

## **EXHIBIT A**

### **SERVICES**

#### **1. GENERAL.**

##### **1.1 Bond.**

**A.** One Performance Bond, as itemized in Section 1.B below, shall be furnished by the successful bidder at the time of entering into the Agreement and filed with the Director of Public Works, 555 County Center, 5<sup>th</sup> Floor, Redwood City, California; it shall be in the form of a surety bond issued by corporations duly and legally licensed to transact surety related business in the State of California, satisfactory to San Mateo County. Premiums for said Performance bond shall be paid by the Contractor and maintained at the Contractor's expense during the period prescribed herein for the completion of the work to be done under the Agreement, including extension of the Agreement.

**B.** The Performance Bond shall be in the amount of 100 percent (100%) of the value for each year of the agreement term. The bonds shall be in accordance with the laws of the State of California to secure payment of any and all claims for labor and material used or consumed in performance of this Agreement.

**Example:**

A three (3) year Agreement, costing \$100,000/year, would require a payment bond in the amount of 100 percent (100%) or \$100,000 for the first year and for each additional year of the Agreement.

**C.** Agreement shall be awarded to the lowest and/or most responsible bidder as interpreted by the Owner and specified herein and shall be entered into by the successful bidder within ten (10) days after being notified by the Owner. Initial remedial cost will not be used to determine the low bidder.

#### **2. QUALIFICATIONS**

##### **2.1 Qualifications:**

Contractor has experience and financial ability to perform the Vertical Transportation Services and the Extra Services and comply with Contractor's obligations under this Agreement, it has one or more local service offices in such locations as to give it the ability to answer a service call within the response times specified in the Scope of Services or elsewhere in this Agreement; it has the financial and technical resources, personnel, parts and tools necessary to maintain the Vertical Transportation Equipment to its original design capabilities based on the condition of the Vertical Transportation Equipment and all technical information available on the Commencement Date, it has obtained (or shall obtain) at its expense, all permits and licenses required to perform the Vertical Transportation Services and the Extra Services, including but not limited to a

State of California elevator license and any necessary business licenses required by the cities or counties where the buildings are located, and will maintain such permits and licenses current and valid during the Term, and all of Contractor's employees, agents, representatives, subcontractors, invitees and any other parties who perform any portion of the Services under the control of Contractor or its subcontractors or for whose acts any of the foregoing may be liable (collectively, "**Contractor's Representatives**") performing any portion of the Vertical Transportation Services and the Extra Services for which a license is required shall hold current licenses at all times during which such persons are performing Vertical Transportation Services and the Extra Services.

The Contractor must be in the elevator service business a minimum five (5) consecutive years, and completely familiar with the specified requirements and methods needed for proper performance of this contract. Proof of these requirements must accompany bid package.

### **3. GENERAL CONDITIONS.**

**3.1 General Conditions and Standard Documents.** This work is subject to the Standard General Conditions of the County of San Mateo setting forth requirements for Public Work, on file with the Department of Public Works. The Standard General Conditions cover Contractor's responsibility and performance of Agreement work related to definitions, instructions, materials, supervision, insurance, taxes, labor laws, etc., and the Contractor shall be held responsible for and governed by requirements therein. These general conditions can be found in Attachment "B" *Sample Agreement*.

**3.2 Notification.** Written notice shall be deemed to have been duly served if delivered in person to the individual or to a member of the firm or to an office of the corporation for whom it is intended or if delivered at or sent by mail to the last business address known to him who gives the notice.

#### **3.3 Protection of County.**

**A.** Neither County, nor its duly authorized representatives, shall be in any way or manner answerable or suffer loss, damage, expense or liability for any loss or damage that may happen to said work, or any part thereof, or in or about the same during its performance, and the Contractor shall assume all liabilities of every kind or nature arising from said work either by accident, negligence, theft, vandalism, or any cause whatsoever and Contractor shall hold the County and its duly authorized representatives harmless from all liability of every kind and nature arising from accident, negligence or any cause whatsoever.

**B. Accident Prevention.** Precaution shall be exercised at all times for the protection of persons (including employees) and property. The inclusion and

continuing reinforcement of safe work practices by the supervisor in charge is deemed an integral part of accident prevention precautionary measures. The safety provisions of applicable laws, CAL OSHA Safety Orders, and building and construction codes shall be observed. Machinery, equipment and all hazards shall be guarded or eliminated in accordance with the best safety provisions of the industry, to the extent that such provisions are not in contravention of applicable law.

### **3.4 Insurance.**

**A.** The Contractor shall not commence work under this Agreement until all insurance required has been obtained and such insurance has been approved by the Director of Public Works. The Contractor shall furnish the Director of Public Works with certificates of insurance evidencing the required coverage, and there shall be a specific contractual liability endorsement extending the contractor's coverage to include the contractual liability assumed by the Contractor pursuant to this Agreement. These certificates shall specify or be endorsed to provide that thirty (30) days' notice must be given, in writing, to the Department of Public Works of any pending change in the limits of liability or of any cancellation or modification of the policy. All insurance must remain in current status throughout the life of this Agreement and the Contractor shall furnish The Director of Public Works with verification of renewal by the 15<sup>th</sup> calendar day following the renewal date given on the active verification.

### **3.5 Laws and Taxes.**

**A.** Laws to be Observed. The Contractor shall keep fully informed of all existing and future State and National laws and all municipal ordinances and regulations of the City and County in which the work is being done which in any manner affect those engaged or employed in the work, or the materials used in the work, or which in any way affect the conduct of the work, and of all such orders and decrees of bodies or tribunals having any jurisdiction or authority over the same, including but not limited to The State of California Elevator Safety Orders, and the ASME Safety Code for Elevators and Escalators

**B.** Assignments. The Contractor shall not assign the whole or any part of this Agreement or any monies due or to become due hereunder without the prior written consent of the County and of all sureties executing any bonds on behalf of the Contractor, in connection with this Agreement. In case the Contractor assigns all or any part of the monies due or to become due under this Agreement, the instrument of assignment shall contain a clause substantially to the effect that it is agreed that the right of the assignee in and to any monies due or to become due the Contractor, or otherwise, shall be subject to all the terms and conditions of this Agreement and of all instruments that are now or may

hereafter be amendatory thereof or supplemental thereto, the rights and remedies of the County there under or arising by operation of law and to the liens of all persons, firms, and corporations for services rendered or materials supplied in connection with the performance this Agreement.

- C.** Royalty and License Fees incidental to the use of any patented material, device or process shall be paid by the Contractor, and in event of a claim of alleged infringement of patent rights the Contractor shall save the County free and harmless from loss on account thereof and also defend, at his own expense, any and all suits that may be brought in such connection.
- D.** Taxes and Permits. The Contractor shall pay for and include all Federal, State, and Local taxes direct or indirect upon all materials, and take out and pay for all permits, fees, and charges.

### **3.6 Labor.**

- A.** The Contractor is requested to employ craft workers and other workers from the local labor market whenever possible to do so. "Local Labor Market" within the meaning of this section is defined as the labor market within the geographical confines of the County of San Mateo, State of California.

- B.** Prevailing Wage:

1. When applicable, Contractor hereby agrees to pay not less than prevailing rates of wages and be responsible for compliance with all the provisions of the California Labor Code, Article 2-Wages, Chapter 1, Part 7, Division 2, Section 1770 et seq. A copy of the prevailing wage scale established by the Department of Industrial Relations is on file in the office of the Director of Public Works, and available at [www.dir.ca.gov/DLSR](http://www.dir.ca.gov/DLSR) or by phone at 415-703-4774. California Labor Code Section 1776(a) requires each contractor and subcontractor keep accurate payroll records of trades workers on all public works projects and to submit copies of certified payroll records upon request.
2. No contractor or subcontractor may be listed on a bid proposal for a public works project (submitted after March 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].
3. No contractor or subcontractor may be awarded a contract for public work on a public works project (awarded on or after April 1, 2015) unless

registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.

4. This agreement is subject to compliance monitoring and enforcement by the Department of Industrial Relations.
5. Contractor agrees that the requirements of this Agreement pertaining to the protection of proprietary rights and confidentiality shall survive termination of this Agreement.

### **3.7 Cancellation and Savings Clauses.**

- A.** In the event of significant changes during the term of this Agreement in the scope of the work covered by this Agreement, such as the need to discontinue service because of the closing or partial closing of a facility, the Agreement shall be canceled or modified as it pertains to the particular facility or facilities.
- B.** County may, at its option, cancel this Agreement at any time effective thirty (30) days following the mailing of written notice to the Contractor at the Contractor's usual place of business.
- C.** If at any time the County determines that service being rendered does not comply with the terms of this Agreement, County may terminate this Agreement effective three (3) days following the mailing of written notice to the Contractor at the Contractor's usual place of business.
- D.** If, during the effective period of this Agreement, the County contracts for the modernization of any of the Equipment shown on Attachment "A" with any vendor, Maintenance services for all elevators in the affected building may be terminated by giving the Contractor thirty (30) days written notice. Contractor shall agree to negotiate an acceptable reduction of cost for service for the balance of this Agreement. Unit pricing shown on Attachment "A" shall be used as a guide in determining reasonable changes in monthly cost.

### **3.8 Terms and Conditions.**

- A.** Term of Agreement. The Agreement shall commence on April 1, 2018 and continue for a period of three (3) years, March 31, 2021, with an option to the County to extend the Agreement for an additional one (1) year. Should the Agreement expire, services shall continue on a month-to-month basis until a new Agreement for like services has been executed or either party terminates upon thirty (30) days written notice.
- B.** Hours of Work. All normal work under this Agreement is to be performed during

the regular working hours, which are Monday through Friday 8:00am – 5:00pm. Whenever possible, routine maintenance work shall be scheduled to avoid times of peak demand on equipment.

- C. Payment of Work Performed.** The County will pay the Contractor for work performed under this Agreement at monthly intervals after completion of said work and receipt of monthly itemized written invoices from the Contractor pursuant to an approved schedule. The payment shall be based on the amount bid for each facility and only for those facilities where work has been completed by the Contractor, inspected and approved by the County.
- D. Billing:** Contractor shall invoice the County using the facility breakdown sheets provided (see Exhibit “B”). Contractor shall provide two separate invoices, one for the Facilities, Maintenance & Operations unit and the second for the Health and Hospitals unit. Invoices shall be submitted to DPW – Accounting, 555 County Center, 5<sup>th</sup> Floor, Redwood City, CA 94063.
- E.** If overtime work, other than specified, is required, the County will pay only the difference between normal and overtime labor at the Contractor’s billing rate.
- F. Background Clearance:** All technicians entering The Hall of Justice and all jail facilities will have to be cleared by jail security after a full background check is conducted. All technicians will also have to present a current driver’s license upon arrival. Contractor is responsible for maintaining proper security clearance throughout the duration of this agreement.
- G. Changes in Work.**
  - 1)** The County, without invalidating the Agreement, may order additional work not covered under the Maintenance Agreement price. Additional work, if added to this Agreement, shall be added by negotiation between County and Contractor or bid proposal. No additional work shall be done or change made unless in pursuance of a written change order agreed upon by San Mateo County and Contractor. No claim for an addition to the Agreement shall be valid unless so ordered.
    - a.** The County must authorize the work based on an agreed cost or based on time and material using the labor rates set forth in Attachment “A”.
    - b.** Contractor shall have no rights of incumbency to restrict the County from seeking competitive bids for any additional work.
    - c.** In the event that the County withdraws or adds any elevator or piece of equipment to or from service, or the usefulness of any elevator shall end, during the term of this Agreement, the Contractor shall agree to negotiate an acceptable reduction and/or increase of cost for service for the balance of this Agreement.

Unit pricing shown on Attachment "A" shall be used as a guide in determining reasonable changes in monthly cost. The County must notify the Contractor thirty (30) days prior to the cancellation of services for that particular location. After said services are cancelled, the amount for that location will be taken off of all future invoices to the County.

**2)** Additional work may be of the nature of, but not limited to:

**a.** A request for a basic change in type of service rendered which would result in additional work to the Contractor,

**b.** Some unforeseen circumstance which has resulted from conditions beyond the County's or Contractor's control and which would not properly be a condition of this Agreement;

**c.** Entirely new equipment added to the scope of the work.

**H.** Trouble Calls. Call back service shall be furnished upon request at the Contractor's expense during regular working hours of the regular working days of the elevator trade. In the event a call back during overtime hours is required, the Contractor shall furnish all travel time, expenses, and time on the job. Contractor may bill the County for the bonus portion of labor for overtime hours, but only a maximum of one (1) hour travel time will be billed per overtime call back.

**1)** For all trouble calls that result in additional cost to the County, Contractor shall furnish the following:

**a.** A time ticket showing date, time and duration of visit;

**b.** A record of the problem reported and a description of the work performed along with any materials provided;

**c.** The technicians name;

**d.** Building and equipment identification.

**e.** Name of County representative requesting the trouble call.

Billing submitted for trouble calls without this supporting documentation will be rejected.

**2)** In the event an elevator is shut down with trapped passengers, Contractor shall guarantee thirty (30) minutes response time during 8:00 a.m. to 5.00 p.m., Monday-Friday, and one (1) hour response time from 5:00 p.m. to 8:00 a.m. daily and on holidays.

**3)** In the event an elevator is shut down without trapped passengers, Contractor shall guarantee sixty (60) minutes response time during 8:00 a.m. to 5:00p.m., Monday –Friday, and two (2) hours response time from 5:00 p.m. to 8:00 a.m. daily and on holidays.

#### **4. SPECIAL CONDITIONS.**

**A.** The Contractor shall be responsible for the skills, methods and actions of the Contractor's employees. The Contractor shall instruct all employees that they are not required to respond to questions, suggestions or instructions from County employees other than representatives of the Director of Public Works.

**B.** Supervision by County. Contractor shall perform the services under the supervision of and to the satisfaction of, the Director of Public Works of the County of San Mateo, or his designee. The Director of Public Works, or his designee, may make inspections at any time, or inspections on any of the areas serviced, report to the Contractor any findings and request from the Contractor additional work or services if required. The Contractor shall cooperate with the Representative authorized by the Director of Public Works to enable the Director of Public Works to determine the Contractor's conformity with these specifications and the adequacy of the work being performed.

**C.** The Contractor shall contact the Department of Public Works, Facilities Maintenance and Operations Managers, or their designees; Telephone Number (650) 363-1875 (Gary Behrens, Facilities Maintenance Section) or (650) 573-3739 (Gary Webb, Health & Hospital Facilities Maintenance Section), for further instructions and information relating to the work under this Agreement. The Contractor must have a staffed business office during normal work hours (normal work hours are 8:00 A.M. to 5:00 P.M., Monday through Friday) where the County can communicate requests. The Contractor must respond to all requests within a time period of eight (8) normal work hours and complete all requested work within 24 hours of notification by the County.

**D.** Security of Premises. The security of the premises being serviced under this Agreement is paramount to the County and this Contractor shall insure through proper procedures while performing the work and by evidence of insurance policies that the Contractor and its employees are fully covered to the extent of personal injuries to themselves or others and damage to County property, both real and personal, and the Contractor shall be bonded to insure recovery in the event of loss or misplacement of personal property and/or records. Insurance shall be in an amount satisfactory to the County and successful Contractor shall supply certificates of insurance and evidence of bonds.



**E. Performance Guarantee:**

- 1)** If an elevator is out of service for longer than two (2) consecutive work days for a non-scheduled repair, the monthly maintenance cost of that unit will be credited to the next monthly billing. All repairs shall be pre-scheduled in writing.
- 2)** If the Contractor does not respond in the time frames listed above under "Trouble Calls", the following month's billing will be credited in the amount of \$500 for each extended trouble call.
- 3)** If during thirty (30) consecutive days, the County experiences three (3) call backs on the same unit for the same problem, the monthly maintenance cost of that unit will be credited to the next monthly billing.
- 4)** If an elevator has call button lights, indicator lights or chimes out for longer than 2 weeks (14 days) the monthly maintenance cost of that unit will be credited to the next monthly billing.
- 5)** No penalty shall be assessed under Section 4.E.1 or 4.E.2 if damage is caused by vandalism or any other cause except normal wear and tear.

**F. County's Right to Survey Quality of Maintenance:**

- 1)** The County may elect to have specific elevators evaluated and tested in accordance with "Special Tests" and witnessed by a neutral party. The Contractor shall provide the necessary manpower, tools, instruments, test weights, etc. as required without additional cost to the County to conduct the test, with respect to each elevator covered by this Agreement, not more frequently than annually.
- 2)** The County may retain the services of an independent elevator consultant to evaluate the elevator performance covered under this Agreement. These evaluations may be made on a quarterly basis during the course of this Agreement.
- 3)** The results of these evaluations will be issued by the elevator consultant to the County. If non-compliance items are included in the report, the County will issue a punch-list to the Contractor who shall correct those items within thirty (30) days of receipt of punch-list. If punch-list items are not corrected within thirty (30) days, the County may solicit competitive corrective bids to abate the non-compliance items. The costs of this corrective action will be deducted from money owed to the Contractor under the terms of the Agreement.

## **5. SCOPE OF WORK.**

- A.** The work to be performed by the Contractor under this Agreement shall consist of furnishing all material, labor, tools and equipment necessary to provide full preventative maintenance repair service on the equipment described in this Agreement.
- B.** Any work not specifically mentioned but which is needed to make the maintenance complete within the terms of this Agreement shall be performed without additional cost.
- C.** Contractor shall perform, coordinate and complete the requirements of the Agreement, in cooperation with any other contractors or trades then doing any work on the County's properties, promptly, diligently, and in a good workmanlike manner to the full and complete satisfaction and acceptance of the County. Contractor shall perform the requirements of the Agreement in a manner that will not impede or obstruct the ongoing operations of the County.
- D.** Contractor shall guarantee that a member of their supervisory personnel regularly engaged in inspection and supervision will visit each elevator covered by this Agreement at least semi-annually to observe the quality of maintenance meets the specified and intended standards called for by this Agreement and shall provide a written report of findings from each visit to the County. The Supervisor shall schedule each visit with the County's Representative responsible for that building so that the County Representative may accompany the Supervisor.
- E.** The Contractor warrants that they are capable of maintaining this equipment covered by this Agreement to its original design capabilities based on the equipment on the equipment condition as surveyed and all the technical information available at the time of award of this Agreement.
- F.** The Contractor shall provide routine servicing of equipment as frequently as indicated by Federal, State, County and municipal laws, but not less than hours prescribed in Exhibit "A" of this Agreement. Time expended on routine service, at a minimum, consist of examination, minor adjustment, cleaning and lubricating the equipment. All lubrication frequencies and types of lubricants will meet the manufacturer's specifications. Any repairs or replacement of equipment is to be considered as additional time beyond that required for routine service. (See Exclusions)
- G.** Personnel necessary to accompany and assist the State Elevator Unit's representatives in the inspection of the County's elevators for issuance of operating permits.

- H. At the County's reasonable request, the Contractor will provide a hall call traffic analysis report on any or all elevators covered by this Agreement. The Analyzer shall be capable of gathering and printing information about the elevator performance and group operation.

## **6. EXCLUSIONS.**

- A. **Obsolete Equipment and Replacement of Obsolete Equipment:** Obsolete Equipment and the labor to replace them will be at the County of San Mateo's expense. Obsolete Equipment (including, but not limited to, assemblies, parts, components or systems) is defined as follows: An item for which the original design is no longer regularly manufactured by the OEM or obtainable by reasonable means, or the original item has been replaced with an item of different design (so long as the different design requires an unreasonable upgrade to the original equipment). Within ninety (90) days of executing this Agreement, Contractor shall inspect the Vertical Transportation Equipment for Obsolete Components and provide the County of San Mateo with a list of such Obsolete Components which is subject to The County of San Mateo's prior review and approval. The County of San Mateo and Contractor agree, if required, to have all obsolescence claims reviewed by an independent third party elevator consultant for final approval.

Except for exclusions above, all other components of the Vertical Transportation Equipment are fully covered by this Agreement.

- B. The following work is excluded from the scope of this Agreement and is not the responsibility of the Contractor:
- 1) Power supply feeder wires up to the elevator controls, building mainline disconnect switches and building mainline fuses.
  - 2) Repair or replacement of products of combustion detectors for fire recall.
  - 3) Car enclosures finishes and overhead lamps for cab illumination; hoistway enclosures; hoistway door panels and frames.
  - 4) Other items, caused by vandalism or negligence by persons other than the Contractor or the contractor's representatives and employees, excluding wear and tear. Contractor shall obtain the County's prior written approval to repair problems related to vandalism. Payment will not be made for any

unauthorized work. For all vandalism and/or negligence related repairs that result in additional cost to the County, Contractor shall furnish the following:

- a. A time ticket showing date, time and labor expended for the repair;
  - b. A description for the work performed along with any materials provided including material costs;
  - c. The technician's name;
  - d. Building and equipment identification;
  - e. Written authorization signed by the Director of Public Works or his designated Representative authorizing said repairs.
- 5) New attachments as may be recommended or directed by insurance companies or by federal, state, or municipal or other governmental authorities.
- 6) Buried cylinders and buried piping.
- 7) Escalators balustrades and decking.

## **7. CONDITIONS OF SERVICE.**

**A.** Contractor shall maintain all Equipment in good operating condition in accordance with manufacturer's specifications; and should conditions, warrant repair or replace the Equipment and/or any components of the equipment, including without limitation, the following:

### **1) Traction Elevators:**

- a. Machine, drive sheave, drive sheave shaft bearings, brake pulley, brake coil, brake contact, linings, seals and component parts, gears, worms, thrusts.
- b. Motor and motor generator, motor and generator windings, rotating element, commutator, brushes, brush holders and bearings.
- c. Controller, selector and dispatching equipment, all relays, solid state components, resistors, condensers, transformers, contacts, leads, dashpots, timing devices, computer devices, computer monitors, keyboards, CRT's and lobby display panels, steel selector tape or cable and mechanical and electrical driving equipment.
- d. Governor, governor sheave and shaft assembly, bearings, contacts, and governor jaws.

**e.** Deflector, car and counterweight sheaves, bearings, car and counterweight buffers, car and counterweight guide rails and brackets, hoistway top and bottom limit switches, governor tension sheave assembly and compensating sheave assembly.

**f.** Guide rails and their support brackets unless their failure is related to seismic activity or building settling.

**g.** Hoistway door interlocks, hoistway door hangers, bottom door guides and auxiliary door closing devices. Automatic power operator, car door hanger, car door contact, door protective devices, and all related door equipment and devices.

For freight elevators with vertical lifting or collapsible car gates and bi-parting, vertical lifting doors or gates, the contractor shall keep all doors and gates in balance for easy operation and renew or replace retiring cams, replace worn astragals, door guides and pull straps.

**h.** Load-weighing equipment, car frame, safety mechanisms, platform, platform sub-flooring, elevator car and counterweight roller and/or slide guides, gibs or rollers, ventilation fans, emergency lighting systems, signal and operating fixtures, including lights, buzzers and gongs in all signal and operating fixtures.

**i.** Renew all suspension means as often as recommended by the original equipment manufacturer and as required by AHJ adopted Code to maintain an adequate factor of safety. Equalize the tension on all hosting ropes as recommended by manufacture.

**j.** Shorten and re-shackle suspension means if stretching makes this necessary.

**k.** Contractor shall check the condition and operation of all door protection devices and all operating fixture lamps on each car at every visit. If the door devices and/or operating fixture lamps are inoperative, they shall be repaired within one business day. If, in the Contractor's opinion, the door protection devices are not maintainable, they shall be replaced at no cost to the County.

**l.** Seismic triggers and/or derailment devices; collision switches.

**m.** Fire related elevator controls.

**n.** Make corrections and respond to discrepancies identified by the local elevator enforcing authorities.

**o.** Repair or replace conductor cables and hoistway and machine room elevator wiring.

## **2) Hydraulic Elevators:**

- a.** Complete pumping plant, valves, exposed piping, fittings, piston (unless damaged by cylinder failure), packing, tank, heaters, mufflers and oil coolers.
- b.** If flexible hose and fitting assemblies are used, they shall be changed as required by ASME A 17.1 Code or sooner if necessary.
- c.** Materials and services covered by traction elevators as applicable.
- d.** Furnish all oils, lubricants, packing and other materials required.
- e.** Contractor shall monitor system hydraulic fluid levels on a monthly basis and notify the County if hydraulic fluid is added to the tank due to an unaccountable loss of fluid. Contractor shall also make the County aware of the implication of possible underground leaking, and, with the County's approval, remove any unit from service when an underground leak is suspected. If applicable, contractor shall provide a proposal with complete description of the procedure for individual testing the integrity of the cylinder and underground to/from oil line.

## **3) Wheelchair Lifts, Platform Lifts and Dumbwaiters:**

- a.** Materials and services covered by Traction Elevators or Hydraulic Elevators as applicable.
- b.** Contractor shall operate all wheelchair lifts on a bi-weekly basis to verify their proper function. Each bi-weekly test shall be recorded with the date and technician's initials in a log that shall be available for State and County inspections.

## **4) Escalators:**

- a.** Machine, brake, sprockets, gears, drive, handrail and step chains, chain and step rollers and bearings, comb plates, step treads, tracks, all bearings for sprockets, sheaves, newel wheels, contacts, coils, skirt switches, Novatex Boards, (if applicable), bull gears, handrail guides, guards and all safety devices.
- b.** Materials and services covered by Traction Elevators as applicable.
- c.** All light fixtures and lamps which are mounted on or in the escalator unit.
- d.** Contractor will be on site during all state inspections.

## **8. ADDITIONAL REQUIREMENTS.**

## **A. Routine Maintenance for Escalators**

- 1)** Semi-Weekly – Examine running unit, check for handrail damage, check handrail drive clean and adjust as necessary, check operation of stop buttons, handrail inlet switches, key start switches, and upper and lower skirt switches, check trim, inner panels, skirts for loose fastenings, correct/replace as required, check for broken comb segments, step treads or risers, replace as required, apply skirt lubrication, check lower station movement, spring length, and chain switch.
- 2)** Monthly – Check and clean controller, check ring gear oil level (add as required), lubricate handrail drive chains, glass balustrade, and step chains, clean upper and lower pits. Check operation of upper and lower access cover, inspection switches, pit switches, gearbox oil and clean breather.
- 3)** Quarterly – Service non-reversing device, clean inside of handrail, clean guide as required, check handrail speed sensor, check brake operation and adjust if required, check motor couplings and grommets, check missing step detector and comb impact-trip force.
- 4)** Semi Annually – Lubricate upper station main bearings (4), lubricate handrail (drive) sheave bearings (if applicable), lubricate lower station bearings (2).
- 5)** Annually – Adjust Novatex boards, replace if required, check operation of broken step, out of level, and step up-thrust switches, change ring gear oil, clean lower end pans up through 30-degree area, clean pans and tracks of upper and lower truss, lubricate drive motor (maximum 5 pumps), change gear box oil, clean breather.

## **B. General:**

- 1)** The Contractor shall maintain the elevator equipment speed in feet per minute and the performance for elevators as indicated under “Basic Performance Requirements.”
  - a.** If the actual performance time of the elevator does not meet the times established for elevators of the speed and type of control, the Contractor shall restore the performance of the elevator to its optimum potential as agreed upon by the Contractor and Director of Public Works.
  - b.** If, in the Contractor’s opinion, the equipment is inherently designed so that it cannot meet these criteria, the Contractor shall so state.

**c.** If there are no exceptions taken, performance shall be provided as specified hereinafter.

**2) Basic Performance Requirements:** Electric elevators shall be adjusted to meet the following basic performance standards and shall maintain these standards for the life of the Agreement.

**a. Operating Characteristics:**

i. Starting, acceleration, stopping and leveling shall be smooth and free from jars or bumps.

ii. Full speed riding shall be without swaying or vibration.

**iii. Elevator and door operation shall be quiet.**

**iv.** Stop made upon operation of emergency stop switch shall be more rapid than a routine stop but not violent.

v. Door pressure shall be maintained below 30 pounds in closing.

**3) Group Supervisory Systems:** Group control systems shall operate at design criteria for the lifetime of the Agreement.

**4) Individual Elevator Performances:** Performance requirements shall be as follows:

**a.** Maintain accuracy leveling of +/- 3/8" for Traction Elevators and 1/2" for Hydraulic Elevators under all loading conditions.

**b. Brake-To-Brake Times for Traction Elevators based on 13'-6" floor heights or less:**

**7.5-8.0 Seconds Maximum for Geared Equipment.**

5.5-6.0 Seconds Maximum for Gearless Equipment.

**c. Floor-to-Floor Times for hydraulic Elevators based on 13'-6" floor heights or less: 12.5 Seconds Maximum.**

**d. Door Open Times shall be no more than:**

3'-0" Single Slide 2.2-2.5 Seconds

3'-6" Center Opening                      2.0-2.2 Seconds



3'-6" Single Slide	2.8-3.0 Seconds
3'-6" Two Speed Side Open	2.2-2.4 Seconds
4'-0" Center Opening	2.4-2.6 Seconds
4'-0" Two Speed Side Open	2.4-2.6 Seconds

**e. Door Standing Times:**

Car Call:	3.0 Seconds
Hall Call:	5.0 Seconds

**f. Door Close Times:** Minimum without exceeding kinetic energy and closing force allowed by Code.

**C. Special Test**

**1)** Elevators provided with fire service shall have their Phase I recall system (and Phase II operations, if applicable) tested by Contractor in accordance with applicable code requirements. Where monthly tests are required, Contractor shall provide such test and the results shall be recorded with date and technician's initials in a log available for State and County inspection. The YSC elevators and the Maple Street Correctional Center will be tested monthly, all others will be done annually. Tests will be performed after normal business hours or weekends or as determined by the owner. Contractor will keep records of these test on file and provide copies to the County.

**2)** Elevators with derailment devices, seismic switches or other special circuitries shall be checked at least once every year to make certain that these devices are operating correctly and as designed. County's Representative and the Contractor shall arrange for mutual acceptable dates to perform the tests. Emergency power operation will be tested by County and, if elevator system fails, Contractor shall make corrections and retest.

**3)** The Contractor shall periodically examine the car safety devices and governors and conduct an annual no load test and shall, during the term of this Agreement, or more often, if required by applicable law, ordinance or regulation,

but no less than every five (5) years, perform one (1) full load, full speed test of the safety mechanism, over-speed governors, car and counter weight buffers. The car balance shall be checked electrically and the governor set. If required, the governor shall be recalibrated and sealed for proper tripping speed. These tests shall be witnessed by the County's Representative and a written report shall be furnished indicating the results of such test. All tests shall conform to the requirements of ASME A 17.1 and/or local code testing requirements.

**4)** Traction elevators shall have a load test performed during the term of this Agreement or more often if required by applicable law, ordinance or regulation but no less than every five (5) years. It shall comply with the State of California's Elevator Safety Order No. 3017 (J). The report shall conform to the requirements of the State with the test witnessed by the County's Representative.

**5)** Contractor shall create a form for each car describing test and deliver a signed copy to the County's Representative after each test has been concluded. This form will also describe any malfunctions along with any corrective action taken.

#### **D. Housekeeping**

**1)** During the first three (3) months this Agreement is in effect, the Contractor shall thoroughly clean all elevator hoistways, pits, car tops, controller interiors including filters and machine rooms. In addition, during the same period of time, all car and hoistway door tracks, hangers, interlocks and closers shall be cleaned, lubricated and adjusted. Continuing cleaning must be on going and at the following minimum intervals or more frequently where conditions warrant.

Quarterly: Car tops, pits, and machine rooms.

Semi-Annually: Hoistways and door equipment.

**2)** The exterior of the machinery and any other parts of the Equipment subject to rust shall be properly painted and presentable at all times. The motor windings and controller coils shall be periodically treated with proper insulating compound. The Contractor shall keep the elevator machinery rooms clean.

**3)** All debris, including but not limited to: wiping rags, empty oil cans, trash from pits, etc. resulting from this work, shall be promptly removed by the Contractor.

#### **E. Stock of Materials**

**1)** The Contractor shall keep in each elevator machine room an adequate supply of contacts, switch parts, coils, conductors, springs, holders, resisters, relays, lamps, condensers, tubes, transformers, car and hall buttons, fuses, and other parts which are required for prompt replacement and repair, together with an adequate supply of lubricants and wiping rags. All supplies should be stored in metal cabinets. Closed metal containers must be used for storage of oily rags. All necessary cabinets, shelves, and containers are to be provided and paid for by the Contractor and shall become the property of the County. All use, storage, and disposal of hazardous and/or waste materials of any type shall be in compliance with all Federal, State, Local and Cal/OSHA requirements.

**2)** In addition, the Contractor shall keep in the buildings where the elevators are located or in a warehouse within fifty (50) miles of the elevator locations or reasonably obtainable within 24 hours:

- a.** One set of motor brushes and holders for each type of motor and generator.
- b.** One door operator motor of each type used.
- c.** Hanger sheaves for car and hoistway doors.
- d.** Two complete door interlocks.
- e.** One set of generator bearings for each type of generator.
- f.** One set of brake linings for each type of break.
- g.** Parts for door protective devices.
- h.** Power supplies.
- i.** Coils, relays, motor brushes and all other parts as needed to assure prompt replacement in the event of the shutdown of any elevator.
- j.** SCR drive components.
- k.** One spare control board of each type installed.
- l.** Cylinder head packing and pump motor belts.

**F. Wiring Diagrams:**

A complete set of all wiring diagrams for the elevator systems covered under this Agreement shall be maintained in their respective machine rooms. All changes in circuitry made by the Contractor shall be properly recorded on the machine room copies of diagrams including the date of change and name of person making same. The wiring diagrams are the property of the County and are to remain in their respective machine room.

**G. Schedules and Records**

**1)** All service technicians shall check in with the facilities manager, or his designee and will sign in the log book upon arrival. Log books will be located in the basement of 455 County Center in Redwood City, the SE shop located at 70 Loop Road in San Mateo and in the Health and Hospital shop located at 222 W. 39<sup>th</sup> Ave in San Mateo. The technician will log out when leaving, indicating if the problem was resolved or update the status of the car or escalator.

**2)** Contractor shall provide a work schedule for each machine room. A copy of each schedule shall be provided to the Facilities Customer Service Center.

**3)** These work schedules shall be designed for each type of equipment and documented in the contractors Maintenance Control Program (MCP). Equipment to be serviced, such as gearless, geared elevators, hydraulic elevators, lifts, etc., shall conform to the manufacturer's recommended practice for the particular equipment specified. They shall show the kind and frequency of service and lubrication proposed by the Contractor for the duration of the Agreement. However, in no case shall the schedule be less than the minimum requirement on on-site routine servicing man-hours indicated in Attachment "A."

**4)** All inspections, lubrication, adjustments, tests, cleaning, routine repairing and other preventative maintenance activities shall be performed in accordance with schedules submitted by the Contractor.

**5)** Schedules posted shall be the chart type, which shall be initialed by the serviceman when each scheduled inspection is performed.

**6)** Contractor shall also maintain an accurate and complete log of all work performed in addition to routine service at each location. These logs shall include call back service describing the nature of all complaints and their resolution. The logs shall be kept in the equipment room at each location. In addition to the specified machine room log, Contractor's workmen or supervisor shall log in and out of each facility/building on each and every visit. This includes but is not limited to, routine maintenance, trouble calls, repairs and supervisor visits. These logs will remain the property of the County.

**7)** For all Hydraulic Elevators, Contractor shall maintain an accurate and complete log of all additions of hydraulic fluid to the system. This log shall include an explanation for each fluid addition. The County is to be notified whenever there is an unaccounted fluid loss from the hydraulic system.

**8)** At the County's request, Contractor shall deliver a copy of the callback and repair log for any elevator covered by this Agreement.

**9)** All forms required for the above schedules, monthly work sheets, call back records and performance reports must be approved by the County.

**10)** Contractor shall notify the Facilities Customer Service Center.

#### **H. Personnel**

**1)** Contractor agrees that all services shall be performed by trained maintenance and repair personnel, directly employed and supervised by the Contractor. All work shall be performed by a mechanic who is, at a minimum, at the Journeyman level. Helper may not work alone but may assist the mechanic as needed. In the event that the County becomes dissatisfied with the performance of any person assigned to perform services under this Agreement, Contractor agrees, upon request from the County's Representative, to promptly assign other qualified personnel to perform these services.

**2)** Contractor's service personnel shall wear uniforms which bear Contractor's name or other appropriate symbol which identifies them as employees of the Contractor and such uniforms shall be clean and in good condition. Contractor's personnel shall have available, photo identification that confirms their current employment with the Contractor.

#### **I. Elevator Inventory, Location, and Frequency of Service.**

See attached Attachment "A" *Elevator Inventory*.