

# FOR CITY OF CLEARWATER



# **CITY OF CLEARWATER**

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# CITY OF CLEARWATER

# **ELEVATOR MAINTENANCE SERVICES AGREEMENT**

# **PART I: GENERAL INFORMATION**

A.	Parties to this Agreement									
	This agreement is between				("Cor	("Contractor") and The City of				
	Clearwater, Clearwater,	Florida	(Owner),	for	Elevator	Maintenance	Services	at	the	facilities

and/or buildings listed in Part I.C of this Agreement to commence on\_\_\_\_\_

# B. Summary of Intent and Requirements

The maintenance work on the elevators is highly critical to the successful operation of the Owner's facilities. This agreement establishes a long-term partnership with the selected elevator maintenance Contractor to ensure a high level of service for City of Clearwater employees and taxpayers, and to extend the life of the elevator systems as much as safely and reliably practical. At Agreement commencement twenty-eight (28) elevator units and two (2) wheel chair lifts are covered; this number subject to modification as a result of additions or deletions.

# C. Schedule of Elevator Equipment Covered by Agreement

License #	Building Name	<u>Location</u>
100340	Sid Lickton Park	714 Saturn
6591	City Hall - South	112 S. Osceola
6592	City Hall - North	112 S. Osceola
24150	WPC MS - Central	1605 Harbor Drive
26098	WPC NE - Central	3290 SR 580
38511	Garden Avenue Garage	28 Garden Avenue
43605	Long Center	1501 N. Belcher
43989	UPARC Side Elevator	1501 N. Belcher #249
45950	Sailing Center	1001 Gulf Blvd
50860	Main Police Dept - South	645 Pierce
50861	Main Police Dept - North	645 Pierce
50988	MSB - West	100 S. Myrtle
50989	MSB – East	100 S. Myrtle
53552	MSB - Garage	640 Pierce St
62156	Fire 44 (Sand Key)	50 Gulf Blvd
100529	Fire 45 (Main)	140 Court
62658	Beach Police Dept	700 Bayway Blvd
73299	Main Library - South	100 Osceola

\_\_\_\_\_, 2018.

73300	Main Library - Center	100 Osceola
73301	Main Library - North	100 Osceola
73454	Spectrum Field - West	601 N Old Coachman
73455	Spectrum Field - South	601 N Old Coachman
86118	General Services – WC Lift	1900 Grand Avenue
104656	Jack Russell Stadium	801 Phillies Drive
98599	Clearwater Beach Lifeguard Station – WC Lift	180 Gulfview
102064	Joe Dimaggio Field	2450 Drew Street
102984	Eddie C Moore - 8 & 9	2780 Drew Street
100698	WTP#2/RO#2	3290 SR580
97347	Carpenter Field Clubhouse	651 N Old Coachman
Not assigned	DOT Building (newly acquired)	Gulf to Bay (at causeway)

#### D. Term of This Agreement

This Agreement shall have an initial term of three (3) years, with the option to renew for two (2) three (3) year additional terms. At the end of the initial term of this contract, the City may initiate renewal(s) as provided herein. The decision to renew a contract rests solely with the City. The City will give written notice of its intention to renew the contract no later than thirty (30) days prior to the expiration.

#### E. <u>Termination Provisions</u>

**By Owner:** This Agreement is subject to termination for convenience by the Owner, without any recourse whatsoever from the Contractor, if the Owner elects to send a thirty (30) days written notice (to be sent via certified mail) to the Contractor for any of the following reasons, including but not limited to:

- 1. Contractor fails to fully keep the equipment operating in a highly reliable, well maintained, professional workmanship and safe operating condition.
- 2. Contractor fails to respond to emergency call-backs in a timely manner, during both regular and overtime hours, as specifically listed in this agreement.
- 3. Contractor fails to continuously provide skilled, knowledgeable elevator technicians and repair personnel, including fully trained and qualified supervision, to provide regularly scheduled service, maintenance, scheduled Contractor unscheduled repair work and proper care for the elevator equipment listed hereinafter, in a manner that will keep the elevator systems in "like-new" operating condition, and equipment/work area in condition required hereinafter.
- 4. Contractor fails to comply with all specified requirements of this Agreement, including, but not limited to the following: submittal of unreasonable pricing of any additional Contractor work, parts, or Contractor labor that is not included in the requirements; failure to comply with all record keeping requirements and submittal of regularly required reports; failure to focus on regularly and properly cleaning the elevator equipment and machinery areas; failure to repair the elevators are requested Contractor required, consistent with requirements; failure to perform the preventive maintenance and adjustment work in a manner that will keep the number of

emergency call-backs to a minimum number, as listed hereinafter; failure to perform analytically based repairs, remedial work, testing and adjusting as required to keep the elevator equipment in first-class operating condition; failure of Contractor to furnish completely skilled personnel, who display good work habits or professional Contractor attitudes while on the premises of the Owner. Additionally, the Elevator Contractor shall notify the Owner's representatives when arriving on site in response to emergency call-backs, and notify the Owner's representative when leaving the site, all by e-mail as required by Owner.

- 5. Contractor personnel shall be notified by Owner in the event funds for this are not approved or appropriated by the Owner, for purposes of continuing this Agreement.
- 6. In the event the Owner becomes dissatisfied with the business relationship with the work of the Contractor for any reason whatsoever, even though it may not be specifically listed herein. The Contractor hereby agrees that no recourse can be taken by the Contractor.

**By Contractor:** The Agreement is subject to cancellation by the Contractor, subject to sixty (60) days prior notice, based on the following provisions:

- 1. Owner fails to provide payments to the Contractor in accordance with Chapter 218, Florida Statutes.
- 2. Owner fails to correct any safety items or other issues that could impact the normal operation, life expectancy or safe use of the elevators, within a reasonable time after Contractor's proper notice in writing. Notice shall be provided in certified letter form to City of Clearwater, Superintendent of General Services or designee, as may be determined during the term of this Agreement.
- 3. Owner fails to maintain the following: sufficient cooling of elevator machine room spaces; machine rooms, pit areas, and hoist ways free of water and other hazards; security of machinery spaces; proper electrical power to the elevator systems, feeders and disconnect switches for the elevator equipment; damage to the elevator equipment due to fire, floods, and other disasters; compliance with all work by Owner related responsibilities as listed herein.

#### F. Order of Precedence

Any inconsistency in documents relating to this Agreement shall be resolved by giving precedence in the following order: (i) this Agreement (including the Exhibit(s) attached hereto) and subsequent Amendments; (ii) the Provider's Request for Proposals #06-18 response; and (iii) Request for Proposals #06-18, Elevator Maintenance Services and subsequent Addenda; all of which are incorporated by reference and attached hereto.

#### G. Assignment

This Agreement may not be assigned either in whole or in part without first receiving the City's written consent. Any attempted assignment, either in whole or in part, without such consent will be null and void and in such event the City will have the right at its option to terminate the Agreement. No granting of consent to any assignment will relieve Contractor from any of its obligations and liabilities under the Agreement.

# H. Changes

Any changes to this Agreement shall be agreed upon in writing by both parties (Amendments). No oral or other representations, modifications, or waivers will be acceptable to either party.

# **END OF PART I**

# PART II: SERVICE REQUIREMENTS

#### A. Contractor's Local Maintenance and Service Office Facilities

The Contractor shall have an established maintenance and service organization staffed with full time personnel including management, supervisor(s), and technicians, located within the Tampa Bay Metropolitan Area (encompassing Tampa/St. Petersburg/Clearwater, specifically Hillsborough and Pinellas Counties). A minimum of twelve (12) highly skilled, journeyman certified elevator maintenance and repair technicians shall be currently and consistently assigned to perform the Contractor's elevator maintenance and elevator repair work only, specifically within the Tampa Bay Metropolitan Area.

#### B. Maintenance Staff Awareness of Agreement Requirements

The local technical and supervisory staff of the Contractor shall be fully trained in the procedures required of this Agreement.

Contractor management shall properly train all technicians who will be assigned to work this Agreement, to communicate the following requirements:

- 1. Notification requirements when an emergency call-back is received. This includes email notification when technician arrives at the site, and when the technician leaves the site after work is completed.
- 2. Response times required, to meet Agreement requirements.
- 3. Preventive maintenance time required on each elevator, intervals, and tasks.
- 4. Items to be checked on a monthly basis and action that must be taken if any systems fail to function properly.
- 5. Cleaning schedule for all portions of the elevator systems, including areas for cleaning by the Owner.
- 6. Maximum time allowed for any elevator to be out of service for repairs, based on failure type.
- Elevators which are to receive rapid response to overtime call-backs as part of this Agreement, and those which require prior approval to receive overtime call-back service.
- 8. Other items that are required by the Agreement, as well as additional Owner related details, such as: building entry requirements; scheduling; communication; contact persons; procedures; and so forth, all in compliance with this Agreement.

#### C. Contractor Organizational Chart

The Contractor shall provide, with his proposal, a complete organizational chart showing the responsibilities of all management and supervisory personnel, and technical personnel, associated with the regional and local office maintenance organization responsible for the scheduled preventive maintenance and unscheduled maintenance and repairs, tests and associated work on the elevator equipment covered by this Agreement. The Organizational Chart shall list all names of personnel (including local, district and regional technical, supervisory, and management personnel), job titles, business and residence phone numbers, business and home addresses of each person on the Organizational Chart. Complete information on each person listed, shall include the following:

education, history of uninterrupted time in the elevator industry, specific types of training in the elevator industry, geographical territory covered by each crew/person(s), who reports to whom, etc. The complete Organizational Chart must be updated each time there is a change in personnel or responsibilities during the entire term of this Agreement.

#### D. Trained Employees

Only fully trained and experienced journeyman certified elevator mechanics and elevator mechanic's helpers, all in the direct, full-time employment of the Contractor, shall be allowed to perform work on the elevators covered by this Agreement. Any employee of the Contractor who appears not to perform in a competent, or be able to work in a safe manner, can be directed to leave the Owner's premises, and the local office manager for the Contractor will be notified by the Owner's Representative. Elevator mechanic's helpers with, or without, temporary mechanic's status, are not acceptable to work as journeymen elevator mechanics on this Agreement regardless of their standing with the Local Union or the Contractor.

Journeymen elevator mechanics must answer all regular and over-time call-backs, and perform all tests, perform all routine maintenance examinations, and perform all repairs on the elevator equipment. Elevator mechanic's helpers can only perform cleaning, painting and replacement of indicator lamps on the elevator equipment, Contractor assist a journeyman elevator mechanic who is working on the site at the same time.

Contractor shall regularly engage in providing and requiring continuing education classes and training sessions to improve the technical skills of the elevator mechanics. Failure to do so demonstrates lack of commitment on the part of the Contractor, and is not in compliance with the requirements of this Agreement. Complete records must be maintained indicating the extent and type of training, and shall be made available to the Owner in the event such a request is made during the term of this Agreement.

#### E. Field Supervision

The elevator maintenance, service and repair mechanic(s) assigned to perform work on the elevators covered by this Agreement shall be properly and regularly supervised by a fully trained supervisory representative of the Contractor, to ensure the work is being performed in the most effective, thorough, efficient, and safe manner to keep the elevators operating and appearing in "like new" condition. As indicated in Part II.A, all supervisory personnel must be based in the Tampa Bay Metropolitan Area office. Likewise, all routine elevator maintenance work, call-backs, tests and repairs must be regularly monitored by the supervisor(s) for maintenance of a very high level of reliability of service, with a very low or limited frequency rate in terms of outages or call-backs due to failures of the elevator systems. Failures in equipment operation, higher numbers than the industry standards for similar types of new or newly renovated elevators are not acceptable, and are not in compliance with this Agreement.

Field supervision shall include regular work site examinations of the work quality and compliance with the terms of this Agreement. Written reports of findings during each supervisor examination shall be supplied to the Owner's Superintendent of General Services or designee, during the term of

the Agreement. Written confirmations and details of site examinations, deficiencies, action requirements, etc., shall occur at least three (3) times per calendar year.

Follow-up examinations of site work shall occur if the Contractor supervisor determines that there are deficiencies which do not meet the Agreement requirements.

#### F. Safety Training and Safe Work Practices

The Contractor shall provide all employees working on the Owner's premises with regularly scheduled training in safe work habits and practices, including regularly updated safety awareness training, as required by applicable Federal and State Laws, company policies and current practices in the elevator industry. All employees must observe safe work habits while performing their assigned work under this Agreement. Complete records must be kept of all regular safety training, as required by applicable laws. Copies of training records shall be made available to the Owner, if requested.

#### G. Storage Cabinets and Elevator Wiring Diagrams

The Contractor shall have the option of providing a suitable locked storage cabinet in each of the machinery rooms for storage of small parts, clean wiping rags, wiring diagrams and the like, or he is permitted to transport those small parts in the maintenance vehicles, along with other parts needed to avoid unnecessary delays in maintaining the system or promptly restoring a malfunctioning elevator to service. Likewise, normal wearing parts should be available during regular maintenance visits to install as part of the required preventive maintenance. This Agreement requires a heavy focus on preventive maintenance work, including replacing wearing parts in advance of their complete failure.

Elevator electrical wiring diagrams shall be properly maintained and stored on the elevator equipment site in a safe manner, to protect the diagrams from excessive damage or misuse. The Contractor shall be responsible for safe storage and for cost of obtaining the necessary wiring diagrams or drawings required for any of the elevators, where drawings are not currently available. Wiring diagrams shall become the property of the Owner. In the event efforts are required from the Owner to obtain drawings from elevator equipment manufacturers, the Owner shall cooperate with the Contractor in obtaining the drawings.

#### H. Major Parts, Minor Parts, Supplies, and Tools Inventory in Local Maintenance Facility

The Contractor, while providing maintenance and repairs under this Agreement, shall stock the following parts, materials and tools, in addition to all other normal maintenance components, parts, supplies, special equipment lubricants, and tools, to be used in servicing elevators included in this Agreement. The following major and minor parts, and tools, shall be located within the Tampa Bay Metropolitan area facility:

 A minimum of one (1) set of major and minor electronic boards, except for elevator specific "mother board" configurations, which will properly fit each type of elevator electronic type controller included in this Agreement. The requirements include any and all elevator controller parts which may be needed to restore any elevator, to

- reliable service. Mother board configurations shall be available from other stocking locations, obtainable within 48 hours of the need being established.
- 2. A minimum of one (1) set of all electronic or conventional controller components, motor drive assemblies and the like from the local stock, or obtainable within 48 hours after the need is established.
- 3. A minimum of (1) set of all relays, coils, resistors, rectifiers, terminal strips, timers, transformers and other elevator controller devices.
- 4. A sufficient number and type of all electrical parts, switches, board edge connectors, fuses, fuse blocks, electronic type components, for repair.
- 5. A minimum of two (2) door operator motors for each type of elevator equipment.
- 6. Complete sets and miscellaneous components, devices, cables and such for the electronic door detectors, for prompt repair purposes.
- 7. A minimum of one (1) each of the alternating current elevator drive motors for all types, sizes, and voltages for pumping units on oil-hydraulic elevators.
- 8. A minimum of one (1) set of oil control valves, valve internal components, hydraulic system gaskets and seals, drive belts, pumps and all such components for the various types of oil hydraulic pumping units.
- 9. A minimum of two (2) sets of all types of hydraulic elevator cylinder packing seals.
- 10. A minimum of twelve (12) rollers, for car doors and hoist way doors, including all associated devices.
- 11. A minimum of two (2) types of interlocks, interlock releases and related equipment.
- 12. A minimum of four (4) door closers, and associated parts.
- 13. A minimum of one (1) set of door operator components, belts, control boards, and the like, for each type of door operator machine.
- 14. A minimum of four (4) of roller guide wheels.
- 15. A minimum of twelve (12) car and hoist way door panel guides of all types, for the elevators.
- 16. Sufficient number of signal fixture components, including a wide selection of lamps, available to repair all such equipment.
- Sufficient number of emergency lighting batteries, lamps, operating devices, chargers and the like, which will restore all elevators. Also, emergency alarm bells and like items.
- 18. Sufficient number of emergency telephone devices that will make it possible to restore elevator safety as soon as possible.
- 19. Selection of cab lighting lamps and fixtures for elevator cab illumination.
- 20. Sufficient number of traction machine minor parts, seals, brake parts and the like, for expeditious elevator repairs.
- 21. Sufficient number of heavy duty tools such as high capacity chain-falls, hydraulic cable cutters, hydraulic elevator piping tools and other such tools for purposes of restoring elevators to service.
- 22. Sufficient number of test weights for testing elevators, where needed.
- 23. Sufficient number of high capacity hydraulic fluid filtering systems for use on these and other elevators. An adequate supply of oil filtering cartridges shall be available.
- Sufficient number of blowers, vacuum cleaners, step ladders, oil transfer pumps, hoist rope tension gauges, door closing pressure spring type gauges, governor jaw/rope

tension gauges, stop watches, voltage/resistance meters, amp. Meters, fully programmed lap-top computers, software archives, adjustment and trouble-shooting manuals, parts manuals, and other such tools. Each technician shall be issued a stop watch and door closing tension gauge.

- 25. Various types of painting supplies, coatings, lubricants, "Corrosion Block" protective coating, all appropriate types of hydraulic fluids. Environmentally approved cleaning solvents and supplies must be on hand and available to the maintenance/repair technicians.
- 26. Wiping clothes and other cleaning media, for use on the elevators.
- 27. Various other equipment, components, supplies, tools and the like, suitable for a highly efficient elevator maintenance and repair operation.

#### I. Maintenance Records

This Elevator Maintenance Agreement requires that the Contractor provide detailed, legible, and complete records of all work performed on the elevator equipment; <u>each visit's</u> work on an elevator must be documented by the elevator maintenance technician, regardless of the circumstances. The written record must be signed by the maintenance technician and by an authorized representative of the Owner. The signature of the Owner's representative is not considered a confirmation that the work was performed or performed correctly, but only to signify that the Contractor's employee was at the building(s) on the specific date shown on the report.

The forms to be used for providing written information to the Owner regarding all work associated with the elevator equipment covered by the Agreement shall be provided by the Contractor. Copies of all work records shall be submitted to a designated representative of the Owner for a perpetual file on the elevators.

These written records must be in addition to those created by a hand-held or similar "PDA" type electronic devices utilized by the Contractor, and shall include the following information:

- 1. Date (month, day and year) of the work performed.
- Exact time period during which the work was performed, including starting and ending times at the building.
- 3. Complete description of all work performed on the elevator(s). Simply stating "PM" maintenance is not an acceptable description of the work.
- 4. List of parts, supplies or equipment being replaced or installed on the elevator equipment.
- 5. All work time shall be broken down on a per elevator basis rather than a generalization of tasks. Time tickets shall apply to each elevator individually, not as a group.
- 6. Mechanic and mechanic's helpers must sign a log when reporting to each building, and sign a log when leaving the building. No exceptions will be accepted, unless if the building has no location at which to report to log in/out. In this case, an email shall be sent to the person designated by the Owner. The log must be maintained at each location designated by the Owner.
- 7. All records of elevator maintenance, repairs, call-backs, tests and other work shall be recorded on paper documents located in each elevator machine room.

8. Fully comply with the elevator maintenance and repair reporting, record keeping and related requirements listed in ASME A17.1-2016 Safety Code for Elevators & Escalators.

On a <u>quarterly</u> basis, the Contractor shall email a complete print-out of all elevator related work performed for the Owner, with a listing of each elevator and separately listing all the work performed on each elevator. This report shall be easily understandable and legible, and list all preventive maintenance work, emergency call-backs, unscheduled elevator work of any type, scheduled work and all required tests. The report shall also include times of arrival and departure at the buildings. Emergency call-backs shall also include the time the call was received by the Contractor. These reports shall be provided to the Superintendent of General Services or designee.

The Contractor shall make all maintenance records available via internet, by assigning an account number and password to a representative of the Owner. These records must provide all relative information regarding elevators covered by this Agreement.

Written records to be kept in each elevator machine room, which shall be legible and sufficiently complete as to reflect the work performed. The records shall include the dates for preventive maintenance, emergency call-backs, repairs, adjustments, tests, voltage checks and other information regarding the care and operation of the elevators.

When elevator technicians respond to emergency call-backs, the technician shall send an e-mail to the Owner's representative as soon as s/he arrives at the site, and shall send an e-mail to the same person prior to leaving the site after the repairs are complete.

#### J. Semi-Annual Meeting Between Contractor and Owner

Semi-annually, a meeting shall be scheduled by the Contractor to meet with the Owner's designated representative(s) and Owner's Elevator Consultant to discuss the performance of the Contractor and the elevator equipment, including emergency call-backs, repair-work, general operation of the elevators, periodic tests and maintenance records, as well as any other issues Contractor concerns related to the elevator equipment. Any areas needing improvement shall be included in the discussion. This meeting shall be scheduled at least twenty-one (21) days in advance of the meeting date, and shall be at the location designated by the Owner.

#### K. Annual Training Meeting Between Contractor and Owner's Employees

On a regular basis, representative(s) of the Contractor shall meet with representatives of the Owner to discuss and verify procedures relating to Owner's responsibilities in terms of elevator equipment maintenance requirements and other important issues. These requirements shall include, but not be limited to, the following subjects:

- 1. Cleaning elevator cabs, including walls, ceilings and other components.
- 2. Cleaning elevator entrances, including doors and frames.
- 3. Cleaning elevator cab thresholds and hoist way entrance thresholds.
- 4. Cleaning the signal fixtures, buttons, and other devices.
- 5. Cleaning of electronic car door safety protection devices.

- 6. Cleaning of all stainless steel surfaces in a proper manner to prevent damage.
- 7. Replacing filters in air conditioning equipment cooling machine rooms.
- 8. Cleaning excessive debris from elevator pit areas. Normal amounts to be cleaned by Contractor.
- 9. Operation of specific keyed operation control features.
- 10. Access to machine room spaces.
- 11. Cleaning of elevator floors, and flooring outside the elevator entrances.
- 12. ASME A17.4 Emergency Evaluation from Elevators, including video.
- 13. Any other features Contractor items that need to be discussed.

A written report shall be generated by Contractor to verify the subjects and recommendations made during the training meeting. Copy of report shall be provided to Owner's Superintendent of General Services or designee.

#### L. Response Times to Call-Backs and Elevator Outages

Response times are a critical aspect of this Agreement. The Contractor shall be responsible to the Owner by promptly responding to unscheduled service, maintenance, and repair call-backs on the elevator equipment covered by this Agreement, in the following manner:

<u>Call-backs during regular working hours:</u> Contractor technician shall arrive at the building within **forty-five (45) minutes** after the service call is received by the Contractor.

<u>Call-backs during overtime working hours:</u> Contractor technician shall arrive at the building within **ninety (90) minutes** after the call for service has been received by the Contractor.

<u>Call-backs related to entrapments on stalled elevators:</u> Contractor technician shall respond as quickly as possible – the Contractor's technician is required to arrive at the building site within **forty-five (45) minutes** during regular time hours, and within **ninety (90) minutes** during overtime hours.

Contractor shall be mindful that a number of the elevators covered by this Maintenance Agreement are located in buildings with only one (1) elevator.

The need for extremely prompt responses to emergency call-backs is critical and is a primary performance element of this Agreement.

Contractor shall place suitable, professionally designed signs on all elevator entrances anytime an elevator is removed from service for maintenance or repairs, and when the maintenance technician arrives at the building in response to an emergency call-back. Install the signs immediately upon arrival, and remove the signs when the elevator repair is completed.

Contractor technician shall send an e-mail to Superintendent of General Services or designee when s/he is dispatched to the site, with an estimated time of arrival. Contractor technician shall send an e-mail to Superintendent of General Services or designee when s/he arrives at the building when an elevator is out of service.

Contractor technician shall send an e-mail to Superintendent of General Services or designee when the elevator has been repaired and restored to service, and prior to leaving the premises.

Failure of the Contractor to comply with the response time requirements, placement of the out of service for repairs or maintenance signs, shall place the Contractor in default of this Agreement.

#### M. Time to Return Elevators to Service

Contractor shall promptly provide all staffing, technical manpower, supervision, materials, parts inventory, supplies and needed tools to make necessary repairs to elevators in need of repairs due to call-backs, scheduled elevator repairs, or unscheduled elevator repairs, all as follows:

Repair of elevator when only minor parts are required: four (4) hours from the time the emergency call-back is reported to the Elevator Contractor. Repairs in this category would include the following work: relays of all types, starter contacts, interlock and interlock release mechanisms, hoist way and car door rollers, pushbutton components, door guides and shoe gibs, limit switch contacts, timers, resistors, rectifiers, electrical connections, electronic door protective devices, door operator motors, door operator drive belts, car door clutches, position indicators, guide shoes and rollers, small printed circuit boards, fuses, other small parts and the like.

Repair of elevator when major parts or repairs are needed (except drive machine motors, rotating elements, worms and gears, drive sheaves, and similar major components): fifty-six (56) hours maximum time from the reporting of an emergency call-back to Contractor, where extensive repairs are required. Repairs under this category would include the following: traveling cables, jack packings and seals, hydraulic elevator oil control valves, "mother" boards, driving machine bearings, motor bearings, complete machine brake assembly, major machine oil seals (not worm shaft seals), governor jaw assemblies, deflector sheave bearings, governor tail sheave assembly, governor cable and other similar work. Traction elevator hoist ropes, on a scheduled basis, should be accomplished in no more than the 56 hours.

Work to replace hoisting cables tor belts, on an unscheduled basis: not more than eighty-five (85) hours from the determination of such required work, until the elevator is returned to service.

Major scheduled repairs or major parts replacement such as driving machine motors, driving machine worms and gears, drive sheave assembly and similar major components: one hundred-twenty (120) hours maximum from the time the major repairs are determined to be necessary until the Contractor restores the elevator to service.

In the event the Contractor fails to comply with the requirements set forth in Agreement Part II.M, the Owner shall have the right to deduct the sum of sixty (60) percent of the next monthly invoice for the elevator involved, on a per incident basis, during a single calendar month. Multiple failures on the part of the Contractor to properly perform, on the same elevator, can result in no payment for monthly maintenance.

In the event the Contractor appears to have been negligent or not proactive in returning any elevator to service after the equipment being out of service due to failing components, lack of parts availability, lack of suitable preventive maintenance program, or the like, the Contractor shall be penalized by a charge of \$150.00 per elevator, per event, for failing to return the elevator(s) to

serviceable condition as promptly as possible. This is in addition to invoice deductions taken per Part II.M.

The number of hours listed in Part II.M are intended to be continuous hours within the regular work week days, beginning 12:01 A.M. Monday and ending 11:59 P.M. Friday, and do not include weekends and holidays.

#### N. Group Control System Tests

Where group type elevator systems exist, the Contractor shall verify the multi-car systems on an annual basis to determine that the equipment is functioning properly as a group operation. Copies of any system performance reports generated shall be presented at the semi-annual meetings with the Owner(s) representative.

#### O. Equipment Performance, Parts Replacement, Maintenance Tests, and Condition Requirements

The mechanical, electrical and safety related equipment associated with the elevators covered by this Agreement must be kept in "like-new" condition, in terms of operation, performance and appearance, throughout the entire term of this Maintenance Agreement. All suitable, appropriate and necessary adjustments, repairs, replacements and renewals of the equipment are required to be performed as needed to maintain the original design, or the renovated equipment design performance, as such conditions apply, including the following: car ride; floor to floor times; door operation smoothness and speeds, door opening and closing times, as shown herein; door closing pressure, as shown herein; reliability, dependability, "as new" performance condition; car speed, as shown herein; noise levels; passenger traffic handling capabilities; floor leveling accuracy; car safety of operation; system free of vibrations, squeaks and rattles; elimination of oil leaks of any type (except for the buried portion of oil-hydraulic cylinders and buried hydraulic pressure lines); cleanliness and housekeeping appearance; operational items such as signal fixtures and operating buttons; corrosion control; painting.

The Contractor shall replace all needed parts of all types, equipment, bearings or assemblies with genuine original elevator equipment manufacturer's parts manufactured for the elevator assemblies, driving machines, elevator electrical controllers, motors, pumps, seals, interlocks, rollers, relays, electronic boards, door operators and related items incorporated into these elevator systems. No parts from other elevator equipment or parts manufacturers shall be acceptable to the Owner, unless the original equipment manufacturer is no longer able to provide a genuine replacement part or assembly.

All incandescent operating fixture lamps shall be replaced with LED type lamps when a fixture requires any type of lamp replacement.

Claims made by Contractor, relating to any type of parts obsolescence, shall not be accepted by the Owner. The Contractor shall be responsible, at their sole expense, for replacement of any parts or assemblies that may become obsolete during the term of this Agreement. The Owner requires that the entire assembly be replaced with a new assembly of equal or greater quality if repair or replacement parts are no longer available for any existing assembly.

As part of this Agreement, the following items shall be measured on regular intervals to ensure compliance with the following performance characteristics. Elevator technicians shall have in their possession the necessary tools and equipment to accurately determine and test the following operations of the elevator equipment as required:

#### Door Opening and Closing Times - to be checked by Contractor on a quarterly basis

Door Opening: Single speed and two-speed doors = 2.2 seconds; center-opening doors = 1.8 seconds; all times measured from door fully closed position to door fully open-door position.

Door Closing: Single speed and two-speed doors, for 3'-6'' wide doors = 4.0 seconds; for 3'-0'' wide doors or less = 3.5 seconds; for 3'-6'' wide center-opening doors = 2.2 seconds; all times measured from door fully open position to door fully-closed position.

Make any required adjustments at the time the doors speeds are checked. Note the testing results in maintenance documents.

# <u>Door Closing Pressure</u> – to be checked by Contractor on a quarterly basis

Door Closing Pressure: to be measured at approximately 1/3 to 2/3 closed, shall be set at a maximum of 18-20 pounds of door torque for all power operated doors.

Make any required adjustments as soon as the variation from the requirements is detected. Note the testing results in maintenance documents.

#### Floor Leveling Accuracy - to be checked by Contractor on a monthly basis

Floor Level Accuracy: shall be set and maintained at no more than 3/16" from exact floor level at all floors, regardless of direction of travel and load on the elevator car platform.

Make any required adjustments as soon as the variation from the requirements is detected. Note the testing results in maintenance documents.

#### Door Stand Open Times – to be checked by Contractor on a quarterly basis

Door Stand Open Time: shall be set at 5.5 seconds for each elevator, unless the Owner's Representative requests that the time be lengthened. If the door time is lengthened, the time period should be noted on the machine room records and on the report of work performed at the time of readjustment.

Make any required adjustments as soon as the variation from the requirements is detected. Note the testing results in maintenance documents.

# **Elevator Travel Speeds & Performance**

# <u>Traction Elevators</u> – to be checked by Contractor on a quarterly basis

The high-speed operation of all elevators shall be within 3% of the system Original design speed, or the renovated equipment design speed, in both directions, with or without a load on the elevator.

- The rate of acceleration and deceleration is to be maintained at 3.0 feet per second.
- The car shall commence movement from the floor approximately one (1) second after all door locks or switches are closed.

 Ride Quality: Car ride on all elevators shall be smooth, quiet, and free from objectionable noises, scrapes, rattling sounds, vibrations, lateral car movement, or harshness in acceleration and deceleration control. Check on monthly basis.

Make any required adjustments as soon as the variation from the requirements is detected. Note the testing results in maintenance documents.

# Hydraulic Elevators - to be checked by Contractor on a quarterly basis

The high-speed operation of the elevators shall be within 5% of the system Original, or the renovated elevator equipment design speed, whichever is the latest design criterion. The down direction speed, without a load on the elevator, shall be set within 8% percent of the up speed of the elevator.

- The rate of acceleration and deceleration shall be maintained to operate the elevator
  equipment in a smooth and efficient manner, approximately 1.75-2.0 feet per second, free from
  jerky and uncomfortable operation. The rates of acceleration and deceleration, including the
  leveling operation, shall be the maximum achievable to provide the best service possible for the
  building.
- The car shall commence movement in the up direction as quickly as possible once the door locks and switches are closed, and the motor commences operating at full speed in up direction. Movement in down direction shall commence as soon as the door interlock and gate contacts are closed.
- Ride Quality: The elevator car ride shall be smooth, quiet and free from objectionable noises, scrapes, rattles, vibrations, lateral car movement or harshness in all positions throughout the travel of the elevator car. Check on a monthly basis.

Make any required adjustments as soon as the variation from the requirements is detected. Note the testing results in maintenance documents.

#### P. Elevator Performance Subject to Evaluation

The overall work performance of the Contractor, and the elevator equipment covered by this Agreement, is subject to periodic evaluation by the Owner, during the entire Agreement term. Any items identified by the Owner as requiring improvement or correction to comply with this agreement, elevator industry standards, elevator performance requirements or the latest edition of ASME A17.1 Safety Code for Elevators and Escalators, shall be corrected within 30 days maximum, by the Contractor. In the event the Contractor fails to comply with the required corrections the Owner shall have the sole right to cancel the Agreement and engage the services of another Contractor. The Contractor shall have the responsibility of paying for the corrections by the new Contractor, either directly or indirectly through his bonding company who provided the Payment and Performance Bond(s). The Contractor who is a party to this Agreement shall not be required to make changes or perform work that is not already required in this Agreement.

#### Q. Routine Maintenance Provisions

The Contractor shall perform the following work in addition to the routinely scheduled preventive maintenance, call-backs, adjustments, repairs, and component replacement or renewal work on the elevator equipment.

#### 1. Elevator Cars – All Elevators

Check condition of all components and systems, and provide all needed repairs or adjustments to the elevator car and car top equipment; clean all car tops, cross-head support members, car door operator machine, car door hanger equipment, car threshold, roller and slide guides on cars, other top of car related equipment, car door switches, electronic safety screens Contractor door edges, car door clutch(s) and related equipment at least **every two (2) months**, to maintain a professional appearance, function and operation. Adjustments and/Contractor repairs of guide shoes, roller guides, door operator machines, car door hangers and tracks, door hanger up-thrusts and related equipment must be made when first diagnosed as being required or needed.

#### 2. Elevator Driving Machines – Traction Elevators

# **Geared Driving Machines**

Contractor shall replace the worm gear oil in each geared traction driving machine at least biannually (every two [2] years). This work includes draining of used oil, thorough flushing the gear case of all oil, sludge and metal particles, before refilling the gear case Contractor reservoir with fresh oil of the proper grade, and weight of only <u>synthetic</u> type worm gear oil, of the type and viscosity recommended by the driving machine manufacturer. Contractor shall maintain a permanent tag on the driving machine gear case which identifies the lubricant that is installed in the driving machine, and the dates at which the oil has been replaced. Note in the maintenance records when the worm gear oil is replaced or added to the gearbox, including the brand/type that was installed.

Properly lubricate all other lubrication points on the elevator driving machines, using the machine manufacturer's recommended lubricants and procedures, and at the proper frequency. This includes drive sheave support bearings, brake pivot points, brake magnet cores and sleeves, drive motors and other locations where lubrication is required. Follow equipment manufacturer's recommendations.

Elevator driving machine worm gear lubrication must be kept at the proper level. Waste oil must not be allowed to accumulate on the machine room floor, on machines or under the driving machine. All leaking seals shall be repaired or replaced as quickly as they are discovered as leaking. The use of absorbent pads around or under driving machines is not an acceptable substitute for replacing seals or gaskets on driving machines, and will not be accepted.

Each month, verify that the thrust bearings, worm shaft bearings, drive sheave bearings and the like are in good condition. Any deteriorated bearings shall be replaced immediately.

#### **Gearless Driving Machines**

The gearless driving machines on any elevators with such design shall be kept clean and maintained. The brake assemblies shall be examined, **guarterly**, for proper operation, low noise level and functionality. Perform any type of maintenance, specific to the type of equipment installed on the elevator. Verify the performance and wearing characteristics, based on the manufacturer's recommendations and maintenance instructions. Check the security of mounting and noise levels of the machinery.

#### 3. Elevator Driving Machines (Pumping Units) – Hydraulic Elevators

Contractor shall filter the hydraulic fluid in the reservoir of each hydraulic elevator at least every three (3) years, using a high capacity type portable filtering system and clean filter cartridges (use new filters for each elevator), to operate for a period of at least five (5) days while the elevator remains in operation. Clean the reservoir of any dirt and debris that may have collected on the bottom of the tank, prior to filtering the oil supply.

On dry mounted motor and pump assemblies, clean the pump, drive motor, oil control valve, and oil collection pan under unit, at least every two (2) months to alleviate the accumulation of dirt, debris and waste oil. The belt tension and condition should also be checked at least every two (2) months, and belt replacements or adjustments made where required. Clean exterior of units at least one (1) time per month. Belts that are badly worn or cracked should be replaced as soon as possible to prevent failure. No waste oil should ever be returned to the oil reservoir. Check the oil level in the tank on monthly basis, after installing a magnet inside the tank to verify the proper fluid level.

On dry or wet mounted types of hydraulic pumping units, check the condition of the wiring, tank for leakage, oil level in tank, and noise levels of the pumps and motors each month. Clean the exterior of the pumping units at least **one (1) time monthly**. Replace any spin-off oil filters on oil cooler systems, as frequently as necessary, to maintain efficient operation of the oil cooling systems.

Regularly check the condition of all hoses, sound and vibration couplings, silencers and other components with rubber components, and replace in the event of leakage. The rubber pads inside all oil-hydraulic type silencer units shall be replaced at least **every three (3) years**, and records shall be kept indicating replacement of the pads.

#### 4. Elevator Driving Machine Motors – Geared & Gearless Traction Elevators

Check the operating condition of all the alternating and direct current motors and related components completely, at least **monthly**. Exterior of the driving machine motors and related electrical gear must be cleaned at least **monthly**, to maintain a professional appearance and operation. Check the condition of the motor bearings at least **one (1) time per month**. Motor bearing lubrication, if required, must be as recommended by the motor manufacturer.

# 5. <u>Elevator Driving Machines – Geared Traction Elevators</u>

Check operation, adjust and repair, if necessary, and clean all worm geared traction type elevator driving machines, drive sheaves, brake pulleys, brake assemblies, gearboxes and all other related components or equipment on a regular basis, at least one (1) time monthly, to maintain a professional appearance and operation. Adjustments to the driving machine brake assemblies shall be made when necessary, and in accordance with ASME A17.1 safety Code for Elevators and Escalators. Machine brakes must perform smoothly and quietly. All machine brake assemblies shall be dismantled, cleaned, repaired as necessary, lubricated, reassembled and tested on an annual basis. All vibrations, noises or other unfavorable operational problems, of any type, must be corrected when detected.

Replace when appropriate, and before elevator performance deteriorates, machine drive sheaves, brake shoes, worms and gears, coupling bushings, machine and motor bearings, machine isolation pads, gaskets, seals and other wearing parts, under this maintenance Agreement. Perform the work when any worn or damaged condition if first detected.

# 6. <u>Hydraulic Cylinders, Piping, and Related Conditions, and Hydraulic Cylinder Maintenance – Oil-hydraulic Elevators</u>

Regularly check, repair and adjust, the conditions at the top of each hydraulic cylinder for conditions involving leakage, damage to the packing gland or other conditions that may impact safety of operation. If the packing or seals leak more than one (1) quart per month, the seals or packing shall be replaced immediately. The tops of the cylinders must be cleaned **monthly** to prevent dirt and debris from being dragged into the hydraulic system. Check all of the piping, valves and fittings in the machine room and pit area at least **one (1) time bi-monthly.** 

Five (5) gallon metal or plastic containers, with enclosed tops, must be used to collect leaking hydraulic fluid. Properly dispose of any oil leakage; however, never return the waste oil to the power unit reservoir.

The buried portion of hydraulic cylinders and any buried hydraulic pressure piping cannot be maintained; therefore, this equipment is excluded from this Contractor's responsibility. When a leak is discovered, the Contractor shall remove the elevator from service and notify the Owner in writing that corrective action is required before the elevator can be returned to service.

#### 7. Hoist way Door Equipment – All Elevators

Examine, adjust, repair and clean all hoist way door tracks and hanger equipment, interlocks and interlock release mechanisms, door guide shoe assemblies, door closers, relating cables and hardware, thresholds in the hoist way and the related door operating equipment, completely, at least **every four (4) months**, to maintain a professional appearance, function and operation. All damaged or worn components shall be replaced or repaired when first determined that corrective work or replacement is necessary or suitable for continued high quality, reliable system operation.

#### 8. Hoist way Equipment - All Elevators

Thoroughly examine, adjust and clean all of the hoist way equipment, guide rails and brackets, roller or slide guide assemblies on cars (on bottom of all cars, and on counterweight assemblies of traction elevators) separator beams, side and lower car frame, hoist cables (traction elevators), governor cables (traction elevators), entire under-car safety devices (traction elevators), traveling cables, compensating cables or chains (where used on traction elevators), exterior of elevator cab walls, edges and bottom of car platforms, bottom of car roller guides or slide guides and all other related equipment at least one (1) time per year. Clean more often, as needed, to maintain a professional appearance and operation. All worn or damaged elevator equipment items must be replaced or repaired when the condition is first determined as necessary to maintain reliable elevator operation. Note the cleaning activities in the maintenance records.

#### 9. Machinery Room Areas - All Elevators

All the equipment in the elevator machine room areas, including over-speed governors (traction elevators), driving machines, power units and oil coolers (hydraulic elevators), driving sheaves and deflector sheaves (traction elevators), exterior of elevator electrical controllers, isolation transformers, disconnect switches and all other electrical equipment, piping, ductwork and devices shall be kept clean at all times, including the machine room floors.

Machine room floor must be painted regularly, at least every three (3) years, to provide a professional appearance at all times.

**Elevator Electrical Controller Equipment** in each machinery room shall be examined during each visit to see if any obvious problems are apparent. The following operations apply to the controller equipment:

- Clean the exterior of the controller cabinets on a monthly basis.
- Clean the interior of the controller equipment on a semi-annual basis.
- Retighten the main power supply conductors on the starters and drive systems at least annually.
- Keep the door(s) closed on controllers when not performing maintenance on the equipment, if they are equipped with doors or panel covers.
- Do not store miscellaneous items, including wiring diagrams, inside the controller panels.
- Listen for unusual noises or sounds which can indicate potential problems with the equipment.
- Do not touch sensitive components on circuit boards with bare hands. Use approved techniques when handling or examining electronic equipment.
- Examine terminal strip connections periodically, to see that connections are securely fastened and have no corrosion.

#### 10. Pit Equipment and Pit Area – All Elevators

Thoroughly examine, repair and clean the pit areas and pit mounted equipment, including buffers and buffer supports, compensation equipment (traction elevators only, if applicable), governor tail sheave and weight assemblies (traction elevators), counterweight guards (traction elevators), hydraulic cylinders (hydraulic elevators only) limit switches, ladders, light fixtures, electrical conduit and electrical duct work, various protective guards or screens, and all other equipment or devices, at least one (1) time bi-monthly.

Pit floor shall be cleaned at least **one (1) time bi-monthly**, or more often if needed to maintain the area free of accumulation of dirt, dust and debris. Pit floors shall be painted periodically to maintain a professional appearance and ease of cleaning. Pit floors that accumulate water should not be painted.

#### 11. Miscellaneous Areas and Items – All Elevators

Depending on building conditions and usage, more frequent cleaning may be required to maintain professional quality housekeeping standards. The Contractor shall take all necessary steps, at his expense, to keep the equipment in a first class, professional looking condition. All necessary painting for appearance and control of rust or corrosion is a requirement of this Agreement.

Examine hoist cables or belts, and equalize the rope/belt tension on hoist ropes & belts (on traction elevators only) at least two (2) times per year. Shorten hoist ropes as may be required so that the counterweight does not strike the pit buffers on traction elevators. Shorten governor cables, as needed, to prevent the governor tail sheave assembly from dropping below normal operating position, which is normal to have the support arm in horizontal position.

On all elevators, replace all door guide shoes, or replaceable gibs, according to the following schedule:

- Car door guide shoes complete shall be replaced at least annually, Contractor more often, if needed.
- Main floor, hoist way door panels, door guide shoes shall be replaced every two (2) years,
   Contractor more often, if needed.
- All other hoist way door panel guide shoes should be replaced at least every five (5) years,
   Contractor more often, if needed.
- These requirements are mandatory, and are intended to avoid damage to doors, thresholds and door equipment.

Examine security of handrails on elevators regularly, and tighten if they become loose. Tighten all other cab, cab door, cabinet and signal fixtures fasteners, when required to prevent loose fasteners, noises, rattles, squeaks and alignment problems. Replace all broken or damaged signal fixture components, screws or devices when damage is first recognized. All this work is required under this Agreement.

Examine the elevator cab interiors on a **monthly** basis, for components that may be damaged or missing. Notify the Owner in writing of any needed repair work which should be provided but is not included in this Agreement.

All elevator equipment components or systems requiring lubrication for proper, reliable, safe operation shall be lubricated at regular intervals to assure that the equipment operates in a suitable manner. Contractor shall have on hand the correct lubricants, and apply the proper lubricants to items of equipment needing lubrication. Follow directions and recommendations recommended by the Original equipment manufacturer.

#### 12. Corrosion Control on All Elevator Equipment – All Elevators

The Contractor shall be responsible to prevent miscellaneous rusting and corrosion on the elevator equipment. Suitable steps shall be taken to keep rust and corrosion from impacting the elevator systems. Equipment shall be examined periodically to determine if additional work is required at the expense of the Contractor.

**Note:** In the event of building flooding, plumbing leaks or overflows, roof leaks and similar conditions, that creates damage to the elevator equipment, the Contractor shall provide a detailed written report, photographs, recommendations for correction and appropriate pricing for total correction of the damage that occurred, beyond the normal environmental conditions.

#### 13. Resetting of Elevator Control Systems

From time to time, elevators may not function due to control systems needing to be reset because of a variety of conditions or causes, including but not limited to power outages, power fluctuations, doors being held open too long, or for any other reason. The Contractor shall be responsible for resetting of elevator control systems regardless of the nature of the failure or cause. This work shall typically be provided without additional billing to the Owner.

In the event frequent failures, or conditions not associated with the elevator system, continue to cause elevator shut-downs, these conditions should prompt a meeting with the Superintendent of General Services or designee to discuss a resolution to the problems. The need to reset the control systems should not be a reason to make the Contractor responsible for all nuisance issues that should be eliminated or accepted by the Owner.

#### 14. Minor Repairs Not Directly Associated with Elevator Equipment Failures

Occasionally, an elevator will fail due to fire service recall operation, trash in the elevator thresholds, damaged pushbuttons or similar circumstances. So long as the repair for such events does not take more than one (1) hour while working on the site, the Contractor shall typically restore the elevator to service without charge to the Owner.

#### R. Working Hours

All the routine scheduled preventive maintenance work and required tests under this Agreement shall be performed between the hours of 8:00 AM to 4:30 PM, of regular working days of the elevator trade in the area in which the work is being performed.

This Agreement includes some elevators receiving both regular time and overtime call-backs for emergency minor elevator failures, as well as call-backs for major elevator related repair work that can be accomplished in less than three (3) hours in the building, for each occurrence, on the basis of 24 hours, seven (7) days per week, including all legal holidays.

All elevators, except those located in the following locations, shall be regular time work and regular time call-backs. The following elevators are subject to regular time maintenance work and call-backs, as well as emergency overtime for call-backs and minor repairs (up to three [3] hours on the job):

- City Hall, South and North, 112 S. Osceola
- o Main Police, two (2 South and North) elevators, 645 Pierce
- o Municipal Services Building, two (2 East and West) elevators, 100 S Myrtle Ave
- o Garden Avenue Parking Garage, one (1) elevator, 28 N Garden Ave
- o Main Library, three (3) elevators, 100 Osceola Ave
- Long Center, one (1) elevator, 1501 Belcher
- o UPARC, one (1) elevator, 1501 Belcher

In the event a single overtime major repair event requires more than three (3) hours to complete (time on the job), the Owner shall be given the option of paying only the over-time premium of the repair work hourly cost for the time greater than the three (3) hours on the job, in order to expedite

the repair work. The Owner, or designated representative of the Owner, must be contacted for approval to continue working beyond three (3) hours in the event the overtime repair work will exceed the three (3) hours, on the job.

#### S. Owner to Provide Proper Building Maintenance

While the successful operation of elevator equipment is a team effort by Owner and Contractor, the Owner shall provide proper maintenance and repairs to the following items, equipment, and building areas (Contractor shall advise when work is required of the Owner):

- 1. Proper and safe access to the elevator equipment areas, including the access doors (must be self-closing, self-locking, requiring a restricted key to enter the rooms. Access to machine room areas must be properly illuminated for safety purposes. Do not allow unauthorized personnel to enter the elevator machinery areas.
- Machinery rooms must be well lighted, with at least 19 foot candles of illumination in all areas in the rooms, measured at floor level, in the darkest spot in the room. No dark areas or major shadows are allowed or permitted. Provide a light switch on the strike jamb of the access door, just inside the room.
- 3. Machinery room air conditioning is required, and should be functional 24/7, and capable of keeping the machinery room spaces between 72-78 degrees F, at times the elevator system is in operation. Owner shall maintain this equipment on a consistent basis, and make repairs Contractor replacements as needed to keep the equipment functional and reliable. Keep the air conditioning equipment condensate from dripping onto the machinery room floor, or onto elevator or electrical equipment. Routine air conditioner filter replacement is the responsibility of the Owner.
- 4. Maintain wall outlets in the elevator machinery room and pit areas. These outlets should be GFCI protected, for added safety.
- 5. Keep all water from leaking into the machinery room areas, hoist way areas and pit areas. It is an elevator code violation for water to be present in any of these areas. Contractor shall notify Owner if water is present in any of these spaces.
- 6. Electrical equipment (lighting, receptacles, lighting switches, electrical conduit and the like) located in the pit areas shall be kept in highly serviceable and operable condition at all times. Contractor shall advise the Owner when any undesirable conditions. In the interest of safety, the Contractor shall physically replace the lamps in the pit areas, using high quality LED lamps provided by the Owner. High output type LED lamps are highly recommended for long life and low energy usage.
- 7. Lighting level in elevator pits is currently required to be at least 10 foot candles, measured at the pit floor. No shadows are permitted. Generally, it will require at least two (2) lighting fixtures, per elevator, to provide the required lighting in an elevator pit.
- 8. Cleaning and minor maintenance of elevator cab walls and interior components; cleaning cab door surfaces; cleaning cab operating fixtures; cleaning cab lighting fixtures and ceiling components; cleaning landing operating fixtures; cleaning of landing doors and frames; cleaning of door safety device, and all other cleaning of surfaces exposed to the public. Building maintenance and cleaning personnel should be trained by the Contractor so that they do not create conditions which cause elevator failures and reliability problems, or damage the architectural finishes or equipment.

- Regular vacuuming, at least daily, the hoist way and car door threshold grooves, which are exposed to public view. Accumulation of dirt and debris in the grooves will cause elevator shutdowns and other reliability problems.
- 10. Frequent cleaning of elevator cab flooring, and removal of any water or slippery substances from the floor covering, in the interest of safety.
- 11. Frequent cleaning and removal of water from floor landing surfaces, in front of the elevator doors.
- 12. Daily check of ceiling lighting in front of the elevator systems. Make required repairs immediately.
- 13. Daily riding of each elevator, while checking for basic safety related items including the following: floor leveling; door operation; door safety detector; alarm bell, car lighting; emergency telephone device; unusual noises, vibration and the like. Immediately advise Contractor of any noticeable defects. Owner should keep daily records of this physical check of the elevator systems.
- 14. Periodic (at least annually) check the elevator main power wiring, disconnects and circuit breaker panels, which feed the elevator systems. Contractor is not responsible to check the power supplies and disconnect means. Loose connections and failing equipment can cause damage to the elevator equipment, which would result in major costs to the Owner due to damaged elevator controller and motor equipment.
- 15. Arrange and pay for the required annual elevator safety inspections conducted by a third party QEI certified elevator inspector, whom is fully qualified by State of Florida to perform this work. Contractor shall coordinate the elevator inspections with Owner. Contractor shall work with inspection firm to suitably perform the work as efficiently as possible.

#### T. Additional Requirements

This Agreement shall be recognized by the Contractor and Owner as a "time is of the essence" and "high performance level" Agreement. Both parties to this Agreement shall make every effort to respond to all needs of the Agreement without causing delays in performance of duties or impacting time schedules.

Either party to this Agreement shall notify the other party in the event the required responsibilities are not being responded to in a timely manner. Communication in writing is required by this Agreement.

# END OF PART II

# PART III: ELEVATOR EQUIPMENT COVERAGE AND MAINTENANCE FREQUENCY

#### A. Equipment Included

The following items or components are included in this Agreement as routine maintenance components, materials, parts, or equipment. Contractor shall regularly and systematically provide preventive maintenance work to include examinations, preventive maintenance, adjustments, cleaning, lubrication as necessary, repairs or replacement components, and if conditions warrant, in the reasonable judgment of the Owner or Contractor, the Contractor shall further professionally repair or replace all worn, damaged, defective or broken parts, components and assemblies, in order to maintain a high level of equipment performance with a minimum of elevator system or equipment outages or failures. This Agreement requires the Contractor to be pro-active in a highly focused <u>preventive maintenance program</u> to maintaining these elevators in a first-class condition. The elevators shall be kept in "like new" conditions, free from any accumulated wear or deterioration whatsoever that detracts from the elevator appearance, performance, and reliability. The elevator(s) must be must be maintained to the highest elevator industry standards, including providing the following:

- Geared and gearless type traction hoisting machines complete, including gearboxes, worm, gears, seals, gaskets, drive sheaves, sheave shafts, gear spiders, bearings, bearing supports and mountings of all types, brake assemblies complete, brake coils, brake switches, brake shoes and linings, couplings and bushings, brake pivot pins and bearings, oil seal retainer flanges, alternating current or direct current drive motors complete, motor housings, drive motor bearings, drive motor rotors and armatures, drive motor stators, encoders, motor brushes, and brush rigging; drive motor cooling fans, tachometers, machine isolation pads and mountings, synthetic type lubricants, and all other driving machine components, whatsoever.
- 2. Oil-hydraulic pumping units, including reservoirs, pumps, motor components and motor bearings, motors complete, belts, sheaves, oil control valves, couplings, piping, sound and vibration isolation couplings, shut-off valves of all types, thermostats, oil cooler assemblies complete, hydraulic silencers with renewable interior and exterior components, isolation pads under pumping units, electrical and pressure piping fittings, wiring of all types, connectors, grommets, and all other components of the pump and pressure systems.
- 3. Hydraulic cylinder plungers and plunger couplings, platen plates, hydraulic packing and seals of all types, hydraulic cylinder guide bearings, hydraulic cylinder packing glands and other components, pressure lines and fittings, piping supports, pressure line shut-off valves, pipe rupture valves, cylinder gas venting fittings, and all other pressure line system components. Include five (5) gallon oil leakage collection containers and collection tubes.
  - Note: Replacement of buried cylinders and buried hydraulic pressure lines is not a requirement of this Agreement; however, the Contractor shall promptly notify the Owner in the event of any underground leakage in any hydraulic system.
- 4. Car movement and logic controller equipment complete, including dispatching equipment, relays, timers, rectifiers, batteries, transformers of all types, isolation transformers, wiring, power conversion devices, fuse holders, electronic boards Contractor devices of all types, printed circuit boards of all types, software programs, contactors, capacitors, resistors, terminal strips, computers, leads, fuses, amp-traps, encoders, tachometers, electrical panels, electronic starters and motor drive units and components; floor selector systems complete, selector components

- and devices, vanes, switches of all types, cams of all types, and all other components in the elevator control systems(s), whether or not listed herein.
- 5. Traction elevator hoist ropes and traction belts, and governor ropes, including fastenings and shackles, isolators and springs.
- 6. Car and counterweight guide rails; rail support brackets; car and counterweight guide shoe assemblies, complete with rollers or slide type assemblies, mountings, springs, pivots, bolts, or other devices. Correct rail alignment, where needed, to provide smooth ride. Car roller guide wheels shall also be replaced when the rubber tires become inflexible enough to impact the car ride comfort.
- 7. Elevator car platforms, car frames, sub-flooring, load-weighing devices of all types, under-car or car top safety devices, platform isolation devices, cab steadying devices, fastenings or attachments, and all car related hardware. Equipment or platforms severely damaged by frequent contact with water is not covered.
- 8. Car and/or counterweight buffers, buffer supports, and buffer switches, if any are installed.
- 9. Traction elevator counterweight fillers, weights, tie rods, weight fastening assemblies, frames, hitches and other counterweight components, including guides.
- 10. Car and hall (landing) signal devices, key switches, pushbuttons, button caps, position indicators, lanterns of all types, indicators of all types, mounting screws, gongs, chimes, indicators of all types, light emitting diodes, incandescent or fluorescent signal lamps of all types, displays, lobby panels, elevator mounted cameras and camera monitors, elevator mounted camera and monitor wiring or cables, all other electrical cables and wiring, and all related equipment. All incandescent lamps in operating fixtures of all types shall be replaced with LED type lamps when lamps have failed due to burnout.
- 11. Hoist way door hangers, door hanger tracks, door rollers, door relating cables and sheaves, interlocks, interlock release mechanisms of all types, door closers of all types, door guide shoes and any replaceable gibs or slides, door security flanges, up-thrusts or eccentrics, markings for handicapped personnel on door frames, and all other door related hardware.
- 12. Door operating systems, including entire car door operator machines, machine motors, motor or system encoders, drive belts, car door clutches, contacts, switches, door hangers, door hanger tracks, door rollers, electronic safety screens Contractor edges complete, drive arms, wiring and cables, car door opening restrictor devices of all types, car door hanger up-thrusts or eccentrics, car door guide shoes and replaceable gibs and all other car door related components.
- 13. Traction elevator speed governors, rope deflector sheaves, encoders, tension sheaves, overspeed switches, contacts, over-speed jaws and weights, and all other related equipment.
- 14. Traction elevator secondary, 2:1 and mountings, deflector and overhead sheaves, sheave beams and supports, all such bearings, bearing seals, guards, shafts, sheave mountings, bolts and fasteners, and all other related equipment.
- 15. Limit switches, directional and emergency switches, cams and miscellaneous hardware.
- 16. Lubricators on traction elevator hoist ropes, including recommended rope lubricants.
- 17. Traction elevator ascending car safety devices for hoist ropes, including all related components in the emergency system.
- 18. Emergency car lighting equipment, including batteries, chargers, inverters, lenses, fixtures, and all related equipment. Emergency alarm bell, including wiring, batteries and all other equipment.
- 19. Emergency communication equipment, including all types of telephones, intercommunication equipment and other such devices, all batteries and battery chargers, and related equipment and

- wiring. Wiring from outside building to elevator controller panel is the responsibility of the Owner.
- 20. Cab ventilating fans or blowers, including blower motors, housings, safety screens, louvers, switches, wiring and related equipment.
- 21. Cab lighting tubes, bulbs, fixtures, starters, transformers, lighting system components, relays, timers, wiring and switches, as well as any related equipment for normal cab lighting systems. LED type systems, and all such related components, are also the responsibility of the Contractor.
- 22. All elevator electrical wiring, including traveling cables, wiring troughs, ducts, conduit, electrical fittings, conductors of all types, and all related electrical equipment.
- 23. All wheel chair lifts, dumbwaiters and like equipment, wiring and apparatus, driving machinery and motor assemblies, driving machinery brakes and gearbox assemblies complete, cables, rollers, guides of all types, electrical controller and switches, signal fixtures of all types, door interlocks and gate assemblies, car lighting and light switches, and all other specialty type lifting equipment components.
- 24. All required specialized lubricants for elevator equipment, including minor fills of the hydraulic fluid in the event of leakage due to need for cylinder seal replacement. Replacement of all the hydraulic fluid in an elevator system is not the responsibility of this Contractor.
- 25. Safe and effective cleaning solvent products that are approved for the application for which they are used. These products must also be environmentally safe.

It is the intention that all equipment or devices, which are incorporated into the elevator and lift equipment systems, are included in this Agreement, except those which are expressly excluded.

#### B. Frequency of Scheduled Routine Preventive Maintenance and Time Required in the Building

The Contractor shall provide scheduled routine preventive maintenance on all the elevators included in this Agreement, at least **one (1) time per month**, with at least the amount of time shown to be spent on each elevator, each month. This time requirement is based on the time spent in the building in the process of providing scheduled preventive maintenance work, not including travel time, time required to obtain parts and supplies, emergency call-backs, tests aside from normal routine maintenance tests, or other such time required in connection with this Agreement.

Scheduled Preventive Maintenance Work is required as follows:

- All oil-hydraulic elevators and Schindler 3300 units shall receive at least 1.25 hours of scheduled preventive maintenance work per month, on the job.
- All traction elevators shall receive at least 2.0 hours of scheduled preventive maintenance work per month, on the job.
- Wheel chair lifts shall receive at least .50 hour of scheduled preventive maintenance work per month, on the job.

In the event the Contractor fails to perform the scheduled monthly preventive maintenance work in accordance with the requirements of this Agreement, the Owner shall have the right to deduct from monthly invoice, the total cost of the monthly maintenance plus 15% penalty for failure to perform, for any elevator unit that is not properly serviced or maintained during any month, in the sole opinion of the Owner. The deduct amount shall not be prorated, and is on a per incident basis.

In the event additional preventive maintenance or repair time is required to keep the elevator equipment operating in a professional, trouble-free, first-class manner, the Contractor is required to provide the necessary maintenance required to accomplish the work without additional cost to the Owner.

#### C. Periodic Tests

The Contractor must perform all of the required elevator annual safety code tests on all elevators, as well as the required five (5) year safety and buffer tests on traction elevators, all at the Elevator Contractor's sole expense, and provide documentation that the tests have been performed as required by **ASME A17.1-2016**, or later, Safety Code for Elevators and Escalators, the latest edition of **ASME A7.2** Elevator Inspectors Manual and the requirements of the State of Florida, for any periodic tests required as of the date of this Agreement.

Evidence of such tests being performed must be provided to the Owner, and to the State of Florida, all as may be applicable by State Law. Costs of performing the tests, except for the cost of any required third-party Elevator Inspector fees and State elevator annual operating licenses, shall be at the expense of the Contractor, and are to be included in this Agreement.

Contractor shall perform periodic tests of the firemen's emergency recall system on all elevators on monthly basis, and maintain a written log of the tests. The tests shall be as required by the elevator code. Notify the Owner in the event any test, involving Owner supplied equipment, is not successful.

#### D. Additional Performance Requirements

This Agreement is intended to provide the Contractor with sufficient available time for the elevator maintenance technicians to perform the required preventive maintenance work necessary towards keeping the elevator equipment in the highest quality condition.

Contractor is expected to perform the preventive maintenance work in a manner that will keep the elevator call-backs and outages to a minimum. For purposes of this Agreement, the following number of call-backs or outages due to equipment failure should not exceed the following number, otherwise the Contractor shall be considered failing to maintain the elevator equipment in a suitable manner:

Four (4) call-backs, per year, per elevator. This is not to be interpreted to be an average of all units, but a maximum number <u>per each individual unit</u>.

The number of call-backs or equipment outages shown does not include conditions related to power failure, excessive vandalism or abuse, or other conditions over which the Contractor has no control.

# E. <u>Elevator Equipment or Work Not Included</u>

The Owner shall be responsible for the following items, equipment and conditions:

- Finished flooring materials on elevator car platforms.
- Wear and tear on car and hoist way entrance thresholds or sills. Except when the wear or damage is the result of failure by the Contractor to maintain or replace the door guide shoe

assemblies, or replaceable guide shoe gibs, when necessary, to avoid such damage to doors and thresholds.

- Cab or car enclosure walls and car tops, light diffusers, handrails (except for the regular tightening of the rails and rail supports, which is a requirement of this Agreement), hung ceilings, translucent plastic ceiling panels, exposed ceiling fixtures or lighting globes, car door panels, protection pads and buttons. Tightening of components or elimination of squeaks or rattles, in cab or on car platform equipment is a requirement of this Agreement.
- Equipment replacement necessary due to major abuse, misuse, water intrusion or other similarly harsh conditions.
- Machine room power supplies, all machine room power disconnects, conduits and wire troughs, feeders, and main line power fuses. If failure of elevator equipment causes the fuses to be blown, the Contractor shall replace the fuses at their cost.
- Hoist way door panels, unless the panels are damaged by failure of the Contractor to maintain the door guide shoes or replaceable gibs and balance of door hanger equipment.
- Hoist way enclosure, machine room enclosure, access to machine room area or hoist way area, machine room air conditioning equipment/heating equipment, machine room lighting and fixtures, machine room electrical outlets, emergency power supply and electrical gear from an emergency generator, and any other electrical power related equipment that was not installed by the Contractor.
- Pit lighting circuits and convenience outlets, disconnects or fuses, conduit and wiring.
   Contractor shall be responsible for replacing pit lighting bulbs in the interest of work safety.
   Lamps shall be provided by the Owner.
- Car lighting and alarm circuit disconnects in machine room areas (including wiring to disconnects), including fuses or circuit breakers.
- Fire detection systems complete, including smoke and/Contractor heat detectors, wiring, alarms, sirens and similar equipment.
- State of Florida elevator inspections, which are required annually.

The Contractor shall not be required to add additional equipment or devices to the elevators or perform additional safety tests at the direction of others without additional charge for the expenses incurred. Also, it shall be understood that the Contractor shall not be responsible for making repairs, renewals, or replacements for work damaged by obvious major abuse, misuse, or circumstances completely beyond their control, except for ordinary wear and tear.

The Contractor shall not be responsible for catastrophic repairs or renewals necessitated by the events of fires, floods, storms, lightning, civil unrest, acts of the government or civil authorities, or other major unforeseen events. The Contractor must, however, promptly notify the Owner in writing of any such circumstances and how the event(s) impacted the elevator system(s). Include photographs of damaged areas or components, if possible.

Further, the Contractor shall not be responsible for any loss, damages, penalties due to any cause completely beyond his control, including strikes or labor disputes, negligence by others, major acts of vandalism or abuse, or other conditions out of their control.

The Contractor does not assume control of the elevator equipment while being a party to this Agreement. The Owner shall immediately notify the Contractor of any known operational defects which may occur during regular maintenance visits, and post any appropriate signage warning passengers not to ride on or use the elevator equipment in the event of elevator related malfunctions. Further, Owner shall remove any elevator equipment from service that is judged to be unsafe for passengers.

# F. Additional Equipment Coverage

During the term of this Agreement, the Owner shall have the right to include additional elevators to the Agreement. The maintenance pricing structure for elevators to be added shall be on the basis of similar elevators already included in the Agreement, or on a "fair price" basis as determined by both Parties.

**END OF PART III** 

# PART IV: ADDITIONAL TERMS AND CONDITIONS

#### A. Insurance Coverages

The Contractor shall continuously provide the insurance coverages as set forth in RFP #06-18, Elevator Maintenance Services, Detailed Specifications, #5, INSURANCE REQUIREMENTS.

#### B. Performance and Payment Bonds

The Contractor shall provide an annual Performance and Payment Bond as set forth in RFP #06-18, Elevator Maintenance Services, Instructions, #i.6, PERFORMANCE SECURITY.

#### C. Owner Shall Have the Right to Solicit Competitive Bids for Elevator Renovation Work

During the course of this Agreement, the Owner may elect to solicit competitive bids to renovate or modernize certain elements of the elevator equipment. The Contractor shall have the ability to respond to the Invitation to Bid at their sole discretion.

#### D. Billing Credits During Major Repairs, Equipment Shut-down, Elevators Removed from Use

The Contractor shall suspend the monthly billing or provide billing credits for maintenance on one (1) or more elevators, during any time period that an elevator is removed from service for an extended period of time of over fifteen (15) days during any single occurrence. These conditions can be the result of myriad events such as building renovation, fire damage, storms, other catastrophic events, major repair work, or other occasions during which the Owner is not beneficially using the elevator equipment.

The Owner is permitted to permanently remove specific elevator(s) from this Agreement, in the event a building is: destroyed due to unavoidable causes; sold; closed; torn down; or if the elevator equipment is permanently removed from service. The respective price for maintenance of any elevator(s) impacted by such events shall be deducted from the price, based on the Agreement pricing in effect at that time.

#### E. Schindler 3300 Exception

The design of Schindler 3300 elevators are known to be extremely proprietary, Schindler makes a concerted effort in their product design in order to push customers into using them as their maintenance provider. ThyssenKrupp has basic maintenance and adjustment capabilities for this equipment and ThyssenKrupp will put forth full efforts to meet response time requirements and adjustments when needed, however, ThyssenKrupp shall be subject to monetary penalties only on a case-by-case basis in case of shutdown of Schindler 3300 units due to the proprietary nature of the equipment, lead times + costs associated with controller components, and lead times + costs associated with job-specific software on the controllers

# F. Parts Acquisition Exception

Costs to acquire door motors, valves, drive motors, and full sets of boards for non-ThyssenKrupp/Dover controllers is cost prohibitive, we will make best efforts to accumulate and stock these parts over the first year of the agreement. When needed we will expedite as much as possible to minimize downtime and aim for 24-48 hour turnaround. All other spare components listed per the

# Elevator Maintenance Agreement

RFP will be stocked locally and on the trucks of our mechanics. This exception does not apply to ThyssenKrupp and Dover equipment which comprises of roughly 1/3 of the portfolio.

# G. Contract Price

Total Initial Monthly Billing shall be \$12,240

**END OF PART IV** 

# **PART V: EXECUTION - ELEVATOR MAINTENANCE AGREEMENT**

Contractor:					
ThyssenKrupp Elevator	4710 Eisenhower Blvd Suite B5				
Firm Name	Address				
	Tampa, FL 33634				
Authorized Signature	City, State, Zip Code	_			
813 505 5164	866 774	2142			
Telephone Number	Fax Number				
Countersigned:					
CITY OF CLEARWATER, FLORIDA					
George N. Cretekos	William B. Horne II				
Mayor	City Manager				
Approved as to form:	Attest:				
Michael D Fuino					
Assistant City Attorney	City Clerk				

**END OF PART V**