

Any one or more members of the Board of Directors or of any committee thereof may participate in a meeting of said Board or of any such committee by means of a conference telephone or similar communications equipment allowing all persons participating in the meeting to hear each other at the same time, and participation by such means shall constitute presence in person at the meeting.

Section 10. Compensation of Directors - Directors, as such, shall not receive any stated salary for their services, but, by resolution of the Board, a fixed sum and expenses of attendance, if any, may be allowed for attendance at any meeting of the Board of Directors or of any committee thereof. Nothing herein contained shall be construed to preclude any director from serving the Corporation in any other capacity and receiving reasonable compensation therefor.

Section 11. Committees - The Board of Directors, by resolution of a majority of the entire Board, may designate from among its members one or more committees, each consisting of one or more directors, and each of which, to the extent provided in such resolution, shall have all the authority of the Board except that no such committee shall have authority as to any of the following matters:

- (a) The submission to shareholders of any action as to which shareholders' authorization is required by statute, the Certificate of Incorporation or by these By-Laws;
- (b) The filling of vacancies in the Board of Directors or in any committee thereof;
- (c) The fixing of compensation of the directors for serving on the Board or on any committee thereof;
- (d) The amendment or repeal of these By-Laws or the adoption of new By-Laws; and
- (e) The amendment or repeal of any resolution of the Board of Directors which by its terms shall not be so amendable or repealable.

The Board may designate one or more directors as alternate members of any such committee who may replace any absent member or members at any meeting of such committee.

Each such committee shall serve at the pleasure of the Board. The Board of Directors shall have the power at any time to fill vacancies in, to change the membership of, or to discharge any such committee. Committees shall keep minutes of their proceedings and shall report the same to the Board of Directors at the meeting of the Board next succeeding, and any action by the committee shall be subject to revision and alteration by the Board of Directors, provided that no rights of a third party shall be affected in any such revision or alteration.

#### ARTICLE IV

#### OFFICERS

Section 1. Executive Officers - The officers of the Corporation shall be a President, one or more Vice-Presidents, a Treasurer and a Secretary and such Assistant Treasurers and Assistant Secretaries and other officers as the Board of Directors may determine. Any two or more offices may be held by the same person. In the event all of the issued and outstanding shares of capital stock of the Corporation are owned by one person, such person may hold all or any combination of offices.

Section 2. Election - The President shall be chosen from among the directors and together with one or more Vice-Presidents, the Treasurer and Secretary shall be elected by the Board of Directors to hold office until the meeting of the Board held immediately following the next annual meeting of share-holders and shall hold office for the term for which elected and until their successors have been elected and qualified. The Board of Directors may from time to time appoint all such other officers as it may determine and such officers shall hold office from the time of their appointment and qualifications until the time at which their successors are appointed and qualified. A vacancy in any office arising from any cause may be filled for the unexpired portion of the term by the Board of Directors.

Section 3. Removal - Any officer may be removed from office by the Board at any time with or without cause.

Section 4. Delegation of Powers - The Board of Directors may from time to time delegate the power or duties of any officer of the Corporation, in the event of his absence or failure to act otherwise, to any other officer or director or person whom they may select.

Section 5. Compensation - The compensation of each officer shall be such as the Board of Directors may from time to time determine.

Section 6. President - The President shall be the chief executive officer of the Corporation and shall have general charge of the business and affairs of the Corporation, subject, however, to the right of the Board of Directors to confer specified powers on officers and subject generally to the direction of the Board.

Unless otherwise ordered by the Board of Directors, the President, or in the event of his inability to act, a Vice-President designated by the Board, shall have full power and authority on behalf of the Corporation to attend and to act and to vote at any meeting of security holders of corporations in which the Corporation may hold securities, and at such meetings shall possess and may exercise any and all rights and powers incident to the ownership of such securities, and which, as the owner thereof, the Corporation might have possessed and exercised, if present. The Board of Directors by resolution from time to time may confer like powers upon any other person or persons.

Section 7. Vice-President - The Vice-President shall have such powers and perform such duties as the Board of Directors may from time to time prescribe. In the absence or inability of the President to perform his duties or exercise his powers, the Vice-President or, if there be more than one, a Vice-President designated by the Board, shall exercise the powers and perform the duties of the President subject to the direction of the Board of Directors.

Section 8. Secretary - The Secretary shall keep the minutes of all meetings and record all votes of shareholders, the Board of Directors and committees in a book to be kept for that purpose. He shall give or cause to be given any required notice of meetings of shareholders, the Board of Directors or any committee, and shall be responsible for preparing or obtaining from a transfer agent appointed by the Board, the list of shareholders required by Article II, Section 7 thereof. He shall be the custodian of the seal of the Corporation and shall affix or cause to be affixed the seal to any instrument requiring it and attest the same and exercise the powers and perform the duties incident to the office of Secretary subject to the direction of the Board of Directors.

Section 9. Treasurer - Subject to the direction of the Board of Directors, the Treasurer shall have charge of the general supervision of the funds and securities of the Corporation and the books of account of the Corporation and shall exercise the powers and perform the duties incident to the office of the Treasurer. If required by the Board of Directors, he shall give the Corporation a bond in such sum and with such sureties as may be satisfactory to the Board of Directors for the faithful discharge of his duties.

Section 10. Other Officers - All other officers, if any, shall have such authority and shall perform such duties as may be specified from time to time by the Board of Directors.

#### ARTICLE V

##### RESIGNATIONS

Any director or officer of the Corporation or any member of any committee of the Board of Directors of the Corporation, may resign at any time by giving written notice to the Board of Directors, the President or the Secretary. Any such resignation shall take effect at the time specified therein or, if the time is not specified therein, upon the receipt thereof, irrespective of whether any such resignations shall have been accepted.

#### ARTICLE VI

##### CERTIFICATES REPRESENTING SHARES

Section 1. Form of Certificates - Each shareholder shall be entitled to a certificate or certificates in such form as prescribed by the Business Corporation Law and by any other applicable statutes, which Certificate shall represent and certify the number, kind and class of shares owned by him in the Corporation. The Certificates shall be numbered and registered in the order in which they are issued and upon issuance the name in which each Certificate has been issued together with the number of shares represented thereby and the date of issuance shall be entered in the stock book of the Corporation by the Secretary or by the transfer agent of the Corporation. Each certificate shall be signed by the President or a Vice-President and countersigned by the Secretary or Assistant Secretary and shall be sealed with the Corporate Seal or a facsimile thereof. The signatures of the officers upon a certificate may also be facsimiles if the certificate is countersigned by a transfer agent or registered by a registrar other than the Corporation itself or an employee of the Corporation. In case any officer who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer before the certificate is issued, such certificate may be issued by the Corporation with the same effect as if the officer had not ceased to be such at the time of its issue.

Section 2. Consideration - A certificate representing shares shall not be issued until the amount of consideration therefor determined to be stated capital pursuant to Section 506 of the BCL has been paid in the form of cash, services rendered, personal or real property or a combination thereof and consideration for the balance (if any) complying with paragraph (a) of Section 504 of the BCL has been provided, except as provided in paragraphs (e) and (f) of Section 5052 of the Business Corporation Law. Notwithstanding that such shares may be fully paid and nonassessable, the corporation may place in escrow shares issued for a binding obligation to pay cash or other property or to perform future services, or make other arrangements to restrict the transfer of the shares, and may credit distributions in respect of the shares against the obligation, until the obligation is performed.

Section 3. Lost Certificates - The Board of Directors may direct a new certificate or certificates to be issued in place of any certificate or certificates theretofore issued by the Corporation, alleged to have been lost, mutilated, stolen or destroyed, upon the making of an affidavit of that fact by the person so claiming and upon delivery to the Corporation, if the Board of Directors shall so require, of a bond in such form and with such surety or sureties as the Board may direct, sufficient in amount to indemnify the Corporation and its transfer agent against any claim which may be made against it or them on account of the alleged loss, destruction, theft or mutilation of any such certificate or the issuance of any such new certificate.

Section 4. Fractional Share Interests - The Corporation may issue certificates for fractions of a share; or it may pay in cash the fair market value of fractions of a share as of the time when those entitled to receive such fractions are determined; or it may issue script in registered or bearer form over the manual or facsimile signature of an officer of the Corporation or of its agent, exchangeable as therein provided for full shares, but such script shall not entitle the holder to any rights of a shareholder except as therein provided.

Section 5. Share Transfers - Upon compliance with provisions restricting the transferability of shares, if any, transfers of shares of the Corporation shall be made only on the share record of the Corporation by the registered holder thereof, or by his duly authorized attorney, upon the surrender of the certificate or certificates for such shares properly endorsed with payment of all taxes thereon.

Section 6. Record Date for Shareholders - For the purpose of determining the shareholders entitled to notice of, or to vote at any meeting of shareholders or any adjournment thereof or to express consent or dissent from any proposal without a meeting, or for the purpose of determining the shareholders entitled to receive payment or any dividend or the allotment of any rights, or for the purpose of any other action, the Board of Directors may fix, in advance, a date as the record date for any such determination of shareholders. Such date shall not be more than sixty nor less than ten days before the date of any meeting nor more than sixty days prior to any action taken without a meeting, the payment of any dividend or the allotment of any rights, or any other action. When a determination of shareholders of record entitled to notice of, or to vote at any meeting of shareholders has been made as provided in this Section, such determination shall apply to any adjournment thereof, unless the Board fixes a new record date under this Section for the adjourned date.

Section 7. Shareholders of Record - The Corporation shall be entitled to treat the holder of record of any share or shares of stock as the holder in fact thereof and, accordingly, shall not be bound to recognize any equitable or other claim to or interest in such share on the part of any other person whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of the State of New York.

## ARTICLE VII

### STATUTORY NOTICES

The Board of Directors may appoint the Treasurer or any other officer of the Corporation to cause to be prepared and furnished to shareholders entitled thereto any special financial notice and/or statement which may be required by Section 510, 511, 516, and 520 of the Business Corporation Law or by any other applicable statute.

## ARTICLE VIII

### FISCAL YEAR

The fiscal year of the Corporation shall be fixed by the Board of Directors by resolution duly adopted, and, from time to time, by resolution duly adopted the Board of Directors may alter such fiscal year.

## ARTICLE IX

### CORPORATE SEAL

The Corporate seal shall have inscribed thereon the name of the Corporation, the year of its incorporation and the words "Corporate Seal" and "New York" and shall be in such form and contain such other words and/or figures as the Board of Directors shall determine. The Corporate seal may be used by printing, engraving, lithographing, stamping or otherwise making, placing or affixing, or causing to be printed, engraved, lithographed, stamped or otherwise made, placed or affixed, upon any paper or document, by any process whatsoever, an impression, facsimile or other reproduction of said Corporate seal.

## ARTICLE X

### BOOKS AND RECORDS

There shall be maintained at the principal office of the Corporation books of account of all the Corporation's business and transactions.

There shall be maintained at the principal office of the corporation or at the office of the Corporation's transfer agent a record containing the names and addresses of all shareholders, the number and class of shares held by such and the dates when they respectively became the owners of record thereof.

## ARTICLE XI

### INDEMNIFICATION OF DIRECTORS, OFFICERS, EMPLOYEES AND AGENTS

Any person made or threatened to be made a party to an action or proceeding, whether civil or criminal, by reason of the fact that he, his testator or intestate, then, is, or was a director or officer of the Corporation, or then serves or has served on behalf of the corporation in such capacity at the request of the Corporation, shall be indemnified by the Corporation against reasonable expenses, judgments, fines and amounts actually and necessarily incurred in connection with the defense of such action or proceeding or in connection with an appeal therein, to the fullest extent permissible by the laws of the State of New York. Such right of indemnification shall not be deemed exclusive of any other rights to which such person may be entitled.

ARTICLE XII  
AMENDMENTS

Subject to Section 613 of the Business Corporation Law, the shares entitled at the time to vote in the election of directors and the Board of Directors by vote of a majority of the entire Board, shall have the power to amend or repeal these By-Laws, and to adopt new By-Laws, provided, however, that any by-law adopted, amended or repealed by the Board of Directors may be amended or repealed by a majority of the votes of the shares at the time entitled to vote thereon as herein provided. No amendment of the By-Laws pertaining to the election of directors or the procedures for the calling and conduct of a meeting of shareholders shall affect the election of directors or the procedures for the calling or conduct in respect of any meeting of shareholders unless notice thereof is given to the shareholders as provided in Section 3 of Article II hereof.

Dated: 8/20/91

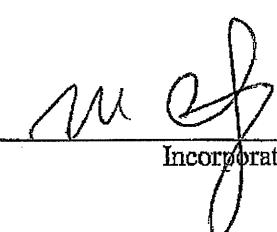
  
Incorporator

EXHIBIT D

[Certificate of Good Standing – NY]

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STATE OF NEW YORK

DEPARTMENT OF STATE

Certificate of Status

I, ROBERT J. RODRIGUEZ, Secretary of State of the State of New York and custodian of the records required by law to be filed in my office, do hereby certify that upon a diligent examination of the records of the Department of State, as of the date and time of this certificate, the following entity information is reflected:

**Entity Name:** C.A.C. INDUSTRIES INC.  
**DOS ID Number:** 1572401  
**Entity Type:** DOMESTIC BUSINESS CORPORATION  
**Entity Status:** EXISTING  
**Date of Initial Filing with DOS:** 08/30/1991  
  
**Statement Status:** CURRENT  
**Statement Due Date:** 08/31/2025

No information is available from this office regarding the financial condition, business activity or practices of this entity.

WITNESS my hand and official seal of the Department of State,  
at the City of Albany, on April 25, 2024 at 10:34 A.M.

ROBERT J. RODRIGUEZ, Secretary of State



*Brendan C. Hughes*

By Brendan C. Hughes  
Executive Deputy Secretary of State

**UNANIMOUS WRITTEN CONSENT  
IN LIEU OF ANNUAL MEETING OF THE  
SOLE SHAREHOLDER AND DIRECTOR  
OF  
C.A.C. INDUSTRIES INC.  
(2023)**

The undersigned, being the sole director and shareholder of C.A.C. Industries Inc., a New York corporation (the “Corporation”), does hereby waive notice of the time, place and purpose of the annual meeting and does hereby consent to the adoption of the following resolutions by unanimous written consent in lieu of an annual meeting of the sole director and shareholder of the Corporation, to the same extent as though such action had been authorized at such special meeting pursuant to notice:

RESOLVED, that for the 2023 term, the following individuals are elected to the office or offices respectively set forth opposite his or her name, to continue to serve until his or her successor is duly elected and qualified:

Michael A. Capasso	Chief Executive Officer, President, and Secretary
John Curley	Chief Administrative Officer and Vice President
Richard E. Gavin	Chief Financial Officer and Treasurer
John M. Labozza	Chief Operations Officer and Vice President

RESOLVED, that the following individuals are elected to serve as the directors of the Corporation for a one year term or until his successor is duly elected and qualified:

Michael A. Capasso

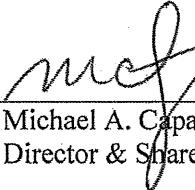
RESOLVED, that all the acts and transactions of the officers of the Corporation which have been taken or made since the last meeting of the Board of Directors and which have been reported to the Board of Directors are hereby authorized, approved, ratified and confirmed in all respects.

FURTHER RESOLVED, that this unanimous written consent in lieu of the Annual Meeting of the Board of Directors of the Corporation may be executed in the original or by PDF and/or in counterparts by the directors, and that this Unanimous Written Consent in Lieu of the Annual Meeting of the Board of Directors be filed with the minutes of the proceedings of the Board of Directors of the Corporation by its Secretary.

*[signature page follows]*

IN WITNESS WHEREOF, these resolutions of the sole Director and Shareholder of the Corporation are adopted by written consent.

Dated: May 1, 2023

  
Michael A. Capasso  
Director & Shareholder

[SIGNATURE PAGE – JOINT WRITTEN CONSENT  
RE OFFICERS AND DIRECTORS–2023]

**CONSENT RESOLUTIONS  
OF THE SOLE SHAREHOLDER  
OF  
C.A.C. INDUSTRIES INC.**

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The undersigned, being the sole shareholder of C.A.C. Industries Inc., a New York corporation (the "Corporation"), does hereby waive all notice of the time, place and purposes of a meeting of the sole shareholder of the Corporation and consents to the adoption of the following resolutions with the same force and effect as if adopted at a duly convened meeting of the sole shareholder of the Corporation, and hereby directs that this written consent be filed with the minutes of the proceedings of the sole shareholder of the Corporation.

**I. Amendment to Bylaws**

**RESOLVED:** That the Bylaws shall be amended in the form attached hereto as Exhibit A.

**II. Election of Members of the Board of Directors**

**RESOLVED:** That the number of directors shall be set at four.

**RESOLVED:** That each of the following individuals is hereby elected as a member of the Board of Directors of the Corporation to serve in such capacity for the ensuing year or until his successor has been duly elected and qualified:

Michael A. Capasso  
John Curley  
Richard E. Gavin  
John M. Labozza

**II. Miscellaneous**

**RESOLVED:** That the Board of Directors of the Corporation is hereby authorized and directed to take any and all actions as it may deem necessary or appropriate to implement the foregoing consent resolutions.

[Signature page follows]

IN WITNESS WHEREOF, the undersigned has executed this Written Consent effective as of the 1<sup>st</sup> day of May, 2024,

**SOLE SHAREHOLDER:**

**NORTM BHAG EMPLOYEE STOCK OWNERSHIP  
TRUST**

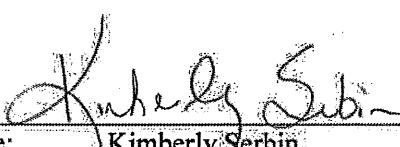
By: TI-TRUST, INC., not in its corporate or individual capacity, but solely in its capacity as trustee of the NORTM BHAG Employee Stock Ownership Trust.

By:

Name:

Title:

Not in her individual capacity, but solely as an authorized officer of TI-TRUST, INC.



Kimberly Serbin

Sr. Vice President

[Signature Page to Written Consent of Sole Shareholder]

**EXHIBIT A**

[Amendment to Bylaws]

**FIRST AMENDMENT  
TO THE  
BY-LAWS  
OF  
C.A.C. INDUSTRIES INC.**

The By-laws (the "By-laws") of C.A.C. Industries Inc., a New York corporation (the "Corporation"), are amended effective May 1, 2024 pursuant to the Consent Resolutions of the Sole Shareholder of the Corporation dated May 1, 2024, as follows:

1.) Article III Section 2 of the By-laws is hereby amended by deleting it in its entirety and replacing it with the following:

"Section 2. Number and Qualification – The number of directors constituting the entire Board shall not be less than three nor more than five, as fixed by resolution of the shareholders entitled to vote for the election of directors. Unless and until a different number shall be so fixed within the limits above specified, the Board shall consist of four (4) directors.

Each director shall be at least 21 years of age. A director need not be a shareholder, a citizen of the United States or a resident of the State of New York. No later than June 30, 2024 and at all times thereafter, the Board shall include at least one Independent Director. No later than April 30, 2026 and at all times thereafter, the Board shall include at least two Independent Directors. An "Independent Director" shall be any person who (a) is not a family member of Michael A. Capasso; (b) is not a current or former employee of the Corporation; (c) has not received any fees for services from Michael A. Capasso or the Corporation during the 12 months immediately preceding his/her appointment (except fees for serving as a director); and (d) is not an individual who has a relationship with Michael A. Capasso or the Corporation, either personally or through his or her affiliate, which in the opinion of the shareholders will affect the person's ability to exercise his or her independent judgment as a director.

2.) Article III Section 10 is hereby amended by deleting it in its entirety and replacing it with the following:

"Section 10. Compensation of Directors – Independent Directors may receive a fee for their services as directors and for travel and other out-of-pocket expenses incurred in attending any regular or special meeting of the Board of Directors. The fee may be a fixed sum to be paid for attending each meeting of the board of directors or a fixed sum to be paid monthly, quarterly or semi-annually, irrespective of the number of meetings attended or not attended. The amount of the fee, if any, and the basis on which it shall be paid shall be determined by the Board of Directors from time to time.

Nothing herein contained shall preclude any Director from serving the Corporation in any other capacity and receiving compensation for such services."

Attest:

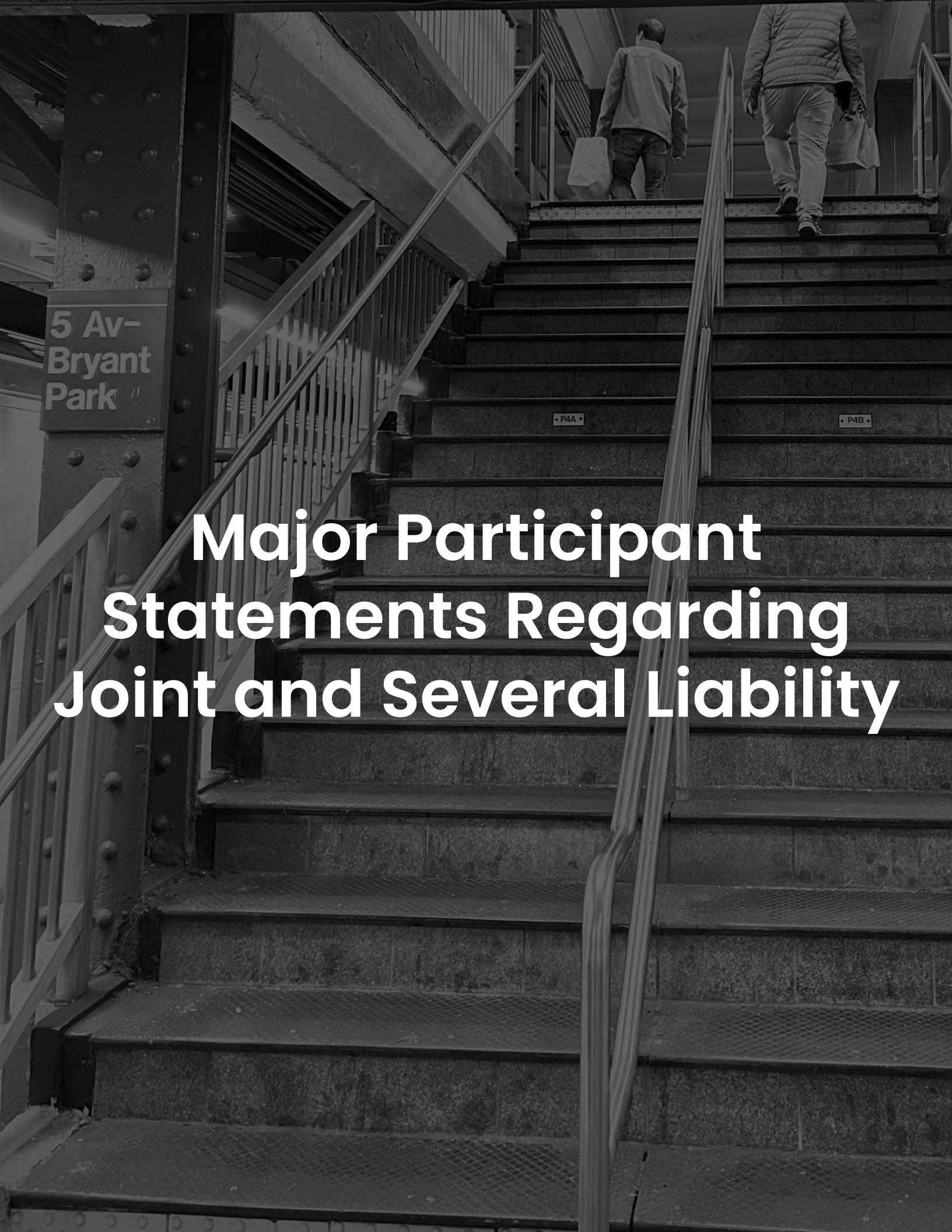
  
Richard E. Gavin, Treasurer



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Bryant  
Park

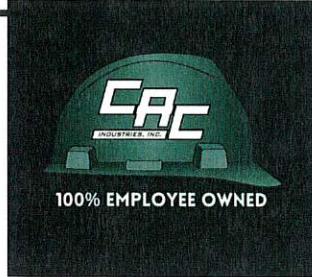
# Design-Builder Joint Venture Agreement

Not applicable.



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Bryant  
Park

# Major Participant Statements Regarding Joint and Several Liability



54-08 Vernon Blvd., Long Island City, NY 11101



718.729.3600



718.606.6995



[www.cacindinc.com](http://www.cacindinc.com)



The Metropolitan Transportation Authority  
Acting by the MTA Construction & Development Company  
2 Broadway, 18th Floor  
New York, New York 10004

**Re: Contract No. A37149 Design-Build Services for Accessibility Upgrades at 42<sup>nd</sup> Street-Bryant Park & 5<sup>th</sup> Avenue Stations**

To Whom It May Concern:

This is to confirm that C.A.C. Industries, Inc. is pursuing the referenced project solely as C.A.C. Industries, Inc. and not in a joint venture. Therefore, no joint and several liability letter is required.

Regards,

Michael A. Capasso  
CEO & President  
C.A.C. Industries, Inc.



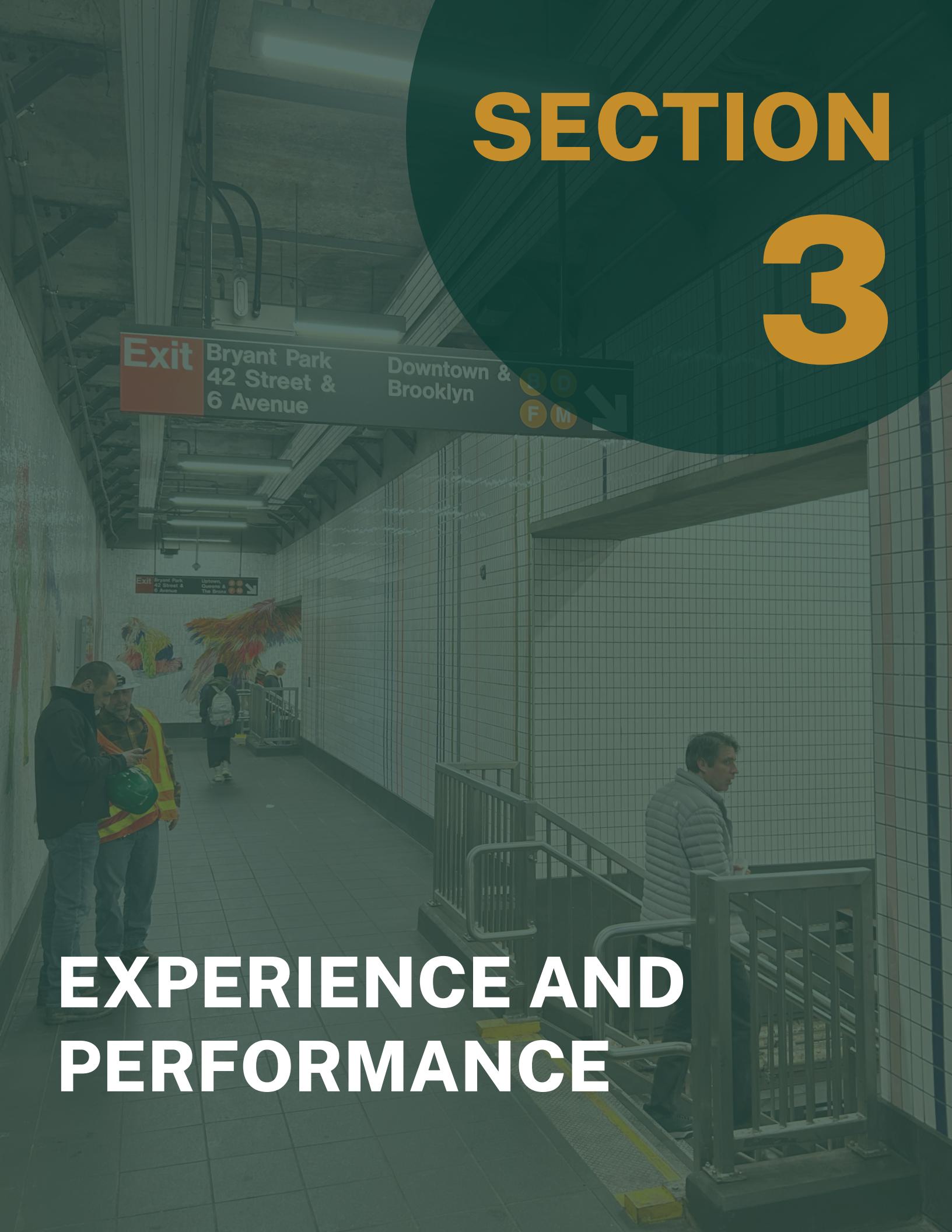
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# Major Participant Joint Venture Agreements

Not applicable.

# SECTION 3

EXPERIENCE AND  
PERFORMANCE



# Background and Experience Summaries

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• P4A •

• P4B •

# SECTION 3: BACKGROUND AND EXPERIENCES

## C.A.C. INDUSTRIES, INC. (PRINCIPAL/LEAD CONTRACTOR)

C.A.C. Industries, Inc. (C.A.C.) boasts a rich history of executing complex and high-profile projects across various sectors, including utilities, roadway reconstruction, parks projects, green infrastructure, and transit work. Over the years, C.A.C. has developed a reputation for excellence and reliability in handling intricate and demanding tasks. The diverse range of skills and proficiencies within our team enables us to offer innovative, in-house solutions tailored to the unique challenges of each project. Our skilled workforce is adept at navigating the complexities of multi-faceted projects, ensuring that we deliver exceptional results even under the most challenging conditions. This combination of expertise and innovation positions C.A.C. as a leader in the industry, capable of meeting and exceeding client expectations on every project.

### Relevant Experience

C.A.C. has a long-standing reputation for executing complex utility and infrastructure work while expanding its expertise into ADA compliance upgrades, elevator installations, and transit facility improvements. C.A.C. is highly skilled in performing utility relocations and structural modifications, including gas, steam, sewer, water main, electric, and communications work, all while maintaining a strong focus on safety, traffic protection, and minimizing impacts to the public and transit users.

C.A.C. has consistently delivered projects in sensitive environments, including active rail stations, areas adjacent to elevated structures, and heavily trafficked pedestrian corridors, making them well-suited to deliver ADA accessibility upgrades and elevator installations.

**C.A.C. and AECOM have worked closely together on major design-build ADA and elevator projects, including the MTA C&D Design-Build Services for ADA Upgrades at 8 Stations Package 2 and Package 4, both of which involved new elevators and ADA-compliant station enhancements.**

The team also collaborated on the MTA C&D Design-Build Services for a Railcar Acceptance and Testing Facility, and the USACE Design-Build for SUNY Old Westbury Alternate Care Site. These shared successes demonstrate the synergy

between C.A.C. and AECOM in delivering high-quality ADA accessibility and transit infrastructure improvements, particularly where complex construction logistics and stakeholder coordination are required.

### Recent MTA C&D Design-Build ADA Projects

#### A37135 Design-Build Services for ADA Upgrades at 8 Stations - Package 2

C.A.C. was heavily involved in the constructability portion of the elevator shaft design. C.A.C. worked with the design-build team to ensure the utility relocation was completed in a feasible and compliant manner, ensuring all utility standards of clearance, depth, and accessibility remained in compliance throughout the construction of the elevator shafts. C.A.C. worked closely with utility owners to ensure that design changes were communicated and approved prior to performing new work. C.A.C. also performed the relocation of sewers, water mains, hydrants, streetlights, and traffic lights to make way for the new elevator pits to be installed. This work was required at three of the eight stations within the contract – two in Queens and one in the Bronx.

#### A37139 ADA Upgrades at Various Stations - Package 4

C.A.C. was responsible for the installation and relocation of water mains, hydrants, ConEdison gas line and electrical ducts. C.A.C. supported the installation of micropiles and jet grout lagging as support of excavation (SOE) for the elevator shaft. C.A.C. excavated the elevator shafts to prepare for the elevator installation and station extension. As a member of the integrated design-build team, C.A.C.'s input on utility relocation constructability, as well as SOE and deep excavation for the elevator shafts, provided valuable insight to the overall successful completion of this contract.

#### A37129 14th Street Station Complex

C.A.C. relocated utilities interfering with new elevator shafts and stair placement at seven locations. The work required extensive excavation and utility coordination. C.A.C. successfully overcame unforeseen conditions, such as discovering rail tracks and concrete columns, which necessitated real time redesigns of utility relocation plans. C.A.C. formed a partnership to relocate a 16-inch high-pressure gas line, which required 24-hour continuous work over two full days to perform the reconnection and system activation. C.A.C. managed to meet the project schedule and manage the work under high-pressure.

### NYCEDC 16230008 High Line Reconstruction

C.A.C. constructed a variety of different accessways, including two elevators with structural glass elevator shafts and cabs, subsurface elevator and utility vaults, underground utilities, ornamental security bollards, and both major and temporary stairways. The scope of work also consisted of a 1.45-mile elevated linear park, greenway, and rail trail constructed on the former New York Central Railroad Spur on the lower west side of Manhattan. Additionally, the project required construction of a raised concrete plank pathway meandering along the elevated railway through a variety of sizes and style planting beds and special features.

### C-34869 - 207th Street Yard

C.A.C. completed the 207th Street Yard ahead of schedule with high quality and no safety incidents. All of the work took place either adjacent to or under an elevated railroad structure running between residential and commercial buildings of various sizes. The project required utility relocations to clear underground utilities for installation of interceptor sewer pipe by microtunneling through eight jet grouted tunneling pits along 10th Avenue and 215th Street in Manhattan. The work also included two regulators along 10th Avenue.

Simultaneously, electrical and communication conduits were run throughout to power the new pump stations for the new sanitary sewer installed in the shop. C.A.C. also completed manhole modifications throughout the yard to protect from storm surge flooding. To assist in the manhole modifications, track removal and replacement along with the signal and track power work took place all in coordination with NYCT's yard personnel, other contractors and MTA Supplied Services during track outages (G.O.'s).

### C-26201 - Second Avenue Subway Phase II Contract I

The work for this contract consists of extensive utility relocation (sewer, storm drain, water, electrical, gas, telecom) and removal, relocation, modification of street and sidewalk furniture (traffic signals, streetlights, trees, sidewalk vaults and cellars, etc.) involving diligent coordination between C.A.C., MTA, NYCDEP, Con Edison, ECS and NYCDOT. In addition, there is comprehensive remediation, protection, and underpinning of existing buildings. The work is being performed along Second Avenue adjacent to buildings, between 104th Street and 112th Street in preparation for the cut-and-cover construction of the new 106th Street Station, for the Second Avenue Subway Project-Phase 2.

### Organizational Structure, Management Resources, Equipment and Labor

C.A.C. is an experienced general contractor specializing in heavy civil and vertical transportation construction projects in New York City that employs 500+ staff. We carry core key field craft crews who are part of our ESOP family, and when necessary, supplement our core field craft crews by hiring from our affiliated unions that provide competent personnel. C.A.C. maintains an extensive 400+ fleet of company-owned construction equipment and vehicles in our 110,000 SF facility located in Long Island City in the heart of the city. If needed, we also rent from equipment rental companies to supplement our fleet.

*Exhibit 3-1: C.A.C.'s Record of Success*

PROJECT	RELEVANT ATTRIBUTES	Value (\$)	Design-Build	Railroad or Transit Infrastructure	Major Metro Area	ADA Compliance	Vertical Transportation	Elevators
			Icon	Icon	Icon	Icon	Icon	Icon
A-37139 ADA Upgrades at Various Stations – Package 4		\$146M*	Icon	Icon	Icon	Icon	Icon	Icon
A-37129 14th St. Station Complex		\$200M*	Icon	Icon	Icon	Icon	Icon	Icon
A-37135 ADA Stations MTA C&D, ADA Upgrades at 8 Stations – Package 2		\$242M*	Icon	Icon	Icon	Icon	Icon	Icon
HWP15XMTA Ped Ramps at MTA Facilities		\$7M			Icon	Icon		
C-26201 2nd Ave Subway – 106th St Station		\$116M	Icon	Icon	Icon	Icon	Icon	
C34869 NYCT 207th St. Yard Sewer Relocation		\$95.4M		Icon	Icon	Icon		
Highline Reconstruction (Section 2)		\$37M	Icon	Icon	Icon	Icon	Icon	Icon
HWX710 – Reconstruction of Bronx & Pelham Pkwy East Bound & Pelham Pkwy South		\$36M		Icon	Icon	Icon		
HWQ1161 – Reconstruction of 99th, 104th & 110th Avenues, Queens		\$59.5M		Icon	Icon			

\*Total Construction Contract Value

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## AECOM [DESIGNER]

AECOM USA, Inc. (AECOM) is a full-service, New York State-licensed corporation specializing in infrastructure engineering, design, and construction management. AECOM's New York Staff includes civil, structural, traffic, environmental, geotechnical, electrical, mechanical, and wastewater engineers; architects, planners, program, project, and construction managers; schedulers, cost engineers, estimators, inspectors, public information, and community relations experts; and a broad range of support personnel. With more than 1,700 employees in the New York metropolitan area, AECOM has the resources and technical expertise to deliver the design for ADA Upgrades at 42nd Street-Bryant Park and Fifth Avenue Stations. Consistently ranked among the top consulting firms by ENR, AECOM has earned a national reputation as a leader in the transportation and infrastructure industries by providing high-quality service; an integrated, multidisciplinary approach; exceptional project experience; and veteran project managers and principals — many of whom are former managers of transit and rail agencies.

## Relevant Experience

### MTA C&D Station Experience – ADA and State of Good Repair (SOGR)

AECOM has extensive experience in the management, design, and construction of complex ADA station upgrades and rehabilitations, as shown in Exhibit 3-2, including more than 30 years of working with the MTA and NYCT. AECOM's recent experience with all divisions and disciplines within NYCT — design, project management, ADA compliance, station renewals, SOGR, escalator replacement, and new elevators — demonstrates our experience and know-how to lead and complete the design scope for this project.

Recently, AECOM provided design and PMC services for ADA projects related to the ADA Upgrades at 42nd Street-Bryant Park and Fifth Avenue Stations and has been a major contributor to the important initiative made by MTA C&D to significantly increase the number of ADA-accessible stations within the NYCT system. For ADA Upgrades–Package 2, AECOM designed eleven new elevators at six stations and replaced six elevators at two stations. The project included SOGR work, major structural modifications, utility relocations, and MEP station design. ADA Upgrades–Package 4 included new elevators at four stations with similar modifications, as well as scope related to the addition of new elevators at existing stations. AECOM has also delivered ADA improvements for MTA C&D as PMC on projects such as 68th Street–Hunter College, where three new elevators were installed. We are currently the PMC on ADA Improvements–Package 5, which encompasses 13 stations, including installation of 18 new elevators and four ramps to be ADA accessible.

These ADA projects mentioned each include SOGR scope such as platform replacements and repair of steel and concrete elements throughout the mezzanine and platform. SOGR was included in design-build projects like NYCT Flushing Line–61st Street Woodside Station and ESI–Package 2, as well as design-bid-build projects such as New Lots Line Station Renewals, Culver Line Renewals, and Liberty Ave Line Station Renewals. The ESI–Package 2 scope included the replacement of precast platform slabs, windscreens, and canopy at the platform level. At the mezzanine level, all finishes were removed and replaced, and structural repairs were made to the underlying structure. At street level, stairs to the mezzanine were removed and replaced, which required coordination with various street-level agencies. The ESI project incorporated a design visual quality process for these replacement elements, which continued through construction.

The AECOM team has a robust approach to the assessment and replacement of deteriorated structural station elements. Our inspection teams have in-depth experience observing and field assessing deteriorated structural elements, designing replacement members, and providing a demolition and construction sequence in a fashion that minimizes interruption to existing facilities and limits scope of work to just the items that need repair and/or replacement.

## Design-Build Experience

AECOM has been working on design-build projects, particularly transit design-build, for over 25 years and has worked on well over \$20 billion in design-build projects nationally. Through this experience, AECOM brings many lessons learned that are directly applicable to a project of this magnitude. AECOM also brings a set of proven design-build project management tools and principles to apply to this project to help facilitate its success. AECOM operates a center of excellence specifically for design-build and has a national resource pool of more than 150 experts across all disciplines that we may call upon for specific project needs or to help us make sure that the project team implements best practices for design-build.

In addition to the ADA and SOGR projects mentioned above, design-build projects for MTA C&D that AECOM is currently working on or has recently completed include NYCT CBTC Crosstown, LIRR Penn Station East End Gateway, NYCT Railcar Facility, MNR Park Avenue Viaduct, and LIRR Hall Interlocking. Drawing from these experiences, AECOM will apply lessons learned to ultimately provide you with a more effective and efficient project.

Exhibit 3-2: AECOM's Record of Success

PROJECT	RELEVANT ATTRIBUTES	Value (\$)	Design-Build	Railroad or Transit Infrastructure	Major Metro Area	ADA Compliance	Vertical Transportation	Elevators
			Icon	Icon	Icon	Icon	Icon	Icon
ADA Upgrades at 8 Stations – Package 2		\$252.7M	Icon	Icon	Icon	Icon	Icon	Icon
ADA Upgrades at 4 Stations – Package 4		\$147.7M	Icon	Icon	Icon	Icon	Icon	Icon
NYCT ESI Package 2		\$149M	Icon	Icon	Icon	Icon		
Penn Station East End Gateway & LIRR Concourse		\$600M	Icon	Icon	Icon	Icon	Icon	Icon
ADA Upgrades – Package 5		\$577M	Icon *	Icon	Icon	Icon	Icon	Icon
D-B Services for Improvements on the Flushing Line		\$199M	Icon	Icon	Icon	Icon	Icon	
NYCT ADA Upgrade of Mosholu Parkway Station		\$35M	Icon	Icon	Icon	Icon	Icon	Icon
Second Avenue Subway Phase I		\$4.1B	Icon ^	Icon	Icon	Icon	Icon	Icon
Design-Build Services for CBTC Crosstown		\$405.5M	Icon	Icon	Icon			
NYCT New Lots Line Station Renewals		\$84.6M		Icon	Icon	Icon		
NYCT Culver Line Station		\$139M		Icon	Icon	Icon		
NYCT Liberty Avenue Line Station Renewals		\$80M		Icon	Icon	Icon		

\*PMC Portion of the Contract  
^ Design-Build and Design-Bid-Build Contract

## Organizational Structure, Management Resources, Equipment and Labor

AECOM has the local resources backed with unparalleled national expertise and understands the importance of providing management leadership and support to facilitate proactive decisions. With local resources in the New York Metro area of over 1,700 employees, including design professionals dedicated solely to transit projects across all design disciplines, AECOM has the depth and breadth of technical expertise to perform the design for ADA Upgrades at Bryant Park-42nd Street and Fifth Avenue Stations. AECOM has delivered numerous MTA and NYCT projects that have included all design disciplines and has a deep understanding of NYCT's design requirements and standards. AECOM's technical staff have experience working on design-build projects and understand the importance of close coordination with the contractor to produce efficient designs and maintain the construction schedule.

## VERDE ELECTRIC CORPORATION (ELECTRICAL SUBCONTRACTOR)

Founded in 1993, Verde is a premier electrical contractor in the New York Metropolitan area. Verde has extensive experience in the transportation and communication sector, along with the design-build method of delivery.

Verde is committed to performance, always striving to lead in these diversified services throughout the industry. Verde's portfolio of public clients includes the MTA, PANYNJ, NYSDOT, NYCDOT, NNYCDDC, along with Westchester, Orange, Rockland and Nassau counties.

## Relevant Experience

Verde has a robust portfolio of experience in the management, design, and construction of complex ADA station upgrades and rehabilitations, as shown in Exhibit 3-3.

### NYCT ESI Package 3 Enhanced Stations - A36622A

Verde was the electrical contractor for the subject bid. The work for this contract consists of data and telecommunication, complete fire alarm system, PA speaker system, lighting at all the stations, CSI components, security cameras, and access control system. Work also included all the power and communication work related to the elevator equipment, plumbing pumps, and the snow melt system. This project was completed per the project schedule and managed under high pressure.

### MTA Replacement of 2 Hydraulic Elevators at Grand Central Station Lexington Line

The work for this contract consists of demolition and removal of the existing elevators, and all installation, testing and

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commissioning of the replacement elevators and their related equipment as applicable per elevator. Systems includes, fire alarm, electrical power, lighting, heat trace scope, PA speakers and all power and communication to the elevators.

### **Metro North Purdy, Scarsdale & Hartsdale Station Improvements**

The project encompasses installation of 2 new ADA elevators at Hartsdale, one new ADA elevator at Scarsdale and one new ADA elevator at Purdy's station. Major work elements at the 3 stations included building a new Communication room and elevator machine room. Verde was the electrical subcontractor for the entire project. The work consisted of demolition of the existing electrical and communication system and replace with new site lighting in the parking lots, new electrical machine room with all the electric, lighting, CCTV, PA speaker and fire alarm systems related.

### **Organizational Structure, Management Resources, Equipment and Labor**

Verde employs over 320 personnel including craft and labor. As part of this team's strategic and proactive solutions to benefit this project, Verde will provide a dedicated and integrated construction management team from Project start to completion. Our management team will plan, organize, direct, and control activities to achieve project goals. These resources are critical to ensure the project runs efficiently, adapts to changes, and ultimately succeeds. Our management plan integrates construction, safety, quality, and commissioning as the main driving forces of the project. Our construction approach is based on our deep understanding of the work, knowledge of the systems to be integrated into, site constraints and our experiences working on similar projects. Our management team will ensure it provides the client with all required resources from project inception to final completion and closeout.

**As equipment and labor resources are essential for operational efficiency, Verde employs over 285 skilled Local 3 electricians to support the goals of all projects.**

### **MID-AMERICAN ELEVATOR COMPANY, INC. [ELEVATOR MANUFACTURER/INSTALLER/MAINTAINER]**

Mid-American Elevator started as a maintenance and repair contractor in Chicago in 1974. Over the last 51 years, the business focus has broadened from standard elevator installation, maintenance and repair to highly custom elevator installation, maintenance and repair, although the company maintains a robust standard elevator installation and maintenance services business. Mid-American has expanded from Chicago to include substantial operations in New York, Washington, D.C., Seattle, Miami and the ability to perform work anywhere in the United States, with a heavy focus on elevators for transit systems.

Our approach to elevator maintenance is founded on the concepts of aggressive preventative maintenance and elite customer service. Properly performed preventative maintenance reduces the frequency of callbacks, downtime and cost. Clear and frequent communication and responsiveness to our customers eliminates compounding problems caused by lack of understanding about our methodology and current customer priorities.

Mid-American Elevator's focus on preventative maintenance and customer service define our management of maintenance work and interface with customer agents. Our goal is to ensure that all preventative maintenance required to keep the elevators in proper running order is performed in a timely and professional fashion. We refuse to overload our maintenance mechanics with more elevators than they can reasonably take care of. This also allows for greater responsiveness. Mechanics who are not overloaded can respond to callbacks and customer service requests more quickly.

Our risk management approach allows us to manage customers facing risk by properly performing preventative maintenance in a timely fashion. Frequent and detailed examinations and adjustments of elevators helps to find potential passenger safety issues before they develop or cause an accident. We manage internal risk through

*Exhibit 3-3: Verde's Record of Success*

PROJECT	RELEVANT ATTRIBUTES	Value (\$)	Design-Build	Railroad or Transit Infrastructure	Major Metro Area	ADA Compliance	Vertical Transportation	Elevators
			■	■	■	■	■	■
A-36622A NYCT ESI Package 3 - Enhanced Stations		\$111.2M	■	■	■	■	■	■
MNR 1000092250 Metro-North Enhanced Stations		\$94M	■	■	■	■	■	■
E-34025R MTA Replacement of Two (2) Hydraulic Elevators at GCT		\$9.5M	■	■	■	■	■	■
MNR 1000106733 Purdy, Scarsdale & Hartsdale Station Improvements		\$15.5M	■	■	■	■	■	■

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a robust safety training and jobsite audit program that ensures our employees are performing their duties in the safest reasonable manner and in compliance with all OSHA regulations. All of our mechanics and managers have current OSHA 30-hour training.

We maintain an industry-standard, documented maintenance control program (ASME A.17.1) that ensures that all aspects and components of the elevator are properly examined and adjusted at prescribed intervals. Mid-American completes code required testing, both Category 1 and Category 5 in accordance with their ASME A.17.1 compliant maintenance control program. Mid-American Elevator has performed elevator maintenance work for transit systems around the United States.

#### **Amtrak in New York**

Current elevator and escalator maintainer for all Amtrak and New Jersey Transit at Penn Station with 24-hour maintenance and callbacks.

#### **Chicago Transit Authority**

Post construction and modernization warranty full maintenance with 24-hour call backs on dozens of elevators over the last 30 years.

#### **Washington Area Metropolitan Transit Authority**

Maintenance service contract with 24-hour callbacks on 250 WMATA elevators and escalators.

#### **Sound Transit in Seattle**

Post construction and modernization warranty full maintenance with 24-hour call backs on elevators installed in the last 2 years.

### **MODERN ELEVATOR INSTALLATIONS, INC. [ELEVATOR MANUFACTURER/INSTALLER/ MAINTAINER]**

Modern Elevator is a full-service elevator company, manufacturer, installer, and maintenance provider throughout North America. The Company was established in 2002 and is headquartered in Hamilton, Ontario, Canada. With offices in Toronto, New York and service vehicles stationed throughout various coverage areas. Modern Elevator's branch offices are located in New York & Toronto and manage all product procurement, installation, service, and maintenance.

Modern Elevator excels in Design-Build projects. Our forward thinking, solution driven, and innovative company culture is the recipe for our success. Collaborating on the design ensures you get a product that meets the requirements and works with the design. It allows Modern Elevator to provide insight, assuring the best option is selected giving the client elevator design/manufacture conformity, elevator performance, elevator reliability and longevity. Our design, our manufacturing and our installation involvement guarantees 100% accountability. Modern's experience covers all facets of elevator design,

manufacturing, installation, and maintenance. Including: Low rise to high rise buildings, Infrastructure and or private projects. High demand use transit and or hospital applications. Commercial and residential elevators. Our highly experienced engineers, project management teams and mechanics have years of experience dealing with design build projects and on a continuous basis perform in a manner that exceeds the scheduling and milestones.

Modern elevator has many certifications: Canadian Welding Bureau, American Welding Society, UL/ULC, Professional Engineers of Ontario, MEA, NYC DOB Pilot Program and Modern Elevator currently sits on the CSA B44-ANSI A17 Code Committee. Modern Elevator manufactures products in Canada and complies with all governing codes and carries all certifications necessary for compliance in each project specific jurisdiction. Manufacturing our own product allows us to be in control of quality, deliveries, assuring schedule and milestones are met.

#### **Past Projects**

Modern Elevator has supplied, managed the installation of 100 plus elevators in the City of New York metropolitan area over the last nine years, including work at LIRR's Murray Hill station, the JetBlue parking structure at JFK Airport, Terminal B at Newark Airport, and at the High Line, to name a few. Modern Elevator has 5-6 elevator projects on going in Toronto, Canada. We are currently working on 2 Transit type projects for Metrolinx, Go stations. The 2 projects locations, Bramalea Go Station and Rutherford Go Station. Each project consists of 6 glass elevators, parking structure elevators and 6 platform/tunnel elevators.

#### **Current Projects**

We will supply, install, and maintain.

#### **Others include**

4 elevators at Sunny Brook Hospital, 9 elevators at Ellies Condo Brook Hospital, 9 elevators at Ellies Condo which includes, commercial, retail and residential building (mid rise & high-rise applications) and 6 elevators at St. Lawrence market which is a high profile for City of Toronto Courthouse. We are currently working on 1 elevator project for Gruppo5 Construction at 18 Harrison, Manhattan, New York and finalizing a contract for the supply, installation and maintenance at the Taxi and Limousine Commission (TLC Wood). Design Build contract to bring (ADA) accessibility to many locations in Toronto, 42 new Modern Elevator designed, manufactured elevator installations and maintenance through 2021-2023 directly for the City of Toronto. In addition to acquiring the contract for 2-8 station design-build Accessibility initiative Elevator project with the NYCTA.

#### **Our Mission**

Provide innovative Design Build engineering solutions for all elevator applications.



**AECOM**

## Vision

Expand on our excellent reputation and brand by building on our foundations of loyalty, integrity, and honesty. We strive to be a top tier manufacturer, Installer and maintainer providing innovative products, services across North America.

## Resources

Modern Elevator Innovations Inc. (OEM) Project management and engineering design teams have a significant amount of experience with Design Build applications and would be one point of contact for the consultants and architectural firms throughout the design process. Once the initial designs are reviewed and approved our experienced production team, manufactures the elevators. Processing sheet, structural steel into elevators and elevator components. The latest technologies and CNC equipment is utilized for all fabrication. Our internal quality control process assures that all products are conformed to the design requirements issued by our engineering team. The procurement department consolidates all sourced equipment from

pre-qualified, preferred vendors that interfaces with the fabricated equipment manufactured by Modern Elevator. We utilize recognized, non-proprietary, reliable, and readily available components from the vendors. Components that are well known in the industry, by elevator consultants and by the MTA.

OEM goods and products are readily available. Many components designed with standardized practices and inventoried, while other repeat customized components can be produced quickly. An OEM that supports the client's performance requirements and overall goal of keeping the elevators running efficiently with minimal down time and call backs. Modern Elevator Innovations Inc's involvement with its branches ensures our clients of our long-term commitment to the products supplied. Taking on 100% accountability and offers 100% support in-regards to installation and the extended warranty. Transitioning from the installation and proceeding into Maintenance of the elevators, our comprehensive Maintenance Control Plan (MCP) is designed specifically around our products and developed / structured to optimize the efficiency and performance of the elevators.