**ATTACHMENT 4**

**Standard Agreement**

JUDICIAL COUNCIL OF CALIFORNIA, ADMINISTRATIVE OFFICE OF THE COURTS

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| --- | --- | --- |
|  |  | AGREEMENT NUMBER |
|  |  |  |
| FEDERAL EMPLOYER ID NUMBER |
|  | | **86-0366154** |
| THIS AGREEMENT is made and entered into this (date) day of (month) (“Effective Date”), in the State of California, by and between the parties identified below. | | |
| In this agreement (the “Agreement”), the term “Contractor” refers to (Contractors Name). and the term “AOC” refers to the Judicial Council of California, Administrative Office of the Courts. | | |
| jcc seal5Incorporated into this Agreement herewith, and attached hereto, are the following contract documents: (1) Exhibit A, Standard Provisions; (2) Exhibit B, Special Provisions General Terms and Conditions; (3) Exhibit C, Payment and Performance Bond, Certificate of Insurance; (4) Exhibit D, Payment Provisions (5) Exhibit E, Statement of Work; (6) Exhibit F, Subcontractors to Contractor; (7) Exhibit G, Contractor’s Key Personnel, Exhibit H, HKA Vertical Transportation Modernization Specifications, Exhibit I, Asbestos Reinspection Report, and Exhibit J, AOC Tool Policy (collectively, the “Contract Documents”).  Contractor shall provide modernization of (21) twenty-one existing elevators located within the Clara Shortridge Foltz Superior Courthouse located at 210 West Temple Street, Los Angeles, California (“Building”) pursuant to the Contract Documents (“Project”) for the firm fixed price of $\_\_\_\_\_\_\_\_\_\_\_\_\_ (“Contract Amount”). The Building is currently occupied by the Superior Court of California, County of Los Angeles (“Court”) and the County of Los Angeles (“County”)  The work for the Project (“Work”) is hereby authorized and funded through performance, for the Contract Amount. | | |
| This Agreement shall commence upon the Effective Date, as set forth above, and shall complete upon final payment and release of final retention by the AOC. | | |
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| --- | --- | --- |
| **AOC’S SIGNATURE** | **CONTRACTOR’S SIGNATURE** | |
| Judicial Council of California,  Administrative Office of the Courts | CONTRACTOR’S NAME *(if Contractor is not an individual person, state whether Contractor is a corporation, partnership, etc.)*  Sundt Construction, Inc. | |
|  | CA CSLB LICENSE NO.:  CLASSIFICATION: | EXP. DATE: |
| BY *(Authorized Signature)*  ✍ | BY *(Authorized Signature)*  ✍ | |
| PRINTED NAME AND TITLE OF PERSON SIGNING  Grant Walker  Senior Manager, Business Services | PRINTED NAME AND TITLE OF PERSON SIGNING | |
| ADDRESS  455 Golden Gate Avenue  San Francisco, CA 94102 | ADDRESS | |

State of California Standard Agreement

Contract No. ***[Agreement Number]*** with ***[Contractor name]***,

**Administrative Office of the Courts Use Only**

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| **Fund Title** | **Program/ Category** | **Item** | **Chapter** | **Statute** | **Fiscal Year** | **Object of Expenditure** | | | **Amount** |
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| Amount Encumbered by this Document: | | | Prior Amount Encumbered for this Contract: | | | | Total Amount Encumbered to Date: | | |
| $**[Dollar amount]** | | | $**[Dollar amount]** | | | | $**[Dollar amount]** | | |
| I hereby certify upon my own personal knowledge that budgeted funds are available for the period of the expenditure stated above. | | | | | | | | | |
| SIGNATURE OF ACCOUNTING OFFICER  ✍ | | | | | | | | DATE | |

State of California Standard Agreement

Contract No. ***[Agreement Number]*** with ***[Contractor name]***,

EXHIBIT A

STANDARD PROVISIONS

1. Indemnification

Contractor agrees, to the fullest extent permitted by law, to indemnify, defend (with counsel satisfactory to the AOC), and hold harmless (collectively, “Indemnify”) the State of California; the Judicial Council of California; the Administrative Office of the Courts;, the Superior Court of California, County of Los Angeles; the County of Los Angeles , and any and all of their officers, agents, contractors, consultants, representatives, volunteers and employees, including without limitation judges, subordinate judicial officers, court executive officers and court administrators (individually, an “Indemnified Party”) from any and all demands, claims, lawsuits, losses, actions, costs (including attorney fees and costs), liabilities, and damages directly or indirectly arising from personal or bodily injuries, death, property damage, or otherwise arising from, related to or in connection with, in whole or in part, any of the following:

(a) Contractor or any of its employees’ or any Subcontractor’s negligent acts, omissions, or intentional misconduct;

(b) Contractor’s breach of its obligations under this Agreement;

(c) Contractor or any of its employees’ or any Subcontractor’s violation of any applicable law, rule, or regulation; and/or

(d) Any claim or lawsuit by any third party, contractor, Subcontractor, supplier, worker, or any other person, firm, or corporation (i) furnishing or supplying Work, Services, Materials, or supplies in connection with the performance of this Agreement (e.g. stop notice actions); or (ii) who may be injured or damaged by the Contractor or any of its Subcontractors, or employees, when such claim arises from, is related to, or is in connection with Contractor’s performance under this Agreement.

This provision does not require the Contractor to Indemnify an Indemnified Party for such portion of any loss, cost, liability, or damage to the extent arising from the sole negligence or willful misconduct of the Indemnified Party.

The AOC shall have the right to accept or reject any legal representation that Contractor proposes to defend the AOC

1. Relationship of Parties

##### Contractor and its employees and any of Contractor’s subcontractors (“Subcontractors”), in the performance of this Agreement, shall act in an independent capacity and not as officers or employees or agents of the State.

1. Termination for Cause

If Contractor fails to perform the work for the Project to the satisfaction of the AOC, or if Contractor fails to fulfill in a timely and professional manner Contractor’s obligations under this Contract, or if Contractor violates any of the terms or provisions of this Contract, the AOC shall have the right to terminate this Contract effective immediately upon the AOC giving written notice thereof to the Contractor. If the Agreement is terminated, the State may proceed with the Work in any manner it deems proper. The cost of any Work already performed by the Contractor, or that is in the process of being performed based on instructions from the State, will be payable by the State upon the presentation of an appropriate invoice by the Contractor, and the approval of said invoice by the State, as provided for in Exhibit C, Payment Provisions.

1. No Assignment

##### Contractor shall not voluntarily or involuntarily assign (e.g. assignment by operation of law), encumber, or otherwise transfer or delegate all or any interest in this Agreement.  Any voluntary assignment by Contractor or assignment by operation of law (e.g. involuntarily assignment) of any portion of Contractor’s interest in this Agreement shall be deemed a default allowing the AOC to exercise all remedies available to it under applicable law.

1. Time of Essence

##### Time is of the essence in this Agreement.

1. Validity of Alterations

##### Alteration or variation of the terms of this Agreement shall not be valid unless made in writing and signed by the parties, and an oral understanding or agreement that is not incorporated shall not be binding on any of the parties.

1. Consideration

The consideration to be paid to Contractor under this Agreement shall in no event exceed the Contract Amount. Contractor shall be paid in accordance with the Payment Provisions set forth in Exhibit "C" of this Agreement. The State's payments to Contractor pursuant to this section shall constitute full compensation for all of Contractor's time, materials, costs and expenses incurred in the performance of this Agreement.

##### END OF EXHIBIT A

State of California Standard Agreement

Contract No. ***[Agreement Number]*** with ***[Contractor name]***,

EXHIBIT B

SPECIAL PROVISIONS

**GENERAL TERMS AND CONDITIONS TO CONTRACT**

1. **NOTICE TO PROCEED:** The Project Manager will provide a written notice to proceed to Contractor with respect to the Project at which time Contractor will proceed with the Work of the Project, however, Contractor shall not commence actual construction until the Contractor’s performance and payment bonds and insurance certificates have been submitted to the AOC and approved by the AOC in accordance with the Contract Documents.
2. **CONTRACT TIME/PROJECT SCHEDULE**:

1. Contract Time: The Contractor shall complete the Work under this Contract (i.e. the Project), including satisfactory completion of all inspections, tests, documentation, punch list and clean up items, and full demobilization within 48 months of the Notice to Proceed (“Contract Time”).
2. Project Schedule: Within fifteen (15) calendar days after the starting date on the Notice to Proceed, the Contractor shall prepare and submit to the AOC for review and acceptance, with copy to the Architect, a detailed update to the Estimated Schedule that was in the AOC’s solicitation document. This schedule, once accepted by the AOC, shall be the Contractor’s Master Project Schedule.
3. The Master Project Schedule shall be comprised of a Critical Path Method network and shall be in a Gantt chart format. Contractor shall input the critical path schedule using Primavera Project Planner, Primavera SureTrack, or AOC-approved equal software. All programs shall be capable of converting the data to a format that is readable using Primavera SureTrack, version 3.0, unless another format is specified in the Contract Documents.
4. Contractor’s Master Project Schedule shall show the dates on which each part, division, or phase of the work for the Project (“Work”) is expected to be started and completed.
5. The Work activities making up the Master Project Schedule shall be of sufficient detail to assure that adequate planning has been done for proper execution of the work and such that, in the sole judgment of the AOC, it provides an appropriate basis for monitoring and evaluating the progress of the Work. The schedule shall show the interdependence of each activity and a critical path. The Master Project Schedule shall include, but shall not be limited to, the following items:
   * + - 1. Due dates of contractual obligations;
         2. Project meetings;
         3. Dates for submission for required milestones;
         4. Review times assumptions;
         5. Dates for AOC or outside agency submittals (including shop drawings), reviews, and/or approvals;
         6. Any required submittals and approvals;
         7. Activities and milestones during construction;
         8. Equipment ordering, delivery, and installation;
         9. Punchlist preparation, punchlist work, and punchlist sign-off; and
         10. Project Closeout.
6. Contractor’s Master Project Schedule shall show the sequence, duration in calendar or working days, and interdependence of activities required for the complete performance of all Work. The schedule shall show milestones, including milestones for AOC-furnished information, and shall include activities for AOC-furnished equipment and furniture when those activities are interrelated with the Contractor’s activities. The transmittal provided with the Master Project Schedule shall state whether the durations are in work days or calendar days.
7. Contractor’s Master Project Schedule shall begin with the effective date of the Notice to Proceed and conclude with the date of final Completion.
8. The construction schedule shall include a critical path activity, if any.
9. The schedule shall be developed using an appropriate work breakdown structure.
10. Contractor may submit a Master Project Schedule that shows the work completed in less time than the specified Contract Time – an early completion (“advanced”) schedule. However, the AOC’s acceptance of such a schedule will not change the Contract Time. The AOC is not required to accept an advanced schedule. Contractor shall not be entitled to extra compensation if the AOC allows the Contractor to proceed performing the Contract on an advanced schedule and Contractor completes the Project, for whatever reason, beyond the date shown in that advanced schedule, but within the time for Completion indicated in the Contract. A schedule showing the work completed in less than the time for Completion indicated in the Contract, shall be considered to have Project Float.
11. The AOC's review and acceptance of the Master Project Schedule is for compliance with the requirements of the Contract Documents only. Review and acceptance by the AOC of the Master Project Schedule only means that the AOC acknowledges that the Contractor believes the Contractor can perform the Work as indicated in the Master Project Schedule and does not relieve the Contractor of any of the Contractor's responsibility for the accuracy or feasibility of the Master Project Schedule, or of the Contractor's ability to meet the interim Project milestone dates and the date of Completion. The AOC's review and acceptance does not expressly or impliedly warrant, acknowledge or admit the reasonableness of the logic, durations, manpower or equipment loading of the Master Project Schedule.
12. Schedule Updates:
    * + - 1. Contractor shall provide a monthly update to the Master Project Schedule to the AOC for approval.
          2. In addition, the Contractor shall provide an update to the Master Project Schedule to the AOC within ten (10) days of commencement of each Phase and at other times when significant changes are made to the schedule or as requested by the AOC.
          3. Contractor Shall provide an update to the Master Project Schedule for the Construction Phase of the Project. Preparation of the Master Schedule for the Construction Phase will take into consideration sufficient time for the AOC to authorize that phase, including any time necessary for the AOC to obtain approval of funding.
          4. Contractor shall provide an update to the Master Project Schedule within three (3) days upon the reasonable request of the AOC.
          5. Contractor shall include with its monthly update to the Master Project Schedule, a Schedule Narrative Report containing a narrative that includes the following:

1. Contractor’s transmittal letter

* + - 1. Description of problem tasks, referenced to field instructions, RFIs, change order numbers, or claim numbers as appropriate.
      2. Current and anticipated delays not resolved by approved change order, including:
         1. Contractor’s reason for the cause of the delay;
         2. Corrective action and schedule adjustments to correct the delay;
         3. Known or potential impact of the delay on other activities, milestones, and project completion date.
      3. Changes in construction sequence
      4. Pending items and status thereof including but not limited to:
         1. Pending change orders
         2. Time extension requests
         3. Other items
      5. Contract completion date status:
         1. If ahead of schedule, the number of calendar days ahead
         2. If behind schedule, the number of calendar days behind
      6. Other project or scheduling concerns
      7. Updated network diagram with target bars shown.

1. The Master Project Schedule shall also show all submittals associated with each work activity, allowing a minimum of fourteen (14) and a maximum of thirty (30) calendar days for the AOC’s consultant’s review of each submittal unless a longer period of time is specified in the Contract Documents.
2. In addition, the Contractor shall also submit a separate Submittal Schedule listing all submittals required under the contract and noting the anticipated date that each submittal will be submitted. All submittals precedent to critical construction activities shall be included in the construction schedule.
3. **SITE EXAMINATION:** Contractor has examined the Site and certifies that it accepts all measurements, specifications and conditions affecting the Project to be performed at the Site. Contractor warrants that it has made all Site examination(s) that it deems necessary as to the condition of the Site, its accessibility for materials, workers and utilities, and Contractor’s ability to protect existing surface and subsurface improvements.
4. **EQUIPMENT AND LABOR:** Contractor shall furnish all tools, equipment, apparatus, facilities, transportation, labor, and material necessary to provide the services herein described.
5. **SUBCONTRACTORS:** Subcontractors, if any, engaged by the Contractor for any work required for the Project shall be subject to the written approval of the Project Manager. Contractor agrees to bind every subcontractor by the terms of the Contract as far as such terms are applicable to subcontractor’s work, including, without limitation, all indemnification, insurance, bond, and warranty requirements. If Contractor subcontracts any part of this Contract, Contractor shall be fully responsible to the AOC for acts and omissions of its subcontractor and of persons either directly or indirectly employed by itself. Nothing contained in the Contract Documents shall create any contractual relations between any subcontractor and the AOC.
6. **TERMINATION FOR CONVENIENCE:** AOC shall also have the right in its sole discretion to terminate the Contract for its own convenience, in which case, the AOC will only be obligated to reimburse Contractor for the actual costs incurred by Contractor as of the date of termination, however, in no event, shall Contractor be entitled to be compensated for any loss of anticipated profits.
7. **SAFETY PRECAUTIONS AND PROGRAMS:**

7.1 The Contractor shall initiate, maintain and supervise all safety precautions and programs in connection with the performance of the Work.

7.2 The Contractor shall comply with all applicable laws, ordinances, rules, regulations and lawful orders of public authorities bearing on the safety of persons or property, or their protection from damage, injury or loss.

7.3 The Contractor shall designate the Work Superintendent, or some other responsible member of the Contractor’s organization who is at the Site, to be the person responsible for the prevention of accidents and the monitoring of the safety of the Work

7.4 The Contractor shall take precautions for safety and provide protection to prevent damage, injury or loss to:

1. Employees working under the Contract and other persons who may be affected thereby;

2. The Work and materials and equipment to be incorporated therein, whether in storage on or off the Project site, under care, custody or control of the Contractor or the Contractor's Subcontractors or Sub-subcontractors; and

other property at the Project site, or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures and utilities, except as otherwise noted or specified.

7.5 The Contractor shall erect and maintain, as required by existing conditions and performance of the Contract, safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying the AOC, other owners and users of adjacent sites and utilities.

7.6 The Contractor shall comply with all applicable laws, ordinances, rules, regulations and lawful orders of public authorities regarding the storage and/or use regulated materials or equipment necessary for execution of Work.

7.7 The Contractor shall remedy damage and loss to property referred to in Clauses 7.4.2 and 7.4.3 caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Clauses 74.2 and 7.4.3. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Exhibit A Section 1.

7.8 The Contractor shall not permit any part of the Work or Project site to be loaded so as to endanger its safety.

7.9 When conditions of the Work, in the judgment of the AOC, present unreasonable risk of injury or death to persons or property damage, the AOC, may direct the Contractor, at the Contractor's sole expense, to close down the Work and not commence work again until all dangerous conditions are eliminated.

7.10 The Contractor, at the Contractor's own cost, shall rebuild, repair, restore and make good any and all damages to any portion of the Work affected by such causes before its acceptance.

7.11 In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's sole discretion, to prevent any threatened damage, injury or loss.

7.12 By signing the Contract, the Contractor certifies, under penalty of perjury under the laws of the AOC of California, that the Contractor will comply with the requirements of the Drug-Free Workplace Act of 1990 (Government Code, Section 8350 et seq.), and will provide a drug-free workplace by taking the following actions:

* + - 1. Publish a statement notifying employees that unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited and specifying actions to be taken against employees for violations.
      2. Establish a Drug-Free Awareness Program to inform employees about:
         1. The dangers of drug abuse in the workplace;
         2. The person's or company's policy of maintaining a drug-free workplace;
         3. Any available counseling, rehabilitation, and employee assistance programs; and,
         4. penalties that may be imposed upon employees for drug abuse violations.
      3. Provide, as required by Government Code, Section 8355(c), that every employee who works under the Contract will:
         1. receive a copy of the company's drug-free workplace policy statement; and
         2. agree to abide by the terms of the company's statement as a condition of employment.

1. **CHANGE IN SCOPE OF WORK:** Any change in the scope of the work for the Project, method of performance, the type of materials, or any other matter materially affecting the performance or nature of the Project shall not be paid for or accepted unless such change, addition, or deletion is approved in advance and in writing by a valid amendment to this Contract executed by the AOC. Contractor specifically understands, acknowledges, and agrees that the AOC shall have the right to request any alterations, deviations, reductions, or additions to the Project and the cost thereof shall be added to or deducted from the amount of the Contract Price by fair and reasonable valuations. Contractor also agrees to provide the AOC with all information requested

to substantiate any cost of the change order and to inform the AOC whether the work will be done by the Contractor or a subcontractor. In addition to any other information requested, Contractor shall submit, prior to approval of the change order, its request for a time extension (if any), as well as all information necessary to substantiate its belief that such change will delay the completion of the Project. If Contractor fails to submit its request for a time extension or the necessary supporting information, it shall be deemed to have waived its right to request such extension.

1. **WORKERS:** Contractor shall at all times enforce strict discipline and good order among its employees and the employees of its subcontractors and shall not employ or work any unfit person or anyone not skilled in work assigned to him or her. Any person in the employ of the Contractor or a subcontractor whom the AOC may deem incompetent or unfit shall be dismissed from the Site and shall not again be employed at Site without written consent from the AOC.
2. **CORRECTION OF ERRORS:** Contractor shall perform, at its own cost and expense and without reimbursement from the AOC, any work necessary to correct errors or omissions that result from, or relate to, Contractor’s failure to comply with the standard of care required for the work for the Project.
3. **SUBSTITUTIONS:** No substitutions of material from those specified in the Work Specifications shall be made without the prior written approval of the Project Manager.
4. **CONTRACTOR SUPERVISION:** Contractor shall provide competent supervision of personnel who are working at the job Site and/or on the Project.
5. **CLEAN UP:** Contractor must remove debris from the Site on a weekly basis. The Site shall be in order at all times when work is not actually being performed and shall be maintained in a reasonably clean condition.
6. **ACCESS TO PROJECT:** TheAOC shall, at all times, have access to the Project while it is in preparation or in progress. Contractor shall provide safe and proper facilities for such access.
7. **SHOP DRAWINGS, PRODUCT DATA AND SAMPLES (SUBMITTALS):**
8. Shop Drawings, Product Data, Samples and similar submittals are not Contract Documents. Their purpose is to demonstrate those portions of the work for which submittals are required and the way the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents. Review by the AOC is subject to the limitations stated herein.
9. Contractor shall review, approve and submit to the AOC all Shop Drawings, Product Data, Samples and similar submittals required by the Contract Documents within the number of days set forth in the Contract Documents.
10. Submittals for finishes shall be submitted in a sequence so as to cause no delay in the progress of the Work or in the activities of the AOC or separate contractors.
11. Submittals that are not required by the Contract Documents may be returned to the Contractor without action.
12. Contractor shall perform no portion of the Work requiring submittal(s) and review of Shop Drawings, Product Data, Samples or similar submittals until the respective submittal has been reviewed by the AOC. Such Work shall be in accordance with reviewed submittals.
13. By submitting Shop Drawings, Product Data, Samples and similar submittals, the Contractor represents that the Contractor has determined and verified materials, field measurements and related field construction criteria, and has checked and coordinated the information contained within the submittal(s) with the requirements of the Contract Documents.
14. Contractor shall not be relieved of the responsibility for any deviation from the requirements of the Contract Documents by the AOC's review of submittals unless the Contractor has specifically informed the AOC, in writing, of such deviation at the time of submittal, and the AOC has given written consent to the specific deviation. The AOC's review shall not relieve the Contractor of responsibility for errors or omissions in submittals.
15. Contractor shall respond per requirements of the Contract Documents, in writing or on resubmitted submittals, to revisions other than those requested by the AOC on previous submittals. After the second resubmittal of a specific item, that is still not accepted, the Contractor will be charged all costs of submittal review. The charges will be deducted from the Contractor’s next pay request.
16. When professional certification of performance criteria of materials, systems or equipment is required by the Contract Documents, the AOC will be entitled to rely upon the accuracy and completeness of such calculations and certifications.
17. When descriptive catalog designations, including manufacturer's name, product brand name, or model number(s) are referred to in the Contract Documents, such designations shall be considered as being those found in industry publications of current issue at date of AOC’s solicitation document.
18. All submittals shall be in accordance with Exhibit H, HKA Vertical Transportation Modernization Specifications, including without limitation section 1.05 of Exhibit H, HKA Vertical Transportation Modernization Specifications.
19. **TIME IS OF THE ESSENCE:** Time is of the essence in the performance of and compliance with each of the provisions and conditions of this Contract.

17. **TIME EXTENSIONS AND DELAYS IN COMPLETION OF THE WORK**

Force Majeure: The AOC and the Contractor shall be excused from performance if there is a force majeure event. A force majeure event is one or more of the following events that adversely impacts the AOC’s or the Contractor’s performance: acts of God, acts of a public enemy, fires, floods, windstorms, tornadoes, earthquakes, wars, riots, insurrections, epidemics, quarantine restrictions, strikes, lockouts, fuel shortages, or freight embargoes

Contractor’s Notice of Delay

1. In addition to the requirements indicated in this subsection, Contractor shall notify the AOC of any anticipated delay and its cause.

Contractor shall, within seven (7) calendar days of any delay impacting the critical path in completing the Work, notify AOC in writing of the causes of the delay including documentation and facts explaining the delay.

In the event the Contractor requests an extension of Contract Time for a delay in this notice, that request shall be submitted in accordance with the provisions in the Contract Documents governing changes in Work. When requesting time, requests must be submitted with full justification and documentation. If the Contractor fails to submit justification, it waives its right to a time extension at a later date. Such justification must be based on the official Construction Schedule as updated at the time of occurrence of the delay or execution of Work related to any changes to the Scope of Work.

Any claim for delay must include the following information as support, without limitation:

1. The duration of the activity relating to the changes in the Work and the resources (manpower, equipment, material, etc.) required to perform the activities within the stated duration.
2. Specific logical ties to the Master Project Schedule for the proposed changes and/or delay showing the activity/activities in the schedule that are affected by the change and/or delay. (A portion of any delay of seven (7) days or more must be provided.)
3. A recovery schedule must be submitted.

AOC shall review the facts and extent of any noticed delay and shall grant Contract Time extension(s) of time for completing Work when, in the AOC’s judgment, the findings of fact justify an extension.

Any extension granted by the AOC shall be based on the Master Project Schedule as updated at the time of occurrence of the delay or execution of work related to any changes to the scope of the Work. Extension(s) of time shall apply only to that portion of Work affected by delay, and shall not apply to other portions of Work not so affected.

An extension of time may only be granted if Contractor has timely submitted the Construction Schedule as required herein.

Following submission of a notice of delay, the AOC may determine whether the delay is to be considered:

1. Excusable and Compensable, Excusable, or Unexcused;
2. How long the delay continues; and
3. To what extent the prosecution and Completion of the Work might be delayed thereby.

Excusable and Compensable Delay(s)

1. Contractor is not entitled to additional compensation for any delay, even a delay caused by an Excusable Delay, unless all of the following conditions are met:
   * + - 1. The AOC is responsible for the delay
         2. The delay is not caused by conflicts, ambiguities or errors or omissions in the Contract Documents that could have been reasonably discovered by the Contractor;
         3. The delay is unreasonable under the circumstances involved and impacts the critical path of the Work and extends the Contract Completion date;
         4. The delay was not within the contemplation of AOC and Contractor;
         5. The delay could not have been avoided or mitigated by the Contractor's care, prudence, foresight, and diligence.
         6. The delay extends the contract completion date, however, the delay is concurrent with another Excusable Delay or a Contractor-caused unexcused delay.
2. Excusable Delay(s)
3. An "Excusable Delay" shall mean an interruption of the Work beyond the reasonable control of the Contractor and that:
   * + - 1. Could have not been avoided by the Contractor's exercising care, prudence, foresight, and diligence, and
         2. Actually extended the Project completion date.
4. Contractor may be entitled to an extension of the Project completion date if there is an Excusable Delay, but the Contractor shall not be entitled to additional compensation for an Excusable Delay.
5. Excusable Delays are limited to force majeure that satisfies the requirements herein.
6. Contractor is aware that governmental agencies and utilities, including, without limitation, the Corrections Standards Authority, State Fire Marshall, Division of the State Architect of the Department of General Services, Division of Occupational Safety and Health of the Department of Industrial Relations, electrical utility companies, and other agencies may have to approve Contractor-prepared drawings or approve an installation. Contractor shall include in its Master Project Schedule for possible review of its drawings and approval of installations and for reasonable delays and damages that may be caused by such agencies. Contractor is not entitled to make a claim for damages or delays or an Excusable Delay arising from the review of Contractor’s drawings or approval of an installation from the Corrections Standards Authority, State Fire Marshall, Division of the State Architect of the Department of General Services, Division of Occupational Safety and Health of the Department of Industrial Relations, electrical utility companies, and other agencies.
7. Delay and Maintenance Costs. Contractor shall only be entitled to additional compensation for costs associated with maintenance of the elevators in the event that the Project is an Excusable and Compensable Delay pursuant to section 18 (B).
8. Unexcused Delay(s) – Liquidated Damages

Contractor and AOC hereby agree that the exact amount of damages for failure to complete the Work within the time specified is extremely difficult or impossible to determine. If the Work is not completed within the time specified in the Contract Documents, it is understood that the AOC will suffer damage.

It being impractical and unfeasible to determine the amount of actual damage, it is agreed the Contractor shall forfeit to AOC as fixed and liquidated damages, and not as a penalty, the amount of $3,500 for each calendar day of delay in completion beyond the Contract Time.

Contractor and its Surety shall be liable for the amount thereof pursuant to Government Code section 53069.85.

Notwithstanding the preceding, Contractor shall not be required to forfeit liquidated damages for an Excusable Delay or an Excusable and Compensable Delay.

1. **OCCUPANCY:** The Building will be occupied throughout the Project by the Court and the County. Contractor shall take all reasonable steps to minimize interference or disruptions to either Court or County business.
2. **CRIMINAL BACKGROUND SCREENINGS:**
3. Definitions:
4. “Approved Person” means a Contractor or a Subcontractor employee who has passed Court- required screening and background check requirements, if any, that the Court requires with respect to the Project (“Court Security Screening and Approval Process”).
5. “Secured Areas” means (i) all areas within the Building that are not generally accessible to the public, including judges’ chambers, all non-public restrooms, elevators, break rooms, and corridors, and other non-public spaces that are dedicated for use only by judges or Court staff and employees, (ii) in-custody areas of the Building, (iii) public areas of the Building during non-business hours that are subject to security screening during normal business hours, and (iv) any rooms in the Building that connect to Department of Justice criminal databases via California Law Enforcement Telecommunications System (CLETS) or contain any records or information (stored in physical or electronic format) that were obtained via CLETS.

## Security Meeting. Within thirty (30) Days of the Effective Date, Contractor shall meet with representatives of the AOC and the Court to discuss security requirements of the Court relating to the Project, including, without limitation, Court Screening and Approval Process, if any. The Contractor shall ensure its employees and Subcontractor employees comply with any Court-specific security protocols, including the Court Screening and Approval Process, if any. Contractor agrees to cooperate with the Court with respect to the screening and background checks of those employees, and shall obtain at no additional cost to the Court or the AOC all releases, waivers and permissions the Court requires with respect to such screenings and background checks. The Court reserves the right to either narrow or broaden the definition of Secured Areas as defined herein and to implement any security screening and approval process that the Court deems necessary with respect to the Project.

## Access to Secured Areas: In the event that the Court limits access to Secured Areas to Approved Persons, then only Approved Persons may have unescorted access to the Secured Areas of the Building, however, the Court may allow, in its sole discretion Contractor and Subcontractor employees who are not Approved Persons (“Unapproved Persons”) to access Secured Areas based upon any terms and conditions of the Court, including without limitation, requiring Unapproved Persons to be escorted by Approved Persons while in the Secured Areas. In no event shall Contractor rely upon an employee of the Court to escort or monitor Unapproved Persons unless the Court has notified Contractor that a Court employee will escort or monitor Unapproved Persons.

## Notification. Contractor must notify all Subcontractors that employees of the Subcontractors must comply with the Court Security Screening and Approval Process.

## Court Badges. If, as part of the Court Security Screening and Approval Process, the Court issues identification badges for Approved Persons, Approved Persons must wear their identification badges in a readily-visible manner whenever they are in a Secured Area. The Contractor will have a procedure in place to ensure that all issued badges are returned to the Court upon termination of an employee or upon completion of the Project.

## Restrictions on Access to the Building. The Court has the ultimate decision as to whether a specific Contractor or Subcontractor employee may have access to the Building, and to limit such access upon the terms and conditions of the Court. The Court shall have the right at any time to refuse Building access to any Contractor or Subcontractor employee if the Court determines, in its sole discretion, that such person poses a risk to the Court or any person, system, or asset associated with the Court. .

## Costs. If the Court requires any background checks, the Court will pay for the actual cost of the background check (e.g. LiveScan), however, the Contractor will be responsible for employee time, fingerprinting fees, local administrative or processing fees, or other costs. Costs associated with escorting an Unapproved Person shall be included within the Contract Amount and Contractor will not receive any additional compensation or reimbursement from the AOC for any costs related to escorting Unapproved Persons.

1. **SECURITY PROTOCOLS:**

Contractor personnel will comply with all AOC- and Court-required security protocols in the performance of Work. Such protocols shall include the then-current AOC Tool Control Policy. The version of the AOC Tool Control Policy in effect as of the Effective Date is attached as Exhibit J.

1. **PROGRESS PAYMENTS:**  On a monthly basis, Contractor shall submit to the AOC an application for payment based upon the actual value for materials delivered or services performed under the Contract up to the last day of the previous month (“**Application for Payment**”). The Project Manager will review the Application for Payment and approve the Application for Payment if the Application for Payment is valid and correct. Within 45 days after the Project Manager’s approval of the Application for Payment, Contractor will be paid a sum equal to ninety percent of the amount invoiced in the Application for Payment (as verified, as applicable, by the Project Manager, Architect, and Inspector and certified by Contractor) The AOC may deduct from any payment an amount necessary to protect the AOC from loss because of: (1) any sums expended by the AOC in performing any of Contractor’s obligations under the Contract which Contractor has failed to perform or has performed inadequately; (2) defective work not remedied; (3) stop notices as required by California law (i.e. Civil Code sections 3181 et. seq.); (4) reasonable doubt that the Project can be completed for the unpaid balance of the Total Contract price or by the scheduled completion date; (5) unsatisfactory prosecution of the work for the Project by Contractor; (6) unauthorized deviations from the Contract; (7) failure of the Contractor to maintain or submit on a timely basis proper and sufficient documentation as required by the Contract or by AOC during the prosecution of the work for the Project; (8) erroneous or false estimates by the Contractor of the value of the work performed; (9) any sums representing expenses, losses, or damages, as determined by the AOC, incurred by the AOC for which Contractor is liable under the Contract; and (10) any other sums which the AOC is entitled to recover from Contractor under the terms of the Contract or pursuant to state law, including section 1727 of the California Labor Code. The failure by the AOC to deduct any of these sums from a progress payment shall not constitute a waiver of the AOC’s right to such sums. The AOC will retain 10 percent from all amounts owing as retention.
2. **MANNER OF PAYMENT:** All payments by the AOC required by this Contract shall be payable by State of California warrants or any other warrant from any account utilized by the AOC.

1. **FAILURE TO ADOPT STATE BUDGET:** An event of default shall not occur if the

AOC is unable to make any payment due hereunder because of the State of California’s failure to timely approve and adopt a State budget. If the AOC fails to make any payment(s) as a result of the State of California’s failure to timely approve and adopt a State budget, the AOC shall promptly pay any previously due and unpaid upon approval and adoption of the State budget.

1. **COMPLETION OF PROJECT:** Contractor shall notify the Project Manager in writing when the Project is complete. The AOC will accept completion of the Project and record the Notice of Completion when the entire Project had been completed to the satisfaction of the AOC. The AOC, at its sole option, may accept completion of the Project and have the Notice of Completion recorded when the Project has been completed to the satisfaction of the AOC, except for minor corrective items (“**Punch List Items**”), as distinguished from incomplete items.
2. **FINAL PAYMENT:**

The following conditions must be fulfilled prior to final payment:

1. The AOC must have accepted the Project as complete in accordance with section 24 of this Exhibit;
2. A duly completed and executed waiver and release upon final payment compliant with Civil Code section 3262 from the Contractor and each subcontractor and supplier;
3. Contractor shall have delivered to the AOC all applicable written guarantees and warranties, including those of its subcontractors, if applicable;
4. The Contractor shall have delivered to the AOC all applicable manuals; and
5. The Contractor shall have completed final clean-up of the Site.

After 35 days have elapsed following the recordation of the Notice of Completion for the Project, the AOC will commence processing the final payment, and provide the final payment to Contractor as expeditiously as possible. The final payment shall be the amount of retention, less the following: (i) any amounts reasonably disputed by the AOC; (ii) 150 percent of the AOC’s estimate of any amount necessary to complete any Punch List Items which are still not complete; (iii) any amounts attributable to stop notices which the AOC is required to withhold under California law (i.e. Civil Code sections 3181 et. seq.).

1. **NO LIENS:** Contractor agrees that Contractor, and any person, firm, or corporation furnishing any materials or labor for any work covered by the Contract, has no rights to lien any portion of the Site or any improvement or appurtenance thereon. Contractor specifically acknowledges, in accordance with Civil Code section 3109, that the Project and the Site are not subject to mechanics liens. In the event that any liens are recorded by Contractor or any person, firm, or corporation furnishing any materials or labor for any work covered by the Contract, Contractor agrees to take whatever action is necessary to remove the lien against the Project or the Site, as applicable.
2. **LICENSES:** Contractor shall secure and maintain in force, at Contractor’s sole cost and expense, all licenses required by law, in connection with the furnishing of materials, supplies, or services herein listed, including without limitation, a C-11 contractor’s license issued by the State Contractors License Board of the State of California.
3. **PERMITS:** Contractor will obtain all necessary permits applicable to the Project and all fees will be paid directly by AOC.
4. **INDEPENDENT CONTRACTOR STATUS:** While engaged in carrying out the work for the Project, the Contractor is an independent contractor, and not an officer, employee, agent, partner, or joint venture of the AOC. Contractor shall be solely responsible for its own Workers' Compensation insurance, taxes, and other similar charges or obligations. Contractor shall be liable for its own actions, including its negligence or gross negligence, and shall be liable for the acts, omissions, or errors of its agents or employees.
5. **ANTI‑DISCRIMINATION:** Contractor agrees to comply with all applicable Federal and California laws relating to discrimination against employees because of race, color, ancestry, national origin, or religious creed including, but not limited to the California Fair Employment Practice Act beginning with Government Code section 12900 and Labor Code section 1735. In addition, Contractor agrees to require like compliance by all its subcontractor(s).
6. **DISABLED VETERAN BUSINESS ENTERPRISES:** To the extent required by law,

Contractor shall comply with all Disabled Veteran Business Enterprise (DVBE) requirements including any participation goals or good faith efforts, as the case may be, as required by Military and Veterans Code section 999 et seq. with respect to any services, materials or supplies provided under this Contract. Contractor agrees to provide the AOC with any requested relevant supporting documents and to maintain such documents for a period of three (3) years after final payment under this Contract. DVBE resources can be found at: http://www.pd.dgs.ca.gov/dvbe/default.htm, or by calling the Office of Small Business and DVBE Services at (916) 375-4940.

1. **PAYMENT BOND AND PERFORMANCE BOND:** 
   1. Contractor shall not commence Work on the Project until it has provided to the AOC, in form acceptable to the AOC, the following surety bonds issued by a California admitted surety insurer:

Performance Bond: A bond in an amount at least equal to one hundred percent (100%) of the Project contract amount as security for faithful performance of this Contract; and

Payment Bond: A bond in an amount at least equal to one hundred percent (100%) of the Project contract amount for payment of persons performing labor and/or furnishing materials in connection with this Contract.

* 1. The costs for these bonds are included in the Contract Amount and Contractor shall not be entitled to any additional compensation with respect to any costs associated with these bonds.

1. **CONTRACTOR’S INSURANCE:**

* 1. General Requirements:

1. The Contractor shall, prior to commencement of any work on the Project, provide the AOC certificates of insurance, on forms acceptable to the AOC, as evidence that the required insurance, with specifications set forth in this section, is in full force and effect.
2. All insurance policies required under this section shall be in force until the end of the term of this Contract or acceptance of the Project, whichever comes later. The completed operations insurance required under section B shall extend for a period of five (5) years past the acceptance of the Project or termination of the Contract, whichever is later. If the required insurance expires during the term of the Contract, the Contractor shall immediately renew or replace the required insurance and provide a new current certificate of insurance to the AOC. Renewal insurance certificates must be tendered to the AOC at least 10 days following the expiration of the previous insurance certificate.
3. The insurance required by sections B.1, B.2 and B.3 as well as any excess liability or umbrella liability insurance that the Contractor maintains in compliance with the terms of section B shall include the State of California; the Judicial Council of California; the Administrative Office of the Courts; County of Los Angeles; and the Superior Court of California, County of Los Angeles,and their respective officers, consultants, representatives, agents and employees as additional insureds, but only with respect to liability arising out of the work performed by the Contractor under this Contract.
4. The Contractor, and any insurer providing insurance required under the terms of section B shall waive any right of recovery it may have against the State of California; the Judicial Council of California; the Administrative Office of the Courts; the County of Los Angeles; and the Superior Court of California, County of Los Angeles,and their respective officers, consultants, representatives, agents and employees loss or damage to the work, or for any liability arising out of any work performed by the Contractor under this Contract.
5. The insurance policies required under section B shall contain a provision that coverage will not be materially changed or cancelled without ninety (60) days prior written notice to the AOC.
6. The Contractor shall be responsible for and may not recover from the AOC any deductible or self-insured retention that is connected to the insurance required under section B.
7. In the event the Contractor fails to keep in effect at all times the specified insurance coverage, the AOC may, in addition to any other remedies it may have, declare the contract to be in breach and withhold all progress payments and retentions until the breach is cured, or terminate this Contract upon the occurrence of such event, subject to the provisions of this Contract.
8. Any insurance required under section B shall be endorsed to be primary and non-contributing with any insurance or self-insurance maintained by the State of California; the Judicial Council of California; the Administrative Office of the Courts; the County of Los Angeles; and the Superior Court of California, County of Los Angeles.
9. The AOC reserves the right to request certified copies of any of the insurance policies required under section B.
10. Specific Insurance Requirements. Prior to the commencement of any work on the Project, Contractor shall furnish to the AOC evidence of insurance as follows:
11. Commercial Liability Insurance (and if required Excess Liability or Umbrella Liability insurance) written on an occurrence form covering the Contractor and the AOC with limits of liability of not less than $5,000,000 per occurrence and a $5,000,000 annual aggregate, applicable solely to the location at which the Services are being performed . The policy shall include coverage for liabilities arising out of premises, operations, independent contractors, products and completed operations, personal and advertising injury, and liability assumed under an insured contract. The policy shall not include exclusion for property damage resulting from explosion, collapse or underground hazard, or inadvertent construction defects. The products and completed operation liability coverage shall extent for a period of not less than five (5) years past the acceptance of the Project, or termination of the Contract, whichever is later. This insurance shall apply separately to each insured against whom a claim is made or lawsuit is brought subject to the insurance policy limit of liability.
12. Commercial Automobile Liability: Automobile liability insurance with limits of not less than $1,000,000 per accident. Such insurance shall cover liability arising out of a motor vehicle, including owned, hired, and non-owned motor

vehicles, assigned to or used in connection with the work to be performed under this Contract.

1. Workers' Compensation: Statutory workers' compensation insurance for all of the Contractor’s employees who will be engaged in the performance of any work under this Contract including special coverage extensions where applicable and employer’s liability with limits not less than $1,000,000 for each accident, $1,000,000 as the aggregate disease policy limit, $1,000,000 as the disease limit for each employee.
2. Builder’s Risk or Installation Insurance: Builders Risk or Installation Insurance covering direct physical loss or damage to the elevator equipment, materials, Contractor’s property, and any portion of the Building damaged as a result of the elevator equipment being staged, installed, or tested until final acceptance of the entire Project. The policy shall also cover all temporary structures, cribbing, and scaffolding used during the course of installation, and will include coverage for debris removal, pollution cleanup resulting from hydraulics fluids and lubricants, expediting expense and extra expenses in an amount of not less that the Contract.
3. **WARRANTY and MAINTENANCE:** In addition to any warranties provided by a manufacturer of any material or good supplied in furtherance of the Project, Contractor guarantees and warrants all labor and material used in the performance of this Contract for a period of one year from the date of the AOC’s recordation of a Notice of Completion for the Project, and at the AOC’s sole option, Contractor shall either repair or replace any and all of that work that may be defective in workmanship and/or materials, without expense whatsoever to the AOC, together with any other work, that may be displaced in so doing. In the event of failure of Contractor to commence and pursue with diligence said replacements or repairs within 10 days after being notified in writing, Contractor hereby acknowledges and agrees that the AOC is authorized to proceed to have the work replaced or repaired and made good at expense of Contractor who hereby agrees to reimburse the AOC for any costs incurred by the AOC with respect to repairing or replacing the work.

In addition, pursuant to section 3.09 of the HKA Vertical Transportation Modernization Specifications (Exhibit H), at no additional cost to the AOC, Contractor shall provide complete maintenance of the elevators during the warranty period following completion of the Project.

1. **CONFIDENTIALITY:** The Contractor shall maintain the confidentiality of all information, documents, programs, procedures, and all other items that Contractor encounters while performing the work for the Project except to the extent allowed by law. This requirement shall be ongoing and shall survive the expiration or termination of this Contract and specifically

includes all student, parent, and disciplinary information.

1. **COMPLIANCE WITH LAWS:** Contractor shall provide all notices and comply with all laws, ordinance, rules and regulations bearing on conduct of the work for the Project. If Contractor observes that any of the work required by this Contract is at variance with any laws, ordinance, rules or regulations, Contractor must notify the AOC, in writing, and, at the sole option of the AOC, any necessary changes to the scope of the Project shall be made and this Contract shall be appropriately amended in writing, or this Contract shall be terminated effective upon Contractor’s receipt of a written termination notice from the AOC. If Contractor performs any work that is in violation of any laws, ordinances, rules or regulations, without first notifying the AOC of the violation, Contractor shall bear all costs arising therefrom.
2. **DISPUTES:** In the event of a dispute between the parties as to performance of the work for the Project, the interpretation of this Contract, or payment or nonpayment for work performed or not performed, the parties will attempt to resolve the dispute through mediation. Pending resolution of the dispute, Contractor agrees it will neither rescind the Contract nor stop the progress of the work for the Project.
3. **CERTIFIED PAYROLL RECORDS:** Contractor and its subcontractor(s) must keep accurate certified payroll records of employees and make them available to the AOC immediately upon request.
4. **LABOR AND MATERIALS**
5. Provision of Labor and Materials: Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work. Materials, articles and equipment furnished by the Contractor for incorporation into the Work shall be new unless otherwise specified in the Contract Documents.
6. Hours of Labor: Workers are limited and restricted to 8 hours during any one calendar day, and 40 hours during any one calendar week except that pursuant to Labor Code Section 1815, any work performed in excess of 8 hours per day and 40 hours during any one week, shall be permitted upon compensation for all hours worked in excess of 8 hours per day at not less than 1-1/2 times the basic rate of pay. The Contractor shall pay the AOC One Hundred Dollars ($100) as a penalty for each worker for each calendar day worked in violation of the above limitations and restrictions.
7. Prevailing Wage:
8. The Contractor shall comply with the provisions of the Labor Code including sections 1770 to 1780, inclusive and specifically Section 1775. In accordance with Section 1775, the Contractor shall forfeit to the AOC the statutory amount, (currently not to exceed two hundred dollars ($200) for each calendar day, or portion thereof), for each worker paid less than the prevailing rates, as determined by the AOC, for the work or craft in which that worker is employed for any work done under Contract by Contractor or by any Subcontractor.

* + - * 1. The amount of the penalty shall not be less than forty dollars ($40) for each calendar day, or portion thereof, unless the failure of Contractor or Subcontractor was a good faith mistake and, if so, the error was promptly and voluntarily corrected when brought to the attention of Contractor.
        2. The amount of the penalty shall not be less than eighty dollars ($80) for each calendar day or portion thereof, if Contractor or Subcontractor has been assessed penalties within the previous three (3) years for failing to meet its prevailing wage obligations on a separate contract, unless those penalties were subsequently withdrawn or overturned.
        3. The amount of the penalty may not be less than one hundred twenty dollars ($120) for each calendar day, or portion thereof, if the Labor Commissioner determines the Contractor, or

Subcontractor willfully violated Labor Code section 1775.

* + - * 1. The difference between such prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the prevailing wage rate, shall be paid to each worker by Contractor or Subcontractor.

1. Pursuant to Labor Code, Section 1770, the Director of the Department of Industrial Relations has ascertained the general prevailing rate of per diem wages and a general prevailing rate for legal holiday and overtime work for each craft required for execution of the Contract. The Contractor shall obtain from the AOC a copy of such prevailing wage rates, which the Contractor shall post at the Project site.
2. Wage rates set forth are the minimum that may be paid by the Contractor. Nothing herein shall be construed as preventing the Contractor from paying more than the minimum rates set. No extra compensation whatsoever will be allowed by the AOC due to the inability of the Contractor to hire labor at minimum rates, nor for necessity for payment by the Contractor of subsistence, travel time, overtime, or other added compensations, all of which possibilities are elements to be considered and ascertained to the Contractor's own satisfaction in preparing its Proposal.
3. If it becomes necessary to employ crafts other than those listed in the General Prevailing Wage Rate booklet, the Contractor shall contact the Division of Labor Statistics and Research as listed inside the booklet or access on the Internet at http:/www.dir.ca.gov/DLSR/statistics\_research.html. The rates thus determined shall be applicable as minimum from the time of initial employment.
4. The Contractor and each Subcontractor shall keep an accurate payroll record showing the names, addresses, social security numbers, work classifications, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by the Contractor and/or Subcontractor in connection with the Work. Payroll records shall be certified and shall be on forms provided by the Division of Labor Standards Enforcement, or shall contain the same information as those forms. Upon written request by the AOC, the Contractor's and Subcontractor's certified payroll records shall be furnished within 10 days. The Contractor's and Subcontractor's certified payroll records shall be available for inspection at the principal office of the Contractor.
5. Travel and Subsistence Payments: The Contractor shall pay travel and subsistence payments to persons required to execute the Work as such travel and subsistence payments are defined in applicable collective bargaining agreements filed with the Department of Industrial Relations, pursuant to Labor Code, Sections 1773.1 and 1773.9.
6. Apprentices: Properly registered apprentices shall be employed in the execution of the Work. Every apprentice shall be paid the standard wage paid to apprentices under the regulations of the craft or trade at which the apprentice is employed, and shall be employed only at the work of the craft or trade to which the apprentice is registered. The Contractor and each Subcontractor shall comply with the requirements of Labor Code, Section 1777.5, and any related regulations regarding the employment of registered apprentices.
7. Skilled Labor Force Availability – 5-Year Requirement: All contractors and subcontractors with a contract value on the Project of two hundred and fifty thousand dollars ($250,000) or more, must employ workers in an apprenticeable craft and have agreements with registered apprenticeship programs, approved by the California Apprenticeship Council, that have graduated apprentices in that craft in each of the immediately preceding five (5) years. This graduation requirement does not apply to programs providing apprenticeship training for any craft that has not been deemed by the Department of Industrial Relations to be an apprenticeable craft for the five years prior.

39. **INTENTIONALLY OMITTED**

1. **GOVERNING LAW:** This Contract shall be governed by California law without regard to any conflict of law rules that would direct the application of the laws of any other jurisdiction. The Contractor irrevocably consents to personal jurisdiction in California.
2. **BINDING CONTRACT:** This Contract shall be binding upon the parties hereto and upon their successors and assigns, and shall inure to the benefit of said parties and their successors and assigns.
3. **AOC WAIVER:** AOC's waiver of any term, condition, covenant or waiver of a breach of any term, condition or covenant shall not constitute the waiver of any other term, condition or covenant or the waiver of a breach of any other term, condition or covenant.
4. **INVALID TERM:** If any provision of this Contract is declared or determined by any court of competent jurisdiction to be illegal, invalid or unenforceable, the legality, validity or

enforceability of the remaining parts, terms and provisions shall not be affected thereby, and said illegal, unenforceable or invalid part, term or provision will be deemed not to be a part of this Contract.

1. **ENTIRE CONTRACT:** This Contract sets forth the entire Contract between the parties hereto and fully supersedes any and all prior agreements, understanding, written or oral, between the parties.
2. **NOTICE:** All notices to the AOC under this Contract shall be given as follows:

#### All notices and correspondence to the AOC must reference the Site, including the address of the Site.

To the AOC: Office of Court Construction and Management

Judicial Council of California

Administrative Office of the Courts

Attn: Project Manager

2255 North Ontario, Suite 200

Burbank, CA 91504

With a copy to : Administrative Office of the Courts

455 Golden Gate Avenue

San Francisco, CA 94102-3688

Attention: Business Services Manager

Phone: 415-865-4090

Fax: 415-865-4326

All notices to the Contractor under this Contract shall be given as follows:

To the Contractor: TBD

END OF EXHIBIT B

State of California Standard Agreement

Contract No. ***[Agreement Number]*** with ***[Contractor name]***,

**EXHIBIT C**

**Contractor to Insert Originals of:**

**PAYMENT AND PERFORMANCE BONDS**

**CERTIFICATE OF INSURANCE**

*The Remainder of This Page Left Blank Intentionally*

State of California Standard Agreement

Contract No. ***[Agreement Number]*** with ***[Contractor name]***,

**EXHIBIT D**

**PAYMENT PROVISIONS**

1. Contract Amount

The total amount owed by the State to Contractor under this Agreement for performing any and all Services authorized hereunder shall not in total exceed the Contract Amount as amended or the Total Amount Encumbered to Date.

1. Compensation

Contractor agrees to perform all Work for the Project, including performing all services and providing all material for the Project, for the Contract Amount.

3. Payment

Payment for the Work shall be made in accordance with sections 22, 23, 24 and 26 of Exhibit B of this Agreement.

4**.** Taxes

The State is exempt from federal excise taxes and no payment will be made for any taxes levied on the Contractor's or any Subcontractor's employees' wages. The State will pay for any applicable State of California or local sales or use taxes on the services rendered or equipment or parts supplied pursuant to this Agreement.

5. Method of Payment

* 1. The Contractor shall submit an invoice monthly for the Work performed during the foregoing month. After receipt of invoice, AOC will either approve the invoice for payment or give the Contractor specific written reasons why part or all of the payment is being withheld and what remedial actions the Contractor must take to receive the withheld amount.
  2. The State will make payment in arrears within sixty (60) days after receipt of the Contractor's properly completed invoice. Invoices shall clearly indicate
     1. The Contract number,
     2. A unique invoice number;
     3. The Contractor's name and address;
     4. Taxpayer identification number
     5. Description of the completed Work, including services rendered, Task(s) performed, and/or Deliverable(s) made, as appropriate; and the name(s) of employee(s) evaluated.
     6. Preferred remittance address, if different from the mailing address.

C. Contractor shall submit one (1) original invoice to:

Judicial Council of California

Administrative Office of the Courts

Office of Court Construction and Management  
Project Manager (Name and address designated on Work Order)

D. The AOC may withhold full or partial payment to the Contractor in any instance in which the Contractor has failed or refused to satisfy any material obligation provided for under this Agreement.

6. Disallowance

If the Contractor claims or receives payment from the AOC that is later disallowed by the AOC, the Contractor shall promptly refund the disallowed amount to the AOC upon the AOC’s request. At its option, the AOC may offset the amount disallowed from any payment due or that may become due to the Contractor under this Agreement or any other agreement.

7. Payment Does Not Imply Acceptance of Work

The granting of any payment by the AOC, or the receipt thereof by the Contractor, shall in no way lessen the liability of the Contractor to correct unsatisfactory work in connection with this Agreement.

8. Release of Claims

The acceptance by the Contractor of its final payment due under this Agreement shall be and shall operate as a release to the State and the AOC of all claims and all liability to the Contractor for everything done or furnished in connection with this Agreement (including every act and neglect of the AOC), with the exception of any claims that are expressly identified by the Contractor as outstanding as of the date of Contractor’s submission of Contractor’s final invoice. Contractor’s failure to identify any such claims shall operate as a release of all claims.

END OF EXHIBIT d

State of California Standard Agreement

Contract No. ***[Agreement Number]*** with ***[Contractor name]***,

EXHIBIT E

STATEMENT OF WORK

1. PROJECT DESCRIPTION

The Project includes the modernization of the 21 elevators in the Building in accordance with the plans and specifications provided by HKA Elevator Consulting, Attachment 2 and the ABM Report, Attachment 3.

The project elevators have various uses including public, in custody, secure judge and freight. Because of the high demand and usage in this building, only one elevator of each use will be allowed offline at a time.

The Project includes all ongoing maintenance and repairs of all elevators for the duration of the Project and during the warranty period.

2. STATEMENT OF WORK

Contractor shall provide shop drawings, new equipment and controls as required for modernization and state certification of the (21) (1 hydraulic, 20 traction) elevators at the Clara Shortridge Foltz Superior Courthouse.

Contractor shall adhere to all of AOC requirements provided herein. All proposers must hold a type C-11 license from the State of California.

All services shall be provided in accordance with the quality standards, specifications, policies, and procedures provided by AOC, which may change from time to time at AOC’s discretion. The listed specifications represent the minimum standards.

**3. Scope of Work: On Site**

Per HKA Elevator Consulting, Inc., Vertical Transportation Modernization Specification, Attachment 2, and Asbestos Reinspection Report, Attachment 3.

**Labor and Materials**

Per HKA Elevator Consulting, Inc., Vertical Transportation Modernization Specification, Attachment 2, and Asbestos Reinspection Report, Attachment 3.

**Equipment**

Per HKA Elevator Consulting, Inc., Vertical Transportation Modernization Specification, Attachment 2, and Asbestos Reinspection Report, Attachment 3.

**Additions and Alternations**

No additions, alterations, or modifications will be made to the Elevators by Selected Contractor, unless first approved in writing by AOC.

**Access by Judicial Branch Personnel**

The Judicial Council of California, the Administrative Office of the Courts (AOC), the Superior Court of California, and the Appellate Courts, including their respective officers, agents, servants, and employees shall have the right to enter and inspect the Parking Facilities at any time.

**Personnel**

During the term of the Agreement, all personnel employed to modernization, service and repair the (21) elevators at Clara Shortridge Foltz Courthouse shall be solely the employees of the selected Contractor and shall have no contractual relationship with AOC.

To the extent permitted by applicable law, it is expected that the selected Contractor shall conduct a pre-employment check of each person intended to be employed at this facility, which check shall include the following:

* + - Job qualifications, including prior experience and recommendations (if any)
    - Honesty
    - Integrity
    - Driving record, including a valid California State Driver’s License
    - Previous criminal activity
    - AOC Live Scan background check.
    - Wear the AOC approved Contractors (Green) badge at all times while on duty.

Contractor shall remove from Contractor’s employees who are unsatisfactory to AOC.

Contractor shall maintain personnel on site during hours of operation. Such personnel shall not be removed from the Project or transfer to other locations operated by Contractor without prior notice to and approval from AOC. Personnel shall not be transferred until a replacement is approved by AOC and oriented to the Project by Contractor.

END OF EXHIBIT E

State of California Standard Agreement

Contract No. ***[Agreement Number]*** with ***[Contractor name]***,

EXHIBIT F  
  
 SUBCONTRACTORS TO CONTRACTOR

For each Subcontractor, list the Subcontractor’s legal name, location of Subcontractor’s main office, and Contract work to be performed.

*To be submitted upon conclusion of bid phase with submittal*

END OF EXHIBIT F

State of California Standard Agreement

Contract No. ***[Agreement Number]*** with ***[Contractor name]***,

EXHIBIT G  
  
CONTRACTOR’S KEY PERSONNEL

|  |  |
| --- | --- |
| **Name** | **Title** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

Contractor’s Key Personnel

The Contractor shall use adequate numbers of qualified individuals with suitable training, education, experience and skill to perform the Services. The Contractor has been selected to perform the Services herein, in part, because of the skills and expertise of the key individuals and/or firms (collectively “Contractor’s Key Personnel”) that are listed in Exhibit F. Substitution or replacement of the individuals and/or firms identified in Exhibit F is not allowed except with written approval of the AOC

If the designated lead or key person fails to perform to the satisfaction of the AOC upon written notice, the Contractor will have fifteen (15) calendar days to remove that person from the Project and replace that person with one acceptable to the AOC. All lead or key personnel for any Subcontractor must also be designated by any Subcontractor and are subject to all conditions stated in this section.

The Contractor shall be responsible for all costs associated with replacing any of Contractor’s Key Personnel, including the additional costs to familiarize replacement personnel with the Services. If the Contractor does not furnish replacement personnel acceptable to the AOC, the AOC may terminate this Agreement for cause.

Prior to the authorization of any Phase of the Agreement, the parties will agree upon any Key Personnel applicable to that Phase. Said personnel shall be documented in Exhibit F.

END OF EXHIBIT G

EXHIBIT H Plans and Specifications provided by HKA Elevator Consulting



Elevator Consulting, Inc.

23211 South Pointe Drive

Laguna Hills, CA 92653

**VERTICAL TRANSPORTATION**

MODERNIZATION SPECIFICATIONS

**Clara Shortridge Foltz**

**Superior Court**

**210 West Temple Street**

**Los Angeles, CA**

**March 20, 2012**

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SECTION 14221

MODERNIZATION OF ELEVATORS

1. GENERAL:
   1. DEFINITIONS:
      1. Main Lobby:  Ground Level unless otherwise indicated.
      2. Fire Recall Level:  As directed by local fire authority.
      3. Alternate Fire Recall Level: As directed by local fire authority.
      4. Non-Proprietary: It is recognized that each manufacturers system contains components that are proprietary to the development of their systems. The Owner may wish to have the elevator system maintained by another technically qualified service provider and by submitting a bid for this project, the manufacturer shall guarantee that for a minimum of 20 years they will provide the following:
         1. Diagnostic, adjusting and monitoring tools for all components including documents, manuals, wiring diagrams and spare parts as listed in Part 3 of this specification shall be provided in each machine room, controller room or machine space as a permanent part of the installation and become the property of the Owner. Devices shall be permanent at no additional cost to Owner, shall not self destruct, require charging or exchange. Remote monitoring devices are excluded from this requirement, however if such devices are removed all wiring shall be neatly terminated, tied within a junction box and properly marked as to its content.
         2. Manufacturer shall guarantee to support the equipment for this project with regard to notification to Owner of system corrective updates, provide and install such updates at no cost to Owner.
         3. Provide contact information for their separate parts warehouse so that the Owner or designated service provider can order parts on a 24 hour basis and delivered with 48 hours.
         4. Provide a list of parts of each component manufactured and stored at the warehouse and the retail cost of each at close out of the project and estimated escalation cost. The cost of these parts is what would be charged to Owner or other service provider.
         5. Provide contact information for technical support so that the Owner or designated service provider can obtain technical support on a 24 hour basis to provide assistance in trouble shooting problems. Indicate hourly rate charged to Owner or designated service provider for such service.
   2. DESCRIPTION:
      1. Modernization work included in this section:
         1. Modernize existing traction and hydraulic elevators complete as shown and specified.
            1. Modernize traction elevators no. 1 through 19 and 21 with new controls, encoders, motor drive units, signals and fixtures, door operating equipment, entrance equipment, hoistway wiring, interior finishes, and recondition other equipment as specified.
            2. Modernize hydraulic passenger elevators no. 20 with new controls, signals and fixtures, interior finishes, door operating equipment, hoistway wiring, hydraulic cylinder, and recondition other equipment as specified.
      2. Examination of site:
         1. Contractor shall visit the building, examine the existing elevators, contract documents, determine condition of all retained components, space conditions, power supply, standby/emergency power supply, and mainline disconnect.
         2. Prior to commencement of work, Contractor shall conduct a ride analysis using an accelerometer on each elevator to document the current ride conditions.
         3. Make all surveys necessary to meet the requirements of this specification and compatibility to products provided.
         4. If any discrepancies are noted, or if work not specified is required, Contractor shall bring such matters to the Owner’s Representative's attention within seven days prior to bidding. If no discrepancies are noted or exceptions taken, it is assumed that all conditions are satisfactory. Failure to do so, Contractor shall be liable for any costs related to structural, mechanical or electrical requirements to accommodate specified equipment.
         5. Contractor shall assume responsibility and provide full maintenance of the elevator equipment upon award of this contract and shall continue such throughout the modernization.
      3. Related work included in this section:
         1. Contractor shall visit the building, examine the existing conditions, power supply, standby/emergency power supply, mainline disconnect, and include all work needed to ensure a fully code compliant modernization. Contractor or his sub-contractors shall perform this work, which may include but is not limited to the following:
            1. Mechanical:

Hoistways: Patching of plaster in hoistways, machine rooms and controller areas, all properly framed, enclosed and adequately ventilated.

* + - * 1. Electrical work:

Power feeders: Modification to existing or installation and connection of three phase power through fused mainline switches or circuit breakers and extended to terminals of controllers. Provide continuous ground where needed.

Light circuits: Single-phase circuit through disconnects and extended to controller for car lights and fan.

Communication circuit: Telephone circuit terminated at junction box of each controller.

Illumination: Lights, light switches and convenience outlets in pits, machine rooms, controller areas and overhead sheave spaces.

Conduit: Installation of electrical conduit and pull boxes with pull wire between hoistways and remote locations of each indicator and control panel.

Common circuit: Dedicated pollution free single phase 20-ampere circuit through fused mainline switch or circuit breaker and extended to common group controller for each bank of two elevators or more.

Standby power: Automatic transfer of standby/emergency power and lighting supply through normal feeders with means of absorbing regenerative power. Two No. 14 wires from “Form C” contacts on transfer switch to designated controller to elevator machine rooms to signal transfer of power.

Sensing devices: Installation and or modification to smoke detectors, heat detectors or products of combustion sensors in elevator lobbies, machine rooms, hoistways and alternate fire recall floor with circuits terminated at junction box in machine rooms for emergency fire service operation.

Life safety circuits: Circuits terminated at junction box at each controller for life safety speakers and fireman's phone communication. Note phone jacks are not permitted in corridor call button boxes.

* + - * 1. General:

Access: Legal access consisting of self-closing and locking access doors, ladders, gratings and steps to machine rooms, controller areas, pits and hoistways.

Supports: Providing supports as shown to carry structural reaction, impact and uplift loads imposed by elevator equipment.

Patching: Patching of floors, walls and surfaces constituting final finishes.

Block-outs: Block-outs, pockets and chases in walls and floors for entrances, signals, fixtures, cables and conduit.

The elevator contractor shall include 3 crane mobilizations for lifting material to the roof of the building.

* + - 1. Barricades: Full height lockable barricade for protection of open hoistways during construction.
      2. Temporary screens: Contractor shall provide between elevators before construction starts and remove at completion of project.
      3. Painting: Field painting of prime-finish items constituting final finishes.
      4. Finish floor: Installation of finish floor in passenger elevator cars.
      5. Life safety or public address speakers: Including wire from machine room to car, accommodations and installation in car canopy.
      6. Card readers: Including wire from machine room j-box to car top j-box, interfacing with elevator controls and installation in elevator car, connection in machine room and testing of system. Note card reader panel is not allowed inside the machine room.
      7. Closed circuit T.V: Including wire from machine room j-box to elevator car top j-box, connection in machine room and testing.
      8. Key cylinders: Furnished by Owner’s Representative, installed under this section.
  1. QUALITY ASSURANCE:
     + 1. Manufacturer's qualifications: The design, engineering and manufacture of major elevator components such as machines, motors, motor drive units, controllers, door operators, safeties, governors, selectors, etc. shall be from manufactures that have been in the business for the last ten (10) years. Equipment proposed must have a history of successful operation under similar conditions for the last two (2) years.
     1. Sub-contractors:
        1. Contractor shall be solely responsible for any and all of the work done by his sub-contractor or other employees and all orders or instructions from the Owner's Representative shall be through him to them. It shall be Contractor's duty to see that all of his sub-contractors commence their work properly at the proper time, and carry it on with due diligence so that they do not delay or injure either work or materials; and that all damage caused by them or their workmen is properly made good by them or by himself at his cost. Contractor shall submit names of his sub-contractors for approval by the Owner's Representative.
        2. The use of sub-contractors is to be limited to work outside the scope of elevator construction work; example, patching, painting, coring of walls, marble work and refinishing.
     2. Elevator cabs and entrances:
        1. Manufactured or rehabilitated by one of the following or accepted equal:
           1. City Lift
           2. Travertine
           3. Winter & Bain
           4. Sterling Corporation
     3. Quality of work and workmanship:
        1. When completed, the installation shall be modern in all respects.
        2. All components specified as new shall be provided as new. All components specified to be retained may be provided as new at Contractor’s option subject to approval of Owner's Representative. All retained components are to be examined, cleaned, adjusted, repaired and/or replaced with new parts. Contractor must be willing to accept all retained equipment on full maintenance without prorating.
        3. All work performed shall be conducted in a workmanship type manner.
     4. Requirements of regulatory agencies:
        1. Codes: In accordance with the latest applicable edition requirements of the following and as specified:
           1. A.D.A.: Americans with Disabilities Act.
           2. ASME: American Society of Mechanical Engineers - A17.1; Safety Code for Elevators and Escalators.
           3. CBC: Title 24; California Building Codes.
           4. CCR: Titles 8; California Code of Regulations.
           5. NEC: National Electric Code. NFPA-72.
           6. IBC: International Building Code.
           7. All local codes, which govern.
     5. Permits:
        1. Arrange and pay for inspections by governing authorities and obtain operating permits.
     6. Safety policies:
        1. Installation and maintenance contractors are required to follow their company’s safety practices and policies as well as the practices and policies of the building management.
     7. Security:
        1. All personnel shall be required to pass security screening, convicted felons will not be allowed on site.
        2. Due to the nature of the courthouse a tool control program is in place and all tools shall be inventoried everyday.
  2. SUBMITTALS:
     1. Shop drawings:
        1. Submit three copies of the following prior to ordering any materials:
           1. Layouts: Plan of machinery spaces showing new equipment and existing equipment; include impact and static loads imposed on building structure, if such should change, and clearances around equipment.
           2. Details: Submit details of cabs, fixtures and entrances.
           3. Data: Indicate on layouts or separate data sheets; machine spaces heat release, power requirements, conduit runs outside of hoistways and machine rooms, car and counterweight roller guides, control systems, motor drive units and door operators.
     2. Samples:
        1. Provide samples of materials and finishes exposed to public view and additional, if specifically requested, 6 inch x 6 inch panels, 12 inch lengths or full size if smaller, as applicable.
     3. Operating instructions:
        1. Submit manufacturer's literature describing system operations and special operations as specified.
     4. Safety policy:
        1. Submit a copy of the company approved safety policy.
     5. All submittals shall be processed pursuant to section 16 of Exhibit B of the Agreement.
  3. INTENTIONALLY OMITTED :
  4. PRODUCT DELIVERY, STORAGE AND HANDLING:
     1. Delivery and storage:
        1. Protect equipment during transportation, erection and construction. Store under cover to prevent damage due to weather conditions. Replace damaged materials. Storage space on site will be available.
     2. Handling:
        1. Owner’s Representative has the first right of refusal to retain any elevator components that are to be removed and modernized with new equipment. All removed components shall remain property of the Owner’s Representative, until the Owner’s Representative notifies Contractor, in writing, of removed components that Owner’s Representative would like to retain. All remaining elevator equipment not to be retained by the Owner’s Representative or reused by Contractor shall be promptly removed from the building by Contractor at no cost to the Owner’s Representative, and become the property of Contractor.
        2. Contractor shall make every attempt to recycle removed elevator equipment. Contractor shall correct any damage to building surfaces and surrounding areas if damaged during removal of this equipment at no cost to the Owner’s Representative.
  5. SCHEDULING AND SEQUENCING:
     1. Schedule:
        1. Submit construction schedule with bid indicating time required from award of contract to;
           1. Equipment fabrication and delivery to site.
           2. Installation testing and final acceptance of all elevators.
        2. Contractor shall be responsible for scheduling related work with other sub-contractors to avoid omissions and delays in job progress. Elevators shall not be removed from service, without prior approval, until all equipment has been manufactured and delivered to the project site for all elevators.
     2. Sequence:
        1. Work under this contract shall be done in the following sequence. Any change to this must be approved by the Owner's Representative. Complete all work for each sequence before proceeding with the next.
           1. Sequence (1) One: Elevator No. 1, 4, 16, & 14
           2. Sequence (2) Two: Elevator No. 2, 5, 17, & 15
           3. Sequence (3) Three: Elevator No. 3, 6, 11, & 18
           4. Sequence (4) Four: Elevator No. 7, 8, 12, & 19
           5. Sequence (5) Five: Elevator No. 9, 10, 13 & 21
           6. Sequence (6) Six: Elevator No. 20
     3. Continuity of service:
        1. The most efficient means of elevator service shall be provided at all times.
        2. All elevators shall operate as an efficient group except for those in the sequence that are out of service.
        3. Provide a temporary overlay on Nos. 1-10 to interface between new group dispatching system, newly completed modernized elevators and elevators not yet modernized.
        4. This system shall be installed in operation and tested by the Owner's Representative after completion of Sequence (1) One and prior to beginning work on Sequence (2) Two. This system shall be tested at the end of each sequence.
        5. Temporary shutdown of any elevator to complete circuit connection to group operation must be done outside of normal working hours of the building and approved by Owner's Representative.
     4. Building operations:
        1. The building will remain in operation during the execution of this contract. Cooperate with building management in scheduling work in such a way as not to cause interruption of or interference with the building operations.
     5. Electrical shutdowns:
        1. Temporary electrical shutdowns will not be allowed except for brief periods to be scheduled for outside 6:00 AM to 7:00 PM and that at least 48 hours in advance and approved by Owner's Representative.
  6. WARRANTY:
     1. Guarantee and Warranty:
        1. Provide special project warranty, signed by Contractor, Installer and Manufacturer, agreeing to replace/repair/restore defective materials and workmanship of all work performed which may develop within one (1) year from final date of completion and acceptance of the **entire installation**. "Defective" is hereby defined to include, but not by way of limitation, operation or control system failures, performances below required minimums, excessive wear, unusual deterioration or aging of materials or finishes, unsafe conditions, the need for excessive maintenance, abnormal noise or vibration and similar unusual, unexpected and unsatisfactory conditions.

1. PRODUCTS:
   1. DESCRIPTION OF SYSTEMS:
      1. Elevator No. 1-10:

|  |  |
| --- | --- |
| * + - 1. Type: | Gearless Traction |
| * + - 1. Capacity: | 4000 Pounds |
| * + - 1. Speed: | 600 FPM |
| * + - 1. Stops: | 21 |
| * + - 1. Openings: | 21 In Line |
| * + - 1. Travel: | Existing |
| * + - 1. Control: | PWM |
| * + - 1. Operation: | New MCE Microprocessor Group Automatic |
| * + - 1. Machine Location: | Overhead |
| * + - 1. Special Operations: |  |
| * + - * 1. Independent Service | |
| * + - * 1. Fire Emergency Service | |
| * + - * 1. Standby Emergency Power | |
| * + - * 1. Anti-Nuisance Service | |
| * + - * 1. Basement Service | |
| * + - * 1. Tenant Security | |
| * + - * 1. Seismic Operation         2. Upward Ascending Motion Protection | |
| * + - 1. Door Operation: | Provide new |
| * + - 1. Door Protection: | Provide new |
| * + - 1. Guide Rails: | Retain |
| * + - 1. Guide Shoes: | Provide new |
| * + - 1. Hoist Ropes: | Provide new |
| * + - 1. Governor Ropes: | Provide new |
| * + - 1. Buffers: | Retain |
| * + - 1. Counterweights: | Retain |
| * + - 1. Safeties: | Retain |
| * + - 1. Governors: | Provide new |
| * + - 1. Car Frame & Platforms: | Retain |
| * + - 1. Compensation: | Retain |
| * + - 1. Machines: | Retain |
| * + - 1. Controllers: | Provide new |
| * + - 1. Motor Drive Units: | Provide new |
| * + - 1. Car Operating Panels: | Provide new |
| * + - 1. Car Position Indicators: | Provide new |
| * + - 1. Service Cabinet: | Provide new |
| * + - 1. Communications: | Provide new |
| * + - 1. Hall Button Stations: | Provide new |
| * + - 1. Hall Lanterns: | Provide new |
| * + - 1. Guard Control Station: | Provide new |
| * + - 1. Life Safety Control Panel: | Provide new |
| * + - 1. Machine Room Monitor Panel: | Provide new |
| * + - 1. Handicap Requirements: | Provide new |
| * + - 1. Wiring: | Provide new |
| * + - 1. Car Enclosure: | Refurbish |
| * + - 1. Hoistway Entrances: | Retain |
| * + - 1. Miscellaneous Items: |  |
| * + - * 1. Key Operated Hoistway Access | |
| * + - * 1. Seismic Requirements | |
| * + - * 1. Card Reader and CCTV Provisions | |
| * + - * 1. Clean hoistways, machine rooms, pits, and equipment; paint machine room floor, car top, pit floor, and all existing metal work | |
|  | |

* + 1. Elevator No. 11- 13 Detention:

|  |  |
| --- | --- |
| * + - 1. Type: | Gearless |
| * + - 1. Capacity: | 4000 Pounds |
| * + - 1. Speed: | 600 FPM |
| * + - 1. Stops: | No. 11-12: 5  No. 13: 14 |
| * + - 1. Openings: | No. 11-12 5 In Line  No. 13: 14 In Line |
| * + - 1. Travel: | Existing |
| * + - 1. Control: | PWM |
| * + - 1. Operation: | New MCE Microprocessor Simplex Selective Collective |
| * + - 1. Machine Location: | Overhead |
| * + - 1. Special Operations: |  |
| * + - * 1. Independent Service | |
| * + - * 1. Fire Emergency Service | |
| * + - * 1. Standby Emergency Power | |
| * + - * 1. Anti-Nuisance Service | |
| * + - * 1. Tenant Security | |
| * + - * 1. Upward Ascending Motion Protection | |
| * + - * 1. Seismic Operation         2. Detention Operation | |
| * + - 1. Door Operation: | Provide new |
| * + - 1. Door Protection: | Provide new |
| * + - 1. Guide Rails: | Retain |
| * + - 1. Guide Shoes: | Provide new |
| * + - 1. Hoist Ropes: | Provide new |
| * + - 1. Governor Ropes: | Provide new |
| * + - 1. Buffers: | Retain |
| * + - 1. Counterweights: | Retain |
| * + - 1. Safeties: | Retain |
| * + - 1. Governors: | Provide new |
| * + - 1. Car Frame & Platforms: | Retain |
| * + - 1. Compensation: | Retain |
| * + - 1. Machines: | Retain |
| * + - 1. Controllers: | Provide new |
| * + - 1. Motor Drive Units: | Provide new |
| * + - 1. Car Operating Panels: | Provide new |
| * + - 1. Car Position Indicators: | Provide new |
| * + - 1. Hall Position Indicators: | Provide new in existing location @ 1 |
| * + - 1. Service Cabinet: | Provide new |
| * + - 1. Communications: | Provide new |
| * + - 1. Hall Button Stations: | Provide new |
| * + - 1. Hall Lanterns: | Provide new |
| * + - 1. Guard Control Station: | Provide new |
| * + - 1. Life Safety Control Panel: | Provide new |
| * + - 1. Machine Room Monitor Panel: | Provide new |
| * + - 1. Handicap Requirements: | Provide new |
| * + - 1. Wiring: | Provide new |
| * + - 1. Car Enclosure: | Refurbish |
| * + - 1. Hoistway Entrances: | Retain |
| * + - 1. Miscellaneous Items: |  |
| * + - * 1. Key Operated Hoistway Access | |
| * + - * 1. Seismic Requirements | |
| * + - * 1. Card Reader & CCTV Provisions | |
| * + - * 1. Clean hoistways, machine rooms, pits, and equipment; paint machine room floor, car top, pit floor, and all existing metal work | |
|  | |

* + 1. Elevator No. 14-15 Service:

|  |  |
| --- | --- |
| * + - 1. Type: | Gearless |
| * + - 1. Capacity: | 5000 Pounds |
| * + - 1. Speed: | 500 FPM |
| * + - 1. Stops: | 21 |
| * + - 1. Openings: | 21 In Line |
| * + - 1. Travel: | Existing |
| * + - 1. Control: | PWM |
| * + - 1. Operation: | New MCE Microprocessor Group Automatic |
| * + - 1. Machine Location: | Overhead |
| * + - 1. Special Operations: |  |
| * + - * 1. Independent Service |
| * + - * 1. Fire Emergency Service |
| * + - * 1. Standby Emergency Power |
| * + - * 1. Anti-Nuisance Service |
| * + - * 1. Tenant Security |
| * + - * 1. Upward Ascending Motion Protection |
| * + - * 1. Seismic Operation |
| * + - * 1. Swing Service |
| * + - 1. Door Operation: | Provide new |
| * + - 1. Door Protection: | Provide new |
| * + - 1. Guide Rails: | Retain |
| * + - 1. Guide Shoes: | Provide new |
| * + - 1. Hoist Ropes: | Provide new |
| * + - 1. Governor Ropes: | Provide new |
| * + - 1. Buffers: | Retain |
| * + - 1. Counterweights: | Retain |
| * + - 1. Safeties: | Retain |
| * + - 1. Governors: | Provide new |
| * + - 1. Car Frame & Platforms: | Retain |
| * + - 1. Compensation: | Retain |
| * + - 1. Machines: | Retain |
| * + - 1. Controllers: | Provide new |
| * + - 1. Motor Drive Units: | Provide new |
| * + - 1. Car Operating Panels: | Provide new |
| * + - 1. Car Position Indicators: | Provide new |
| * + - 1. Hall Position Indicators: | None |
| * + - 1. Service Cabinet: | Provide new |
| * + - 1. Communications: | Provide new |
| * + - 1. Hall Button Stations: | Provide new |
| * + - 1. Hall Lanterns: | Provide new |
| * + - 1. Guard Control Station: | Provide new |
| * + - 1. Life Safety Control Panel: | Provide new |
| * + - 1. Machine Room Monitor Panel: | Provide new |
| * + - 1. Handicap Requirements: | Provide new |
| * + - 1. Wiring: | Provide new |
| * + - 1. Car Enclosure: | Refurbish |
| * + - 1. Hoistway Entrances: | Retain |
| * + - 1. Miscellaneous Items: |  |
| * + - * 1. Key Operated Hoistway Access |
| * + - * 1. Seismic Requirements |
| * + - * 1. Card Reader & CCTV Provisions |
| * + - * 1. Clean hoistways, machine rooms, pits, and equipment; paint machine room floor, car top, pit floor, and all existing metal work |
|  |

* + 1. Elevator No. 16-19 Judge:

|  |  |
| --- | --- |
| * + - 1. Type: | Gearless |
| * + - 1. Capacity: | 3000 Pounds |
| * + - 1. Speed: | 500 FPM |
| * + - 1. Stops: | No. 16, 18, 19: 15  No. 17: 14 |
| * + - 1. Openings: | No. 16, 18, 19: 15 In Line  No. 17: 14 In Line |
| * + - 1. Travel: | Existing |
| * + - 1. Control: | PWM |
| * + - 1. Operation: | New MCE Microprocessor Simplex Selective Collective |
| * + - 1. Machine Location: | Overhead |
| * + - 1. Special Operations: |  |
| * + - * 1. Independent Service |
| * + - * 1. Fire Emergency Service |
| * + - * 1. Standby Emergency Power |
| * + - * 1. Anti-Nuisance Service |
| * + - * 1. Tenant Security |
| * + - * 1. Upward Ascending Motion Protection |
| * + - * 1. Seismic Operation |
| * + - 1. Door Operation: | Provide new |
| * + - 1. Door Protection: | Provide new |
| * + - 1. Guide Rails: | Retain |
| * + - 1. Guide Shoes: | Provide new |
| * + - 1. Hoist Ropes: | Provide new |
| * + - 1. Governor Ropes: | Provide new |
| * + - 1. Buffers: | Retain |
| * + - 1. Counterweights: | Retain |
| * + - 1. Safeties: | Retain |
| * + - 1. Governors: | Provide new |
| * + - 1. Car Frame & Platforms: | Retain |
| * + - 1. Compensation: | Retain |
| * + - 1. Machines: | Retain |
| * + - 1. Controllers: | Provide new |
| * + - 1. Motor Drive Units: | Provide new |
| * + - 1. Car Operating Panels: | Provide new |
| * + - 1. Car Position Indicators: | Provide new |
| * + - 1. Hall Position Indicators: | None |
| * + - 1. Service Cabinet: | Provide new |
| * + - 1. Communications: | Provide new |
| * + - 1. Hall Button Stations: | Provide new |
| * + - 1. Hall Lanterns: | Provide new |
| * + - 1. Guard Control Station: | Provide new |
| * + - 1. Life Safety Control Panel: | Provide new |
| * + - 1. Machine Room Monitor Panel: | Provide new |
| * + - 1. Handicap Requirements: | Provide new |
| * + - 1. Wiring: | Provide new |
| * + - 1. Car Enclosure: | Refurbish |
| * + - 1. Hoistway Entrances: | Retain |
| * + - 1. Miscellaneous Items: |  |
| * + - * 1. Key Operated Hoistway Access |
| * + - * 1. Seismic Requirements |
| * + - * 1. Card Reader & CCTV Provisions |
| * + - * 1. Clean hoistways, machine rooms, pits, and equipment; paint machine room floor, car top, pit floor, and all existing metal work |
|  |

* + 1. Elevator No. 20 Kitchen:

|  |  |
| --- | --- |
| * + - 1. Type: | Hydraulic Direct Plunger |
| * + - 1. Capacity: | 4000 Pounds |
| * + - 1. Speed: | 50 FPM |
| * + - 1. Stops: | 3 |
| * + - 1. Openings: | In Line |
| * + - 1. Travel: | Existing |
| * + - 1. Control: | Soft Start AC |
| * + - 1. Operation: | New MCE Microprocessor Simplex Selective Collective |
| * + - 1. Machine Location: | Adjacent |
| * + - 1. Special Operations: |  |
| * + - * 1. Independent Service | |
| * + - * 1. Fire Emergency Service | |
| * + - * 1. Tenant Security | |
| * + - * 1. Battery Lowering | |
| * + - 1. Door Operation: | Provide new |
| * + - 1. Door Protection: | Provide new |
| * + - 1. Guide Rails: | Retain |
| * + - 1. Guide Shoes: | Provide new |
| * + - 1. Plunger Unit: | Provide new |
| * + - 1. Cylinder Unit: | Provide new |
| * + - 1. Buffers: | Retain |
| * + - 1. Car Frame & Platforms: | Retain |
| * + - 1. Power Unit: | Provide new |
| * + - 1. Controllers: | Provide new |
| * + - 1. Piping: | Provide new |
| * + - 1. Car Operating Panels: | Provide new |
| * + - 1. Car Position Indicators: | Provide new |
| * + - 1. Hall Position Indicators: | None |
| * + - 1. Service Cabinet: | Provide new |
| * + - 1. Communications: | Provide new |
| * + - 1. Hall Button Stations: | Provide new |
| * + - 1. Hall Lanterns: | Provide new |
| * + - 1. Guard Control Station: | Provide new |
| * + - 1. Life Safety Control Panel: | Provide new |
| * + - 1. Handicap Requirements: | Provide new |
| * + - 1. Wiring: | Provide new |
| * + - 1. Car Enclosure: | Refurbish |
| * + - 1. Hoistway Entrances: | Retain |
| * + - 1. Miscellaneous Items: |  |
| * + - * 1. Key Operated Hoistway Access | |
| * + - * 1. Seismic Requirements | |
| * + - * 1. Card Reader Provisions | |
| * + - * 1. Clean hoistways, machine rooms, pits, and equipment; paint machine room floor, car top, pit floor, and all existing metal work | |

* + 1. Elevator No. 21 Shuttle:

|  |  |
| --- | --- |
| * + - 1. Type: | Geared |
| * + - 1. Capacity: | 3500 Pounds |
| * + - 1. Speed: | 100 FPM |
| * + - 1. Stops: | 3 |
| * + - 1. Openings: | 3 In Line |
| * + - 1. Travel: | Existing |
| * + - 1. Control: | PWM |
| * + - 1. Operation: | New MCE Microprocessor Simplex Collective |
| * + - 1. Machine Location: | Adjacent Basement Application |
| * + - 1. Special Operations: |  |
| * + - * 1. Independent Service |
| * + - * 1. Fire Emergency Service |
| * + - * 1. Standby Emergency Power |
| * + - * 1. Anti-Nuisance Service |
| * + - * 1. Tenant Security |
| * + - * 1. Upward Ascending Motion Protection |
| * + - * 1. Seismic Operation |
| * + - 1. Door Operation: | Provide new |
| * + - 1. Door Protection: | Provide new |
| * + - 1. Guide Rails: | Retain |
| * + - 1. Guide Shoes: | Provide new |
| * + - 1. Hoist Ropes: | Provide new |
| * + - 1. Governor Ropes: | Provide new |
| * + - 1. Buffers: | Retain |
| * + - 1. Counterweights: | Retain |
| * + - 1. Safeties: | Retain |
| * + - 1. Governors: | Provide new |
| * + - 1. Car Frame & Platforms: | Retain |
| * + - 1. Compensation: | Retain |
| * + - 1. Machines: | Retain |
| * + - 1. Controllers: | Provide new |
| * + - 1. Motor Drive Units: | Provide new |
| * + - 1. Car Operating Panels: | Provide new |
| * + - 1. Car Position Indicators: | Provide new |
| * + - 1. Hall Position Indicators: | None |
| * + - 1. Service Cabinet: | Provide new |
| * + - 1. Communications: | Provide new |
| * + - 1. Hall Button Stations: | Provide new |
| * + - 1. Hall Lanterns: | Provide new |
| * + - 1. Guard Control Station: | Provide new |
| * + - 1. Life Safety Control Panel: | Provide new |
| * + - 1. Machine Room Monitor Panel: | Provide new |
| * + - 1. Handicap Requirements: | Provide new |
| * + - 1. Wiring: | Provide new |
| * + - 1. Car Enclosure: | Refurbish |
| * + - 1. Hoistway Entrances: | Retain |
| * + - 1. Miscellaneous Items: |  |
| * + - * 1. Key Operated Hoistway Access |
| * + - * 1. Seismic Requirements |
| * + - * 1. Card Reader & CCTV Provisions |
| * + - * 1. Clean hoistways, machine rooms, pits, and equipment; paint machine room floor, car top, pit floor, and all existing metal work |

* 1. MATERIALS:
     1. Aluminum: Alloy and temper best suited for anodizing finish specified.
     2. Nickel silver: CDA Alloy 796, leaded nickel silver.
     3. Plywood: PS-1, A-D exterior Grade Douglas Fir, fire retardant treated.
     4. Sheet steel: ASTM A366, uncoated, pickled, free from defects.
     5. Sound deadener: Fire retardant; spray, roller or adhesive applied; 3/16 inch thick.
     6. Stainless steel: ASTM A167; type 302 or 304.
  2. FINISHES:
     1. Exposed-to-view surfaces:
        1. Provide as follows unless otherwise specified.
           1. Aluminum: Clear anodized finish.
           2. Sheet steel:

Shop prime: Degrease clean of foreign substances and apply one coat of corrosion inhibiting primer compatible with finish paint selected. Hoistway items visible to public shall be painted one additional coat of black paint.

Finish paint: Three coats baked enamel; sand each coat smooth; color as selected.

* + - * 1. Stainless steel:

Plain: Satin, directional polish, No. 4 finish unless otherwise specified.

Patterned: Rigidized Metal's No. 5 WL, Ardmore Textured Metals No. 5-SM or equal.

* + - * 1. Touch-up:

Prime surfaces: Use same paint as factory for field touch-up.

Finish painted surfaces: Refinish whole panel with shop prime and finish paint as specified above.

* + 1. Non-exposed-to-view surfaces:
       1. Degrease and shop paint manufacturer's standard corrosion inhibiting primer.
  1. AUTOMATIC OPERATION:
     1. General operation of individual elevators:
        1. Provide a MCE iBox or approved equal non-proprietary diagnostic microprocessor-controlled dispatching and car control system, based on real time calculations, designed to monitor all types of traffic and sufficiently flexible so that it can be modified to accommodate changes in traffic patterns.
        2. Serial link communications: Provide a distributed processing network consisting of localized processors located in machine rooms, car stations, hall stations and top of car to allow system to make fast decisions based on data shared by the processor involved in the different operations of the elevators. For group dispatch operations, all elevators in the group shall be capable of acting as a group common dispatcher as the need arises.
        3. Fault diagnostic system: Provide Owner’s Representative with all hardware such as on-board LED. diagnostics, hand held device or laptop computer, as standard with manufacturer, and supporting software documentation. Diagnostic system shall be capable of determining faults most difficult to find, as well as be capable of performing all code required testing.
        4. The system shall be flexible, irrespective of the number of elevators in normal service.
     2. Destination Information Dispatch Group Operation Nos. 1-10:
        1. Provide variable algorithm based control system with remote keypad/intuitive touch screen at entrance(s) to building location as selected by Owners Representative, upon passenger entering floor selection onto keypad/touch screen system shall via integral display instantly indicate elevator ( A-B-C-D, 1-2-3-4, etc ) designated for each passenger upon registering of selected floor destination.
        2. Provide call correction in the event of misuse, abuse or neglect, a single passenger places numerous calls or fails to enter elevator designated, elevator car load weigher’s shall detect weight of passenger and correct automatically. In the event there is a single call place and numerous passengers enter elevator, system shall monitor and allow for making corrections automatically in algorithm based logic.
        3. Early car announcement shall not exceed 10 seconds if implemented.
        4. Upon entering elevator passenger shall note their destination floor is illuminated on floor indicator destination panel, upon arrival at destination floor, floor number on indicator destination panel flashes to confirm their arrival.
        5. Remote keypad/intuitive touch screen shall employ an international wheelchair symbol to activate special features for people with special needs. Upon activation of wheelchair symbol, provide both visual and/or audible responses. Provide that the elevator assigned to persons with special needs will have fewer passengers to allow extra room in elevator cab. Provide extended door open time to allow passenger extra time to enter and exit elevator. Provide audible tones and/or voice communication to indicate elevator assigned, elevator location, status of doors and arrival at destination floor to assist special need passengers throughout their journey.
        6. Dispatching system shall group passengers to elevator(s) by their common input selected destination floor information. Call allocation dispatching system shall minimize the amount of stops performed by elevator.
        7. System shall constantly and continuously monitor passenger demand to implement the most effective dispatching method at any given moment. System shall constantly assess real-time passenger origin via ETD (Estimated Time to Destination) and destination data to dynamically assign passenger(s) to respective elevators.
        8. Dispatching system shall be flexible to changing passenger traffic patterns throughout the day. Make internal diagnosis via variable algorithm and corrections to account for changing traffic patterns during normal day. System maintains flexibility to adjust to “UP PEAK” in mornings, “TWO WAY”, during lunchtime and “DN PEAK” at evenings so passengers benefit from reduced wait times, fewer stops per trip throughout entire day.
           1. UP PEAK, assumes 100% of traffic is traveling up the building form the main entrance floor.
           2. TWO-WAY, assumes 40% traveling up, 40% traveling down and 20% traveling between intermediate floors.
           3. DN PEAK, assumes 100% of traffic is traveling down the building to the main entrance floor.
        9. ETD algorithm shall apply a common approach to both conventional up/down hall calls, and destination calls, allowing both to be used in the same system. Intermediate hall calls shall be calculated with corresponding car calls. Hall call shall be interfered or assigned as a car call to eliminate SDF (System Degradation Factor). As hall call ages it shall receive additional priority to eliminate long wait calls.
        10. Provide concealed (COP) car operating panel.
        11. Provide accessible (COP) car operating panel.
        12. Provide accessibility for fully integrating system into existing or planned security system at Owners Representative direction.
        13. Provide selection of floor selection destination input devices to Owners Representative, but not limited to keypad, intuitive screen, security card swipe, PIN number registration, special keys and hands free radio tag devices.
        14. **SPECIAL NOTE**: It has been found by Siikonen (2000) and Barney (2002) that reduction of elevators, reduction in elevator capacity and speed, based on enhanced performance of destination dispatch type control systems is likely to cause problems with performance at other times, particularly during lunchtime and evening periods. Destination Dispatch shall not be used to reduce the amount of elevators used, all analysis shall be performed using standard UP PEAK conditions. This system will only enhance the UP PEAK condition.
            1. In has been found, in traffic scenarios where grouping is minimal, a system with destination input offers no meaningful improvements over conventional systems.
     3. Group automatic operation; for two or more cars:
        1. Provide an "on-demand" hall call response system that will continuously scan the hall calls and assign the closest elevator in time to respond to that call. The system shall be capable of reassigning the elevator if demand changes the real time calculation.
        2. A car with no car calls registered arriving at a floor where both "up" and "down" hall calls are registered shall respond to the hall call in the direction of travel and illuminate the appropriate lantern. If no car call is registered for that direction, the lantern shall be extinguished, the lantern for the other direction shall light and the car shall respond to the call in that direction. The doors shall not close and reopen.
        3. The system shall be capable of monitoring hall and car calls to monitor coincidental calls. The cars will continuously scan the whole system to determine the closest elevator in time taking into account the coincidental car and hall call.
        4. Other required features:
           1. Should a car be delayed from leaving a floor for any reason, other cars shall respond to the hall calls at that floor and shall be dispatched in a normal manner.
           2. Provide each car with an adjustable load-weighing device, which will immediately dispatch cars and bypass hall calls when car is loaded to predetermined load.
        5. General program adjustments:
           1. After each group of elevators have been placed in regular service and the building substantially occupied, the elevators shall be regularly observed under normal operating conditions and minor adjustments shall be made as found necessary to ensure that the elevators operate at maximum efficiency.
           2. If zones are employed, arrangements shall be made in the control circuits of the elevators for the division between each zone to be raised or lowered if found necessary due to uneven distribution of traffic between the zones and/or staffing requirements.
     4. Simplex selective collective operation:
        1. Arrange for simplex selective collective automatic operation. Operate elevators from a single riser of landing buttons and from operating device in car.
        2. Momentary pressure of one or more car or landing buttons, other than those for landing at which car is standing, starts car, and causes car to stop at first landing for which a car or landing call is registered corresponding to direction in which car is traveling. Stops made in order in which landings are reached, irrespective of sequence in which calls are registered.
        3. Double door operation not permitted. If an up traveling car has a passenger for an intermediate floor and a down call is registered at that floor, with no calls above car, it travels to floor, opens door to let passenger out, then lights down direction arrow in hall lantern and accepts waiting passenger without closing and reopening doors.
  2. SPECIAL OPERATIONS:
     1. Inspection operation:
        1. Provide key-operated hoistway access device and car top operating device. Key switches shall be mounted in existing locations at terminal landings.
     2. Independent service:
        1. Independent service operation shall be provided so that, by means of a switch located in the car service cabinet, the car can be removed from automatic operation and be operated by an attendant. The attendant shall have full control of the starting, stopping and direction of car travel.
        2. The car shall respond to car buttons only. The hall signals for the car on independent service shall not operate.
     3. Anti-nuisance: (TRACTION ELEVATORS ONLY)
        1. Provide "anti-nuisance service" whereby all car calls will be cancelled if the load-weighing device detects that an abnormal number of calls are registered given the number of passengers in the car.
        2. System using false call answering to accomplish this is not acceptable.
     4. Operation under fire or other emergency conditions:
        1. Provide special emergency service to comply with ASME A17.1, CCR Title 8, IBC and local codes having jurisdiction.
        2. Provide Phase 1 recall switch at main floor elevator lobby and fire control life safety room. Interlock recall switches to prevent simultaneous activation.
        3. Key switches at main floor shall be integrated in hall button station with engraved instructions.
     5. Operation under earthquake conditions:
        1. Provide seismic operation in accordance with CCR Title 8 ASME A17.1.
        2. Provide a dual ring and string, continuously monitoring type counterweight displacement device for each counterweight with rings mounted on each corner of frame.
        3. Provide a seismic switch device measuring both horizontal and vertical accelerations for each group of elevators located per manufacturer's recommendations.
     6. Operation under standby/emergency power system:
        1. General: The standby power system is sized to operate one elevator in each group simultaneously. Elevators shall be grouped as follows:
           1. Group 1 = Elevators No. 1-10.
           2. Group 2 = Elevators No. 11.
           3. Group 3 = Elevators No. 12.
           4. Group 4 = Elevators No. 13.
           5. Group 5 = Elevators No. 14-15.
           6. Group 6 = Elevators No. 16.
           7. Group 7 = Elevators No. 17.
           8. Group 8 = Elevators No. 18.
           9. Group 9 = Elevators No. 19.
           10. Group 10 = Elevators No. 21.
        2. When normal power fails and standby power becomes available, a signal will be given to the controllers, all elevators will shut down, and all car lights, etc., will be extinguished.
        3. When emergency power comes onto the line, power for lighting car fan and alarm bell shall be automatically transferred and all cars on automatic operation shall be sequentially returned one at a time from each group, to the main floor.
        4. After all cars are parked at main floor, one car of each group shall resume normal operation.
        5. Provide interlocking illuminated strip switches or keyed rotary switch to permit manual or automatic selection of desired elevator to operate on emergency power.
        6. When normal power fails and emergency power is used, or when normal power is restored, the elevator manufacturer shall provide all circuitry necessary, including time delay or auxiliary relays required to accomplish safe, continuous elevator operation. The cars will start in sequence, not simultaneously; allow 10 seconds between starts.
        7. Fire service and derailment devices shall be operable when system is on emergency power operation.
     7. Tenant security:
        1. Arrange control system to enable and disable car call buttons as follows:
           1. Function, which locks out all cars in a group so that all car and corridor buttons are inoperative, except the main floor.
           2. Function which locks out any selected car button for all elevators in a group serving that floor.
           3. Tenant security operations can be overridden by cars on independent, any special emergency service or by card reader access.
     8. Swing service operation; Elevator no. 14-15:
        1. Provide a key switch with pilot light in guard control station.
        2. Activation of switch removes car from group operation and places it on simplex selective collective operation, controlled by normal car buttons and a separate inconspicuous riser of hall buttons.
        3. Swing service operation shall not effect cars on independent or fire emergency service.
        4. LCD and keyboard function to accomplish the above will be acceptable.
        5. Provide key switch in each inconspicuous riser station to allow operation of the buttons.
  3. DOOR OPERATION:
     1. Passenger type; Horizontal sliding:
        1. Provide door times available as specified under "Design Criteria."
        2. Car and hoistway doors shall open and close simultaneously, quietly and smoothly; door movement shall be cushioned at both limits of travel. Door operation shall not cause cars to move appreciably.
        3. Door hold open times shall be readily and independently adjustable when car stops for a car or hall call. Main floor door hold times shall be adjustable independent of other floors.
     2. Door operator:
        1. Provide new heavy-duty master type operator mounted on car enclosure utilizing minimum 12-guage support angles to isolate from direct mounting of operator on the car top.
        2. Pre-approved closed loop door operators:
           1. ThyssenKrupp HD-04
           2. GAL MOVFR
     3. Door Protection:
        1. Remove existing door protection devices and provide new electronic optical scanning type:
           1. Provide a door protective system which does not rely on physical contact with a person or object to inhibit door movement or initiate door reversal.
           2. Pre-approved optical door sensors:

Adams GateKeeper ICU.

Janus Pana80 Plus.

Otis Lambda.

Tritronics LeadingEdge.

TL Jones Microscan.

* + - * 1. The system shall be able to detect a 2 inch diameter rod introduced at any position within the door movement and between the height of 2 inches and 63 inches above sill level.
        2. Detection of intrusion into the protected area shall cause the doors, if fully open, to be held in the open position and, if closing, to reverse to fully open position.
        3. If doors are prevented from closing for an adjustable period of 15 to 45 seconds or upon activation of fire emergency service, they shall proceed to close at reduced speed and a loud buzzer shall sound. Door closing force shall not exceed 2-1/2 ft.-lb when door re-opening device is not in operation.
        4. For side-opening doors, the detector for the strike jamb side shall be recessed, flush with strike jamb.
    1. Door hold button; Elevator No. 11-15. 20-21:
       1. Provide an illuminated door hold button, operation of which will hold the doors open for a predetermined and adjustable period of 20 to 90 seconds. Sound warning buzzer 5 seconds prior to expiration of time. Normal operation shall be resumed upon:
          1. Expiration of door hold time.
          2. Operation of door close button in car.
          3. Operation of any floor button in car.
  1. SIGNALS AND OPERATING FIXTURES:
     1. General:
        1. Provide signals and fixtures as shown and specified. Location and arrangement of fixtures shall comply with disabled access requirements.
           1. Buttons Nos. 16-19: Provide minimum 1 inch diameter mechanical, white illuminated halo style buttons raised 1/8 inch from surrounding surface with square shoulders and with 5/8" engraved identifications. Operation of car or hall button shall cause button to illuminate. Response of car to car or hall call shall cause corresponding button to extinguish.
           2. Buttons Nos. 1-10, 11-15, 20-21: Provide vandal-resistant stainless steel minimum 1 inch diameter mechanical, buttons, raised 1/8 inch from surrounding surface with square shoulders and integral illumination equal to Adams, EPCO, ERM, or INNOVATION fixtures. Operation of car or hall button shall cause button to illuminate. Response of car to car or hall call shall cause corresponding button to extinguish.
           3. Switches: Toggle type typically or key operated where noted.
           4. Key switches: Some special security key switch tumblers will be provided by the Courts for installation during the manufacturing of the fixtures.
           5. Faceplates: Provide of material and finish as indicated and specified; 1/8 inch minimum thickness with sharp edges relieved. Faceplates shall be sized to cover holes left by removal of existing fixtures where new fixtures are provided and provided with engraved fire sign, per A17.1.
           6. Fastenings: Provide with flush tamper-proof screws of material and finish matching faceplates.
           7. Cabinets: Provide with pulls, concealed hinges and doors mounted flush with hairline joints to adjacent surface.
           8. Arrangement: Arrangement of fixtures shall generally conform to that specified, but components may be rearranged after review of submittal.
           9. Engraving: Of size indicated; color backfill with epoxy paint in contrasting color as selected.
           10. Lamps: Miniature LED type.
           11. Audible chimes: Electronic adjustable audible chimes from 75 to 85 dBA in elevator lobby 3'-0" above floor and 3'-0" away form elevator entrance; bell type gong not acceptable.
           12. Provide floor passing signal of the adjustable electronic audible chime type.
           13. Tactile markings: Provide raised Braille and alpha characters, numerals or symbols to the left of operating buttons and devices used by the public. Indications may be engraved directly on faceplates or separate plates flush mounted with hairline joints and concealed mechanical fasteners. Plates shall be of same size and shape as buttons. Raised characters shall be white on a black background with Braille designation directly below the character.
     2. Car operating panels:
        1. General: Provide buttons numbered to conform to floors served and the following:
           1. Locate top operating button at 48 inches above floor; maximum 54 inches when required.
           2. Locate emergency stop switch and illuminated alarm button in bottom row at 35 inches above floor.
           3. Provide "Door Open", "Door Close", and "Door Hold" buttons located above emergency stop and alarm of same design as car button.
           4. Engrave main panel with capacity, number of passengers and elevator number in 1/4-inch letters. Engrave auxiliary panel with NO SMOKING in 1/2 inch letters. All other signage required by local codes shall be engraved as directed by Owner's representative.
           5. Provide fire emergency panel above floor buttons containing phase II fire key switch, call cancel button stop switch, door open, door close buttons and audible/visual signals.
           6. Make provisions for card readers and CCTV.
        2. Elevator No. 1-10, 20-21: Provide two new panels per car; integrate cabinets, buttons and engraving into hinged single piece faceplate mounted to front return panel side wall adjacent to strike jamb.
        3. Elevator No. 11-19: Provide one new panel per car; integrate cabinets, buttons and engraving into hinged single piece faceplate mounted in existing location.
     3. Car position indicators:
        1. Provide car position indicators with indications corresponding to floor designations with matching direction arrows.
           1. Provide new digital alpha numeric type segmented LED or fluorescent readout indicator with minimum two-inch high indications mounted integral with each car operating panel.
     4. Hall position indicators:
        1. Provide with indications corresponding to floor designations with matching direction arrows.
           1. Elevator No. 1-13: Provide new digital alphanumeric type segmented LED or fluorescent readout indicator with minimum two-inch high indications. Combine with hall lantern.
     5. Service cabinet:
        1. Provide new cabinet, door with a lock and concealed hinge as an integral part of car operating panel mounted with flush hairline joints. Cabinet door shall be provided with a flush glazed window of required size to hold elevator-operating permit. Service cabinet shall contain the following:
           1. Independent service switch.
           2. Two-speed ventilation switch (Hi-Off-Low).
           3. Light switch.
           4. Inspection switch, key operated.
           5. Duplex GFI convenience outlet.
           6. Buzzers as required.
           7. Constant pressure test switch for emergency car lighting.
           8. Card reader over-ride switch-key operated.
     6. Communication equipment:
        1. Provide a new complete communication system in compliance with ADA regulations consisting of a combination speaker/microphone, amplifier, automatic dialer with 4 number rollover capability and matching car station push button with telephone symbol to activate system and acknowledgment lights. Mount in car operating panel behind a pattern of holes, wire to machine room and program automatic dialer as directed by Owner’s Representative.
        2. Building emergency personnel communication system (for travels over 60’): Provide a two-way voice communication system in accordance with ASME A17.1. The two-way voice communication system outside of the car shall be located within the guard station control panel.
     7. Hall button fixtures:
        1. Each fixture shall contain buttons, which light to indicate hall call registration and extinguish when call is answered. Provide intermediate fixtures with two buttons and terminal fixtures with one. Engrave fire-exiting instructions on faceplates. Provide minimum of two fasteners at top and bottom of faceplate.
           1. Elevator No. 1-10: Provide elevator group with four risers of hall button stations.
           2. Elevator No. 11-21: Provide each elevator group of elevators with one riser of hall stations.
           3. Elevator No. 14-15: Provide an inconspicuous riser mounted in hoistway entrance jamb having key switch or card reader operated up and down illuminated buttons with faceplates matching finish of entrance frames.
     8. Hall lanterns:
        1. Provide new faceplates and provide new single chime for up and double chime for down direction. Lantern illuminates white for up and red for down. As car approaches floor, lantern shall illuminate and chime approximately 4 seconds prior to doors opening to indicate next direction of travel. Chime shall be at least 85 dBA in Corridor.
     9. Hall lanterns No. 1-15, 20-21:
        1. Provide dual vandal resistant hall lanterns.
     10. Remote control stations:
         1. Provide new indicator and control panels with wiring from elevator hoistways to and between remote stations as specified.
         2. Engrave operating instructions for controls, indicators, elevator numbers and floors served by each elevator or group of elevators.
         3. Provide all conduit runs as needed.
         4. Manufacturer's Elevator Monitoring System utilizing LCD device and keyboard is preferred providing all features specified can be incorporated.
     11. Provide new indicator and control panels as follows:
         1. Marshall's Security control station at floor “S” Nos. 1-21: Provide with a stainless steel faceplate and rough in electrical box to be wall or desk type computer monitoring system with a 17” flat screen monitor with keyboard and printer mounted in the console. Locate as directed. Include the following devices for each elevator or group of elevators as applicable.
            1. Digital LED or fluorescent readouts with direction arrows indicating location and direction of travel of each elevator.
            2. Switch and pilot light to call and shut down each car at lobby with doors closed. Pilot light to illuminate when car is in service.
            3. Independent service switch and pilot light for each car to call car to lobby and park with doors open. Pilot light to illuminate when car is on independent service.
            4. Tenant security switches as specified under special operations.
            5. Swing service switches as specified under special operations.
            6. Remote detention car pushbutton touch screen panel for Nos. 11-13 to provide full control of detention elevators.
         2. Life safety control station in main lobby; Elevator No. 1-21: Locate in existing location. Size panel to suit space available; design as approved. Include the following for each elevator or group of elevators as applicable:
            1. Digital LED or fluorescent readouts with direction arrows indicating location and direction of travel of each elevator.
            2. Three-position fire key switch with visual indication.
            3. A pilot light marked STANDBY OR EMERGENCY POWER in 1/4 inch letters, and illuminating manual selection switches for each car, indicating which car is operating on standby (emergency) power. The sign shall light as soon as main power fails and each jewel shall remain illuminated as long as its car is operating on emergency power. When normal power is resumed, all lights shall be extinguished automatically.
            4. A compartment containing properly identified keys to operate all fire service switches. Provide tags with legible instructions on each key. Lock on compartment shall be subject to house master key or fire department key as approved.
     12. Disabled access requirements:
         1. Provide to meet local codes having jurisdiction including handrail and button configuration.
            1. Car operating panels: Provide raised Braille and alpha characters, numerals or symbols to the left of operating buttons and devices used by the public. Indications may be engraved directly on faceplates or separate plates flush mounted with hairline joints and concealed mechanical fasteners. Plates shall be of same size and shape as buttons. Raised characters shall be white on a black background with Braille designations directly below the character. Provide “star” at main egress landing.
            2. Entrances: Provide raised Braille and alpha characters, numerals or symbols similar to those for car stations of size required by governing authority. Locate on each entrance jamb at 60 inches above floor indicating floor designation. Material and finish of plates shall match hall button station faceplates. Provide with contrasting background and mounting means similar to those on car panels. Braille designation shall be to the left of the raised character. Provide “star” at main egress landing.
            3. Provide voice floor announcement in each elevator with adjustable sound levels.
  2. WIRING:
     1. General:
        1. Provide all necessary wiring and 20% spares between cars and controllers and to all remote control stations; minimum of four. Furnish shielded wires in cables for all communications card readers and speakers. Include six additional pairs of shielded spares and two RG-6 coaxial cables for each car.
        2. Interface Junction Box:
           1. Provide a common interface junction box in each machine room with the following terminal blocks for each elevator.

Telephone

Standby Power transfer switch contacts

Fire alarm relay outputs

Card reader inputs per floor

Fire phone jacks

Fire paging speakers

CCTV

* + 1. Traveling Cables:
       1. Use minimum number of “ET” rated traveling cables with flame retarding and moisture resisting covers. Include shielded wires and spares as noted above. Cord thoroughly and protect cables from rubbing against hoistways or car items. Provide with steel cable core and properly anchored to relieve strain on individual conductors.
    2. Work light and GFI convenience outlet:
       1. Provide on top of car with wire lamp guard.
    3. Stop switch:
       1. Provide in each pit and on top of car.
    4. Alarm gong:
       1. Six-inch size, 110 volt.
       2. Provide on top of each car and one per group inside of hoistway at main landing to be actuated by corresponding alarm button or emergency stop switch.
    5. Auxiliary disconnect switches:
       1. Provide as required in remote controller rooms or at remote equipment not in view of mainline switches; include all wiring and conduit.
    6. Coaxial circuit:
       1. Provide for closed circuit television camera in elevators. Run from elevator car to machine room junction box.
  1. CAR ENCLOSURES:
     1. General:
        1. Fabricate finish work smooth and free from warps, buckles, squeaks and rattles; joints lightproof. Car shall be sound isolated from car frame. No visible fastenings except as indicated.
        2. All elevators shall be weighed before work begins to determine actual weight of car enclosures. Contractor shall keep a log of all equipment and weight removed and added to the suspension system. Contractor is responsible for complying with CCR Title 8 Section 3000(h) (Major Alterations).
     2. Emergency lighting; All elevators:
        1. Provide an emergency car lighting unit mounted on top of car, battery driven and self-rechargeable. Upon outage of normal power the unit shall, within 5 seconds, light two lamps as part of normal car lighting orseparate lights mounted above drop ceiling. The unit shall have sufficient capacity to keep the lights in continuous operation for four hours and also the alarm bell for one hour. Provide a readily accessible means for testing the unit in service cabinet. Light fixtures mounted in car front returns or operating panels are not acceptable.
     3. Elevator No. 1-6: Retain existing shell enclosure and rehabilitate as follows:

|  |  |
| --- | --- |
| * + - 1. Front returns: | Clad |
| * + - 1. Car operating panels: | Provide new, match existing finish |
| * + - 1. Wall panels: | Provide new clad with 5 WL architectural metal and stainless steel revels |
| * + - 1. Transom | Clad, match existing finish |
| * + - 1. Hand rails: | Provide new ADA Compliant |
| * + - 1. Ceiling and lighting: | Provide new island type clad with No. 4 stainless steel with 6 LED down lights |
| * + - 1. Ventilation | Provide new Two-speed squirrel cage exhaust blower (Morrison AA or equal) with sound isolation mounting on canopy. |
| * + - 1. Emergency exit: | Retain Provide code compliant micro-switch |
| * + - 1. Car Doors | Provide new, match existing finish |
| * + - 1. Finish flooring | Provide new vinyl tile |
| * + - 1. Protective pads | Provide new |

* + 1. Elevator No. 7, 9 & 11: Retain existing shell enclosure and rehabilitate as follows:

|  |  |
| --- | --- |
| * + - 1. Front returns: | Clad 5 WL |
| * + - 1. Car operating panels: | Provide new, |
| * + - 1. Wall panels: | Provide new clad with 5 WL architectural metal and stainless steel revels |
| * + - 1. Transom | Clad 5 WL |
| * + - 1. Hand rails: | Provide new ADA Compliant |
| * + - 1. Lighting: | Provide new flush mounted detention lighting |
| * + - 1. Ventilation | Provide new Two-speed squirrel cage exhaust blower (Morrison AA or equal) with sound isolation mounting on canopy. |
| * + - 1. Emergency exit: | Retain Provide code compliant micro-switch |
| * + - 1. Car Doors | Provide new 5WL |
| * + - 1. Finish flooring | Provide new aluminum diamond decking |

* + 1. Elevator No. 8 & 10: Retain existing shell enclosure and rehabilitate as follows:

|  |  |
| --- | --- |
| * + - 1. Front returns: | Clad No. 4 |
| * + - 1. Car operating panels: | Provide new, match existing finish |
| * + - 1. Wall panels: | Provide new clad with 5 WL architectural metal and stainless steel revels |
| * + - 1. Transom | Clad No. 4 |
| * + - 1. Hand rails: | Provide new ADA Compliant |
| * + - 1. Ceiling and lighting: | Provide new island type clad with No. 4 stainless steel with 6 LED down lights |
| * + - 1. Ventilation | Provide new Two-speed squirrel cage exhaust blower (Morrison AA or equal) with sound isolation mounting on canopy. |
| * + - 1. Emergency exit: | Retain Provide code compliant micro-switch |
| * + - 1. Car Doors | Provide new No. 4 |
| * + - 1. Finish flooring | Provide new vinyl tile as selected |
| * + - 1. Protective pads | Provide new |

* 1. HOISTWAY ENTRANCES:
     1. General:
        1. Retain existing or provide new as specified.
        2. Fabricate finish work smooth with flush surfaces and free from warps and buckles.
        3. New entrance assemblies shall bear 1-1/2 hour U.L. rating.
        4. Provide entrances of size and type as scheduled.
     2. Hangers and Tracks:
        1. Provide all new door tracks and hanger assemblies. Sheave type with two-point suspension. Steel sheaves with flanged groove and resilient sound-absorbing tires. Minimum 2-1/2 inch diameter for hoistway, 3 inch for car. Manufacturer's heavy-duty tracks and ball or roller bearing with adjustable up thrusts.
     3. Closers:
        1. Provide new cable relating torsion spring mechanical type or broken arm jack knife type as required for door assembly. Counter-weighted closers are acceptable if mounted to strut.
     4. Dust and hanger covers:
        1. Retain existing, clean and refinish with black paint. Replace any missing covers.
     5. Fascia, toe and head guards:
        1. Retain existing, modify to comply with code, refinish with black paint and refasten for greater rigidity. Replace any missing fascia or guards.
     6. Interlocks:
        1. Provide all new. Equip each hoistway door with a tamper-proof interlock which shall prevent operation of the car until doors are locked in the close position as defined by the Code and shall prevent opening of doors at landing from corridor side unless car is at rest at landing in leveling zone or, hoistway access switch is used. Provide all new type “SF” high temperature wiring for interlock circuits.
     7. Pick-up roller assemblies:
        1. Provide all new pick-up roller assemblies as required for door operating equipment furnished.
     8. Sills:
        1. Retain existing, power clean to metal and refinish.
     9. Limit Switches:
        1. Retain existing, clean contacts and replace as required.
     10. Frames:
         1. Retain existing. Clean and refinish as scheduled. Frames to be refinished by others.
     11. Hoistway doors:
         1. Retain existing, re-hang to remove all twists, provide two new guides per panel which will remain engaged in sill if guiding member is destroyed. Provide new full height astragals and non vision wings matching finish of door panels. Contractor must use the original reinforcing on existing hoistway and car doors for mounting hangers, pickup rollers, drive vanes, etc. If original reinforcing is not reusable for drive vanes and pickup rollers, Contractor shall furnish new reinforcing (minimum of 1/4" thick plate) welded to the door face. A minimum of four (4) 5/16” threaded bolts is to be used for attachment to the reinforcing plate. Where slotted holes are provided in the attachment block, a 1/4" dowel pin is to be fitted after doors locks are set up. Door panels to be refinished by others.
     12. Passenger Elevator Entrance Schedule:
         1. Elevator No. 1-10:

|  |  |
| --- | --- |
| * + - * 1. Size: | 3’-6” wide by 7’-0” high. |
| * + - * 1. Type: | Center Single speed |
| * + - * 1. Frames: Refinish by others | |
| * + - * 1. Doors: Refinish by others | |
| * + - * 1. Sills: Refinish | |

* + - 1. Elevator No. 11-13:

|  |  |
| --- | --- |
| * + - * 1. Size: | 4’-4” wide by 7’-0” high. |
| * + - * 1. Type: | Center Two speed |
| * + - * 1. Frames: Refinish by others | |
| * + - * 1. Doors: Refinish by others | |
| * + - * 1. Sills: Refinish | |

* + - 1. Elevator No. 14-15:

|  |  |
| --- | --- |
| * + - * 1. Size: | 4’-6” wide by 7’-0” high. |
| * + - * 1. Type: | Side Two speed |
| * + - * 1. Frames: Refinish by others | |
| * + - * 1. Doors: Refinish by others | |
| * + - * 1. Sills: Refinish | |

* + - 1. Elevator No. 16-19:

|  |  |
| --- | --- |
| * + - * 1. Size: | 3’-6” wide by 7’-0” high. |
| * + - * 1. Type: | Center Single speed |
| * + - * 1. Frames: Refinish by others | |
| * + - * 1. Doors: Refinish by others | |
| * + - * 1. Sills: Refinish | |

* + - 1. Elevator No. 20:

|  |  |
| --- | --- |
| * + - * 1. Size: | 5’-1” wide by 7’-0” high. |
| * + - * 1. Type: | Side Two speed |
| * + - * 1. Frames: Refinish by others | |
| * + - * 1. Doors: Refinish by others | |
| * + - * 1. Sills: Refinish | |

* + - 1. Elevator No. 21:

|  |  |
| --- | --- |
| * + - * 1. Size: | 3’-6” wide by 7’-0” high. |
| * + - * 1. Type: | Center Single speed |
| * + - * 1. Frames: Refinish by others | |
| * + - * 1. Doors: Refinish by others | |
| * + - * 1. Sills: Refinish | |

* 1. TRACTION ELEVATOR EQUIPMENT:
     1. Design criteria:
        1. Pre-approved products:
           1. Motion Control Engineering iBOX
        2. Performance:
           1. Contract speed: Maximum three percent (3%) speed variation under any loading condition in either direction.
           2. Motion time: Start of motion to stop of motion as measured in both directions for a typical one floor run under any loading condition. After make-up of hoistway door interlock, initiate movement of car within 0.2 second. Typical floor height of 14’-6” is assumed.

Elevator No. 1-19: 5.0 seconds

Elevator No. 20: 20.0 seconds

Elevator No. 21: 10.7

* + - * 1. Door Open Times:

Elevator No. 1-10, 16-19, 21: 1.6 seconds

Elevator No. 11-13: 2.0 seconds

Elevator No. 14-15: 2.7 seconds

Elevator No. 20: 3.0 seconds

* + - * 1. Door close times: Minimum, without exceeding kinetic energy and closing force, allowed by code.
        2. Door dwell times: Comply with A.D.A. formula and provide separate adjustable timers with initial settings as follows:

Main lobby hall call: 6.0 to 8.0 seconds.

Upper lobby hall call: 6.0 to 8.0 seconds.

Car call: 5.0 to 6.0 seconds.

Interruption of door protective device: Reduce dwell to 0 seconds.

* + - * 1. Leveling: Within 1/4 inch under any loading condition. Level into floor at all times, do not overrun floor and level back.
        2. Re-leveling: Provide smooth and accurate re-leveling required due to cable stretch.
      1. Operating qualities: Architect and Owner’s Representative will judge riding qualities of cars and enforce the following requirements. Make all necessary adjustments.
         1. Acceleration and deceleration: Starting and stopping shall be smooth and comfortable, without obvious steps of acceleration. Slowdown, stopping and leveling shall be without jars or bumps. Stopping upon operation of emergency stop switch shall be rapid but not violent.

Vertical Acceleration: Maximum 4 Fps². Maximum jerk 8 Fps³.

Horizontal Acceleration (ISO A95 Scaling): Maximum 15 mg peak-to-peak measured at full speed for full travel in both directions.

Vertical Vibration: Ride shall be free of vibration through out acceleration, full speed and deceleration for full travel in both directions.

* + - * 1. Full Speed Riding: No more than 20 mg peak-to-peak (ISO A95 Scaling).
      1. Motor control:
         1. Equipment: Capable of operating at plus or minus ten percent of normal feeder voltage and plus or minus three percent of feeder frequency without damage or interruption of elevator service.
         2. Control system: Digital closed loop feedback control incorporating positional and velocity selector system that is capable of operating continuously at contract speed and load for one hour without exceeding 50 degrees Centigrade from ambient machine room temperature. Design system to not adversely affect stability of voltage and frequency controls of standby generator set or loads connected to power bus during standby power operation.
         3. Car load sensing:

The control system shall sense the actual load condition of the elevator prior to any movement of the elevators. The start/acceleration pattern shall be adjusted to reflect the car load to achieve a smooth start/acceleration under all load conditions and location in the hoistway.

Provide load sensing devices that utilize crosshead deflection or hoist rope pressure. System shall be accurate within 100 pounds and stable over extended periods.

Systems using pre-torquing of the D.C. motor armature are acceptable; variable voltage control of the brake energization is not acceptable.

* + - 1. Sound control:
         1. Vibration: Sound isolate machines and motor drives from beams and building structure to prevent objectionable noise and vibration transmission to occupied building spaces.
         2. Airborne noise: Maximum acoustical output level of:

75 dBA measured in machine room.

60 dBA measured in elevator cars during all sequences of operation.

50 dBA measured in elevator lobbies.

* 1. HOISTWAY EQUIPMENT:
     1. Guide rails and brackets:
        1. Retain existing car and counterweight rails, realign, clean, check, tighten and replace Code non-complying brackets, fishplates and bolts. Provide log of the alignment corrections to the Owner's Representative.
     2. Guide shoes:
        1. Provide new guide shoes for car and counterweight of the roller type with neoprene or rubber composition tires, minimum 3/4 inch wide and fully adjustable spring loaded to provide continuous contact with rail surfaces. Balance car to insure equal guide shoe pressure on all wheels and not exceed manufacturer's recommendations. Nominal roller diameter shall be 6 inches for car and 3 inches for counterweight. Provide seismic retainer plates as required.
     3. Hoist ropes:
        1. Provide new of size and type to suit equipment manufacturer's specifications.
        2. Tension hoist ropes so that all rope tensions are within a 10 lbs. range.
     4. Governor ropes:
        1. Provide new of size and type to suit governor and safeties manufacturer's specifications.
     5. Buffers:
        1. Retain existing oil buffers. Renew existing springs, seals, valves and clean ram, readjust to car buffer plates, drain and flush out all oil tanks, clean down, replace seals as necessary, refill and test with full load at contract speed.
     6. Counterweights:
        1. Retain existing, realign, correct balance, clean down and tighten frame bolts.
           1. Provide retainer plates to meet seismic code requirements.
           2. Secure weight to provide noise free operation at full speed in both directions.
     7. Safeties:
        1. Retain. Strip down completely, clean, replace operating jaws, arms and springs and reassemble. Test its operation with governor device.
     8. Governor:
        1. Provide new.
           1. Provide new governor device that is compatible with safety gear with protective covering over sheave, jaws and exposed gears (if applicable).
           2. Provide bi-directional and over-speed switches.
           3. A certificate must be obtained from Code Authorities that the new governor is acceptable for operation of the existing car safety gear.
     9. Governor tail weight:
        1. Provide new.
           1. Frame shall be ratchet or tension type held under 200 pounds tension.
     10. Car frame and platform:
         1. Retain existing car frame and platform.
            1. Replace rubber supports and load weighing switches.
            2. Provide new sills of extruded aluminum bronze nickel silver mounted with concealed fasteners.
            3. Static balance weight to be added as required.
            4. Clean down and tighten frame bolts.
     11. Sheaves:
         1. Retain existing secondary overhead deflecting 2:1 car 2:1 counterweight sheaves. Clean thoroughly, provide new bearings, seals and lubricants. Provide seismic rope retainers as required.
     12. Compensation:
         1. Retain existing sheaves, provide new ropes if required. Existing sheave assembly shall be cleaned, pivot points, guiding surfaces and bearings checked for proper movement and new lubricant provided. Provide new switch arranged to prevent elevator operation when sheave approaches upper or lower limit of travel.
  2. MACHINE ROOM EQUIPMENT:
     1. General:
        1. Provide equipment to fit existing space and structural limitations. Coordinate related electrical, structural and mechanical.
     2. Traction machines:
        1. Retain existing gearless machine Nos. 1-19 and rehabilitate as follows:
           1. Field Coils: Dismantle machine, remove and re-insulate field coils. Provide new field coils or rewind to the machine manufacturer's requirements. Spray the field coils with high quality insulating varnish. Provide a megger insulation test report of all field coils and armature windings; the megger reading to be a minimum of 500,000 ohms.
           2. Commutator: Turn and undercut, clean and resurface the commutator. This work can be done on site but must be performed by an approved machine repair workshop contractor. Provide all new brush holders, insulation and brushes to the original manufacturer's standard.
           3. Brake: Dismantle the brake; replace the linings, pivot pins and bushings. Clean and re-insulate the operating coil. Remove and clean the operating core. Realign the brake and set to withhold 125% load. Drill and pin brake spring nut.
           4. Bearings: Replace the hoist machine main bearings and oil lubrication carriers with the exact bearings as recommended by the machine manufacturer. Provide recommended lubricants.
           5. Drive Sheave: Provide new.
           6. Reassembly: Check, realign the machine drive sheave to the car pickup following the realignment of the car guide rails. Provide data of the alignment checking and adjustment to Owner's Representative. Clean machine and repaint.
        2. Retain existing geared machine No. 21 and rehabilitate as follows:
           1. Brake: Dismantle; replace lining, pins and bushings. Clean, lubricate, reassemble, adjust and repaint.
           2. Motor: Provide new AC motor matched to new Flux Vector AC motor drive.
           3. Bearings: Flush, repack worm shafts, replace thrust bearing and provide new lubricants. Replace oil chain carrier.
           4. Gears: Set backlash for smooth gear operation. Replace worm and ring gear if required for smooth operation.
           5. Gear Case: Drain, flush, replace seals and provide new lubricants.
           6. Drive Sheave: Retain existing and re-groove. Provide seismic rope retainers.
     3. Ascending car protection:
        1. Provide new ascending car protection that detect an ascending car over-speed condition at a speed not greater than 10% higher than the speed at which the car governor is set to trip.
           1. If the over-speed detection means requires electrical power for its functioning:

A loss of electrical power to the ascending car over-speed detection and control means shall cause the immediate activation of the emergency brake.

The occurrence of a single ground or the failure of any mechanically operated switch shall not render the detection means inoperative.

Provide means to stop car if unintended motion occurs.

Provide any structural modifications to accommodate ascending car motion device. Provide structural engineers stamped installation drawings.

* + 1. Controller:
       1. Provide MCE or approved equal non-proprietary diagnostic control system from approved manufacturer; overload relays in three legs of power circuit and in loop circuit; cabinets with NEMA-1 enclosures and doors arranged with locks or mechanical latches. Provide permanently marked symbols or letters identical to those on wiring diagrams adjacent to each component.
          1. The controller wiring shall be carried out in a neat and workmanlike manner in accordance with relevant requirements of National Electric Code and ASME A17.5.
          2. All external connections to the equipment on each controller shall be made by means of approved cable thimbles and/or solderless cable lugs, depending on the current to be carried.
          3. Condenser activated or dashpot timers, motors or incandescent globes for dampening acceleration and deceleration steps are unacceptable.
          4. Main contactors or starter switches shall be horsepower rated and are not to be mounted directly to the steel cabinets, to ensure quiet operation of controllers.
          5. The controllers must be properly shielded from line feeder pollution.
    2. Power Conversion and Regulation Unit:
       1. General:
          1. All circuitry shall be as approved by the enforcing code. Operation shall be quiet and the performance standards herein specified shall be provided.
          2. Design system to control starting and stopping and to prevent damage to motor from overload or excess current and to automatically disconnects power supply. Apply brake and bring car to rest in event of power failure or safety device operation.
          3. Controllers shall not have failure modes which results in full power being applied to drive machine operation in event of phase reversal, phase failure or low voltage which might result in elevator malfunction.
          4. Controllers shall provide adequate EMC to reject a 500 kHz to 1500 MHz rf signal at a power level 100 watts and a distance of 1 meter.
       2. Solid State Control (PWM):
          1. Provide smooth acceleration and deceleration by variable voltage applied to hoisting motor and by dynamic braking before brake application.
          2. Provide system to convert 3 phase, 60 Hz, A.C. building power supply to a fixed D.C. voltage and then invert from D.C. voltage to a variable voltage, variable frequency. The carrier frequency shall be above 15,000 Hz.
          3. Failure of any static control device, speed measuring circuit or speed pattern generating circuit to operate as intended or occurrence of single accidental ground or short circuit shall not permit car to start or run if any hoistway door or gate is open or unlocked.
          4. Provide coordinated fault protection which protects entire power circuit and power semi-conductors against short circuit conditions; protects against limited faults arising from partial grounds, partial shorts in motor armature, or in power unit itself; protects drive motor against sustained overloads; and provides semi-conductor transient and incoming line phase sequence protection.
          5. Protects building system power line against line voltage transients by providing each elevator drive with isolation transformer and devices to limit distortion to not more than 4% RMS of base 60 Hz line voltage, with frequencies above 600 Hz attenuated at minimum of 12 db per octave. Measure voltage distortion requirements at secondary of building system transformer used to provide power to elevator system.
          6. System shall be provided with necessary devices to insure quiet operation not exceeding noise level specified in "Design Criteria" and to protect building system power line against line voltage transients.
    3. Machine beams:
       1. Provide all structural steel machine and sheave beams with dead end hitch plates, bearing plates, anchors and blocking as required to support equipment.
  1. HYDRAULIC ELEVATOR EQUIPMENT:
     1. Design Criteria:
        1. Performance:
           1. Contract Speed: Maximum twenty percent (20%) speed variation under any loading condition in the up direction.
           2. Leveling: Within 3/8 inch under any loading condition. Level into floor at all times, do not overrun floor and level back.
           3. Hydraulic pressure: Hydraulic components shall be factory tested for 600 PSI. Maximum operating pressure shall be 425 PSI.
        2. Operating qualities:
           1. Owner’s Representative will judge riding qualities of cars and enforce the following requirements. Make all necessary adjustments.

Starting and stopping shall be smooth and comfortable. Slowdown, stopping and leveling shall be without jars or bumps.

* + - 1. Sound control:
         1. Vibration: Sound isolate power units from building structure to prevent objectionable noise and vibration transmission to occupied building spaces.
         2. Airborne noise: Maximum acoustical output level of:

85 dBA measured in machine room.

60 dBA measured in elevator cars during all sequences of operation.

50 dBA measured in elevator lobbies.

* 1. HYDRAULIC HOISTWAY EQUIPMENT:
     1. Guide rails and brackets:
        1. Realign, clean, check, tighten, existing rails and replace Code non-complying brackets, fishplates and bolts. Provide log of the alignment corrections to the Owner's Representative.
     2. Guide shoes:
        1. Provide new guide shoes of the roller type with neoprene tires, minimum 3/4 inch wide and fully adjustable spring loaded to provide continuous contact with rail surfaces. Balance car to insure equal guide shoe pressure on all wheels and not exceed manufacturer's recommendations. Nominal roller diameter shall be 4 inches.
     3. Buffers:
        1. Retain existing.
     4. Car frame and platform:
        1. Retain existing car frame. Clean down and tighten frame bolts. Static balance weight to be added as required.
     5. Platen isolation:
        1. Provide minimum 3/4 inch thick steel plates between top of plunger and car frame with 1 inch rubber or neoprene isolation material between.
     6. Cylinder: Provide new.
        1. Cylinder Well and Casing: Remove existing cylinder plunger unit and provide new as follows:
           1. Well: The Elevator Installer shall familiarize himself with existing conditions and be responsible for drilling cylinder wells.
           2. Casing: Provide steel casing, 12 inches greater in diameter than wrapped cylinder and proper depth to retain hole and provide structural integrity of PVC casing. Provide minimum 10 gauge corrosion resistant well casing; water tight joints and closed bottom. Weld seams solid at multiple casing joints. Provide a steel ring at top of casing to be keyed into pit floor. Provide watertight seal at bottom using 2'-0" thick non-shrink concrete plug of type for installation under water where drive casing is required and closed bottom casing can not be installed.
           3. Provide minimum 3/8 inch thick PVC casing with watertight sealed couplings and bottom end caps. Inside diameter shall be 6 inches greater than outside diameter of cylinder. Extend PVC above pit floor to fit snug against cylinder head.
           4. Installation: Set cylinder and PVC casing within steel casing and backfill between all voids with clean dry neutral silica sand, well tamped. After cylinder is set, provide a watertight laminating or epoxy resin seal between PVC and top of cylinder. Plunger and cylinder shall be plumb within 1/16 inch.
        2. Cylinder: Steel pipe, factory tested for 400 pounds/square inch working pressure. Sandblast or wire brush outside of cylinder to remove rust and scale. Paint with heavy coat of epoxy or mastic. Work shall be done in shop and repaired in field if coating is damaged.
     7. Packing:
        1. Provide new packing which inhibits leaking of oil with drip ring.
     8. Scavenger pump:
        1. Provide electrically operated scavenger pump with storage reservoir and float activated or other automatic means to return oil to system. Provide 1/4 inch copper tubing for oil return line.
     9. Oil:
        1. Provide Chevron OC turbine oil or approved equal, 150 SSU at 100 degrees F. temperature.
     10. Piping: Provide new. Minimum Schedule 80 steel pipe suitable for 400 pounds pressure. No hoses shall be used in any part of piping. Provide sound isolating couplings in oil line between jack and pumping plant. Support piping using vibratim isolating mounts or hangers with integral felt or neoprene at least 1/4 inch thick.
         1. Overhead and Exposed Piping: Use victaulic method of piping throughout system with victaulic type 77 fittings or equal. Provide drip deflectors at pipe joints where pipes run above inaccessible ceiling areas to prevent damage to these areas in case of joint leakage.
         2. Underground Piping: Use threaded or welded joints. Protect with extruded high density polyethylene coating having a thickness of 25 to 60 mills applied with a minimum 8 mill thickness of modified rubber band adhesive material all as manufactured by Plexco or equal. Install piping on 3 inch bed of clean, dry sand and backfill with additional 3 inches of sand.
         3. Testing: Before enclosing pipe system, close ends, fill with fluid, establish 400 PSI pressure and allow to stand for 24 hours. Make corrective repairs to leaks or pressure drop.
     11. Pit Valves: Provide in each elevator pit a gate valve to shut off oil between cylinder and pumping plant, and a pressure type line rupture safety valve to shut off oil between cylinder head and pit valve. Activation of safety valve shall not void operation of lowering valve.
     12. Ruptured pipe valve:
         1. Provided new a pressure type line rupture safety valve to shut off oil between cylinder head and pit valve. Activation of safety valve shall not void operation of lowering valve.
  2. MACHINE ROOM EQUIPMENT:
     1. General:
        1. Provide equipment to fit existing space and structural limitations. Coordinate related electrical, structural and mechanical work with other trades.
     2. Pumping Plant: Provide new.
        1. General: Self contained unit with sound reducing cabinet and sound isolated base.
        2. Pump: IMO, Roper or accepted equal for 150 SSU oil, belt driven or submersible. Maximum speed 3600 RPM. Maximum pressure 425 pounds per square inch..
        3. Tank: Capacity equal to plunger displacement plus 25%. Provide strainers, oil level gauge and device to maintain uniform oil temperature.
        4. Valves: Integral type by Elevator Equipment Company, Maxton Company or by elevator manufacturer. Provide conveniently located manual lowering valve accessible without removing pumping plant enclosure panels.
        5. Motor: General Electric, Imperial, Westinghouse or accepted equal; maximum speed 1800 RPM for belt driven and 3600 RPM for submersible. Provide minimum 120 start heavy-duty motor, continuous rated, 50 degrees C. temperature rise, Class A insulation or 70 degrees C. rise for Class B insulation.
        6. Muffler: Blow-out proof type between pumping plant and cylinder.
     3. Controller:
        1. Integral, floor or wall mounted as applicable to space conditions. Include door operating relays combined with controller. Provide solid state soft starting with starting switches rated at minimum 57% of horsepower rating. IEC method of line starter application is unacceptable. Provide three (3) manual reset overload relays, one in each line and reverse phase relay. Provide externally mounted permanently identified junction boxes on controller cabinets for termination of communication circuits. Pre-approved controllers:
           1. Motion Control Engineering HMC-2000
           2. Smart Rise
     4. Hydraulic elevator protective circuit:
        1. In the event the car should stall due to low oil in the system or, if for other cause the car fails to reach the top landing within a predetermined time while traveling "up", a special circuit shall be provided which shall automatically return the car to the bottom landing and open the doors for 10 seconds after which the elevator will close doors and completely shut down. Recycling the mainline switch shall restore Service.
     5. Hydraulic elevator battery emergency lowering operation:
        1. Provide a battery driven unit which will initiate operation of the Protective Circuit and lower elevator to bottom landing in the event of a power failure.
        2. Service shall be restored automatically upon restoration of normal power supply.
        3. Arrange with an exposed method of testing.
        4. Arrange circuitry so that, if the mainline switch is open when the power transfer takes place, the elevator will not respond to the operation of the protective circuit.
        5. Provide a double pole-isolating switch on the battery unit to disconnect the battery output.

1. EXECUTION:
   1. GENERAL:
      1. Bidding documents:
         1. Bidders shall examine existing conditions. Any discrepancies which affect the elevator work or conditions adverse to the bidder's equipment shall be brought to Owner's Representative's attention at least seven (7) days prior to the bid date. If no discrepancies are presented, changes required to accommodate bidder’s equipment become the responsibility and cost to Contractor.
   2. PREPARATION:
      1. Field measurements:
         1. Field verify dimensions before proceeding with the work.
         2. Coordinate related work by other trades.
   3. INSTALLATION:
      1. General:
         1. Install per manufacturer's requirements, those of regulatory agencies and as specified.
      2. Welded Construction:
         1. Provide welded connections for installation of elevator work where bolted connections are not required for subsequent removal or for normal operation, adjustments, inspection, maintenance and replacement of worn parts.
         2. Comply with AWS standards for workmanship and for qualifications of welding operators.
      3. Sound Isolation:
         1. Mount rotating and vibrating elevator equipment and components on vibration-absorption mounts, designed to effectively prevent transmission of vibrations to structure and thereby, eliminate sources of structure-borne noise from elevator system.
      4. Lubrication:
         1. Lubricate operating parts of systems as recommended by manufacturer.
      5. Alignment:
         1. Coordinate alignment of hoistway entrances with elevator guide rails, for accurate alignment of entrances with cars. Where possible, delay final adjustment of sills and doors until car is operable in shaft. Reduce clearances to minimum, safe workable dimensions at each landing.
         2. Align guide rails plumb and parallel with maximum deviation of 1/16 inch. Anchorage of guide rails in pits shall not compromise waterproofing.
      6. Graphics:
         1. Provide graphics visible to public as selected by Owner's Representative.
      7. Manufacturer's nameplates:
         1. Manufacturer's nameplates, trademarks or logos not permitted on surfaces visible to public.
      8. Cleaning of the installation:
         1. After the installation of each elevator has been completed and immediately prior to the carrying out of the tests, the machine room and all equipment therein, the elevator hoistways including outside of car and all ledges and similar areas, the elevator pit and equipment therein, and all door hanger runners, guides, tracks and sills shall be thoroughly cleaned down, preferably with vacuum cleaning equipment, and all dust, fluff, dirt, grit, excessive oil and grease and rubbish shall be removed from site.
      9. Finish painting after tests:
         1. After satisfactory completion of the tests, any damage to the paint work shall be made good and the installation re-cleaned, if necessary, after which at least one final coat of gloss oil resistant or enamelized paint shall be applied by brushing or spraying in Contractor's customary colors to all the existing and new equipment in the machine room and also to such items in the hoistway or elsewhere which have received only a primer coat.
         2. Painting shall be performed either during normal working hours or after hours at no additional cost to the Owner.
      10. Painting of machine room, car tops and pit floors:
          1. After the completion of the entire installation, the floor of each machine room and pit areas shall be thoroughly cleaned down and brush painted with one coat of traffic paint having oil resistant properties. Owner’s Representative will advise the color. Machine room painting shall be done during normal working hours.
          2. Painting shall be performed after hours at no additional cost to the Owner for the pits and cartop equipment.
   4. NOISE CONTROL:
      1. General:
         1. Contractor, in the preparation and the execution of the work, shall recognize the particular and mandatory requirements of the remodeling project due to the character of the work and the use occupancy of the building.
         2. Contractor shall perform all noisy work as directed by Owner's Representative.
      2. Building operations:
         1. Noise and vibration generated by this construction for this work may, at times, create a problem for the operations of the building. In the event the noise produced by the construction work conflicts with the building function, Contractor, at the request of the Owner's Representative, shall reduce or stop the noise.
         2. It should be noted that this is a courthouse and if directed by the Courts work shall stop immediately.
      3. Measurement:
         1. The noise level shall be measured on the "A" Scale of a sound level meter as follows:
            1. With the meter located 3'-0" from the nearest staff work station to the elevator lobby, the sound level shall not exceed 75 dBA.
            2. With the meter located 3'-0" from each machine room door at floor level, the sound level shall not exceed 85 dBA.
            3. With the meter located 3'-0" from any hoistway door at any level, the sound level shall not exceed 90 dBA.
      4. Types of noise generating work:
         1. All heavy demolition (concrete walls and floors).
         2. All grinding, chipping, pounding, sanding and cutting of holes and core drilling.
   5. TEMPORARY ELEVATOR USE DURING CONSTRUCTION:
      1. General:
         1. Should the other contractors require the use of any elevator during construction, he shall make arrangements directly with Contractor, coordinate temporary facilities and pay all costs associated with the protection, operation and use of elevators.
      2. Maintenance:
         1. Elevators shall be maintained on a regular basis during the temporary construction use. A minimum of two hours per week per elevator shall be spent on examination, lubrication, adjusting and cleaning the elevator equipment.
      3. Damage:
         1. The Owner is entitled to receive newly modernized elevator equipment upon final acceptance of the entire project.
         2. The Owner’s Representative will thoroughly examine all elevator equipment upon completion of temporary use and provide a punch-list outlining items that must be repaired or replaced to ensure the equipment is in satisfactory condition. Final acceptance and payment will not be made until all items have been satisfactorily completed.
      4. Schedule:
         1. Sufficient time must be allowed to prepare and adjust temporary elevators so that the entire elevator installation is ready for final acceptance.
   6. FIELD QUALITY CONTROL:
      1. Regulatory agencies inspection:
         1. Upon completion of elevators, Contractor shall provide instruments, weights and personnel to conduct test required by regulatory agencies. Contractor shall submit a complete report describing the results of the tests.
      2. Examination and testing:
         1. When installation is ready for final acceptance, notify and assist Owner’s Representative in making a walk-through inspection of entire installation to assure workmanship and equipment complies with contract documents. Provide equipment to perform the following tests:
            1. One-hour heat and run test with full load in car. Perform for one car of each duty.

Stop car at each floor in each direction.

Provide well-shielded thermometers for motor and generator and verify that temperatures do not exceed 50 degrees Centigrade above ambient.

Performance and leveling tests shall be made before and after heat and run test.

* + - * 1. Check and verify operation of all safety features and special operations.

Measure horizontal acceleration.

Pull mainline switch and check dynamic braking of Motor Drive units; fuses shall not blow.

Measure acoustical output levels in machine room, lobbies and cars.

* + 1. Correction:
       1. Make corrections to defects or discrepancies at no cost to Owner’s Representative. Should discrepancies be such that re-examination and retesting is required, Contractor shall pay for all costs including those of Owner’s representative fees.
    2. Final acceptance:
       1. Final acceptance of the installation will be made only after all corrections are complete, final submittals and certificates received and the Owner’s Representative is satisfied and the installation is complete in all respects. Final payment will not be made until the above is completed.
  1. INSTRUCTIONS:
     1. Instruct Owner's personnel in proper use of each system.
  2. PROJECT RECORD DOCUMENTS:
     1. As-built drawings:
        1. Contractor shall maintain at the job site a separate and complete set of contract drawings which will be used solely for the purpose of recording changes made in any portion of the work during the course of construction, regardless of the reason for such change.
        2. Changes, as they occur, will be marked on the record set of drawings on a daily basis.
        3. The monthly payment will be withheld until the Owner's Representative has verified that "as-built" corrections are current. Before final payment is authorized, Contractor shall certify that all changes in the work are included on the drawings and will deliver such to the Owner's Representative.
     2. Record drawings:
        1. Contractor shall prepare "as-built" drawings in duplicate of any changes to electrical work on prints supplied by the Owner's Representative. During the course of construction, actual locations to scale shall be shown for all runs of mechanical and electrical work, installed in walls and floors or otherwise concealed. This shall cover all piping, electrical wiring, whether in conduit or cable, duct work, etc. shall be located, in addition, by dimension. All services shall be identified in ink on the prints.
        2. In addition, Contractor shall keep a complete record copy of the plans and specifications for the use in preparing "as-built" plans and specifications at the end of the job. Contractor shall sign and date the prints and deliver them to the Owner's Representative.
  3. MAINTENANCE:
     1. General:
        1. Provide complete continuing maintenance on entire elevator equipment during regular working hours on regular working days for the duration of the Project plus an additional year of maintenance during the warranty period following completion of the Project.
     2. Examination:
        1. Include systematic examination, adjustment, and lubrication of elevator equipment whenever required and replacement of defective parts with parts of same manufacture as required for proper operation. Contractor not responsible for repairs to car enclosures, door panels, frames, sills or platform flooring resulting from normal usage or misuse, accidents and negligence for which Contractor is not responsible. Examinations shall be performed weekly expending a minimum of one and one-half hour per unit per visit performing preventative maintenance service for traction elevators and monthly expending a minimum of one hour per unit per visit performing preventative maintenance service for hydraulic elevators .
     3. Performance standards:
        1. Maintain the performance standard set forth in this Specification and maintain correct operation of the dispatching system.
        2. Maintain smooth starting and stopping, smooth riding qualities and accurate leveling at all times.
     4. Call-backs:
        1. In event of failures, provide 24 hour call-back service at no additional cost to Owner.
     5. Elevator shutdowns:
        1. Should any elevator become inoperative, repair within 24 hours of notification of such failure. Breakdown of major components shall be completed and service restored within 72 hours.
        2. Failure to comply with above, Owner’s Representative may order the work done by other contractors at Contractor's expense.
        3. Devices repaired or replaced by others shall, nevertheless, become provided with maintenance by Contractor who shall become completely responsible for correct operation of such devices for lifetime of this contract.
     6. Follow-up tests:
        1. Test all safety devices and emergency operations at 6 month intervals or more often and submit written report on each test. Make tests at times which do not interfere with building operation.
     7. Maintenance materials:
        1. Expendable parts: Contractor shall provide a metal cabinet in at least one machine room on project premises containing expendable parts required for prompt replacement. Parts used for routine maintenance shall be replenished and stored in machine room to ensure an adequate supply is available.
        2. Replacement parts: Keep the following parts in a warehouse within 50 miles of the project premises.
           1. One door operator motor of each type used.
           2. Transformers of each type installed.
           3. Two complete door interlocks.
           4. Complete SCR or Motor Drive Unit.
           5. Parts for door protective devices.
           6. Such other parts as are needed to insure prompt replacement in event of elevator shutdown such as spare control boards for computer-operated systems.
     8. Maintenance data:
        1. After completion, and prior to final acceptance, submit three sets of complete and accurate maintenance data specific for each elevator. Final payment will not be made until received.
           1. Manuals: Describe proper use and maintenance of equipment, lubrication points, types of lubricants used and frequency of lubricant application.
           2. Parts catalogs: Complete listing of all parts of equipment and components used in the installation.
           3. Wiring diagrams: One laminated set mounted in machine room, one reproducible set delivered to Owner’s Representative. Wiring diagrams shall be as built, specific for this installation, and reference identification on drawings shall match points identified on terminals of controllers.
           4. Maintenance tool and software manuals: Provide maintenance tools and supporting software documentation required for the complete maintenance of the entire system including diagnostics and adjusting. Maintenance tool may be hand held or built into control system and shall be of the type not requiring recharging or reprogramming nor of the automatic destruct type. The tool and supporting software may be programmed to operate only with this project's identification serial numbering.
     9. Final service and inspection:
        1. Two weeks before expiration of the year's maintenance, the equipment shall be lubricated, fully serviced, adjusted to the standards designated and emergency service operation devices shall be checked. A complete inspection will be made by Owner's Representative.
     10. Quotation:
         1. The Firm Fixed Fee shall include the required maintenance of the elevators for the duration of the Project plus an additional year of maintenance and materials during the warranty period following completion of the Project.

END OF EXHIBIT H

**EXHIBIT I**

## ASBESTOS REINSPECTION REPORT



## CONFIDENTIAL AND PRIVILEGED

## ASBESTOS REINSPECTION

**For the property located at:**

**County of Los Angeles**

**Criminal Courts Building**

210 West Temple

Los Angeles, California

Prepared for:

**Mackone Development, Inc.**

2242 Beverly Blvd.

Los Angeles, California 90057

Attn: Matt Dugan

Prepared by:

**Ambient Environmental Inc.**

1464 Sixth Street

Norco, California 9286081

(951) 272-4730

March 30, 2012

Ambient Environmental Inc. Project #12-1312

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Todd Hill

California Certified Asbestos

Consultant #09-4544

**General**

Ambient Environmental Inc. was retained by Mackone Development to conduct a reinspection of Asbestos Containing Building Materials (ACBM) and Presumed Asbestos Containing Materials (PACM) in accordance with the Asbestos Hazard Emergency Response Act (AHERA) Final Rule published on October 30, 1987 in the Federal Register under Title 40 CFR Part 763 Subpart E. The Final Rule’s effective date was December 14, 1987.

Mr. John J. Lumpkin Jr. (CAC #92-0365), both EPA Accredited Building Inspectors, performed the inspection of the criminal courts elevators corridors and mechanical rooms on March 30, 2012.

**ReInspection Procedures**

The reinspection assessment and identification was performed by entering each interior and exterior functional space and assessing all structural/mechanical components and architectural finishes with each elevator. The following procedures were conducted during the reinspection assessment:

The reinspection included the following activities:

1. Review all existing original and all re-inspection asbestos reports.
2. Perform a walkthrough of each building to visually assess all homogeneous building materials identified in the survey reports.
3. Location of homogeneous ACBM.
4. Assessment of current conditions.

Areas inspected:

1. Elevator Lobbies
2. Elevator Mechanical Rooms
3. Elevator Shafts

**Assessment of ACBM**

Assessment covered three general areas of concern:

* Friable/Non-Friable: Materials are “friable” if, when dry, they can be crumbled by hand pressure.
* Non-Friable: ACBM are considered non-friable when dry and can not be crumbled by hand pressure.
* Damage: Damage falls into three categories:

1. Significant: The material has suffered extensive damage over a wide area or damage in some areas is extremely severe so that the integrity of the whole material is threatened.
2. Damaged: The material has localized damage, which does not threaten the integrity of the whole homogeneous area.
3. Undamaged: The material is intact.

The following are previously identified asbestos-containing materials and presumed asbestos-containing materials located at the criminal court building elevators:

| Material | Location of Material | Asbestos Content | Friable | Condition |
| --- | --- | --- | --- | --- |
| 9x9 Floor Tile | Elevator Lobby Parking | 2% Chrysotile | No | Undamaged |
| Floor Tile Mastic | Elevator Lobby Parking | 15% Chrysotile | No | Undamaged |
| Pipe Insulation (Fittings) | Elevator Mechanical Room | 30% Chrysotile | Yes | Undamaged |
| Fireproofing | Elevator Lobby Parking | 65% Chrysotile | Yes | Damaged |
| Floor Tile Mastic | Elevator Lobby Service | 15% Chrysotile | No | Undamaged |
| Pipe Insulation (Fittings) | Elevator Mechanical Room Service | 30% Chrysotile | Yes | Undamaged |
| Fireproofing | Elevator Lobby Service | 65% Chrysotile | Yes | Damaged |
| 12x12 Floor Tile | Elevator Lobby 1st Floor | 2% Chrysotile | No | Undamaged |
| Floor Tile Mastic | Elevator Lobby 1st Floor | 15% Chrysotile | No | Undamaged |
| Pipe Insulation (Fittings) | Elevator Mechanical Room 1st Floor | 30% Chrysotile | Yes | Undamaged |
| Fireproofing | Elevator Lobby 1st Floor | 65% Chrysotile | Yes | Damaged |
| Acoustic Ceiling Texture | Elevator Lobby 1st Floor | 25% Chrysotile | Yes | Undamaged |
| 12x12 Floor Tile | Elevator Lobby 2nd Floor | 2% Chrysotile | No | Undamaged |
| Floor Tile Mastic | Elevator Lobby 2nd Floor | 15% Chrysotile | No | Undamaged |
| Pipe Insulation (Fittings) | Elevator Mechanical Room 2nd Floor | 30% Chrysotile | Yes | Undamaged |
| Fireproofing | Elevator Lobby 3rd Floor | 65% Chrysotile | Yes | Damaged |
| 12x12 Floor Tile | Elevator Lobby 3rd Floor | 2% Chrysotile | No | Undamaged |
| Floor Tile Mastic | Elevator Lobby 3rd Floor | 15% Chrysotile | No | Undamaged |
| Pipe Insulation (Fittings) | Elevator Mechanical Room 3rd Floor | 30% Chrysotile | Yes | Undamaged |
| Fireproofing | Elevator Lobby 4th Floor | 65% Chrysotile | Yes | Damaged |
| 12x12 Floor Tile | Elevator Lobby 4th Floor | 2% Chrysotile | No | Undamaged |
| Floor Tile Mastic | Elevator Lobby 4th Floor | 15% Chrysotile | No | Undamaged |
| Pipe Insulation (Fittings) | Elevator Mechanical Room 4th Floor | 30% Chrysotile | Yes | Undamaged |
| 12x12 Floor Tile | Elevator Lobby 5th Floor | 2% Chrysotile | No | Undamaged |
| Floor Tile Mastic | Elevator Lobby 5th Floor | 15% Chrysotile | No | Undamaged |
| Pipe Insulation (Fittings) | Elevator Mechanical Room 5th Floor | 30% Chrysotile | Yes | Undamaged |
| Fireproofing | Elevator Lobby 5th Floor | 65% Chrysotile | Yes | Damaged |
| 12x12 Floor Tile | Elevator Lobby 6th Floor | 2% Chrysotile | No | Undamaged |
| Floor Tile Mastic | Elevator Lobby 6th Floor | 15% Chrysotile | No | Undamaged |
| Pipe Insulation (Fittings) | Elevator Mechanical Room 6th Floor | 30% Chrysotile | Yes | Undamaged |
| Fireproofing | Elevator Lobby 6th Floor | 65% Chrysotile | Yes | Damaged |
| 12x12 Floor Tile | Elevator Lobby 7th Floor | 2% Chrysotile | No | Undamaged |
| Floor Tile Mastic | Elevator Lobby 7th Floor | 15% Chrysotile | No | Undamaged |
| Pipe Insulation (Fittings) | Elevator Mechanical Room 7th Floor | 30% Chrysotile | Yes | Undamaged |
| Fireproofing | Elevator Lobby 7th Floor | 65% Chrysotile | Yes | Damaged |
| 12x12 Floor Tile | Elevator Lobby 8th Floor | 2% Chrysotile | No | Undamaged |
| Floor Tile Mastic | Elevator Lobby 8th Floor | 15% Chrysotile | No | Undamaged |
| Pipe Insulation (Fittings) | Elevator Mechanical Room 8th Floor | 30% Chrysotile | Yes | Undamaged |
| Fireproofing | Elevator Lobby 8th Floor | 65% Chrysotile | Yes | Damaged |
| 12x12 Floor Tile | Elevator Lobby 9th Floor | 2% Chrysotile | No | Undamaged |
| Floor Tile Mastic | Elevator Lobby 9th Floor | 15% Chrysotile | No | Undamaged |
| Pipe Insulation (Fittings) | Elevator Mechanical Room 9th Floor | 30% Chrysotile | Yes | Undamaged |
| Fireproofing | Elevator Lobby 9th Floor | 65% Chrysotile | Yes | Damaged |
| 12x12 Floor Tile | Elevator Lobby 10th Floor | 2% Chrysotile | No | Undamaged |
| Floor Tile Mastic | Elevator Lobby 10th Floor | 15% Chrysotile | No | Undamaged |
| Pipe Insulation (Fittings) | Elevator Mechanical Room 10th Floor | 30% Chrysotile | Yes | Undamaged |
| Fireproofing | Elevator Lobby 10th Floor | 65% Chrysotile | Yes | Damaged |
| 12x12 Floor Tile | Elevator Lobby 11th Floor | 2% Chrysotile | No | Undamaged |
| Floor Tile Mastic | Elevator Lobby 11th Floor | 15% Chrysotile | No | Undamaged |
| Pipe Insulation (Fittings) | Elevator Mechanical Room 11th Floor | 30% Chrysotile | Yes | Undamaged |
| Fireproofing | Elevator Lobby 11th Floor | 65% Chrysotile | Yes | Damaged |
| 12x12 Floor Tile | Elevator Lobby 12th Floor | 2% Chrysotile | No | Undamaged |
| Floor Tile Mastic | Elevator Lobby 12th Floor | 15% Chrysotile | No | Undamaged |
| Pipe Insulation (Fittings) | Elevator Mechanical Room 12th Floor | 30% Chrysotile | Yes | Undamaged |
| Fireproofing | Elevator Lobby 12th Floor | 65% Chrysotile | Yes | Damaged |
| 12x12 Floor Tile | Elevator Lobby 13th Floor | 2% Chrysotile | No | Undamaged |
| Floor Tile Mastic | Elevator Lobby 13th Floor | 15% Chrysotile | No | Undamaged |
| Pipe Insulation (Fittings) | Elevator Mechanical Room 13th Floor | 30% Chrysotile | Yes | Undamaged |
| Fireproofing | Elevator Lobby 13th Floor | 65% Chrysotile | Yes | Damaged |
| 12x12 Floor Tile | Elevator Lobby 14th Floor | 2% Chrysotile | No | Undamaged |
| Floor Tile Mastic | Elevator Lobby 14th Floor | 15% Chrysotile | No | Undamaged |
| Pipe Insulation (Fittings) | Elevator Mechanical Room 14th Floor | 30% Chrysotile | Yes | Undamaged |
| Fireproofing | Elevator Lobby 14th Floor | 65% Chrysotile | Yes | Damaged |
| 12x12 Floor Tile | Elevator Lobby 15th Floor | 2% Chrysotile | No | Undamaged |
| Floor Tile Mastic | Elevator Lobby 15th Floor | 15% Chrysotile | No | Undamaged |
| Pipe Insulation (Fittings) | Elevator Mechanical Room 15th Floor | 30% Chrysotile | Yes | Undamaged |
| Fireproofing | Elevator Lobby 15th Floor | 65% Chrysotile | Yes | Damaged |
| 12x12 Floor Tile | Elevator Lobby 16th Floor | 2% Chrysotile | No | Undamaged |
| Floor Tile Mastic | Elevator Lobby 16th Floor | 15% Chrysotile | No | Undamaged |
| Pipe Insulation (Fittings) | Elevator Mechanical Room 16th Floor | 30% Chrysotile | Yes | Undamaged |
| Fireproofing | Elevator Lobby 16th Floor | 65% Chrysotile | Yes | Damaged |
| 12x12 Floor Tile | Elevator Lobby 17th Floor | 2% Chrysotile | No | Undamaged |
| Floor Tile Mastic | Elevator Lobby 17th Floor | 15% Chrysotile | No | Undamaged |
| Pipe Insulation (Fittings) | Elevator Mechanical Room 17th Floor | 30% Chrysotile | Yes | Undamaged |
| Fireproofing | Elevator Lobby 17th Floor | 65% Chrysotile | Yes | Damaged |
| 12x12 Floor Tile | Elevator Lobby 18th Floor | 2% Chrysotile | No | Undamaged |
| Floor Tile Mastic | Elevator Lobby 18th Floor | 15% Chrysotile | No | Undamaged |
| Pipe Insulation (Fittings) | Elevator Mechanical Room 18th Floor | 30% Chrysotile | Yes | Undamaged |
| Fireproofing | Elevator Lobby 18th Floor | 65% Chrysotile | Yes | Damaged |
| 12x12 Floor Tile | Elevator Lobby 19th Floor | 2% Chrysotile | No | Undamaged |
| Floor Tile Mastic | Elevator Lobby 19th Floor | 15% Chrysotile | No | Undamaged |
| Pipe Insulation (Fittings) | Elevator Mechanical Room 19th Floor | 30% Chrysotile | Yes | Undamaged |
| Fireproofing | Elevator Lobby 19th Floor | 65% Chrysotile | Yes | Damaged |
| 12x12 Floor Tile | Elevator Lobby Penthouse | 2% Chrysotile | No | Undamaged |
| Floor Tile Mastic | Elevator Lobby Penthouse | 15% Chrysotile | No | Undamaged |
| Pipe Insulation (Fittings) | Elevator Mechanical Room Penthouse | 30% Chrysotile | Yes | Undamaged |
| Fireproofing | Elevator Lobby Penthouse | 65% Chrysotile | Yes | Damaged |

**Conclusion**

It is Ambient Environmental, Inc’s. professional opinion that all ACBM can be managed in place. Maintenance, construction and repair personnel should be made aware the presence of ACBM and instructed not to disturb and/or damage these materials. Current federal and state regulations require any repair, renovation and/or demolition of any ACBM should be conducted only by workers and/or contractors who have been properly trained in the correct handling of asbestos. All asbestos work should proceed under the guidance or direction of an independent State Certified Asbestos Consultant. The ACBM identified during this three year re-inspection are in good condition and are not likely to pose an environmental or public health risk so long as the ACBM identified during this re-inspection are maintained in their present condition.

Ambient Environmental Inc. warrants that our services are performed, within the limits prescribed by the Asbestos Hazard Emergency Response Act (AHERA) Final Rule published on October 30, 1987 in the Federal Register under Title 40 CFR Part 763 Subpart E. Any recommendations in this report are professional opinions based solely on visual observations as described in this report. Opinions and recommendations presented herein apply to site conditions existing at the time of our investigation.

END OF EXHIBIT I

**EXHIBIT J**

**AOC Tool Control Policy** (**Effective October 1, 2009**) **Property Control in In-Custody Holding Areas**

**Background:**

The Facilities Management Unit is responsible for Facilities Services throughout In-Custody Holding areas. Successful provision of services requires technical personnel to access and operate in these areas and to bring all the tools, supplies, materials, parts, and equipment necessary to complete their work. Due to the unique nature of the environment, there is an extremely high risk that any of these items, if not properly controlled, will result in property damage, and/or personal injury to those who operate and occupy the areas, and to others who may in the course of normal operations, enter these areas.

**Policy:**

**In-Custody Holding Areas**: It is the policy of the Facilities Management Unit to control all tools, supplies, materials, parts, and equipment necessary to complete Facilities Services work in In-Custody Holding areas. This control will be achieved through implementation of the procedures and documentation below and will be reinforced through periodic evaluation.

**All other areas**: This policy applies equally to all other areas in which Court or Court-related or supported functions are conducted. These areas include but are not limited to conference rooms, secured Court staff areas, parking lots, administrative areas, hallways, conveyances, restrooms, and building infrastructure control rooms. Control in these areas shall be achieved to the greatest extent possible through an emphasis on awareness, vigilance, and on-the-spot remediation of deficiencies in property control and accountability.

Acceptance of employment in the Court environment in general implies a thorough understanding of the physical security risks involved when tools, supplies, materials, parts, and equipment are not properly controlled. Facilities Management Unit staff and outsourced service providers at all levels are responsible to support this policy through education and direct action. Failure to apply the fundamentals of this policy through action or inaction can result in property damage, and/or personal injury to anyone in the Court environment and can lead to appropriate action, up to and including the suspension of granted access rights to state courts.

**Goal:**

Eliminate risks of property damage, and/or personal injury to those who operate and occupy In-Custody Holding areas, and to others who may in the course of normal operations, enter these areas.

**Procedure:**

There are three basic phases in the accomplishment of Facilities Services in In-Custody Holding areas.

* Pre-entry: The basic activities in this phase include planning, scheduling, and coordination with In-Custody operational personnel, and assembly of tools, supplies, materials, parts, and equipment necessary to complete the work. This includes travel to the job site, arrival, and formal notification to In-Custody operational personnel that all preparations for work are completed. Establishment of positive control of tools, supplies, materials, parts, and equipment is accomplished.
* In Place: This phase includes activities carried out while inside the controlled In-Custody Holding areas. There shall be no intermediate exit/re-entry.
* Exit. In this phase, technicians have completed all work and are outside the controlled In-Custody Holding areas. Technicians inform In-Custody operational personnel of the job status, report any unusual circumstances, and complete necessary documentation to validate and record control of tools, supplies, materials, parts, and equipment.

**Minimal Operational Requirements:**

Proper control of tools, supplies, materials, parts, and equipment is achieved through inventory and documentation activities at each of the three phases as described above. Personnel must be vigilant to ensure:

* Careful determination and inventory of what is needed in the Pre-entry phase.
* Strict limitation on what is brought into the In-Place phase, to the minimum required property as shown on the Pre-Entry inventory.
* Validating that the same property is removed during the Exit phase.
* Accuracy and thoroughness in completing required documentation.

**Documentation:**

In order to record the actions required in the Minimal Operational Requirements, a simple localized form shall be developed and used at each occurrence of the procedure above.

* The form shall allow for recording of the date, place, and time of the inventory of property in the Pre-entry Phase and shall have a place to record the signatures of both the technician, (or lead technician), and the In-Custody operational personnel.
* The form shall allow for recording of the inventory of property in the Exit Phase and shall have a place to record the date, place, and time, and signatures of both the technician, (or lead technician), and the In-Custody operational personnel.
* If, during the Exit phase, it is discovered that one or more items shown on the Pre-entry inventory are missing, Facilities Services personnel shall immediately report the condition to the In-Custody operational personnel, remain at the job site, and comply with all direction as provided by the In-Custody operational personnel to resolve the deficiency. Regardless of the results of the effort to reconcile “Pre-Entry property inventories” to “Exit property inventories”, Facilities Services personnel shall record the details of the event on the form.
* Retain completed forms for at least 90 Days at each site.

**Compliance:**

Compliance with this policy is demonstrated with existence of written site specific guides, and existence and proper use of the required inventory forms.

**Site Specific Requirements:**

Because there are a very wide range of physical layouts, sizes, assignment of In-Custody operational personnel, Facilities Services resources, and In-Custody operating schedules and procedures, local Facilities Services management shall establish written site specific guides and procedures, but at a minimum must include a form to record the date, place, and time of inventories and validation signatures as shown in the Documentation section above.

**Site Specific Options:**

Decisions on whether or not to establish dedicated tool cribs, shadow boards, containers, property marking, lost/found property guidance or other control measures for tools, supplies, materials, parts, and equipment in support of general Facilities Services operations are local, and as such are outside the provisions of this policy. Such provisions shall not in any way take precedence over, or in any other manner interfere with, the requirements of this policy.

**Exemption:**

The procedures and documentation in this policy is not required when Facilities Services personnel are sworn peace officers and also serve in the capacity of In-Custody operational personnel.

**Periodic Evaluation:**

AOC personnel shall evaluate compliance with this policy upon random inspection of completed forms and also through random observation of the full cycle of the Pre-entry, In Place, and Exit phases of an occurrence.

END OF EXHIBIT J