

ATTACHMENT H – SCOPE OF WORK

(SOUTH AND EAST HUBS)

▪ Background

The City University of New York (CUNY) Facilities Shared Services (FSS) provides centralized facilities support and maintenance services to campuses across New York City. As part of this solicitation, the participating campuses have been organized into the following geographic regions:

South Region: Brooklyn College, New York City College of Technology (NYCCT), Medgar Evers College (MEC), Kingsborough Community College (KBCC), and the College of Staten Island (CSI).

East Region: LaGuardia Community College, Queensborough Community College, York College, and Queens College.

The campuses included in this solicitation comprise a diverse range of facilities with varying operational requirements, building systems, and infrastructure. These facilities include academic buildings, administrative offices, residence halls, athletic facilities, and other specialized campus environments that support the educational mission of the University.

▪ Anticipated Contract Term

The Contract Term shall be for a period of Five (5) years, commencing upon approval of the Contract by the Attorney General and the New York State or New York City Comptroller, as applicable.

A. Preventive Maintenance Labor

1. The Contractor shall provide scheduled systematic examinations, adjustments, cleaning and lubrication of all machinery, machinery spaces, trusses for escalators, hoist ways and pits. The Contractor shall include the following minimums on site that are to be dedicated to routine preventive maintenance. These are minimum requirements and in all cases the Contractor is responsible to provide the amount of time per device necessary to complete all tasks:
 - i. One hour per month per Hydraulic Elevator
 - ii. Two hours per month per Traction Elevator
 - iii. One hour per three-month period per ADA, Wheelchair Lift, and Dumbwaiter
 - iv. Six hours per three-month period per Escalator

v. Three hours per three-month period per Vertical Conveyor

2. The Contractor shall formulate its proposed schedule for the forthcoming month and/or quarter incorporating the "minimum" preventive maintenance requirements specified herein for all units. The schedule shall consist of the anticipated "out of service" times for each unit and the procedure to be performed. Deviations from this master schedule as desired by Contractor or mandated by other building and equipment conditions shall be reported to CUNY for approval.
3. When conditions warrant or CUNY requests a revised schedule be submitted for the balance of the year, the Contractor shall prepare same incorporating the record history of preventive maintenance procedures accomplished prior to the revision.
4. Prior to commencement of each site visit, the Contractor shall obtain a list of complaints or other recorded vertical transportation problems from the management representative for building services. Corrective actions shall be implemented based on the severity of the complaint, required extra work repairs and scheduled maintenance procedures as approved by CUNY or designee. Prior to leaving each site visit, the Contractor shall review with CUNY or Designee the corrective action taken on each noted item. The Contractor shall provide a written report when requested.
5. The Contractor shall assign a manager's representative(s) and manager's assistant(s) who shall be in charge of all Contractor personnel and services provided under this Project. The manager(s) shall have the overall responsibility on a 24-hour, seven days per week basis.
6. The Contractor's manager, assistant manager, superintendent, supervisor and/or foreperson shall each be authorized by the Contractor to receive and put into effect promptly all orders, directions, or other instructions from CUNY's designated representatives when they are in charge of operations at the building, provided such instructions do not adversely affect the Agreement nor the safe operations of the equipment or the Contractor's personnel and public safety. The Contractor's manager representative shall formulate a chain of command and time schedule for approval by CUNY representatives. During normal working hours, coordination of services shall be directed through an on-site representative or, when conditions warrant, a designated assistant. Requirements for scheduling procedures, recording events, personnel employed, or other documentation shall be the responsibility of the designated Contractor's representative when the manager or his assistant is not on site or available to fulfill the mandated requirements.

7. The preventative maintenance specified herein is considered the minimum for all equipment. If specific equipment requires additional preventative maintenance for safe reliable operation, as specified by the manufacturer or by American Society of Mechanical Engineers (ASME) 17.1/17.2 2022 A17.1 standards, the Contractor shall perform the required additional preventative maintenance and all required testing without added cost to CUNY.
8. Any revisions of an agreed upon maintenance time schedule must have the prior written approval of CUNY. CUNY shall have the right to revise an established maintenance time schedule by giving the Contractor notice and at no additional cost to CUNY for work performed during regular working hours.
9. If for any reason CUNY managing agent notifies the Contractor that maintenance services are not allowed or required for any said month(s), the Contractor shall not be penalized for not performing their required hours.

B. Maintenance of Elevators, Wheelchair Platform Lifts, and Vertical Reciprocating Conveyors

The Contractor shall:

1. Use all reasonable care to keep the vertical transportation systems in proper, safe, and efficient operating condition, twenty-four hours per day, seven days per week, including legal holidays. The Contractor shall furnish all labor, materials, supplies, parts, equipment, temporary barricades, warning signs, and do all things necessary or proper for or incidental to such maintenance. Maintenance hereunder shall be deemed to include such removal and replacement of equipment and materials as may be necessary or desirable to afford access to the equipment for maintenance or repair. All maintenance shall be at least in accordance with the provisions of law, as well as with governmental rules, regulations, and orders applicable. Whenever services are rendered, it will be the Contractor's responsibility to contact CUNY to report the kind of service rendered.
2. Provide timely on-site mechanic.
3. Perform maintenance service for each vertical transportation system at the minimum frequencies indicated hereunder, subject to a time schedule submitted to and approved by CUNY, the Authority Having Jurisdiction (AHJ) code requirements and in accordance with ASME 17.1/17.2 2022 A17.1. The "Schedule of Inspections, Checks and Services", indicates the minimum maintenance routines required to be performed. Preventative maintenance and/or testing procedures for vertical transportation equipment shall be

performed on one (1) unit at a time within the same site during the normal working hours of Contractor as approved by CUNY.

4. Prior to commencement of services, formulate a schedule for the forthcoming year incorporating the "minimum" requirements specified herein for all units in a format developed in accordance with the mandated ASME 17.1/17.2 2022 A17.1 Maintenance Control Program. (MCP) For Cart conveyors, Plow lifts and other equipment that is not covered by ASME 17.1/17.2 2022 A17.1, the Contractor shall formulate a schedule in accordance with manufacturer's specifications and codes adopted by the AHJ for the specific equipment. In addition, a written MCP as outlined in A17.1 shall be provided to CUNY within ninety (90) days from the execution of a contract. This schedule shall consist of the anticipated "out of service" times for each unit and the procedure to be performed. The Contractor shall furnish the required outage time and duration prior to the equipment being removed from service. The schedule and associated downtime shall be confirmed and accepted by CUNY prior to commencement of the work. At no time shall a device be left offline for an extended period of time without prior approval from CUNY. Deviations from this master schedule as desired by Contractor or mandated by other Site and equipment conditions shall be reported to CUNY for approval. When conditions warrant or CUNY requests a revised schedule be submitted for the balance of the year, the Contractor shall prepare same incorporating the recorded history of preventative maintenance procedures accomplished prior to the revision.
5. Make at a minimum, the following scheduled inspections, checks, and services to each of the vertical transportation systems and all of their individual components, and at the indicated frequencies as further specified:
 - i. As Needed: Operate Vertical Transportation Systems: (From inside the car under normal operation.)
 - a. Check for any unusual noise or operation function.
 - b. Check floor stopping accuracy, leveling, pre-door opening.
 - c. Check alarm bell stop switch.
 - d. Check door protection operational appurtenances.
 - e. Perform necessary, immediate repairs and adjustments.
 - f. Check operating and signal equipment.
 - g. Check emergency communication system.

ii. As Needed: Machine Room and Secondary:

- a. Observe controllers and relay panels. Check contactors for burning and wear. Inspect wiring and physical condition of components for deteriorations, heating, and contamination. Review hydraulic control valves and associated apparatus.
- b. Motors and/or Generators - Check for proper lubrication of bearings. Inspect brushes and commutation with car in operation. Check each unit for noise, vibration, overheating and clearances between rotating elements and poles.
- c. Hoisting Machines and Brakes - Check all lubrication provisions, empty drip pans, and wipe down equipment. Observe worm gears for backlash and thrust play where applicable. Inspect brake components for wear and operation. Observe physical conditions in standing and operating modes.
- d. Drive Sheaves and Wire Ropes - Observe physical conditions in standing and operating modes.
- e. Overspeed Governor and Auxiliary Sheaves - Check for any unusual noise, vibrations, or other physical deteriorations.
- f. Perform necessary immediate repairs and adjustments.

iii. Monthly (12 times per year)

- a. Perform general inspection of machinery, traction motor, generator, brushes, gearbox, pulleys, brakes, governor, selectors, or floor controllers. Lubricate as required.
- b. Empty drip pans, discard oil, check reservoir oil level, and add oil as needed.
- c. Inspect and lubricate machinery, contacts, linkage, and gearing.
- d. Clean and inspect the controller, selectors, relays, connectors, and contacts.
- e. Ride the car and observe the operation of doors, leveling, reopening devices, and smoothness.
- f. If rails are lubricated, check condition and lubrication. Service lubricators.

- g. Check operation of all hoistway door interlocks.
 - h. Inspect all lighting associated with the vertical transportation systems, including, but not limited to pit lights, equipment room lights, shaft way lights, floor indication lights, car and hall station push button lights, interior and exterior direction lights, arrow lights, signal lantern lights, underfloor lights, cab, entrance, and roof lights. Replace as needed. The Contractor shall repair all inoperative lights and so indicate in the checklist of the "Service Maintenance Form" specified hereinafter. Check all alarms and maintain them in proper working order. In addition, all car lighting, indicator, and other incandescent lighting is to be repaired within the first two months of the Term and every year thereafter.
 - i. Check fire service signals and operations and update the monthly testing log.
 - j. Remove litter, dust, oil, and other extraneous materials from all machine room equipment, door saddles, and other areas of the elevators not accessible from the elevator lobby.
 - k. Clean trash from pit and empty drip pans, discard oil. Examine plunger seals and correct excess leakage.
 - l. Confirmed that two-way communications are operable and clear communication to the call center designated by CUNY is functioning correctly within AHJ requirements.
- iv. Quarterly (4 times per year)
- a. Observe operation of vertical transportation systems throughout their full range and at all floors it serves to test controls, safety devices, leveling, re-leveling, and other devices.
 - b. Check door operation. Clean, lubricate and adjust brake checks, linkages, gears, wiring, motor, check keys, set screws, contacts, belts, chains, and cams.
 - c. Inspect the interior of the cab. Test telephone or communication system, normal and emergency lights, fan, emergency call system or alarm, miscellaneous hardware, control panel, and emergency lights.
 - d. Inspect hoist way and pit. Clean and lubricate equipment as required. Service guide rail lubrication.

- e. Observe operation of motor, generator, brakes, governor, traction machinery, and sheaves.
- f. Test the manual and emergency control applicable to systems.
- g. Check oil level in car and counterweight oil buffers, oil hydraulic systems, add oil as required.
- h. Visually inspect the controller, selector, contacts, and relays. Check adjustments and replace the contact as required.
- i. Check hallway doors. Clean, lubricate, and adjust tracks, hangers and upthrust, eccentrics, linkage, gibs, and interlocks.
- j. Clean, adjust and lubricate car door or gate tracks, pivots, hangers, car grille, and stile channels.
- k. Correct all complaints and conditions recorded. Perform necessary immediate repairs and adjustments.
- l. Operate Vertical Transportation Systems: (From inside the car under normal operations).
 - 1. Check for any unusual noise or operational function.
 - 2. Check floor stopping accuracy/leveling/pre-door opening.
 - 3. Check alarm bell/stop switch.
 - 4. Check door protection/operational appurtenances.
 - 5. Check all operating and signal fixtures for illumination and audible functions.
 - 6. Check interior ventilation provisions, emergency lighting, light controls, and auxiliary equipment.
 - 7. Check and observe door operations. Inspect door alignment, guides, and closing pressure. Adjust door timing features as required.
- m. Machine Room and Secondary:
 - 1. Observe controllers and relay panels. Check contactors for burning and wear. Inspect wiring and physical condition of components for deterioration, heating, and contamination.
 - 2. Service and calibrate seismic switch.
 - 3. Check all controller resistance tubes, grids, and connections for obvious deficiencies
 - 4. Remove controller fuses. Clean fuses and holders.

5. Inspect selector and/or encoder drive components and operating functions. Lubricate components per the Original Equipment Manufacturer (O.E.M.) specifications.
6. Inspect selector and/or encoder drive components and operating functions. Lubricate components per the O.E.M. specifications.
7. Motors and/or Generators - Check for proper lubrication of bearings. Inspect brushes and commutation with the car in operation. Check each unit for noise, vibration, and heating. Check brush tensioning and wear. Perform a visual inspection of armature, field coils, and interpole.
8. Windings, connections, leads, and commutator risers for physical deteriorations and damaged insulation.
9. Hoisting Machines and Brakes - Check all lubrication provisions, empty drip pans, and wipe down equipment. Observe worm gears for backlash and thrust play. Inspect brake components for wear and operation. Check all machine component fastenings to include drive sheave and ring gear bolts, machine hold-downs, couplings, brake drum pulleys, isolation mounts, and covers. Inspect brake linings and drum surfaces.
10. Drive Sheaves and Wire Ropes - Observe physical conditions in standing and operating modes. Inspect the position of wire ropes in traction drive sheave grooves. Monitor rope slippage under normal operating modes. Inspect all speed monitoring and control apparatus.
11. Coded Belts - Observe physical conditions in standing and operating modes. Inspect the position of coated belts in traction drive sheave grooves. Monitor rope slippage under normal operating modes. Inspect all speed monitoring and control apparatus as outlined by the O.E.M. Ensure any coated belt monitoring device is functioning properly.
12. Overspeed Governor/Auxiliary Sheaves - Check for any unusual noise, vibrations, or other physical deteriorations. Ensure seals and tags are properly affixed and legible. Lubricate governor(s), selector drives, and auxiliary sheave components in accordance with O.E.M. specifications.

n. Car Top:

1. Clean, lubricate, and adjust the master door operator when conditions warrant. Adjust the clutch/vane to pick-up roller clearances.
2. Inspect car guides for wear and alignment. (Lubricate sliding shoe systems.) Adjust guide tensioning and observe operation.
3. Inspect the car and counterweight cable hitches. Replace worn or noisy rollers. Adjust the cab steadiers.
4. Inspect counterweight safety mechanism and component hitch connections.
5. Inspect counterweight derailment system.
6. Inspect counterweight assembly, alignment, and cable tensioning/wear.
7. Inspect door engaging equipment, car and shaft way door top track assemblies, safety interlock switches, and operating linkages for physical wear, dirt, or other deteriorations. Clean, lubricate, repair, and adjust systems when conditions warrant.
8. Observe the condition of upper slow-down, directional, and final limit switch devices.
9. Inspect wire rope or coated steel belt conditions and equalization at a minimum of six points in the shaft way.
10. Inspect hoist way landing, leveling, and encoding equipment for alignment, operation, and physical condition.
11. Inspect top of car operating station, emergency exit cover, work lighting, auxiliary safety switches, tapes, tape readers, and appurtenances.

o. Pit Area:

1. Clean and lubricate the governor tension sheave assembly. Check weighted clearance. Inspect cable condition.
2. Observe the condition of buffer equipment and mountings, strikers, plates, switches, and blocking.

3. Check stop switch and lighting provisions. Inspect and service oil hydraulic return systems.
4. Inspect compensation equipment. Lubricate applicable component parts and check electrical or other safety provisions for physical deterioration.
5. Inspect bottom car guides for wear, alignment, and tensioning. Replace worn or noisy rollers.
6. Inspect the bottom of the car, safety mechanisms, electrical traveling cables, and component hitch connections.
7. Observe the condition of bottom terminal slow-down, directional, and final limit switch devices, pit area, and remove all trash and debris.
8. Check counterweight run by clearance.
9. Inspect sump pump and piping.

p. Miscellaneous:

1. Check all indicating lights, lanterns, gongs, and audible and visible signals for proper operation.
2. Check all hall push buttons for proper operation.
3. Verify that mandated emergency operation testing has been performed per local law requirements, governing authority regulations, and as directed by CUNY.
4. Record all inspection and lubrication procedures completed in the machine room log and issue a copy of check sheets or other recorded data to CUNY with written recommendations for work procedures to be done by others or as an extra cost to CUNY by the Contractor.
5. Perform immediate repairs and adjustments. Notify CUNY and schedule major procedures necessitating extended out-of-service time within forty-eight regular working hours of the preventative maintenance inspection with CUNY prior consent and approval.

v. Semi-Annual (Two times per year)

- a. Check all indicating lights, lanterns, gongs, and audible and visible signals for proper operation.
- b. Inspect car-safety mechanism, clean and keep free of rust and dirt, and lubricate, as necessary.

- c. Monitor the sequence of operation and compare the same to the O.E.M. design specification. Check and record individual car performance levels:
 - 1. Door open cycle time.
 - 2. Door close cycle time.
 - 3. Long door non-interference dwell time.
 - 4. Short door non-interference dwell time.
 - 5. Reduced door non-interference dwell time.
 - 6. Floor to Floor (Brake to Brake) time.
 - 7. Brake-to-Brake (Flight) time.
 - 8. Door closing pressure.
 - 9. Speed up direction.
 - 10. Speed down direction.
- d. Check all fire control manual operations and signals to include Alternate Floor Recall.
- e. Check all safety switches for doors, gates, or other passenger protection devices.
- f. Ensure hoistway doors are properly aligned, set, and self-closing.
- g. Check emergency cab interior lighting system and communication device operations.
- h. Check car door locking, safety switches, and passenger protection for proper operation.
- i. Observe elevator system operation for quality of ride, acceleration, deceleration, noise, and floor stopping accuracy. Preopening, re-leveling, or other operational features are checked from inside each car.
- j. Perform immediate minor adjustments or repairs to maintain O.E.M. performance standards.
- k. Prepare a written report for all examinations performed and issue the same to CUNY.

vi. Annual (Once per year)

- a. Check controllers and selectors. Clean with a blower, check alignment of switches, relays, timers, contacts, hinge pins, and other controller components, adjust, and lubricate. Check all resistance tubes and grids. Check oil in overload relays, settings, and operation of overloads. Clean and inspect fuses and holders, and all controller connections. Verify operation of Seismic Protection Systems,

Emergency Evacuation Systems, and/or Battery Lowering and replace batteries, if needed.

- b. In the hoistway, examine guide rails, cams and fastenings, hoist and governor wire ropes, and counterweight. Inspect and test limit and terminal switches. Check and adjust car shoes, gibs, or roller guides. Adjust or replace as needed. Lubricate hoist wire ropes in accordance with ASME 17.1/17.2 2022 A17.1.
- c. Clean all overhead beams, sills, bottom of platform, car tops, and hoistway walls.
- d. Clean car light fixtures.
- e. Thoroughly clean car and counterweight guide rails using a nonflammable or high flash point solvent to remove lint, dust, and excess lubricant in accordance with ASME 17.1/17.2 2022 A17.1 prevailing standards and/or AHJ requirements.
- f. Thoroughly clean the machine room, pit, top and bottom of the car, and all other elevator system components and areas.
- g. Dismantle machine brake assembly. Inspect all pivot pins, bushings, collars, sleeves, guides, bearings, or other operating apparatus for wear. Replace worn component parts, provide new spacers, washers, and fittings to ensure unrestrictive operation. Readjust assembly in accordance with O.E.M. design criteria.
- h. Drain and flush machine housings, oil hydraulic storage tanks, bearings, and lubrication parts. Inspect all exposed equipment for wear. Replace worn or damaged bearings, seals, packings, and gaskets.
- i. Blow out or vacuum windings in rotational equipment, inspect apparatus for internal damages, overheating, or other deteriorations. Clean and service contaminated brush riggings, inspect bearings and shafts for wear. Apply insulating varnish to exposed windings and ensure all leads, connections, or other electrical apparatus are properly insulated. Inspect grounding provisions and take necessary actions to correct deficiencies. Adjust brush settings, compounding, and/or other apparatus to ensure proper operation and efficiencies are maintained.
- j. Provide standby labor for emergency power testing, including full operational functions.
- k. Record all Periodic Testing procedures completed under annual preventative maintenance program per ASME 17.1/17.2 2022 A17.1 Part 8 Standards and issue CUNY a report incorporating extraordinary

repairs/adjustments necessary, suggested modifications, component upgrading, or other recommendations for improved safety, reliability, and performance.

- l. Formulate a Master Maintenance Schedule (ASME 17.1/17.2 2022 A17.1 Part 8 Standards) for the forthcoming year, incorporating the "minimum" requirements specified herein for all units. The schedule shall consist of the anticipated "out of service" times for each unit and the procedure to be performed. Deviations from this master schedule as desired by the Contractor or mandated by other site and equipment conditions shall be reported to CUNY for approval. When conditions warrant or CUNY requests a revised schedule be submitted for the balance of the year, the Contractor shall prepare the same, incorporating the recorded history of preventative maintenance procedures accomplished prior to the revision.
- m. Inspect cameras on elevators.
 - vii. Biennially (Every two years)
 - a. Drain, flush, and refill reservoirs on each hoisting machine if required.
 - b. Perform a thorough shaft cleaning.
 - viii. Triennially (Every three years)
 - a. If provided, each VVVF traction elevator battery backup leveling device's battery shall be replaced and tested.

C. Maintenance of Escalators

The Contractor shall:

1. Use all reasonable care to keep the escalators and cart conveyors in proper, safe, and efficient operating condition, twenty-four hours per day, seven days per week, including holidays. The Contractor shall furnish all labor, materials, supplies, parts, equipment, temporary barricades, warning signs, and do all things necessary or proper for or incidental to such maintenance. The selection of parts, along with the extent and schedule of maintenance, should take operating conditions into account, including temperature and weather conditions. Maintenance hereunder shall be deemed to include such removal and replacement of equipment and materials as may be necessary or desirable to afford access to the equipment for maintenance. All maintenance shall be at least in accordance with the provisions of law, as well as with governmental rules, regulations, and orders applicable. Whenever services are

rendered, it shall be the Contractor's responsibility to contact CUNY to report the kind of service rendered.

2. Maintain each escalator/Cart conveyor in proper adjustment for smooth, quiet operation. Escalator/Cart conveyors manufacturer's approved lubricants and cleaning materials or the equivalent approved by CUNY, shall be furnished by the Contractor.
3. Perform maintenance service for each unit at the minimum frequencies indicated hereunder, subject to a time schedule submitted to and approved by CUNY and the AHJ code requirements. The "Schedule of Inspections, Checks and Services" indicates the minimum maintenance routines required to be performed. Compensation for such maintenance routines shall be included in the Contract Sum. Any revisions of an agreed-upon maintenance time schedule must have the prior written approval of CUNY. CUNY shall have the right to revise an established maintenance time schedule by giving Contractor notice and at no additional cost to CUNY for work performed during regular working hours.
4. Make at a minimum, the following scheduled inspections, checks, and services to each of the escalators and cart conveyors and all of their individual components, and at the indicated frequencies as further specified:
 1. Quarterly (4 times per year)
 - a. Ride and Observe
 1. Check all decking surfaces (panels, skirts, outer and inner decking) for protrusions and gaps. Remove and repair protrusions of 3/16 inch or greater.
 2. Check that all anti-slide devices are present and securely attached. Replace and secure where required.
 3. Verify that all side (skirt) brushes are intact and securely mounted. Replace and secure where required.
 4. Listen for any unusual noise and feel for vibrations or roughness in the ride. Investigate and correct all defects.
 5. With the escalator running, visually inspect all step treads and risers for defects and damage. Report defects and damages to the Contractor's immediate supervisor and CUNY.

6. Where ceiling intersection guards are provided, check for damage, and ensure Exhibit is securely mounted. Replace and secure as needed.
7. Check that the lighting above the escalator is adequate. Correct as needed. Inform the Contractor's immediate supervisor and CUNY if another department is needed to make the correction.
8. Verify that the demarcation, skirt, comb plate, balustrade, under handrail, and landing plate lights and covers at both landings are operating and clean. Clean light covers and replace defective bulbs as needed.
9. Verify that nothing is protruding below seven feet above the escalator, measured from the nose line of the steps and landing plates. Correct as needed. Inform the Contractor's immediate supervisor and CUNY if another department is needed to correct.

b. Entrance and Egress

1. Check all decking surfaces (panels, skirts, outer and inner decking) for protrusions and gaps. Remove and repair protrusions of 3/16 inch or greater.
2. Verify there are "caution" signs on both sides of the upper and lower landings. Verify the "caution" signs are in good condition. Clean as needed. Replace any worn or damaged signs.
3. Clean the gap between the comb segments and the landing plate on the escalator.
4. While the escalator is running check that the steps are properly indexing, and the steps are engaging squarely with the combs. Repair and adjust as required.
5. Public Areas – These devices are exposed to various weather conditions and as such should be checked more frequently including but not limiting to the impact plates and supporting heaters. They should be cleaned and free of debris that may impact the operation.

c. Start / Stop Station

1. Check both the starting and emergency stop buttons stations for missing parts, defects, and damage. Repair and replace as needed.
2. Verify the escalator will start from either the upper or lower station.
3. Verify the escalator will stop when either emergency stop button is pressed.
4. Verify the escalator will start without a control set.

d. Handrail

1. Visually inspect the handrails for pinch points. Correct and repair as needed. Visually inspect handrail capping for cuts, cracks, and gouges. If damaged, inform Contractor's immediate supervisor and CUNY.
2. Look for rubber filings on the balustrade. If filings are found, inspect further as this may indicate improper handrail tension. Adjust as needed.
3. From the lower landing firmly grip each handrail and verify that the handrail does not stall under moderate force. If either handrail stalls, adjust handrail traction.
4. While riding the escalator, verify that the handrails are traveling smoothly and at substantially the same speed with the steps, without jerking and hesitation. Correct and repair as needed.
5. Visually inspect the handrail inlet devices. Verify that the handrail inlet brushes are securely mounted and are in good condition. Tighten and replace if defective damaged.

e. Housekeeping

1. Check machine space for any water infiltration.
2. Ensure the equipment in the machine space is protected from the elements.
3. Perform an annual clean down and as required by code.
4. Clean upper and lower pans.

f. Broken Main Drive Chain Device

1. Verify that the lever pad or roller is in good condition and moves freely. Check that the chain guard is present and securely fastened. Verify that the broken main drive chain switch device activates and stops the escalator when the arm drops. Verify that the escalator will start only when the arm is returned to its normal position and a controller reset is made. Adjust the switch as needed.

g. Gear Reducer / Handrail Transmission

1. Check the oil levels in the external and internal gearboxes and handrail transmissions. Add oil if needed.
2. Check gear and transmission cases for oil leakage and excessive vibration, noise, and heat. Record all defects and damages in the maintenance log and inform Contractor's immediate supervisor and CUNY.
3. Check that the oil is not milky white, burnt, rancid, or foaming excessively. Record all defects in the maintenance log and inform Contractor's immediate supervisor and CUNY.
4. Examine sprockets for tooth wear and coupling engagement. Inform Contractor's immediate supervisor and CUNY.

h. Motor Speed Monitor

1. If applicable, check that the four inductive sensors are clean and are surely mounted to the holding device installed between the brake unit and gear case. Verify the sensors wires are securely connected and are in good condition. Clean sensors. Repair damaged wires and secure all connections. Where displayed, record motor speed on the maintenance check sheet.

i. Controller

1. With the escalator running visually inspect escalator controller components. Look and listen for excessive arcing, signs of excessive heat, and sounds of excessive noise (chatter, humming).
2. Verify that components are working as designed. Correct all items, as needed.
3. With the escalator running, measure and record main line currents and phase-to-phase and phase-to-ground voltages.

4. With the power removed inspect the escalator controller for loose wire connections and for wire damage. Tighten, repair, and replace when needed.
5. Verify that the main line and controller fuses are the same value as recorded on the escalator print.

j. Lubrication

1. Fill the automatic oiler reservoir to operating level.
2. Where no automatic oiler is provided, manually lubricate all chains.
3. Visually verify the automatic oiler is operating as designed. Correct and repair as needed.
4. Visually check all chains are being lubricated. Correct
5. and Repair as needed.

k. Machine Brakes

1. If applicable, Internal Primary: Verify that the brake lining has a minimum thickness of 3mm and that the brake lining and the brake surface are free of oil and grease. Check that all wires are in good condition and the connections are secured. Clean, correct, and repair as needed.
2. If applicable, External Primary: Verify that the brake pad clearance is .5mm. Check that all brake surfaces are free of oil and dirt. Check that all wires are in good condition and the connections are secured. Clean, correct, and repair as needed.

l. Safety Brake (Smart Brake)

1. If applicable, check fluid level in the smart brake reservoir; add fluid if needed. Examine and clean sensors, pump unit, solenoids, and gauges. Verify that all wires are in good condition and are securely fastened. Verify that the safety brake is operating as designed when the broken main drive chain device is actuated. Verify that the escalator will not run until a controller reset is made. Visually check the brake system stops the escalator within 12 to 18 inches.

2. If applicable, check fluid level in the smart brake reservoir; add fluid if needed. Examine and clean sensors, pump unit, solenoids, and gauges. Verify that all wires are in good condition and are securely fastened. Verify that the safety brake is operating as designed when the broken main drive chain device is actuated. Verify that the escalator will not run until a controller reset is made. Visually check the brake system stops the escalator within 12 to 18 inches.

m. Main Drive Chain

1. Check the adjustment of the main drive chain; verify it is properly tensioned. Adjust as needed.
2. Examine all sprockets and chain for wear. Inform Contractor's immediate supervisor and CUNY if defective and/or damaged.

n. Carriage

1. Verify that the carriage moves freely, and the steps are engaging the comb segments squarely. Remove enough steps to give a clear view of the carriage and finger tracks.
2. Examine the tracks and carriage springs for defects and damage. Inform Contractor's immediate supervisor and CUNY if any defects and/or damage are found.
3. Clean lower pan, tracks, and switches.
4. Remove the tension on both carriage springs.
5. Move the carriage back and forth. Verify that it is free of obstacles and that it moves smoothly without binding and dragging.
6. Verify that the finger tracks stay engaged throughout carriage movement.
7. Lubricate and grease carriage (rails) tracks and bearings.
8. Compress both carriage springs to the same manufacturer's specifications. Record actual measurement in the space provided on the checklist sheet.
9. Place the broken step chain monitors to the correct tripping position. Trip each monitor. Verify that the escalator does not start until the monitors and controller are manually reset.
10. Reinstall the steps.

11. While the escalator is running, check that the steps are properly indexing, and the steps are engaging squarely with the combs. Repair and adjust as required.
12. Verify that the threaded carriage rods are at a right angle to the bearing blocks. Adjust as needed.

o. Inspection Operation

1. Run the escalator in both directions in inspection mode. Verify that the escalator is operating as designed.

p. Comb

1. Check that all comb segments are in good condition, are securely fastened, and there are no missing screws. Tighten and replace as needed.
2. Replace all broken comb segments and those comb segments with two back-to-back broken teeth.
3. Verify that the gap between the comb segments and the landing plate is free of dirt and debris. Clean as needed.
4. While the escalator is running, check that the steps are properly indexing and that the steps are engaging squarely with the combs. Repair and adjust as required.
5. Verify that the comb stops functions as designed: Remove the inner decking panel above the comb stop switch (upper landing right side at lower landing left side).
6. Remove the center comb segment and lay a piece of flat stock on the center part of the step tread.
7. Place a pry bar under the comb plate frame angle near the step entrance and apply force to move the plate up.
8. Observe the comb stop switch mechanism to ensure cam rotation occurs as the comb plate is lifted up. Clean and lubricate all pivot points.
9. Verify that the escalator will not run when the cam rotation opens the normally closed contacts on the comb stop switch.
10. Verify that the escalator will run when the comb plate is returned to the correct position. Note: a control reset is not needed.
11. Clean the gap between the comb segments and the landing plate.

12. Remove the floor plate and comb segments. Inspect the Teflon strip; verify it is intact and in good condition.
13. Move the actuating rod horizontally. Check that the rod via the linkage actuates the switch and the normally closed contacts open. Clean and lubricate all pivot points.
14. Replace the outer (end) comb segments and screws. Set the screws to a torque setting 1.75nm. Replace thinner (center) comb segments and screws. Set these screws to a torque setting of 3.25nm.

q. Demarcation / Landing Lights

1. Verify that the landing, comb plate, balustrade, under handrail and demarcation lights are operating and are visible at both landings. Clean all light covers and replace defective bulbs.

r. Step Sag / Step Level Device

1. With steps removed and on inspection mode, move the opening to the step sag switch. Verify that the switch will trip if the step riser sags 3mm on the load side or lifts 3mm on return side. Clean and lube the moveable mechanical arms, pivot points, and switches. Verify that the escalator will not start until a manual controller is made.

s. Step Up Thrust Device

1. Lift the ends of each up thrust track; check that they move freely and return to their normal resting position without binding. Verify that each switch trips after 1mm of vertical movement is made. Check that the vertical clearance between the dog ear brackets and the upthrust track is 3mm. Clean and lubricate all pivot points. After each switch is tripped, verify that the escalator will not start until a manual controller reset is made.

t. Skirt Monitor / Skirt Obstruction Devices

1. Check for a 3mm clearance between the step and skirts throughout the length of the escalator. Verify that the escalator will not start when a 2 mm feeler gauge is inserted between any of the switch actuators and the inner side of the skirt panel (repeat for all skirt switches). Verify that the escalator will not start until a manual controller reset is made.

u. Missing Step Switch

1. Verify that the proximity sensor is securely fastened and clean. Inspect all wiring and switch functioning. With the escalator off inspection mode, run the escalator with a step removed. Verify that the missing step switch shut the escalator off. Verify that the escalator will start only with the step-in place and when a controller reset is manually made.
2. With the escalator on inspection mode and a step removed, verify that the step roller is center of the step edge. Verify that the mechanical switch is securely fastened and clean. Clean and lubricate all pivot points. Inspect all wiring for fraying and secure connections. With the escalator off inspection mode, run the escalator with the step removed. Verify that the missing step switch shuts the escalator off. Verify the escalator will only start when the step is replaced, and a manual controller reset is made.

v. Step-Band Locking Device

1. If applicable, check that the step band locking device is tightened and secure. Verify that the escalator will not start when the step band locking device is engaged. Clean and lubricate arm and pivot points.

w. Pit

1. Clean the lower pan and pit floor.
2. Verify that the sump pump is working as designed. Repair as needed.

x. Broken Step Chain Monitoring Device

1. Depress the broken step chain switch actuator until switch trips. Verify that the switch is working by trying to start the escalator. If the switch is working properly, the escalator will not start.
2. Verify that the escalator will start only when the broken step device is in the correct position and a manual controller reset is made.
3. Check for broken and loose wires. Repair, replace, and tighten as needed.
4. Verify that the switch lobe (actuator Roller) is centered in actuating indentation.

2. Semi-Annual (Two Times Per Year)

a. Handrail

1. Visually inspect the handrail guides on the load and return sides for defects and damage. Correct and repair as needed.
2. Inspect handrail drive systems: newel sheaves, rubber bands, and pressure rollers for defects and damage. Correct, repair, and adjust as needed.
3. Clean and lubricate all pivot points and linkages and grease all bearings.

a. Broken Handrail Monitors

1. Verify the escalator will not start until the lever is in the correct position and a manual controller reset is made. Clean and lubricate lever pivot points.

c. Handrail Speed Monitors

1. 1. Verify that the handrail speed monitoring device immediately sounds when the handrail stalls or a speed deviation of 15% between the handrail and step occurs for two or more seconds. Verify the escalator will not start until a manual controller reset is made. Check that the monitor roller is in good condition and free of residue buildup, and that it is making firm contact with the handrail. Repair or replace as required. Where handrail speed is displayed, record the same on the maintenance sheet.

d. Handrails, Inlets, Brushes, and Devices

1. Check that the handrail inlet device will stop the escalator when the lever moves and the switch is actuated. Correct and adjust as needed.
2. Verify that the escalator will not start until a manual controller reset is made. Clean and lubricate pivot points.

e. Broken Step Chain Monitoring Device

1. If applicable, verify that the springs on both sides are compressed to the same manufacturer specification. Correct and adjust as needed.
2. Verify that the escalator will not start when either broken step chain monitor device is tripped.

f. Tracks

1. Inspect track systems, load, and return sides. Look for defects and damage. Correct and replace as needed.

2. Check for missing and loose track bolts. Replace and tighten all track bolts.
3. Verify that the tracks are properly aligned and are spaced to the manufacturer's specifications. Correct as needed.

g. Step Band Rollers/Wheels

1. Inspect all rollers/wheels for defects, damage, and wear. Replace defective and damaged rollers/wheels.

h. Step Inspection

1. Visually verify that the step threads and "A"-frame bolts are not missing and are secured. Replace missing and tighten all step thread and "A"-frame bolts as needed.
2. Check for missing and loose step connection bolts. Replace missing and tighten step connecting bolts as needed.
3. Check for missing tab washers. Verify that the tab washers are peen over the step connecting bolts heads. Replace and peened tab washers as needed.
4. Visually inspect steps for defects and damage. Correct, repair, and replace defected and damaged steps. Inform Contractor's immediate supervisor and CUNY if steps cannot be repaired or replaced.

i. Lubrication Lines

1. Verify that the oil and grease lines are free of kinks and are properly connected and securely fasten. Correct, repair, and replace as needed.

D. Repair, Replacement, Adjustment, and Related Service Coverage

The Contractor shall:

1. Provide fully comprehensive repair, replacement, adjustment, and related service coverage for all component systems including spare or replacement parts unless specifically excluded herein. Failure to provide a particular component, service or other procedure does not limit Contractor's obligation or liability to provide the necessary work or service.
2. Perform complete maintenance of all elevator devices to ensure they may be operated safely in accordance with performance standards and other criteria specified in this agreement. Coverage shall be for twenty-four hours per day,

seven days per week except for scheduled preventative maintenance and safety test procedures approved by CUNY.

3. Furnish all materials, labor, supplies, parts, equipment barricades, warning signs, semi-permanent structures, or other apparatus necessary or proper for and incidental to maintenance procedures.
4. Be responsible for clearing and paying for any violations and fines related to the Equipment. Violations shall be cleared within the time limits imposed by the AHJ.
5. Be responsible for keeping the exterior of the machinery and any other parts of the equipment free from rust.
6. Cover all associated parts, apparatus and procedures whether specifically defined or not and shall include the necessary hoisting, rigging or other procedures required for execution of the repair, replacement, adjustment, and service of equipment. The following list of equipment is provided as a means to establish the full comprehensive intent:
 - i. Automatic door systems, power-operated door systems, and manual door/gate systems complete:
 - a. Power operator and engagement linkages
 - b. Car door top track and hanger roller assemblies.
 - c. Car doors and gate, eccentrics, stops, bumpers, and related operating mechanisms for multiple speed or multiple panel doors and gates.
 - d. Car gates, bottom guides, retainers, fire stops, gibbs, entrance sills and threshold plates, gate handles, and protection guards.
 - e. Electrical safety switches and activation mechanisms, door protective and/or retracting devices, and power door operators.
 - f. Electromechanical safety interlock assemblies, related operating mechanisms, clutch, vane, or other master system engaging devices, linkages, zoned locking devices, and self-closing devices.
 - ii. Car frame, platform, and car safety devices complete:
 - a. Crosshead, stiles, hitch plates, anti-spin devices, tie rods, supports, and related structures.
 - b. Car guides, car rollers, shoes, stands, spindles, gibbs, rollers and tensioning devices.

- c. Sub-platform, under car platform fireproofing, car sills with support cradles, load weighing devices, top/side exit access operating/safety hardware, cab steadiers and electrical switches.
 - d. Car fans, blowers, and cab ventilation systems.
- iii. Hoisting machinery, and rotating power drives with mounting supports and beams, raised platforms and weighted foundations and structures complete:
 - a. Geared traction and winding drum units, gearless traction, and related systems complete.
 - b. Worms, gears, shafts, couplings, drive sheaves, deflector sheaves, 2:1 sheaves, bearings, support/mounting apparatus, brake assembly, rotating elements and all associated castings, guards, retainers, and hardware.
 - c. Integral and free-standing brake units, drums, discs, pulleys, shoes, linings, pads, pins, sleeves, plungers, coils, caps, adjustment devices and hardware complete.
 - d. AC and DC motors, motor generators, rotating regulators, and exciters; armatures, field coils, pole pieces, interpoles, commutators, brush riggings, brush holders, carbon brushes, stator windings, fan or other ventilation mechanisms, bearings, bushings, shafts, caps, packings, seals, junction boxes, leads, connectors and related wiring.
- iv. Controls, selectors, solid state power drives, encoding devices, transformers with related wiring, conduit, and circuitry complete.
 - a. Relays, contactors, switches, capacitors, resistors, fuses, circuit breakers, overloads, power supplies, regulators, tach generators, arc shields, shunts, holders, and hardware.
 - b. Circuit boards, transmitters, encoders, transformers, rectifiers, transistors, solid state switching devices, insulators, timing devices, suppressors, and computer apparatus devices to include software, software upgrades, monitors, keyboards, touch screens/pads and printers.
 - c. Filters, fans, blowers, control cabinet air conditioning, wiring, studs, terminal blocks, plug connectors, system monitors and other diagnostic devices.

- d. Cabinets, frames, isolation pads, isolation transformers, chokes, diagnostic tools, status indicators, solid state, and hard-wire circuitry.
 - e. Verify operation of Emergency Evacuation Systems annually and/or Battery Lowering and replace batteries, if required.
- v. Car and counterweight safety systems
 - a. Overspeed governors and electromechanical safety devices, wire ropes and tensioning devices with related hitch and connection apparatus complete.
 - b. Car and counterweight safety devices, drums, rods, linkages, clamps, and hardware.
 - c. Rope grippers and similar apparatus used for compliance with ASME 17.1/17.2 2022 A17.1 Rule 2.19.
- vi. Hoistway and pit equipment
 - a. Guide rails, fishplates, brackets, inserts and related hardware to include jack bolts or other special mechanisms for mounting and alignment.
 - b. Wire ropes, chains and cables with guards used for suspension, compensation, safety, and selector encoding with related hitch and connection hardware complete.
 - c. Corridor entrance top track and hanger rollers, toe guards, fascias, dust covers, sills, stops, bumpers, eccentrics, retainers, and bottom guides.
 - d. Overhead machine room, secondary and 2:1 wire rope sheaves, shafts, bearings, bushings, seals, mounting supports, lubrication devices, guards, and hardware complete.
 - e. Electrical wiring and conduit, electrical traveling cables, electrical limits, slowdowns, activating cams, switches, vanes, inductors, tapes, readers, leveling and encoding systems complete with all related hardware and wiring.
 - f. Compensation sheaves, shafts, frames, guides, switches, rollers, cams, guards, "S" hooks, guidance systems and all related hardware.
 - g. Counterweight assemblies, guides, rollers, stands, strike plates, safeties, and hitch devices.

- h. Car and counterweight buffers, stands, strikes, blocking, platforms, extension devices, mounting hardware and appurtenances.
 - i. Pit safety switches, cable tensioning devices, access ladders, light switches, lighting assemblies, bulbs, and guards.
- vii. Operating and signal fixtures with electrical wiring
- a. Car operating panels, push buttons, stop switches, audible signals, keyed or other control switches, visual signals, jewels, and indicators with electrical wiring.
 - b. Car position indicators, riding lanterns, signal annunciators, and visual and audible signals are complete.
 - c. Corridor push button stations, hall lanterns, hall position indicators, keyed switches, access controls, electrical wiring, and traveling cables are complete.
 - d. Emergency lighting systems, emergency communication devices, and signal systems, complete, including batteries.
 - e. Corridor and lobby fixtures with remote controls and operational monitoring devices, starter panels, emergency power selectors, telltale panels, location indicators, security controls, and monitors.
 - f. Remote monitoring systems, controls, monitors, printers, and related apparatus.
- viii. Hydraulic systems' components, including but not limited to, tanks, valves, pump, cylinder head, above ground piping, hoses, fittings, gauges, seals, O-Rings, filters, screens, packings, belts, recovery devices overflow devices, emergency operating and signal systems, above grade cylinder and plunger assemblies complete, mufflers, heaters, and shut-off valves.
- ix. Escalator systems' components, including but not limited to driving machines, steps, rollers, tracks, lubricators, handrails, guides, starting mechanisms, stop and safety switches, comb plates, hand guards, brush guards, skirt boards, skirt lighting, comb plate lighting, balustrade lighting, under handrail lighting, overhead step lighting, step/handrail driving mechanisms complete, lubricating devices, chains, sprockets, demarcation lighting and/or safety strips or other markings.
- x. Inspect all lighting associated with the elevator systems, including, but not limited to pit lights, equipment room lights, shaftway lights, floor indication lights, car and hall station push button lights, interior and

exterior direction lights, arrow lights, signal lantern lights, underfloor lights, cab, entrance, and roof lights. Repair as needed.

xi. Component Exclusions:

a. The following elevator system components are excluded for normal wear and tear repairs or replacements:

1. Car enclosures (including removable panels, suspended ceilings, lighting fixtures (lamps are included), light diffusers, floor coverings, entrance thresholds, trim, and car panel doors). Hoistway enclosures, entrance frames and door panels.
2. Underground hydraulic cylinders and buried piping.
3. Machine room power disconnect switches together with fuses, power wiring located before the means of primary disconnect, power fuses or circuit breakers located in the primary means of disconnect, elevator machine room general lighting, and ventilation. Cab, Pit, and shaftway lighting fixtures and wiring (lamps are included). Support structures for machine beams or other apparatus are normally provided by others and not subject to preventative maintenance procedures by the Elevator Contractor. Machine room or other equipment access doors with associated locks, closers, and labeling.

E. On Site Mechanic and Central Dispatch Center

The Contractor shall:

1. Provide a dedicated On-Site Mechanic during Peak Hours at Five (5) designed Campus (CUNY reserves the right to add or remove campuses from this requirement as operational needs dictate) The primary purpose of the On-Site Mechanic is to reduce and keep to minimum the rescue time, to perform maintenance and repair services, and to restore elevator service quickly once rescues are made. The On-Site Mechanic will be assigned permanently to College during regular time hours of 7:00am to 4:00pm.
2. Immediately assign temporary replacement for the absence of either or both the Resident Modernization and Service/Repair and Registered Apprentice due to illness, vacation, or other unforeseen event; Contractor acknowledges and agrees that there shall be no lapse in presence and service of the On-Site Resident Team.
3. Ensure that the On-Site Resident Team records its attendance by signing in and out in the Buildings and Grounds Office located in (college address). Contractor shall also ensure that the Contractor's

temporary replacement employees as well as Contractor's repair team shall sign in and out in the Elevator Service Log Book located in the Buildings and Grounds office at college campuses.

4. Provide a central dispatch center where a Contractor employee shall record, dispatch, control and monitor all service calls for the timely, properly, and efficiently dispatch of qualified mechanics for emergencies and routine service calls. An answering service does not satisfy this requirement.
5. Provide Call Back Service at all times to assigned campuses 24 hours per day, 7 days per week, every day of the year. The Response time for Call Back service during Peak Hours shall be within fifteen minutes. The response time for Call Back service during Off Peak Hours will be within thirty minutes.
6. Carefully screen all its personnel and notify CUNY two weeks in advance of intent to change personnel. Contractor shall immediately replace personnel who, with or without cause, are deemed unacceptable to CUNY.
7. Periodically conduct field audits of service personnel to maintain quality standards.
8. Wear company photo IDs that include the employee's names, prominently displayed on their outer clothing at all times while they are on CUNY property.
9. Ensure all work performed meets or exceeds industry safety standards and Occupational Safety and Health Administration (OSHA) Guidelines, for materials and workmanship.

F. Maintenance Service Records and Reports

The Contractor shall:

1. Provide and maintain current work logs of all work performed with start and completion dates and a brief description of the maintenance or repair performed including check charts or an approved equivalent electronic reporting system. Logs and Check Charts shall be kept in the machine room for each unit. In the event electronic reporting is used then a notice shall be posted in each unit room which shall set forth the procedures to be followed to obtain access to the electronic reporting system.
2. Record all Preventive Work performed in assigned College's Work order system. All preventive Maintenance Work Orders presented to the Contractor for work to be performed shall be signed, dated,

and returned to College by Contractor on a monthly basis. Contractor shall complete all Preventive Maintenance Work Orders within the time period indicated by CUNY, and Contractor shall provide and attach dated and signed Work Orders, indicating when the work was completed, to its monthly invoices.

3. Upon completion of Preventive Maintenance Work Order, promptly report

that the work has been completed. The Contractor's Representative is required to review the maintenance and initial check charts monthly. The Contractor shall attach a copy of Contractor's Check Chart to its invoices.

4. Be responsible for providing and maintaining Labor Log Books in addition to Time Cards and Service Logs located in the Buildings and Grounds office at college campuses. Contractor shall attach a copy of Contractor's Labor Logs to its invoices.
5. Obtain and submit with the invoices any and all receipts for replacement parts, lubricants, cleaning solutions, and other such materials used during the period invoiced.
6. Provide a monthly report to the Director which will include the following:
 - i. Reports of all Entrapments, including
 - a. The date and time of notice by the college and the name of the person calling
 - b. The response time
 - c. Time of release of passengers
 - d. Statements made by passengers
 - e. Nature or cause of the entrapment
 - f. Full description of the repair, including labor time and equipment installed.
 - g. The time the unit is placed back in regular service.
 - ii. Reports for all Call Backs, including:
 - a. The date and time of notice by the college and the name of the person calling.
 - b. The response time.

- c. A full description of the repair, including labor time and equipment installed.
 - d. Date and time unit is placed back in regular service.
 - iii. Reports that summarize monthly maintenance and inspection performed on each Unit.
 - iv. Reports on all tests and test results required by this Contract.
 - v. Reports on Response Time to Field Correction Notices, including:
 - a. The date and time of receipt of the Field Correction Notice.
 - b. Full description of the repair, including labor time and equipment installed.
 - c. Date and time of correction of Field Correction Notice.
 - d. Name and time of signoff of Field Correction Notice by CUNY representative.
 - vi. Provide an annual report each year due two weeks after the anniversary date of the execution of the contract which contains the following:
 - a. The total number of Call Backs for the report year and the number of Call Backs for each unit.
 - b. The total number of Entrapments and the number of Entrapments for each unit.
 - c. The average percentage of downtime and the average percentage of downtime for each unit.
 - d. Any open deficiency items noted by the insurance company, code requirements, local authorities, oversight agencies, CUNY inspections, and third-party inspections.

G. Cleaning

The Contractor shall:

1. During the course of all examinations, remove and discard immediately all accumulated dirt and debris from the car top(s), upper and lower escalator machinery areas, and pit area(s).
2. Prior to each annual anniversary date of execution of the contract, the Contractor shall thoroughly clean down the entire hoistway and wellway of all accumulated dirt, grease, dust, and debris.

H. Painting

The Contractor shall:

1. Keep the exterior of the machinery and any other parts of the equipment subject to rust properly painted, identified and presentable at all times.
2. Periodically treat motor windings and controller coils with proper insulating compound per O.E.M. recommendations or otherwise as needed.
3. Paint the machine room floor with good quality deck enamel when CUNY and the Contractor determine that the floor is in poor condition.

I. Inspections / Tests

The Contractor shall:

1. Conduct Safety, Efficiency and Maintained Conditions surveys, inspections and tests as follows:
 - i. Semi-Annual quality control evaluations by a qualified supervisor to ensure and confirm the services and procedures as specified in the RFP are properly executed relative to maintenance and performance standards for the systems serviced.
 - ii. Mandated inspections and testing in accordance with the latest ASME 17.1/17.2 2022 A17.1 standards applicable per local law and/or as required by the AHJ.
 - iii. Filing of all procedures and preparation of reports within the required time periods for the examination(s) rendered shall be performed by the Contractor. CUCF will engage the services of a third-party qualified and certified agency for the sole purpose of witnessing mandated inspections and tests performed by the Contractor per the requirements of the local AHJ. The Contractor shall conform to the third-party agency schedule and provide qualified labor at no additional charge to CUCF.
2. As required, correct noted deficiencies in addition to preparation and filing of appropriate Affirmation of Correction(s) within the stipulated timeframe as required by the AHJ.
3. Submit proposals in a timely fashion in an effort to meet applicable correction deadlines within five business days on critical items or otherwise within fourteen business days. Proposals shall indicate the material and labor costs in addition to anticipated time of completion from approval of proposal(s) by CUNY.

4. If applicable, perform independent testing of Fire Emergency Operating Systems and/or Emergency Power System tests in accordance with local law requirements and ASME 17.1/17.2 2022 standards. CUCF retains the right to have these tests performed on a not-to-interfere basis at any hour of the day and any day of the week; and the cost for overtime work shall be limited to the premium labor portion for work performed on an overtime basis.
5. Maintain a record of all ASME 17.1/17.2 2022 code-required safety tests, fireman's service tests, telephone/intercom tests and emergency power tests on site.
6. Maintain monthly oil consumption records on site in accordance with ASME 17.1/17.2 2022 A17.1 Safety Code and as required by the AHJ.
7. Conduct testing procedures in accordance with ASME 17.1/17.2 2022 A17.1 standards at intervals specified and indicated in ASME 17.1/17.2 2022 A17.1, Appendix N and/or local code requirements in place at commencement of contract. Complete and execute all governing authority filing procedures including payment of all associated fees or other charges where mandated by local authorities, and forward confirmation of all authority required filings to the Manager within ten working days of the date the test procedure was completed. Any fines incurred for failure to complete required testing or for filing irregularities will be paid by the Contractor.
8. Perform an Annual Electric Traction Elevator Safety Test conforming to the requirements contained in ASME 17.1/17.2 2022 A17.1 Category 1, Inspection and Test Requirements on all Traction Elevators covered by this Contract.
9. Perform a Five-Year Safety Test conforming to the requirements contained in ASME 17.1/17.2 2022 A17.1 Category 5, Inspection and Test Requirements on all Traction Elevators covered by this contract.
10. Perform an Annual Hydraulic Elevator Safety Test conforming to the requirements contained in ASME 17.1/17.2 2022 A17.1 Category 1, Inspection and Test Requirements on all Hydraulic Elevators covered by this Contract and/or as required by the AHJ.
11. Perform a Three-Year Safety Test conforming to the requirements contained in ASME 17.1/17.2 2022 A17.1 Category 3, Inspection and Test Requirements on all Hydraulic Elevators covered by this contract.
12. Perform a Five-Year Safety Test conforming to the requirements contained in ASME 17.1/17.2 2022 A17.1 Category 5, Inspection and Test Requirements on all Hydraulic Elevators covered by this contract.

13. Perform all testing and inspections on the escalator(s) / moving walk(s) in accordance with the requirements of ASME 17.1/17.2 2022 A17.1 for all escalator(s) / moving walk(s) covered by this contract. Note: Inspections and tests are not part of maintenance.
14. CUNY may engage the services of a third-party qualified and certified agency for the sole purpose of mandated inspections of the equipment per local code authority requirements. The Contractor shall conform to the third-party agency schedule and provide qualified labor to assist in these inspections (including assistance in gaining access to hoistways, pits and machine rooms) at no additional charge to CUNY.
15. Be responsible for the payment of any fines or retesting fees and all applicable labor should an inspection failure be as a result of any component or system covered under this maintenance agreement. Should an inspection failure be the result of both a component or system covered under this Contract and a related building system that is the responsibility of CUCF, the cost of re-inspection shall be proportionally split between the Contractor and CUNY.
16. File for and obtain any abatement necessary should any violation noted by an inspector be found to be cited in error with the applicable code.
17. Contact CUCF to establish mutually convenient dates for the performance of the inspections and tests. Where possible, these inspections and tests shall be scheduled so as to coincide with the Contractor's regular maintenance inspections on a "not to interfere" basis. Any deficiencies discovered as a result of the inspections and testing, whether witnessed by CUNY or not, shall be characterized as follows:
 - i. Condition I - "Immediate" shall be utilized for life safety or other immediate deficiencies that adversely affect normal, safe operation and mandate removal of the unit from service at the time of testing. Upon the occurrence of the aforementioned, the Contractor shall notify CUCF verbally and provide a written confirmation prior to 10:00 AM on the next regular business day. Work required to correct such deficiencies shall be proposed immediately and, upon approval and completion, notification given to CUCF to witness the re-inspection procedure.
 - ii. Condition II - "Priority" shall be utilized for those deficiencies which could become life threatening or further impair the safe operation of elevator systems. Condition II "Priority" deficiency classifications shall be applied to units and/or conditions that will

create critical service interruptions. Required repairs, replacements and adjustments shall be proposed for corrective actions and reinspection within forty-eight (48) hours of recording the deficiency. CUNY will approve the extra work proposals and coordinate this mandated work based on the severity of the reported condition and building operations.

- iii. Condition III - "Routine" shall be utilized for deficiencies that may be addressed as soon as possible. Such conditions and/or deficiencies shall not be considered as safety infractions or conditions that will otherwise cause unscheduled removal from service of units or create conditions that will hamper regular building operations. The Contractor shall issue itemized proposals for recommended extra work procedures within two (2) weeks of recording the deficiency.

18. When repairs, adjustments or other equipment replacements are instituted over an extended time period, update reports and ensure outstanding deficiencies are indicated on any new inspection or test procedures that may be undertaken prior to the satisfactory completion of work previously specified. CUCF and/or designated representatives shall retain the right to witness all reinspection and/or test procedures as required to expunge the outstanding deficiencies.

J. Emergency Service (24 Hours per Day, 7 Days per Week)

1. Provide call-back service which consists of promptly dispatching qualified employees in response to requests from CUNY, by telephone or otherwise, for emergency adjustment or minor repairs on any day of the week, at any hour, day, or night. If repairs cannot be made immediately, the mechanic shall notify CUNY as to the reason and provide supplemental information regarding the restoration of services.
2. Callback service in response to passenger entrapments shall be provided within one-half hour during regular working hours and within one hour during overtime periods.
3. Call-back services for out-of-service units that have been secured by CUNY shall be provided within one hour during regular working hours and within two hours between 6:00 a.m. and 7:00 a.m. and 4:30 p.m. and 6:30 p.m. Monday through Friday, except holidays.
4. Call-back services for out-of-service units that have been secured by CUNY shall be provided within three hours at all other times not specified above in "1" or "2."

5. Call-back services for non-essential system malfunctions that do not constitute an operational or other safety condition shall be provided during normal working hours of regular working days within four hours of the request for service.
6. In the event the Contractor does not mobilize to the device within the above specified time periods, the Contractor may be held liable by CUNY for all material and labor costs related to the damage incurred by emergency services personnel.

K. Scheduled Service Procedures

1. Maintenance requirements, in addition to scheduled and emergency repairs, renewals and testing, shall include but are not limited to:
 - i. Examination of wire ropes and/or suspension belts to maintain proper tensioning and legal bottom clearances on a monthly basis for shortening and adjusting ropes as required and performance of all reshackling procedures per ASME 17.1/17.2 2022 A17.1 and/or ASME 17.1/17.2 2022 A17.6 standards and local laws in conjunction with maintenance of related slack cable devices, machine limits or other safety equipment.
 - ii. Examination, repair, and replacement of all electrical wiring, traveling cables, conduits, connections, and related apparatus extending from the main line power supply switch in the machine or other power supplies in hoistways.
 - iii. Maintenance of pit, hoistway and machine room lighting to include repairing, wiring, and switch controls.
 - iv. Mandated inspections and relative labor requirements for third party examinations and/or test procedures as approved by CUNY.
 - v. Routine maintenance and mandated annual servicing of elevator hoisting machine brakes in accordance with Part 8 of A17 as modified by Appendix K of the New York City Building Code. The Contractor shall note the date of the annual brake servicing and the company performing it in the Maintenance Control Program (MCP) and shall attach a metal tag to the car controller indicating the date of the servicing and the company performing it.
2. Monthly Firemen's Recall Service Tests following the ASME 17.1/17.2 2022 Code A17.1/A17.2 requirements must be performed monthly and test logs kept current and stored in an accessible location in the Elevator Machine Room / Space, and per the requirements of the Local AHJ. If to be performed by CUCF per local requirements, it is the responsibility of the Contractor to advise CUCF of such in writing.

3. The Contractor shall assign a dedicated on-site technician who will provide routine maintenance, ensuring that all safety devices, ropes, stopping precision, and noise vibration are functioning. The on-site technician shall provide emergency repairs when unexpected problems occur and shall assess the situation, contact the on-site contact personnel, and obtain approval (if not covered by the contract) before performing necessary repairs. The on-site technician shall conduct functional and operational tests on refurbished, repaired, and modified elevator equipment, assemblies, and systems; shall ensure a safe environment during service operations; and shall also, identify and communicate any site risks to on-site personnel promptly. Maintain necessary security clearances, area permits, licenses, and certifications.

L. Working Hours

1. The maintenance work to be performed under these specifications shall be performed during the normal working hours of 7:00 a.m. to 4:00 p.m., Monday through Friday, State holidays accepted. Proposer shall submit with its bid, and update annually, together with supporting documentation, including copies of any relevant union collective bargaining agreements, a statement of the hourly rates paid to its mechanics and helpers for "regular time" work, which term shall mean the hours stated and shall be synonymous with the "straight time hourly labor cost". The contractor shall also state what constitutes "time and one-half" as opposed to "double time." The Contractor shall provide emergency call back service for all elevators under which the Contractor agrees to have a workman report to the site of the emergency within two (2) hours after receipt of a request for such service by telephone or otherwise from CUNY This emergency callback service shall be limited to minor adjustments or repairs to provide uninterrupted elevator service. Emergency callback service shall be performed as part of this Contract without additional charge, during regular working days. The Contractor shall provide names and telephone numbers of the persons to be contacted. Should callback occur during other than normal working hours necessitating the payment by this Contractor of premium or overtime wages, this Contractor shall be responsible for the basic hourly rate paid, but CUNY will, upon receipt of properly documented bills, pay the actual amount of the premium portion of the wage together with the percentage of compensation, insurance contributions of Unemployment and Old Age Insurance attributable to such premium wage.

M. Outstanding and Future Notice of Violations

1. The Contractor shall be responsible for addressing all outstanding violations not corrected, up to and including violations that may be issued

subsequent to the violations and prior to the effective date indicated in the Notice to Proceed letter. The Contractor shall provide all labor and material on a fixed fee basis to correct and receive documented dismissal from the NYC DOB – Elevator Unit regarding each outstanding violation.