

AMERICAN SOCIETY OF HIGHWAY ENGINEERS

National Project of the Year Award

OFFICIAL ENTRY FORM

AWARD CATEGORY (Check One):	☐ Under \$20 Million	☑ Over \$20 Million
SPONSORING REGION (Check One):		
	Great Lakes	□ Northwest
	North Central	☐ Rocky Mountain
□ Southeast □		□ Southwest
D Southeast	1 South Central	D Southwest
CONTACT INFORMATION FOR SUBMITTING REGION:		
Contact Name: Scott Eshenaur	ASHE Region Position:	NE Region NPAC Chairperson
Phone (Office): 717.790.9565 Phone (Mobile)	: 717.580.8426	l Address: sreshenaur@modjeski.com
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DDO IECT INFODMATION.		
PROJECT INFORMATION:	MT of New York Inc	
ENTERING AGENCY/COMPANY'S NAME: JN	T C t t	TVDE
PROJECT NAME: Hunts Point Interstate Acc PROJECT LOCATION: Hunts Point Peninsula alor	ess Improvement - Contact I	I YPE:
CITY: South Brony	COLINTY:	STATE: NY
CITY: South Bronx FINAL CONSTRUCTION COST: \$460 Million	COUNTT:	UCTION COST: \$460 Million
PROJECT COMPLETION DATE: 12/21/22	BUDGETED CONSTR	OCTION COST. 4400 Million
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 	_ ASHE SECTION CONTACT NA	
PHONE (OFFICE): 212.993.5774 PHON	NE (MOBILE): 516.445.3495 E-M	AIL: jbrugge@gpinet.com
PROJECT TEAM:		
PROJECT OWNER: New York State Depart	rtment of Transportation (NYSDOT	
STREET ADDRESS: 1209 Colgate Avenue		•
CITY: Bronx	STATE: NY	ZIP: 10472
CONTACT PERSON: Snehal Shah, PE	PHONE: 347-591-3874	
		Shah@dot.ny.gov
PROJECT DESIGN FIRM: JMT of New York, In		
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CITY: Manhattan	STATE: NY	ZIP: 10006
CONTACT PERSON: Brian J. Strizki, PE		
	E-MAIL ADDRESS: bstriz	ki@jmt.com
Slamala /ECCO IV		
PRIME CONTRACTOR: Skanska/ECCO JV	. 200	
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CITY: East Elmhurst	STATE: NY	ZIP: 11370
CONTACT PERSON: Jessica Miller, PE	PHONE: 646-915-7301	oo Millow@glronglro
E-MAIL ADDRESS: Jessica.Miller@skanska.com		
Entry Form Completed By: Brian J. St	rizki PE	12/00/22
Entry Form Completed By: Brian J. St.	112K1, 1 L	Date: 12/09/22





Project Highlights:

- \$460 Million design-build project
- Substantially reduced congestion and improved infrastructure
- Transformed South Bronx area for residents and visitors
- Received AGCNY and ASHE NY Metro Project of the Year

The Hunts Point Interstate Access Improvement Project

Transforming the South Bronx, New York

JMT of New York, Inc. was the Lead Design Engineer on this \$460 million design-build contract for the New York State Department of Transportation (NYSDOT). The JMT team performed bridge, highway, and traffic design services to improve access to the Hunts Point peninsula in South Bronx, New York.

NYSDOT sought to make major enhancements to the peninsula and surrounding areas by improving access for trucks and cars traveling to and from commercial businesses including the Hunts Point food distribution center.

They also sought to address several other unique challenges such as improving operations on the Bruckner/Sheridan Interchange and correcting infrastructure deficiencies throughout the area.

Complexity

The Hunts Point Peninsula in South Bronx, New York is home to the largest food distribution facility in the nation - the Hunts Point Food Distribution Center.

The peninsula is home to many other industrial and commercial properties, along with a residential area in the northeastern portion. The NYSDOT estimates more than 78,000 vehicles travel there daily. This created challenges accessing the peninsula; requiring truck drivers to use local streets.

The project had several complex design elements. It was a multidisciplined effort, with many design teams incorporating their expertise. The JMT Team designed six new bridges over the Amtrak NE Rail Corridor, a new 734" bridge over Bruckner Boulevard and Express lanes, a new precast rigid frame water main protection structure, and a cast-in-place concrete bridge carrying Bruckner Boulevard and Express lanes over a new multiuse pedestrian/bicycle path connecting the two Bronx River Parks together. The project also included two major bridge rehabilitations, 22 new retaining walls, and realignment, reconstruction, and widening of the connecting roadways.



Six New Bridges Over Amtrak and CSX

Ramps SE and ES connect Edgewater Road with Sheridan Boulevard. They span over Amtrak's NE corridor with two new complex bridges over the railroad, tied into fully integral abutment support on piles.



Construction of Ramps ES and SE over the NE corridor

The Ramp SE structure is a 173-foot-long, single-span bridge supported by straight and curved girders with full integral abutments. It connects NB Sheridan Boulevard to Edgewater Road. The Ramp ES structure over the RR is a 358-foot-long, two-span bridge, also supported by straight and curved girders The abutments and center pier are fully integral with no bearings or deck joints. Ramp ES over Bruckner Boulevard and Express lanes is a 734-foot-long, seven-span, multi-steel plate girder bridge comprised of straight and curved girders and support on fully integral piers and abutments.



Integral Pier Construction

The team incorporated stormwater management and drainage design, lighting, and utility design and coordination. The design included the construction of six new structures over and adjacent to the NE corridor electrified RR lines.

Coordinating with railways was paramount to the project's success. JMT's railroad coordinator was aware of their critical issues and knew how to navigate their requirements. With limited night track outages with short durations, RR condonation was done daily throughout the project schedule.

Application of Innovative Technologies and Construction Techniques

JMT took a collaborative, solutions-oriented approach during our weekly task force design meetings, providing an open forum for unconstrained thinking to generate innovative ideas. This type of team effort ensured a successful solution for every challenge, along with a structured, clear plan.

The design of the Bronx River Viaduct incorporated jointless bridge decks using link slabs to reduce deterioration to structural elements below. The functionality of this design will reduce maintenance cost, enhance durability and reduce construction cost.

The Bruckner Expressway and Bruckner Boulevard cross the NE Rail Corridor and the Bronx River. This also caused several complex project challenges including meeting tight vertical clearance requirements and complex maintenance of traffic to ensure truck access was maintained in the local area.

The geotechnical investigation indicated poor soil conditions throughout the project site. JMT's team used innovative ground improvement methods such as load balancing with a lightweight cellular foam concrete fill to address soil capacity issues and settlement concerns.



Lightweight Cellular Concrete Fill used in the retaining wall system

Using innovative techniques such as *AccelBridge* for deck replacement of the 592' Westchester Ramp allowed total replacement of the bridge in just under 30 days, reducing traffic impacts to the local community.



AccelBridge Construction

Social & Economic Considerations

The construction impacts to the local community were closely monitored by a full-time community liaison who coordinated the daily construction activities with the local community and businesses.

This design-build project significantly relieved congestion on local streets, upgraded and improved access and safety for travelers, corrected geometrical and operational deficiencies, replaced deteriorated infrastructure elements, improved bike/pedestrian lanes, reduced bridge maintenance, and minimized impacts to Amtrak, CSX, and MTA.

Improving the Hunts Point Interstate Access has transformed an outdated interstate highway into a boulevard, giving residents and visitors safer recreational spaces and improved access to the market. This reduces costs for everyone, relieves congestion, and improves efficiency for the community.

Before this project, an estimated 13,000 commercial trucks relied on local roads to travel to the peninsula daily. According to the city, the trucks were a major contributor to poor air quality and road deterioration. This project resulted in cleaner air, safer roads, and reduced congestion. Changes like these improve the lives of local residents immeasurably. Other social considerations included amenities to the South Bronx area such as a new park, bike lanes, and a shared-use path.

Safety

This project has provided a more efficient and much less congested roadway system, allowing motorists and residents to travel securely on local roads and highways. The project also addressed many infrastructure and operational issues.



Aerial view of the construction of the "island"

One safety challenge involved setting up and using a large overhead crane to move steel and materials in the project area. The crane was erected on top of a retained earth structure known as "the Island". This crane was used for most of the major structural steel picks over the RR.



Manitowoc MLC-650 Crane on top of the Island

These picks could not interfere with train schedules and traffic flow. Winds were monitored continuously during crane operations. If winds were to reach more than 30 mph work was immediately suspended.

JMT's traffic team was an integral part of this project, with newly designed signing and traffic marking. Safety was also improved with the installation of ADA-compliant sidewalks and ramps in the local highway network where feasible.

The team improved bike lanes, added a shared-use path, modernized traffic control signals, incorporated intelligent transportation systems, and improved pedestrian signals at multiple intersections, creating a safer space for everyone.

Aesthetics & Sustainable Features

This project completely transformed the look and feel of the South Bronx, with new traffic designs, improved streetscaping, and new infrastructure. Realigning, rehabilitating, and reconstructing dozens of bridges has had an incredibly eye-pleasing impact, with an updated boulevard, better highway systems, and unclogged local roads.

To further enhance project aesthetics, the JMT team incorporated architectural treatments on the 22 retaining walls and on all of the piers and abutments throughout the project.

The newly designed park, which will be operated by the New York City Parks Department, included landscaping, new lighting, appurtenances, and the shared-use path connecting the new park to the Concrete Plant Park on the north side of Bruckner Boulevard.



New City Park and Shared-Use Path

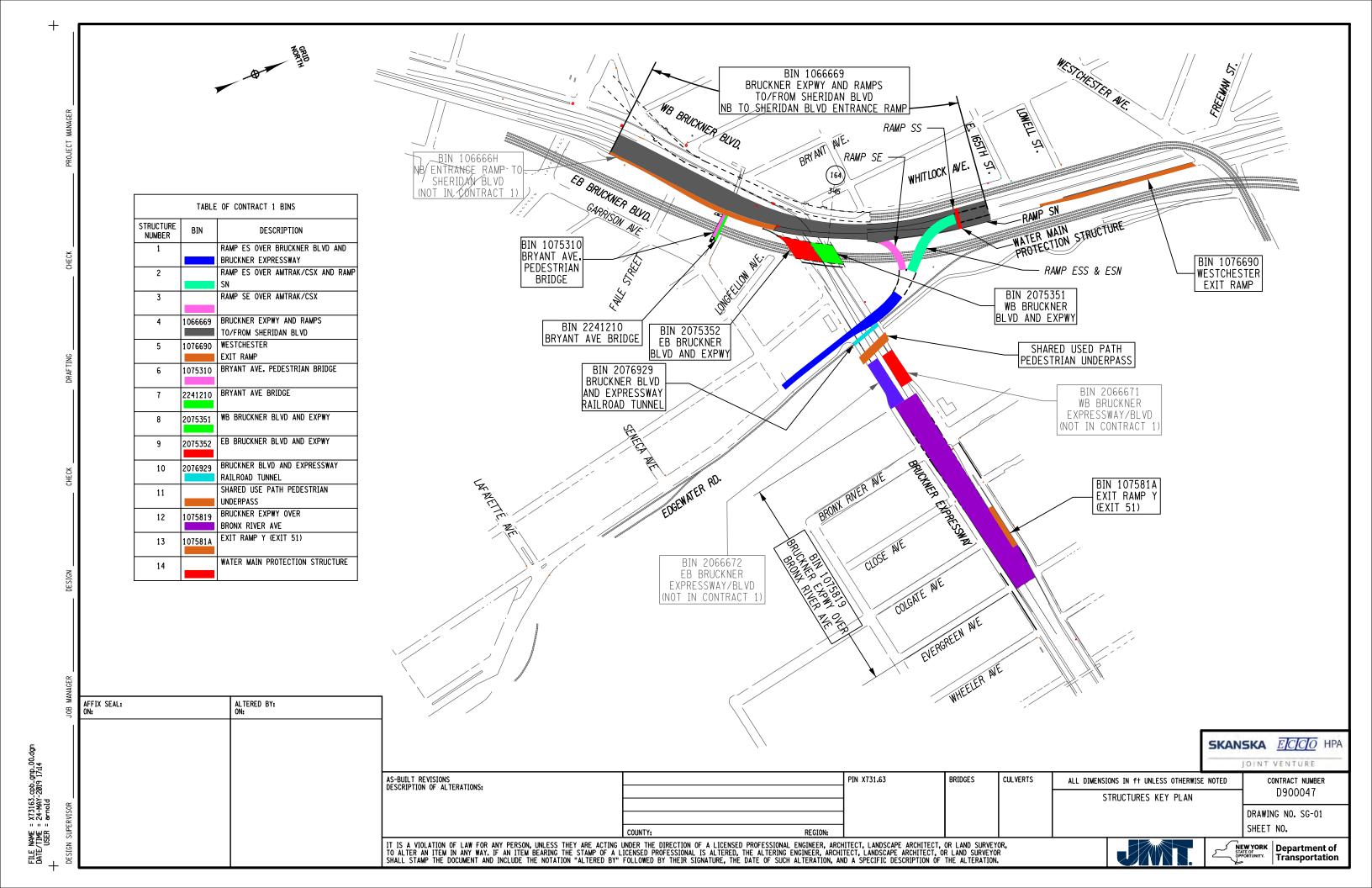
The look and feel of the South Bronx area, particularly around Hunts Point, is dramatically changed. Sustainability and aesthetic factors include cleaner roadways and bridges without deterioration or damage, modern streetscaping, intelligent transportation systems, and rehabilitated structures. According to one local South Bronx citizen, "this project has realized the decades-long dream of all South Bronx residents."

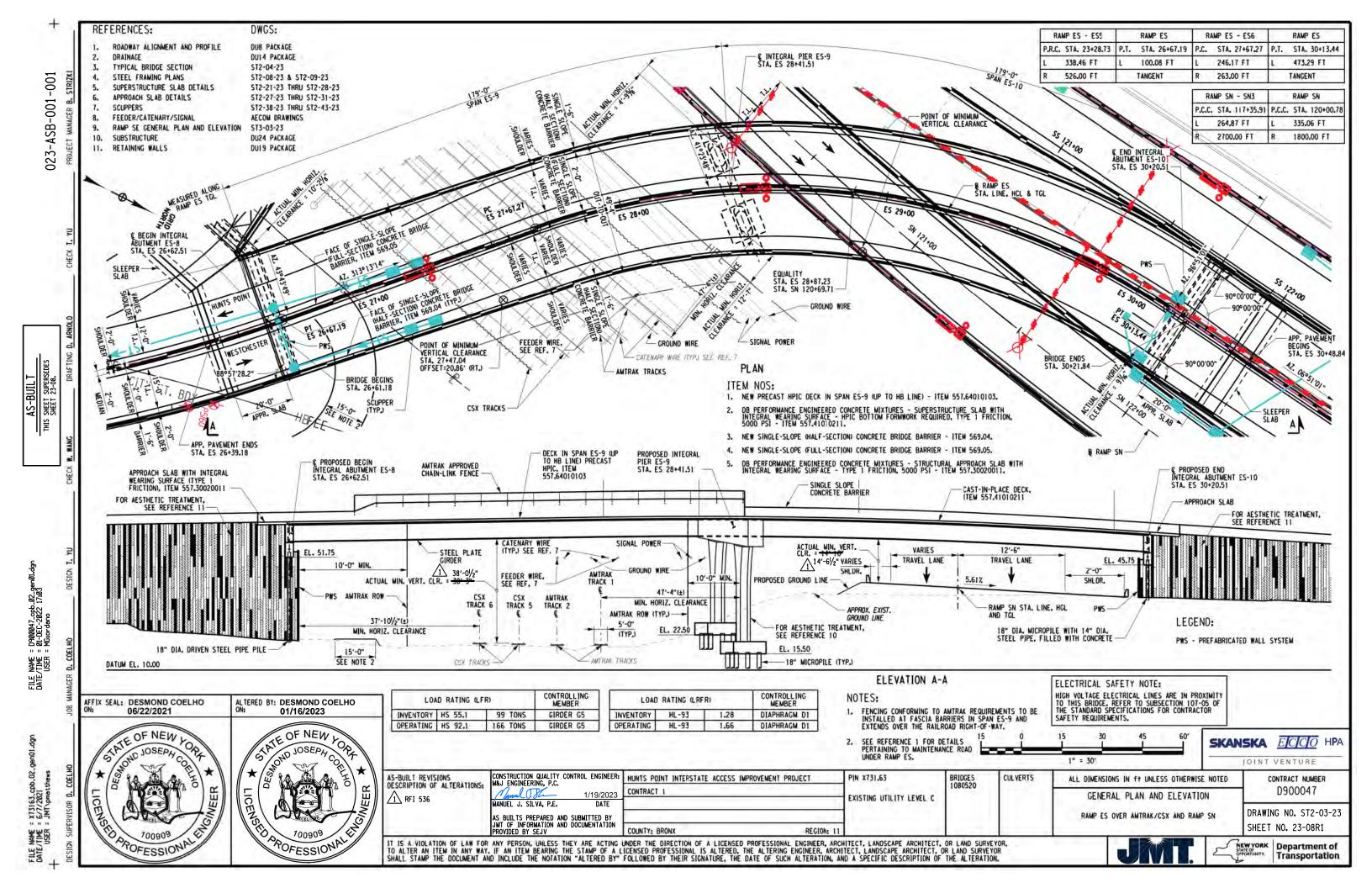
Exceeding Owner/Client Needs

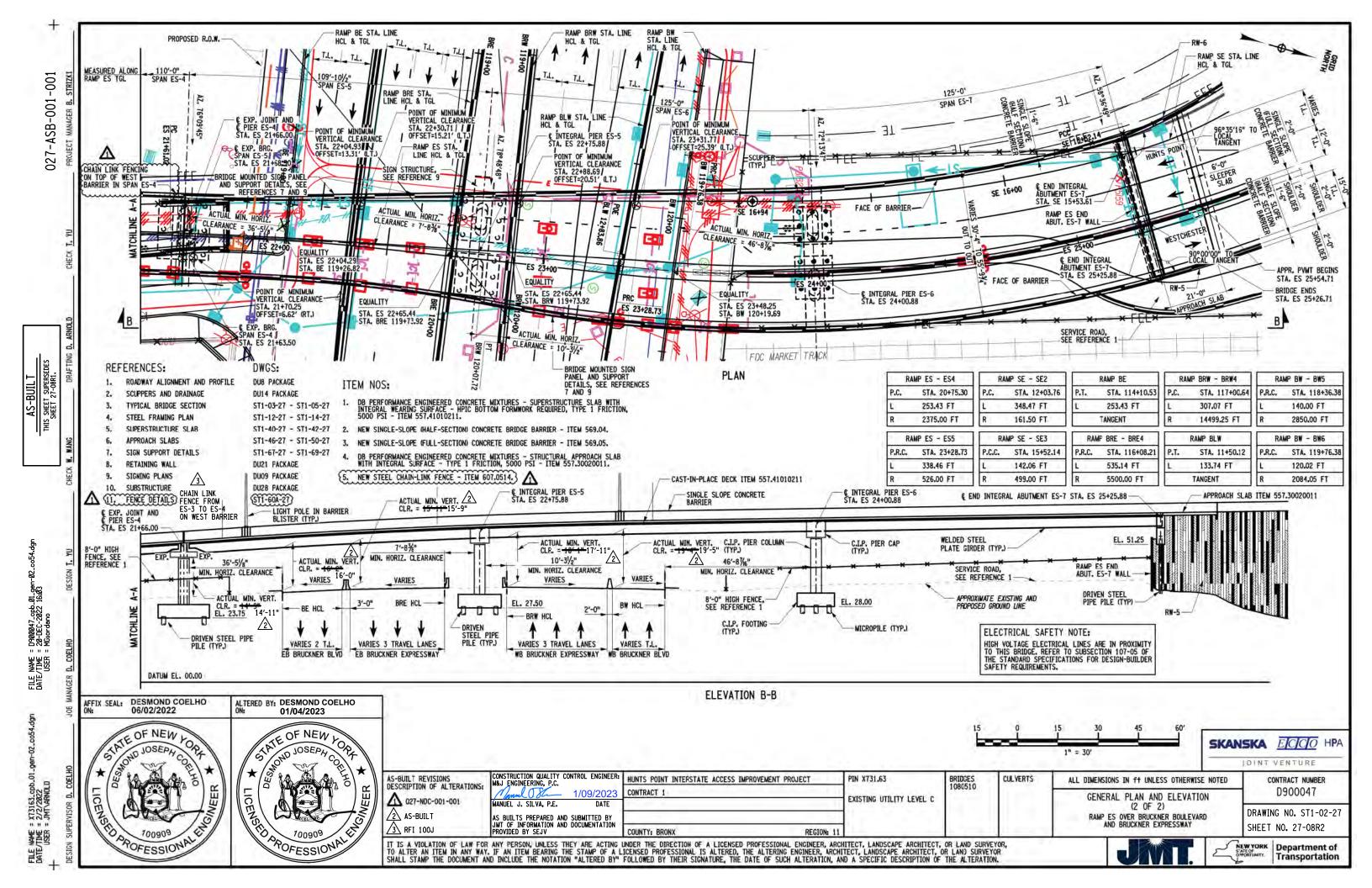
The NYSDOT is dedicated to enhancing the South Bronx through a litany of ongoing infrastructure projects, beginning with this one. JMT understands that every contract must pave the way for the next. This ensures a smoother transition throughout an entire project.

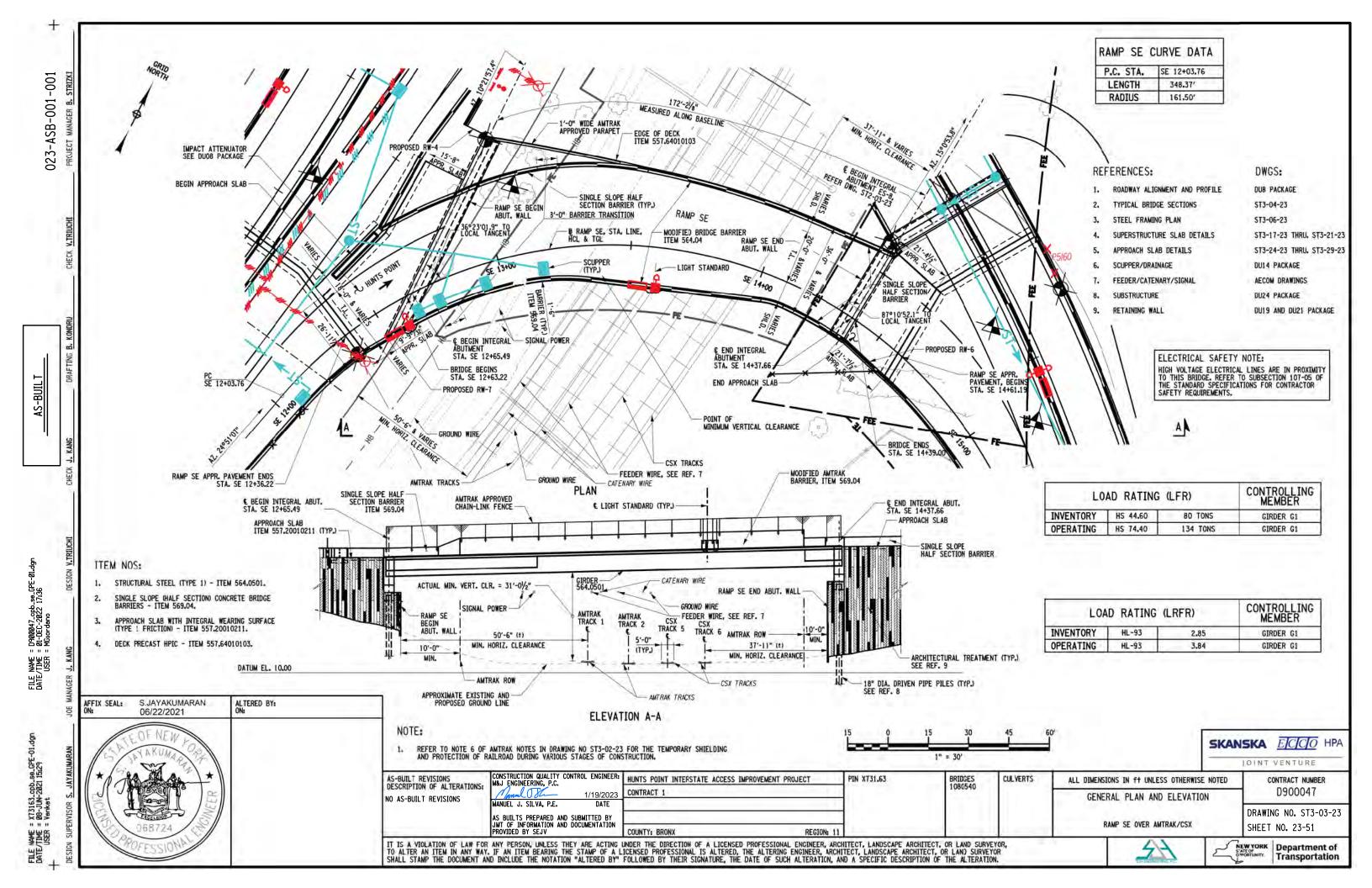
As such, JMT worked collaboratively to overcome project challenges in innovative and effective ways, thereby saving cost and exceeding schedule deliveries. JMT's innovative design practices, effective and ongoing teamwork, and excellent engineering practices encouraged a winning project, which will continue to improve the lives of South Bronx residents and travelers for generations.

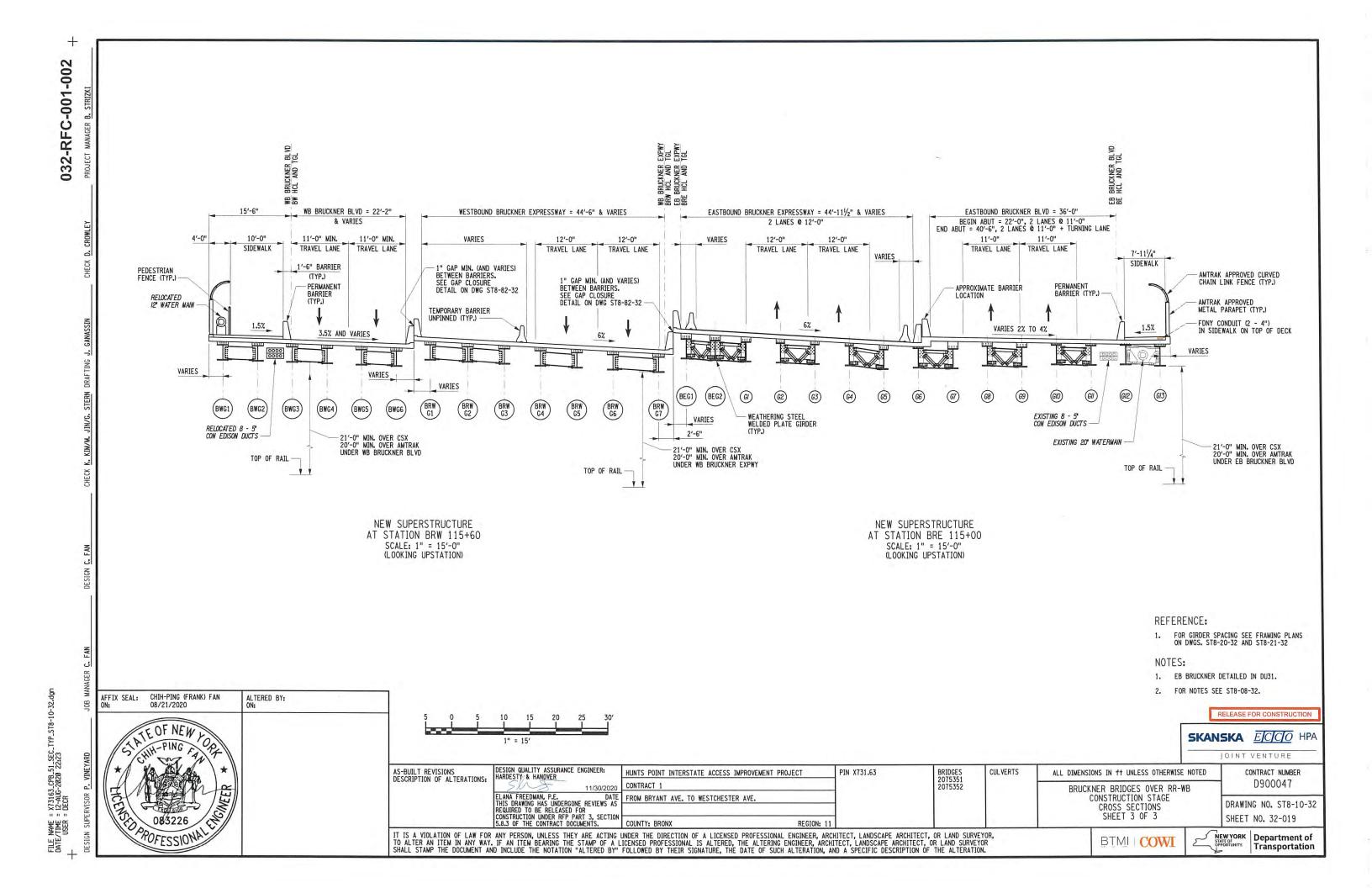
In the end, this project met the short-and long-term goals of the client. The team provided easier access for motorists, relieved congestion, corrected operational deficiencies, replaced deteriorated infrastructure elements, improved bicycle/pedestrian access, and improved the community's quality of life.











4 NEW BRIDGES OVER AMTRAK/CSX



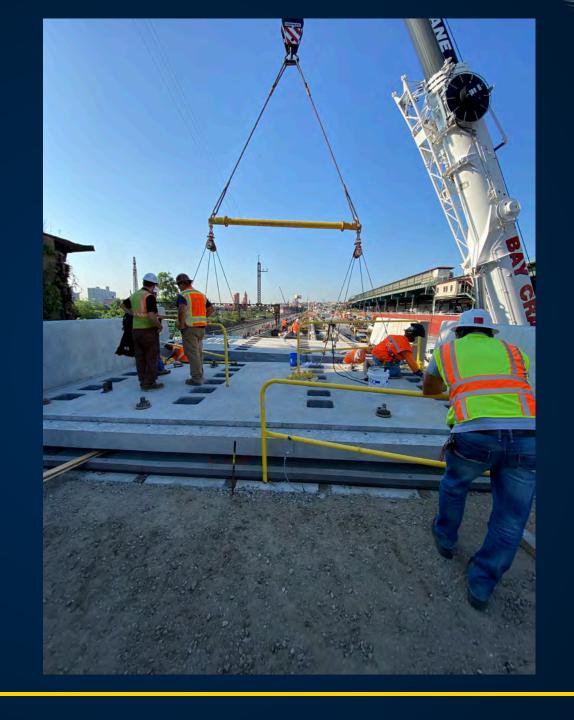
INTEGRAL PIER CONSTRUCTION



INTEGRAL ABUTMENT CONSTRUCTION

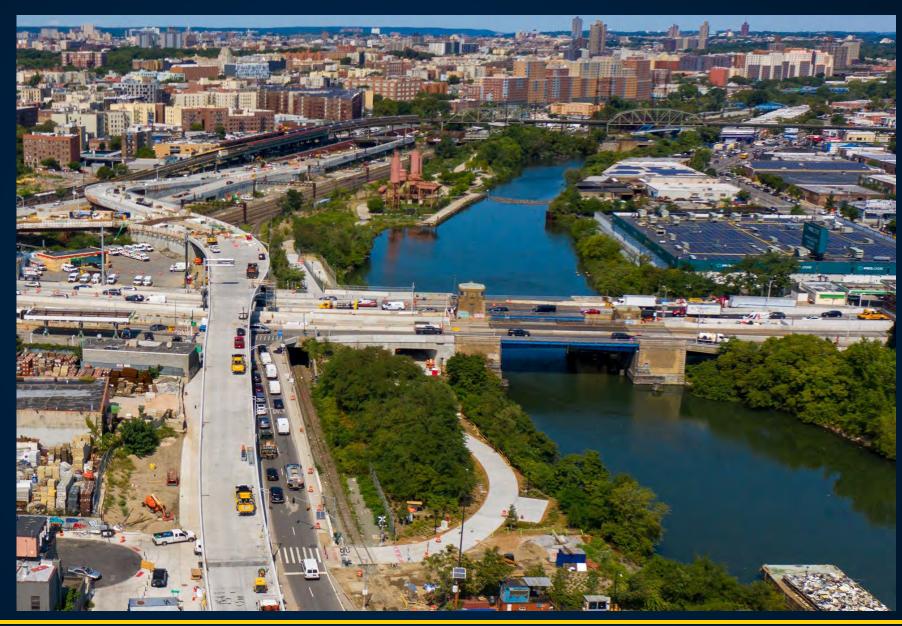


ACCELBRIDGE CONSTRUCTION



NEW CITY PARK

AND SHARED USE PATH



KATHY HOCHUL Governor

MARIE THERESE DOMINGUEZ Commissioner

CRAIG F. RUYLE, P.E.Regional Director

January 24, 2023

ASHE National Committee

Attention: Scott Eshenaur

(via email at sreshenaur@modjeski.com

RE: 2023 ASHE National Project of the Year

Award Entry - Hunts Point Interstate Access Improvement Project - Contract 1

Substantial Completion

Dear Sir/Madam,

I believe that the work of the engineering firm, JMT of New York, Inc. meets the intended uses and expectations of this award submission.

A concerted effort between NYSDOT, JMT of New York, Subconsultants and the Contractor made for a positive improvement to the entire area. This project presented a wide variety of challenges that needed to be addressed in a short period of time to protect the well-being of the traveling public. These challenges were met with teamwork and innovation.

I am verifying that substantial completion of this project was on 12/21/22, as noted on the Entry Form.

Sincerely,

Snehal Shah, PE

Snehal Shah, P.E. Deputy Chief Engineer NYSDOT, Region 11, 3rd Floor 47-40 21st Street Long Island City, NY 11101

CC: Craig Ruyle, Regional Director, R-11



January 24, 2022

ASHE National Committee

Attention: Scott Eshenaur

RE: 2023 ASHE National Project of the Year – Over \$20M

Award Entry – Hunts Point Interstate Access Improvement Project – Contract 1

Statement of Commitment

Dear Sir/Madam,

JMT of New York, Inc. (JMT) is pleased to submit our entry for the 2023 ASHE National Project of the Year award.

I am confirming that I or a representative of the JMT/project team will attend the awards luncheon should this project win.

Very truly yours,

JOHNSON, MIRMIRAN & THOMPSON, INC.

Brian J. Strizki, PE Chief Executive Officer

JMT of New York, Inc.

BJS/dk