption prior to maturity as provided in the Certificate of Determination.

Section 2.04 Interest Payments. The Series 2022 Obligations shall bear interest from their date or dates and be payable on such date or dates as may be determined pursuant to the related Certificate of Determination. Except as otherwise provided in the related Certificate of

Determination, interest on the Series 2022 Obligations shall be computed on the basis of twelve (12) 30-day months and a 360-day year.

Section 2.05 Denominations, Numbers and Letters. Unless otherwise provided in the related Certificate of Determination, the Series 2022 Obligations shall be issued in fully registered form without coupons in the denomination of \$5,000 or any integral multiple thereof. The Series 2022 Obligations shall be numbered and lettered as provided in the related Certificate of Determination.

Section 2.06 Places of Payment and Paying Agents. Except as otherwise provided in the related Certificate of Determination, principal and Redemption Price of the Series 2022 Obligations shall be payable to the registered owner of each Series 2022 Obligation when due upon presentation of such Series 2022 Obligation at the principal corporate trust office of the applicable Trustee. Except as otherwise provided in the related Certificate of Determination, interest on the registered Series 2022 Obligations will be paid by check or draft mailed on the interest payment date by the applicable Paying Agent, to the registered owner at his address as it appears on the registration books or, at the option of any Owner or Holder of at least one million dollars (\$1,000,000) in principal amount of the Series 2022 Obligations, by wire transfer in immediately available funds on each interest payment date to such Owner or Holder thereof upon written notice from such Owner or Holder to the related Trustee, at such address as such Trustee may from time to time notify such Owner or Holder, containing the wire transfer address (which shall be in the continental United States) to which such Owner or Holder wishes to have such wire directed, if such written notice is received not less than twenty (20) days prior to the related interest payment date (such notice may refer to multiple interest payments).

Section 2.07 Sinking Fund Installments. Except as otherwise provided in the related Certificate of Determination, the Series 2022 Bonds, if any, determined in the related Certificate of Determination shall be subject to redemption (a) in part, by lot, (b) pro rata (in the case of Series 2022 Bonds issued as Taxable Obligations), or (c) otherwise as determined in accordance with the Applicable Resolution, on each date in the year or years as determined in the related Certificate of Determination at the principal amount thereof, plus accrued interest up to but not including the date of redemption thereof, from mandatory Sinking Fund Installments which are required to be made in amounts sufficient to redeem on each such date the principal amount of such Series 2022 Bonds.

Section 2.08 Redemption Prices and Terms. The Series 2022 Bonds may also be subject to redemption prior to maturity, at the option of the Issuer, upon notice as provided in Article A-IV of the Applicable Resolution, at any time as a whole or in part (and by lot within a maturity, or otherwise as determined in accordance with Section A-404 of the Applicable Resolution, if less than all of a maturity is to be redeemed), from maturities designated by the Issuer on and after the date and in the years and at the Redemption Prices (expressed as a percentage of principal amount) determined in the related Certificate of Determination, plus accrued interest up to but not including the redemption date.

Section 2.09 Sources of Payment for Series 2022 Notes Issued as Obligation Anticipation Notes.

1. The principal of and interest on the Series 2022 Notes issued as Obligation Anticipation Notes may be payable solely from (i) the proceeds of any other Series 2022 Notes issued for the same purposes as such Obligation Anticipation Notes, (ii) the proceeds of the Series 2022 Bonds issued for the same purposes as such Obligation Anticipation Notes, and (iii) the proceeds of notes or other evidences of indebtedness or any other amounts (which other amounts are not pledged under the Applicable Resolution), in each case if and to the extent such amounts may lawfully be used to make such payments. The interest on the Series 2022 Notes may also be payable from amounts available for transfer pursuant to Section 503(c) of the Senior Resolution for the payment of Subordinated Indebtedness, as defined therein.

2. There are hereby pledged to the payment of principal and interest on the Series 2022 Notes issued as Obligation Anticipation Notes issued as Obligation Anticipation Notes (i) the proceeds of other Series 2022 Notes issued to refinance such Series 2022 Notes issued as Obligation Anticipation Notes, and (ii) the proceeds of the Series 2022 New Money Bonds issued to refinance such Series 2022 Notes issued as Obligation Anticipation Notes, and such pledge has priority over any other pledge thereof created by the Applicable Resolution, including Section 501 thereof, or a similar section of other Applicable Resolutions. There is also hereby pledged to the payment of interest on the Series 2022 Notes amounts available for transfer pursuant to Section 503(c) of the Senior Resolution for the payment of Subordinated Indebtedness in accordance with and subject to the limitations contained in the Applicable Resolution. Proceeds and amounts described in clause (iii) of Section 2.09(1) hereof may be pledged to the payment of principal and interest on the Series 2022 Notes issued as Obligation Anticipation Notes to the extent set forth in a Certificate of Determination.

Section 2.10 Delegation to an Authorized Officer. There is hereby delegated to each Authorized Officer, subject to the limitations contained in this Supplemental Resolution, the following powers with respect to the Series 2022 Obligations:

(a) to determine whether and when to issue any (i) Series 2022 New Money Bonds, the amount of the Series 2022 New Money Bonds to be applied to finance Capital Costs or other uses as provided in Section 2.02 hereof, and the amount of the proceeds of the Series 2022 New Money Bonds, estimated to be necessary to pay the Costs of Issuance of the Series 2022 New Money Bonds and capitalized interest, if any, (ii) Series 2022 New Money Notes, the amount of the Series 2022 New Money Notes to be applied to finance Capital Costs or other uses as provided in Section 2.02 of this Supplemental Resolution and the amount of the proceeds of the Series 2022 New Money Notes estimated to be necessary to pay the Costs of Issuance of the Series 2022 New Money Notes and capitalized interest, if any, and (iii) Series 2022 Refunding Obligations constituting Refunding Obligations or Obligations issued to refund Cross-Credit Obligations, and to determine the amount of the proceeds of the Series 2022 Refunding Obligations to be applied to refunding purposes as well as the specific Obligations or Parity Debt or Cross-Credit Obligations, or portions of either to be refunded and the date or dates, if any, on which such refunded obligations shall be redeemed, and the amount of the proceeds of the Series 2022 Refunding Obligations estimated to be necessary to pay the Costs of Issuance of the Series 2022 Refunding Obligations;

(b) to determine the purpose or purposes for which the Series 2022 Obligations are being issued, which shall be one or more of the purposes set forth in Section 2.02 of this Supplemental Resolution;

(c) to determine the principal amounts of the Series 2022 Obligations to be issued for the purposes set forth in Section 2.02 of this Supplemental Resolution and whether such principal amounts constitute a separate Series or a subseries of Series 2022 Obligations, which principal amounts (and the aggregate of all such Series and subseries) shall not exceed the principal amounts permitted by Section 2.01 of this Supplemental Resolution, and with respect to Series 2022 Bonds, to determine Accreted Values and Appreciated Values, if applicable;

(d) to determine the maturity date and principal amount of each maturity of the Series 2022 Obligations and with respect to Series 2022 Bonds, the amount and due date of each Sinking Fund Installment, if any;

(e) to determine the date or dates which the Series 2022 Obligations shall be dated and the interest rate or rates of the Series 2022 Obligations or the manner of determining such interest rate or rates; provided, however, that (i) any Series 2022 New Money Bonds issued as fixed rate Tax-Exempt Obligations shall be subject to a maximum interest rate of not greater than 10% per annum, any Series 2022 New Money Bonds issued as fixed rate Taxable Obligations shall be subject to a maximum interest rate of not greater than 12% per annum, any Variable Interest Rate Obligations issued as Tax-Exempt Obligations shall be subject to a maximum interest rate of not greater than 15% per annum, any Variable Interest Rate Obligations issued as Taxable Obligations shall be subject to a maximum interest rate of not greater than 18% per annum and any Parity Reimbursement Obligations shall be subject to a maximum interest rate of not greater than 25% per annum, or, in each such case, such higher rate or rates as determined by the Board; and (ii) the true interest cost (as calculated by the officers of the Issuer executing any Certificate of Determination, which calculation shall be conclusive) on the Series 2022 Notes bearing a fixed rate of interest shall not exceed 4.00% per annum and for Series 2022 Notes bearing interest at a variable interest rate shall not exceed a rate equal to SIFMA or another short-term index generally accepted in the marketplace chosen by an Authorized Officer and set forth in the Certificate of Determination, in each case, plus 4.00% and any default rate or equivalent rate shall not exceed the sum of 4.00% plus either a specified prime rate or the federal funds rate;

(f) to determine the Redemption Price or Redemption Prices, if any and the redemption terms, if any, for the Series 2022 Obligations; provided, however, that if the Series 2022 Obligations are to be redeemable at the election of the Issuer, the Redemption Price (except in the case of taxable Series 2022 Obligations) shall not be greater than one hundred three percent (103%) of the principal amount of the Series 2022 Obligations to be redeemed, plus accrued interest thereon up to but not including the date of redemption and in the case of Series 2022 Obligations issued as Taxable Obligations the Redemption Price may be determined pursuant to provisions relating to pro rata redemption and/or make-whole redemption;

(g) to determine whether the sale of any or a portion of the Series 2022 Obligations shall be conducted on either a negotiated or competitive bid basis and, as applicable, to determine the purchase price for the Series 2022 Obligations to be paid by the purchaser or purchasers referred to in one or more Purchase Agreements or a bank direct purchase agreement, the purchase price for the Series 2022 Obligations to be paid by the winning bidder, if such sale is conducted by competitive bid pursuant to a Notice of Sale, in either case as such document is described in Section 2.11 of this Supplemental Resolution, which may include such original issue discount and original issue premium as shall be determined in the related Certificate of Determination; provided, however, that, in the case of Series 2022 Bonds sold on a negotiated basis (and not competitive sale), the underwriters' discount reflected in such purchase price shall not exceed (i) \$10.00 for each one thousand dollars (\$1,000) principal amount of the Series 2022 Bonds and (ii) \$3.50 for each one thousand dollars (\$1,000) principal amount of the Series 2022 Notes;

(h) to take all actions required for the Series 2022 Obligations to be eligible under the rules and regulations of DTC for investment and trading as uncertificated securities, to execute and deliver a standard form of letter of representation with DTC and, notwithstanding any provisions to the contrary contained in this Supplemental Resolution, to include in the related Certificate of Determination such terms and provisions as may be appropriate or necessary to provide for uncertificated securities in lieu of Series 2022 Obligations issuable in fully registered form;

(i) to determine whether to issue all or any portion of the Series 2022 Obligations as Tax-Exempt Obligations, Taxable Obligations, Put Obligations, Variable Interest Rate Obligations or as any other form of Obligations or Obligation Anticipation Notes permitted by the Applicable Resolution or this Supplemental Resolution and any matters related thereto, including (i) the terms and provisions of any such Series 2022 Obligations, (ii) the selection of remarketing agents, tender agents, calculation agents, auction agents, dealers, bidding agents or any other agents or parties to ancillary arrangements and the terms of any such arrangements, and (iii) the methods for determining the accrual of Debt Service;

(j) to determine the advisability, as compared to an unenhanced transaction, of obtaining one or more Credit Facilities, to select a provider or providers thereof and to determine and accept the terms and provisions and price thereof, to determine the items to be pledged to the Series 2022 Obligations from those permitted by Section A-203 of the Applicable Resolution, and to determine such other matters related thereto as in the opinion of the officer executing the related Certificate of Determination shall be considered necessary or appropriate and to effect such determinations by making any changes in or additions to this Supplemental Resolution required by Credit Facility providers, if any, or required by a Rating Agency in order to attain or maintain specific ratings on the Series 2022 Obligations, or relating to the mechanisms for the repayment of amounts advanced thereunder or payment of fees, premiums, expenses or any other amounts, notices, the provision of information, and such other matters of a technical, mechanical, procedural or descriptive nature necessary or appropriate to obtain or implement a Credit Facility with respect to the Series 2022 Obligations, and to make any changes in connection therewith. Such changes may include, but are not limited to, the making of any additional covenants

with Holders or other parties deemed necessary or appropriate by the officer executing any Certificate of Determination;

(k) to determine that Series 2022 Refunding Obligations comply with all Board policies relating to the issuance of refunding obligations in effect at the time of such determination;

(l) to make such changes to the form of this Supplemental Resolution as may be required by a Rating Agency in order to attain or maintain specific ratings on the Series 2022 Obligations;

(m) to make such changes to the form of this Supplemental Resolution as may be necessary or desirable in order to cure any ambiguities, inconsistencies or other defects;

(n) to determine whether to (i) enter into an escrow agreement or other arrangement in connection with the issuance of Refunding Obligations, including the selection of escrow agents, verification agents and the manner of determining specified matters relating to the defeasance of the refunded obligations and (ii) purchase SLGs or open market securities and the form and substance thereof and any related investment agreement, and to determine the application of any amounts released in connection with any such refunding; and

(o) to determine any other matters provided for herein, or permitted by the provisions of the Applicable Resolutions, including the election and determination of matters relating to Tax-Exempt Obligations, and to determine matters relating to the payment or defeasance of Obligation Anticipation Notes, including preparation of any documentation therefor.

2. Any Authorized Officer shall execute one or more Certificates of Determination evidencing the determinations made pursuant to this Supplemental Resolution and any such Certificate of Determination shall be conclusive evidence of the determinations of such Authorized Officer, as stated therein. More than one Certificate of Determination may be delivered to the extent more than one Series or subseries of Series 2022 Obligations are delivered from time to time or other authority is exercised under this Supplemental Resolution from time to time and each such Certificate of Determination shall be delivered to the related Trustee concurrently with the authentication and delivery of the respective Series or subseries of Series 2022 Obligations by such Trustee or other documentation. Determinations set forth in any Certificate of Determination shall have the same effect as if set forth in this Supplemental Resolution.

3. Any such Authorized Officer may exercise any authority delegated under this Supplemental Resolution from time to time following issuance of any Series 2022 Obligations, as appropriate for any purposes, including to remove or replace Trustees under Applicable Resolutions as permitted by the Applicable Resolution, provided such substitute Trustee meets the requirements of the Applicable Resolution; to change interest rate modes or auction periods; to obtain or terminate one or more Credit Facilities, including substitute or additional Credit Facilities; to enter into one or more bank direct purchase agreements or similar instruments providing for the private placement of Series 2022 Obligations with financial or governmental

entities; to appoint new or additional agents or other parties deemed appropriate to a particular form or mode of Series 2022 Obligation or Series 2022 Obligation Anticipation Note or manner of sale; to enter into one or more remarketing agreements, firm remarketing agreements, continuing disclosure agreements or other agreements in connection with the remarketing of any Series 2022 Obligations; if any Series 2022 Obligations shall consist of multiple subseries, to change the principal amounts and number of the individual subseries or to combine one or more subseries into a single Series or subseries; or, if any Series 2022 Obligations consist of a single Series or subseries, to divide such Series or subseries into two or more subseries and to determine the principal amount of such subseries. In connection with the remarketing, by negotiated sale, competitive bid or direct or private placement, of any Series 2022 Obligations, any such Authorized Officer is hereby authorized to make public and to authorize the use and distribution by remarketing agents or other appropriate parties of a remarketing circular (including a preliminary remarketing circular), or other disclosure document, in substantially the form most recently executed or delivered by the Issuer in connection with the remarketing of Obligations or Obligation Anticipation Notes to the extent applicable, with such changes, omissions, insertions and revisions as such Authorized Officer shall deem advisable. Any Authorized Officer shall execute one or more amendments to the applicable Certificate or Certificates of Determination evidencing the determinations made pursuant to this paragraph and any such amended Certificate of Determination shall be conclusive evidence of the determinations of such Authorized Officer, as stated therein.

Section 2.11 Sale of Series 2022 Obligations. Each Authorized Officer is hereby authorized either (i) to sell and award all or any portion of the Series 2022 Obligations through a competitive bidding process to purchasers meeting the requirements of one or more Notices of Sale to be published in order to give notice of the competitive sale of the Series 2022 Obligations; (ii) to sell and award all or any portion of the Series 2022 Obligations through a negotiated sale to the purchasers who are referred to in the Purchase Agreement and who shall be selected from the then current list of approved underwriters or shall be an approved governmental lender under a federal or State program; (iii) to sell and award all or any portion of the Series 2022 Obligations through a direct sale to the financial or governmental institution or institutions selected by the Authorized Officer who shall be referred to in the continuing covenant, direct purchase or similar agreement; or (iv) to issue all or any portion of the Series 2022 Notes in the form of a Loan Facility to any financial or governmental institution or institutions selected by the Authorized Officer. Each Authorized Officer is hereby authorized to sell and award the Series 2022 Obligations to the purchasers referred to in the preceding sentence in the case of a bond purchase agreement or note purchase agreement, in substantially the form most recently executed or delivered by the Issuer, to the extent applicable, in connection with the sale of Obligations or Obligation Anticipation Notes, or, with respect to a continuing covenant, direct purchase or similar agreement, containing bank facility terms and provisions (including, without limitation, increased costs, term-out, events of default and remedies) in substantially the form set forth in a letter of credit reimbursement agreement most recently executed or delivered by the Issuer to the extent applicable, including, if applicable, that the requirement that the Loan Facility issuer or direct purchaser offer to the Issuer a term-out provision of no less than five years, with such revisions to reflect the terms and provisions of the Series 2022 Obligations as may be approved by the Authorized Officer executing the Purchase Agreement. Each Authorized Officer is hereby authorized to agree to the selection of the representative of the underwriters or the other purchasers or facility providers as referred to in the Purchase Agreement or Agreements and to execute and deliver the Purchase Agreement or

Agreements for and on behalf and in the name of the Issuer with such changes, omissions, insertions and revisions as may be approved by the Authorized Officer executing the Purchase Agreement or Agreements, said execution being conclusive evidence of such approval and concurrence in the selection of the representative of the underwriters.

If it is determined that any sale of Series 2022 Obligations shall be conducted on a competitive bid basis, each Authorized Officer is hereby further authorized to conduct the sale and award of the Series 2022 Obligations on the basis of a competitive bid, pursuant to the terms of a Notice of Sale, in a form, including any limitations on permitted bidders and a description of the basis for determining the winning bidder or bidders, determined by such Authorized Officer. Each Authorized Officer is hereby authorized to conduct such competitive sale of the Series 2022 Obligations in a manner consistent with this Supplemental Resolution and to utilize the services of the Authority's financial advisor and the services of an electronic bidding service, as such Authorized Officer shall determine, and the execution by such Authorized Officer of a letter of award shall be conclusive evidence of such award.

Each Authorized Officer is hereby authorized to make public and to authorize the use and distribution by said purchasers or other appropriate parties of a Preliminary Official Statement in connection with each public offering or any direct or private placement of the Series 2022 Obligations or Obligation Anticipation Notes, in substantially the form most recently executed or delivered by the Issuer in connection with the sale of Obligations or Obligation Anticipation Notes, to the extent applicable, with such changes, omissions, insertions and revisions as such officer shall deem advisable, said distribution being conclusive evidence of the approval of such changes, omissions, insertions and revisions. The Issuer authorizes any of said officers to deliver a certification to the effect that such Preliminary Official Statement or Official Statement, if deemed necessary or appropriate, together with such other documents, if any, described in such certificate, was deemed final as of its date for purposes of Rule 15c2-12 of the Securities and Exchange Commission, as applicable.

Each Authorized Officer is hereby authorized to make public and to authorize distribution of an Official Statement in substantially the form of each Preliminary Official Statement or the most recently executed and delivered Official Statement if there is not a Preliminary Official Statement to the extent applicable, with such changes, omissions, insertions and revisions as such Authorized Officer shall deem advisable, to sign such Official Statement and to deliver such Official Statement to the purchasers of such issue of the Series 2022 Obligations, such execution being conclusive evidence of the approval of such changes, omissions, insertions and revisions.

Notwithstanding the preceding two paragraphs, however, each Authorized Officer may make public and authorize the use and distribution of a final Official Statement in connection with the public offering of the Series 2022 Obligations meeting the requirements of the preceding two paragraphs and may deem such Official Statement final as of its date for purposes of Rule 15c2-12 of the Securities and Exchange Commission.

Each Authorized Officer is hereby authorized to execute and deliver for and on behalf and in the name of the Issuer, to the extent determined by such Authorized Officer to be necessary or convenient, a Continuing Disclosure Agreement, substantially in the form of the Continuing Disclosure Agreement most recently executed and delivered by the Issuer to the extent applicable,

with such changes, omissions, insertions and revisions as such Authorized Officer shall deem advisable (the “Continuing Disclosure Agreement”), said execution being conclusive evidence of the approval of such changes, omissions, insertions and revisions.

The proceeds of each good faith deposit, if any, received by the Issuer from the purchasers of each issue of the Series 2022 Obligations under the terms of the related Purchase Agreement or Notice of Sale may be invested by the Issuer pending application of the proceeds of such good faith deposit for the purposes provided in Section 2.02 of this Supplemental Resolution at the time of the issuance and delivery of such Series 2022 Obligations.

Each Authorized Officer (including any Assistant Secretary of the Issuer) is hereby authorized and directed to execute, deliver, amend, replace or terminate any and all documents and instruments (including any remarketing agreements, dealer agreements, broker-dealer agreements, tender agent agreements, escrow agreements, auction agency agreements, any investment agreements or arrangements, or any reimbursement agreements or documents or instruments relating to a Credit Facility deemed appropriate to a given form or mode of an Obligation) and to do and cause to be done any and all acts necessary or proper for carrying out each Purchase Agreement or Notice of Sale, each Continuing Disclosure Agreement, the terms of any Credit Facility or other such agreement or arrangement, and the issuance, sale and delivery of the Series 2022 Obligations and for implementing the terms of the Series 2022 Obligations and the transactions contemplated hereby or thereby.

When reference is made in this Supplemental Resolution to the authorization of an Authorized Officer to do any act, such act may be accomplished by any of such officers individually.

Section 2.12 Forms of Series 2022 Obligations and Trustee’s Authentication Certificate.

(a) Subject to the provisions of the Applicable Resolution, the form of registered Series 2022 Bonds, and the related Trustee’s certificate of authentication, shall be substantially in the form set forth in Exhibit One (or any analogous attachment or reference thereto) to the Applicable Resolution including, if necessary, any changes to comply with the requirements of DTC or the provisions of this Supplemental Resolution or the related Certificate of Determination.

(b) The form of registered Series 2022 Notes, and the certificate of authentication, shall be of substantially the form and tenor provided in any Certificate of Determination.

Section 2.13 Appointment of Trustees and Paying Agents. Unless otherwise provided in the related Certificate of Determination, U.S. Bank Trust National Association shall be the Trustee under the Senior Resolution and the Paying Agent for the Series 2022 Obligations issued thereunder. Unless otherwise provided in the related Certificate of Determination, The Bank of New York Mellon (as successor in interest to JPMorgan Chase Bank, N.A., with respect to the Subordinate Resolution) shall be the Trustee under the other Applicable Resolutions and the Paying Agent for the Series 2022 Bonds issued thereunder. Unless otherwise provided in the related Certificate of Determination, The Bank of New York Mellon shall be the Trustee under the PMT Resolution and the Paying Agent for the Series 2022 Bonds issued thereunder.

Section 2.14 General Provisions. As and to the extent provided in any Certificate of Determination, the provisions of Articles A-III, IV, A-IV, A-VII, A-IX and A-XI of the Applicable Resolution (or similar provisions of Applicable Resolutions hereafter added) may apply equally to the Series 2022 Notes as though set forth in full herein but with each reference to Bonds being a reference to Series 2022 Notes, except as affected by the terms hereof and the procedures of the Securities Depository; provided that the Authorized Officer executing any Certificate of Determination may, in the alternative, set forth in any Certificate of Determination provisions relating to any such matters as deemed necessary or appropriate by such Authorized Officer.

ARTICLE III

DISPOSITION AND ALLOCATION OF PROCEEDS

Section 3.01 Disposition and Allocation of Series 2022 New Money Bond Proceeds. Except as otherwise provided under Applicable Resolutions hereafter added or as otherwise provided in any Certificate of Determination, any proceeds of the sale of the Series 2022 Bonds, other than accrued interest and capitalized interest, if any, shall be deposited, simultaneously with the issuance and delivery of a series or subseries of the Series 2022 Bonds, or shall otherwise be disposed of or applied pursuant to the related Certificate of Determination in accordance with the Applicable Resolution, as follows:

(a) such proceeds shall be (i) deposited in the Series 2022 Bond Proceeds Account, which is hereby established in the Proceeds Fund for each such series or subseries, and applied to the payment of Capital Costs or the payment of principal of and redemption premium, if any, and interest on the Series 2022 Notes or (ii) otherwise applied to the payment of such amounts; and

(b) the balance of such proceeds shall be (i) deposited in the Series 2022 Costs of Issuance Account, which is hereby established in the Proceeds Fund for each such series or subseries, and applied to the payment of Costs of Issuance, or (ii) otherwise applied to the payment of Costs of Issuance.

Section 3.02 Disposition of Series 2022 Note Proceeds. Except as otherwise provided under Applicable Resolutions hereafter added or as otherwise provided in any Certificate of Determination, the proceeds of the sale of the Series 2022 Notes shall be deposited in the Series 2022 Note Proceeds Account which is hereby established in the related Proceeds Fund and applied pursuant to the related Certificate of Determination to the payment of Capital Costs, including any Costs of Issuance and accrued and capitalized interest, and the payment of principal of and interest on Outstanding Series 2022 Notes.

Section 3.03 Disposition of Refunding Obligation Proceeds. Except as otherwise provided under Applicable Resolutions hereafter added or as otherwise provided in any Certificate of Determination, any proceeds of the sale of the Series 2022 Refunding Obligations, other than accrued interest, if any, shall be deposited, simultaneously with the issuance and delivery of a series or subseries of the Series 2022 Refunding Obligations, or shall otherwise be disposed of or applied pursuant to the related Certificate of Determination as follows:

(a) such proceeds shall be (i) deposited in the Series 2022 Refunding Obligations Proceeds Account, which is hereby established in the Proceeds Fund for each such series or subseries, and applied to the refunding of any Obligations, Parity Debt or Cross Credit Obligations, or portions of any of them, in accordance with Section 2.02 hereof or (ii) otherwise applied to such refunding; and

(b) the balance of such proceeds shall be (i) deposited in the Series 2022 Refunding Obligations Costs of Issuance Account, which is hereby established in the Proceeds Fund for each such series or subseries, and applied to the payment of Costs of Issuance, or (ii) otherwise applied to the payment of Costs of Issuance.

Section 3.04 Accrued Interest. Unless otherwise provided in the related Certificate of Determination, the accrued interest and capitalized interest (excluding capitalized interest on Series 2022 Refunding Obligations), if any, received on the sale of the Series 2022 Obligations shall be deposited in the Debt Service Fund created under the Applicable Resolution.

ARTICLE IV

TAX COVENANTS AND DEFEASANCE

Section 4.01 Tax Covenants Relating to the Series 2022 Obligations. The Issuer covenants that, in order to maintain the exclusion from gross income for Federal income tax purposes of the interest on the Series 2022 Obligations issued as Tax-Exempt Obligations, the Issuer will satisfy, or take such actions as are necessary to cause to be satisfied, each provision of the Code necessary to maintain such exclusion. In furtherance of this covenant, the Issuer agrees to comply with such written instructions as may be provided by Bond Counsel. In furtherance of the covenant contained in the preceding sentence, the Issuer agrees to continually comply with the provisions of any “Arbitrage and Use of Proceeds Certificate” or “Tax Certificate” to be executed by the Issuer in connection with the execution and delivery of any Series 2022 Obligations issued as Tax-Exempt Obligations, as amended from time to time.

Notwithstanding any other provision of the Applicable Resolution to the contrary, upon the Issuer’s failure to observe, or refusal to comply with the above covenant (a) the Owners or Holders of the Series 2022 Obligations, or the applicable Trustee acting on their behalf, shall be entitled to the rights and remedies provided to Owners or the applicable Trustee under the Applicable Resolutions (for the Series 2022 Notes, as though such provisions related to Series 2022 Notes rather than Bonds), other than the right (which is hereby abrogated solely as to the Issuer’s failure to observe, or refusal to comply with the above covenant) to declare the principal of all Obligations then Outstanding, and the interest accrued thereon, to be due and payable pursuant to Section 567 of the Issuer Act, and (b) neither the Owners of the Obligations or notes of any Series or holders of any Parity Debt (other than the Owners of the Series 2022 Obligations or the applicable Trustee acting on their behalf), nor the applicable Trustee acting on their behalf, shall be entitled to exercise any right or remedy provided to the Owners, the Parity Debt holders or the applicable Trustee or Noteholders under the Applicable Resolution based upon the Issuer’s failure to observe, or refusal to comply with, the above covenant.

The provisions of the foregoing covenants set forth in this Section shall not apply to any Series 2022 Refunding Obligations, including any subseries thereof, which the Issuer determines pursuant to the applicable Certificate of Determination to issue as Taxable Obligations.

Section 4.02 Additional Covenants.

1. The Issuer covenants and agrees that it will not issue any Obligations under the Senior Resolution (other than pursuant to Section 205 thereof) unless in addition to satisfying the requirements of the Senior Resolution, an Authorized Officer delivers to the trustee under the Senior Resolution a certificate demonstrating that for any period of 12 consecutive calendar months out of the 18 complete calendar months next preceding the date of authentication and delivery of such issue of Senior Obligations, Net Revenues are at least equal to 1.10 times the Combined Maximum Annual Calculated Debt Service for all Obligations, and Parity Debt under each of the Resolutions.

2. The Issuer covenants and agrees that in addition to complying with the provisions of Section 6.04 of the Subordinate Resolution, the Issuer shall at all times establish, levy, maintain and collect, or cause to be established, levied, maintained and collected, such tolls, rentals and other charges in connection with the TBTA Facilities as shall always be sufficient, together with other money available therefor (including the anticipated receipt of proceeds of sale of Obligations or other bonds, notes or other obligations or evidences of indebtedness of the Issuer that will be used to pay the principal of Obligations issued in anticipation of such receipt, but not including any anticipated or actual proceeds from the sale of TBTA Facilities), to equal or exceed in each calendar year the greater of (a) an amount equal to the sum of amounts necessary in such calendar year (i) to pay all Operating Expenses of the Issuer, plus (ii) to pay the sum of Calculated Debt Service as defined in the Subordinate Resolution and Calculated Debt Service as defined in the Senior Resolution, plus (iii) to maintain any reserve established by the Issuer pursuant to the Senior Resolution, in such amount as may be determined from time to time by an Authorized Officer in his or her judgment, or (b) an amount such that Revenues less Operating Expenses shall equal at least 1.10 times the sum of Calculated Debt Service as defined in the Senior Resolution and Calculated Debt Service as defined in the Subordinate Resolution for such calendar year.

Section 4.03 Defeasance. In the event the Issuer shall seek, prior to the maturity or redemption date thereof, to pay or cause to be paid, within the meaning and with the effect expressed in this Supplemental Resolution or in the Applicable Resolution, all or less than all Outstanding Series 2022 Obligations issued as Tax-Exempt Obligations and the provisions of Section 4.01 hereof shall then be of any force or effect, then, notwithstanding the provisions of this Supplemental Resolution or Article A-XI of the Applicable Resolutions (Article A-IX of the PMT Resolution), the Series 2022 Obligations issued as Tax-Exempt Obligations which the Issuer then seeks to pay or cause to be paid shall not be deemed to have been paid within the meaning and with the effect expressed in this Supplemental Resolution or Section A-1101 of the Applicable Resolutions (Section A-901 of the PMT Resolution) unless (i) the Issuer has confirmed in writing that the Owners or Holders of the Series 2022 Obligations issued as Tax-Exempt Obligations which the Issuer then seeks to pay or cause to be paid will continue, after such action, to have the benefit of a covenant to the effect of the covenant of the Issuer contained in Section 4.01 hereof or (ii) there shall have been delivered to the related Trustee an Opinion of Bond Counsel to the effect that non-compliance thereafter with the applicable provisions of the Code will not affect the then

current treatment of interest on the Series 2022 Obligations issued as Tax-Exempt Obligations in determining gross income for Federal income tax purposes.

ARTICLE V

REIMBURSEMENT

Section 5.01 Capital Program Reimbursement.

(a) The Issuer intends to finance Applicable Transit and Commuter Project expenditures and Applicable Bridge and Tunnel Project expenditures in 2022 (whether directly or as a reimbursement) as more fully described in the accompanying staff summary and capital program documents referenced therein (the “Project”).

(b) The Issuer desires to finance the Project through the issuance of tax-exempt debt or tax-advantaged debt, if available, and other sources as described in the approved capital programs, including moneys derived from the Metropolitan Transportation Authority (“MTA”) and its affiliates and subsidiaries, and expects to reimburse expenditures made from such other sources with proceeds of such tax-exempt or tax-advantaged debt.

(c) The statements contained in this Section with respect to the reimbursement of the expenditures described in this resolution are intended to be statements of official intent as required by, and in conformance with, the provisions of Treasury Regulation Section 1.150-2(e).

(d) The expenditures in connection with the Project to be reimbursed pursuant to this Supplemental Resolution have been incurred and paid not more than 60 days prior to the date this Supplemental Resolution (or any amendment of or supplement to this Supplemental Resolution, as applicable) is adopted or will be incurred and paid after the date this Supplemental Resolution (or any amendment of or supplement to this Supplemental Resolution, as applicable) is adopted in connection with the Project.

(e) The Issuer reasonably expects that the maximum principal amount of tax-exempt or tax-advantaged debt (including bonds, commercial paper and bond anticipation notes) to be issued by the Issuer subsequent to the date hereof to pay Applicable Transit and Commuter Project expenditures and Applicable Bridge and Tunnel Project expenditures in 2022 (whether directly or as a reimbursement), in addition to amounts previously authorized by other resolutions intended to be statements of official intent as required by, and in conformance with, the provisions of Treasury Regulation Section 1.150-2(e), are \$1.8 billion and \$500 million, respectively, which are the amounts set forth in Section 2.01 of this Supplemental Resolution (plus associated financing costs).

(f) This Section shall take effect immediately.

Section 5.02 Central Business District Reimbursement.

(a) MTA and the Issuer intend to finance capital costs relating to the Central Business District Tolling Program, as more fully described in the accompanying staff summary (the “Central Business District Project”).

(b) MTA and the Issuer desire to finance the Central Business District Project through the issuance of tax-exempt debt or tax-advantaged debt, if available, and other sources, including moneys deposited into the Central Business District Tolling Capital Lockbox Fund established by Section 553-j of the Public Authorities Law, and expect to reimburse expenditures made from such other sources with proceeds of such tax-exempt or tax-advantaged debt.

(c) In its Fiscal Year 2021 Capital Projects Budget, the State of New York included a loan of \$100 million to the MTA for capital project costs of the planning, design, acquisition and construction to implement the Central Business District Tolling infrastructure and collection system, as established in Article 44-C of the Vehicle and Traffic Law.

(d) The statements contained in this Section with respect to the reimbursement of the expenditures described in this Section are intended to be statements of official intent as required by, and in conformance with, the provisions of Treasury Regulation Section 1.150-2(e).

(e) The expenditures in connection with the Central Business District Project to be reimbursed pursuant to this Section have been incurred and paid not more than 60 days prior to the date hereof or will be incurred and paid after the date hereof in connection with the Central Business District Project.

(f) MTA and the Issuer reasonably expect that the maximum aggregate principal amount of tax-exempt or tax-advantaged debt (including bonds, commercial paper and bond anticipation notes) to be issued by MTA and the Issuer subsequent to the date hereof to pay Central Business District Project expenditures in 2022 (whether directly or as a reimbursement) is \$305 million (plus associated financing costs).

(g) This Section shall take effect immediately.

PROCUREMENTS

The Procurement Agenda this month includes 13 actions for a proposed expenditure of \$86.9M.

Staff Summary

Subject Request for Authorization to Award Various Procurements
Department MTA Procurement
Department Head Name Kuvershen Ayer
Department Head Signature
Division Head Name

Date December 13, 2021
Vendor Name Various
Contract Number Various
Contract Manager Name Various
Table of Contents Ref #

Board Action					
Order	To	Date	Approval	Info	Other
1	Finance	12/13/21	X		
2	Board	12/15/21	X		

Internal Approvals			
Order	Approval	Order	Approval
1	Procurement	3	CFO
2	Legal		

PURPOSE:

To obtain approval of the Board to award various contracts/contract modifications and purchase orders, as reviewed by the MTA Finance Committee.

DISCUSSION:

MTAHQ proposes to award Noncompetitive procurements in the following categories: None

MTAHQ proposes to award Competitive procurements in the following categories:

Schedules Requiring Majority Vote:

Schedule F: Personal Service Contracts	3	\$	60.0 M
Schedule H: Modifications to Personal & Miscellaneous Service Contracts	10	\$	26.9 M
SUBTOTAL	13	\$	86.9 M
TOTAL	13	\$	86.9 M

BUDGET IMPACT: The purchases/contracts will result in obligating MTAHQ operating and capital funds in the amount listed. Funds are available in the current MTAHQ operating/capital budgets for this purpose.

RECOMMENDATION: That the purchases/contracts be approved as proposed. Items are included in the resolution of approval at the beginning of the Procurement Section.

BOARD RESOLUTION

METROPOLITAN TRANSPORTATION AUTHORITY

WHEREAS, in accordance with Section 1265-a and Section 120 of the Public Authorities Law and the All-Agency Procurement Guidelines, the Board authorizes the award of certain noncompetitive purchase and public work contracts, and the solicitation and award of request for proposals in regard to purchase and public work contracts; and

WHEREAS, in accordance with the All-Agency Procurement Guidelines, the Board authorizes the award of certain noncompetitive miscellaneous procurement contracts, and certain change orders to procurement, public work, and miscellaneous procurement contracts; and

WHEREAS, in accordance with Section 2879 of the Public Authorities Law and the All-Agency Guidelines for Procurement of Services, the Board authorizes the award of certain service contracts and certain change orders to service contracts.

NOW, the Board resolves as follows:

1. As to each purchase and public work contract set forth in the annexed Schedule A, the Board declares competitive bidding to be impractical or inappropriate for the reasons specified therein and authorizes the execution of each such contract.
2. As to each request for proposals (for purchase and public work contracts) set forth in Schedule B for which authorization to solicit proposals is requested, for the reasons specified therein the Board declares competitive bidding to be impractical or inappropriate, declares it is in the public interest to solicit competitive request for proposals and authorizes the solicitation of such proposals.
3. As to each request for proposals (for purchase and public work contracts) set forth in Schedule C for which a recommendation is made to award the contract, the Board authorizes the execution of said contract.
4. The Board ratifies each action taken set forth in Schedule D for which ratification is requested.
5. The Board authorizes the execution of each of the following for which Board authorization is required: (i) the miscellaneous procurement contracts set forth in Schedule E; (ii) the personal service contracts set forth in Schedule F; (iii) the miscellaneous service contracts set forth in Schedule G; (iv) the modifications to personal/miscellaneous service contracts set forth in Schedule H; (v) the contract modifications to purchase and public works contracts set forth in Schedule I; and (vi) the modifications to miscellaneous procurement contracts set forth in Schedule J.
6. The Board ratifies each action taken set forth in Schedule K for which ratification is requested.
7. The Board authorizes the budget adjustments to estimated quantity contracts set forth in Schedule L.

DECEMBER 2021

LIST OF COMPETITIVE PROCUREMENTS FOR BOARD APPROVAL

Procurements Requiring Majority Vote:

F. Personal Service Contracts

(Staff Summaries required for items estimated to be greater than \$1,000,000.)

- | | |
|---|---|
| <ol style="list-style-type: none"> 1. Alliant Insurance Services, Inc. \$60,000,000 2. Marsh USA Inc. 3. Willis Towers Watson Northeast, Inc. | <p><u>Staff Summary Attached</u></p> <p>↓</p> <p>↓</p> |
|---|---|
- Eight Years**
Contract #s 15625-0100 thru 0300
Award of three competitively negotiated personal services as-needed contracts for Broker Services on specific Owner-Controlled Insurance Program packages for the 2020–2024 Capital Program and Related Projects.

H. Modifications to Personal Service Contracts and Miscellaneous Service Contracts Awarded as Contracts for Services

(Staff Summaries required for items estimated to be greater than \$1,000,000.)

- | | |
|--|--|
| <ol style="list-style-type: none"> 4. ABSG Consulting, Inc. \$26,900,000 (Aggregate) 5. Accenture LLP 6. Bentley Systems, Inc. 7. CSC Consulting, Inc. 8. Distributed Information Technologies, Inc. 9. Infor USA, Inc. 10. Infosys (Raj Technologies) 11. Interloc Solutions, Inc. 12. Lifecycle Technical Services, Inc. 13. Net Consulting Group | <p><u>Staff Summary Attached</u></p> <p>↓</p> <p>↓</p> <p>↓</p> <p>↓</p> <p>↓</p> <p>↓</p> <p>↓</p> <p>↓</p> <p>↓</p> |
|--|--|
- Eight Years**
Contract #s 15135-0100 thru 1200 Modification 1
Amendment of a competitively negotiated miscellaneous service contract with 10 retainer firms, exercising previously included contract options to extend the contract term through July 2024.

Staff Summary

Schedule F: Personal Service Contracts

Item Number 1–3					
Department, Department Head Name: Finance, Robert Foran					
Division, Division Head Name: Risk and Insurance Management, Phyllis Rachmuth					
Board Reviews					
Order	To	Date	Approval	Info	Other
1	Finance	12/13/21	X		
2	Board	12/15/21	X		
Internal Approvals					
Order	Approval	Order	Approval		
1	Procurement	4	DDCR		
2	Risk and Insurance Mgmt.	5	Legal		
3	CFO	6	OMB		

SUMMARY INFORMATION	
Vendor Names: Alliant Insurance Services, Inc. Marsh USA, Inc. Willis Towers Watson Northeast, Inc.	Contract Numbers: 15625-0100 15625-0200 15625-0300
Description: Insurance Broker Services	
Total Amount: \$60,000,000	
Contract Term (including Options, if any): Eight years	
Option(s) included in Total Amount?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Renewal?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Procurement Type: <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Noncompetitive	
Solicitation Type: <input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:	
Funding Source: <input type="checkbox"/> Operating <input checked="" type="checkbox"/> Capital <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Other:	

Purpose:

To recommend that the Board approve the award of three competitively negotiated personal services as-needed contracts for Broker Services on specific Owner-Controlled Insurance Program (“OCIP”) packages for the 2020–2024 Capital Program and Related Projects for a period of eight years at a not-to-exceed total cost of \$60 million. The contracts will be awarded to the following firms for use on an as-needed basis without obligation to the MTA or its agencies: Alliant Insurance Services, Inc. (“Alliant”); Marsh USA Inc. (“Marsh”); and Willis Towers Watson Northeast, Inc. (“Willis”).

For each specific OCIP package, the MTA will select insurance brokers through mini-RFPs based on its proposed cost for the services (excluding insurance premiums) and the qualifications of the team that will deliver the services.

Discussion:

Over the years, OCIPs (or, wrap-up insurances) have been successfully utilized on several agency capital projects. OCIP has been used by the agencies for major projects since the 1980s and has been in continuous use on the Capital Programs for multi-project wrap-ups since 1997. Programs in closeout include the NYC Transit 2000–2004 Capital Program Stations and Escalators/Elevators and Line Structures, and LIRR/MNR 2000–2004 Capital Program. Active OCIPs include the NYC Transit 2005–2009 Capital Program, LIRR/MNR 2005–2009 Capital Program, MTA Capital Construction (“MTACC”) East Side Access, MTACC Second Avenue Subway; and 2010–2014 Capital Program for NYC Transit, LIRR, MNR, and Small Business Mentoring Program (“SBMP”); NYC Transit, LIRR, MNR, and SBMP projects for the balance of the 2015–2019 Capital Program and Superstorm Sandy–related projects.

Generally, OCIPs produce savings for construction projects of more than \$100 million and meet certain criteria, such as a high percentage of labor cost, when compared to total construction dollars. In September 2003, the MTA commissioned a study with Deloitte & Touche concerning the cost effectiveness of its most recent capital program OCIPs. The results showed that those OCIPs could save approximately 0.5 percent to 4 percent of the total construction cost. In May of 2016, MTA commissioned a follow-up study with Ernst & Young that reaffirmed savings projections of 0.4 percent to 3.5 percent of the total construction cost. In addition to construction savings, OCIPs benefit the MTA by covering our capital construction projects with higher limits of insurance and uniform insurance coverage across all trades, thereby better protecting the interests of the MTA.

NYC Transit, LIRR, MNR, and SBMP projects for the balance of the 2020–2024 Capital Program and Related Projects, expected to be awarded over the next three years, would be included in this OCIP. With an approximate listing of over 300 projects, construction values are estimated to be more than \$30 billion. By combining these projects into large insurance program packages, the MTA benefits by maximizing its purchasing power.

Staff Summary

Schedule F: Personal Service Contracts

In accordance with the terms of the contract for the specific OCIP packages, each contractor and subcontractor of every tier working on the projects will be provided with uniform Workers' Compensation, Commercial General Liability, Excess Liability, and Builder's Risk insurance policies. We anticipate that coverages will be provided for the entire term of the specific OCIP packages, estimated to be six years, and will be noncancelable except for nonpayment of premium or noncompliance with serious safety recommendations.

A Request for Proposals ("RFPs") was publicly advertised and letters informing potential proposers of the RFP's availability were emailed to 26 firms. Three proposals were received on May 6, 2021. A Selection Committee ("SC"), comprised of representatives from MTA Risk and Insurance Management, MTA Construction & Development, MTA Transformation, and MTA's Department of Diversity and Civil Rights, evaluated the proposals and recommended three firms to be invited to make oral presentations: Alliant, Marsh, and Willis. Upon conclusion of the oral presentations, the SC determined each to be qualified to perform the services required by the RFP. The SC chose providers based on the following considerations: (1) responsiveness to the RFP, demonstration of a clear understanding of the objectives and constraints of an Owner-Controlled Insurance Program; (2) conceptual proposals for comprehensive administration of an effective and cost efficient OCIP, including flexibility to adjust depending on the number of projects and size of a construction contract, (3) qualifications and experience in providing insurance brokerage services for public and private entities in the New York City metropolitan region; (4) experience working with clients on evaluating alternative approaches to insuring construction projects and the utilization of a dual-bid process to measure OCIP efficacy; (5) proposer's willingness to commit specific individuals who, based on education, training, and experience, are highly qualified to perform and deliver high-quality services; and (6) cost proposal.

All three providers were deemed technically qualified to perform the services. Each demonstrated a clear understanding of the OCIP insurance-related services, experience with Small Business Mentoring Programs, and proposed skilled and experienced personnel for the positions required.

Awards will be made based on specific OCIP packages through mini-RFPs that will be issued to these three insurance brokers. The MTA will request that each broker interested in proposing for a specific package submit mini technical and cost proposals explaining how it proposes to market the insurance program and provide comprehensive OCIP insurance-related services, and the cost of such services. The MTA will select one broker for the specific package based on proposed cost for the services (excluding insurance premiums) and the qualifications of the team that will deliver the services.

As a result of negotiations, the not-to-exceed hourly rates originally proposed ranged from \$40 to \$420.28. Following negotiations, best and final offers ("BAFOs") were received with rates ranging from \$40 to \$348.24, which on an average hourly rate is 25–34 percent less than the originally proposed rates. The average hourly rates contained in the BAFOs range from 14 to 50 percent less than the previous contract. For marketing, the fixed fee ranges from \$50K to \$120K in the BAFOs, which on average is 60–73 percent less than the previous contract. Based on the foregoing, these prices were found to be fair and reasonable.

The contract resulting from this procurement has been evaluated to determine the necessity and appropriate scope, if any, of cybersecurity requirements, including any requirements under federal, state, and local law and regulations. The Authority is working with the vendor to include applicable cybersecurity requirements prior to issuance of the notice of award.

D/M/WBE Information

MTA Department of Diversity and Civil Rights has assigned a 22.5 percent DBE goal. Alliant Insurance Services, Marsh USA and Willis Towers Northeast have submitted utilization plans towards achieving the required DBE goal. Alliant Insurance Services and Willis Towers Northeast has not completed any MTA contracts with goals; therefore, no assessment of the firm's MWDBE/SDVOB performance can be determined at this time. Marsh USA has not achieved its MWDBE goals on previous contracts; however it has demonstrated good faith effort towards meeting these goals.

Impact on Funding

The total not-to-exceed cost of \$60 million will be provided by the 2020–2024 Capital Program and Related Projects allocated over the agencies participating in the program. Specific funding sources and amounts will not be known until the remainder of the Capital Plan is authorized.

Alternatives

Do not utilize OCIP Coverage. The alternative to an OCIP would be to require each construction contractor to purchase insurance coverage and provide the MTA with evidence of that insurance. Costs for insurance would be included in construction contract bids. Based on MTA's prior experience, ensuring the program utilizing this method in lieu of an OCIP could cost an additional 0.4 to 3.5 percent in insurance premiums. OCIPs also provide for greater control over job site safety and assure that all contractors will have the proper insurance coverage in place for the term of the programs. Should an OCIP not be purchased, these assurances/benefits will be lost.

Perform service in-house. This alternative is neither feasible nor cost effective. The MTA does not have the staff with the specialized expertise or experience to perform the necessary services.

Schedule H: Modifications to Personal Service & Miscellaneous Service Contracts

Item Number: 4-13

Vendor Names (Locations): Various (10 Retainer Firms) ABSG Consulting (Spring, Texas) Accenture LLP (New York, New York) Bentley Systems Inc. (Exton, Pennsylvania) CSC Consulting Inc. (Tysons, Virginia) Distributed Information Technologies, Inc. (Arlington, Virginia) Infor USA, Inc (New York, New York) Infosys [Raj Technologies] (Plainview, New York) Interloc Solutions, Inc. (Folsom, California) Lifecycle Technology Services, Inc. (North Charleston, South Carolina) Net Consulting Group (Framingham, Massachusetts)	Contract Numbers: 15135-0100 thru 1200 15135-0100 15135-0200 15135-0300 15135-0400 15135-0500 15135-0800 15135-0900 15135-1000 15135-1100 15135-1200	AWO/Modification# 1
Description: Enterprise Asset Management (EAM) As-Needed Integration Services	Original Amount: \$50,000,000	
Contract Term (including Options, if any): August 1, 2016–July 31, 2024 (this modification)	Prior Modifications: \$ 0.00	
Option(s) included in Total Amount? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Prior Budgetary Increases: \$ 0.00	
Procurement Type: <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Noncompetitive	Current Amount: \$50,000,000	
Solicitation Type: <input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:	This Request: \$26,900,000 (Aggregate)	
Funding Source: <input checked="" type="checkbox"/> Operating <input checked="" type="checkbox"/> Capital <input checked="" type="checkbox"/> Federal <input type="checkbox"/> Other:	% of This Request to Current Amount: 53.8%	
Requesting Dept./Div., Dept./Div. Head Name: COO / Enterprise Asset Management PMO, Tom Savio	% of Modifications (including This Request) to Original Amount: 53.8%	

Purpose:

Board approval is sought to amend a competitively negotiated miscellaneous service contract with 10 retainer firms, exercising previously included contract options to extend the contract term through July 2024, and to increase the contract capacity by \$26.9 million to support the continuation of asset management modernization processes and software implementation activities that are part of the MTA Enterprise Asset Management (“EAM”) Program.

Discussion:

On July 27, 2016, the Board approved 12 competitively negotiated, all-agency software integration retainer contracts in the not-to-exceed amount of \$50M (on an as-needed basis) to support and implement the next stage of MTA’s EAM Program. The term was for a base period of five years (August 1, 2016–July 31, 2021) with two additional one-year options. Option one was exercised without additional funding and extended the agreement through July 31, 2022. At this time, approval is being sought to exercise the second one-year option (July 2022 through July 2023) and add an additional year (July 2023–July 2024), extending the contract end date to July 31, 2024, as well as increasing the contract value by \$26.9M in order to continue to provide EAM Integration Services. The additional capacity is intended to support the following EAM projects: (1) continue development and implementation of remaining Metro-North Railroad (“MNR”) infrastructure classes including structures, stations, facilities, and Grand Central Terminal; (2) development and integration of All-Agency document management system to support EAM; (3) All-Agency information system integration; and (4) All-Agency program project management services. To date, of the \$50M originally approved, \$49.9M has been encumbered.

When the first one-year option was exercised (covering July 2021–July 2022), two of the 12 firms opted not to extend their individual agreements due to lack of interest and available resources to participate in MTA task orders. Therefore, this modification is to extend services with the following 10 remaining firms: ABSG Consulting, Inc.; Accenture LLP; Bentley Systems, Inc.; DXC Technology (now the parent of CSC Consulting, Inc.); Distributed Information Technologies, Inc.; Infor USA, Inc.; Infosys (Raj Technologies, a DBE); Interloc Solutions, Inc.; Life Cycle Technical Services, Inc.; and Net Consulting Group.

Schedule H: Modifications to Personal Service & Miscellaneous Service Contracts

The original Board-approved Staff Summary reserved two optional years but did not include sufficient funding for the option years. The base contract's average hourly rates are \$203.70. These rates were negotiated and are comparable to the EAM consulting average rates of \$209.89. In 2020 and 2021, MTA Procurement partnered with MTA EAM Project Management Office and Agency project leads and negotiated an additional 5–10 percent reduction from the originally 2016 awarded rates. Based on the above, these negotiated rates are considered fair and reasonable.

In addition to this agreement, there are two additional contracts that were awarded to meet federal requirements supporting process improvements, and installation of an enterprise information system for asset management. The first was approved by the Board in February 2016 and retained 20 firms for as-needed consulting services necessary to support and implement the MTA's EAM program in the not-to-exceed amount of \$115M. The second was approved by the Board in March 2016 and awarded to Sygma Technology for the purchase EAM software and interim hosting services in the not to exceed amount of \$26.7M.

The EAM Program was initiated to enable all levels of the organization to make more informed, transparent, and data-driven Capital and Operating decisions resulting in better utilization of MTA resources, and lower the cost of maintaining system performance while improving operational safety and reliability. The purpose of undertaking an EAM approach is to transition to an efficient All-Agency consolidated maintenance model that promotes a more effective life cycle approach to maintaining MTA's nearly \$1 trillion asset base. By managing assets uniformly across the agencies, the MTA can, through common business practices, economies of scale, and data sharing (1) improve asset utilization and performance; (2) reduce asset-related operating costs; (3) reduce capital costs; and (4) optimize scheduled work. A standardized EAM Information Systems ("EAM-IS") will (1) ensure adherence to federal requirements; and (2) enable the MTA to both close out Investigator General recommendations and address Crowe Audit findings.

Since Board approval of this contract award, the following accomplishments have been achieved within NYC Transit Department of Subways, Long Island Rail Road, and MNR:

Established core- and mobile-based EAM System across agencies

- Over 5,500 employees using the EAM system (long-term projection: 16,000+ users)
- 600K+ assets have been uploaded and monitored within the EAM system
- 1.4M+ work orders have been created and tracked through the EAM system
- 5,000 mobile devices deployed to frontline staff to upload information regarding maintenance
- 25+ active projects have been initiated and are in various stages of completion

Integration and utilization of the Geographic Information System ("GIS") within the EAM-IS

- 50+ GIS applications used across MTA operations, safety, security, and customer communications
- Integration to EAM system to view all assets, work orders, and defects on a map
 - 2 for 1 concept – "If it goes into EAM, you can see it on the map"
- Process reengineering as part of EAM implementation

This contract has been evaluated to determine the necessity and appropriate scope, if any, of cybersecurity requirements, including any requirements under federal, state, and local law and regulations. Any applicable cybersecurity requirements, to the extent required, have been included in the contract terms and conditions.

In connection with a previous contract awarded to DXC Technology ("DXC"), DXC was found to be responsible notwithstanding significant adverse information ("SAI") pursuant to the All Agency Responsibility Guidelines and such responsibility finding was approved by the MTA Deputy Chief Operating in consultation with the MTA General Counsel. No new SAI has been found relating to DXC and DXC has been found to be responsible.

D/M/WBE Information

MTA Department of Diversity and Civil Rights assigned a 17 percent DBE goal. All vendors awarded tasks have been meeting their DBE requirements.

Impact on Funding

Funding is based on approved budgets (operating, capital and/or federal) for MTA Headquarters and the operating agencies and will not exceed the limits approved by the Board.

Alternatives

If this request for an additional \$26.9M in capacity is not approved, the MTA would be required to initiate the Request for Proposal process to complete the EAM Program, which will result in increased rate structures for 2022. Allowing this contract to expire will stop the implementation of EAM until another contract is in place, delaying this critical work. The consequence of this will be failing to meet MTA commitments to its funding partners to modernize asset management systems and failing to act on the recommendations of the 2019 Crowe Financial Audit related to the implementation of modern asset management systems. Also, EAM must meet the new federal requirements that support process improvements and the installation of an enterprise information system for asset management. The MTA and its agencies do not have resources or the trained personnel to perform these services.

Contracts

David K. Cannon, Vice President

December 2021 Procurement Package

PROCUREMENTS

The Procurement Agenda this month includes one action with no expenditure.

Subject Request for Authorization to Award Procurement Actions					
Department Contracts					
Department Head Name & Title David K. Cannon, Vice President					
Department Head Signature <i>David K. Cannon</i>					
Board Action					
Order	To	Date	Approval	Info	Other
1	Finance Committee	12/13/21	X		
2	Board	12/15/21	X		

Date: December 10, 2021			
Internal Approvals			
	Approval		Approval
	Executive Vice President & General Counsel		President

Purpose

To obtain the approval of the Board to adopt a resolution/declaration and, to inform the Finance Committee of this procurement action.

Discussion

MTA Construction & Development proposes to award a Noncompetitive Procurement in the following category:

MTA Construction & Development proposes to award Competitive Procurements in the following categories:

<u>Schedules Requiring Two-Thirds Vote</u>	<u># of Actions</u>	<u>\$ Amount</u>
B. Competitive Request for Proposals (Solicitation of Purchase/Public Work Contracts)	1	\$ -TBD-
TOTAL	1	\$ -TBD-

Budget Impact

The approval of this procurement action will not obligate any funds at this time.

Recommendation

The procurement action be approved as proposed. (The item is included in the resolution of approval at the beginning of the Procurement Section.)

MTA Construction & Development

BOARD RESOLUTION

WHEREAS, in accordance with Sections 1265-a and 1209 of the Public Authorities Law and the All Agency Procurement Guidelines, the Board authorizes the award of certain non-competitive purchase and public works contracts, and the solicitation and award of request for proposals in regard to purchase and public work contracts; and

WHEREAS, in accordance with the All Agency Procurement Guidelines, the Board authorizes the award of certain non-competitive miscellaneous service and miscellaneous procurement contracts, certain change orders to purchase, public work, and miscellaneous service and miscellaneous procurement contracts;

WHEREAS, in accordance with Section 2879 of the Public Authorities Law and the All-Agency Guidelines for Procurement of Services, the Board authorizes the award of certain service contracts and certain change orders to service contracts.

NOW, the Board resolves as follows:

1. As to each purchase and public work contract set forth in annexed Schedule A, the Board declares competitive bidding to be impractical or inappropriate for the reasons specified therein and authorizes the execution of each such contract.
2. As to each request for proposals (for purchase and public work contracts) set forth in Schedule B for which authorization to solicit proposals is requested, for the reasons specified therein, the Board declares competitive bidding to be impractical or inappropriate, declares it is in the public interest to solicit competitive request for proposals and authorizes the solicitation of such proposals.
3. As to each request for proposals (for purchase and public work contracts set forth in Schedule C for which a recommendation is made to award the contract), the Board authorizes the execution of said contract.
4. As to each action set forth in Schedule D, the Board declares competitive bidding impractical or inappropriate for the reasons specified therein, and ratifies each action for which ratification is requested.
5. The Board authorizes the execution of each of the following for which Board authorization is required: i) the miscellaneous procurement contracts set forth in Schedule E; ii) the personal service contracts set forth in Schedule F; iii) the miscellaneous service contracts set forth in Schedule G; iv) the modifications to personal/miscellaneous service contracts set forth in Schedule H; v) the contract modifications to purchase and public work contracts set forth in Schedule I; vi) the modifications to miscellaneous procurement contracts set forth in Schedule J.
6. The Board ratifies each action taken set forth in Schedule K for which ratification is requested.

DECEMBER 2021

LIST OF COMPETITIVE PROCUREMENTS FOR BOARD APPROVAL

Procurements Requiring Two-Thirds Vote:

**Schedule B. Competitive Requests for Proposals (Solicitation of a Purchase/Public Work Contracts)
(Staff Summaries required for items estimated to be greater than \$1M)**

1.	To Be Determined	\$ Cost To Be Determined	<u>Staff Summary Attached</u>
	Contract No. To Be Determined		

MTA Construction & Development requests that the Board adopt a resolution, pursuant to Public Authorities Law Section 1265-a.4.f and Article III(B)(6)(b) of the All Agency General Procurement Guidelines, declaring that it is in the public's interest to utilize a competitive Request for Proposal process to procure a Public-Private Partnership agreement for the design, construction, financing and maintenance of elevators and other ADA improvements at selected New York City Transit subway stations.

Schedule B Competitive Requests for Proposals
 Staff Summary
 Item Number 1

Dept & Dept Head Name:
 Contracts/David K. Cannon, VP & Chief Procurement Officer

David K. Cannon

Board Reviews

Order	To	Date	Approval	Info	Other
1	Finance Committee	12/13/2021	X		
2	Board	12/15/2021	X		

Internal Approvals

Order	Approval	Order	Approval
	<i>[Signature]</i> Executive Vice President & General Counsel	<i>JTS</i>	President

SUMMARY INFORMATION	
Vendor Name	Contract Number
RFP Authorizing Resolution	To be determined
Description Rapid MTA Station Accessibility Upgrade Project – (Public Private Partnership Delivery)	
Total Amount To Be Determined	
Contract Term To Be Determined	
Option(s) included in Total Amount? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Renewal? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Procurement Type <input checked="" type="checkbox"/> Competitive <input type="checkbox"/> Non-competitive	
Solicitation Type <input checked="" type="checkbox"/> RFP <input type="checkbox"/> Bid <input type="checkbox"/> Other:	
Funding Source <input type="checkbox"/> Operating <input checked="" type="checkbox"/> Capital <input type="checkbox"/> Federal <input type="checkbox"/> State	

Purpose/Recommendation

MTA Construction & Development (“C&D”) requests that the Board adopt a resolution, pursuant to Public Authorities Law (“PAL”) Section 1265-a.4.f and Article III(B)(6)(b) of the All Agency General Procurement Guidelines, declaring that it is in the public’s interest to utilize a competitive Request for Proposal (“RFP”) process to procure a Public-Private Partnership (“P3”) agreement for the design, construction, financing and maintenance of elevators and other ADA improvements at selected New York City Transit (“NYCT”) subway stations (the “P3 Contract”).

Discussion

The MTA has been exploring utilizing P3 as an additional delivery model for projects in the 2020-2024 Capital Plan. This alternative delivery model has been deployed nationally and globally to tap into private sector innovation to deliver capital projects more quickly and efficiently and, meet strict long-term maintenance standards. To that end, C&D, along with the MTA, engaged Orrick, Herrington & Sutcliffe and Goldman Sachs & Co. LLC to assist in (i) identifying potential projects for P3 delivery; (ii) analyzing the potential project(s) for P3 delivery. Based on this analysis, an ADA accessibility project was determined to be the best-suited candidate for an initial MTA project utilizing P3 delivery. Accordingly, C&D is requesting authorization to use the RFP method and move forward with a project to install elevators and improve existing ADA access across selected stations (the “Project”) for a subset of the NYCT stations slated for accessibility improvements in the 2020-2024 Capital Plan. The Project includes ADA Accessibility upgrades, including new elevators at eight (8) Stations; Church Ave (2/5); Sheepshead Bay (B/Q); Rockaway Boulevard (A); Kings Highway (B/Q); Woodhaven

Boulevard (M/R); Steinway Street (M/R); Junius Street (3); and Moshulu Parkway (4); and replacement of existing elevators at five (5) stations; 125th Street (A/B/C/D); 34th Street Penn Station (A/C/E); Euclid Avenue (A/C); 161st Street Yankee Stadium (4); and 3rd Avenue 149th Street (2/5).

C&D is proposing a Design-Build-Finance-Maintain approach, wherein the P3 Partner is responsible for initial construction of the ADA improvements and elevator upgrades and will provide ongoing maintenance and ensure uptime through the Project Term. The Project Term contemplated is 25 years following substantial completion, with a 15-year initial maintenance window with extension options through the full Project Term. At the end of the lease term, the improvements remain with MTA in a pre-determined state of good repair. This structure provides performance and reliability requirements that exceed the MTA's existing system metrics, with performance guarantees backed by at-risk capital. The P3 Partner is only fully compensated if they meet the high reliability and uptime performance criteria outlined in the Project Agreement. Moreover, by having the P3 Partner finance a portion of the Project that is only repaid if the P3 Partner successfully delivers and maintains the Project to the MTA's standards, the MTA is able to give bid teams flexibility to propose solutions that deviate from MTA's otherwise prescriptive technical specifications, which is expected to reduce the cost of delivery.

C&D is contemplating a payment mechanism wherein the P3 Partner would receive a combination of (i) progress/milestone payments during construction, (ii) completion payments following substantial completion; and (iii) availability payments through the term to cover the remaining capital costs and ongoing maintenance. The availability payments will be used by the P3 Partner to secure at-risk financing for the remaining portion of the capital costs. In exchange for the higher cost of private sector financing for a portion of the Project, the MTA will receive: (i) performance guarantees for availability of the improvements, (ii) increased cost certainty for initial construction and ongoing maintenance versus traditional delivery methods and (iii) potential cost savings through the modified procurement model, which are expected to offset any increased financing cost. The MTA will only award to a P3 Partner if the final bid is below the MTA's risk-adjusted expected cost to self-deliver.

C&D undertook a preliminary market sounding in October and November 2021 to validate the proposed delivery model. Of the 55 firms contacted, eight provided responses that substantially validated the delivery model approach and provided initial feedback around key value drivers that C&D will evaluate to incorporate into the project to reduce overall cost.

Accordingly, C&D is requesting authorization to move forward with an RFP process to procure the project under the P3 delivery model with a best value award. Following board approval, C&D intends to advertise and release a Request for Qualifications and to select 3-4 of the respondents to receive the Request for Proposals. C&D expects proposals to be due in late 2022 and award to the preferred P3 Partner, subject to further approval of this Board, in late 2022.

DECEMBER 2021
MTA REAL ESTATE
LIST OF REAL ESTATE ACTION ITEMS FOR BOARD APPROVAL

MTA NEW YORK CITY TRANSIT

Acquisition of Permanent and Temporary Easements from Amtrak, Long Island City, NY

MTA LONG ISLAND RAIL ROAD

License agreement with DNJ Industries Inc. for parking in Maspeth, NY

Staff Summary

Subject ACQUISITION OF A TEMPORARY AND PERMANENT EASEMENT FROM AMTRAK
Department REAL ESTATE
Department Head Name LISETTE CAMILO
Department Head Signature
Project Manager Name MICHAEL B. DANIELS

Date DECEMBER 15, 2021
Vendor Name
Contract Number
Contract Manager Name
Table of Contents Ref. #

Board Action					
Order	To	Date	Approval	Info	Other
1	Finance Committee	12/13/21	X		
2	Board	12/15/21	X		

Internal Approvals			
Order	Approval	Order	Approval
1	Legal		
2	Chief Development Officer		
3	Chief Financial Officer		

AGENCY: MTA New York City Transit (“NYCT”)
GRANTOR: National Railroad Passenger Corporation (“Amtrak”)
LOCATION: Amtrak Rail Yard, (Block 72, Lot 250) located near 49th Avenue and 21st Street Long Island City, New York 11101
ACTIVITY: Acquisition of a permanent and temporary easement for purpose of constructing a flood wall for NYCT’s Hunters Point Portal
ACTION REQUESTED: Authorization to acquire the permanent and temporary easements
TERM AND SPACE: Temporary construction easement (1,125 square feet) for approximately 24 months. permanent easement (470.8 square feet)
COMPENSATION: \$68,000 due at signing to Grantor for the permanent easement
 \$2,100 per month for the temporary construction easement, payable to Grantor in 6-month increments.

COMMENTS:

In connection with future flood mitigation and resiliency efforts associated with NYCT’s Hunters Point portal in Long Island City, NYCT has proposed to install a flood wall adjacent to the portal entrance. The concrete flood wall will be used to protect the NYCT Flushing Line Right of Way from flooding during a major storm event. Pursuant to NYCT design plans, a Permanent Easement must be acquired from Amtrak. The area of the permanent easement is 470.8 square feet. The vertical limits are approximately 20’ above grade to approximately 39’-6” below grade to accommodate piles anchored to rock.

In addition, NYCT will require a temporary construction easement from Amtrak at surface for approximately 24 months. The TCE is 1,125 square feet.

The Amtrak parcel comprises of a single tax lot containing 3.5 acres of land identified on the Tax Map of New York City – Borough of Queens as Block 72, Lot 250. The Right Of Way for NYCT’s Flushing Line runs along the northern boundary of the Property. The locations of the easements are adjacent to Amtrak’s right of way.

Staff Summary

FINANCE COMMITTEE MEETING EASEMENT FOR A FLOOD WALL AND A TEMPORARY CONSTRUCTION EASEMENT (Cont'd.)

Prior to construction, NYCT will be required to seek Amtrak's acceptance/approval of the design plans and construction documents. NYCT will be required to cover Amtrak expenses associated with review of the aforementioned plans as well as any incurred onsite force account work.

An appraisal deemed the permanent easement to be \$68,000, and the temporary construction easement to be \$2,100 per month (\$50,400 for the duration of the 24-month project). A subsequent appraisal review validated the appraised value. Amtrak Real Estate has agreed to the value of both easements.

Based on the foregoing, MTA Real Estate requests authorization for NYCT to acquire property interests from Amtrak on the above-described terms and conditions.

Staff Summary

Subject LICENSE AGREEMENT WITH DNJ INDUSTRIES INC. MASPETH, QUEENS COUNTY, NY
Department REAL ESTATE
Department Head Name LISETTE CAMILO
Department Head Signature
Project Manager Name ROBERT GOLDBERG

Date December 13, 2021
Vendor Name
Contract Number
Contract Manager Name
Table of Contents Ref. #

Board Action					
Order	To	Date	Approval	Info	Other
1	Finance Committee	12/13/21	X		
2	Board	12/15/21	X		

Internal Approvals			
Order	Approval	Order	Approval
1	Legal		
2	Chief Development Officer		
3	Chief of Staff		

AGENCY: MTA Long Island Rail Road ("LIRR")
LICENSEE: DNJ Industries Inc. d/b/a DNJ Mechanical ("DNJ")
LOCATION: Adjacent to 59-32 55 Street and 55-05 Flushing Avenue, Maspeth, Queens County, New York
ACTIVITY: License agreement for parking
ACTION REQUESTED: Authorization to enter into a license agreement
SPACE: Total of 2,035 square feet
TERM: Five (5) years
COMPENSATION: \$15,000, first year with 3% annual increases

COMMENTS:

MTA Real Estate received a request from DNJ to license LIRR property along the Bushwick Branch railroad line. DNJ operates an engineering manufacturing company for the local construction industry in Maspeth, New York. DNJ owns two properties located at 59-32 55 Street, and 55-05 Flushing Avenue in Maspeth, which are both adjacent to the LIRR Property.

LIRR will enter into an agreement pursuant to MTA Real Estate's Policies and Procedures for the Licensing of Real Property for licenses requiring board approval but not requiring requests for proposals where there have been no inquiries for the past 12 months, and where the property is located such that only a single adjacent owner can make use of the property(Circumstances 1 and 3 respectfully).

Based on the forgoing, MTA Real Estate recommends approval of a license agreement between DNJ and the LIRR.