

**AGREEMENT  
CITY OF TRENTON, NEW JERSEY  
BID2023-12  
RES. NO. 23-230  
AWARDED TO  
OTIS ELEVATOR COMPANY FOR THE MODERNIZATION OF THE ELEVATOR AT THE  
TRENTON WATER UTILITY  
PREVAILING WAGE APPLIES**

This Agreement, entered into this 5<sup>TH</sup> Day of MAY 2023 between the City of Trenton, a municipal corporation of the State of New Jersey, ("CITY") **319 EAST STATE STREET, TRENTON, NEW JERSEY 08608** and **OTIS ELEVATOR COMPANY, 30 TWOSOME DRIVE, MOORESTOWN, NEW JERSEY 05057** (Contractor"), witnesseth that:

**WHEREAS**, Contractor has bid, proposed or offered to furnish and deliver to the City the materials, supplies and/or goods to perform the services **in an amount not to exceed \$192,974.00 for a period of one (1) year;**

**FIRST**, A. Contractor, under the penalty expressed in the bond hereinafter mentioned, will furnish, supply and deliver to the City of Trenton the following materials, supplies or services as authorized by:

**RESOLUTION ACCEPTING A BID AND AWARDING A CONTRACT TO OTIS ELEVATOR COMPANY FOR THE  
MODERNIZATION OF THE ELEVATOR AT THE TRENTON WATER UTILITY, 333 CORTLAND ST., TRENTON, NJ FOR A  
PERIOD OF ONE (1) YEAR FROM DATE OF AWARD IN AN AMOUNT NOT TO EXCEED \$192,974.00  
BID 2023-12**

B. The contract shall submit with contracts with the following:

**UPDATED CERTIFICATE OF INSURANCE WITH SIGNED CONTRACTS**

**PERFORMANCE BOND REQUIRED WITH SIGNED CONTRACTS**

**SUBCONTRACTORS: MARSHALL INDUSTRIAL TECHNOLOGIES, ELECTRICAL; J III ELECTRONICS INC.,  
LIFE SAFETY FIRE:**

Such performance by Contractor will be in strict accordance with the terms and conditions of the bid specifications, the bid response and the authorizing resolution, which are included above and is incorporated by reference,. Additionally, Contractor will furnish good and ample security in a sum equal to the said contract price for the said articles and services.

**SECOND.** The City of Trenton will pay Contractor the total sum mentioned herein when the appropriate Department Director has executed a certification that the said articles or services have been furnished, delivered and accepted in full conformity to the aforementioned specifications and offer or proposal.

**THIRD.** The City of Trenton reserves the right to order a greater or lesser quantity, not to exceed twenty-five percent, of any or all of the articles named in the said offer or proposal than is stated therein, and it is distinctly agreed between the said parties that the price quoted in the offer or proposal of Contractor shall be regarded as a standard of prices, and the total sum mentioned herein as the consideration of this contract shall not be regarded as limiting the right of the City of Trenton to order such greater or lesser quantity.

**FOURTH.** In the event of the failure of Contractor to deliver to the City of Trenton, such articles or perform such work or labor as described in such quantities as ordered at the time stated for such delivery by the City of Trenton, or in the event that such articles as are delivered or work and labor performed do not meet the specifications or standards, as established by the City of Trenton for such articles or acceptance of such work and labor, then such delivery shall be rejected by telephone or written notice to the Agent or address indicated by the Contractor and by simultaneous and like notice to his surety. Additionally, if Contractor or his surety does not cure the default within the time set by the said Agent on behalf of the City of Trenton, then the said Agent on behalf of the City, shall have the right to procure such services or purchase such articles in their place and stead in the open market as are needed for replacement, and from the best source available in the judgment of the said Agent and to charge the expense of such articles or work performed to Contractor and to deduct the amount thereof from any moneys due or to become due to Contractor by virtue of this agreement. Provided, however, that the surety on the bond of Contractor for the faithful performance of this agreement shall be first notified of the necessity for such replacement, and given the same time allowance for such replacement as is given Contractor.

**FIFTH.** This contract shall not be amended, assigned or subcontracted without the consent of the City of Trenton in writing (if the total compensation payable thereunder shall thereby exceed \$2,500.00, approval by Resolution of the Governing Body shall be required), and any breach of this covenant shall authorize the City of Trenton, by its said Agent, to declare this contract null and void and to refuse to make any further payments thereunder to Contractor.

third party to mediate any disputes arising under this agreement and the mediation shall be conducted informally in a manner decided upon by the mediator".

SEVENTH. Contractor hereby agrees to pay all workmen as a minimum the prevailing wages rate in accordance with Chapter 150 of the New Jersey Laws of 1963, Prevailing Wages on Public Contracts and U.S. Department of Labor Wage Rates with the higher rate for any given occupation being the governing rate, and N.J.S.A. 10:2-1 et seq., prohibiting discrimination in employment on public contracts.

EIGHTH. During the performance of this contract, the contractor agrees as follows:

a. CONTRACTOR or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, or sex. CONTRACTOR will take affirmative action to ensure that such applicants are recruited and employed, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, gender identity or expression, affectional or sexual orientation, disability, nationality or sex. Such action shall include, but not be limited to the following: employment, up-grading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. CONTRACTOR agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause. (N.J.S.A. 10:5-33; N.J.A.C. 17:27-3.4)

b. CONTRACTOR or subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of CONTRACTOR, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, gender identity or expression, affectional or sexual orientation, disability, nationality or sex. (N.J.S.A. 10:5-33; N.J.A.C. 17:27-3.4)

c. CONTRACTOR or subcontractor where applicable, will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of CONTRACTOR's commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment. (N.J.S.A. 10:5-33; N.J.A.C. 17:27-3.4)

d. CONTRACTOR or subcontractor, where applicable, agrees to comply with any regulations promulgated by the Treasurer pursuant to P.L. 1975, c.127, as amended and supplemented from time to time. (N.J.A.C. 17:27-3.4)

Note: A public works contract for a subcontractor with a total work force of four or fewer employees or for a contractor or subcontractor performing under an existing Federally approved or sanctioned affirmative action program shall contain as mandatory language only paragraphs a, b, and c above, and the contract shall not contain any other mandatory language prescribed by N.J.A.C. 17:27. (N.J.A.C. 17:27-3.4) (c)

- e. All bidders and all contractors who are negotiating for a procurement or service contract with the public agency which is not subject to a federally approved or sanctioned affirmative action program are required to submit to the public agency, prior to or at the time the contract is submitted for signing by the public agency (in accordance with N.J.A.C. 17:27-4.3 promulgated by the Treasurer pursuant to P.L. 1975, c. 127), one of the following three documents:
1. Appropriate evidence that the contractor is operating under an existing federally approved or sanctioned affirmative action program; or
  2. A certificate of employee information report approval issued in accordance N.J.A.C. 17:27-4; or
  3. An initial employee information report consisting of forms provided by the affirmative action office and completed by the contractor in accordance with N.J.A.C. 17:27-4. (N.J.A.C. 17:27-3.3) (a)
- f. CONTRACTOR or subcontractor agrees to attempt in good faith to employ minority and female workers consistent with the applicable county employment goals prescribed by N.J.A.C. 17:27-5.2 promulgated by the Treasurer pursuant to P.L. 1975, c. 127, as amended and supplemented from time to time or in accordance with a binding determination of the applicable county employment goals determined by the affirmative action office pursuant

to N.J.A.C. 17:27-5.2 promulgated by the Treasurer pursuant to P.L. 1975, c. 127, as amended and supplemented from time to time. (N.J.A.C. 17:27-5.3) (a) (1)

g. CONTRACTOR or subcontractor agrees to inform in writing appropriate recruitment agencies in the area, including employment agencies, placement bureaus, colleges, universities, labor unions, that it does not discriminate on the basis of age, creed, color, national origin, ancestry, marital status or sex, gender identity or expression, and that it will discontinue the use of any recruitment agency which engages in direct or indirect discriminatory practices. (N.J.A.C. 17:27-5.3) (a) (2)

h. CONTRACTOR or subcontractor agrees to revise any of its testing procedures, if necessary, to assure that all personnel testing conforms with the principles of job-related testing, as established by the statutes and court decisions of the State of New Jersey and as established by applicable Federal law and applicable Federal court decisions. (N.J.A.C. 17:27-5.3) (a) (3)

i. CONTRACTOR or subcontractor agrees to review all procedures relating to transfer, upgrading, downgrading and layoff to ensure that all such actions are taken without regard to age, creed, color, national origin, ancestry, marital status or sex, and conform with the applicable employment goals, consistent with the statutes and court decisions of the State of New Jersey, and applicable Federal law and applicable Federal court decisions. (N.J.A.C. 17:27-5.3) (a) (4)

j. CONTRACTOR agrees that in the hiring of persons for the performance of work under this contract or any subcontract hereunder, or for the procurement, manufacture, assembling or furnishing of any such materials, equipment, supplies or services to be acquired under this contract, no contractor, nor any person acting on behalf of such contractor or subcontractor, shall, by reason of race, creed, color, national origin, ancestry, marital status, gender identity, or expression, affectional or sexual orientation or sex, discriminate against any person who is qualified and available to perform the work to which the employment relates. (N.J.S.A. 10:2-1) (a)

k. No contractor, subcontractor, nor any person on his behalf shall, in any manner, discriminate against or intimidate any employee engaged in the performance of work under this contract or any subcontract hereunder, or engaged in the procurement, manufacture, assembling or furnishing of any such materials, equipment, supplies or services to be acquired under such contract, on account of race, creed, color, national origin, ancestry, marital status, gender identity or expression, affectional or sexual orientation or sex. (N.J.S.A. 10:2-1) (b)

l. There may be deducted from the amount payable to the contractor by the contracting public agency, under this contract, a penalty of \$50.00 for each person for each calendar day during which such person is discriminated against or intimidated in violation of the provisions of the contract. (N.J.S.A. 10:2-1) (c)

m. This contract may be canceled or terminated by the contracting public agency, and all money due or to become due hereunder may be forfeited, for any violation of this section of the contract occurring after notice to the contractor from the contracting public agency of any prior violation of this section of the contract. (N.J.S.A. 10:2-1) (d)

n. The parties of this contract do hereby agree that the provisions of N.J.S.A. 10:2-1 through 10:2-4, dealing with discrimination in employment on public contracts, and the rules and regulations promulgated pursuant thereto, are hereby made a part of this contract and are binding upon them. (N.J.A.C. 13:6-1.1)

o. Contractor and subcontractor agree and guarantee to afford equal opportunity in performance of the contract and, except with respect to affectional or sexual orientation, and gender identity or expression in accordance with an affirmative action program approved by the State Treasurer. (N.J.S.A. 10:5-32 and 10:5-35) (a)

p. The parties of this contract do hereby agree that the provisions of Title II of the Americans with Disabilities Act of 1990, 42 U.S.C. Section 12101 et seq., which prohibits discrimination on the basis of disability by public entities in all services programs and activities provided or made available by public entities, and the rules and regulations promulgated pursuant thereto, are made a part of this contract. The contractor agrees to conduct all activities in compliance with the provisions of Title VI of the Civil Rights Act of 1964, the Rehabilitation Act of 1973, the Age Discrimination Act of 1975, Title IX of the Education Amendments of 1972, and the U.S. Department of Labor's regulations at 29 CFR Parts 31, 32 and 34.

Contractor shall cooperate with any state or federal reviews aimed at determining compliance with nondiscrimination laws and regulations authorized by State Law and expressly specified herein.

IN WITNESS WHEREOF, the City of Trenton has caused this agreement to be signed by the Mayor of the City of Trenton and its corporate seal to be hereto affixed, attested by the City Clerk, and Contractor has likewise caused this agreement to be executed the day and year first above written.

CITY OF TRENTON

Attest:

  
Brandon Garcia, RMC  
Municipal Clerk

  
W. Reed Gusclora, Esq. Mayor

Date

7/18/23

Date

7.10.23

and

OTIS ELEVATOR COMPANY, 30 TWOSOME DRIVE, MOORESTOWN, NEW JERSEY 05057

OUR ACCEPTANCE OF THIS  
AGREEMENT IS CONDITIONED  
ON PROVISIONS CONTAINED  
IN THE ATTACHED  
ACKNOWLEDGEMENT FORM  
# 5/30/2023

Attest:

  
~~Secretary~~

Regional sales  
manager

President

Date

Christine Kassis 6/13/2023

# RESOLUTION

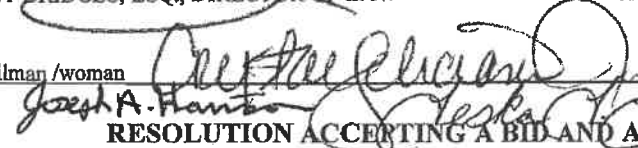
No. **23-230**Date of Adoption **MAY 04 2023**

Approved as to Form and Legality

Factual content certified by

  
WESLEY BRIDGES, ESQ., DIRECTOR OF LAW  
SEAN SEMPLE, ACTING DIRECTOR OF WATER & SEWER

Councilman /woman

  
presents the following Resolution:

**RESOLUTION ACCEPTING A BID AND AWARDED A CONTRACT TO  
OTIS ELEVATOR COMPANY FOR THE MODERNIZATION OF THE ELEVATOR AT THE  
TRENTON WATER UTILITY, 333 CORTLAND ST., TRENTON, NJ FOR A PERIOD OF  
ONE (1) YEAR FROM DATE OF AWARD IN AN AMOUNT NOT TO EXCEED \$192,974.00  
BID 2023-12**

**WHEREAS**, one (1) sealed bid was received in the Division of Purchasing at 11:00am by the Purchasing Agent on February 22, 2023, for Modernization of the Elevator at Trenton Water Utility, 333 Cortland Street for the City of Trenton, Department of Water and Sewer, Water Distribution Complex for a period of one (1) year; and

**WHEREAS**, the elevator at Trenton Water Utility, 333 Cortland Street has been inoperable for an extended amount of time. This contract is required for the necessary maintenance and safety of a working elevator to accommodate customers; and

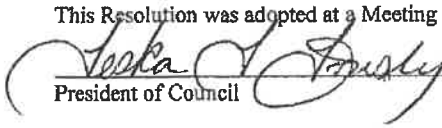
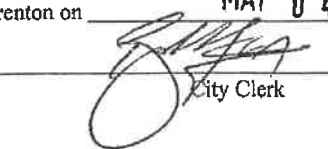
**WHEREAS** the sole bid of, Otis Elevator Company, 30 Twosome Drive, Moorestown, New Jersey 05057 is made pursuant to advertisement, be and is hereby accepted, as the lowest, responsible, responsive bidder complying with terms and specifications on file in the Division of Purchasing; and

**WHEREAS**, funds in an amount not to exceed \$192,974.00 have been certified to be available in the following account number: CY' 2023, 3-05- -55-5501-834-006 contingent upon the temporary and final adoption of CY'2023 budget. This contract shall be awarded for a period of one (1) year from time of award.

**NOW, THEREFORE, BE IT RESOLVED**, by the City Council of the City of Trenton that the Mayor is hereby authorized to execute a contract with Otis Elevator Company, 30 Twosome Drive, Moorestown, New Jersey 05057 in an amount not to exceed \$192,974.00 for Modernization of the Elevator at Trenton Water Utility, 333 Cortland Street for a period of one (1) year for the City of Trenton, Department of Water and Sewer for the said purposes in the manner prescribed by law.

	Aye	Nay	Abstain	Absent		Aye	Nay	Abstain	Absent		Aye	Nay	Abstain	Absent
EDWARDS	✓				GONZALEZ				✓	FRISBY	✓			
FELICIANO	✓				HARRISON	✓								
FIGUEROA				✓	WILLIAMS	✓								
KETTENBURG														

This Resolution was adopted at a Meeting of the City Council of the City of Trenton on

**MAY 04 2023**  
President of Council  
City Clerk

**SPECIFICATIONS  
FOR  
MODERNIZATION OF TRENTON WATER WORKS OTIS ELEVATOR  
333 CORTLAND STREET  
TRENTON, NJ 08638**

The City of Trenton, Department of Water and Sewer is soliciting sealed bids for the modernization of one (1) OTIS Elevator at Trenton Water Works, located at 333 Cortland Street, Trenton, New Jersey 08638. This Otis Elevator was installed on April 4, 1990, with a weight capacity of 2,000 pounds. The type of elevator controller originally installed was an OTIS LRV but has since been replaced by an OTIS HydroAccel controller. During this modernization project, the capacity, speed, travel, stops and openings shall be retained. This is a turnkey project.

**SPECIFICATIONS**

This bid specification calls for an upgrade of the entire elevator. This includes furnishing and installation of a microprocessor based hydraulic control system that will perform all the functions of safe elevator motion and elevator door control. This modernization also includes, but is not limited to, new operation equipment including self-leveling, emergency service and remote monitoring maintenance; new machine room equipment; new door equipment; new hoist way equipment; and new (or integral) operating panel, hall buttons and stations.

**OPERATION**

**NEW AUTOMATIC SELF-LEVELING**

The elevator shall be provided with automatic self-leveling that shall typically bring the elevator car level with the floor landings + 1/4" regardless of direction of travel. The automatic self-leveling shall correct for over or under travel and rope stretch.

**NEW SPECIAL EMERGENCY SERVICE**

Special Emergency Service operation shall be provided in compliance with the latest applicable revision of the ASME/ANSI A17.1 Code.

Special Emergency Service Phase I to return the elevator(s) non-stop to a designated floor shall be initiated by an elevator smoke detector system or a key switch provided in a lobby fixture.

The smoke detector system, if required, shall be included in work performed by others. The elevator contractor shall provide contacts on the elevator controller to receive signals from the smoke detector system.

A key switch in the car shall be provided for in-car control of each elevator when on Phase II of Special Emergency Service.

If an elevator is on independent service when the elevators are recalled on Phase I operation, a buzzer shall sound in the car and a jewel shall be illuminated, subject to applicable codes.

#### **NEW INDEPENDENT SERVICE**

When the Independent Service switch in the car operating panel is actuated ; it shall cancel previously registered car calls, disconnect the elevator from the hall buttons, and allow operation from the car buttons only. Door operation shall occur only after actuation of the "DOOR CLOSE" button.

#### **NEW INSPECTION OPERATION**

For inspection purposes, an enabling key switch shall be provided in the car operating panel to permit operation of the elevator from on top of the car and to make car and hall buttons inoperative.

#### **NEW REMOTE ELEVATOR MONITORING MAINTENANCE**

A microprocessor system that continuously monitors the Unit(s) on a 24-hour per day, year-round basis will be provided. The system will notify a dispatching center that the elevator is inoperative by sending a message via telephone line (Provided by others. See "Work by Others" section.) This makes it possible to have a mechanic dispatched rapidly in response to such a message.

#### **MACHINE ROOM EQUIPMENT**

##### **POWER SUPPLY**

The power supply will be 208 Volts with the new equipment arranged for this power supply.

##### **NEW CONTROLLER**

A microprocessor-based control system shall be provided to perform all the functions of safe elevator motion and elevator door control. This shall include all the hardware required to connect, transfer and interrupt power, and protect the motor against overloading. The system shall also perform group operational control. Controller will be equipped with generator operation option.

##### **EW SOFT STARTER**

A new solid-state starter shall be provided. It will be of the same power requirement and starting configuration that presently exists.

##### **NEW SUBMERSIBLE POWER UNIT**

The existing power unit will be replaced with a new power unit. The new power unit will consist of a positive displacement pump, motor, integral 4-coil control valve, oil

tank and muffler. The pump and motor are submerged and are mounted to the tank with rubber isolators to reduce vibration and noise.

## **DOOR EQUIPMENT**

### **NEW CLOSED LOOP DOOR OPERATOR**

Install a new closed loop door operator. Car and hoist way doors shall be power operated by means of a closed loop door operator mounted on top of the car designed to give consistent door performance with changes in temperature, wind, or minor obstruction in the door track. The system continually monitors door speed and position and adjusts it accordingly to match the pre-determined profile.

### **NEW DOOR-PROTECTION DEVICE**

Install a new solid state, infrared passenger protection device on the car door. Elevator doors shall be provided with a reopening device that will stop and reopen the car door(s) and hoist way door(s) automatically should the door(s) become obstructed by an object or person.

### **NEW INTERLOCKS**

The present interlocks will be retained. A thorough examination will be made of the interlocks. Any adjustment required shall be accomplished.

### **RETAIN CAR DOORS, TRACKS AND HANGERS**

The present car door tracks and hangers shall be retained and inspected for proper alignment. Any adjustment required shall be accomplished.

### **RETAIN HOISTWAY ENTRANCES**

The present hoist way entrances will be retained.

### **RETAIN HOISTWAY DOOR RESTRICTORS**

The present hoist way door restrictors shall be replaced if needed.

## **HOIST WAY EQUIPMENT**

### **NEW HOIST WAY OPERATING DEVICES**

Terminal stopping devices shall be provided to slow or automatically stop the car at the terminal landings and to automatically cut off the power and apply the brake, should the car travel beyond the terminal landings.

### **NEW PIT SWITCH**

An emergency stop switch shall be located in the pit accessible from the pit access door.



### **EMERGENCY RETURN UNIT**

An emergency return unit will be added to enable the car to return to the lowest landing and open doors in the event of a power loss.

The following hoist way equipment shall be retained :

- CAR GUIDES
- CAR INTERIOR (This item shall be removed if the City choses the alternate for new cab interior)
- FLOORING
- SPRING BUFFERS
- PIT EQUIPMENT
- JACK ASSEMBLY

### **CAR FIXTURES**

#### **NEW APPLIED (OR INTEGRAL) CAR OPERATING PANEL**

An applied (or integral) car operating panel shall be furnished. The panel shall contain a bank of mechanical illuminated buttons marked to correspond with the landings served, an emergency call button, emergency stop button, door open and door close buttons and a light switch. All buttons, when applicable, to be long life LED illumination. This panel shall be equipped with a button that shall initiate two-way communication between the car and a location inside the building, switching over to another location if call is unanswered.

#### **NEW EMERGENCY CAR LIGHTING**

An emergency power unit employing a 6-volt sealed rechargeable battery and totally static circuit shall be provided. The power unit shall illuminate the elevator car and provide current to the alarm bell in the event of normal power failure. The equipment shall comply with the requirements of the latest applicable revision of the ASME/ANSI A17.1 Code.

### **HALL FIXTURES**

#### **NEW HALL BUTTONS and HALL STATIONS**

New surface mount hall buttons and stations shall be installed at each landing. An up button and a down button at each intermediate landing and a single button at each terminal landing shall be installed. All buttons, when applicable, shall be long-life LED illumination. New stations will be replaced as per code and will replace what is currently installed.

## **WORK BY OTHERS**

Prospective bidders be advised that this is a turnkey project. Any item or work that needs to be done by other contractors will be the responsibility of the awarded bidder; therefore, subcontracting is allowed under this contract. Additionally, prospective bidders agree to pursue and schedule the work by other trades in a timely manner so as to not interrupt vendors work.

The following items must be performed by others, and the awarded contractor hereby agrees to provide this work in accordance with the applicable codes and enforcing authorities:

### **AIR CONDITIONING**

Provide suitable ventilation and cooling equipment, if required, to maintain the machine-room temperature between 60°F and 100°F. The relative humidity should not exceed 95 percent non-condensing.

### **BUILDING POWER**

Provide electrical power for light, tools, hoists, etc. during installation as well as electric current for starting, testing, and adjusting the elevator. Power of permanent characteristics to be provided to properly operate all the elevators concurrently scheduled to be modernized. Power must be a 3-phase 4 wire system with ground and bonded disconnects. Grounded leg delta systems are not acceptable.

### **SMOKE AND HEAT SYSTEM**

Provide elevator lobby, machine room and hoist way smoke detecting devices located as required and wired from the fire control center to a controller in the machine room. Hoist way devices are required to be made accessible from outside the elevator hoist way. Coordinate signal connections and necessary testing with the Elevator Contractor. Provide the following zones and locate signal circuits in a properly labeled junction box in the machine room:

Main Floor Recall: Provide one set of normally closed contacts that will open when any smoke sensor related to the elevators at the designated main landing senses smoke. This excludes other devices located in the machine room, hoist way or main egress floor.

Alternate Floor Recall: Provide one set of normally closed contacts that will open when the smoke sensor at the main egress floor senses smoke.

Machine Room/Hoist way Recall: Provide one set of normally closed contacts that will open when any smoke sensor located in the machine room or hoist way/pit senses smoke.

**SPRINKLERS**

Provide code compliant sprinkler system, as required, in the hoist way, pit and machine room. If sprinklers are being installed or altered in the hoist way(s), pit or the machine rooms, a means must be provided to disconnect three-phase power before water is applied. This is usually accomplished with a shunt trip breaker that must be located outside the elevator machine room. The shunt trip breaker may be activated by heat detectors located within 24" of the sprinkler heads and arranged to trip at a lower temperature than the sprinkler heads. A heat detector is not required in the pit if the sprinkler head is within 24" of the pit floor. Heat and smoke devices in elevator hoist ways must be installed with UL rated and lockable panels that are accessible for servicing from outside the hoist way. The panel interiors are to be guarded using a minimum 13-gauge metal with a pattern of maximum 3/4 inch holes.

**CUTTING AND PATCHING**

Do any cutting, (including cutouts to accommodate hall signal fixtures, entrances and/or machine room access) patching and painting of walls, floors, or partitions.

**MAIN DISCONNECT**

Provide a fused lockable disconnect switch or circuit breaker for each elevator per the National Electrical Code with feeder or branch wiring to the transformer. Size to suit elevator contractor. Provide a SHUNT TRIP disconnect, as required, if sprinklers are being provided. Provide suitable connections from the main disconnect to the elevator control equipment.

Electrical Feeder system to limit available short circuit to not more than 10k amps at the load side of the elevator main line disconnect.

**GROUND WIRE**

Provide a properly sized ground wire from the elevator controller(s) to the primary building ground.

**EMERGENCY COMMUNICATIONS – Phone Only**

Provide a continuously monitored phone line terminating at controller.

**EMERGENCY COMMUNICATIONS – Voice / Video / Text**

Provide a dedicated 125-volt, 15 ampere single-phase power supply with a fused SPST disconnect switch or circuit breaker, per group of elevators in the same location as the 3-phase elevator disconnect. This disconnect or breaker shall be capable of being locked in the open position per National Electrical Code or Canadian Electrical Code, as applicable. If Emergency (standby) power system is supplied this disconnect must be arranged to be feed from the same emergency (standby) power transfer switch as the elevator group. Provide a dedicated RJ45

internet network connection in each control room, minimum download speed 5Mbps per elevator, minimum upload speed 1Mbps per elevator.

#### **EMERGENCY COMMUNICATIONS – Intercom**

Provide a 120VAC 15A single phase power supply with fused disconnect switch (or circuit breaker) with GFCI outlet in machine room located as required for communications system.

#### **ELEVATOR MANAGEMENT SYSTEM (EMS)**

Provide a 120VAC 15A single phase power supply with two duplex GFCI outlet and fused disconnect switch (or circuit breaker) located in areas containing EMS equipment (typically machine room, fire command center, and/or building security station). Where Web based EMS supplied, provide CAT-5 cable from elevator machine room to EMS terminal locations.

#### **TEMPORARY CROSS DISPATCHING (CDT)**

For each group provide a 120VAC 15A single phase power supply with fused disconnect switch (or circuit breaker) with GFCI outlet located in elevator machine room.

#### **COMPASS**

For each group provide a 120-volt AC, 15-amp, single-phase power with GFCI outlet in the machine room with fused disconnect switch (or circuit breaker) capable of being locked in the open (off) position.

#### **GFCI OUTLETS**

Provide 120volt GFCI type convenience outlets in the machine room and in each pit. . Provide additional non-GFCI outlet in each pit for use by sump pump. Pits subject to sprinklers shall have NEMA 4 rated fixtures if located below 48" above pit floor

#### **CAR LIGHT POWER SUPPLY AND DISCONNECT**

For each car provide a 120-volt AC, 15-amp, single-phase power supply with fused disconnect switch (or circuit breaker) capable of being locked in the open (off) position with feeder wiring to each controller located in the machine room.

#### **REMOTE MONITORING POWER SUPPLY AND DISCONNECT**

Provide a separate 120-volt, 15-amp, single-phase power supply with fused SPST disconnect switch or circuit breaker for remote monitoring capable of being locked in the open position.

### **REMOTE MONITORING MAINTENANCE TELEPHONE LINE REQUIREMENTS**

Provide one (1) outside telephone line to the elevator machine room that allows data calls to and from a toll-free number at a dispatching center. The telephone line may be either a separate line dedicated to the remote monitoring maintenance equipment or may be an existing line that is shared between another telephone and the remote monitoring maintenance equipment.

### **INFORMATION DISPLAY POWER SUPPLY AND DISCONNECT**

Provide a separate 120-volt, AC, 15-amp, single-phase power supply with fused SPST disconnect switch with duplex outlets in the machine room or other locations as required, for information display terminal and controller of information display when provided. Also provide one (1) pair of shielded/twisted conductors between controller and machine room.

### **VIDEO DISPLAY POWER SUPPLY AND DISCONNECT**

For each car provide a 120-volt AC, 15-amp, single-phase power supply with fused disconnect switch (or circuit breaker) capable of being locked in the open (off) position and with GFCI outlet located in the machine room.

### **REMOTE PANELS**

Provide required conduit, with adequate pull boxes and ells from the elevator hoist way(s) to the location or locations required to facilitate the installation of Lobby Panels, Fire Control Room Panels or Elevator Monitoring Systems. Size and number as specified. Leave a measured pull tape in the conduit. Furnish and pull required conductors.

### **EMERGENCY (STANDBY) POWER**

If emergency power is available, verify and provide the following:

Power that meets the load characteristic requirements of the new control system. Power that is capable of operating and providing sufficient power to non-linear elevator loads and that is capable of absorbing regenerated power resulting from running elevators with overhauling loads.

Two conductors to the machine room from a normally closed auxiliary contact on the Owner's EP transfer switch. Contacts to open when power transfers to the emergency source.

Two additional conductors to the machine room from an adjustable timed relay on the Owner's EP transfer switch to indicate "request to transfer" from standby to normal power.

Power for 115VAC circuits that supply elevator cab lights, cab fan, communication means, EMS, and Compass dispatching systems (if applicable).

Power for machine room lighting, ventilation, and cooling means.

### **ROOF LIGHTING**

Lighting is required to illuminate machine room access paths on the roof.

### **LIGHTING**

Provide sufficient lighting in the buildings common areas to facilitate a safe working environment. Provide new or modify machine room lighting to provide a minimum of 19 ft. candles of illumination and new pit lighting to provide a minimum of 10ft. candles of illumination. The machine room light switch shall be located within 18" of the lock-set side of the entry door. Pit light switches shall be adjacent to the pit ladder and a minimum of 24" above the threshold level. Lighting must have code compliant guards of either grounded metal, plastic or comparable. Pits subject to sprinklers shall have NEMA 4 rated fixtures.

### **PROJECT BEING "DRIED-IN"**

Work, as required, to keep the elevator lobbies, hoist way, machine room and storage area "dried-in" for the entire length of the project.

### **MACHINE ROOM ACCESS**

Provide a self-locking and self-closing door for the elevator machine room. Access door to be adequately sized to accept our equipment. Modify machine room access, as required, to comply with code and facilitate safe egress of all equipment.

### **FIRE EXTINGUISHER**

Provide fire extinguisher in elevator machine room.

### **NON-ELEVATOR MATERIAL IN HOISTWAY**

Remove or encapsulate, as required, any non-elevator related pipes or wiring located in the elevator machine room or hoist way.

### **HOISTWAY VENTILATION**

Provide code compliant hoist way ventilation. Code requires a means to prevent the accumulation of hot air and gasses at the top of the hoist way. Pressurizing the hoist ways or providing vents from the top of the hoist way to the outside of the building usually accomplishes this. Vents shall not be less than 3 1/2% of the area of the hoist way nor less than 3 sq. ft. for each elevator car, whichever is greater. You may not vent the hoist way to the machine room. If the hoist way vents must run through the machine room, they must be enclosed in a fire rated structure and not violate clearances around our equipment.

**HOISTWAY LEDGES**

Provide a 75o angle constructed of a non-combustible material on all ledges that are 2" greater in the hoist way, excluding multi-hatch divider beams.

**SIDE COUNTERWEIGHT GUARDING**

Provide and install guarding of counterweights in a multiple elevator hoist way as required, when a counterweight is located between elevators, the counterweight runway shall be guarded on the side next to the adjacent elevator. The guarding must meet or exceed the requirements of ASME A17.1 – 2007, section 2.3.2.3.

**SUMP HOLE GRATING**

Provide a flush grating over the sump hole located in the elevator pit.

**DISPOSAL**

The disposal of removed elevator components; machines, controllers, ropes, hydraulic fluid, oils, buffers and packing materials from the new equipment and any and all related materials shall be the sole responsibility of the Customer or owner. A dumpster is provided on site, we will deposit waste materials in the dumpster or at an agreed upon on-site location for removal by the Customer or owner.

**PIT LADDERS**

Provide a pit ladder, as required, in each pit that does not have walk-in access doors. Ladder shall extend 48" above first landing access door.

**ADDITIONAL STOPS/OPENINGS**

Extend the existing hoist ways and add additional landing(s) and new machine room. Hoist way and machine room shall be constructed in accordance with applicable building codes and ANSI A17.1.

Ledges over 2" wide shall have a 75° bevel on top. (Except separator beams) Hoist way shall be fire rated and may require patching of holes. No other pipes or electrical conduit not associated with the elevator equipment are allowed in the hoist way. Power feeders may not run up the hoist way, except by special permission of the governing authority, and shall not contain splices or junction boxes in the hoist way.

Provide crane to bring new material and removal of the machine room equipment to new machine room.

Provide temporary roof as required to provide continuously dry hoist ways and machine rooms.

Perform all demolition of old machine room slab and structure. Protect existing elevator cars and equipment from demolition damage, dust, and debris.

Supply new machine beams and beams supports per reactions supplied by vendor.

Provide new machine room slab to suit reactions. Remove any construction forms, scaffold or decking from hoist way. Cut and patch hoist ways as required to provide a legal hoist way.

Provide, maintain, and remove any temporary barricades per OSHA or local authority requirements and furnish barricades to protect the public from access to construction areas.

Supply and install adequate support for guide rail fastening, including separator beams where required.

Provide adequate fastening for hoist way entrances and sills.

Provide finished floor elevation reference height at time of installation of new entrance sills.

Provide legal access to new machine room (and temporary access per OSHA requirements during construction).

Grout or finish blocking of new entrances to provide a fire rated enclosure.

Provide hoist beams over each elevator hoist way in machine room rated to hoist elevator machines.

Finish painting of new hoist way entrances shall be by others if prime entrances are selected.

#### **EMERGENCY RETURN UNIT (ERU)**

If an ERU battery-operated lowering device is being provided with your hydraulic elevator modernization than others are to provide an auxiliary contact in either the existing lockable disconnect (if currently code compliant) or in a new code compliant lockable disconnect.

#### **LOCKOUT TAG OUT**

In furtherance of OSHA's directive contained in 29 C.F.R. § 1910.147(f)(2)(i), which requires that a service provider (an "outside employer") and its customer (an "on-site employer") must inform each other of their respective lock out/tag out ("LOTO") procedures whenever outside servicing personnel are to be engaged in control of hazardous energy activities on the customer's site, vendor incorporates by reference its mechanical LOTO procedures and its electrical LOTO procedures. Customer agrees that it will disseminate these procedures throughout its organization to the appropriate personnel who may interact with vendor personnel while vendor personnel are working on site at Customer's facility.

#### **CONFINED SPACES**

The machine room, hoist way, pit, and mezzanine ("Elevator Spaces") may be considered Permit- Required Confined Spaces as defined by the Occupational Safety and Health Organization ("OSHA"), 29 C.F.R. § 1910.146(b) and § 1926 Subpart AA. Vendor shall document process to control or eliminate hazards and classify such Elevator Spaces as non-permit required confined spaces. In the event that the Customer, others, or unique site conditions or hazards (such as chemical manufacturing sites) require vendor to handle such Elevator Spaces as Permit-



Required Confined Spaces, the Customer or owner will be responsible for supplying, at its expense, all resources, including monitoring, permitting, attendants and rescue planning associated with handling such Elevator Spaces as Permit-Required Confined Spaces. The Customer or owner is required to inform vendor of all known or potential hazards related to Elevator Spaces that vendor may be required to access prior to vendor performing any work in such spaces. Further, the Customer or owner is required to communicate any changes in the conditions associated with such Elevator Spaces or activities in or around such spaces that could introduce a hazard into such spaces.

### **HAZARDOUS MATERIALS**

The existence of asbestos or other hazardous material in any elevator hoist way, machine room, hallway, or other place in the building where vendor's personnel are or may be required to perform their work. In the event it should become necessary to abate, encapsulate or remove asbestos or other hazardous material from the building, TWW agree to be responsible for such abatement, encapsulation or removal, and any governmental reporting, and in such event, vendor shall be entitled to (i) delay its work until it is determined to vendor's satisfaction that no hazard exists and (ii) compensation for delays encountered

### **ELEVATOR IMPROVEMENTS - ALTERNATES**

#### **CAB AIR PURIFIER**

##### **ALTERNATE # 1**

Vendor will furnish and install Cab Air Purifier to existing elevator fan. Additionally, vendor will modify the existing fan to allow air to flow across the ionizer and into the cab.

The Cab Air Purifier shall use proactive air purification technologies to minimize airborne viruses safely by using bipolar ionization, which creates millions of positive and negative ions, a proven method of virus reduction.

The purpose of this air purifier system is to safely, proactively, and continuously purify the elevator cab air, killing harmful, disease-inducing microbes such as MS2 Bacteriophage – a virus similar to SARSCoV-2 (the virus that causes COVID-19) at 97.5% efficacy when airborne and 81% efficacy on surfaces when exposed to the device for 10 minutes, and similar viruses. The filter reduces airborne allergens and other particulate matter and neutralizes odors and VOCs.  
Compliant with ASME A17.1 / CSA B44 and NFPA70 / CSA22.1

**CAB INTERIOR UPGRADES**  
**ALTERNATE # 2**

Replacement of current elevator car interior panels with new interior panels. Color, design, and/or material will be selected by the point of contact for this project at Trenton Water Works. Costs should include all labor and material to remove the old car interior or install the new one. Interior includes standard cab panels, handrails, and ceiling.

**EXPEDITED INSTALLATION**  
**ALTERNATE #3**

Vendor to install the elevator equipment on an expedited schedule. The anticipated installation time is 8 working days. This time frame is predicated on the work by others being completed prior to the start of the elevator equipment. Vendor understands that time is of the essence and will make every attempt to install the elevator in the expedited timeline. If an expedited option is chosen, any work that involves the cab refurbishment or door work beyond just the door operator will be completed after the initial modernization is performed and inspecting by State of New Jersey Division of Elevator Safety and Compliance. The extent of the work to be performed is either described above or in the attached specification which is incorporated into and made a part of this document.

## CONTRACT AWARD

Upon opening bids, pricing shall remain firm for a period of sixty (60) calendar days. In the event that the award is not made within sixty (60) calendar days, bidders may hold their bid consideration beyond sixty days or until the contract is awarded.

☒ Check here if willing to hold the pricing consideration beyond sixty days or until the contract is awarded.

☐ Check here if not willing to hold the pricing consideration beyond sixty days or until the contract is awarded.

  
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**AUTHORIZED SIGNATURE**