UNIVERSITY OF MARYLAND, BALTIMORE REQUEST FOR MULTI-STEP BID FOR

REPAIRS AND MAINTENANCE OF ELEVATORS, DUMBWAITERS AND LIFTS

IFB88597WG

Issued: May 9, 2018

Issued by: University of Maryland, Baltimore

Strategic Sourcing and Acquisition Services

220 Arch Street, Suite 02-100

Baltimore, MD 21201 Attn: Wesley Gordon

(410) 706- 2427 (410) 706- 8577 (fax)

e-mail: wgordon@umaryland.edu

Technical/Price Offer Due: Monday, June 4, 2018, at 2:00 p.m.

University of Maryland, Baltimore

Strategic Sourcing and Acquisition Services

The Saratoga Building

220 Arch Street, Suite 02-100

Baltimore, MD 21201

Pre-Bid Conference: Wednesday, May 16, 2018 @ 9:00 a.m.

University of Maryland, Baltimore

The Saratoga Building

Strategic Sourcing and Acquisition Services

220 Arch Street, Rm. 02-100

Baltimore, MD 21201

<u>WARNING:</u> If it becomes necessary to revise any part of the Multi-Step Bid, amendment will be posted to the University's eBid Board website at http://www.umaryland.edu/procurement/. It is the responsibility of the bidder to check the website frequently until the closing date for amendments and questions and answers. An acknowledgement of the receipt of all amendments issued is required from all vendors submitting a bid.

SPECIAL ACCESS: Anyone requiring special assistance in obtaining a copy of the solicitation in attending a Pre-Bid Conference or in delivering a bid is requested to contact the Buyer listed above at least 48 hours in advance.

TABLE OF CONTENTS

IFB88597WG

INSTRUCTIONS TO BIDDER	SECTION 00100
INFORMATION AVAILABLE TO BIDDERS	SECTION 00200
TECHNICAL OFFER, EVALUATION, AND FORMS	SECTION 00300
SCOPE OF WORK	SECTION 00400

GENERAL PROVISION:

SPECIFICATIONS:

SPECIAL CONDITIONS

RATICLE 3

RATICLE 3

RATICLE 4

ATTACHMENT A

Technical Checklist (see Section 00300)
Bid/Proposal Affidavit
Key Personnel Forms and References
Firm Experience Forms and References
Company Profile Form
Annual Sales Form
Statement of Approach Form
Economic Benefit Form
Certification Regarding Investment Activities in IRAN
Acknowledgement of Amendment Form

ATTACHMENT B - BID PRICE DOCUMENTS

ATTACHMENT C - SCHEDULE B

ATTACHMENT D - CONTRACT FORMS

UMB Maintenance / Service Contract Contract affidavit

ATTACHMENT E – MINORITY BUSINESS ENTERPRISE (MBE) FORMS

EXHIBIT I – Ashland Industrial Services VTS Audit (includes: Master Deficiency List, Individual Reports, and Installation & Modernization Data)

SECTION 00100 INSTRUCTIONS TO BIDDER

SECTION 00100

INSTRUCTIONS TO BIDDERS FOR THE MAINTENANCE CONTRACT

A. **OBJECTIVES**

- 1. The objective of this Multi-Step Bid is to select qualified Contractor to perform maintenance, servicing, repairs and component replacements on the University VTSs, within the identified University of Maryland, Baltimore owned property unless noted otherwise in this document and as specified by authorized personnel of the University of Maryland, Baltimore. In addition, the Contractor will be required to provide proposals for renovation, upgrades and modernization projects under the terms of this contract.
 - (see Section 00400, for a more detailed description).
- 2. The initial Contract will be for the period of twelve (12) months, beginning August 1, 2018 and ending July 31, 2019. The University retains, at its unilateral discretion, the right to renew any resulting contract(s) for four (4) additional one year periods, with no increase in the Contractor's quoted rates, except as noted in Section 00400, Article 1 - "General Provisions", Paragraph C.
- 3. The University of Maryland, Baltimore (UMB), Strategic Sourcing and Acquisition Services will be the Issuing Office for this procurement.

В. INSTRUCTIONS FOR SUBMITTAL OF MULTI-STEP BIDS

For detailed information on preparation and submittal of Multi-Step Bids see Section 00300 "Technical Offer, Evaluation, and Forms".

C. **ISSUING OFFICE**

1. The Issuing Office is:

> University of Maryland, Baltimore Strategic Sourcing and Acquisition Services The Saratoga Building 220 Arch Street, Suite 02-100 Baltimore, Maryland 21201

Attn: Wesley Gordon

2. Contact information for the Issuing Office is:

> Direct: (410) 706-2427 Office: (410) 706-7880 (410) 706-8577 Fax:

Email: wgordon@umaryland.edu

NOTE: The Issuing Office is open from 8:00 a.m. to 5:00 p.m. weekdays.

3. The Issuing Office shall be the sole point of contact with the University for questions and inquiries regarding preparation and submittal of this Multi-Step Bid.

D. PRE-BID MEETING

1. A Pre-Bid Meeting will be held in conjunction with this Multi-Step Bid on May
16, 2018 at 9:00 a.m. in the University of Maryland, Baltimore, The Saratoga
Building, Strategic Sourcing and Acquisition Services, 220 Arch Street, Rm.
02-100, Baltimore, Maryland 21201.

UMB Campus Map: http://www.umaryland.edu/maps/

- 2. A walk through of the sites will be conducted as part of the Pre-Bid Meeting immediately following the meeting. This is the only opportunity for a site inspection which will consist of seeing the actual areas and a sampling of the areas where work is to be performed.
- 3. While attendance at the Pre-Bid Meeting is not mandatory, information presented may be very informative; therefore, all interested vendors are encouraged to attend in order to be able to better prepare acceptable Bids. Please contact the UMB Issuing Office if your firm plans to send representative. We ask that a maximum of two (2) representatives from each company attend this meeting.
- 4. Appropriate auxiliary aids and services for qualified individuals with disabilities will be provided upon request. Please contact Wesley Gordon at 410-706-2427 with specific requests at least 48 hours or 2 business days prior to the conference.

E. TERMINOLOGY

All references in this Request For Multi-Step Bid to Contractor, Proposer, Architect, and other person or persons are made relative to the singular person, male gender (e.g. "he", "him", "his", etc.) These are intended only as generic terms relative to number and gender, and are employed solely to simplify text and to conform to commonly used construction specifications language.

F. QUESTIONS AND INQUIRIES

- 1. Questions, request for clarification or additional information must be submitted in writing and directed to the individual referenced with the Issuing Office, on or before May 23, 2018 at 4:00pm. Inquiries will receive a written reply. All questions and answers will be posted to the UMB eBid Board at http://www.umaryland.edu/procurement/, but without identification of the inquirer. Failure to request such clarification is a waiver to any claim by the Bidder for expense made necessary by reason of later interpretation of the Bid documents by the University.
- 2. Items affecting the scope of work or conditions of the contract shall be subject to the conditions of an Amendment (see paragraph W below).

G. TECHNICAL OFFER AND PRICE DUE DATE AND TIME

- 1. One (1) original, plus five (5) copies (for a total of 6), of a Bidder's Technical Offer and One (1) original Bid Pricing in separate marked envelopes must arrive at the Issuing Office by June 4, 2018 by 2:00 p.m. in order to be considered. Contractors are requested to clearly mark the original copy as such.
- 2. Access to the Issuing Office is <u>only</u> available to the public by elevator. There are two passenger elevators serving the entire building and bidders will be required to sign in at the security desk before entering the elevator. Bidder's hand delivering Multi-Step Bids must allow sufficient time once inside the building to insure timely receipt by the Issuing Office. Bidder's mailing Multi-Step Bids must allow sufficient mail delivery time to insure timely receipt by the Issuing Office.
- 3. <u>LATE BIDS CANNOT BE ACCEPTED.</u> Bids are to be delivered to Strategic Sourcing and Acquisition Services, Room 02-100, 220 Arch Street, Baltimore, MD. 21201. UMB recommends against use of mail or delivery services, which will not guarantee delivery directly to Room 02-100. Bids delivered to the campus central mail facility or to locations other than Room 02-100 will <u>not</u> be considered "received" by the Strategic Sourcing and Acquisition Services until they arrive at Room 02-100. UMB will not waive delay in delivery resulting from need to transport a bid or proposal from another campus location, or error or delay on the part of a carrier.

H. SITE INVESTIGATION

By submitting a bid the vendor acknowledges that he has investigated and satisfied himself as to the conditions affecting the work, including but not restricted to those bearing upon transportation, disposal, handling and storage of materials, availability of labor, water, and electric power. Any failure by the Contractor to acquaint himself with the available information will not relieve him from responsibility for estimating properly the cost of successfully performing the work. The University shall not be responsible for any conclusions or interpretations made by the Contractor of the information made available by the University.

I. BID SECURITY/PERFORMANCE AND PAYMENT BONDS

NOT APPLICABLE.

J. RIGHT TO REJECT BIDS AND WAIVE INFORMALITIES

The University reserves the right to reject any and all bids or to accept any bid in the interest of the State of Maryland. For the same reason, the University reserves the right to waive any technicality or minor irregularity in a Multi-Step Bid.

K. <u>BIDS FIRM FOR 120 DAYS</u>

All bid prices shall be firm for one hundred twenty (120) calendar days from the Multi-Step Bid Price due date. This period may be extended by written mutual agreement between the Bidder and the University.

L. <u>CANCELLATION OF THE MULTI-STEP BID</u>

The University may cancel this Multi-Step Bid, in whole or in part, at any time.

M. MULTI STEP BID ACCEPTANCE

The University reserves the right to accept or reject any and all bids, in whole or in part, received as a result of this Multi-Step Bid; or to waive minor irregularities. Further, the University reserves the right to make a whole award, multiple awards, a partial award, or no award at all. Bidders judged by the procurement officer not to be responsible or offerers whose proposals are classified as not reasonably susceptible of being selected for award shall be so notified. The University reserves the right to increase or decrease the quantities of any location, materials, equipment, supplies or services.

N. FORMATION OF AGREEMENT/CONTRACT OR ISSUANCE OF PURCHASE ORDER

The Contract to be entered into as a result of this IFB (the "Contract") shall be by and between the bidder as contractor and the University in the form of either a University **Purchase Order** and/or **Contract** and shall contain the provisions included herein as Attachment C (Schedule B) or Attachment D (UMB Maintenance/Service Contract) as well as any additional terms required by the University of Maryland, Baltimore or the State of Maryland. By submitting an offer, the Bidder warrants that they have reviewed Attachment D (UMB Maintenance/Service Contract) and will execute a contract on that form upon request by University of Maryland, Baltimore.

O. <u>INCURRED EXPENSES</u>

The University will not be responsible for any costs incurred by any vendor in preparing and submitting a Bid, delivery of or return of representative samples (if applicable).

P. <u>ECONOMY OF PREPARATION</u>

Multi-Step Bids should be prepared simply and economically, providing a straightforward, concise description of the bidder's offer to meet the requirements of the Multi-Step Bid.

Q. <u>MINORITY BUSINESS ENTERPRISE NOTICE</u>

1. Establishment of Goal and Subgoals.

An overall MBE subcontractor participation goal of <u>30%</u> for each renovation, upgrades and modernization task orders that exceeds \$200,000 has been established for this procurement.

In addition, the following subgoals have been established for this procurement for any task orders that exceeds \$200,000:

- (African-American subgoal percentage) <u>8</u>% for African-American MBEs,
- (Asian-American subgoal percentage) <u>3</u>% for Asian-American MBEs,
- (Hispanic-American subgoal percentage) <u>3</u>% for Hispanic-American MBEs

Notwithstanding any subgoals established above, the Contractor is encouraged to use a diverse group of subcontractors and suppliers from any/all of the various MBE classifications to meet the remainder of the overall MBE participation goal.

2. **Attachments E-1 to E-6:** The following Minority Business Enterprise participation instructions, and forms are provided to assist Bidders/Offerors:

Attachment E-1A	MBE Utilization and Fair Solicitation Affidavit & MBE Participation Schedule (must submit with Bid/Proposal)
Attachment E-1B	Waiver Guidance
Attachment E-1C	Good Faith Efforts Documentation to Support
	Waiver Request
Attachment E-2	Outreach Efforts Compliance Statement
Attachment E-3A	MBE Subcontractor Project Participation
	Certification
Attachment E-3B	MBE Prime Project Participation Certification
Attachment E-4A	Prime Contractor Paid/Unpaid MBE Invoice Report
Attachment E-4B	MBE Prime Contractor Report
Attachment E-5	Subcontractor/Contractor Unpaid MBE Invoice
	Report
Attachment E-6	Liquidated Damages

- 3. A Bidder/Offeror shall include with its Bid/Proposal a completed MBE Utilization and Fair Solicitation Affidavit (**Attachment E-1A**) whereby:
 - (a) The Bidder/Offeror acknowledges the certified MBE participation goal and commits to make a good faith effort to achieve the goal and any applicable subgoals, or requests a waiver, and affirms that MBE subcontractors were treated fairly in the solicitation process; and
 - (b) The Bidder/Offeror responds to the expected degree of MBE participation, as stated in the solicitation, by identifying the specific commitment of certified MBEs at the time of Bid/Proposal submission. The Bidder/Offeror shall specify the percentage of total contract value associated with each MBE subcontractor identified on the MBE participation schedule, including any work performed by the MBE prime (including a prime participating as a joint venture) to be counted towards meeting the MBE participation goals.

(c) A Bidder/Offeror requesting a waiver should review Attachment E-1B (Waiver Guidance) and E-1C (Good Faith Efforts Documentation to Support Waiver Request) prior to submitting its request.

If a Bidder/Offeror fails to submit a completed Attachment E-1A with the Bid/Proposal as required, the Procurement Officer shall determine that the Bid is non-responsive or the Proposal is not reasonably susceptible of being selected for award.

- 4. Bidders/Offerors are responsible for verifying that each of the MBE(s) (including any MBE primes and/or MBE primes participating in a joint venture), selected to meet the goal and any subgoals and subsequently identified in **Attachment E-1A** is appropriately certified and has the correct NAICS codes allowing it to perform the committed work.
- 5. Within ten (10) Working Days from notification that it is the recommended awardee or from the date of the actual award, whichever is earlier, the Bidder/Offeror must provide the following documentation to the Procurement Officer.
 - (a) Outreach Efforts Compliance Statement (Attachment E-2).
 - (b) MBE Prime/Subcontractor Project Participation Certification (Attachment E-3A/3B).
 - (c) If the recommended awardee believes a waiver (in whole or in part) of the overall MBE goal or of any applicable subgoal is necessary, the recommended awardee must submit a fully-documented waiver request that complies with COMAR 21.11.03.11.
 - (d) Any other documentation required by the Procurement Officer to ascertain Bidder/Offeror responsibility in connection with the certified MBE subcontractor participation goal or any applicable subgoals.

If the recommended awardee fails to return each completed document within the required time the Procurement Officer may determine that the recommended awardee is not responsible and, therefore, not eligible for Contract award. If the Contract has already been awarded, the award is voidable.

6. A current directory of certified MBEs is available through the Maryland State Department of Transportation (MDOT), Office of Minority Business Enterprise, 7201 Corporate Center Drive, Hanover, Maryland 21076. The phone numbers are (410) 865-1269, 1-800-544-6056, or TTY (410) 865-1342. The directory is also available on the MDOT website at http://mbe.mdot.state.md.us/directory/. The most current and up-to-date information on MBEs is available via this website. Only MDOT-certified MBEs may be used to meet the MBE subcontracting goals.

- 7. The Contractor, once awarded a Contract, will be responsible for submitting or requiring its subcontractor(s) to submit the following forms to provide the State with ongoing monitoring of MBE Participation:
 - (a) **Attachment E-4A** (Prime Contractor Paid/Unpaid MBE Invoice Report).
 - (b) **Attachment E- 4B** (MBE Prime Contractor Report)
 - (c) **Attachment E-5** (MBE Subcontractor/Contractor Unpaid MBE Invoice Report).
- 8. A Bidder/Offeror that requested a waiver of the goal or any of the applicable subgoals will be responsible for submitting the Good Faith Efforts Documentation to Support Waiver Request (Attachment E-1C) and all documentation within ten (10) Working Days from notification that it is the recommended awardee or from the date of the actual award, whichever is earlier, as required in **COMAR** 21.11.03.11.
- 9. All documents, including the MBE Utilization and Fair Solicitation Affidavit & MBE Participation Schedule (**Attachment E-1A**), completed and submitted by the Bidder/Offeror in connection with its certified MBE participation commitment shall be considered a part of the resulting Contract and are hereby expressly incorporated into the Contract by reference thereto. All of the referenced documents will be considered a part of the Bid/Proposal for order of precedence purposes (see Contract **Attachment D**, Section 1).
- 10. The Bidder/Offeror is advised that liquidated damages will apply in the event the Contractor fails to comply in good faith with the requirements of the MBE program and pertinent Contract provisions. (see Contract **Attachment D**, Section 1).
- 11. As set forth in COMAR 21.11.03.12-1(D) when a certified MBE firm participates on a contract as a prime contractor (including a joint-venture where the MBE firm is a partner), a procurement agency may count the distinct, clearly defined portion of the work of the contract that the certified MBE firm performs with its own work force towards fulfilling up to fifty-percent (50%) of the MBE participation goal (overall) and up to one hundred percent (100%) of not more than one of the MBE participation sub-goals, if any, established for the contract.

In order to receive credit for self-performance, an MBE prime must list its firm in Section 3A of the MBE Participation Schedule (**Attachment E-1A**) and include information regarding the work it will self-perform. For the remaining portion of the overall goal and the sub-goals, the MBE prime must also identify other certified MBE subcontractors (see Section 3B of the MBE Participation Schedule (**Attachment E-1A**) used to meet those goals. If dually-certified, the MBE prime can be designated as only one of the MBE classifications but can self-perform up to 100% of the stated sub-goal.

As set forth in COMAR 21.11.03.12-1, once the Contract work begins, the work performed by a certified MBE firm, including an MBE prime, can only be counted towards the MBE participation goal(s) if the MBE firm is performing a commercially useful function on the Contract.

- 12. With respect to Contract administration, the Contractor shall:
 - (a) Submit by the 10th of each month to the Agency's designated representative:
 - (i) A Prime Contractor Paid/Unpaid MBE Invoice Report
 (Attachment E-4A) listing any unpaid invoices, over 45
 days old, received from any certified MBE subcontractor,
 the amount of each invoice and the reason payment has not
 been made; and
 - (ii) (If Applicable) An MBE Prime Contractor Report (Attachment E-4B) identifying an MBE prime's selfperforming work to be counted towards the MBE participation goals.
 - (b) Include in its agreements with its certified MBE subcontractors a requirement that those subcontractors submit by the 10th of each month to the Department's designated representative an MBE Subcontractor Paid/Unpaid Invoice Report (Attachment E-5) that identifies the Contract and lists all payments to the MBE subcontractor received from the Contractor in the preceding 30 days, as well as any outstanding invoices, and the amounts of those invoices.
 - (c) Maintain such records as are necessary to confirm compliance with its MBE participation obligations. These records must indicate the identity of certified minority and non-minority subcontractors employed on the Contract, the type of work performed by each, and the actual dollar value of work performed. Subcontract agreements documenting the work performed by all MBE participants must be retained by the Contractor and furnished to the Procurement Officer on request.
 - (d) Consent to provide such documentation as reasonably requested and to provide right-of-entry at reasonable times for purposes of the State's representatives verifying compliance with the MBE participation obligations. Contractor must retain all records concerning MBE participation and make them available for State inspection for three years after final completion of the Contract.
 - (e) Upon completion of the Contract and before final payment and/or release of retainage, submit a final report in affidavit form and

- under penalty of perjury, of all payments made to, or withheld from MBE subcontractors.
- (f) The liquidated damages provisions of Attachment E-6 for nonconstruction procurements shall apply for all contracts awarded with MBE participation goals.

R. MODIFICATIONS AND WITHDRAWAL OF MULTI-STEP BIDS

- 1. Withdrawal of, or modifications to, Technical Offers and/or Bid Prices are effective only if written notice thereof is filed to the Issuing Office prior to the time Technical Offers or Bid Prices are due. A notice of withdrawal or modification to a Technical Offer or Bid Price must be signed by an officer with the authority to commit the company.
- 2. No withdrawal or modifications will be accepted after the due date for this procurement.

S. <u>TELEGRAPHIC/FACSIMILE BID MODIFICATIONS</u>

Vendors may modify their Bids by telegraphic or facsimile communication at any time prior to the due date and time set to receive Bids provided such communication is received by the University prior to such time and, provided further, the University is satisfied that a written confirmation of the modification with the signature of the bidder was mailed prior to the time and date set to receive Bids. The communication should not reveal the Bid price but should provide the addition or subtraction or other modification so that the final prices, percent or terms will not be known to the University until the sealed Bid is opened. If written confirmation is not received within two (2) days from the scheduled Bid opening time, no consideration will be given to the modification communication. No telephone, telegraphic, or facsimile price Bids will be accepted.

T. <u>FINANCIAL DISCLOSURE BY PERSONS DOING BUSINESS WITH THE STATE</u>

Bidders providing materials, equipment, supplies or services to the University must comply with Section 13-221 of the State Finance and Procurement Article, of the Annotated Code of Maryland which requires that every business which enters into contracts, leases or other agreements with UMB and receives in the aggregate \$100,000, or more, during a calendar year shall, within thirty (30) days of the time when the \$100,000 is reached, file with the Secretary of State a list containing the names and address of its resident agent, each of its officers, and any individual who has beneficial ownership of the contracting business.

U. <u>BID AFFIDAVIT</u>

The Proposal/Bid Affidavit enclosed in this document (see Attachment A) must be executed by each responding Contractor and submitted with their Technical Offer.

V. <u>ARREARAGES</u>

By submitting a response to this solicitation, the proposers represent that it is not in arrears in the payment of any obligation due and owing the State of Maryland, including the payment of taxes and employee benefits, and that it shall not become so delinquent during the term of the contract.

W. <u>MULTIPLE/ALTERNATIVE BIDS</u>

Bidders may <u>not</u> submit more than one (1) bid in response to this request, nor may bidders submit an alternate to this bid.

X. AMENDMENT

- 1. If it becomes necessary to revise any part of the Multi-Step Bid, an amendment will be made and posted to the University's eBid Board at http://www.umaryland.edu/procurement/. It is the responsibility of the vendor to check the website frequently until the opening date for addendums, amendments and changes. An acknowledgement of the receipt of all amendments, addenda, and changes issued are required from all vendors submitting a Bid. This acknowledgement of the receipt must be included with your response. Failure to acknowledge receipt with bid submission shall render the bid non responsive and it shall not be considered. An Acknowledgement of Receipt of Amendment form is provided in this bid (see Attachment A).
- 2. Oral explanations or instructions will not be binding; only written addendum and/or amendments will be binding.

Y. RECIPROCITY

Not Applicable.

Z. **QUALIFICATIONS**

The University reserves the right to require that the Contractor demonstrate that it has the skills, equipment and other resources to satisfactorily perform the nature and magnitude of work necessary to complete the project within the proposed contract schedule.

AA. PUBLIC INFORMATION ACT

Offerors must specifically identify those portions of their Bids, if any, which they deem to contain confidential, proprietary information or trade secrets and must provide justification why such material should not, upon Invitation, be disclosed by the University under the Public Information Act, Part III, Title 4, State Government Article, Annotated Code of Maryland.

Vendors must clearly indicate each and every section that is deemed to be confidential, proprietary or a trade secret (it IS NOT sufficient to preface your Bid with a proprietary statement).

BB. MULTI-STEP RESPONSE MATERIALS

All written materials submitted in response to this Multi-Step Bid become the property of the University and may be appended to any formal documentation, which would further define or expand the contractual relationship between the University and the successful vendor(s).

CC. PROCUREMENT REGULATIONS

This Multi-Step Bid and any resulting contract shall be governed by the USM Procurement Policies and Procedures and the State Finance and Procurement Article of the Annotated Code of Maryland and by State Procurement Regulations, Code of Maryland Regulations Title 21, as applicable.

DD. DEBRIEFING OF UNSUCCESSFUL BIDDERS

A debriefing of an unsuccessful bidder shall be conducted upon written request submitted to the Procurement Officer within ten (10) days on which the bidder knew, or should have known its bid was unsuccessful. The debriefing shall be limited to a discussion of the unsuccessful bidder's technical offer only and shall provide information on areas in which it was deemed weak or deficient.

EE. TERMS AND CONDITIONS OF CONTRACT

By submitting a response to this solicitation, a firm shows acceptance of all terms and conditions contained in this bid document.

FF. MARYLAND PUBLIC ETHICS LAW, TITLE 15

The Maryland Public Ethics Law prohibits, among other things: State employees or officials (and in some cases, former employees) and businesses in which such an individual is employed or holds a financial interest from (i) submitting a bid or proposal, (ii) negotiating a contract, and (iii) entering into a contract with the governmental unit with which the individual is affiliated per the Maryland Code, State Government Article, § 15-502.

If the bidder/offeror has any questions concerning application of the Sate Ethics Law to the bidder/offerors participation in this procurement, it is incumbent upon the bidder/offeror to seek advice from the State Ethics Commission Office: 45 Calvert Street, 3rd Floor, Annapolis, MD. 21401, Office: (410) 260-7770 or Toll Free: 877-669-6085.

The procurement officer may refer any issue raised by a bid or proposal to the State Ethics Commission. The procurement officer may require the bidder/offeror to obtain advice from the State Ethics Commission and may reject a bid or proposal that would result in a violation of the Ethics Law.

The resulting contract is cancelable in the event of a violation of the Maryland Public Ethics Law by the vendor or any State of Maryland employee in connection with this procurement.

GG. Mandated Contractor Reporting of Suspected Child Abuse & Neglect (Short Form)

Maryland law contains mandatory reporting requirements for all individuals who suspect child abuse or neglect. Contractors performing work on campus also must comply with USM Board of Regents (BOR) VI-1.50 – *Policy on the Reporting of Suspected Child Abuse and Neglect*, as well as the UMB *Procedures for Reporting Suspected Child Abuse and Neglect*. A copy of the USM Policy and UMB Procedures are available at: http://www.umaryland.edu/equalaccess/report-a-concern/report-suspected-child-abuse-or-neglect/

The Policy and Procedures are incorporated herein.

UMB reserves the right to terminate this contract if Contractor fails to comply with the above-referenced policy or procedures, or if, in the judgment of UMB, termination is necessary to protect the safety and welfare of children who come into contact with the UMB community.

HH. <u>eMARYLAND MARKETPLACE</u>

The successful bidders under this Multi-Step Bid must be registered on the eMaryland Marketplace prior to receiving a contract award. The instructions for registration can be found on the eMM website at https://emaryland.buyspeed.com/bso/

II. SMALL BUSINESS

Not applicable.

JJ. <u>CERTIFICATION REGARDING INVESTMENT ACTIVITIES IN IRAN</u>

Offerors must complete, sign and return in Attachment A, Certification Regarding Investment Activities in Iran with their technical response. Companies appearing on the Investment Activities In Iran list are ineligible for award.

END OF SECTION 00100

SECTION 00200 INFORMATION AVAILABLE TO BIDDER

SECTION 00200 INFORMATION AVAILABLE TO BIDDERS

A. <u>CONTRACT DOCUMENTS</u>

- 1. Contract Documents consisting of the following:
 - a. Procurement Specification (Sections 00100, 00200, 00300, and 00400),
 - b. Attachment A, Attachment B, Attachment C and the Contract documents (i.e. contract, Contract Affidavit, etc. found in Attachment D), Exhibit I and any applicable Amendment(s) which may be issued prior to the Technical Offer Due Date.
- 2. A complete set of bid documents all of which describe the scope of work to be furnished is available to all interested parties on the UMB Strategic Sourcing and Acquisition Services eBid Board website http://www.umaryland.edu/procurement/ at no charge.
- 3. All of these materials will be included in the Contract, which the University awards as a result of this Multi-Step Bid and will be among the Contract documents. The bidder by submitting its bid agrees that, if awarded the Contract, it will be bound under the Contract to all the terms and conditions of the Contract Documents. By submitting an offer, the Contractors warrant that they have reviewed Attachment D (Contract) and will execute a contract on that form upon invitation by University of Maryland, Baltimore.

B. GENERAL INFORMATION FOR BIDDERS

- 1. Bids must be made in the official name of the firm or individual under whom business is conducted (showing official business address) and must be signed by a duly authorized person.
- 2. Each bidder must furnish all information required by the IFB. Erasures or other changes must be initialed by the person signing the bid. Bids signed by an agent of the corporation must be accompanied by evidence of their authority.
- 3. This Invitation for Bids creates no obligation on the part of the University to award the contract or to compensate offerors for Bid preparation expenses.

C. PRE-BID CONFERENCE

1. A Pre-Bid Conference will be conducted for all interested parties early in the Multi-Step Bid phase of the project as indicated in Section 00100 Instructions to Bidders.

- 2. This is the only scheduled site visit. Attention is directed to the following provisions in Section 00100:
 - F. Questions and Inquiries
 - G. Technical Offer and Price Due Date and Time
 - H. Site Investigation W. Amendment

END OF SECTION 00200

SECTION 00300 TECHNICAL OFFER, EVALUATION, AND FORMS

SECTION 00300 TECHNICAL OFFER, EVALUATION, AND FORMS

A. TRANSMITTAL LETTER

A transmittal letter prepared on the Offeror's business stationery must accompany the Technical Offer. The purpose of this letter is to transmit the Bid; therefore, it should be brief, but shall list all items contained within the Technical Offer. The letter must be signed by an individual who is authorized to bind his firm to all statements, including services and prices, contained in the Technical Offer.

B. <u>SIGNING OF FORMS</u>

The Technical Offer & Bid Price, if submitted by an individual, shall be signed by the individual; if submitted by a partnership, they shall be signed by such member or members of the partnership as have authority to bind the partnership; if submitted by a corporation, they shall be signed by an officer, and attested by the corporate secretary or an assistant corporate secretary. If not signed by an officer there must be attached a copy of that portion of the by-laws or a copy of a board resolution, duly certified by the corporate secretary, showing the authority of the person so signing on behalf of the corporation. Signatures shall be under seal, i.e.: indicated by the word "(Seal)" following signature of individual and partner bidders, and indicated by affixing the Corporate Seal at corporate signatures.

C. TWO-VOLUME SUBMITTAL

The selection procedure for this procurement of this contract requires that a review of the Technical Offer of the Contractors is to be conducted by an UMB Evaluation Committee prior to the opening of the pricing documents. The Technical Offer form(s) shall be filled out in ink or typed. Any erasures and/or alterations shall be initialed in ink by the signer.

1. Volume I - Technical Offer

This volume should be prepared in a clear and precise manner. All appropriate points of the Multi-Step Bid solicitation must be addressed. The criteria for this volume are listed in Section 00300, Paragraph D. Only those Contractors who's Technical Offer has achieved the minimum or better technical score, will have their Bid Pricing opened. **The Technical Offer must be submitted in a sealed envelope**. The envelope shall have the Bidder's name; the project name and project number prominently displayed, together with the words, "TECHNICAL OFFER."

2. Volume II - Bid Price

a. As explained previously in Section 00300, upon completion of the technical evaluation the Bid Price will be opened for only those Contractors achieving the required minimum or better technical score. Those firms not achieving the

minimum technical score, their Bid Price will be returned unopened.

b. The Bid Price must be submitted in a <u>sealed</u> envelope. The Bid Price envelope shall have the Bidder's name, the project name and the project number prominently displayed, together with the words "BID PRICE". It should consist of the Bid Price Documents.

D. <u>TECHNICAL OFFER CRITERIA</u>

The following information <u>must</u> be furnished in the Technical Offer portion of the Multi-Step Bid. <u>Failure to include any of the items noted below in your technical offer may result in the offer being considered non-responsive.</u> The criteria (found in Attachment A) are listed in order of importance. Bidders are to compile their Technical Offer Submission in this same order.

1. KEY PERSONNEL & REFERENCES

1.1 <u>KEY PERSONNEL</u>: Within this category, the named positions are defined below. These Key people must be direct employees of the bidding firm.

Contract Manager: This person will be responsible for the overall management of this contract and be the prime contact person for the University. May also provide onsite management as needed: supervision of the trade Contractors as needed, reviewing the project in the field when required with a University's Project Manager or designee and be the channel for inquiries concerning work in progress (i.e. maintain project schedule) and work to be started under this contract. The University will accept only one (1) person in this role.

<u>Lead Mechanic:</u> Is an elevator mechanic, licensed by Maryland DLLR who is a direct employee of the bidding firm. The lead mechanic will be on site to supervise all scheduled work, assist and coordinate with the University's Project Manager or designee all activities and maintenance for the University, and is responsible to ensure that work is completed competently and in a timely manner. Lead elevator mechanic must have a minimum of 10 years' experience as an elevator mechanic with 5 years' experience as lead mechanic. <u>Firm may submit no more than one (1) person for this position.</u>

<u>Mechanics</u>: Is an elevator mechanic, licensed by Maryland DLLR who is a direct employee of the bidding firm. The mechanic will be on site for scheduled work and is responsible to ensure that work is completed competently and in a timely manner. The elevator mechanic must have a minimum of 5 years' experience as an elevator mechanic. <u>Firm may submit no more than two (2) personnel for this position.</u>

Adjustor: Is a senior troubleshooter, licensed by Maryland DLLR as an elevator mechanic, who is a direct employee of the bidding firm. The adjuster to assist the on-site employees in the event that they or the University's Project Manager feel that they need technical assistance. Once called, the adjuster shall stay with the job and shall respond to all future calls until the University's Project Manager is satisfied that the problem has been solved. The elevator adjustor must have a minimum of 10 years' experience as an elevator mechanic with at least a minimum of 5 years in the elevator adjustor role. Firm may submit no more than one (1) person for this position.

NOTE: The Key Personnel Forms were developed for use on this procurement to ensure that all requested information is provided. <u>Bidders are required to utilize the University's forms</u>; it is the Bidder's responsibility to provide all requested information within his Technical Offer.

NOTE: Personnel Commitment: By submitting these names for consideration, the Bidder is <u>committing</u> these people to UMB for this maintenance, servicing, repairs and component replacements contract, if awarded. No personnel changes will be permitted without written authorization from the University.

Provide the name of the Contract Manager, Lead Mechanic, Mechanics and Adjustor to be assigned to this contract, if awarded, and complete the Key Personnel Forms on each Key Personnel inclusive of the following information:

- **Technical Training/Educational background** inclusive of degrees- majors, apprenticeships and licenses; dates achieved; and the granting institutions and/or associations.
- Work experience with the bidding firm inclusive of duration (with specific calendar years noted) of employment and position(s) held;
- **Work experience with prior employers**, durations (with specific calendar years noted) of employment and position(s) held;

- Key Personnel References

Provide three (3) references, preferably the contracts/projects references listed in #1.2 below, successfully been completed within the past five (5) years from issue date of bid on the proposed key person inclusive of contact person, phone number in the space provided on the Key Personnel Forms.

Such references are to be **contract/project references not employment references**; that is, the University is interested in speaking to an individual with the contract/project location (i.e. Project Manager, Owner, Maintenance staff, etc.) that the key person deals with on a daily/regular basis regarding the key person's performance on a particular contract/project.

Such references are to be from different contracts/projects; that is, only one reference per contract/project is allowed as well, only one (1) reference may be within the University of Maryland, Baltimore.

In addition, the University reserves the right to check other sources available. The University will hold all references in the strictest of confidence.

Please insure that the information is accurate and that the reference named can speak to the **individual's performance in the role to be assigned on this contract**.

1.2 SIMILAR CONTRACT/PROJECT EXPERIENCE:

(page 4 of the Key Personnel Forms) similar to UMB's maintenance, servicing, repairs and component replacements on the University VTSs, including similar in scope, nature and complexity of the outlined bid, size and setting (urban environment and higher education), preferably the projects listed in #2 below with a minimum of three (3) projects to be listed and successfully been completed within the past five (5) years from issue date of bid.

Please include the following:

- a) Contract/Project Name and address (location)
- b) Contract/Project Description: Brief description of each contract/project including type of work performed (i.e. preventative maintenance, repairs, inspections, testing, troubleshooting, etc.), and setting (occupied setting, urban environment, higher education, etc.). Contract/Project was under a T&M, Not to Exceed, etc.
- c) Key Person's role on each selected contract/project.
- d) Dollar amount of contract/project.

- e) The start date and completion date or projected completion of the contract/project;
- f) Reference Contact/Project: <u>valid</u> name and telephone number

2. FIRM EXPERIENCE AND REFERENCES:

2.1 FIRM EXPERIENCE:

Complete the Proposer's Contract/Project Experience Form (found in Attachment A), for three (3) contracts/projects, **successfully been completed within the past five (5) years from issue date of bid,** which are similar to work to be performed under this contract inclusive of: scope, nature and complexity of the outlined bid, size and setting (urban environment and higher education) and site constraints.

In order to be considered as experience, these projects **must** be completed by the bidding firm.

Please Note: If your firm is a local office of a parent company, such experience must be performed by the local office in order to be considered. These contracts/projects should demonstrate your firm's experience with work in occupied buildings and higher education. As indicated on the form, the following information is to be provided for each project as follows:

a. Contracts/Projects:

- i. Current elevators under maintenance agreements in the Baltimore Area.
- ii. Specific <u>maintenance projects</u> of elevators in a public facility similar to a University or large campus installation. List no less than three (3) jobs.

Description: Brief description of each contract/project including type of work performed (i.e. preventative maintenance, repairs, inspections, testing, troubleshooting, etc.), and setting (occupied setting, urban environment, higher education, etc.). Contract/Project was under a T&M, Not to Exceed, etc.

- iii. Key Person's role: on each selected contract/project
- iv. The dollar amount of this contract/project;

- v. The start date and completion date or projected completion of the contract/project;
- vi. Reference Contact/Project: <u>valid</u> name and telephone number

b. Renovation or Installation Projects:

The proposer must have sufficient engineering and technical expertise to perform complete renovations and replacement of major components on single and multiple VTS units. The proposer shall submit a minimum of three (3) renovations or new installation projects involving the installation and/or replacement of major components and costing the customer \$250,000 or more.

- i. Project Name and address (location)
- ii. Project description
- iii. Dollar amount of project.
- iv. The start date and completion date or projected completion of the project;
- v. Reference: <u>valid</u> name and telephone number

NOTE: Firm Experience noted should demonstrate the Bidder's knowledge and ability to perform similar work in scope to the size, nature and complexity of the outlined bid and in an urban environment and higher education environment, with similar site constraints.

The references of customers of previous similar work provided will be checked by the University. All references should include a contact person who can comment on your firm's ability to do similar work.

NOTE: It is imperative that reference contact names and phone numbers be given for the contracts/projects listed and be accurate. In addition, the University reserves the right to check other sources available. The University will hold references in the strictest of confidence.

3. COMPANY PROFILE:

Complete the **Company Profile** Form included in the bid documents.

Please be sure to include a brief, but **informative**, history of your firm (including engineering and manufacturing capabilities, maintenance areas covered, and

elevators under service contracts), organizational chart of both the <u>parent</u> company and the <u>local branch office</u> which would service the University, **including** bonding capacity. Complete the Annual Sales Volume form for the last three (3) years (2015, 2016 and 2017) as part of your company's profile

4. **STATEMENT OF APPROACH:**

Provide a detailed but concise, overall description (developed in response to this bid) of **how** your firm will organize and manage this contract and **how** work will be performed by your firm per the scope of services/work contained in the bid documents.

The information to be provided under this category is to include, but not limited to, the following:

- a. Describe experience with providing maintenance on equipment, machines and controls to the various VTS units at the University of Maryland, Baltimore.
- b. Describe how your mechanics and/or maintenance employees carry out safety practices before performing any kind of maintenance on UMB's VTS units.
- c. Describe proposed capabilities and systems used to monitor and report the execution of the proposed maintenance contract.
 - i. Elevator Contractor shall have on-line maintenance reporting capability for full access by the UMB. Provide overview of system and give brief description of available reports. If Elevator Contractor does not have the capability for on-line maintenance reporting, provide information listing documentation available to verify contract requirements for submission to UMB.
 - ii. Elevator Contractor should include any equipment or systems that will be used to verify and define the efforts of the maintenance contract. Maintenance management software, electronic job tasking and electronic notification for completion of job task are of particular interest.
 - iii. Elevator Contractor should include any equipment or systems that can be used to accent the efforts of the maintenance contract. Remote monitoring capabilities and systems for automatic notification of maintenance task completion are of particular interest.

- d. Describe maintenance schedule and proposed tasks for the completion of the required preventive maintenance hours listed in the equipment schedule. Proposed preventive maintenance hours are a minimum, and any additional hours or repairs required to adhere to the maintenance requirements as defined in the contract documents are the responsibility of the successful Contractor. Include the following items:
 - i. Weekly, Monthly, Quarterly, Annual tasks for geared and gearless traction passenger elevators.
 - ii. Weekly, Monthly, Quarterly, Annual tasks for geared and gearless traction service elevators.
 - iii. Weekly, Monthly, Quarterly, Annual tasks for hydraulic elevators.
- e. Describe engineering capabilities. Proposal should include information documenting experience in elevator manufacturing, modernization, design ability, and technical centers dedicated to maintenance and repair of elevator equipment not manufactured by the Elevator Contractor. Include the following items:
 - i. Engineering facilities in USA.
 - ii. Registered engineers on staff.
- f. Describe spare parts supply and network of obtaining and providing for OEM parts and supplies. Proposal should include emphasis on elevators parts and technical support for all elevator and machine types included in the UMB VTSs fleet. Include the following information:
 - i. Suppliers for elevator parts
 - ii. Suppliers for elevator circuit board repair.
 - iii. Test tools or software for laptops required for maintenance of proprietary elevator and elevator system components must be addressed. One unit must be on-site and assigned to the project to facilitate maintenance efforts. All test tools are to remain property of the Contractor.
 - iv. Proposed spare parts inventory. Contractor shall provide the proposed spare parts for the project. Parts inventory should represent required items to keep unnecessary

downtime to a minimum. Insufficient spare parts inventory can result in disqualification for this item.

g. Particular challenges which this contract presents and how your firm would address these challenges.

5. ECONOMIC BENEFIT:

Provide a detailed, but concise, overall description as to how the award of this contract will benefit the economy of the State of Maryland if your firm is the successful Contractor. (Please do not include any details of the price proposals with this information):

Such items include, but not limited to:

- a. The estimated percentage of contract dollars to be recycled into Maryland's economy in support of this contract, through the use of Maryland Subcontractors and supplies;
- b. The number and type of jobs for Maryland residents resulting from the contract;
- c. Tax revenues to be generated for Maryland and its political subdivision as a result of the contract; and,
- d. Estimated percentage of Subcontract/Supplier dollars committed to "local" Maryland businesses. For purposes of this bid, a "local" Maryland business is a business with its primary base of operation located in the same county as the job site for this project, or a Maryland business located within twenty five (25) miles of the job site.
- e. Other benefits to the Maryland economy which the offeror promises will result from awarding the contract to the offeror. Describe the benefit, its value to the Maryland economy (in terms of percentages), and how it will result from the contract award.

E. <u>EVALUATION PROCEDURE FOR TECHNICAL OFFERS IN MULTI-STEP</u> BIDS

- 1. Each technical offer shall be evaluated by a UMB Evaluation Committee. Those Contractors not achieving at least **75%** of the available technical points will not be considered further.
- 2. Once the technical scores have been tabulated, the bidders achieving the minimum technical score or better, their Bid Pricing will be opened. Those bidders not

achieving the minimum technical score or better, their Bid Pricing will be returned unopened.

3. The University intent is to make one (1) award.

F. BID PRICE AND ENCLOSURES:

The Bid Price Forms are included. Please note that no changes, alterations or additions to the Bid Price Forms are permitted. Any erasures and/or alterations to the Bidder's pricing shall be initialed in ink by the signer. The Bidders shall state prices in dollars and cents (no rounding prices up or down), in both words and figures. If there is any question or difference between the written words and the figures, the written word shall govern.

G. EVALUATION OF BIDS/METHOD OF AWARD:

Award will be made to one (1) awardee that is the lowest responsible and responsive bidder based on the Total Bid Amount and meeting requirements. The University reserves the right to make an award as a total, by group or by groups of Phases as determined to be in the best interest of the University.

END OF SECTION 00300

SECTION 00400 SCOPE OF WORK ARTICLE 1 – 4

SECTION 00400

SCOPE OF WORK

MAINTENANCE OF ELEVATORS, DUMBWAITERS AND LIFTS

ARTICLE 1 – GENERAL PROVISIONS

A. <u>BACKGROUND</u>

The University of Maryland, Baltimore (UMB) is a public university that is a part of the University System of Maryland, a public corporation and an instrumentally of the State of Maryland. The 71-acre research and technology complex encompasses 67 buildings located in West Baltimore; a city that has become a model for urban rebirth and vitality. The UMB complex has over 7,119 faculty members and staff and 6,329 students enrolled in six professional and graduate schools; School of Dentistry, School of Law, School of Medicine, School of Nursing, School of Pharmacy, School of Social Work and a Graduate School.

B. SCOPE

The objective of this Multi-Step Bid is to select qualified Contractor to perform maintenance, servicing, repairs and component replacements on the University VTSs, within the identified University of Maryland, Baltimore owned property unless noted otherwise in this document and as specified by authorized personnel of the University of Maryland, Baltimore. In addition, the Contractor will be required to provide proposals for renovation, upgrades and modernization projects under the terms of this contract.

The Contractor must be experienced and qualified to provide all labor, materials, equipment, supplies, supervision and other resources as required to keep the VTSs at optimum operating level within the identified University of Maryland, Baltimore owned property unless noted otherwise in this document and as specified by authorized personnel of the University of Maryland, Baltimore.

C. CONTRACT TERM

The initial Contract is to be issued for a period of twelve (12) months, beginning August 1, 2018 and ending July 31, 2019. The University to retain, at its unilateral discretion, the right to renew any resulting contract(s) for four (4) one year unilateral renewal options.

Rates shall be firm during each contract year. Contractor may submit a written request annually for rate adjustment ninety (90) days prior to the Contract anniversary date. All other terms and conditions shall remain the same. It will be UMB's sole option to approve, or not, any such price adjustment.

UMB will use the U.S. Bureau of Labor Statistics, Producer Price Index (PPI) Industry Data to monitor any such rate adjustment requests for reasonableness. Rate adjustments will be made in accordance with the month to month period for the preceding year in accordance with the percentage change of the U.S. Bureau of Labor Statistics PPI Industry Data, Industry Group for Commercial machinery repair and maintenance, Series Id: PCU81131-81131-, issued for Product type: Commercial machinery repair and maintenance. UMB will use the **March index** of **130.0(P)** as the benchmark.

All such rate adjustment requests will be calculated using a simple percentage method.

The following example illustrates the computation of percentage change:

CPI for current period: 150.252
Less CPI for previous period: 147.362
Equals index point change: 2.89
Divided by previous period CPI: 147.362
Equals: .0196
Results multiplied by 100: .0196 x 100

Equals Percentage change: 1.96%

- D. All communications are to be directed to the designated UMB Operations Manager (OM) Project Manager or designee only. All change order work may not proceed until an additional purchase order change order has been issued by the Strategic Sourcing and Acquisition Services for additional work and the applicable additional cost.
- **E**. Any staff changes by the Contractor for the Contract Manager must be reviewed and approved by UMB's Strategic Sourcing and Acquisition Services via the issuance of a contract amendment prior to any reassignments being made.
- **F**. The Contract Manager should be readily available to review all phases of the project when requested by the University. No changes can be made in the Contract Manager without the written approval of the University via the issuance of a contract amendment by UMB's Strategic Sourcing and Acquisition Services.

G. <u>CONTRACT IMPLEMENTATION MEETING</u>

Contractor receiving an award under this solicitation may be required to attend a Contract Implementation Meeting to be held after the contract award, as scheduled by the Strategic Sourcing and Acquisition Services. The location and agenda for this meeting will be communicated to the Contractor by the Strategic Sourcing and Acquisition Services.

H. <u>ADDING/DELETE</u>

The University reserves the right to add or delete equipment and/or locations from this contract. In such events, contract prices shall be adjusted in accordance with the unit prices

as shown in the bid price sheets and as mutually agreed upon between the University and Contractor through a written contract amendment. Any adjustment(s) due to addition or deletion must be approved by the University's Strategic Sourcing and Acquisition Services through a written contract amendment.

END OF SECTION 00400/ARTICLE 1

SECTION 00400

ARTICLE 2- SPECIFICATIONS

A. SCOPE OF WORK

The objective of this Multi-Step Bid is to select qualified Contractor to perform maintenance, servicing, repairs and component replacements on the University VTSs within the identified University of Maryland, Baltimore owned property unless noted otherwise in this document and as specified by authorized personnel of the University of Maryland, Baltimore. In addition, the Contractor will be required to provide proposals for renovation, upgrades and modernization projects under the terms of this contract.

There are currently 126 units to be covered, refer to Exhibit I for listing of UMB's units.

The Scope of Work shall also include the following:

1. General

a. The work performed under this contract shall consist of, but is not limited to, furnishing all labor, supplies, solvents, lubricants, tools, equipment, instrumentation, parts, materials and transportation to perform complete preventative maintenance, inspection, testing, troubleshooting, rebuilding, repairs, and replacements in order to keep all VTS units detailed in the system profiles and the elevators to be added with the opening of the Health Sciences Facility III building (anticipated 4/2018) in optimum working condition. This work shall include, as a minimum, similar work on all related equipment, attachments, appurtenances, and monitoring accessories located in the VTS machine rooms, hoistways, pits, car interiors and associated landings or lobbies.

The University recognizes that the VTS units may not be in optimum working condition at the time of award of this contract. To this end, the University engaged Ashland Industrial Services to evaluate the condition of the VTS units. A report of this effort is contained in Exhibit I and details and deficiencies found for each VTS unit. As part of this contract bidders shall include separate, one-time pricing (refer to Phase 1 Repairs and Phase 2 Repairs pricing sheets) to correct the deficiencies identified in this report. All deficiencies shall be corrected by the successful bidder within 90 days from the date that the Contractor assumes maintenance responsibility for the VTS units. The contractor shall be responsible for notifying the University of any existing defects not noted in the Ashland report within the first 30 days after assuming maintenance responsibility for the elevators. Absent this notification, it shall be assumed that the elevators are in proper working condition and the contractor shall be responsible for any repairs to keep the elevators in that condition, as covered by this contract.

b. When the University requests work outside of the standard maintenance scope of the contract specifications (i.e. enhancements etc.), such work will be performed on a Time and Material (T&M), Not to Exceed (NTE), basis. The University will supply to the Contractor a written scope of work inclusive of required schedule of the work. The Contractor will review the project site and the scope of work and provide a written proposal with breakdown of time and material, not to exceed price based on the quoted time and material and Subcontractor (if required) rates. The Contractors price proposal is to be itemized for all labor categories, material, and Subcontractors showing unit costs and extended line item amounts, as well as a total not to exceed price. Upon written approval (i.e. Purchase Order) by the University the work will commerce. The University will pay actual cost up to the not to exceed quoted price. Any costs beyond the not to exceed price quotation will be borne by the Contractor unless a written change order is issued by the University. Unless the situation is deemed to be an EMERGENCY, no work shall be started until a Purchase Order is issued by the University's Strategic Sourcing and Acquisition Services.

Invoicing of time and material and Subcontractor (if required) not to exceed work is to contain a complete breakout of all prices, including unit costs prior to appropriate markup, and extended totals. As well, time tickets, material invoices, and Subcontractor invoices are to be attached to the invoice as documentation to the billed amount. Refer to Section 00400, Article 4 below.

- c. All Task Orders shall include the following information:
 - i. Scope of Work
 - ii. Applicable drawings
 - iii. Location
 - iv. Hours of Work
 - v. Completion Date
 - vi. Billing Information
 - vii. University Point of Contact and Phone Number
 - viii. Contractor Point of Contact and Phone Number
 - ix. Task item numbers, amounts and costs
 - x. Copy of proposal

- 2. Vertical Transportation Systems (VTS), Subsystems, and Components
 - a. VTS System The VTS system, for the purpose of this contract, is a complex group of interrelated, interdependent, and interacting subsystems and components that provides safe, comfortable transportation from one floor or level to another. The Contractor shall maintain the VTS systems located at the University in good operating condition by cleaning, adjusting, realigning, lubricating, repairing, rebuilding, or replacing systems, subsystems and components as required. Performance standards shall be adhered to and verified for contract compliance.
 - b. VTS Subsystems The VTS subsystems, for the purpose of this contract, are major components of the VTS system including controllers, machines, pump units, hydraulic jack pistons, motor-generator sets, governors and door operators. These items are considered major because they perform major functions and because they are generally expensive to replace. The Contractor will be required to replace any major subsystem unless the University determines that the Contractor or the Contractor's employees have not caused damage to the subsystem either willfully, through negligence or through neglect. The Contractor shall maintain these major subsystems in good operating condition by cleaning, lubricating, adjusting, realigning, repairing, rebuilding, or replacing subsystem components as required. The Contractor may elect to replace a major subsystem at the Contractor's expense if doing so would be more cost effective than repairing that item.
 - c. VTS Components A VTS component, for the purpose of this contract, is any part, assembly, attachment, appurtenance or accessory of the VTS system or any part, assembly, attachment, appurtenance or accessory of one of the subsystems listed in item A. 2. b. above. The Contractor shall clean, lubricate, adjust, realign, reset, repair, rebuild, or replace, as required, any component that fails to perform as designed, that causes any other component, subsystem or system to fail to perform as designed, or that shows signs of fatigue, leakage, wear, or imminent failure. Components of the VTS system that are not subsystems, but assemblies, and therefore components fitting this category include, but are not limited to the safety, the selector, and the emergency lighting system. Subsystem components fitting this category include, but are not limited to, valve assemblies, worm gears, ring gears, printed circuit boards, magnetic contactors, motors, and brakes, which are also covered under this section of the contract. Any attachments or appurtenances to any system or subsystem such as computers, including software, video display monitors, lobby monitors, monitoring devices or communication devices used for control or remote monitoring shall be covered under this contract and shall be included in this group. The Contractor shall repair or replace all lighting inside the elevator cars and smoke detectors when they have been installed in conjunction with firefighter's service and are not connected to a building fire alarm system. The Contractor shall repair or replace the emergency telephone when it is incorporated in or behind the car-operating panel. The Contractor shall be

responsible for replacing all electrical wiring extending from the secondary lugs of the main line disconnect in the machine room and outlets in the hoistway. The Contractor shall be responsible for maintaining, repairing, and replacing all communication lines and security wiring from the point of connection in the machine room or hoistway to and including the connection to the device in the elevator cab or elevator lobby wall.

- d. Exclusions The Contractor shall not be held responsible for the following unless the Contractor or the Contractor's employee(s) either willfully or through negligence or neglect causes damage to that item:
 - The main line disconnect, the fuses or circuit breaker enclosed in the main line disconnect and the electrical conductors connected to the primary side of the disconnect.
 - ii. The repair or replacement of the sump pump in the VTS pit or the removal of water from VTS pits.
- iii. Exhaust fans or heating/cooling convectors located in the machine room.
- iv. Underground hydraulic piping and the underground portion of the hydraulic jack cylinder. (This does not include the piston.)
- v. VTS unit cab interiors including decorator panels on the walls, floor tiles, lighting diffusers, and handrails. The Contractor shall, however, be responsible for tightening screws and fasteners that may become loose in the course of normal operation of the VTS units and shall be required to report any deficiencies in these area to the contract manager.
- e. Cleaning and painting The Contractor shall keep the VTS pits, car tops, hoistways, and the machine room clean and free of dirt, oil, grease, and debris at all times. Machinery and equipment that are subject to rust shall be painted as required to keep a uniformly neat and clean appearance. Within the first year of this contract, all machine rooms shall be cleaned and painted. Machine room floors shall be thoroughly cleaned and painted every two (2) years thereafter. The VTS unit number shall be painted on the crosshead, machine, power unit, controller, motor generator, selector, governor and related disconnects of all units. Floor numbers 4 inch high, shall be painted on the interior surface of all hoistway doors at intervals required by governing authorities. The Contractor shall be responsible for the maintenance and inspection/testing of all lighting and fire extinguishers located inside hoistways and elevator machine rooms.
- f. Replacement Parts and Materials The Contractor shall possess and maintain at the University, or at a local facility, a supply of replacement parts and materials sufficient for the maintenance and repairs of the VTS units at the University. Only parts and materials that are correctly designed and suitable in all respects shall be used or installed on the equipment under this contract. The

Contractor shall be responsible for inspecting the equipment, researching the availability of replacement parts, and stocking any replacement parts or materials that are in scarce supply or that will become scarce within the term of the contract. Neither obsolescence nor the lack of available parts shall relieve the Contractor from responsibility to repair the equipment. The Contractor, at the Contractor's expense, shall take whatever actions necessary to provide the required parts, including machining or fabricating replacement parts or replacing the larger component or assembly. The Contractor shall retain ownership of all parts and materials until installed or used to repair University equipment. The Contractor shall be solely responsible for properly storing chemicals and solvents and for both the security and the safety of the parts and materials stored.

3. Callback Service and Emergency Service

- a. Twenty-Four Hour Callback Service The Contractor shall provide the University with VTS service twenty-four (24) hours per day, seven days per week. The Contractor shall provide call-back service as requested by the University, either by telephone or by other means, for after-hours service to repair and restore to safe operating condition any VTS unit at the University. The cost of this service shall be included in the base price and no additional cost shall be charged to the University at the time the service is rendered. The following conditions and definitions apply:
 - i. Any malfunctioning or inoperative VTS unit reported to the Contractor at any time Monday through Friday, shall be repaired and placed in safe operation before the Contractor's employees leave the University unless University personnel agrees to postpone such repairs. The Contractor shall bear all costs associated with such repairs, including the cost of overtime.
 - ii. The Contractor shall provide a system for callback notification that is acceptable to the University and approved by the University's Project Manager. The system shall include the mechanism to provide an accurate estimate of the time of arrival to the OM Service Center and a means of contacting a supervisor if a problem occurs.
 - iii. The Contractor's employee shall respond to a call-back service call involving an out of service VTS unit and report to the University's Operations and Maintenance (OM) Service Center within a maximum two (2) hour time period from the time the original call was placed. The Contractor's employee may respond by telephone, by two-way radio, or by any other means established by the Contractor and accepted by the University. The Contractor's employee must report in person to the OM Service Center within the allotted time.

- iv. The Contractor's employee shall respond immediately to an emergency callback involving trapped passengers and report to the University's OM Service Center within a two (2) hours time period from the time the original call was placed. If the Contractor's employee fails to contact the OM Service Center within fifteen (15) minutes, the University shall call the local fire department to rescue the trapped passengers and the Contractor shall bear the costs of any damage or repairs resulting from the rescue. If the Contractor's employee fails to report on site within the allotted two (2) hours or the stated estimated time of arrival combined with the elapsed response time exceeds two (2) hours the University shall call the local fire department to rescue the trapped passengers and the Contractor shall bear the costs of any damage or repairs resulting from the rescue. The times recorded by the University's OM Service Center shall be the official time used to determine if the Contractor's employee responded and reported within the specified time limits. In the case where a VTS unit is damaged as the result of a rescue, the Contractor's employee shall repair the unit and return it to service if possible. If the responding employee is unable to repair the unit at that time, the employee shall secure the unit and leave it in a safe condition until the next regular work shift.
- v. The University shall be the sole judge in determining whether callback service is the result of wear and tear or if vandalism or misuse of the equipment was the sole cause. Should vandalism or misuse be determined, and the Contractor's employee responded within the appropriate time limits, the Contractor may bill the University for labor and materials in accordance with the appropriate section of the Contract. In such cases, the Contractor shall be required to provide documentation to support the claim in a form acceptable to the University.
- vi. If the University determines that the callback is the result of vandalism or misuse and the Contractor's employee has responded within the appropriate time limits, the Contractor may bill the University for travel time and mileage costs per the University's Travel Policy. Travel time shall be calculated as the actual time in route to the University multiplied by two (2) or one and one half (1-1/2) hours whichever is less. This time shall represent the round trip time for the call. Actual round trip mileage shall be calculated as the mileage to the University multiplied by two (2), or thirty (30) miles whichever is less.

vii. All Contractor employees requested on weekends, holidays, or nights to perform work shall report to the OM Service Center to receive work order instructions and keys. The holidays for the maintenance contract shall be those observed by the University. The time of arrival must be recorded on the University work order. Upon completion of work, the Contractor's employees shall return to the OM Service Center to return the keys and complete the work order and time ticket. The completed University work order and a copy of the completed time ticket MUST remain at the OM Service Center.

4. VTS Testing

- a. The Contractor shall be responsible for the scheduling and testing of the elevator units per Elevator Code and the State of Maryland requirements.
 - i. Performance of all routine and periodic tests required on all VTS units included under this contract. The costs of this service shall be included in the base price and no additional charge shall be made at the time of the tests. The Contractor shall be responsible for any re-inspection fees as a result of failure of any tests or inspections not caused by the University or items not include in the maintenance contract terms.
 - ii. All tests shall be witnessed by an inspector, provided by the Maryland DLLR, Division of Labor and Industry, or if required supervised by a QEI certified inspector supplied by the Contractor. No additional charge shall be permitted at the time of the test.
 - iii. The Contractor's designated on-site employees may perform the annual tests required on all elevator units. Employees of the Contractor, other than the Contractor's designated on-site employees, shall perform the annual tests on all other VTS units. The cost of providing these test teams shall be included in the base contract price. No charge shall be permitted at the time the tests are performed.
 - iv. All regularly due five (5) year tests and any tests requiring weights and/or special equipment shall be performed by a test team consisting of employees of the Contractor other than those regularly assigned to the University under the contract. The cost of providing these test teams shall be included in the base contract price. No charge shall be permitted at the time the tests are performed.
 - v. The test team shall report directly to the University's Project Manager who will assist them to sign out keys and locate the VTS to be tested.

- vi. The test team shall complete a company service ticket for each day of testing at the University. That service ticket must identify each unit tested by the State identification number and what test(s) were performed.
- vii. The Contractor shall schedule the tests with the Department of Labor and Industry and notify the University's Project Manager at least seven (7) working days prior to the date of the test(s) so that University's Project Manager may notify the people in the affected building(s) that the VTS unit(s) will be out of service on that day and time during the test.
- viii. The Contractor shall provide a schedule of tests to the University's Project Manager detailing how the Contractor intends to proceed with these tests.
- ix. The Contractor's employees shall place high quality signs on or near the VTS unit under test notifying the public that the unit is out in service and /or under test and remove the signs after the tests have been completed
- x. The Contractor's employees shall test the smoke detectors associated with the VTS unit(s) when the detectors are provided solely for the firefighter's service and not connected to the building fire alarm system.
- xi. When the smoke detectors in the VTS spaces are connected to the building fire alarm system, the Contractor's employees shall coordinate and perform this test with the assistance of the University Electronics Shop or designated Contractor.
- xii. The supervising mechanic, if required, shall sign off on all tests including the Firefighter's recall test, the shunt trip circuit breaker test, and the emergency generator test(s) as they apply to each VTS unit.

5. Contractor's Employees Essential Functions

Contract Manager:

The Contractor shall be required, as part of their base proposal, to provide a Contract Manager who shall be responsible for the management, scheduling and reporting as required by the contract.

The Contract Manager shall possess expertise on the kinds of VTS units in the UMB VTS fleet and any other current designs, modern microprocessor-based controllers, and be currently sufficient in technical capability to provide technical and management decisions on a day to day basis.

The Contract Manager shall have the responsibility for the following:

- a. The Contract Manager shall be available at all times to assist in the resolution of maintenance problems or system malfunctions associated with the equipment covered under this contract. The Contract Manager shall have the authority to make all decisions to resolve any problems at the University related to maintenance or repair. The Contractor shall inform the University's Project Manager or designee in advance of the name of any substitute or replacement Contract Manager in the event that the designated Contract Manager is not available. The Contractor shall submit all information required by this section for approval by the University prior to the assignment of any new or replacement Contract Manager to this contract.
- b. Attendance at the bi-weekly elevator status meeting.
- c. Preparation of performance reports and quality control documentation.
- d. Preparation of the two week look-ahead schedule for all planned activities to include: inspections, testing, scheduled repairs, major repairs and upgrades.
- e. Coordination and scheduling of testing with the State of Maryland.
- f. Authority to schedule and manage manpower requirements.
- g. Coordination and support for all monitoring elements of the maintenance contract.
- h. Authority to authorize purchase for required material, additional labor, work order or repairs up to \$10,000.
- i. Authority to manage labor and scheduling of required personnel.
- j. Authority to direct personnel to comply with requests from the University's Elevator Program Manager.
- k. If proposer is to utilize a union mechanic for this position, this person will be in addition to the assigned journeyman mechanics.

Mechanics:

The Contractor shall be required, as part of their base proposal, to provide a minimum of three (3) employees, one (1) lead mechanic and two (2) elevator maintenance mechanics to be permanently assigned to the contract. The Contractor is required to provide as many journeyman maintenance mechanics as is necessary to fulfill the requirements of the contract. Elevator Mechanics and substitutes assigned to this project must possess a Maryland Elevator Mechanic License.

a. One mechanic shall serve as the lead mechanic on site. He shall assist and coordinate with the University's Project Manager or designee all activities and maintenance for the University.

- b. Each elevator mechanics shall be at the University forty hours per week to provide routine maintenance and repairs as called for by the contract.
- c. The elevator mechanics' shifts shall be arranged to provide 12 hours of coverage from 6:00 A.M. until 6:00 P.M. Monday through Friday at the University.
- d. The University recognizes the following shut down holidays: New Year's Day, Dr. Martin Luther King, Jr. Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, the day after Thanksgiving & Christmas Day. Specific dates will be made available each year when the University holiday schedule is announced.
- e. The Contractor shall notify the University Project Manager or designee immediately with the names(s) and work classifications(s) of substitute mechanics who will replace the required mechanics when they are absent. Replacement personnel must be approved by the University. Regular monthly invoices shall be adjusted for all hours that the above employees or approved substitute employees are not available to the University.

All mechanic maintenance employees directly engaged in the work to be accomplished under this contract shall possess, prior to their employment in a journeyman mechanic's capacity, at least five (5) years of recent experience as a maintenance mechanic at the journeyman level unless otherwise approved by the University's Project Manager.

All journeymen mechanics shall possess experience on the types and manufacturers of VTS units to be maintained under this contract.

Adjuster or Trouble Shooter:

The Contractor shall provide at no additional cost to the University an adjuster or troubleshooting specialist to assist the Contractor's designated on-site employees in the event that they or the University's Project Manager or designee feel that they need technical assistance due to any one (1) of the following:

- a. A VTS unit is out of service for a period of forty-eight (48) hours or greater without a definite cause being determined.
- b. The designated on-site employees have affected three (3) repairs or replaced three (3) components or any combination totaling three (3) attempts to repair a VTS unit without satisfactory results.
- c. An intermittent or recurring problem has caused at least three (3) service calls or work orders within a two (2) week period or has caused passengers to be trapped on two (2) occasions within a two (2) week period on the same unit.

Test Teams:

The Contractor shall provide an employee test team consisting of at least one (1) Mechanic and one (1) Apprentice to perform any and all tests requiring the use of weights and/or special test equipment other than those allowed. This includes, but is not limited to, final acceptance tests, five-year tests and tests required because of the replacement of major or sensitive components and tests required by special circumstances.

- a. The test team shall not consist of employees regularly assigned on-site. The test team shall perform all test related tasks without the assistance of regularly assigned employees. The cost of providing these test teams shall be included in the base proposal. No charge shall be permitted at the time of test team performance.
- b. The annual tests required on all elevators may be performed by the onsite employees.
- c. The annual tests performed on dumbwaiters and lifts shall be performed by a test team. The cost of providing these test teams shall be included in the base proposal. No charge shall be permitted at the time the tests are performed.
- d. The proposer shall provide a Qualified Elevator Inspector (QEI) to witness any and all tests, **when required by code**, that are not witnessed by an inspector from the Department of Labor and Industry. The cost of providing a QEI certified inspector shall be included in the base proposal. No charge shall be permitted at the time of the test.
- e. Maryland Department of Labor, Licensing and Regulation Division of Labor and Industry (DLI) is the provider of all annual inspections. The State of Maryland provides a state inspector to the University for the inspection of University equipment. All testing and scheduling shall be coordinated with the State.

Service Crews:

The Contractor shall provide service crews to perform specialized tasks requiring special skills or equipment and tasks not usually performed by maintenance mechanics. The costs of these crews shall be included in the base contract price. No additional charge shall be permitted when these crews are provided. The tasks that service crews shall perform include but are not limited to the following:

a. The removal and the replacement or installation of heavy components; i.e., motors and motor generator sets.

- b. The removal and replacement of jack packing, high-pressure hydraulic pipes, fittings, and hoses or flexible lines.
- c. The removal, replacement, installation or repair of machine components including, but not limited to thrusts, worms, gears, sheaves and bearings or any repacking that requires the disassembly or the partial disassembly of the machine.
- d. The removal, installation, replacement, or shortening of hoist ropes, hoist belts, governor ropes, and selector ropes or tapes.
- e. A certified welder shall perform any work that requires electric arc welding, oxy-acetylene welding, or cutting with an oxy-acetylene torch. All work of this nature shall be performed according to the American Welding Society Standards.
- f. Any work that involves: welding, cutting with a torch, grinding, sawing, or cutting wood, metal, or concrete that may cause the products of combustion shall proceed only after the Contractor's Contract Manager has acquired a "HOT WORKS PERMIT" from the Department of Environmental Health and Safety (EHS) and any adjacent smoke detectors and the fire alarm have been disabled by the University's Electronic Shop. The Contractor shall take every precaution to ensure the safety of the building occupants. See (Cutting, Welding, and Hot Works).

6. Repairs Due to Vandalism or Misuse

- a. The Contractor shall repair damage to a VTS unit(s) caused by vandals or persons misusing the unit(s). All repairs shall be implemented expeditiously without regard to fault. All costs of materials and labor directly associated with vandalism or misuse are independent of the base contract and are reimbursable to the Contractor. However, the following conditions shall apply:
 - i. Damages incidental to the rescue of trapped passengers shall not be considered either vandalism or misuse and shall not be reimbursable.
 - ii. Damages resulting from or contributed by improper maintenance, repairs, replacements, parts, materials, or workmanship used by or performed by the Contractor's employees shall not be billed to the University.
- b. All reimbursable work shall be billed in accordance with the time and material rates quoted in the Contractor's proposal.
- c. The University reserves the option of using the Contractor's regularly assigned designated employees to perform a normally reimbursable repair without

incurring additional labor costs if the repair is minor or if to do so is deemed in the best interest of the University. The University's Project Manager or designee, prior to the work being performed, shall approve the work performed by the Contractor's regularly assigned designated employees.

- d. All major reimbursable work shall be performed by Contractor's employees other than the Contractor's designated employees regularly assigned to the University under the base contract, unless the Contractor's designated employees regularly assigned to the University work at times other than and in addition to their normal shift.
- e. The University shall have the sole right to decide whether the services rendered are the result of normal wear and tear or the result of vandalism or misuse.

7. Renovations or Modernizations

- a. The Contractor shall be required to provide proposals for renovation, upgrades and modernization projects under the terms of this contract. The Contractor may recommend renovations or modernizations, as well, by submitting a proposal to the University's Project Manager accompanied by a letter recommending the proposed work. This letter shall state the conditions prompting the recommendation and the advantages of the proposed work. The University maintains the right to accept or reject any proposal. The proposal shall contain the following information:
 - A detailed description of the work the Contractor intends to perform including descriptions of all of the components the Contractor intends to install or replace the manufacturer of the item, the manufacturer's model and/or series number, and important parameters or features of the installed component.
 - ii. Any work required to be performed by the University and/or other Contractors if not included in the proposal.
 - iii. A not-to-exceed estimate of the man hours or team hours required to accomplish the proposed work and the labor costs based on the labor rates quoted in the proposal.
 - iv. A detailed summary of material costs based upon the expected materials costs to the Contractor. This price estimate added to the estimated price of labor shall form the not-to-exceed price of doing the proposed work.
 - v. Estimated lead times required for delivery of materials before start of actual work or before specific phases of the work can begin.

- vi. Optional additions to the proposed work that would enhance the project or would save the University money or inconvenience by incorporating one or all of them into the project. Include the options on a separate page or under a separate heading. Include manufacturer(s) and material and labor costs as in item "d" above.
- vii. The length of time required to perform the work.
- b. There shall be no change or substitution of material once the proposal has been accepted, unless the University's Project Manager or deisgnee approves it. Accepting the change or substitution must be deemed to be in the best interest of the University.
- c. All work that requires taking a VTS unit out of service for a period longer than one (1) hour must be scheduled no less than seven (7) working days in advance. Any work on a VTS unit used for handicapped access or that requires taking an elevator out of service for longer than three (3) weeks must be scheduled four (4) weeks in advance and must be scheduled at a time that causes a minimum of inconvenience to the University.
- d. The Contractor shall take every precaution to insure the safety of all employees and any passers-by. The Contractor's employees shall be provided with appropriate tools equipment and safety gear and follow all safety regulations. The Contractor shall install suitable barriers and/or barricades to prevent injury to passers-by. All work shall be performed according to OSHA/MOSH, the Elevator Industry Field Employees' Safety Handbook, NFPA 70(e) and other applicable Federal, State, and Local laws, codes, and regulations.
- e. The Contractor shall keep the public areas of the building free of construction materials and remove all debris and scraps, including dismantled VTS equipment, from the site in a timely manner.
- f. The Contractor shall remove, handle, and dispose of hazardous materials in accordance with Federal, State, and local regulations.
- g. Any work that involves welding, cutting with a torch, grinding, sawing, or cutting wood, metal, or concrete that may cause fire, smoke, dust, or the products of combustion shall proceed only after the Contractor's Contract Manager has acquired a hot works permit from the Department of Environmental Health and Safety (EHS) and the fire alarm or the adjacent smoke detectors have been disabled by the University's Electronic Shop. The Contractor shall take every precaution to ensure the safety of the building occupants. (See Cutting, Welding, and Hot Works.)

- h. All work performed under this contract shall be warranted for two (2) year covering all parts and labor.
- i. The University shall retain five (5) percent of the total price of any project on which Contractor has provided 100% performance and payment surety. Invoices to the University shall specify the Task Order Number, project name, building name and number, and the VTS unit number.
 - i. The invoice shall contain a brief description of the work, the man hours and/or team hours expended the cost per man hour and/or team hours, and total labor costs.
 - ii. The invoice shall contain the costs of materials for the project, the mark up, and the total material costs.
 - iii. The invoice shall contain the total of the labor and material costs or the quoted not-to-exceed price whichever is less. It shall also include the amount of the retention and the amount due at the time of the invoice.
 - iv. The invoice shall have a certified payroll attached totaling all the man hours or team hours charged to the project.
 - v. The invoice shall have attached copies of actual manufacturer or supplier invoices to the Contractor with the actual prices the Contractor paid.
- j. One (1) year following the original invoice date, the Contractor shall submit a second invoice for the retention if one is due and the Contractor has met his warranty obligations.
- k. The University shall not be required by this contract to award any renovation or remodeling contract to the Contractor. The University maintains the right to contract any and all work to whomever the University deems appropriate.
- l. All renovation work or modernization work shall be performed in accordance with all applicable codes. The Contractor shall be responsible for all necessary permits and fees associated with the project. The Contractor agrees to perform all work required by the codes unless specifically excluded as an item in Contractor's proposal. A blanket statement of exclusion shall not relieve the Contractor of performing to the codes. Any re-inspection fees as a result of the acceptance inspection shall be solely the responsibility of the Contractor.

8. Preventive Maintenance

a. Regular routine preventive maintenance inspections shall be performed by Contractor on all VTS units included in the equipment inventory. The Contractor's employees-performing these inspections shall observe the operation of the equipment through its full range of operation, and shall immediately correct

any deficiencies or abnormalities in the operation or appearance of the equipment. The Contractor's employees performing the inspections shall specifically note on the inspection form any adjustments, lubrication, or repairs performed during these inspections, recording the item, the equipment and the work performed. As a minimum, the following periodic preventive maintenance inspections shall be performed:

i. Monthly

- 1) Check the general condition and operation of the VTS unit. Correct any obvious malfunctions or aberrant conditions.
- 2) The machine room, car top, and pit shall be inspected and cleaned. All drip pans shall be emptied and cleaned and pit cans shall be emptied.
- 3) All pushbuttons, position indicators, lobby monitors, and hall or traveling lanterns and chimes shall be checked and cleaned, relamped, and/or repaired as required.
- 4) Safety edges, photo-eye rays, or proximity devices shall be checked for proper operation and cleaned, lubricated, or adjusted as required.
- 5) Door closer pivot points, sill trips, and checking devices shall be cleaned, lubricated, adjusted, repaired, or replaced as necessary.
- 6) Door and gate interlocks shall be inspected and cleaned and/or adjusted as required.
- 7) Check all door and gate operations and correct deficiencies as needed. Check and adjust car door hangers and door gibs.
- 8) Test and inspect the controller for proper operation. Adjust and/or clean if necessary. Check filters in solid state controllers and clean or replace as is appropriate.
- 9) Test and inspect the selector mechanisms. Clean, lubricate, or adjust as required.
- 10) Check leveling and re-leveling switches and/or mechanisms at all stops. Make any required adjustments or repairs.
- 11) Clean and adjust the car top sensor as required.
- 12) Check the pump unit for leaks and proper oil level in tank, repair leaks, and add oil as required.

- 13) Check the jack packing for wear or leakage. Adjust or replace as required.
- 14) Inspect guide rails for proper lubrication if required. Lubricate as required.
- 15) Inspect motor-generator brushes and commutator for wear.

 Replace or re-seat brushes as required and stone and undercut commutator as needed.
- 16) Check and lubricate motor-generator bearings as required.
- 17) Clean and lubricate relay dashpots.
- 18) Inspect motor brushes and commutator for wear and arcing. Replace or reseat as required and stone and undercut commutator if needed.
- 19) Check and lubricate motor bearings as required.
- 20) Check and lubricate machine bearings as required. Observe gear case bearings for end play.
- 21) Inspect all belts, couplings, and pulleys for wear and proper alignment. Align, repair, or replace as required.
- 22) Fire Service tests.

ii. Quarterly

- 1) Clean, adjust, and lubricate car side and top emergency exits.
- 2) Inspect and test the door operator for proper operation. Check motor, contacts, chains, belts, pulleys, sprockets, linkage, and door restrictors for wear. Clean, lubricate, adjust, and/or repair as needed. Check the inertia of the doors and adjust as necessary.
- 3) Inspect and test retiring cam device. Clean, lubricate, adjust, and/or repair as required.
- 4) Check oil level in guide rail lubricating devices. Replenish as required.
- 5) Clean and adjust brake. Inspect brake shoes for wear and replace as needed. Check operation of brake repair or replace as required.
- 6) Inspect selector. Clean, adjust, and lubricate guides, sheaves, chains, tapes, etc. and clean and adjust finger switches and contacts.

- 7) Clean, lubricate, and adjust leveling switches, hoistway vanes, magnets, and inductors. Check leveling operation.
- 8) Inspect governor and tension sheave. Clean and lubricate as required.
- 9) Check machine for oil leaks, repair as needed. Clean machinery and paint if required.
- 10) Clean and inspect governor and hoist ropes for breaks, and red rouge or rust. Measure diameter of ropes at narrowest point for minimum diameter. Replace as required.
- 11) Clean and inspect oil buffers. Check oil level and replenish to desired level. Paint as required.
- 12) Inspect and adjust relays and contacts. Burnish or replace as required. Test shunts for flexibility and replace as needed.
- 13) Inspect traveling cables for wear or breaks. Tape and/or realign to avoid other objects in the hoist way.
- 14) Test manual lowering valves and emergency lowering devices for proper operation. Repair or replace as required.
- 15) Clean, lubricate, and adjust door tracks, hangers, and up-thrusts.

iii. Semi-Annually

- 1) Check the car operating station. Test, clean and adjust switches and contacts. Re-lamp call indicators as required.
- 2) Test emergency lighting system for proper operation. Inspect batteries for corrosion or leakage. Repair or replace as required.
- 3) Check load weighing devices and dispatch time settings. Correct as necessary.
- 4) Test stopping, slowdown, and limit switches. Clean, lubricate, adjust, repair, or replace as required.
- 5) Inspect car and counterweight guide shoes and roller guides. Clean, lubricate, adjust, repair, or replace as needed.
- 6) Check timing on car dispatching system.
- 7) Inspect and test motor starters for proper operation. Clean and burnish contacts or replace as needed. Check wiring connections for proper fit and tightness.

- 8) Clean car and lobby position indicators and signal boards, and adjust if necessary.
- 9) Check oil level in buffers and inspect governor and tape tension sheaves and fastenings.
- 10) Inspect Controllers. Vacuum or blow controllers and dispatch panels free of dust, dirt, and other foreign materials. Inspect components such as capacitors, resistors, coils, etc. for proper installation, connection and evidence of excessive heat or possible failure. Remove printed circuit boards and clean connections on the boards and on the racks with suitable solvent.

iv. Annually

- Check and test hoistway doors. Fill and adjust checks and door eccentrics. Check door gibs, struts, sills, headers, bumpers and fastenings. Clean and adjust door contacts. Clean, lubricate, and adjust chains, cables, and sheaves.
- 2) Inspect all ropes, hitches, shackles, and fasteners for wear and lubricate needed. Equalize rope tension if needed. Replace defective or worn equipment.
- 3) Brush down the hoistway and all hoistway equipment. Inspect, re-align, and clean guide rails as needed. Clean car top.
- 4) Inspect all sheaves (machine, counterweight, deflector and car) for wear or cracks. Clean, lubricate, and repair or replace as required.
- 5) Check and adjust safeties. Clean and lubricate as required.
- 6) Inspect machine bearings. Clean, lubricate, and/or replace as necessary.
- 7) Inspect motor-generator sets. Inspect windings for cracking or deteriorating insulation or heat damage and reinsulate or rewind if needed. Check bearings for wear and clean, lubricate, and/or replace as necessary. Check the armature and rotor for loose segments. Repair or replace as required.
- 8) Inspect hoist motor. Check windings for deteriorating insulation or heat damage and re-insulate or rewind motor is needed. Check bearings for wear and clean, lubricate, and/or replace as required. Check the armature for loose segments. Repair or replace as required.

- 9) Inspect pump motors. Check stator winding for deteriorating insulation or heat damage and re-insulate or rewind as needed. Check bearings for wear and clean, lubricate, and/or replace as required. Check rotor for loose segments and repair or replace as necessary.
- 10) Group Supervisory Control Systems where installed, shall be checked. Dispatching, scheduling, and emergency service operations shall be tested and adjusted to meet specifications as required.
- 11) Clean down hoistway.
- 12) Paint machine room floor, machine buffers and rails as needed.
- 13) Inspect and check remote monitoring components for proper operation and connections.

9. EQUIPMENT PERFORMANCE STANDARDS

- a. Equipment listing, type, preventive maintenance hours and individual car performance requirements are covered under this Agreement. Equipment performance requirements indicated are the minimum standard and are not the sole criteria for judging Contractor's performance.
- b. Contractor shall maintain a quiet and comfortable car ride with smooth acceleration, deceleration, and accurate stop. Door operation shall be smooth and quiet.

c. Elevator Ride Quality:

- i. Horizontal and vertical acceleration within hydraulic cars during all riding and door operating conditions shall not exceed 25 mg peak-to-peak in the 1 – 10 Hz range. Measurement criteria ISO804.
- ii. Horizontal and vertical acceleration within traction cars during all riding and door operating conditions shall not exceed 15 mg peak-to-peak in the $1-10~\mathrm{Hz}$ range. Measurement criteria ISO804.
- iii. Acceleration and deceleration shall be smooth constant and not exceed 3 feet/second² with an initial ramp between 0.5 and 0.75 seconds.
- iv. Sustained jerk shall not exceed 6 feet/second³.
- v. Measured noise levels in a moving car outside the leveling zone shall not exceed 55 dBA under any condition including car ventilation blower or fan on highest speed. Measured noise levels in car within the leveling zone or when car is stopped shall not exceed 60 dBA. There shall be no discernible sound in the elevator car from hoist machine, suspension means, sheaves, counterweight, pump unit, electrical power conversion unit(s), platform(s), car enclosure walls, or car and counterweight guide

assemblies unless it is mutually determined by Contractor and University that such sounds are attributable to the design of the equipment, provided such design exception shall not apply to the extent that Contractor has provided design or redesign Services under this Agreement or related Agreement.

- d. Elevator Performance Requirements Performance standards for each vertical transportation unit is provided in the addendum. In the absence of specific performance requirements the following shall be used:
 - i. Door open time for all elevators shall be from 2-3 seconds and is measured from start of door(s) open until door(s) is fully open.
 - ii. Door close time for all elevators shall be from 3-4 seconds and is measured from start of door(s) close until door(s) is fully closed.
 - iii. Door closing force shall be no more than 30 lbf. Door closing force is measured with door(s) at rest and between 1/3 and 2/3 closed.
 - iv. Door Nudging time to be 30-45 seconds.
 - v. Car calls dwell time to be 3-4 seconds.
 - vi. Hall calls door dwell time to be 5-7 seconds.
 - vii. Car stopping accuracy shall be $\pm 1/8$ " measured under all load conditions.
 - viii. Rated car speed, regardless of load, shall not vary more than $\pm 5\%$.
 - ix. University has the right to request verification of ride quality with PMT measuring device; if necessary. Measurement to be benchmark for contract compliance.

e. Equipment usage criteria

- i. Callback Frequency: Frequency is defined as average number of callbacks per unit per month. Callback frequency is calculated by dividing total number of callbacks experienced by an individual elevator, dumbwaiter or lift, or group of elevators during a prior twelve (12) month period divided by twelve (12) months. Callback frequency will be evaluated quarterly.
 - 1) No Contractor penalty shall apply for a callback frequency up to .333 per quarter.
 - 2) A maintenance audit of an individual elevator, dumbwaiter or lift, and any VTS group that it may be a part of can be triggered if a callback frequency of over .35 for the previous quarter is experienced on any individual elevator, dumbwaiter or lift or group of elevators.
 - 3) See sample calculation.
 - 4) Callback Definition; Callback is defined as any request for service or assistance by the University when any unit is not available for beneficial usage due to equipment shutdown or malfunction.

Callbacks due to abuse or vandalism will not be used in the calculation of the callback ratio.

ii. CALLBACK RATIO CALCULATION SAMPLE 4-car group

OF CALLBACKS / PROPERTY ÷ # OF UNITS / PROPERTY ÷ 12 MONTHS = RATIO

Callbacks / Property / Year	Ratio	
4	.083	1 Callback / Unit / Year
8	.167	2 Callbacks / Unit / Year
12	.250	3 Callbacks / Unit / Year is maximum ratio
16	.333	4 Callbacks / Unit / Year
17	.354	Would trigger audit

iii. Penalty: Contractor's failure to meet callback frequency for specific group of elevators per building for two (2) consecutive three-month periods, shall trigger an automatic maintenance audit by University's Elevator Consultant on the non-qualifying elevator group. Contractor agrees to expeditiously take corrective action in regard to identified deficiencies. Further, Contractor acknowledges University's right to deduct cost of said audit from amount due Contractor.

10. Summary

a. The work performed under this contract shall consist of, but is not limited to, furnishing all labor, supplies, solvents, lubricants, tools, equipment, instrumentation, parts, materials and transportation to perform complete maintenance, inspection, testing, troubleshooting, rebuilding, repairs, and replacements on all VTS units. The above are the minimum requirements to be met by the Contractor. The Contractor shall keep all Vertical Transportation System (VTS) units operating with the minimum number of service calls and the minimum amount of downtime.

B. <u>DOCUMENTATION AND REPORTING ON WORK PERFORMANCE</u>

1. Daily Time Tickets

a. All of the Contractor's employees performing any work on equipment under this contract or working on any project that is paid through this contract shall submit a time ticket for each day or portion of a day worked at the University. These daily time tickets shall be completed, signed, and submitted to the University's Project Manager or to the OM Service Center during non-normal hours, at the end of each day or before leaving the job, whichever comes first. These daily time sheets shall include the following information:

- i. Date, day of the week, time arrived, and time departed.
- ii. Building name(s) and VTS unit number(s) or state identification number(s).
- iii. Work Order Number or the type of preventive maintenance performed.
- iv. Description(s) of problem(s) found and corrective action(s) taken shall be written in clear terms for each VTS unit.
- v. Employee's name and total hours charged to the job at each location and travel time if charged.

b. Invoices presented for payment will not be honored if the University's Project Manager does not have an original copy of the service ticket for that invoice.

2. Work Orders

- a. The University writes a work order for each service problem reported. All the Contractor's employees responding to a service call, whether they are assigned to the contract or are providing emergency callback service, shall complete the University's work order, providing the following information:
 - i. Correct VTS unit number(s) and/or state identification number(s).
 - ii. A clear description of the problem found and the work performed.
 - iii. Employee's name and total hours.
 - iv. The operational status of the VTS unit.
- b. The Contractors' designated employees shall complete their work orders daily and submit them to the University's Project Manager the following morning. All other of the Contractor's employees shall complete their work orders in full before leaving the University and either submit them to the University's Project Manager or leave them at the OM Service Center
- c. The University expects all work orders to be completed in a timely manner. Any work order that is not completed within seventy-two (72) hours shall be reported in the backlog list, which shall be updated daily.
- d. The University requires all the Contractor's employees and Subcontractor's employees to fill out the work orders they complete using the work order program on the University's computer system. Each individual shall be capable of performing this function with minimal instruction.

3. Routine Inspection and Maintenance Sheets

a. Each of the Contractor's designated employees performing routine maintenance at the University shall complete a routine inspection and maintenance sheet. This maintenance sheet shall list all of the routine inspections and/or maintenance performed each day or part of a day. The maintenance sheets shall contain the following information:

- i. Employee's name, building name, and VTS unit number and/or state identification number.
- ii. Date, time spent, and type of maintenance performed.
- iii. Material used and notes on specific problems found and solved or remaining to be solved.

4. Maintenance Checklists

a. Each VTS unit shall have affixed to its controller, a maintenance control program and checklist appropriate to the type and manufacturer of the equipment. The maintenance control program shall become the property of the University. It shall conform to the manufacturer's recommended inspection and maintenance schedule and to the minimum requirements to follow.

b. Each item on the checklist shall be initialed by the mechanic performing the work in the square corresponding to that item and to that date. When the checklist is complete, a new checklist shall be affixed in its place and the removed checklist shall be submitted to the University's Project Manager or designee for review and to be filed.

5. Oil Loss and Hazardous Material Checklist

- a. Each hydraulic VTS unit shall be monitored for oil loss and shall have a checklist affixed to the pump unit listing the following:
 - i. The building name and number, the VTS unit number, the state identification number, and the room number of the machine room.
 - ii. The dates when hydraulic fluid is added to the tank and the quantities of fluid added.
 - iii. The dates when contaminated fluid is removed from the system and the quantity removed.
 - iv. Any additional information required by Local, State, or Federal agencies.

6. Contractor Reporting System and Forms

a. The Contractor shall develop a reporting system and the forms necessary to satisfy the requirements of Section B, paragraphs 1 through 5 above in **conjunction** with and approved by the University's Project Manager. The work orders as specified in paragraph 2 above shall be provided by the University.

b. Maintenance Review and Inspection Procedures

- i. The Contractor's Contract Manager shall meet with the University's Project Manager Bi-weekly to review and discuss the maintenance of the VTS units located at the University. The agenda for these meetings shall include but shall not be limited to the following:
 - Print out callbacks for previous 2 weeks from Maintenance Management program (Work Management Systems) as defined by the OM Service Center. Review of maintenance callbacks for the prior two weeks.
 - 2) Identify any problem elevators and prepare repair task or identify plans to bring units into compliance.
 - 3) Overview and two week look ahead for any scheduled tests or major repairs.
 - 4) Any outstanding repair orders or tasks
 - 5) Repair or modernization projects that may be underway
 - 6) Acceptance of units from construction
 - 7) Training issues
 - 8) Monitoring issues
 - 9) Recommendations for improvements or upgrades
 - 10) Billing and invoicing
 - 11) Submittal of performance testing and audits of units for compliance
 - 12) Meeting minutes to be kept by the Contractor's Contract Manager and provided for reference at next meetings. Include in meeting minutes Action items for University and Contractor.
- ii. The Contractor's Contract Manager shall meet with the University's Project Manager once each month for a walk-through inspection of the VTS units on campus. This shall be in addition to the bi-weekly visits.
 - 1) The purpose of the inspection is to acquaint both the Contractor's Contract Manager and the University's Project Manager with the condition of the equipment and the quality of maintenance performed on the VTS units.
 - 2) A minimum of three (3) VTS units shall be inspected during the inspection.

- 3) The inspection tour should take no less than four (4) hours to perform.
- 4) The Contractor's Contract Manager may select specific VTS units or site to visit, but the tour cannot end until all of the sites selected by the University's Project Manager have been inspected.

C. GENERAL SPECIFICATIONS

1. Payments

a. Payments in the amount stipulated in the contract shall be made monthly upon submission of properly certified invoices. Each monthly payment shall be one-twelfth (1/12) the annual contract amount. If necessary, at the commencement or termination of this contract, payment shall be made for any fractional part of a month at a rate of one-thirtieth (1/30) of the monthly charge for each day service is rendered.

b. The Contractor shall submit to the University within fourteen (14) calendar days after the end of each payroll period, a certified payroll report attesting that the Contractor's designated employees for maintenance at the University have worked for forty (40) hours per week, performing maintenance on the VTS units at the University. In addition the certified payroll shall include any other of Contractor's employees assigned to maintenance or service work at the University. The certified payroll shall contain the employees' names, addresses, exact and specific work classifications, total hours, straight time rate of pay, and gross wages earned. An employee's address need not be reported after it has been reported one time.

c. Service rendered because of vandalism, misuse or abuse of equipment, negligence, or other similar acts not covered under the contract will be paid for on an individual basis at the applicable labor and material rates after University Task Order is issued. An invoice submitted for work performed that is beyond the scope of the contract shall contain a the Task Order Number, complete description of the problem, the work performed, an itemized breakdown of the cost of labor and materials, and whether or not the VTS unit was returned to service. The University will be the sole judge determining if this service is a result of vandalism, misuse, abuse, negligence or normal wear and tear. In addition, the Contractor shall submit to the University with the invoice, a certified payroll for the Contractor's employees that performed the work indicated on the invoice. The certified payroll shall contain the employee's name(s), address(es), exact and specific work classification(s), total hours straight time, total hours overtime, rate of pay, and gross wages earned.

2. Equipment Inventory

a. The following procedure shall be used to add a VTS unit(s), not installed or renovated by Contractor, to the contract inventory:

- i. One Hundred and Twenty (120) days prior to the end of the VTS unit(s) warranty period the Contractor shall inspect the unit(s) and provide a list of major deficiencies for correction by any other Contractor responsible for the equipment installation or renovation. The Contractor shall provide this list within thirty (30) days of the inspection. If a list is not received in the specified time, it will be assumed that no pre-acceptance corrections are necessary and no further charges will be permitted.
- ii. The Contractor shall assume responsibility for maintaining the VTS unit(s) on the day following the end of the warranty period.

b. VTS unit(s) may be added, deleted or suspended from the contract from time to time at the discretion of the University. When adding VTS units included in the original price proposal the proposed cost, adjusted as allowed by the terms of the contract and prorated for the remaining term of the then current purchase order, will be added by change order issued by the University's procurement officer. When deleting VTS units included in the original price proposal the proposed cost deletion, adjusted as allowed by the terms of the contract and prorated for the remaining term of the then current purchase order, will be deleted by change order issued by the University's procurement officer. From time to time the University may choose to suspend the maintenance of VTS units when they are subject to extended outages due to renovation, modernization or, for example, loss of use of the building due to emergency or damage. Should this occur the prorated cost of maintaining the VTS units shall be deducted from the contract by way of a change order to the purchase order by the University's procurement officer. The reverse of this process shall be employed to restore units to full maintenance. Should the University require the addition of VTS units not originally proposed the Contractor must document all actual and/or anticipated increases in labor and material costs caused by the addition. The increase in the contract price shall be consistent with the University's experience with other similar VTS units (traction/hydraulic, number of openings, age) and shall not exceed the parameters set forth in this solicitation.

3. Transportation on Campus

- a. The campus is prone to heavy vehicular and pedestrian traffic. Every precaution shall be exercised to avoid injuring people or disrupting traffic.
- b. All materials shall be protected during transport and handling to prevent any and all damage. This shall include the provision of any necessary lifting devices or machines, and the skilled personnel to operate such machines.

4. Driving and Parking

a. All Contractor and employee vehicles used in the performance of this contract shall comply with the rules and regulations of the University's Department of Public Safety and Department of Parking and Transportation Services. The Contractor and Contractor's employees shall be subject to all campus traffic and parking regulations and restrictions and shall be responsible for any fines and/or restrictions as a result of violations.

b. Parking is not provided. Parking is the responsibility of the Contractor. The Contractor shall provide for and acquire the necessary parking permits for each employee regularly assigned to the campus as part of the contract. In addition, the Contractor shall acquire and make available parking permits for the use of any additional Contractor employees (service crew, adjuster, supervisor) performing work at the University. Those additional employees shall not use the permits of the regularly assigned employees.

5. Keys, Identification Cards, and Security

a. The Contractor's employees who are regularly assigned to the University shall be required to sign-out the appropriate "Elevator Key Ring" and/or access card(s) from the OM Service Center at the beginning of each shift. Each person shall sign out one (1) elevator key ring and or access card(s) and shall be responsible for that key ring and/or access card(s) until returned at the end of the shift. The Contractor's employees shall maintain diligent care of the key and/or access card(s) to avoid their loss and shall return them to the OM Service Center at the end of the shift. The Contractor's regularly assigned employees will be issued a University Identification Badge (Refer to P. Employee Identification on page 64), which they will carry on their persons at all times while they are on campus. These cards will double as a card key, which will allow them to enter a growing number of buildings and certain spaces within buildings. Each person shall be responsible for the card, take diligent care of it, and not lend it to anyone. If the card is lost, stolen, or damaged, the person to whom the card is assigned shall report it to the University's Project Manager immediately. A charge will be assessed for replacing lost or stolen cards.

b. The Contractor's employees who are not regularly assigned to the University shall first report to the University's Project Manager or deisgnee. They will then be assisted in signing out keys and/or access cards or directed to sign-out keys and/or access cards from the OM Service Center for access to the buildings or to the VTS machine rooms. These employees shall report back to the University's Project Manager or deisgnee and shall observe the same procedures concerning

keys and/or access cards as the Contractor's designated employees.

Any of the Contractor's employees responding to a VTS emergency call shall first report to the OM Service Center to sign out the "Elevator Key Ring" and/or access card(s), respond to the call and then return keys and/or access card(s) to the OM Service Center and have their service ticket signed.

- c. The safety and security of all faculty, staff, students, and visitors on the campus is a serious concern at the University. It is, therefore, of the utmost importance that the Contractor and the Contractor's employees honor our security procedures and take diligent care of any University keys and/or access cards under their control. It is the policy of the University that:
 - i. No Contractor shall sign keys and/or access card(s) out overnight or take keys and/or access card(s) off the campus. Any of the Contractor's employees not returning keys and/or access cards when leaving campus will be subject to recall, at the Contractor's expense, to return those items.
 - ii. No one shall duplicate or cause to be duplicated, any key or any access card on the University system. Anyone acquiring or attempting to acquire a University key or access card by fraudulent means or for unauthorized purposes will face criminal charges.
 - iii. Lost or stolen keys or access cards shall be reported immediately to the University's Project Manager or designee and to the campus police. The Contractor shall be responsible for the costs of replacing lost keys and/or re-keying the affected building or buildings if the University decides that security has been breached.
- d. Access to most academic buildings is unrestricted between the hours of 7:00 a.m. and 11:00 p.m. Monday through Friday except on holidays. Access to these buildings is restricted at all other times. The Contractor shall confine employees to public areas and other areas such as the VTS units, machine rooms, and hoistways, where they have work to perform.
- d. Access to some academic or administrative buildings is restricted to only authorized personnel. In other buildings access to some areas of the building may also be restricted. The Contractor and Contractor's employees shall follow the security procedures required by the University for that building or area. Neither the Contractor nor the Contractor's employees shall prop open doors separating secure areas from unsecured areas or leave these doors open, unlocked or unsecured and unattended at any time.
- e. The Contractor shall be responsible for the communication and enforcement of these policies to the Contractor's employees and to any Subcontractors that the Contractor engages to perform work at the University.

f. The University's policy concerning keys, access cards, and security procedures may change during the term of the contract. Additional restrictions and/or procedural steps may be added in the future.

6. Communications Equipment

- a. Two-way Radios The Contractor's employees regularly assigned to the University shall be required to use radio communication equipment while providing maintenance service at the University. The University currently provides two-way radios on the University's radio frequency for the use by the on-site personnel.
 - i. Radios will be provided at either the University Project Manager's office or at the OM Service Center.
 - ii. The Contractor's designated employees shall be required to pick up the necessary radio equipment at the beginning of the shift and return the radios in good condition at the end of the shift.
 - iii. The radios provided are to be used for official communications only.

 They shall be used for communicating with the OM Service Center or with another of Contractor's designated employees. All conversations shall be brief and to the point. Long exchanges shall be avoided and proper radio etiquette used at all times.
 - iv. The Contractor shall be held liable for replacement or repair costs for communications equipment that is lost or damaged by the Contractor's employees.
 - v. Jobs requiring frequent exchanges, long conversations or calls made to the Contractor's office shall be conducted over radios or telephones provided by the Contractor.
- b. The Contractor shall provide their site supervisor with a telephone the telephone number to which shall be a local call from the University.

7. Instruction of University Employees

- a. The Contractor shall provide eight (8) hours of instruction and/or training to University personnel on operational procedures for emergencies and routine problems that require immediate response. Training sessions or instruction shall be provided every six (6) months as required by the University. The cost of this service shall be included in the contract price. No charge shall be permitted when the service is rendered.
- b. Assistance to Other Trades The Contractor shall assist personnel of other trades by performing work required by the University in VTS areas. The Contractor shall provide access to VTS areas, shut down the unit(s) and/or make the area safe for

the other trades to work. The Contractor's employees shall advise the other tradesmen of any dangers in the area and of code requirements. The cost of this service shall be included in the contract price. No charge shall be permitted at the time the service is rendered.

- c. Assistance with Passenger Entrapments on Elevators Warranted by Others The Contractor's designated on-site employees shall assist the University with the rescue of entrapped passengers on VTS units under warranty with other elevator companies during the hours covered by regular shifts. The VTS unit shall be left out of service for the warranty company's inspection. The cost of this service shall be included in the contract price. No charge shall be permitted at the time the service is rendered.
- d. Storage The available space for the Contractor's operating office and for storage of onsite materials is limited. Available storage may or may not be in a single location on campus. The major portion of the Contractor's supplies must be stored at the Contractor's local warehouse. The Contractor shall not store materials in public areas or in locations where such storage blocks or impedes access to other building systems. The Contractor shall be solely responsible for the safety and the security of any materials and/or equipment stored at the University. The Contractor shall be solely responsible for storing hazardous materials in suitable containers and in appropriate locations.
 - i. The Contractor's employees, other than the on-site employees, shall perform routine delivery of parts and materials.
 - ii. The emergency pick-up of parts by the Contractor's on-site employees is allowed, but shall be limited to short trips to the Contractor's local warehouse or to local venders. The University's Project Manager shall approve all trips off the University during the hours covered by regular shifts.
 - iii. The Contractor's employees, other than the on-site employees shall deliver large or heavy items requiring more than one (1) person to handle.
 - e. Employee Conduct and Appearance The University reserves the rights to request, execute, and receive a background investigation on any employee of the Contractor and to require the Contractor to remove any employee from the University whose actions are considered to be detrimental to the best interests of the University. The Contractor shall at all times exercise and enforce strict discipline, good order, and control among the Contractor's employees. The Contractor shall not employ or permit to remain on the job any person the Contractor or the University considers unfit. The University shall have the

final decision in the approval or disapproval of the Contractor's employees performing work on this contract.

f. All the Contractor's employees performing work on this contract shall report in attire appropriate for the tasks that they are to perform and which comply with any codes that may apply. They shall be dressed in a work uniform with an identification patch containing both the company name and the employee's name and carry a photo-identification card or wear a clip-on photo identification badge containing, at a minimum, the company name, address and the employee's name. The Contractor's employees shall identify themselves to any resident or staff member, requesting identification. The Contractor's employees are to always present a professional appearance. Uniforms are to be in good repair, shirttails tucked in when in public and identification badges are to be plainly visible.

g. The Contractor will ensure that Contractor's employees and any Subcontractor employees comply with University policies and guidelines on Sexual Harassment Prevention and Substance Abuse. The Contractor will review these expectations with all the Contractor's employees and any Subcontractor employees who are to work at the University.

8. Workmanship

All work performed on this contract, either by the Contractor's employees or Subcontractor employees shall be done in a workmanlike manner. The University's Project Manager will determine what is or is not workmanlike.

9. Inspection and Monitoring by the University

The University reserves the right to monitor, inspect or test, or have the monitoring, inspection and testing performed by others, to ascertain that the requirements of these specifications are being fulfilled. Should it be found that the standards herein specified are not being met; the University may demand the Contractor to immediately place the VTS units in a condition that conforms to those standards. If the Contractor fails to comply with such demands, within a reasonable time, the University may by written notice to the Contractor, terminate the Contractor's right to proceed further with the work and may prosecute it to completion, by contract or otherwise, and the Contractor and the Contractor's sureties shall be liable to the University for any excess costs occasioned by the University.

Prior to the conclusion of the contract the University will assess the condition of the vertical transportation units to assure that all meet an industry standard common maintenance standard. The University may choose to employ a third party vertical transportation consultant for this service. The Contractor shall

complete any and all identified repairs and address all identified issues prior to the end of the contract. The intent here is simple: at the start of the contract the University is paying to bring all vertical transportation units to an common industry standard of maintenance and it is expected that the Contractor shall maintain the vertical transportation equipment in this fashion throughout the period of the contract so that the University does not experience this cost again on the occasion of the next contract award.

10. Scheduling Routine Maintenance

Any routine maintenance or repair that involves a VTS unit that is in safe operating condition prior to the performance of the work must be scheduled seven (7) working days in advance if the unit is removed from service for a period greater than one (1) hour. Any work on a VTS unit used for disability access or work requiring three (3) days or more to complete shall be scheduled four (4) weeks in advance and shall be performed at a time that does not interfere with classes or scheduled events.

11. Signs

The Contractor shall provide all designated employees with a sufficient quantity of high quality "OUT-OF-SERVICE" signs. These signs shall be placed at each VTS unit lobby, on every floor near the call buttons or on the door panel prior to removing a VTS unit from service. These signs must also be posted at the lobbies on all floors of out-of-service units upon responding to a trouble call if or when it is determined that the VTS unit will be out of service for one-half (1/2) hour or more and the Contractor's staff shall advise the OM Service Center prior to removing a VTS unit from service of the location and anticipated duration of the system outage as required in paragraph 15 below. The signs shall state that the unit is out of service and that interested parties may call UMB Work Contract at ext. 6-7570 for further information.

12. Lock-Out Tag-Out System

The Contractor shall have an approved Lock-out/Tag-out Program and shall supply all designated employees with a sufficient quantity of locks, tags, plastic ties, and other devices as required to lock-out and tag-out the circuit breaker(s) or the disconnect(s) of any VTS unit(s) removed from service. The Contractor's employees shall lock-out and tag-out any circuit breaker or disconnect that the employee de-energizes prior to working on the equipment and remove the lock and the tag when the work has been completed.

13. Safety

The Contractor shall equip all designated employees with any and all equipment, personal protective equipment, apparel, signs, barriers, and machinery necessary to safely perform their tasks and to ensure the safety of others. The Contractor shall provide all designated employees with the proper information, instruction and equipment to safely perform their duties in accordance with OSHA/MOSH, NFPA 70 (e), Elevator Industry Field Employees Safety Handbook and other Federal, State, and Local codes as appropriate.

14. VTS Units "Out-of-Service" List

The OM Service Center keeps a list of out-of-service VTS units for the purpose of informing interested building occupants of the status of these units. When it is determined that a VTS unit must be shut down and/or cannot be returned to service, the Contractor's employees shall immediately call the OM Service Center and ask that the unit be placed on the down list. The Contractor's employees shall provide the OM Service Center with the building name, the VTS unit number, the reason for the shut down and/or the delay, and an estimated duration of the outage. When the unit is returned to service after the repair, the Contractor's employees shall immediately call the OM Service Center and ask that the unit be removed from the down list. The Contractor's lead employee shall check the down log each morning to insure that it is up to date. The Contractor's employee working the evening shift shall check the down list prior to the end of his shift to insure that it is complete and correct.

15. Cutting, Welding, and Hot Works

a. Any work that involves welding, cutting with a torch, grinding, sawing, or cutting wood, metal, or concrete that may cause fire, smoke, dust, or the products of combustion shall proceed only after the Contractor's Contract Manager has acquired a "HOT WORK PERMIT" from the Department of Environmental Health and Safety (EHS) and the fire alarm or the adjacent smoke detectors have been disarmed by the UMB Electronics Shop. The Contractor shall provide a fire watch and take every precaution to ensure the safety of the building occupants.

b. Before cutting, welding, or using other open flame or spark producing equipment the Contractor's employees shall take the following precautions:

- i. Clear the floors and the surrounding area of combustible material within 35 feet of the work area.
- ii. Protect materials that cannot be moved with noncombustible material or fire retardant covers.
- iii. Tightly cover any floor openings within 40 feet of the work area.

- iv. Keep an appropriate fire extinguisher in the work area.
- v. Inspect all equipment to be used to insure that it is in good condition.
- vi. Make sure that the building sprinkler system, where provided, is in service.
- vii. Make sure that appropriate arrangements have been made to prevent false alarming of smoke detectors.
- viii. Clear the area of all flammable lint, dust, vapors, or liquids or equipment previously containing such materials.
 - ix. Assign a responsible firewatcher to watch for dangerous sparks in the area as well as the floors above and below. The firewatcher shall remain on the job site during the operation and for 30 minutes after the job has been completed. The firewatcher shall sign the permit in the place provided for his signature.

16. Hazardous Materials Handling

- a. The Contractor shall monitor each hydraulic VTS unit for oil loss and shall document the date oil is added, how much oil is added, and from what source.
- b. All environmentally sensitive materials shall be handled and/or disposed of in accordance with Federal, State, and Local guidelines. The costs associated with this service shall be included in the contract. No charge shall be permitted at the time the service is rendered.

17. VTS Prints and Instructions

The Contractor shall be responsible for maintaining the proper prints, drawings and instructions for maintenance, adjustment, or troubleshooting in the VTS machine rooms at all times. If any of these items become damaged or missing the Contractor shall replace them at his own expense.

18. Test Equipment

The Contractor shall provide all test equipment, specialized tools and/or instrumentation required to test, measure, adjust and/or diagnose VTS unit systems

19. Governing Standards

a. All work performed under this contract shall be in accordance with the American National Safety Code for Elevators, Dumbwaiters, Escalators, and Moving Walks, ASME A17.1 latest edition (including the latest revision supplements), ASME A17.2, ASME A17.3, A18.1, A117.1 the State of Maryland, Division of Labor and Industry, Department of Licensing and Regulation, the National Electrical Code –

NFPA 70, OSHA/MOSH, EPA regulations, and all governing local codes.

b. The Contractor shall correct all cited violations of items covered under this contract at no additional cost to the University, including any fees for re-inspection.

D. PACKAGING AND MARKING

The following packaging and marking requirements are incorporated herein:

The Contractor shall:

- 1. Pack and mark each shipment to comply with specifications contained herein. In the absence of specifications, prepare each shipment in conformance with carrier requirements and accepted trade practices.
- 2. Mark the outside of each shipment carton with the applicable contract number.
- 3. Deliver each shipment in good order and condition to the point(s) of delivery specified herein.
- 4. Be responsible for any loss and/or damage to the goods occurring before receipt of each shipment by the consignee at the delivery point(s) specified herein.
- 5. Furnish a delivery schedule and designate the mode of delivering carrier.

E. DELIVERIES OR PERFORMANCE

- 1. Prices quoted shall include all transportation and delivery charges fully prepaid by the Contractor, Free On Board (FOB) Destination to the University VTS unit.
- 2. When installation is required as part of this contract, the Contractor shall be responsible for removal of all packing materials.

F. CONTRACT ADMINISTRATION DATA

1. Roles of the University of Maryland, Baltimore Project Manager and Strategic Sourcing and Acquisition Services

The Strategic Sourcing and Acquisition Services is the University of Maryland, Baltimore authorized representative for all contract matters related to this contract. Additionally, throughout the duration of the contract, the Strategic Sourcing and Acquisition Services shall be the only individual with authority to modify any provisions of this contract including, without limitation, the statement of work, pricing or any other sections.

The University of Maryland, Baltimore Project Manager and designated staff shall be the principal interface on behalf of the University of Maryland, Baltimore for post-award technical matters, and shall have the authority to explain and provide further details regarding the University of Maryland, Baltimore expectations concerning the work to be performed hereunder and/or the items to be provided herein. The UMB Project Manager and designated staff shall have no authority to modify any provisions of this contract.

2. <u>Invoicing</u>

The Contractor shall provide the following invoicing services. Invoices shall reflect the structure spelled out in Section 00400, Article 4.

Throughout the duration of any resultant contract, the Contractor shall provide one paper copy of each invoice. The paper invoice must contain the following minimum information:

- a. Invoice Number
- b. Invoice Date
- c. The word ORIGINAL printed on the original copy of the document.
- d. The full company or corporate name and address; payment address if it differs from corporate address.
- e. The full nine (9) digit Federal Tax Identification number (for U.S. Contractors only) or Social Security Number.
- f. Purchase order number and/or contract number.

Direct invoices to the following address:

Accounts Payable University of Maryland, Baltimore The Saratoga Building 220 Arch Street Office Level 2, Rm. 02-123 Baltimore, Maryland 21201

Any invoice that is unclear, illegible or does not conform to these specific requirements shall be returned to the Contractor for re-issuance.

3. Schedule of Payments

Not applicable.

4. Assignment

No part of the work specified herein may be assigned or transferred to another Contractor without the prior written authorization of the Strategic Sourcing and Acquisition Services.

G. SERVICE REPORTS

Upon the completion of every required maintenance visit the Contractor shall include a written service report. Written Service reports are to be signed by both technician and University's Operation Maintenance representative or designee.

Written service reports shall be submitted at the end of each visit with the following information provided on the service reports to the designated University Representative:

- 1. Show date, starting and completion time;
- 2. location of the equipment (i.e. building, box/room location);
- 3. unit;
- 4. make and model;
- 5. serial number;
- 6. detailing exactly what tasks/work performed;
- 7. maintenance interval (if applicable) and;
- 7. if follow-up work is needed, it shall be listed, as such, with work completed by next business day, or as scheduled with University designated representative.

H. EMERGENCY SERVICE:

1. **DEFINITION OF EMERGENCY CALLS:**

An emergency service call is defined as any call the University makes to the Contractor to report a malfunction of any part, component, system, or subsystem, which has or had the potential to disrupt the operation of the equipment, the system, endangering equipment or personnel safety. These calls may be made at any time of any day. The Contractor shall respond to these calls as noted below.

2. RESPONSE TO EMERGENCY SERVICE CALLS:

The Contractor shall have phone service 24/7 to handle emergency calls. The University, or its representatives, shall notify the Contractor by telephone call when emergency service is required. The contract shall provide a telephone number where he or any of his designated representatives could be contracted in case of an emergency. The Contractor shall provide emergency service in response to calls made at any time of any day, 24 hours per day 7 days per week including holidays. The Contractor shall respond (i.e. be working onsite) within two (2) hours after a service call is made, unless otherwise scheduled by the University's designated representative.

NOTE: There shall be no charge for visits made between 7:00 AM - 4:00 PM, Monday through Friday.

3. LIQUIDATED DAMAGES:

The contractor shall have satisfactorily repaired malfunctioning equipment components, parts and shall have the system functioning properly within twenty four (24) hours maximum after the service call is made. Otherwise the contractor shall reimburse the owner 1/365 of the contract for every day that the malfunction(s) prevent(s) the equipment from operating properly.

4. SERVICE AND MATERIALS:

- a. When responding to an emergency service call, the Contractor shall provide all labor, materials, trouble-shooting diagnostics and equipment required to repair the malfunction and restore the equipment to first class operation condition. Replacements parts shall be of current design of same manufacturer to minimize system depreciation and obsolescence. Service shall be provided as may be required to restore the equipment or system to proper use without additional cost to the University.
- b. Workmen responding to a service call, scheduled or emergency shall unless otherwise directed, report in and sign out at the WORK CONTROL CENTER, located at the Pearl Street Garage, Operations and Maintenance, 622 W. Fayette Street, Baltimore, Maryland 21201 (410) 706-7570.
- c. At the time of sign-in, the service personnel may be issued keys, as required, to permit entry to the work area. Keys must be returned at the end of each service call (i.e. when work/job is completed and/or system is back online).

I. NON-EMERGENCY SERVICE (ROUTINE REPAIR):

1. DEFINITION OF NON-EMERGENCY SERVICE CALLS:

Non-emergency service call is defined as any call the University makes to the Contractor to report a malfunction or maladjustment of any part, component, system, or sub-system, which usually do not result in the equipment or system disruption or endangering equipment or personnel safety. These calls may be made during normal working hours. The Contractor shall respond to these calls as noted below.

2. RESPONSE TO NON-EMERGENCY SERVICE CALLS:

The Contractor shall have phone service 24/7 to handle non-emergency calls. The University, or its representatives, shall notify the Contractor by telephone call

when non-emergency service is required. The Contractor shall respond (i.e. be working on-site) within twenty-four (24) hours/next business day – between 7:00 am - 4:00 pm, after a service call is made, unless otherwise directed by the University's designated representative.

3. LIQUIDATED DAMAGES:

The contractor shall have satisfactorily repaired malfunctioning equipment components, parts and shall have the system functioning properly within twenty four (24) hours maximum after the service call is made. Otherwise the contractor shall reimburse the owner 1/365 of the contract for every day that the malfunction(s) prevent(s) the equipment from operating properly.

4. SERVICE AND MATERIALS:

- a. When responding to non-emergency service calls, the Contractor shall provide all labor, materials, troubleshooting diagnostics, the equipment required to repair the malfunction and restore the equipment to first class operating condition. Replacement shall be of current design of same manufacturer to minimize system depreciation and obsolescence. Service shall be provided, as may be required to restore the equipment or system to proper use without additional cost to the University.
- b. Workmen responding to a service call, scheduled or non-emergency shall unless otherwise directed, report in and sign out at the WORK CONTROL CENTER, located in the Pearl Street Garage, Operations and Maintenance (OM), 622 W. Fayette Street Baltimore, Maryland 21201 (410) 706-7570.
- c. At the time of sign-in, the service personnel may be issued keys, as required, to permit entry to the work area. Keys must be returned at the end of each service call (i.e. when work/job is completed and/or system is back online).

J. <u>ADDITIONAL CONTRACT REQUIREMENTS:</u>

- 1. Work area shall be left clean at the end of any visit. Any debris, as a result of work performed, shall be removed and disposed of offsite. The University's trash receptacles shall not to be used.
- 2. Damages: to be reported in writing to the University representative, immediately, or as soon as possible, at the latest, before the end of the visit.
- 3. Contractor's employees: criminal background checks must have been performed on all employees assigned to this contract. University shall

have the option to request evidence of such checks, at its discretion.

K. <u>REPLACEMENT MATERIAL:</u>

The Contractor shall replace worn, failed, and doubtful components and parts. Replacement parts, materials and supplies provided during the required maintenance or emergency service shall conform to the manufacturer's part number for the particular equipment except in the event that the part number is superseded by a more recent one, the most recent shall be provided. Software (if required), to include current operating, application and programming software, firmware updates etc. and any necessary system or front end hardware needed to utilize them is to be included in the scope of the project as they become available from the original manufacturer. Implementation of the upgrades is at the discretion of the University.

L. ELEVATOR OUTAGES:

The Contractor shall notify the University Project Manager or designee at least three (3) full business days prior to any proposed start of an elevator outage.

M. EMPLOYEE CONDUCT

Contractor will be fully responsible for the conduct of all of their employees and Subcontractor's employees. Behavior of Contractor employees deemed to be inappropriate (to include, but not limited to, sexual harassment of campus personnel, visitors and/or students; acts of violence of destruction of property; profane or obscene behavior or language; activities that disrupt the normal course of business at the university) in the sole discretion of the University or other contracting authority will result in the removal of the employee(s) from the premises. Serious or repeated problems with behavior deemed inappropriate will result in the involved employee (s) being excluded from working on the university's premises. The contract administrator, if in his /her sole opinion, determines the actions of the Contractor's employees or agents to be so egregious may request immediate termination of the contract by the Procurement Officer. The final decision shall be at the Procurement Officer's sole discretion.

The University reserves the right to request the removal of any employee "without cause" at any time.

N. <u>LIFTING DEVICES FOR EQUIPMENT</u>

Supply all cranes, lifts, hoists, etc., for the proper and efficient movement of all materials. All shall be provided with proper guides, bracing, safety devices, etc., as required by law and good practice.

O. PROTECTION OF WORK, STORAGE AND TRANSPORTATION OF MATERIALS

- 1. All equipment must be installed and/or stored indoor immediately upon arrival at the job site. If storage is required, a suitable space will be designated by OM at the applicable campus. Under no circumstances shall equipment be stored outdoors.
- 2. Transportation: All materials and equipment shall be so crated, packaged, blocked and otherwise protected during transportation and handling to prevent damage of any kind. This shall include the provision of any necessary lifting devices or machines and the skilled personnel to operate such machines.
- 3. Protecting Work in Place: Provide all necessary protection of completed work to prevent any and all damage.

P. <u>EMPLOYEE IDENTIFICATION</u>

- 1. The Contractors shall obtain identification (University ID Badge) for their employees, equipment and Subcontractors at the prevailing University badge fee. **EMPLOYEE**IDENTIFICATION OF WORKMEN ASSIGNED TO THE UNIVERSITY

 PROJECTS SHALL BE VISIBLE AT ALL TIMES. All Contractor's employees and Subcontractors shall be in uniform which identifies both Contractor's company name and employee's name as an employee.
- 2. All vehicles and mobile equipment shall be identified with the Contractors Name displayed in a highly visible manner.

Q. MATERIAL COSTS

Material costs, which will be reimbursed to the Contractor, shall be based on the cost of materials to the Contractor from his usual sources of supply with all usual trade practice discounts deducted. All cost discounts shall be deducted in determining materials costs. The Contractor shall provide equipment and material as specified by the University from sources at the least cost to the University. Competitive quotations shall be secured wherever feasible and in all instances when requested by the University. Contractor will be required to provide copies of invoices and proof of payment when requested by the University. Contractor responsible for receiving own materials, including unloading of delivery trucks, checking deliveries, transportation to the work area, University employees are not responsible for this.

R. UNIVERSITY'S RIGHT TO FURNISH MATERIAL AND EQUIPMENT

The University reserves the right to purchase material or job required merchandise. The Contractor will be reimbursed only for his labor cost used on the materials furnished. Materials not used on the job shall be returned to University's stock for credit to job.

S. SUBCONTRACTS

The Contractor shall be reimbursed for Subcontractor work per the quoted mark up. Before any such Subcontracts are awarded, the University shall be furnished with complete information in writing as to the fees which would be paid to the Subcontractor. The Subcontractor shall furnish to the Contractor the complete records as to labor and material cost and his fees. The Contractor shall submit such records to the Project Manager or designee with all requests for payment, which include payment on such Subcontracts, when requested.

T. TRUCKING/VEHICLES

Name of Contractor, License Numbers, Telephone Number and Address shall be displayed visibly on trucks/vehicles. The Contractor will be required to coordinate with the University on the loading and unloading of materials.

U. REMOVAL OF DEBRIS & CLEANING

Waste and debris shall not be allowed to accumulate in the building(s) or work area(s). The Contractor shall remove all debris, as the work progresses in occupied spaces the Contractor shall remove all debris on a daily basis. Salvageable material shall be piled separately for reuse or salvage by the University.

The Contractor shall be responsible to remove debris and clean work areas as the work progresses. On completion of the work, areas shall be left clean, free from abrasive or set materials liable to cause damage. Contractors shall be responsible for the removal of excess material and debris associated with their division of work.

V. INSURANCE REQUIREMENTS

1. a. The Contractor shall not start work under this contract until the Contractor has obtained at its own expense all of the insurance called for hereunder and such insurance has been approved by the procurement officer; nor shall the Contractor allow any Subcontractor to start work on any subcontract until all insurance required by the subcontract has been obtained and approved by the Contractor and University of Maryland. Approval of insurance required of the Contractor and Subcontractors for the University will be granted only after submission to the University of original certificates of insurance signed by an authorized representative of the insurers or, alternately, at the University's request, certified copies of the required insurance policies.

- b. The Contractor shall require all Subcontractors to maintain during the term of this agreement, Commercial General Liability insurance, Business Automobile Liability insurance, Workers Compensation and Employers Liability insurance, in the same manner, including the additional insured requirements in paragraph 1.e. below, as specified for the Contractor. The Contractor shall furnish Subcontractors' certificates of insurance to the University immediately upon request.
- c. All insurance policies required hereunder shall be endorsed to include the following provision; "It is agreed that this policy is not subject to cancellation, non-renewal, material change, or reduction in coverage until forty-five (45) days prior written notice has been given to the University."
- d. No acceptance and/or approval of any insurance by University of Maryland shall be construed as relieving or excusing the Contractor, or the surety or bond, if any, from any liability or obligation imposed upon either or both of them by the provision of the Contract Documents.
- e. NAMED ADDITIONAL INSURED The University of Maryland and the State of Maryland (including their elected or appointed officials, agents and employees) are to be named as additional insured under all coverage's except Workers Compensation, and the certificates of insurance (or the certified policies, if requested) must so indicate through inclusion of appropriate endorsement. Coverage afforded under this paragraph shall be primary to any other insurance of self-insurance, whether or not such other insurance or self-insurance is stated as primary, excess or contingent, as respects the above additional insured, their elected and appointed officials, agents and employees.
- f. Insurance coverage required in these specifications shall be in force throughout the Contract Term. Should the Contractor fail to provide acceptable evidence of current insurance within ten (10) days of receipt of written notice at any time during the contract term, the University shall have the absolute right to terminate the Contract without any further obligation to the Contractor, and the Contractor shall be liable to the University for the entire additional cost of procuring substitute performance and the cost of performing the incomplete portion of the Contract at time of termination.

- g. Contractual and other liability insurance provided under this Contract shall not contain a supervision, inspection or engineering service exclusion that would preclude University of Maryland or participation institutions from supervising or inspecting the operations of the Contractors as the end result.
- h. The Contractor shall assume all on-the-job responsibilities as to the control of persons directly employed by it and of agents or Subcontractors and anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable. The Contractor shall be as fully responsible to the University for the acts and omissions of its Subcontractors and of persons employed by them as it is for acts and omissions of persons directly employed by the Contractor.
- i. All required insurance coverage's must be acquired from insurers allowed to do business in the State of Maryland and acceptable to the University. The insurers must have a policyholders' rating Class "A-" or better, and a financial size of "Class VII" or better in the latest edition of Best's Insurance Reports.
- j. UMB will consider deductibles or self-insured retention as part of its review of the financial stability of the bidder. Any deductibles or self-insured retention shall be disclosed in the Contractor's proposal and shall be assumed by the Contractor.
- 2. The Contractor shall purchase the following insurance coverage's:
 - a. <u>Commercial General Liability Insurance</u> or its equivalent, for bodily injury, personal injury and property damage, including loss of use. It is preferred that coverage be provided on an "occurrence" basis. If "claims made" forms are submitted, the requirements noted in section 5 below must be met. Such Commercial General Liability policy shall include the following extensions:
 - i. It is preferred that the general aggregate limit applies separately to this project:
 - ii. Premises/Operations:
 - iii. Actions of Independent Contractors:
 - iv. Products/completed Operations to be maintained for two(2) years after completion of the contract.
 - v. Contractual Liability including protecting for the Contractor for claims arising out of liability assumed under this contract.

- vi. Personal injury liability including coverage for offenses related to employment, and for offenses assumed under this contract (delete any standard employment and contractual exclusions if contained in the personal injury coverage section):
- b. <u>Business Automobile Liability</u>, which will pay for liabilities arising out of accidents involving the ownership, operation, maintenance or use of any owned, hired or non-owned motor vehicles, uninsured motorist's insurance and automobile contractual liability.

NOTE: INSURANCE MUST BE ON A PRIMARY BASIS. CONTRACTUAL REQUIREMENTS MUST BE CLEARLY INDICATED ON CERTIFICATE OR BY ENDORSEMENTS.

- c. <u>Workers Compensation</u> statutory benefits are required by Maryland law or other laws as required by labor union agreements, including standard Other States coverage; Employers Liability coverage.
- 3. The coverage listed in paragraph 2.a., b., and c. (above) shall be written for not less than the following limits of liability. Limits can be furnished by a combination of primary and excess (umbrella) policies.
 - a. Commercial General Liability Insurance including all extensions \$2,000,000 each occurrence; \$2,000,000 personal injury; \$2,000,000 products/completed operations; \$2,000,000 general aggregated
 - b. Automobile bodily injury liability insurance with limits of not less than \$1,000,000 for each person and \$2,000,000 for each accident, and property damage liability insurance, with a limit of not less than \$2,000,000 for each accident.
 - c. Workers Compensation insurance statutory requirements. Employer's liability insurance \$1,000,000 each accidental injury; and \$1,000,000 policy limit for disease.
- 4. <u>Tort-Claim Act</u> It is agreed that the Contractor and its insurers will not raise or use, in the adjustment of claims or in the defense of suits against any participating USM institution, any immunity of the insured from tort liability, (including Maryland Tort Claim Act), including any limitation of liability, unless requested by any participating institution.

- 5. NOTE: If insurance required in paragraph 2.a. iv. and v. above has been issued on a "claims made" basis, the Contractor must comply with the following additional conditions. The limits of liability and the extensions to be included as described above remain the same. The Contractor must either:
 - 1. Agree to provide certificates of insurance evidencing the above coverages for a period of three (3) years after final payment for the contract. Such certificates shall evidence a retroactive date no later than the beginning of the Contractor's or Subcontractor's work under this contract, or
 - 2. Purchase an extended (minimum three (3) years) reporting period endorsement for the policy or policies in force during the term of this contract and evidence the purchase of this extended reporting period endorsement by means of a certificate of insurance or a copy of the endorsement itself, and
 - 3. The "retroactive date" must be effective prior to the inception of the work under this contract, and
 - 4. No "sunset" clauses shall apply.

*NOTE: A CERTIFICATION FROM AN AUTHORIZED BROKER OR AGENT THAT ALL REQUESTED COVERAGES ARE AVAILABLE AND WILL BE PROVIDED TO THE CONTRACTOR UPON AWARD OF THIS CONTRACT AND MUST BE PROVIDED WITH YOUR TECHNICAL BID PACKAGE. FAILURE TO PROVIDE CERTIFICATION MAY RENDER THEIR RESPONSE NON-RESPONSIVE AND IT MAY NOT BE CONSIDERED FOR AWARD.

END OF SECTION 00400/ARTICLE 2

SECTION 00400

ARTICLE 3 – SPECIAL CONDITIONS

- A. The Contractor understands and agrees that work beyond that estimated may be assigned to him and in that event he agrees to perform such work in accordance with the terms herein.
- B. The University reserves the right to complete particular projects through this Contract, through the use of University employees or to obtain separate Contracts through its normal procurement process according to the best interests of the University.
- C. The University reserves the right to assign University personnel employed in various trades to projects under this Contract and/or to perform a portion of the work under a particular project.
- D. The Contractor must be able to deliver all said labor and standard items of material and equipment within time frame confirmed in the Purchase Order(s) for each scope of work. Purchase of equipment and material not usually carried in stock by local distributors shall be accomplished competitively within the shortest time possible while maintaining the job schedule.
- E. The Contractor shall maintain a local office with telephone available for receiving and making calls throughout the working day and shall have available locally sufficient storage space for materials and equipment if his office and principal place of business is not located within 50 miles of the University.
- F. The Contractor shall designate a Contract Manager as key personnel to be assigned to this contract. Refer to Section 00300 for defined roles of this key person.
- G. The Contract Manager should be readily available to review all phases of the project when requested by the University. No changes can be made to the Contract Manager without the written approval of the University via the issuance of a contract amendment by UMB Strategic Sourcing and Acquisition Services.
- H. The Contractor shall perform the work under this Contract on the job site in the presence of University employees, other University Contractors and/or Subcontractors, whether union or non-union and shall complete the work assigned in the time required. If off-site work such as shop fabrication, the University shall be so notified at the time the Not-to-Exceed price is provided by the Contractor. The University reserves the right to inspect such off-site work at any time.

END OF SECTION 00400/ARTICLE 3

SECTION 00400

ARTICLE 4 - RATES AND MARK-UPS

A. CONTRACTOR'S LABOR RATES

- 1. It is understood and agreed that the cost of all of the following items shall be included in the Contractor's Labor Rates. These are not intended to be a complete listing.
 - a. Salaries of the Contractor's executive officers and office employees in whatever capacity employed, including such time as is spent at the job site or elsewhere in connection with the work, or time spent in consultation with University's representatives.
 - b. Expenses incurred in conducting the Contractor's business and his offices wherever located.
 - c. The Contractor's legal expense in connection with any work under the Contract.
 - d. Premiums for Workmen's Compensation and Unemployment Insurance, Contractor's share of Social Security Payment, and other such expenses based on payrolls of labor performed in connection with the work under the Contract.
 - e. Premiums for insurance for this Contract as required by the Specification or by the law to carry including Contractor's Liability, Property Damage, vehicle Insurance on tools and equipment as stipulated in the Specifications.
 - f. Fringe benefits for health and welfare, Workmen's Compensation insurance, vacations, holidays and pensions furnished by the Contractor.
 - g. Tools and construction equipment of all types including maintenance, loss and breakage as required to complete the work.
 - h. Overtime or incentive pay.
 - I. Accounting records.
 - J. All costs incurred by the Contractor in connection with the Guarantee as specified.
 - k. Overhead of general expenses of any kind not expressly indicated in the Specifications.
 - 1. All overhead and profit associated with labor.
 - m. Trucking, including use of truck and all fuel, depreciation, maintenance, and repair costs.
 - n. Expense incurred in complying with the labor and equal opportunity provisions of the Contract.
 - o. Travel costs for Contractor's business operation or employee's residence to job site of University of Maryland, Baltimore.
 - p. Welfare funds such as vacation allowance or other fringe benefits which are included in the local prevailing wage rates by written agreement between Contractors and Labor Unions.

- 2. The University will reimburse the Contractor as "labor cost" as follows:
 - a. Contractor's Lead Mechanic, when required, at the scale or hourly cash wages as designated in the Contractor's Bid Price. Labor cost shall include all workmen directly employed for the project and shall include all items noted in Paragraph A above.
 - b. Contractor's Mechanics, when required, at the scale or hourly cash wages as designated in the Contractor's Bid Price. Labor cost shall include all workmen directly employed for the project and shall include all items noted in Paragraph A above.
 - c. Contractors' Adjustor: when required, at the scale or hourly cash wages as designated in the Contractor's Bid Price. Labor cost shall include all workmen directly employed for the project and shall include all items noted in Paragraph A above.
- 3. The normal work hours for the Contractors shall be 7:00 AM through 4:00 PM, Monday Friday, unless otherwise stated in this Bid document. The work shall be carried forward during normal work hours unless the Contractor elects on his own violation to extend operations beyond regular hours and such extensions are approved by the University in writing. Overtime will be approved for payment only if the overtime is authorized in writing by the University Operations and Maintenance (OM) Project Manager or designee and indicated on University authorized Purchase Order (as noted in 00400/Article 1, Paragraph D). Overtime shall be shown in the Offer for change order work.
- 4. The University will not recognize any premium or incentive pay and no work shall be performed on an overtime basis or shift differential and no overtime payer shift differential shall be included as a "job cost" unless the performance of such overtime or shift differential has been authorized by the issuance of a change order amendment to the letter of acknowledgement or purchase order change order or as agreed to in the submitted not-to-exceed price by the Contractor or as required in the scope of work issued by the University on a particular project.
- 5. In the event an emergency exists which would require immediate overtime work, an authorized representative of the University shall be verbally notified by the Contractor immediately and if permission to perform this work is granted verbally, it shall be confirmed in writing by the University within twenty-four (24) hours of such work with a change order amendment to the purchase order to be issued within one (1) week of such work.
- 6. In the event that overtime work is required by the University it will be recognized as a "job cost" only if a change order amendment to the purchase order change order has been issued to the Contractor's price. The overtime work shall be limited to the work and time approved in advance of its performance and paid at the recognized premium rate.

7. Incentive payments or premium payments made to any employees by the Contractor either as permanent employee pay, subsistence or other pay in excess of the wage shall be at the expense of the Contractor and must be included as part of the quoted Labor Rates per Paragraph A above.

B. "JOB COSTS" FOR WHICH THE CONTRACTOR WILL BE REIMBURSED

(Material, Subcontractor & Equipment Rental on a cost plus fixed percentage mark-up per the Contractor's Bid Price).

- 1. The net cost of all materials including applicable federal or state taxes thereon plus the fixed percentage mark-up will be applicable for payment. The Contractor upon the request of Operations and Maintenance (OM) Project Manager or designee will provide copies of actual invoices; however, the Contractor will be required to provide to the University with its Certificate of Payment and Application for Payment copies of applicable Purchase Orders for material costs (see Section 00400, Article 4, paragraph C. 2, below for further explanation).
- 2. All payments made for Subcontractors cost plus fixed percentage mark-up.
- 3. Equipment rental will be handled same as "B. 1 "above.
- 4. Equipment owned by a firm, for which the University will be invoiced for its use, will be charged at daily rates noted on the Bid Price Documents.

C. <u>RECORDS OF PROJECT COSTS TO BE PROVIDED BY THE CONTRACTOR:</u>

- 1. Records: All the below listed items, records, and reports shall be furnished to the University as required by the Contractor's office staff (the cost of which is included in the Contractor's quoted labor rates). See paragraph C. 2 below as to documentation to be provided by the Contractor with Certificates of Payment. When requested by the University, the Contractor is required to furnish any records within ten (10) days of the request. The Contractor shall retain the following records for three (3) years after completion of a project:
 - a. Purchase Orders and invoices for materials inclusive of tool rentals as well as proof of payments (canceled checks);
 - b. Subcontract agreements as well as proofs of payments (canceled checks); and,
 - c. Payroll records for all of the Contractor's personnel inclusive of Contract Manager, Service Technicians and trade people.
 - d. Final billings on an assigned project must be submitted to the University for processing. Failure to submit this required final invoice will result in the final invoice being returned to the Contractor for compliance.

2. Billing Format:

- a. Contractor is to provide a schedule of values to the University for approval prior to the submission of the first progress billing.
- b. With each submission, the Contractor is to attach the following back-up information:
 - i. Copies of purchase orders (PO's) for material costs billed inclusive of transportation charges; if, however, the materials used are not specifically purchases for such work but are taken from the Contractor's stock, then in lieu of the P.O., the Contractor shall provide a written statement as to what these materials are, accompanied by an affidavit of the Contractor which shall certify that such materials were taken from the stock, that the quantity claimed was actually used, and that the price and transportation of the materials as are claimed represent actual cost.
 - ii. Statement of labor costs inclusive of name, classification, total hours for each, rate and extension total for work performed by the Contractor's own forces.
 - iii. Copy of any Subcontractors' invoices which are applicable.

END OF SECTION 00400/ARTICLE 4

END OF SECTION 00400

ATTACHMENT A Technical Proposal Forms

The following forms must be included within the Proposers Technical Proposal. However, please refer to Section 00300 for further required contents of the Technical Proposal. Completion of these forms is not the entire Bid.

NOTE: PLEASE RETURN FORMS IN THE SAME ORDER GIVEN.

 _ Transmittal Letter (Mandatory)
 _ Bid/Proposal Affidavit
 _ Key Personnel Form for Contract Manager
 _ Key Personnel References (3) for Contract Manager
 _ Key Personnel Form for Lead Mechanic
 _ Key Personnel References (3) for Lead Mechanic
 _ Key Personnel Form for Mechanics (Firm may submit no more than two (2) personnel for this position)
 _ Key Personnel References (3) for Mechanics
 _ Key Personnel Form for Adjustor
 _ Key Personnel References for Adjustor
 Firms Experience Forms and References: Maintenance Projects (3) Renovations/Modernization (3)
 _ Company Profile
 _ Annual Sales
 _ Statement of Approach
 _ Economic Benefit
 _ Certification Regarding Investment Activities in IRAN
 _ Certificate of Insurance
 _ MBE Attachment E-1A: MBE Utilization and Fair Solicitation Affidavit
Acknowledgment of Amendment(s) (if any)

BID/PROPOSAL AFFIDAVIT

A. AUTHORIZED REPRESENTATIVE

I HEREBY AFFIRM THAT:	
I am the (title)(business)	and that I noccess the legal
,	alf of myself and the business for which I am acting.

B. CERTIFICATION REGARDING COMMERCIAL NONDISCRIMINATION

The undersigned bidder hereby certifies and agrees that the following information is correct: In preparing its bid on this project, the bidder has considered all proposals submitted from qualified, potential Subcontractors and suppliers, and has not engaged in "discrimination" as defined in §19-103 of the State Finance and Procurement Article of the Annotated Code of Maryland. "Discrimination" means any disadvantage, difference, distinction, or preference in the solicitation, selection, hiring, or commercial treatment of a vendor, Subcontractor, or commercial customer on the basis of race, color, religion, ancestry, or national origin, sex, age, marital status, sexual orientation, or on the basis of disability or any otherwise unlawful use of characteristics regarding the vendor's, supplier's, or commercial customer's employees or owners. "Discrimination" also includes retaliating against any person or other entity for reporting any incident of "discrimination". Without limiting any other provision of the solicitation on this project, it is understood that, if the certification is false, such false certification constitutes grounds for the State to reject the bid submitted by the bidder on this project, and terminate any contract awarded based on the bid. As part of its bid or proposal, the bidder herewith submits a list of all instances within the past 4 years where there has been a final adjudicated determination in a legal or administrative proceeding in the State of Maryland that the bidder discriminated against Subcontractors, vendors, suppliers, or commercial customers, and a description of the status or resolution of that determination, including any remedial action taken. Bidder agrees to comply in all respects with the State's Commercial Nondiscrimination Policy as described under Title 19 of the State Finance and Procurement Article of the Annotated Code of Maryland.

B-1. Certification Regarding Minority Business Enterprises.

The undersigned bidder hereby certifies and agrees that it has fully complied with the State Minority Business Enterprise Law, State Finance and Procurement Article, §14-308(a)(2), Annotated Code of Maryland, which provides that, except as otherwise provided by law, a Contractor may not identify a certified minority business enterprise in a bid or proposal and:

- (1) Fail to request, receive, or otherwise obtain authorization from the certified minority business enterprise to identify the certified minority proposal;
- (2) Fail to notify the certified minority business enterprise before execution of the contract of its inclusion in the bid or proposal;

- (3) Fail to use the certified minority business enterprise in the performance of the contract; or
- (4) Pay the certified minority business enterprise solely for the use of its name in the bid or proposal.

Without limiting any other provision of the solicitation on this project, it is understood that if the certification is false, such false certification constitutes grounds for the State to reject the bid submitted by the bidder on this project, and terminate any contract awarded based on the bid.

C. AFFIRMATION REGARDING BRIBERY CONVICTIONS

I FURTHER AFFIRM THAT:

Neither I, nor to the best of my knowledge, information, and belief, the above business (as is defined in Section 16-101(b) of the State Finance and Procurement Article of the Annotated Code of Maryland), or any of its officers, directors, partners, controlling stockholders, or any of its employees directly involved in the business's contracting activities including obtaining or performing contracts with public bodies has been convicted of, or has had probation before judgment imposed pursuant to Criminal Procedure Article, §6-220, Annotated Code of Maryland, or has pleaded nolo contendere to a charge of, bribery, attempted bribery, or conspiracy to bribe in violation of Maryland law, or of the law of any other state or federal law, except as follows (indicate the reasons why the affirmation cannot be given and list any conviction, plea, or imposition of probation before judgment with the date, court, official or administrative body, the sentence or disposition, the name(s) of person(s) involved, and their current positions and responsibilities with the business):

D. AFFIRMATION REGARDING OTHER CONVICTIONS

I FURTHER AFFIRM THAT:

Neither I, nor to the best of my knowledge, information, and belief, the above business, or any of its officers, directors, partners, controlling stockholders, or any of its employees directly involved in the business's contracting activities including obtaining or performing contracts with public bodies, has:

- (1) Been convicted under state or federal statute of:
- (a) A criminal offense incident to obtaining, attempting to obtain, or performing a public or private contract; or

- (b) Fraud, embezzlement, theft, forgery, falsification or destruction of records or receiving stolen property;
- (2) Been convicted of any criminal violation of a state or federal antitrust statute;
- (3) Been convicted under the provisions of Title 18 of the United States Code for violation of the Racketeer Influenced and Corrupt Organization Act, 18 U.S.C. §1961 et seq., or the Mail Fraud Act, 18 U.S.C. §1341 et seq., for acts in connection with the submission of bids or proposals for a public or private contract;
- (4) Been convicted of a violation of the State Minority Business Enterprise Law, §14-308 of the State Finance and Procurement Article of the Annotated Code of Maryland;
- (5) Been convicted of a violation of §11-205.1 of the State Finance and Procurement Article of the Annotated Code of Maryland;
- (6) Been convicted of conspiracy to commit any act or omission that would constitute grounds for conviction or liability under any law or statute described in subsections (1)—(5) above;
- (7) Been found civilly liable under a state or federal antitrust statute for acts or omissions in connection with the submission of bids or proposals for a public or private contract;
- (8) Been found in a final adjudicated decision to have violated the Commercial Nondiscrimination Policy under Title 19 of the State Finance and Procurement Article of the Annotated Code of Maryland with regard to a public or private contract; or
- (9) Admitted in writing or under oath, during the course of an official investigation or other proceedings, acts or omissions that would constitute grounds for conviction or liability under any law or statute described in §§B and C and subsections D(1)—(8) above, except as follows (indicate reasons why the affirmations cannot be given, and list any conviction, plea, or imposition of probation before judgment with the date, court, official or administrative body, the sentence or disposition, the name(s) of the person(s) involved and their current positions and responsibilities with the business, and the status of any debarment):

_			

E. AFFIRMATION REGARDING DEBARMENT

I FURTHER AFFIRM THAT:

Neither I, nor to the best of my knowledge, information, and belief, the above business, or any of its officers, directors, partners, controlling stockholders, or any of its employees directly involved in the business's contracting activities, including obtaining or performing contracts with public bodies, has ever been suspended or debarred (including

being issued a limited denial of participation) by any public entity, except as follows (list each debarment or suspension providing the dates of the suspension or debarment, the name of the public entity and the status of the proceedings, the name(s) of the person(s) involved and their current positions and responsibilities with the business, the grounds of the debarment or suspension, and the details of each person's involvement in any activity that formed the grounds of the debarment or suspension).
AFFIRMATION REGARDING DEBARMENT OF RELATED ENTITIES
I FURTHER AFFIRM THAT:
(1) The business was not established and it does not operate in a manner designed to evade the application of or defeat the purpose of debarment pursuant to Sections 16-101, et seq., of the State Finance and Procurement Article of the Annotated Code of Maryland and
(2) The business is not a successor, assignee, subsidiary, or affiliate of a suspended or debarred business, except as follows (you must indicate the reasons why the affirmations cannot be given without qualification):
SUB-CONTRACT AFFIRMATION
I FURTHER AFFIRM THAT:
Neither I, nor to the best of my knowledge, information, and belief, the above business, has knowingly entered into a contract with a public body under which a person debarred or suspended under Title 16 of the State Finance and Procurement Article of the Annotated Code of Maryland will provide, directly or indirectly, supplies, services, architectural services, construction related services, leases of real property, or construction.
AFFIRMATION REGARDING COLLUSION
I FURTHER AFFIRM THAT:
Neither I, nor to the best of my knowledge, information, and belief, the above business has:

- (1) Agreed, conspired, connived, or colluded to produce a deceptive show of competition in the compilation of the accompanying bid or offer that is being submitted;
- (2) In any manner, directly or indirectly, entered into any agreement of any kind to fix the bid price or price proposal of the bidder or offeror or of any competitor, or otherwise taken any action in restraint of free competitive bidding in connection with the contract for which the accompanying bid or offer is submitted.

I. FINANCIAL DISCLOSURE AFFIRMATION

I FURTHER AFFIRM THAT:

I am aware of, and the above business will comply with, the provisions of Section 13-221 of the State Finance and Procurement Article of the Annotated Code of Maryland, which require that every business that enters into contracts, leases, or other agreements with the State of Maryland or its agencies during a calendar year under which the business is to receive in the aggregate \$100,000 or more shall, within 30 days of the time when the aggregate value of the contracts, leases, or other agreements reaches \$100,000, file with the Secretary of State of Maryland certain specified information to include disclosure of beneficial ownership of the business.

J. POLITICAL CONTRIBUTION DISCLOSURE AFFIRMATION

I FURTHER AFFIRM THAT:

I am aware of, and the above business will comply with, Election Law Article, §§14-101—14-108, Annotated Code of Maryland, which requires that every person that enters into contracts, leases, or other agreements with the State of Maryland, including its agencies or a political subdivision of the State, during a calendar year in which the person receives in the aggregate \$100,000 or more shall file with the State Board of Elections a statement disclosing contributions in excess of \$500 made during the reporting period to a candidate for elective office in any primary or general election.

K. DRUG AND ALCOHOL FREE WORKPLACE

(Applicable to all contracts unless the contract is for a law enforcement agency and the agency head or the agency head's designee has determined that application of COMAR 21.11.08 and this certification would be inappropriate in connection with the law enforcement agency's undercover operations.)

I CERTIFY THAT:

- (1) Terms defined in COMAR 21.11.08 shall have the same meanings when used in this certification.
- (2) By submission of its bid or offer, the business, if other than an individual, certifies and agrees that, with respect to its employees to be employed under a contract resulting from this solicitation, the business shall:
- (a) Maintain a workplace free of drug and alcohol abuse during the term of the contract;

- (b) Publish a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of drugs, and the abuse of drugs or alcohol is prohibited in the business' workplace and specifying the actions that will be taken against employees for violation of these prohibitions;
- (c) Prohibit its employees from working under the influence of drugs or alcohol;
- (d) Not hire or assign to work on the contract anyone whom the business knows, or in the exercise of due diligence should know, currently abuses drugs or alcohol and is not actively engaged in a bona fide drug or alcohol abuse assistance or rehabilitation program;
- (e) Promptly inform the appropriate law enforcement agency of every drug-related crime that occurs in its workplace if the business has observed the violation or otherwise has reliable information that a violation has occurred:
- (f) Establish drug and alcohol abuse awareness programs to inform its employees about:
- (i) The dangers of drug and alcohol abuse in the workplace;
- (ii) The business' policy of maintaining a drug and alcohol free workplace;
- (iii) Any available drug and alcohol counseling, rehabilitation, and employee assistance programs; and
- (iv) The penalties that may be imposed upon employees who abuse drugs and alcohol in the workplace;
- (g) Provide all employees engaged in the performance of the contract with a copy of the statement required by K(2)(b), above;
- (h) Notify its employees in the statement required by $\S K(2)(b)$, above, that as a condition of continued employment on the contract, the employee shall:
- (i) Abide by the terms of the statement; and
- (ii) Notify the employer of any criminal drug or alcohol abuse conviction for an offense occurring in the workplace not later than 5 days after a conviction;
- (i) Notify the procurement officer within 10 days after receiving notice under K(2)(h)(ii), above, or otherwise receiving actual notice of a conviction;
- (j) Within 30 days after receiving notice under K(2)(h)(ii), above, or otherwise receiving actual notice of a conviction, impose either of the following sanctions or remedial measures on any employee who is convicted of a drug or alcohol abuse offense occurring in the workplace:
- (i) Take appropriate personnel action against an employee, up to and including termination; or

- (ii) Require an employee to satisfactorily participate in a bona fide drug or alcohol abuse assistance or rehabilitation program; and
- (k) Make a good faith effort to maintain a drug and alcohol free workplace through implementation of K(2)(a), above.
- (3) If the business is an individual, the individual shall certify and agree as set forth in §K(4), below, that the individual shall not engage in the unlawful manufacture, distribution, dispensing, possession, or use of drugs or the abuse of drugs or alcohol in the performance of the contract.
- (4) I acknowledge and agree that:
- (a) The award of the contract is conditional upon compliance with COMAR 21.11.08 and this certification:
- (b) The violation of the provisions of COMAR 21.11.08 or this certification shall be cause to suspend payments under, or terminate the contract for default under COMAR 21.07.01.11 or 21.07.03.15, as applicable; and
- (c) The violation of the provisions of COMAR 21.11.08 or this certification in connection with the contract may, in the exercise of the discretion of the Board of Public Works, result in suspension and debarment of the business under COMAR 21.08.03.

L. CERTIFICATION OF CORPORATION REGISTRATION AND TAX PAYMENT

I FURTHER AFFIRM THAT:

(1) The business named above is a (domestic) (foreign) corporation registered in
accordance with the Corporations and Associations Article, Annotated Code of
Maryland, and that it is in good standing and has filed all of its annual reports, together
with filing fees, with the Maryland State Department of Assessments and Taxation, and
that the name and address of its resident agent filed with the State Department of
Assessments and Taxation is:

Name:	Address:	
-		

(2) Except as validly contested, the business has paid, or has arranged for payment of, all taxes due the State of Maryland and has filed all required returns and reports with the Comptroller of the Treasury, the State Department of Assessments and Taxation, and the Department of Labor, Licensing, and Regulation, as applicable, and will have paid all withholding taxes due the State of Maryland prior to final settlement.

M. CONTINGENT FEES

I FURTHER AFFIRM THAT:

(If not applicable, so state).

The business has not employed or retained any person, partnership, corporation, or other entity, other than a bona fide employee, bona fide agent, bona fide salesperson, or

commercial selling agency working for the business, to solicit or secure the Contract, and that the business has not paid or agreed to pay any person, partnership, corporation, or other entity, other than a bona fide employee, bona fide agent, bona fide salesperson, or commercial selling agency, any fee or any other consideration contingent on the making of the Contract.

N. Repealed.

O. ACKNOWLEDGEMENT

I ACKNOWLEDGE THAT this Affidavit is to be furnished to the Procurement Officer and may be distributed to units of: (1) the State of Maryland; (2) counties or other subdivisions of the State of Maryland; (3) other states; and (4) the federal government. I further acknowledge that this Affidavit is subject to applicable laws of the United States and the State of Maryland, both criminal and civil, and that nothing in this Affidavit or any contract resulting from the submission of this bid or proposal shall be construed to supersede, amend, modify or waive, on behalf of the State of Maryland, or any unit of the State of Maryland having jurisdiction, the exercise of any statutory right or remedy conferred by the Constitution and the laws of Maryland with respect to any misrepresentation made or any violation of the obligations, terms and covenants undertaken by the above business with respect to (1) this Affidavit, (2) the contract, and (3) other Affidavits comprising part of the contract.

I DO SOLEMNLY DECLARE AND AFFIRM UNDER THE PENALTIES OF	
PERJURY THAT THE CONTENTS OF THIS AFFIDAVIT ARE TRUE AND	
CORRECT TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BEI	LIEF.
Date: By:	
(Authorized Representative and Affiant)	

12.0021 (Rev. 07/2010)

Page 1 of 4

KEY PERSONNEL FORMS IFB88597WG

MAINTENANCE OF ELEVATORS, DUMBWAITERS AND LIFTS

KE	Y PERSON'S NA	ME:		
PO	SITION TO BE A	ASSIGNED:		# of Personnel for this Position
			□ Contract Manage	
			□ Lead Mechanic	1
			□ Mechanics	2
			□ Adjustor	1
atta to s	ch additional pages ee attached pages.	finds the space provides to this form as he fir NING/EDUCATION	nds appropriate and j	ust indicate on this
	ssociation/			censes/Seminars
	nstitution	Apprenticesh Degree - Maj		ate Earned
em		STORY: (If a person please provide comple his form.)		
Pag		ADI OVED'S NAME.		
4.1	CURRENT EN	WIFLOTER'S NAME.		
4.1		MENT:		
4.1 DA				

Page 2 of 4

KEY PERSONNEL FORMS IFB88597WG

EY P	ERSON'S NAME:				
	4.2 PRIOR EMPLOYER'S NAME:				
DATES OF EMPLOYMENT:					
	POSITION HELD	DURATION BY DATE			
	4.3 PRIOR EMPLOYER'S NAME:				
	DATES OF EMPLOYMENT:				
	POSITION HELD	DURATION BY DATE			
	CONTRACT/PROJECT REFERENCES: (Note: It is preferable that these references from the Similar Contract/Project Experience provided on attached chart below to this K Personnel Form; if this is the case, you need only indicate "see attached" under to Description of Contract item.)				
	5.1 CONTACT PERSON:	TELEPHONE #:			
	COMPANY NAME:				
	DEGCD IPTION OF CONTRA ACT				

Page 3 of 4

KEY PERSONNEL FORMS IFB88597WG

5.2	CONTACT PERSON:	TELEPHONE #:
COM		
DESC	CRIPTION OF CONTRACT:	
5.3	CONTACT PERSON:	TELEPHONE #:
COM	PANY NAME:	
DESC	CRIPTION OF CONTRACT:	
АСН	IEVEMENTS/PROFESSIONAL/1	TRADE CERTIFICATIONS/OTHER
		TRADE CERTIFICATIONS/OTHER

Page 4 of 4

KEY PERSONNEL FORMS SIMILAR CONTRACT/PROJECT EXPERIENCE ATTACHMENT IFB88597WG

KEY PERSON'S NAME:	OFFERER:
A. ELEVATORS, DUMBWAITERS AND LIFTS PROPOSER:	PROJECT OWNER'S NAME:
PROJECT NAME:	
START DATE:	**CONTACT PERSON:
COMPLETION DATE:	**TELEPHONE NUMBER:
CONTRACT AMT: \$	OFFERER'S CONTRACT MANAGER:
CONTRACT METHOD:T&MLUMP SUM/FP	OFFERER'S LEAD MECHANIC:
OTHER	OFFERER'S MECHANIC:
	OFFERER'S ADJUSTOR:
SETTINGS:OCCUPIED,URBAN ENVIRONMENT, H	HIGHER EDUCATION
WORK INCLUDED: (check all that apply)	
Preventative Maintenance repairs	inspectionstestingRenovationsModernization
Reporting on work performance Five-Year	Tests Troubleshooting Other:
Brief, but detailed, description of the project inclusive of type of pro	oject and Project Schedule.
**NOTE: Be sure that the Contact Person and Telephone	# are accurate as the University will be contacting them for a

reference.

OFFERER'S CONTRACTS/PROJECTS MAINTENANCE EXPERIENCE FORM IFB88597WG

OFFERER	:
----------------	---

A. MAINTENANCE OF ELEVATORS, DUMBWAITER PROPOSER:			
PROJECT NAME:			
START DATE:			
COMPLETION DATE:			
CONTRACT AMT: \$	OFFERER'S CONTRACT MANAGER:		
CONTRACT METHOD: T&M LUMP SUM/FP	OFFERER'S LEAD MECHANIC:		
OTHER	OFFERER'S MECHANIC:		
	OFFERER'S ADJUSTOR:		
***SETTINGS: OCCUPIED,URBAN ENVIRONMENT,			
***WORK INCLUDED: (check all that apply) Preventative Maintenance repairs Reporting on work performance Five-Yea	inspections testing Troubleshooting ar Tests Other:		
Brief, but detailed, description of the project inclusive of type of p	project and Project Schedule.		

^{**}NOTE: Be sure that the Contact Person and Telephone # are accurate as the University will be contacting them for a reference.

^{***}NOTE: The Offerer shall submit a minimum of three (3) maintenance contracts/projects of elevators in a public facility similar to a University or large campus installation.

OFFERER'S RENOVATION/MODERNIZATION EXPERIENCE FORM IFB88597WG

OF:	FER	ER:
-----	-----	-----

B. RENOVATION/MODERNIZATION OF ELEVATORS, I PROPOSER:	DUMBWAITERS AND LIFTS PROJECT OWNER'S NAME:
PROJECT NAME:	ADDRESS:
START DATE:	**CONTACT PERSON:
COMPLETION DATE:	**TELEPHONE NUMBER:
***CONTRACT AMT: \$	OFFERER'S CONTRACT MANAGER:
CONTRACT METHOD: T&M LUMP SUM/FP	OFFERER'S LEAD MECHANIC:
OTHER	OFFERER'S MECHANIC:
	OFFERER'S ADJUSTOR:
SETTINGS: OCCUPIED,URBAN ENVIRONMENT, HIG	HER EDUCATION
***WORK INCLUDED: (check all that apply): Renovations Brief, but detailed, description of the project inclusive of type of project	
	·
	······································

^{**}NOTE: Be sure that the Contact Person and Telephone # are accurate as the University will be contacting them for a reference.

^{***}NOTE: The Offerer shall submit a minimum of three (3) renovations or new installation contracts/projects involving the installation and/or replacement of major components and costing the customer \$250,000.00 or more.

COMPANY PROFILE IFB88597WG

BIDDING FIRMS COMPANY NAME: (Local branch which will service UMB contract)		
ADDRESS OF COMPANY:(Local branch which will service UMB contract)		
DATE OF INCORPORATION: STATE OF INCORPORATION:		
PARENT COMPANY INFORMATION (IF APPLICABLE):		
DATE OF INCORPORATION: STATE OF INCORPORATION:		
TYPE OF ORGANIZATION (I.E., CORPORATION, PARTNERSHIP, INDIVIDUAL, JOINT VENTURE):		
NUMBER OF YEARS IN BUSINESS UNDER PRESENT NAME:		
# OF YEARS IN BUSINESS: # OF YEARS IN BUSINESS (PARENT OFFICE)		
OTHER OR FORMER NAMES UNDER WHICH YOUR ORGANIZATION HAS OPERATED:		
TYPE OF WORK PERFORMED (CHECK ALL THAT ARE APPLICABLE):		
□ Full Service Maintenance, □ Preventative Maintenance, □ Repairs, □ Inspections		
□ Renovations, □ Modernizations, □ Five-Year Testing's, □ Troubleshooting		
□ OTHER:		
TYPE OF SERVICES WHICH WILL BE PROVIDED BY LOCAL BRANCH OFFICE WHICH WILL SERVICE UMB:		
TYPE OF SERVICES WHICH WILL BE PROVIDED BY PARENT COMPANY (IF APPLICABLE) TO UMB:		
TYPE OF SUPPORT SERVICES PROVIDED BY PARENT OFFICE TO THE LOCAL BRANCH OFFICE WHICH WILL SERVICE UMB:		

COMPANY PROFILE IFB88597WG

NOTE: ATTACH ORGANIZATIONAL CHART OF BOTH THE <u>PARENT COMPANY</u> (IF APPLICABLE) AND THE <u>LOCAL BRANCH OFFICE</u> WHICH WILL SERVICE UMB.

NAME OF PRINCIPAL(S) AND TITLE(S) AT THE BRANCH OFFICE WHICH WILL SERVICE UMB:
NAME OF PRINCIPAL(S) AND TITLE(S):
BRIEF HISTORY OF COMPANY:

	TOTAL COMPANY	LOCAL	EMPLOYEES IN
		BRANCH	THE
		OFFICE	BALTIMORE
		WHICH WILL	METROPOLITAN
		SERVICE UMB	AREA
Number of Managers			
Number of Supervisors			
Number of Mechanics			
Number of Modernization/Construction			
Field Staff			
Number of Maintenance Field employees			
Number of Engineering employees			
Number of Office/Administrative Personnel			
TOTAL NUMBER OF EMPLOYEES:			

COMPANY PROFILE IFB88597WG

OFFICES AND WAREHOUSE LOCATIONS IN BALTIMORE METROPOLITAN AREA:
ELEVATORS UNDER MAINTENANCE SERVICES AGREEMENTS IN BALTIMORE METROPOLITAN AREA:
RID SECURITY.
BID SECURITY: BONDING COMPANY.
BONDING COMPANY:
BONDING CAPACITY:

NOTE: If a Bidder finds the space provided is insufficient, he can attach additional pages to this form as he finds appropriate and just indicate on this form to "See Attached Page(s)".

ANNUAL SALES VOLUME/NUMBER OF CONTRACT/PROJECTS IFB88597WG

YEAR	ANNUAL SALES VOLUME \$	NUMBER OF CONTRACTS/PROJECTS COMPLETED	LARGEST CONTRACT/PROJECT SIZE
2017	\$		\$
2016	\$		\$
2015	\$		\$

The above figures should be for the <u>local branch office</u> which will service the University.

STATEMENT OF APPROACH FORM IFB88597WG

In response to the BID, Bidders are to provide their statement of approach as to **how** the Contractor will organize and manage this contract and **how** work will be performed by their firm per the scope of services/work contained in the bid documents.

The information to be provided under this category is to include, but not limited to, the following:

a.		perience with providing maintenance on equipment, machines and controls to the various the University of Maryland, Baltimore.
b.		w your mechanics and/or maintenance employees carry out safety practices before any kind of maintenance on UMB's VTS units.
c.	Describe pro maintenance	posed capabilities and systems used to monitor and report the execution of the proposed contract.
	i.	Elevator Contractor shall have on-line maintenance reporting capability for full access by the UMB. Provide overview of system and give brief description of available reports. If Elevator Contractor does not have the capability for on-line maintenance reporting, provide information listing documentation available to verify contract requirements for submission to UMB.
	ii.	Elevator Contractor should include any equipment or systems that will be used to verify and define the efforts of the maintenance contract. Maintenance management software, electronic job tasking and electronic notification for completion of job task are of particular interest.
	iii.	Elevator Contractor should include any equipment or systems that can be used to accent the efforts of the maintenance contract. Remote monitoring capabilities and systems for

automatic notification of maintenance task completion are of particular interest.

STATEMENT OF APPROACH FORM IFB88597WG

- d. Describe maintenance schedule and proposed tasks for the completion of the required preventive maintenance hours listed in the equipment schedule. Proposed preventive maintenance hours are a minimum, and any additional hours or repairs required to adhere to the maintenance requirements as defined in the contract documents are the responsibility of the successful Contractor. Include the following items:
 - i. Weekly, Monthly, Quarterly, Annual tasks for geared and gearless traction passenger elevators.
 - ii. Weekly, Monthly, Quarterly, Annual tasks for geared and gearless traction service elevators.
 - iii. Weekly, Monthly, Quarterly, Annual tasks for hydraulic elevators.
- e. Describe engineering capabilities. Proposal should include information documenting experience in elevator manufacturing, modernization, design ability, and technical centers dedicated to maintenance and repair of elevator equipment not manufactured by the Elevator Contractor. Include the following items:
 - i. Engineering facilities in USA.
 - ii. Registered engineers on staff.
- f. Describe spare parts supply and network of obtaining and providing for OEM parts and supplies. Proposal should include emphasis on elevators parts and technical support for all elevator and machine types included in the UMB VTSs fleet. Include the following information:
 - i. Suppliers for elevator parts
 - ii. Suppliers for elevator circuit board repair.
 - iii. Test tools or software for laptops required for maintenance of proprietary elevator and elevator system components must be addressed. One unit must be on-site and assigned to the project to facilitate maintenance efforts. All test tools are to remain property of the Contractor.
 - iv. Proposed spare parts inventory. Contractor shall provide the proposed spare parts for the project. Parts inventory should represent required items to keep unnecessary downtime to a minimum. Insufficient spare parts inventory can result in disqualification for this item.
- g. Particular challenges which this contract present and how your firm would address these challenges.

ECONOMIC BENEFIT FORM IFB88597WG

Provide a detailed, but concise, overall description as to how the award of this contract will benefit the economy of the State of Maryland if your firm is one of the successful Contractors.

a.	The estimated percentage of contract dollars to be recycled into Maryland's economy in support of this contract, through the use of Maryland Subcontractors and supplies;
b.	the number and type of jobs for Maryland residents resulting from the contract;
c.	tax revenues to be generated for Maryland and its political subdivision; and,
d.	Estimated percentage of Subcontract/Supplier dollars committed to "local" Maryland businesses. For purposes of this bid, a "local" Maryland business is a business with its primary base of operation located in the same county as the job site for this project, or a Maryland business located within twenty five (25) miles of the job site.
e.	Other benefits to the Maryland economy which the offeror promises will result from awarding the contract to the offeror. Describe the benefit, its value to the Maryland economy (in terms of percentages), and how it will result from the contract award.

CERTIFICATION REGARDING INVESTMENT ACTIVITIES IN IRAN

Ref: Maryland Board of Public Works Advisory Number 2013-1

- 1. The undersigned certifies that, in accordance with State Finance & procurement Article §17-705:
- (i) it is not identified on the list created by the Board of Public Works as a person engaging in investment activities in Iran as described in §17-702 of State Finance & Procurement Article; and
- (ii) it is not engaging in investment activities in Iran as described in State Finance & Procurement Article §17-702.

Or;

to

	Oi,	
2. The undersigned is unable to the following activities:	make the above certification regarding its investment activities in Ir	an due
Company Name		
Signature	Title	
Print	Date	
Note: List is available at:	http://bpw.maryland.gov Click on "Debarments"	

STRATEGIC SOURCING AND ACQUISITION SERVICES UNIVERSITY OF MARYLAND, BALTIMORE AMENDMENT TO SOLICITATION REQUEST

1. Date:	2. Solicitation No.:		3. Dated:
4. To:			
L			
5. AMENDMENT NO.			
6. [] THE ABOVE NUMBERED	SOLICITATION REQUES	ST IS AMENDED AS S	SET FORTH IN BLOCK 7.
[] THE HOUR AND/OR DATE	OF SOLICITATION OPEN	NING IS CHANGED TO	·
7. DESCRIPTION OF AMENDMEN	IT OR CHANGE.		
8. QUESTIONS CONCERNING TH	IIS ARE TO BE REFERR	ED TO:	
		UNIVERSITY OF MA	ARYLAND, BALTIMORE
		BY:	
		Authorized Sig	nature

ACKNOWLEDGEMENT OF RECEIPT OF AMENDMENT

SOLICITATION NO.		
SOLICITATION DUE:		
SOLICITATION FOR:		
NAME OF VENDOR:		-
The undersigned, hereby acknowledges the	receipt of the following amendment:	
Amendment No.	Date:	
Amendment No.	Date:	
Amendment No	Date:	
Amendment No	Date:	
Amendment No	Date:	
This form must be included in you amendment with their response. For your response shall render their reconsidered for award.	ailure to acknowledge receipt	t of this amendment with
	Signature	
	Print Name	
	Title	
	Date	

ATTACHMENT B Bid Price Documents

The Bid Price Documents will be opened by all bidders who achieve the minimum or better-required technical score. Refer to Section 00300 for further information.

This attachment must be filled in and submitted with the Bid Price Documents.

BID PRICE DOCUMENTS

Multi-Step Bid No.: IFB88597WG Technical Offer & Price Due: <u>June 4, 2018 at 2:00 PM</u> Bid for: REPAIRS AND MAINTENANCE OF ELEVAT	Page 1 of 8 ORS, DUMBWAITERS AND LIFTS
Name of Bidder:	
Fid Number:	
Wesley Gordon University of Maryland, Baltimore Strategic Sourcing and Acquisition Services 220 Arch St. Rm. 02-100 Baltimore, MD 21201	Date:
Dear Mr. Gordon	
The undersigned, hereby submits its Bid Pricing to provsupervision, and other resources as required for Repairs and and Lifts as set forth in UMB, IFB88597WG dated May 9, 20	Maintenance of UMB Elevators, Dumbwaiters
Having received clarification on all matters upon which any complete the work for the guaranteed pricing listed below. BIDDERS ARE NOT TO ALTER, ADD TO, OR DEL DOCUMENTS.	. ALL BLANKS ARE TO BE COMPLETED
(signer's initial Signature pages below shall be signed by con	

-	No.: IFB88597		ΔÆ	Page 2 of 8
		June 4, 2018 at 2:00 PM NTENANCE OF ELE	<u>vi</u> VATORS, DUMBWAITI	ERS AND LIFTS
Name of Bidde	r:			
Section I:		, DE VIGED FOR DID		AGE G
NOTE: THIS	SECTION WILL	L BE USED FOR BID	EVALUATION PURPO	DSES!
Enhancement V	Vork to be done o	n a time and material (Γ&M), not to exceed (NTE	E) basis;
The undersigne	d agree to provide	e all labor, materials, ec	uipment, supplies, supervi	ision, services and other
_		-		ore campus, in accordance
	•		•	ork for the following rates
and mark-ups:	a specifications,	and other documents, in	erem and completes ans w	ork for the following rates
and mark-ups.				
1 Dogular I ak	on Dotos (in ooo	andance with Section (00400 Patas and Mark w	ng)
1. Regular Lai	or Kates (in acc	*REGULAR RATE	00400 Rates and Mark-u TOTAL (estimated hours x	ps)
POSITIONS	Estimated hours	*REGULAR RATE (\$/HR)	Regular Rate)	
Lead Mechanic	120	\$	\$	
Mechanic	80	\$	\$	
Adjustor	40	\$	\$	
11050001		TOTAL:	-	
	J			1
2. Overtime La	ahor Rates (in ac	cordance with Section	00400 Rates and Mark-	une)
	Ì		TOTAL (estimated hours x	up 5)
POSITIONS	Estimated hours	**Overtime Rate (\$/HR)	Overtime Rate)	
Lead Mechanic	60	\$	\$	
Mechanic	40	\$	\$	
Adjustor	20	\$	\$	
		TOTAL:	\$	
				•
NOTE:				
*Regular hourly	v rates is defined	as Monday through Frid	day, at eight hours or less l	nours worked per
day/evening.	,	: ,6	,,8	real real real real real real real real
day/evening.				
**Overtime wil	I poid for any hou	ire worked beyond eigh	t hours per day/evening M	landay through Eriday
		•		•
			y and University observed	
				al Day, Independence Day
			Day. ALL OVERTIME H	
APPROVED B	Y THE UNIVER	SITY IN WRITING PF	RIOR TO WORKING SUC	CH HOURS.

(signer's initial ____)
Signature pages below shall be signed by company representative as noted.

Multi-Step Bid No.: IFB88597WG Page 3 of 8

Technical Offer & Price Due: June 4, 2018 at 2:00 PM

Bid for: REPAIRS AND MAINTENANCE OF ELEVATORS, DUMBWAITERS AND LIFTS

Name of Bidder:			
_			

3. Mark-up Percentages:

Material Mark-up over invoice is at:	Estimated: Material Amount	TOTAL: (mark-up % x material amount)
%	\$100.00	\$

Note: Inclusive of freight/handling cost, overhead, and profit.

NOTE: Material, equipment and Subcontractor costs which will be reimbursed to the Contractor shall be adjusted to reflect all available discounts, refunds, rebates and allowances which the Contractor reasonably should take under the circumstances, and for credits for proceeds the Contractor received or reasonably should receive from salvage and material returned to suppliers. Normally materials costs will be based on the Contractor's price from its usual sources of supply with all usual trade practice discounts or Contractor's customary discounts from specific vendors deducted. All cost discounts shall be deducted in determining materials costs and mark-ups allowed by the contract. The Contractor shall take advantage of opportunities to reduce materials costs by using alternative sources of supply, seeking competitive quotations whenever feasible and in all instances where requested by the University. The Contractor is responsible for receiving materials, including unloading of delivery trucks, checking deliveries, and transportation of materials to the work site.

Equipment Rental Mark-up over	Estimated: Equipment Rental	TOTAL: (mark-up % x equipment
invoice is at:	Amount:	rental amount)
%	\$100.00	\$

Note: Not owned by Awarding Contractor. Inclusive of delivery/pick-up, handling costs overhead, and Profit.

NOTE: Material, equipment and Subcontractor costs which will be reimbursed to the Contractor shall be adjusted to reflect all available discounts, refunds, rebates and allowances which the Contractor reasonably should take under the circumstances, and for credits for proceeds the Contractor received or reasonably should receive from salvage and material returned to suppliers. Normally materials costs will be based on the Contractor's price from its usual sources of supply with all usual trade practice discounts or Contractor's customary discounts from specific vendors deducted. All cost discounts shall be deducted in determining materials costs and mark-ups allowed by the contract. The Contractor shall take advantage of opportunities to reduce materials costs by using alternative sources of supply, seeking competitive quotations whenever feasible and in all instances where requested by the University. The Contractor is responsible for receiving materials, including unloading of delivery trucks, checking deliveries, and transportation of materials to the work site.

Subcontractor Mark-up over invoice	Estimated: Subcontractor Amount:	TOTAL: (mark-up % x
is at:		Subcontractor amount)
%	\$100.00	\$

Note: Subcontractor costs to include all coordination time, set-up, etc.

NOTE: Material, equipment and Subcontractor costs which will be reimbursed to the Contractor shall be adjusted to reflect all available discounts, refunds, rebates and allowances which the Contractor reasonably should take under the circumstances, and for credits for proceeds the Contractor received or reasonably should receive from salvage and material returned to suppliers. Normally materials costs will be based on the Contractor's price from its usual sources of supply with all usual trade practice discounts or Contractor's customary discounts from specific vendors deducted. All cost discounts shall be deducted in determining materials costs and mark-ups allowed by the contract. The Contractor shall take advantage of opportunities to reduce materials costs by using alternative sources of supply, seeking competitive quotations whenever feasible and in all instances where requested by the University. The Contractor is responsible for receiving materials, including unloading of delivery trucks, checking deliveries, and transportation of materials to the work site.

(signer's initial)
Signature pages below shall be signed by company representative as noted.

echnical Of	id No.: IFB88597WG fer & Price Due: <u>June 4, 2018 at 2:00 PM</u> AIRS AND MAINTENANCE OF ELEV		S, DUMBW	AITERS	Page 4 of 8 AND LIFTS
ection II:	er:S SECTION WILL BE USED FOR BID I	 EVALU	J ATION PU	RPOSES	:!
VALIJATIO	ON OF BIDS/METHOD OF AWARD:				
	e made to one (1) awardee that is the lowest	respon	sible and resi	onsive bi	dder based on th
	ount and meeting requirements. The Univer				
	y groups of Phases as determined to be in th				
group or o.	y groups of Finases as determined to be in th	ie oest i	interest of the	o o in versi	<i>cy</i> .
A P	PHASE 1: REPAIRS				
Item		Cars	Openings	Lifts	Repair Costs
1.	Grand Garage	4	44		\$
2.	Lexington Garage	4	38		\$
3.	Plaza Garage Elevator 1	2	9		\$
4.	Saratoga Parking Garage	3	33		\$
5.	Pratt Garage	4	44		\$
6.	Penn Garage	3	30		\$
7.	Pratt Athletic Facility	1	2		\$
8.	MIEMSS	2	10		\$
9.	Campus Center	4	20		\$
10.	Campus Center Bookstore	1	2		\$
11.	100 North Greene	1	7		\$
12.	Biomedical Research Facility	1	6		\$
13.	Lexington Bldg.	2	12		\$
14.	Dental Museum	2	9		\$
15.	Health Sciences & Human Services Library (HS/HSL)		21		\$
16.	Law School	7	34		\$
17.	Pearl Shops	2	5	1	\$
18.	Pine Street Annex	1	2		\$
19.	Saratoga Office Building	2	9		\$
20.	School of Social Work	4	17	1	\$
21.	Maryland Psychiatric Research Center				\$
	(MPRC) Hill Bldg. #34	1	5		
	Located: Catonsville, MD				
22.	Donaldson Brown Center	1	3		\$
	Located: Port Deposit, MD	1	3		
	Escated: 1 oft Beposit, 111B				

/ Dollars

(Words)

The Bidder shall state the total pricing in dollars and cents, in both words and figures where indicated. If there are any questions or difference between words and figures, the written words shall govern.

(signer's initial ____)

Multi-Step Bid No.: IFB88597WG Page 5 of 8

Technical Offer & Price Due: June 4, 2018 at 2:00 PM

Bid for: REPAIRS AND MAINTENANCE OF ELEVATORS, DUMBWAITERS AND LIFTS

Name of Bidder:	

B. - PHASE 1: MAINTENANCE

					(160 hrs per month x hourly rate) Monthly	Annual Maintenance Cos (monthly cost x 12)
Items	Phase 1: Building Name	Cars	Openings	Lifts	Maintenance Cost	
1.	Grand Garage	4	44		\$	\$
2.	Lexington Garage	4	38		\$	\$
3.	Plaza Garage Elevator 1	2	9		\$	\$
4.	Saratoga Parking Garage	3	33		\$	\$
5.	Pratt Garage	4	44		\$	\$
6.	Penn Garage	3	30		\$	\$
7.	Pratt Athletic Facility	1	2		\$	\$
8.	MIEMSS	2	10		\$	\$
9.	Campus Center	4	20		\$	\$
10.	Campus Center Bookstore	1	2		\$	\$
11.	100 North Greene	1	7		\$	\$
12.	Biomedical Research Facility	1	6		\$	\$
13.	Lexington Bldg.	2	12		\$	\$
14.	Dental Museum	2	9		\$	\$
15.	Health Sciences & Human Services Library (HS/HSL)	3	21		\$	\$
16.	Law School	7	34		\$	\$
17.	Pearl Shops	2	5	1	\$	\$
18.	Pine Street Annex	1	2		\$	\$
19.	Saratoga Office Building	2	9		\$	\$
20.	School of Social Work	4	17	1	\$	\$
21.	Maryland Psychiatric Research Center (MPRC) Hill Bldg. #34 Located: Catonsville, MD	1	5		\$	\$
22.	Donaldson Brown Center Located: Port Deposit, MD	1	3		\$	\$
	PHA	SE 1: TO	OTAL ANNU	AL MAIN	TENANCE COST:	\$

	_	
	/	Dollars
(Words)		_

The Bidder shall state the total pricing in dollars and cents, in both words and figures where indicated. If there are any questions or difference between words and figures, the written words shall govern.

(signer's initial ____)

Multi-Step Bid No.: IFB88597WG Page 6 of 8

Technical Offer & Price Due: June 4, 2018 at 2:00 PM

Bid for: REPAIRS AND MAINTENANCE OF ELEVATORS, DUMBWAITERS AND LIFTS

Name of Bidder:	
-----------------	--

C. - PHASE 2: REPAIRS

Items	Phase 2: Building Name	Cars	Openings	Lifts	Repair Costs
1.	Institute of Human Virology (IHV)	4	23	2	\$
2.	Allied Health	2	10		\$
3.	Environmental Health & Safety (EHS)	1	3		\$
4.	School of Nursing	6	41		\$
5.	General Research Bldg.	2	8		\$
6.	Bressler Research Bldg.	4	60		\$
7.	Howard Hall	4	24	1	\$
8.	Health Sciences Facility (HSF) I	5	28	1	\$
9.	Health Sciences Facility (HSF) II	2	16		\$
10.	Health Sciences Facility (HSF) III	7	74		
11.	Medical School Teaching Facility (MSTF)	5	43		\$
12.	Pharmacy Hall	5	37		\$
13.	Dental School	8	66		\$
14.	Plaza Garage elevators 2 & 3	2	8		\$
15.	Pearl Garage	3	19		\$
16.	Maryland Bar Center	1	5		\$
17.	737 W. Lombard St.	2	11		\$
	PHA	SE 2: T	OTAL REP	AIR COST:	\$

(Figures)

	D 11
	Dollars
(Words)	

The Bidder shall state the total pricing in dollars and cents, in both words and figures where indicated. If there are any questions or difference between words and figures, the written words shall govern.

(signer's initial ____)

Multi-Step Bid No.: IFB88597WG Page 7 of 8

Technical Offer & Price Due: June 4, 2018 at 2:00 PM

Bid for: REPAIRS AND MAINTENANCE OF ELEVATORS, DUMBWAITERS AND LIFTS

Name of Bidder: _			
_			

D. - PHASE 2: MAINTENANCE

Items	Phase 2: Building Name	Cars	Openings	Lifts	(160 hrs per month x hourly rate) Monthly Maintenance Cost	Annual Maintenance Cost (monthly cost x 12)
Terris	Institute of Human Virology				\$	\$
1.	(IHV)	4	23	2	•	,
2.	Allied Health	2	10		\$	\$
	Environmental Health & Safety	1	3		\$	\$
3.	(EHS)	1	3			
4.	School of Nursing	6	41		\$	\$
5.	General Research Bldg.	2	8		\$	\$
6.	Bressler Research Bldg.	4	60		\$	\$
7.	Howard Hall	4	24	1	\$	\$
8.	Health Sciences Facility (HSF) I	5	28	1	\$	\$
9.	Health Sciences Facility (HSF) II	2	16		\$	\$
10.	Health Sciences Facility (HSF) III	7	74	2	\$	\$
11.	Medical School Teaching Facility (MSTF)	5	43		\$	\$
12.	Pharmacy Hall	5	37		\$	\$
13.	Dental School	8	66		\$	\$
14.	Plaza Garage elevators 2 & 3	2	8		\$	\$
15.	Pearl Garage	3	19		\$	\$
16.	Maryland Bar Center	1	5		\$	\$
17.	737 W. Lombard St.	2	11		\$	\$
	PHASE 2	2: TOTA	L ANNUAL I	MAINTE	NANCE COST:	\$

(Figures)

	/	Dollars
(Words)		

The Bidder shall state the total pricing in dollars and cents, in both words and figures where indicated. If there are any questions or difference between words and figures, the written words shall govern.

(signer's initial ____)

Multi-Step Bid No.: IFB88597WG

Page 8 of 8

Name of Bidder:

Technical Offer & Price Due: <u>June 4, 2018 at 2:00 PM</u>
Bid for: REPAIRS AND MAINTENANCE OF ELEVATORS, DUMBWAITERS AND LIFTS

f the Unive		¢
	Regular Labor Rates TOTAL:	\$
2.	Overtime Labor Rates TOTAL:	\$
3.	Material Mark-up TOTAL:	\$
4.	Equipment Rental Mark-up TOTAL:	\$
5.	Subcontractor Mark-up TOTAL:	\$
6.	A. – Phase 1 – Repair Cost Items: 1-22:	\$
7.	B. – Phase 1: Maintenance Costs Items: 1-22:	\$
8.	C. – Phase 2: Repair Costs Items: 1-17:	\$
9.	D. – Phase 2: Maintenance Costs Items 1-17:	\$
	TOTAL BID AMOUNT (1+2+3+	-4): \$(Figures)
/XV 1		/ Dollars
(Words he Bidder shall etween words a	state the total pricing in dollars and cents, in both words and figures nd figures, the written words shall govern.	where indicated. If there are any questions or difference
	(signer's initial)	

The offeror represents, and it is a condition precedent to acceptance of this bid, that the offeror has not been a party to any agreements to submit a fixed or uniform price. Sign where applicable below.

A. INDIVIDUAL PRINCIPAL In Presence of Witness:		
FIRM NAME ADDRESS TELEPHONE NO.		
	SIGNED Printed Name Title:	
B. CO-PARTNERSHIP PRINCIPAL (Name of Co - Partnership)		
ADDRESS		
TELEPHONE NO		
In Presence of Witness:	as to	
BY		
Printed Name:	as to	
BY	(Partner)	
Printed Name:	as to	
BY	(Partner)	

C. CORPORATE PRINCIPAL

(Name of Corporation)
ADDRESS:
TELEPHONE NO.:
[Printed Name of Corporate (or Assistant Corporate) Secretary]
[Corporate (or Assistant Corporate) Secretary Signature for Identification]
BY:
Signature of Officer and Title
Printed Name
 Title

ATTACHMENT C

SCHEDULE B University of Maryland, Baltimore SOLICITATION TERMS & CONDITIONS November 2006

Definitions:

- (a) "Vendor" or "Contractor" means a person, partnership, corporation or other entity submitting an offer in response to a University solicitation.
- (b) "Offer" means a quote submitted by a vendor.
- (c) "UMB" means the University of Maryland, Baltimore or any other component of the University System of Maryland (USM) on behalf of which this procurement is made by UMB.
- (d) "Contract" an agreement entered into by UMB for the acquisition of supplies, services, construction, architecture services and engineering services.

Terms:

- 1. Reservation of Rights. This solicitation creates no obligation on the part of UMB. This solicitation may be cancelled at any time prior to opening of offers. UMB reserves the right to increase or decrease the quantities of any materials, equipment, supplies or services described in the solicitation. Offers may be modified or withdrawn by written notice received prior to the time and date set for opening. UMB reserves the right to accept or reject any and all offers in whole or in part. The University reserves the right to make awards by item, groups of items, multiple awards, or on an all or none basis as best serves the interests of the University.
- 2. <u>Pricing</u>. The unit price shall be considered as the offer price, which will be evaluated by UMB. Separate unit prices shall be submitted for each item; extensions shall be indicated where applicable and total offer price shown when requested. Unless otherwise provided in the solicitation, offer prices are irrevocable for a period of 90 days following the date set for offer opening.
- 3. Specifications; Equivalents. All materials, equipment, supplies or services shall conform to applicable Federal and State laws and regulations and to the specifications contained in the solicitation. Any manufacturer's names, trades names, brand names, information and/or catalog numbers listed in a specification are for information and are not intended to limit competition. The vendor may offer any brand which meets or exceeds the specification for any item(s). If offers are based on equivalent products, the vendor shall indicate on the offer form the manufacturer's name and product number and shall submit with the offer cuts, sketches, and descriptive literature and/or complete specifications. Reference to literature submitted with a previous offer shall not satisfy this provision. The vendor shall also explain in detail the reason(s) why the proposed equivalent will meet the specifications and not be considered an exception thereto. UMB reserves the right to determine acceptance of any items proposed as equivalent. Offers which do not comply with these requirements are subject to rejection. Offers lacking any written indication of intent to offer an alternate brand shall be received and considered in complete compliance with the specifications as listed on the solicitation form.
- 4. <u>Samples</u>. UMB reserves the right to request and be furnished samples, at no expense to UMB, prior to or after the award, for the purpose of quality and specification evaluation. Samples shall be returned, upon request, at the vendor's expense. UMB does not guarantee that Samples returned will be in the same condition as when submitted.
- 5. <u>Vendor's Terms and Conditions</u>. The Purchase Order issued by UMB shall constitute the contract between the parties. A VENDOR'S PROPOSED TERMS ARE NOT PART OF THE CONTRACT UNLESS SPECIFICALLY ACCEPTED IN WRITING BY THE PROCUREMENT OFFICER. NO OTHER UNIVERSITY EMPLOYEE CAN ACCEPT OR EXECUTE A CONTRACT FORM OR ACCEPT A VENDOR'S TERMS. Any terms and conditions, including any form contracts, which the vendor proposes to use, shall be submitted (a) by the solicitation closing date in the case of a single step procurement or (b) by the closing date

for technical offers, in the case of a multi-step procurement. If a vendor does not submit any proposed terms on a timely basis, its offer will be deemed an offer to contract on UMB's terms. If a vendor timely proposes any non-UMB terms or conditions, the vendor must indicate clearly in writing whether or not its offer is contingent upon the acceptance of any or all of the vendor's terms and conditions. UMB may reject any offer made contingent upon University acceptance of a vendor's terms and conditions.

- 6. <u>Minority Business Enterprise Notice</u>.
 - (a) Minority business enterprises are encouraged to respond to this solicitation
 - (b) Refer to the specifications of the solicitation for identification of Minority Business Enterprise "MBE" participation goal.
- 7. <u>Public Information Act Notice</u>. Offerors shall give specific attention to the identification of those portions of their responses that they deem to be confidential, proprietary information or trade secrets and shall provide justification why such materials, upon request, should not be disclosed by UMB under the Public Information Act, Part III, Title 10, State Government Article, Annotated Code of Maryland.
- 8. <u>Arrearages</u>. By submitting a response to this solicitation, a vendor shall be deemed to represent that it is not in arrears in the payment of any obligation due and owing the State of Maryland, including the payment of taxes and employee benefits, and that it shall not become so in arrears during the term of the contract if selected for contract award.
- 9. <u>Bid/Proposal Affidavit</u>. The attached bid/proposal affidavit shall be completed and submitted by the vendor with the bid or proposal. The terms and conditions of the affidavit will be incorporated into and made a part of any contract resulting from this solicitation.
- 10. <u>Bid Security</u>. Solicitations for construction contracts reasonably expected by the procurement officer to exceed \$100,000 shall require a bid security in an amount equal to at least 5% of the amount of the bid or price proposal. For all other non-construction contracts, refer to the specifications of this solicitation addressing bid security. Absence of any such reference shall mean that no bid security is required. Notwithstanding the above, notice of a bid security is required if a federal law or condition of federal assistance for the contract requires it.
- 11. <u>Ethics</u>. The Vendor is responsible to assure compliance with the Maryland Public Ethics Law, Title 15, State Government Article, Annotated Code of Maryland. The Public Ethics Law prohibits, under certain circumstances, (i) present and former officials and employees of State agencies, or (ii) businesses in which those persons or their close relations hold employment or economic interests, from submitting bids or proposals, negotiating for themselves or others, or entering into contracts with the State. In the event a violation of the Maryland Public Ethics Law occurs in connection with a Vendor's response to this solicitation or a resulting contract award to a Vendor, the University reserves the right to reject the proposal or declare an event of default of the contract awarded to the Vendor. Any Vendor with concerns about compliance with the Maryland Public Ethics Law is encouraged to contact the State Ethics Commission for more information.
- 12. <u>Rights in Inventions</u>. For the consideration payable under this Contract, Vendor agrees to report any invention arising out of the Work required by this Contract to UMB. UMB shall have sole right and authority to seek statutory patent protection under United States and foreign patent laws and to enjoy the benefits of ownership of the invention, whether or not the invention was required of the Vendor as part of the performance of Work. Vendor hereby assigns all right, title and interest in and to inventions made in the course of the Work to UMB and agrees to execute and deliver all documents and do any and all things necessary and proper to effect such assignment.
- 13. <u>Copyrights</u>. For the consideration payable under this Contract, the work product required by this Contract shall be considered a work made for hire within the meaning of that term under the copyright laws of the United States, applicable common law and corresponding laws of other countries. UMB shall have sole right and authority to seek statutory copyright protection and to enjoy the benefits of ownership of the work. The party performing the work hereby assigns all right, title and interest in and to the work to the UMB.
 - 14. Acknowledgement of Addenda. If it becomes necessary to revise any part of the bid,

- addenda will be posted to the eBid Board website at http://www.umaryland.edu/procurement/. It is the responsibility of the bidder to check the website frequently until the opening date for addendums, amendments, and changes. A written acknowledgement of the receipt of all amendments, addenda, and changes issued shall be required from all vendors submitting a bid.
- 15. <u>Conflict of Interest</u>. An individual or a person that employs an individual who assists the University in the drafting of specifications, an invitation for bids, a request for proposals for a procurement or the selection or award made in response to an invitation for bids or request for proposals may not: (1) submit a bid or proposal for that procurement; or (2) assist or represent another person, directly or indirectly, who is submitting a bid or proposal for that procurement.
- 16. Health Insurance Portability and Accountability Act of 1996, Pub. L. No. 104-191. ("HIPAA") and Maryland Confidentiality of Medical Records Act (Annotated Code of Maryland, Health General Article '4-301 et seq. ("the Act"). Contractor acknowledges that the University of Maryland Baltimore is a HIPAA hybrid covered entity. Contractor agrees that Contractor's access to and use of protected health information (as that term is defined by HIPAA), if any, under this Agreement will be conducted in accordance with the requirements of the Act and HIPAA, including the terms of a HIPAA Business Associate Agreement if so required by UMB. Such Business Associate Agreement is either attached hereto as Schedule H or Contractor shall promptly execute such Business Associate Agreement upon the University's request. Contractor shall also cause any Subcontractor, agent, or party under Contractor's direction or control that is participating in this Agreement to promptly execute a standard HIPAA Business Associate Agreement if so requested by UMB.

PURCHASE ORDER TERMS & CONDITIONS March 2007

- 1. Parties. The parties to this Contract are the Contractor identified on the Purchase Order ("P.O.")/Contract and UMB. In contractual matters, UMB shall be represented by a Procurement Officer designated in writing by UMB. The original Procurement Officer for this Contract is named on the P.O., which designation may be changed from time to time by UMB. If UMB is acting as procurement agent for another institution in the University System of Maryland, such institution is the party in interest under the Contract, and will be identified on the P.O. For such contracts, all rights and liabilities of UMB pursuant to the Purchase Order and applicable law shall be the rights and liabilities of that institution, which the UMB may exercise as agent, and UMB shall have no liability to the Contractor pursuant to the Contract. If more than one person or entity is identified on the P.O. as Contractor, each of them shall have joint and several liability for the performance of this Contract.
- 2. <u>Conflicting Terms</u>. Any proposal for terms in addition to or different from those set forth in this P.O. or any attempt by the Contractor to vary any of the terms of this P.O. by Contractor's acceptance shall not operate as a rejection of this offer, unless such variance is in the terms of the description, quantity, price or delivery schedule, but shall be deemed a material alteration thereof, and this offer shall be deemed acceptable by the Contractor without the additional or different terms. If this P.O. is an acceptance of a prior offer by the Contractor, the acceptance is expressly conditioned upon Contractor's assent to any additional or different terms contained herein. The Contractor understands and agrees that the terms and conditions of this P.O. may not be waived.
- 3. <u>Clauses Incorporation by Reference</u>. This Contract consists of the terms and conditions of this P.O. and any amendments of the P.O. All terms and conditions of the solicitation, and any amendment thereto, are made a part of this Contract.
- 4. <u>Invoices</u>. A separate invoice for this P.O. or for each shipment shall be rendered following shipment. All invoices must be forwarded directly to the Accounts Payable Department, University of Maryland, Baltimore, Saratoga Street Offices, Level 02 Room 02-123, 220 Arch St., Baltimore, Maryland 21201-1531. THE CONTRACTOR'S FEDERAL EMPLOYER IDENTIFICATION NUMBER OR SOCIAL SECURITY NUMBER MUST BE

INCLUDED ON THE FACE OF ALL INVOICES BILLED TO UMB. Payments to the Contractor pursuant to this Contract shall be made no later than 30 days after the State's receipt of a proper invoice from the Contractor. Charges for late payment of invoices, other than as prescribed by Title 15, Subtitle 1, of the State Finance and Procurement Article, Annotated Code of Maryland, or by the Public Service Commission of Maryland with respect to regulated public utilities, as applicable, are prohibited.

- 5. <u>P.O. Number.</u> The P.O. number must be stated on all related invoices, delivery memoranda, bills of lading, packages, correspondence, and/or MSDS forms (see para. 18).
- 6. <u>Specifications</u>. All materials, equipment, supplies or services shall conform to federal and State laws and regulations and to the specifications contained in the solicitation.
- 7. <u>Delivery and Acceptance</u>. Delivery shall be made in accordance with the solicitation specifications. UMB, in its sole discretion, may extend the time of performance for excusable delays due to unforeseeable causes beyond the Contractor's control. UMB unilaterally may order in writing the suspension, delay, or interruption of performance hereunder. UMB reserves the right to test any materials, equipment, supplies, or services delivered to determine if the specifications have been met. The materials listed in the bid or proposal shall be delivered FOB the point or points specified prior to or on the date specified in the bid or proposal. Any material that is defective or fails to meet the terms of the solicitation specifications shall be rejected. Rejected materials shall be promptly replaced. UMB reserves the right to purchase replacement materials in the open market. Contractors failing to promptly replace materials lawfully rejected shall be liable for any excess price paid for the replacement, plus applicable expenses, if any.
- 8. <u>Delays</u>. The Contractor agrees to perform the work continuously and diligently, and no charges or claims for damages shall be made by Contractor for any delays or hindrances from any cause whatsoever during the progress of any portion of the work specified in the Contract.
- 9. <u>Tax Exemption</u>. UMB is generally exempt from federal excise taxes, Maryland sales and use taxes, District of Columbia sales taxes, and transportation taxes. Exemption Certificates shall be completed upon request. Where a Contractor is required to furnish and install material in the construction or improvement of real property in performance of a contract, the Contractor shall pay the Maryland Sales Tax and the exemption does not apply.
- 10. <u>Non-Hiring of Employees; Conflict of Interest</u>. (a) No official or employee of the State, as defined under State Government Article, SS15-102, Annotated Code of Maryland, whose duties as such official or employee include matters relating to or affecting the subject matter of this Contract shall, during the pendancy or term of this contract and while serving as an official or employee of the State, become or be an employee of the Contractor or any entity that is a Subcontractor on this contract.
- 11. <u>Non-Discrimination in Employment and Equal Opportunity</u>. (a) The Contractor agrees not to discriminate in any manner against an employee or applicant for employment because of race, color, religion, creed, age, sex, marital status, national origin, ancestry, or disability of a qualified individual with a disability and to post, and to cause Subcontractors to post, in conspicuous places available to employees and applicants for employment, notices setting forth the substance of this clause.
- 12. <u>Financial Disclosure</u>. The Contractor shall comply with State Finance and Procurement Article, 13-221, Annotated Code of Maryland, which requires that every business that enters into contracts, leases or other agreements with the State and receives in the aggregate \$100,000 or more during a calendar year, shall, within 30 days of the time when the \$100,000 is reached, file with the Secretary of State certain specified information to include disclosure of beneficial ownership of the business.
- 13. Political Contribution Disclosure. Contractor shall comply with, and require its officers, directors, and partners to comply with, the provisions of Election Law Article, Annotated Code of Maryland, Sections 14-101 through 14-108, which requires that every person doing public business (as there defined), and every individual whose contributions are attributable to the person entering into such an agreement, during a calendar year in which the person receives cumulative consideration of \$100,000 or more from public business, shall file with the State Administrative Board of Election Laws a statement disclosing contributions in excess of \$500 made during the

reporting period to a candidate for elective office in any primary or general election. The statement shall be filed with the State Administrative Board of Election Laws: (1) before a purchase or execution of a lease or contract by the State, a county, an incorporated municipality, or their agencies, and shall cover the preceding two calendar years; and (2) if the contribution is made after the execution of a lease or contract, then twice a year, throughout the lease or contract term on (a) February 5, to cover the 6-month period ending January 31; and (b) August 5, to cover the 6-month period ending July 31.

- 14. <u>Anti-Bribery</u>. The Contractor warrants that neither it nor any of its officers, directors, or partners, nor any employees who are directly involved in obtaining or performing contracts with any public body has been convicted of bribery, attempted bribery, or conspiracy to bribe, under the laws of any state or of the federal government or has engaged in conduct since July 1, 1977, which would constitute bribery, attempted bribery or conspiracy to bribe under the laws of any state or the federal government.
- 15. <u>Corporate Registration</u>. Pursuant to 7-201 <u>et seq</u>. of the Corporations and Associations Article of the Annotated Code of Maryland, corporations not incorporated in the State shall be registered with the State Department of Assessments and Taxation, 301 West Preston St., Baltimore, Maryland 21201, before doing any <u>interstate</u> or foreign business in this State. Before doing any <u>intrastate</u> business in this State, a foreign corporation shall qualify with the Department of Assessments and Taxation.
- 16. <u>Contingent Fees</u>. The Contractor warrants that it has not employed or retained any person, partnership, corporation, or other entity, other than a bona fide employee or agent working for the Contractor, to solicit or secure this agreement, and that it has not paid or agreed to pay any person, partnership, corporation, or other entity, other than a bona fide employee or agent, any fee or any other consideration contingent on the making of this agreement.
- 17. <u>EPA</u>. Materials, supplies, equipment, or services shall comply in all respects with the Federal Noise Control Act of 1972, where applicable.
- 18. <u>OSHA; MSDS</u>. All materials, supplies, equipment, or services supplied as a result of this Contract shall comply with the applicable U.S. and Maryland Occupational Safety and Health Act standards. Pursuant to 29 CFR part 1910, where applicable, an MSDS for the products supplied or used in carrying out this Contract must be sent to:

University of Maryland, Baltimore

Associate Director for EHS

714 West Lombard Street

Baltimore, MD 21201-1010

- 19. <u>Termination for Convenience</u>. Upon written notice to the Contractor, UMB may terminate this Contract, in whole or in part, whenever UMB shall determine that such termination is in its best interest. UMB shall pay all reasonable costs incurred up to the date of termination and all reasonable costs associated with termination of the Contract. However, the Contractor may not be reimbursed for anticipatory profits. Termination hereunder, including the determination of the rights and obligations of the parties, shall be governed by the provisions of USM Procurement Policies & Procedures.
- 20. <u>Termination for Default</u>. When the Contractor has not performed or has unsatisfactorily performed the Contract, payment shall be withheld at the discretion of the State. Failure on the part of the Contractor to fulfill contractual obligations shall be considered just cause for termination of the Contract and the Contractor is not entitled to recover any costs incurred by the Contractor up to the date of termination. Termination hereunder, including the determination of the rights and obligations of the parties, shall be governed by the provisions of USM Procurement Policies & Procedures.
- 21. <u>Disputes</u>. This Contract shall be subject to USM Procurement Policies & Procedures. Pending the resolution of a claim, the `Contractor shall proceed diligently with the performance of the contract in accordance with the procurement officer's decision.
- 22. <u>Multi-Year Contracts</u>. If funds are not appropriated or otherwise made available to support continuation in any fiscal year succeeding the first fiscal year, this Contract shall terminate automatically as of the beginning of the fiscal year for which funds are not available. The

Contractor may not recover anticipatory profits or costs incurred after termination.

- 23. <u>Intellectual Property</u>. Contractor agrees to defend upon request and indemnify and save harmless UMB, its officers, agents and employees with respect to any claim, action, cost or judgment for patent infringement, or trademark or copyright violation arising out of purchase or use of materials, supplies, equipment or services covered by this Contract.
- 24. <u>Maryland Law</u>. The provisions of this Contract shall be governed by the laws of Maryland.
- 25. <u>Pre-Existing Policies & Procedures</u>. The USM Procurement Policies & Procedures in effect on the date of execution of this Contract are applicable to this Contract.
- 26. <u>Indemnification</u>. UMB shall not assume any obligation to indemnify, hold harmless, or pay attorneys' fees that may arise from or in any way be associated with the performance or operation of this Contract.
- 27. <u>Drug and Alcohol Free Workplace</u>. The Contractor warrants that the Contractor shall comply with COMAR 21.11.08 Drug and Alcohol Free Workplace, and that the Contractor shall remain in compliance throughout the term of this purchasing order.
- 28. <u>Retention of Records</u>. The Contractor shall retain and maintain all records and documents relating to this Contract for three years after final payment by the State hereunder or any applicable statute of limitations, whichever is longer, and shall make them available for inspection and audit by authorized representatives of the State, including the Procurement Officer or designee, at all reasonable times.
- 29. <u>Ethics</u>. This purchase order is cancelable in the event of a violation of the Maryland Public Ethics Law by the vendor or any UMB employee in connection with this procurement.
- 30. <u>Rights in Inventions</u>. For the consideration payable under this Contract, Vendor agrees to report any invention arising out of the Work required by this Contract to UMB. UMB shall have sole right and authority to seek statutory patent protection under United States and foreign patent laws and to enjoy the benefits of ownership of the invention, whether or not the invention was required of the Vendor as part of the performance of Work. Vendor hereby assigns all right, title and interest in and to inventions made in the course of the Work to the UMB and agrees to execute and deliver all documents and do any and all things necessary and proper to effect such assignment.
- 31. <u>Copyrights</u>. For the consideration payable under this Contract, the work product required by this Contract shall be considered a work made for hire within the meaning of that term under the copyright laws of the United States, applicable common law and corresponding laws of other countries. UMB shall have sole right and authority to seek statutory copyright protection and to enjoy the benefits of ownership of the work. The party performing the work hereby assigns all right, title and interest in and to the work to the UMB.
- 32. Ownership of Documents. All documents which are prepared by the Vendor and form a part of its services shall be the property of UMB and shall be delivered to UMB upon termination of this Contract if UMB so requests. The Vendor shall be responsible for the protection and/or replacement of any original documents in its possession. UMB shall receive all original drawings and the Vendor shall retain a reproducible copy.
- 33. Health Insurance Portability and Accountability Act of 1996, Pub. L. No. 104-191. ("HIPAA") and Maryland Confidentiality of Medical Records Act (Annotated Code of Maryland, Health General Article '4-301 et seq. ("the Act"). Contractor acknowledges that the University of Maryland Baltimore is a HIPAA hybrid covered entity. Contractor agrees that Contractor's access to and use of protected health information (as that term is defined by HIPAA), if any, under this Agreement will be conducted in accordance with the requirements of the Act and HIPAA, including the terms of a HIPAA Business Associate Agreement if so required by UMB. Such Business Associate Agreement is either attached hereto as Schedule H or Contractor shall promptly execute such Business Associate Agreement upon the University's request. Contractor shall also cause any Subcontractor, agent, or party under Contractor's direction or control that is participating in this Agreement to promptly execute a standard HIPAA Business Associate Agreement if so requested by UMB.

ATTACHMENT D CONTRACT DOCUMENTS

NOTE: These are provided for information ONLY. The successful Contractor will be required to complete these forms.

Maintenance/Service Contract Contract Affidavit

MAINTENANCE/SERVICE CONTRACT

Contract No		
University of Maryland, Baltimore		
This Contract is entered into between (hereinafter referred to as Contractor) and the <u>University of Maryland, Baltimore</u> (hereinafter referred to as the University).		
<u>1. SCOPE:</u>		
2. TERM: The term of this contract shall begin on and terminate on		
3. COMPENSATION AND METHOD OF PAYMENT: As compensation for satisfactory performance of the work described herein, the University will pay the Contractor an amount not to exceed		
The Contractor's Taxpayer Identification Number consisting of the Social Security Number for individuals and sole proprietors or the Federal Employer Identification Number for all other types of organization is:		
The Contractor shall be paid only for items or services that are specifically named in this contract. No additional costs for items or services will be paid by the University without its prior express written consent.		
<u>4. INVOICING:</u> Invoices shall be rendered to the satisfaction of the University's designated representative and shall be payable as provided. The work shall be delivered free from all claims, liens, and charges whatsoever.		
5. PAYMENT OF UNIVERSITY OBLIGATIONS: Payments to the Contractor pursuant to this contract shall be made no later than 30 days after the University's receipt of a proper invoice from the Contractor. Charges for late payment of invoices, other than as prescribed by Title 15, Subtitle 1, of the State Finance and Procurement Article, Annotated Code of Maryland, or by Public Service Commission of Maryland with respect to regulated public utilities, as applicable are prohibited.		
6. LIABILITY: All persons furnished by Contractor shall be considered solely its employees or agents and Contractor shall be responsible for payment of all unemployment, social security and other payroll taxes, including contributions from employees when required by law.		
Contractor agrees to indemnify and save the University harmless from any claims or demands (including the costs, expenses, and reasonable attorney's fees on account thereof) that may be made: (1) by anyone for injuries to persons or damage to property resulting from Contractor's acts or omissions or those of persons furnished by Contractor or (2) by persons furnished by Contractor or Contractor's subContractors under Workmen's Compensation or similar acts.		

Contractor also agrees to defend the University at its request, against any such claim or demand. The University agrees to notify Contractor promptly of any known written claims or demands against the University for which Contractor is responsible hereunder.

The University shall not assume any obligation to defend, indemnify, hold harmless, or pay Attorney's fees that may arise from or in any way be associated with the performance or operation of this agreement.

Contractor shall maintain, during the term thereof, Workmen's Compensation Insurance, Public Liability Insurance, and if the use of automobiles is required, Automobile Public Liability Insurance. Contractor shall also require its subContractors, if any, who may enter upon University premises to maintain such insurance. Contractor and its subContractors shall furnish the University, when requested, with copies of policies or other satisfactory proof of insurance.

7. COMPLIANCE WITH LAWS: The Contractor hereby represents and warrants that:

- A. It is qualified to do business in the State of Maryland and that it will take such action as, from time to time hereafter, may be necessary to remain so qualified;
- B. It is not in arrears with respect to the payment of any monies due and owing the State of Maryland, or any department or unit thereof, including but not limited to the payment of taxes and employee benefits, and that it shall not become so in arrears during the term of this Contract;
- C. It shall comply with all Federal, State and local laws, regulations, and ordinances applicable to its activities and obligations under this Contract; and
- D. It shall obtain, at its expense, all licenses, permits, insurance, and governmental approvals, if any, necessary to the performance of its obligations under this Contract.
- **8. UNIVERSITY WORK RULES:** Employees and agents of Contractor and any subContractors shall while on the premises of the University, comply with all University rules and regulations including, where required by Government Regulations, submission of satisfactory clearance from the U.S. Department of Defense or other Federal Authority concerned.

Contractor shall acquaint itself with conditions governing the delivery, receiving and storage of materials at the work site if applicable to this work, as not to interfere with University operations. Contractor shall not stop, delay or interfere with University work schedule without the prior approval of the University's specified representative. Contractor shall provide and maintain sufficient covering to protect stock and equipment from the action of its work, if applicable.

<u>9. HARMONY:</u> Contractor shall be entirely responsible for working in harmony with all others on the work site when Contractor is working on University premises.

- <u>10. WARRANTY:</u> Contractor warrants that material and/or services furnished hereunder will be fit for the purposes intended and will be free from defects in material and workmanship where applicable.
- **11. MODIFICATIONS IN THE WORK:** This Contract may be amended with the consent of both parties. Amendments may not change significantly the scope of the Contract.
- **12. NON-HIRING OF EMPLOYEES:** No official or employee of the State of Maryland, as defined under State Government Article, SS 15-102, Annotated Code of Maryland, whose duties as such official or employee include matter relating to or affecting the subject matter of this contract, shall, during the pendancy or term of this contract and while serving as an official or employee of the State become or be an employee of the Contractor or any entity that is a subContractor on this contract.
- **13. DISPUTES:** This contract shall be subject to the USM Procurement Policies and Procedures pending resolution of a claim, the Contractor shall proceed diligently with the performance of the contract in accordance with the procurement officer's decision.
- **14. MARYLAND LAW PREVAILS:** The laws of the State of Maryland shall govern the interpretation and enforcement of this Contract.
- 15. NON-DISCRIMINATION IN EMPLOYMENT: the Contractor agrees: (a) not to discriminate in any manner against an employee or applicant for employment because of race, color, religion, creed, age, sex, marital status, national origin, ancestry, or disability of a qualified individual with a disability; (b) to include a provision similar to that contained in subsection (a), above, in any subcontract except a subcontract for standard commercial supplies or raw materials; and (c) to post and to cause subContractors to post in conspicuous places available to employees and applicants for employment, notices setting forth the substance of this clause.
- **16. SUSPENSION OF WORK:** The procurement officer unilaterally may order the Contractor in writing to suspend, delay or interrupt all or any part of the work for such period of time as he may determine to be appropriate for the convenience of the University.
- **17. PRE-EXISTING REGULATIONS:** In accordance with the provisions of Section 11-206 of the State Finance and Procurement Article, Annotated Code of Maryland, the regulations set forth in USM Procurement Policies and Procedures in effect on the date of execution of this contract are applicable to this contract.
- **18. DELAYS AND EXTENSIONS OF TIME:** The Contractor agrees to perform the work continuously and diligently and no charges or claims for damages shall be made by it for any delays or hindrances from any cause whatsoever, during the progress of any portion of the work specified in this contract.

Time extensions will be granted only for excusable delays that arise from unforeseeable causes beyond the control and without the fault or negligence of the Contractor, including but not restricted to, acts of God, acts of the public enemy, acts of the State of Maryland in either its

sovereign or contractual capacity, acts of another Contractor in the performance of a contract with the State, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, or delays of subContractors or suppliers arising from unforeseeable causes beyond the control and without the fault or negligence of either the Contractor or the subContractors or suppliers.

19. COST AND PRICE CERTIFICATION:

- A. The Contractor by submitting cost or price information certifies that, to the best of its knowledge, the information submitted is accurate, complete, and current as of a mutually determined specified date prior to the conclusion of any price discussions or negotiations for:

 (1) A negotiated contract, if the total contract price is expected to exceed \$100,000, or a smaller amount set by the procurement officer; or (2) a change order or contract modification expected to exceed \$100,000, or smaller amount set by the procurement officer.
- B. The price under this contract and any change order or modification hereunder, including profitor fee, shall be adjusted to exclude any significant price increases occurring because the Contractor furnished cost or price information which, as of the date agreed upon between the parties, was inaccurate, incomplete, or not current.
- **20. TERMINATION FOR DEFAULT:** If the Contractor fails to fulfill its obligations under this contract properly and on time, or otherwise violates any provision of the contract, the University may terminate the contract by written notice to the Contractor. The notice shall specify the acts of omissions relied on as cause for termination. All finished or unfinished supplies and services provided by the Contractor, shall at the University's option, become the University's property. The University shall pay the Contractor fair and equitable compensation for satisfactory performance prior to receipt of notice of termination, less the amount of damages caused by Contractor's breach. If the damages are more than the compensation payable to the Contractor, the Contractor will remain liable after termination and the State can affirmatively collect damages. Termination hereunder, including the determination of the rights and obligations of the parties, shall be governed by the provisions of USM Procurement Policies and Procedures.
- **21. TERMINATION FOR CONVENIENCE:** The performance of work under this contract may be terminated by the University in accordance with this clause in whole, or from time to time in part, whenever the University shall determine that such termination is in the best interest of the University. The University will pay all reasonable costs associated with this contract that the Contractor has incurred up to the date of termination and all reasonable costs associated with termination of the Contract. However, the Contractor shall not be reimbursed for any anticipatory profits which have not been earned up to the date of termination. Termination hereunder, including the determination of the rights and obligations of the parties, shall be governed by the provisions of the USM Procurement Policies and Procedures.
- **22. FINANCIAL DISCLOSURE:** The Contractor shall comply with the provisions of Section 13-221 of the State Finance and Procurement Article of the Annotated Code of Maryland, which requires that every business that enters into contracts, leases or other agreements with the State of Maryland or its agencies during a calendar year under which the business is to receive in the aggregate \$100,000 or more, shall within 30 days of the time when the aggregate value of these

contracts, leases or other agreements reaches \$100,000, file with the Secretary of the State of Maryland certain specified information to include disclosure of beneficial ownership of the businesses.

- **23. POLITICAL CONTRIBUTION DISCLOSURE:** Landlord shall comply with, and require its officers, directors, and partners to comply with, the provisions of Election Law Article, Annotated Code of Maryland, Sections 14-101 through 14-108, which requires that every person doing public business (as there defined), and every individual whose contributions are attributable to the person entering into such an agreement, during a calendar year in which the person receives cumulative consideration of \$100,000 or more from public business, shall file with the State Administrative Board of Election Laws a statement disclosing contributions in excess of \$500 made during the reporting period to a candidate for elective office in any primary or general election. The statement shall be filed with the State Administrative Board of Election Laws: (1) before a purchase or execution of a lease or contract by the State, a county, an incorporated municipality, or their agencies, and shall cover the preceding two calendar years; and (2) if the contribution is made after the execution of a lease or contract, then twice a year, throughout the lease or contract term on (a) February 5, to cover the 6-month period ending July 31.
- **24. CONTINGENT FEE PROHIBITION:** The Contractor, architect, or engineer (as applicable) warrants that it has not employed or retained any person, partnership, corporation, or other entity, other than a bona fide employee or agent working for the Contractor, architect or engineer, to solicit or secure this agreement, and that it has not paid or agreed to pay any person, partnership, corporation, or other entity, other than a bona fide employee or agent, any fee or any other consideration contingent on the making of this agreement.
- **25. RETENTION OF RECORDS:** The Contractor shall retain and maintain all records and documents relating to this Contract for three years after final payment by the University hereunder or any applicable statute of limitations, whichever is longer, and shall make them available for inspection and audit by authorized representatives of the University, including the procurement officer or designee, at all reasonable times.
- **26. MULTI-YEAR CONTRACTS CONTINGENT UPON APPROPRIATIONS:** If the General Assembly fails to appropriate funds or if funds are not otherwise made available for continued performance for any fiscal period of this Contract succeeding the first fiscal period, this Contract shall be cancelled automatically as of the beginning of the fiscal year for which funds were not appropriated or otherwise made available; provided, however, that this will not affect either the University's rights or the Contractor's rights under any termination clause in this Contract. The effect of termination of the Contract hereunder will be to discharge both the Contractor and the University from future performance of the Contract, but not from their rights and obligations existing at the time of termination. The Contractor shall be reimbursed for the reasonable value of any nonrecurring costs incurred but not amortized in the price of the Contract. The University shall notify the Contractor as soon as it has knowledge that funds may not be available for the continuation of this Contract for each succeeding fiscal period beyond the first.

27. LIQUIDATED DAMAGES: Time is an essential element of the Contract and it is important that the work be vigorously prosecuted until completion. For each day that any work shall remain uncompleted beyond the time(s) specified elsewhere in the contract, the Contractor shall be liable for liquidated damages in the amount(s) provided for in the solicitation, provided, however, that the due account shall be taken of any adjustment of the specified completion time(s) for completion of work as granted by approved change orders.

The contractor shall have satisfactorily repaired malfunctioning equipment components, parts and shall have the system functioning properly within twenty four (24) hours maximum after the service call is made. Otherwise the contractor shall reimburse the owner 1/365 of the contract for every day that the malfunction(s) prevent(s) the equipment from operating properly.

- **28. VARIATIONS IN ESTIMATED QUANTITIES:** Where the quantity of a pay item in this Contract is an estimated quantity and where the actual quantity of such pay item varies more than twenty-five percent (25%) above or below the estimated quantity stated in this Contract, an equitable adjustment in the Contract price shall be made upon demand of either party. The equitable adjustment shall be based upon any increase or decrease in costs due solely to the variation above one hundred twenty-five percent (125%) or below seventy-five percent (75%) of the estimated quantity. If the quantity variation is such as to cause an increase in the time necessary for completion, the procurement officer shall, upon receipt of a written request for an extension of time within ten (10) days from the beginning of the delay, or within a further period of time which may be granted by the procurement officer before the final settlement of the Contract, ascertain the facts and make adjustment for extending the completion date as in his judgment the findings justify.
- **29. TRUTH-IN-NEGOTIATION CERTIFICATION:** (Mandatory for architectural services or engineering services contracts over \$100,000.) The Contractor by submitting cost or price information, including wage rates or other factual unit costs, certifies to the best of its knowledge, information and belief, that:
- A. The wage rates and other factual unit cost supporting the firm's compensation, as set forth in the proposal, are accurate, complete and current as of the contract date;
- B. If any of the items of compensation were increased due to the furnishing of inaccurate, incomplete or non-current wages or other units of cost, the State is entitled to an adjustment in all appropriate items of compensation, including profit or fee, to exclude any significant sum by which the price was increased because of the defective data. The University's right to adjustment includes the right to a price adjustment for defects in costs or pricing data submitted by a prospective or actual subContractor; and
- C. If additions are made to the original price of the Contract, such additions may be adjusted to include any significant sums where it is determined the price has been increased due to inaccurate, incomplete or non-current wage rates and other factual costs.

- <u>30. ETHICS:</u> The vendor is responsible to assure compliance with the Maryland Public Ethics Law, Title 15, State Government Article, Annotated Code of Maryland. In the event a violation of the Ethics Law occurs in connection with the Vendor's response of this solicitation or a resulting contract award to the vendor, the University reserves the right to (1) reject the Vendor's bid or proposal or (2) declare an event of default under the contract.
- **31. RIGHTS IN INVENTIONS:** For the consideration payable under this Contract, Contractor agrees to report any invention arising out of the Work required by this Contract to University of Maryland, Baltimore. University of Maryland, Baltimore shall have sole right and authority to seek statutory patent protection under United States and foreign patent laws and to enjoy the benefits of ownership of the invention, whether or not the invention was required of the Vendor as part of the performance of Work. Contractor hereby assigns all right, title and interest in and to inventions made in the course of the Work to University of Maryland, Baltimore and agrees to execute and deliver all documents and do any and all things necessary and proper to effect such assignment.
- **32. COPYRIGHTS:** For the consideration payable under this Contract, the work product required by this Contract shall be considered a work made for hire within the meaning of that term under the copyright laws of the United States, applicable common law and corresponding laws of other countries. University of Maryland, Baltimore shall have sole right and authority to seek statutory copyright protection and to enjoy the benefits of ownership of the work. The party performing the work hereby assigns all right, title and interest in and to the work to the University of Maryland, Baltimore.
- **33. CONTRACT AFFIDAVIT:** The attached Contract Affidavit must be executed by an authorized representative of the Contractor and is incorporated by reference into this Contract.
- **34. SPECIFICATIONS:** All materials, equipment, supplies or services shall conform to federal and State laws and regulations and to the specifications contained in the solicitation.
- **35. TAX EXEMPTION:** UMB is generally exempt from federal excise taxes, Maryland sales and use taxes, District of Columbia sales taxes, and transportation taxes. Exemption certificates shall be completed upon request. Where a Contractor is required to furnish and install material in the construction or improvement of real property in performance of a contract, the Contractor shall pay the Maryland Sales Tax and the exemption does not apply.
- <u>36. ANTI-BRIBERY:</u> The Contractor warrants that neither it nor any of its officers, directors or partners, nor any employees who are directly involved in obtaining or performing contracts with any public body has been convicted of bribery, attempted bribery, or conspiracy to bribe, under the laws of any state or of the federal government or has engaged in conduct since July 1, 1997, which would constitute bribery, attempted bribery or conspiracy to bribe under the laws of any state or the federal government.
- **37. EPA:** Materials, supplies, equipment, or services shall comply in all respects with the Federal Noise Control Act of 1972, where applicable.

38. OSHA; MSDS: All materials, supplies, equipment, or services supplied as a result of this Contract shall comply with the applicable U.S. and Maryland Occupational Safety and Health Act Standards. Pursuant to 29 CFR part 1910, where applicable, an MSDS for the products supplied or used in carrying out this Contract must be sent to:

University of Maryland, Baltimore Assoc. Director for EHS 714 West Lombard Street Baltimore, MD 21201-1010

- **39. INTELLECTUAL PROPERTY:** Contractor agrees to defend upon request and indemnify and save harmless UMB, its officers, agents and employees with respect to any claim, action, cost or judgment for patent infringement, or trademark or copyright violation arising out of purchase or use of materials, supplies, equipment or services covered by this Contract.
- **40. DRUG AND ALCOHOL FREE WORKPLACE:** The Contractor warrants that the Contractor shall comply with COMAR 21.11.08 Drug and Alcohol Free Workplace, and that the Contractor shall remain in compliance throughout the term of this Contract.

41. MANDATED CONTRACTOR REPORTING OF SUSPECTED CHILD ABUSE &

NEGLECT: The University of Maryland, Baltimore (UMB) and the University System of Maryland (USM) are committed to protecting the safety and welfare of children who come into contact with the UMB community. Maryland law contains mandatory reporting requirements for all individuals who suspect child abuse or neglect. *See* Maryland Code Annotated, Family Law Article, Sections 5-701 through 5-708. A copy of the above-referenced USM/UMB Policy and Procedures are available at: https://www.umaryland.edu/oac/areas-of-responsibility/report-a-concern/report-suspected-child-abuse-or-neglect/

The Policy and Procedures are incorporated herein.

Contractors performing work on campus also must comply with USM Board of Regents (BOR) VI-1.50 – *Policy on the Reporting of Suspected Child Abuse and Neglect*, as well as the UMB *Procedures for Reporting Suspected Child Abuse and Neglect*. Specifically, Contractors performing work on campus must report suspected child abuse or neglect orally or in writing to: (a) the local department of social services or law enforcement agency; <u>and</u> (b) the University President's Designee (i.e. the UMB Chief Accountability Officer), if the suspected child abuse or neglect: (i) took place in UMB facilities or on UMB property; (ii) was committed by a current or former employee or volunteer of the USM; (iii) occurred in connection with a UMB sponsored, recognized or approved program, visit, activity, or camp, regardless of location; or (iv) took place while the victim was a registered student at UMB.

UMB reserves the right to terminate this contract if Contractor fails to comply with the above-referenced policy or procedures, or if, in the judgment of UMB, termination is necessary to protect the safety and welfare of children who come into contact with the UMB community.

42. ELIGIBILITY TO PURCHASE NOT APPLICABLE.

The pricing, terms and conditions of the successful offeror's/bidder's proposal/bid and this contract is made available to other agencies for cooperative procurements. The Contractor agrees to extend the proposal/bid price structure and discounts to all University System of Maryland campuses and facilities within the State of Maryland, and any other educational institution in the State of Maryland.

All purchases under this contract by any entity which is not a unit or agency of the State of Maryland (1) shall constitute a purchase or contract between the Contractor and that entity only, (2) shall not constitute a purchase or contract of the State of Maryland, (3) shall not be binding or enforceable against the State of Maryland or any of its units or agencies, and (4) may be subject to other terms and conditions agreed to by the Contractor and the purchases. Contractor bears the risk of determining whether or not any entity from which the Contractor receives an order under the Contract is a unit or agency of the State of Maryland such that the contract may be enforced against the State of Maryland.

43. ENTIRE CONTRACT: This Contract represents, in its entirety, the mutual understanding of the parties. This Contract supersedes any and all prior understandings and agreements, either written or oral, between the Agency and Contractor. No subsequent agreements or modifications hereof, whether expressed or implied, shall bind the parties unless the same be in writing and signed by the parties.

Contract No.	
AGREED TO:	AGREED TO:
University of Maryland, Baltimore	(Company)
Signature	Signature
Print	Print
Title	Title
Date	Date

CONTRACT AFFIDAVIT

A. AUTHORITY
I HEREBY AFFIRM THAT:
I, (print name) possess the legal authority to make this Affidavit.
B. CERTIFICATION OF REGISTRATION OR QUALIFICATION WITH THE STATE DEPARTMENT OF ASSESSMENTS AND TAXATION
I FURTHER AFFIRM THAT:
The business named above is a (check applicable items):
(1) Corporation — domestic or foreign;
(2) Limited Liability Company — domestic or foreign;
(3) Partnership — domestic or foreign;
(4) Statutory Trust — domestic or foreign;
(5) Sole Proprietorship
and is registered or qualified as required under Maryland Law.
I further affirm that the above business is in good standing both in Maryland and (IF APPLICABLE) in the jurisdiction where it is presently organized, and has filed all of its annual reports, together with filing fees, with the Maryland State Department of Assessments and Taxation. The name and address of its resident agent (IF APPLICABLE) filed with the State Department of Assessments and Taxation is:
Name and Department ID
Number:Address:
and that if it does business under a trade name, it has filed a certificate with the State Department of Assessments and Taxation that correctly identifies that true name and address of the principal or owner as:
Name and Department ID Number:
Address:
C. FINANCIAL DISCLOSURE AFFIRMATION

I FURTHER AFFIRM THAT:

I am aware of, and the above business will comply with, the provisions of State Finance and Procurement Article, §13-221, Annotated Code of Maryland, which require that every business that enters into contracts, leases, or other agreements with the State of Maryland or its agencies during a calendar year under which the business is to receive in the aggregate \$100,000 or more shall, within 30 days of the time when the aggregate value of the contracts, leases, or other agreements reaches \$100,000, file with the Secretary of State of Maryland certain specified information to include disclosure of beneficial ownership of the business.

D. POLITICAL CONTRIBUTION DISCLOSURE AFFIRMATION

I FURTHER AFFIRM THAT:

I am aware of, and the above business will comply with, Election Law Article, §§14-101—14-108, Annotated Code of Maryland, which requires that every person that enters into contracts, leases, or other agreements with the State of Maryland, including its agencies or a political subdivision of the State, during a calendar year in which the person receives in the aggregate \$100,000 or more shall file with the State Board of Elections a statement disclosing contributions in excess of \$500 made during the reporting period to a candidate for elective office in any primary or general election.

E. DRUG AND ALCOHOL FREE WORKPLACE

(Applicable to all contracts unless the contract is for a law enforcement agency and the agency head or the agency head's designee has determined that application of COMAR 21.11.08 and this certification would be inappropriate in connection with the law enforcement agency's undercover operations.)

I CERTIFY THAT:

- (1) Terms defined in COMAR 21.11.08 shall have the same meanings when used in this certification.
- (2) By submission of its bid or offer, the business, if other than an individual, certifies and agrees that, with respect to its employees to be employed under a contract resulting from this solicitation, the business shall:
- (a) Maintain a workplace free of drug and alcohol abuse during the term of the contract;
- (b) Publish a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of drugs, and the abuse of drugs or alcohol is prohibited in the business' workplace and specifying the actions that will be taken against employees for violation of these prohibitions;
- (c) Prohibit its employees from working under the influence of drugs or alcohol;
- (d) Not hire or assign to work on the contract anyone who the business knows, or in the exercise of due diligence should know, currently abuses drugs or alcohol and is not actively engaged in a bona fide drug or alcohol abuse assistance or rehabilitation program;
- (e) Promptly inform the appropriate law enforcement agency of every drug-related crime that occurs in its workplace if the business has observed the violation or otherwise has reliable information that a violation has occurred;
- (f) Establish drug and alcohol abuse awareness programs to inform its employees about:
- (i) The dangers of drug and alcohol abuse in the workplace;
- (ii) The business's policy of maintaining a drug and alcohol free workplace;
- (iii) Any available drug and alcohol counseling, rehabilitation, and employee assistance programs; and
- (iv) The penalties that may be imposed upon employees who abuse drugs and alcohol in the workplace;
- (g) Provide all employees engaged in the performance of the contract with a copy of the statement required by $\S E(2)(b)$, of this regulation;
- (h) Notify its employees in the statement required by E(2)(b), of this regulation, that as a condition of continued employment on the contract, the employee shall:
- (i) Abide by the terms of the statement; and

- (ii) Notify the employer of any criminal drug or alcohol abuse conviction for an offense occurring in the workplace not later than 5 days after a conviction;
- (i) Notify the procurement officer within 10 days after receiving notice under §E(2)(h)(ii), of this regulation, or otherwise receiving actual notice of a conviction;
- (j) Within 30 days after receiving notice under §E(2)(h)(ii), of this regulation, or otherwise receiving actual notice of a conviction, impose either of the following sanctions or remedial measures on any employee who is convicted of a drug or alcohol abuse offense occurring in the workplace:
- (i) Take appropriate personnel action against an employee, up to and including termination; or
- (ii) Require an employee to satisfactorily participate in a bona fide drug or alcohol abuse assistance or rehabilitation program; and
- (k) Make a good faith effort to maintain a drug and alcohol free workplace through implementation of §E(2)(a)—(j), of this regulation.
- (3) If the business is an individual, the individual shall certify and agree as set forth in §E(4), of this regulation, that the individual shall not engage in the unlawful manufacture, distribution, dispensing, possession, or use of drugs or the abuse of drugs or alcohol in the performance of the contract.
- (4) I acknowledge and agree that:
- (a) The award of the contract is conditional upon compliance with COMAR 21.11.08 and this certification;
- (b) The violation of the provisions of COMAR 21.11.08 or this certification shall be cause to suspend payments under, or terminate the contract for default under COMAR 21.07.01.11 or 21.07.03.15, as applicable; and
- (c) The violation of the provisions of COMAR 21.11.08 or this certification in connection with the contract may, in the exercise of the discretion of the Board of Public Works, result in suspension and debarment of the business under COMAR 21.08.03.

F. CERTAIN AFFIRMATIONS VALID

I FURTHER AFFIRM THAT:

To the best of my knowledge, information, and belief, each of the affirmations, certifications, or acknowledgements contained in that certain Bid/Proposal Affidavit dated ______, 20___, and executed by me for the purpose of obtaining the contract to which this Exhibit is attached remains true and correct in all respects as if made as of the date of this Contract Affidavit and as if fully set forth herein.

I DO SOLEMNLY DECLARE AND AFFIRM UNDER THE PENALTIES OF PERJURY THAT THE LEDGE, C Π

CONTENTS OF THIS AFFIDAV INFORMATION, AND BELIEF.	IT ARE TRUE AND CORRECT TO THE BEST OF MY KNOWL
Date:	
Ву:	(printed name of Authorized Representative and affiant)
	(signature of Authorized Representative and affiant)
12.00061 (02/13)	

ATTACHMENT E MINORITY BUSINESS ENTERPRISE (MBE) FORMS

MBE ATTACHMENT E-1A: MBE UTILIZATION AND FAIR SOLICITATION AFFIDAVIT & MBE PARTICIPATION SCHEDULE

PART 1 - INSTRUCTIONS

PLEASE READ BEFORE COMPLETING THIS DOCUMENT

This form includes Instructions and the MBE Utilization and Fair Solicitation Affidavit & MBE Participation Schedule which must be submitted with the bid/proposal. If the bidder/offeror fails to accurately complete and submit this Affidavit and Schedule with the bid or proposal, the Procurement Officer shall deem the bid non-responsive or shall determine that the proposal is not reasonably susceptible of being selected for award.

- Contractor shall structure its procedures for the performance of the work required in this Contract to attempt to achieve the minority business enterprise (MBE) subcontractor participation goal stated in the Invitation for Bids or Request for Proposals. Contractor agrees to exercise good faith efforts to carry out the requirements set forth in these Instructions, as authorized by the Code of Maryland Regulations (COMAR) 21.11.03.
- 2. MBE Goals and Subgoals: Please review the solicitation for information regarding the Contract's MBE overall participation goals and subgoals. After satisfying the requirements for any established subgoals, the Contractor is encouraged to use a diverse group of subcontractors and suppliers from the various MBE classifications to meet the remainder of the overall MBE participation goal.
- 3. MBE means a minority business enterprise that is certified by the Maryland Department of Transportation ("MDOT"). Only MBEs certified by MDOT may be counted for purposes of achieving the MBE participation goals. In order to be counted for purposes of achieving the MBE participation goals, the MBE firm, including a MBE prime, must be MDOT-certified for the services, materials or supplies that it is committed to perform on the MBE Participation Schedule. A firm whose MBE certification application is pending may not be counted.
- 4. Please refer to the MDOT MBE Directory at https://mbe.mdot.maryland.gov/directory/ to determine if a firm is certified with the appropriate North American Industry Classification System ("NAICS") Code <u>and</u> the product/services description (specific product that a firm is certified to provide or specific areas of work that a firm is certified to perform). For more general information about NAICS codes, please visit https://www.census.gov/eos/www/naics/. Only those specific products and/or services for which a firm is certified in the MDOT Directory can be used for purposes of achieving the MBE participation goals. CAUTION: If the firm's NAICS Code is in <u>graduated status</u>, such services/products <u>may not be counted</u> for purposes of achieving the MBE participation goals. A NAICS Code is in the graduated status if the term "Graduated" follows the Code in the MDOT MBE Directory.
- 5. <u>Guidelines Regarding MBE Prime Self-Performance</u>. Please note that when a certified MBE firm participates as a prime contractor on a Contract, a procurement agency may count the distinct, clearly defined portion of the work of the Contract that the certified MBE firm performs with its own workforce toward fulfilling up to, <u>but no more than</u>, fifty-percent (50%) of the overall MBE participation goal, including up to one hundred percent (100%) <u>of not more than one</u> of the MBE participation subgoals, if any, established for the Contract.
 - ✓ In order to receive credit for self-performance, an MBE prime must be certified in the appropriate NAICS code to do the work and must list its firm in the MBE Participation Schedule, including the certification category under which the MBE prime is self-performing and include information regarding the work it will self-perform.

- ✓ For the remaining portion of the overall goal and the remaining subgoals, the MBE prime must also identify on the MBE Participation Schedule the other certified MBE subcontractors used to meet those goals or request a waiver.
- ✓ These guidelines apply to the work performed by the MBE Prime that can be counted for purposes of meeting the MBE participation goals. These requirements do not affect the MBE Prime's ability to self-perform a greater portion of the work in excess of what is counted for purposes of meeting the MBE participation goals.
- ✓ Please note that the requirements to meet the MBE participation overall goal and subgoals are distinct and separate. If the contract has subgoals, regardless of MBE Prime's ability to self-perform up to 50% of the overall goal (including up to 100% of any subgoal), the MBE Prime must either commit to use other MBEs for each of any remaining subgoals or request a waiver. As set forth in Attachment E-1B Waiver Guidance, the MBE Prime's ability to self-perform certain portions of the work of the Contract will not be deemed a substitute for the good faith efforts to meet any remaining subgoal or the balance of the overall goal.
- ✓ In certain instances where the percentages allocated to MBE participation subgoals add up to more than 50% of the overall goal, the portion of self-performed work that an MBE Prime may count toward the overall goal may be limited to less than 50%. Please refer to the Governor's Office of Small Minority & Women Business Affairs' website for the MBE Prime Regulations Q&A for illustrative examples.
 http://www.goMDsmallbiz.maryland.gov/Documents/MBE_Toolkit/MBEPrimeRegulation_QA.pdf
- 6. Subject to items 1 through 5 above, when a certified MBE performs as a participant in a joint venture, a procurement agency may count a portion of the total dollar value of the Contract equal to the distinct, clearly-defined portion of the work of the Contract that the certified MBE performs with its own forces toward fulfilling the Contract goal, and not more than one of the Contract subgoals, if any.
- 7. The work performed by a certified MBE firm, including an MBE prime, can only be counted towards the MBE participation goal(s) if the MBE firm is performing a commercially useful function on the Contract. Please refer to COMAR 21.11.03.12-1 for more information regarding these requirements.

8. Materials and Supplies: New Guidelines Regarding MBE Participation.

- ✓ Regular Dealers: Up to 60% of the costs of materials and supplies provided by a certified MBE may be counted towards the MBE participation goal(s) if such MBE is a Regular Dealer of such materials and supplies. Regular Dealer is defined as a firm that owns, operates, or maintains a store, a warehouse, or any other establishment in which the materials, supplies, articles, or equipment are of the general character described by the specifications required under the contract and are bought, kept in stock, or regularly sold or leased to the public in the usual course of business; and does not include a packager, a broker, a manufacturer's representative, or any other person that arranges or expedites transactions. Generally, a Regular Dealer will be identified as a wholesaler or supplier in the MDOT Directory.
- ✓ <u>Manufacturers</u>: A certified MBE firm's participation may be counted in full if the MBE is certified in the appropriate NAICS code(s) to provide products and services as a manufacturer.
- ✓ <u>Brokers</u>: With respect to materials or supplies purchased from a certified MBE that is neither a manufacturer nor a regular dealer, a unit may apply the entire amount of fees or commissions charged for assistance in the procurement of the materials and supplies, fees, or transportation charges for the delivery of materials and supplies required on a procurement toward the MBE contract goals, provided a unit determines the fees to be reasonable and not excessive as compared with fees customarily allowed for similar services. A unit may not apply any portion of the costs of the materials and supplies toward MBE goals.

- ✓ <u>Furnish and Install</u>: The participation of a certified MBE supplier, wholesaler, and/or regular dealer certified in the proper NAICS Code(s) to furnish and install materials necessary for successful contract completion may be counted in full.
- 9. **Dually certified firms**. An MBE that is certified in more than one subgroup category may only be counted toward goal fulfillment of ONE of those categories with regard to a particular contract.
 - Example: A woman-owned Hispanic American (dually certified) firm may be used to fulfill the women-owned OR Hispanic American subgoal, but not both on the same contract.
- 10. CAUTION: The percentage of MBE participation, computed using the percentage amounts determined for all of the MBE firms listed in PART 3, MUST meet or exceed the MBE participation goal and subgoals (if applicable) as set forth in PART 2- for this solicitation. If a bidder/offeror is unable to meet the MBE participation goal or any subgoals (if applicable), then the bidder/offeror must request a waiver in PART 2 or the bid will be deemed not responsive, or the proposal not reasonably susceptible of being selected for award. You may wish to use the attached Goal/Subgoal Worksheet to assist in calculating the percentages and confirming that your commitment meets or exceeds the applicable MBE participation goal and subgoals (if any).
- 11. If you have any questions as to whether a firm is certified to perform the specific services or provide specific products, please contact MDOT's Office of Minority Business Enterprise at 1-800-544-6056 or via email to mbe@mdot.state.md.us sufficiently prior to the submission due date.

Subgoals (if applicable)

	Total African American MBE Participation:	%
	Total Asian American MBE Participation:	
	Total Hispanic American MBE Participation:	%
	Total Women-Owned MBE Participation:	%
Overall Goal		
	Total MBE Participation (include all categories):	%

PART 2 - MBE UTILIZATION AND FAIR SOLICITATION AFFIDAVIT & MBE PARTICIPATION SCHEDULE

This MBE Utilization and Fair Solicitation Affidavit and MBE Participation Schedule must be completed in its entirety and included with the bid/proposal. If the bidder/offeror fails to accurately complete and submit this Affidavit and Schedule with the bid or proposal as required, the Procurement Officer shall deem the bid non-responsive or shall determine that the proposal is not reasonably susceptible of being selected for award.

In connection with the bid/proposal submitted in response to Solicitation No, I affirm the following:
1. MBE Participation (PLEASE CHECK ONLY ONE)
I acknowledge and intend to meet IN FULL both the overall certified Minority Business Enterprise (MBE) participation goal of <u>30</u> percent and all of the following subgoals for renovations, upgrades and modernization task orders that exceed \$200,000:
 8 percent for African-American MBEs, 3 percent for Asian-American MBEs, 3 percent for Hispanic-American MBEs
Therefore, I am not seeking a waiver pursuant to COMAR 21.11.03.11. I acknowledge that by checking the above box and agreeing to meet the stated goal and subgoal(s), if any, I <u>must</u> complete PART 3 - MBE Participation Schedule in order to be considered for award.
<u>OR</u>
I conclude that I am unable to achieve the MBE participation goal and/or subgoals. I hereby request a waiver, in whole or in part, of the overall goal and/or subgoals I acknowledge that by checking this box and requesting a partial waiver of the stated goal and/or one or more of the stated subgoal(s) if any, I <u>must</u> complete PART 3, the MBE Participation Schedule for the portion of the goal and/or subgoal(s) if any, for which I am not seeking a waiver, in order to be considered for award.

Additional MBE Documentation

I understand that if I am notified that I am the apparent awardee or as requested by the Procurement Officer, I must submit the following documentation within 10 working days of receiving notice of the potential award or from the date of conditional award (per COMAR 21.11.03.10), whichever is earlier:

- (a) Good Faith Efforts Documentation to Support Waiver Request (Attachment E-1C)
- (b) Outreach Efforts Compliance Statement (Attachment E-2);
- (c) MBE Subcontractor/MBE Prime Project Participation Statement (Attachments E-3A and E-3B);
- (d) Any other documentation, including additional waiver documentation if applicable, required by the Procurement Officer to ascertain bidder or offeror responsibility in connection with the certified MBE participation goal and subgoals, if any.

I understand that if I fail to return each completed document within the required time, the Procurement Officer may determine that I am not responsible and therefore not eligible for contract award. If the contract has already been awarded, the award is voidable.

Information Provided to MBE firms

In the solicitation of subcontract quotations or offers, MBE firms were provided not less than the same information and amount of time to respond as were non-MBE firms.

I solemnly affirm under the penalties of perjury that: (i) I have reviewed the instructions for the MBE Utilization & Fair Solicitation Affidavit and MBE Schedule, and (ii) the information contained in the MBE Utilization & Fair Solicitation Affidavit and MBE Schedule is true to the best of my knowledge, information and belief.

Bidder/Offeror Name (PLEASE PRINT OR TYPE)	Signature of Authorized Representative
Address	Printed Name and Title
City, State and Zip Code	Date

SUBMIT THIS AFFIDAVIT WITH TECHNICAL PROPOSAL

PART 3 - MBE PARTICIPATION SCHEDULE

SET FORTH BELOW ARE THE (I) CERTIFIED MBES I INTEND TO USE, (II) THE PERCENTAGE OF THE TOTAL CONTRACT VALUE ALLOCATED TO EACH MBE FOR THIS PROJECT AND, (III) THE ITEMS OF WORK EACH MBE WILL PROVIDE UNDER THE CONTRACT. I HAVE CONFIRMED WITH THE MDOT DATABASE THAT THE MBE FIRMS IDENTIFIED BELOW (INCLUDING ANY SELF-PERFORMING MBE PRIME FIRMS) ARE PERFORMING WORK ACTIVITIES FOR WHICH THEY ARE MDOT-CERTIFIED.

Prime Contractor	Project Description	Project/Contract Number
MBE PRIMES: PLEASE COMPLETE BOT CTION A: For MBE Prime Contract MBE Prime Firm Iame: MBE Certification Number: If dually certified, check only one box.) African American-Owned Hispanic American-Owned Asian American-Owned	Percentage of total Contract V counted towards the MBE ove overall goal):% Pleat Instructions of this documer regarding materials and sup Supplier	s in a Joint Venture) alue to be performed with own forces and rall participation goal (up to 50% of the ase refer to Item #8 in PART 1-nt for new MBE participation guidelines
☐ Women-Owned ☐ Other MBE Classification CTION B: For all Contractors (inc	counted towards the subgoal, of not more than one subgoal)	performed with MBE prime's own forces:
MBE Firm Name: MBE Certification Number:	towards the MBE overall participat% Please refer to Item #	e to be performed with own forces and counted tion goal (up to 50% of the overall goal): #8 in PART 1- Instructions of this document forces regarding materials and supplies.
If dually certified, check only one box.) African American-Owned Hispanic American- Owned Asian American-Owned Women-Owned Other MBE Classification	☐ Supplier ☐ Manufacturer ☐ Broker ☐ Furnish and Install ☐ Services ☐ Other	
	Description of the Work to be F	Performed:

MBE Firm Name: MBE Certification Number: (If dually certified, check only one box.) African American-Owned Hispanic American- Owned Asian American-Owned	Percentage of total Contract Value to be performed with own forces and counted towards the MBE overall participation goal (up to 50% of the overall goal):
☐ Women-Owned ☐ Other MBE Classification	Services Other Description of the Work to be Performed:
MBE Firm Name: MBE Certification Number: (If dually certified, check only one box.) African American-Owned Hispanic American- Owned Asian American-Owned Women-Owned Other MBE Classification	Percentage of total Contract Value to be performed with own forces and counted towards the MBE overall participation goal (up to 50% of the overall goal): % Please refer to Item #8 in PART 1- Instructions of this document for new MBE participation guidelines regarding materials and supplies. Supplier Manufacturer Broker Furnish and Install Services Other Description of the Work to be Performed:
MBE Firm Name: MBE Certification Number: (If dually certified, check only one box.) African American-Owned Hispanic American- Owned Asian American-Owned Women-Owned Other MBE Classification	Percentage of total Contract Value to be performed with own forces and counted towards the MBE overall participation goal (up to 50% of the overall goal):

Continue on separate page if needed

Bidder/Offeror Name (PLEASE PRINT OR TYPE)	Signature of Authorized Representative
Address	Printed Name and Title
City, State and Zip Code	Date

SUBMIT THIS AFFIDAVIT WITH EACH TASK ORDER

I solemnly affirm under the penalties of perjury that: (i) I have reviewed the instructions for the MBE Utilization & Fair Solicitation Affidavit and MBE Schedule, and (ii) the information contained in the MBE Utilization & Fair

Solicitation Affidavit and MBE Schedule is true to the best of my knowledge, information and belief.

MBE ATTACHMENT E-1B WAIVER GUIDANCE

GUIDANCE FOR DOCUMENTING GOOD FAITH EFFORTS TO MEET MBE PARTICIPATION GOALS

In order to show that it has made good faith efforts to meet the Minority Business Enterprise (MBE) participation goal (including any MBE subgoals) on a contract, the bidder/offeror must either (1) meet the MBE Goal(s) and document its commitments for participation of MBE Firms, or (2) when it does not meet the MBE Goal(s), document its Good Faith Efforts to meet the goal(s).

I. Definitions

MBE Goal(s) - "MBE Goal(s)" refers to the MBE participation goal and MBE participation subgoal(s).

Good Faith Efforts – The "Good Faith Efforts" requirement means that when requesting a waiver, the bidder/offeror must demonstrate that it took all necessary and reasonable steps to achieve the MBE Goal(s), which, by their scope, intensity, and appropriateness to the objective, could reasonably be expected to obtain sufficient MBE participation, even if those steps were not fully successful. Whether a bidder/offeror that requests a waiver made adequate good faith efforts will be determined by considering the quality, quantity, and intensity of the different kinds of efforts that the bidder/offeror has made. The efforts employed by the bidder/offeror should be those that one could reasonably expect a bidder/offeror to take if the bidder/offeror were actively and aggressively trying to obtain MBE participation sufficient to meet the MBE contract goal and subgoals. Mere *pro forma* efforts are not good faith efforts to meet the MBE contract requirements. The determination concerning the sufficiency of the bidder's/offeror's good faith efforts is a judgment call; meeting quantitative formulas is not required.

Identified Firms – "Identified Firms" means a list of the MBEs identified by the procuring agency during the goal setting process and listed in the procurement as available to perform the Identified Items of Work. It also may include additional MBEs identified by the bidder/offeror as available to perform the Identified Items of Work, such as MBEs certified or granted an expansion of services after the procurement was issued. If the procurement does not include a list of Identified Firms, this term refers to all of the MBE Firms (if Statefunded) the bidder/offeror identified as available to perform the Identified Items of Work and should include all appropriately certified firms that are reasonably identifiable.

Identified Items of Work – "Identified Items of Work" means the bid items identified by the procuring agency during the goal setting process and listed in the procurement as possible items of work for performance by MBE Firms. It also may include additional portions of items of work the bidder/offeror identified for performance by MBE Firms to increase the likelihood that the MBE Goal(s) will be achieved. If the procurement does not include a list of Identified Items of Work, this term refers to all of the items of work the bidder/offeror identified as possible items of work for performance by MBE Firms and should include all reasonably identifiable work opportunities.

MBE Firms – "MBE Firms" refers to a firm certified by the Maryland Department of Transportation ("MDOT") under COMAR 21.11.03. Only MDOT-certified MBE Firms can participate in the State's MBE Program.

II. Types of Actions Agency will Consider

The bidder/offeror is responsible for making relevant portions of the work available to MBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available MBE subcontractors and suppliers, so as to facilitate MBE participation. The following is a list of types of actions the procuring agency will consider as part of the bidder's/offeror's Good Faith Efforts when the bidder/offeror fails to meet the MBE Goal(s). This list is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive. Other factors or types of efforts may be relevant in appropriate cases.

A. Identify Bid Items as Work for MBE Firms

- 1. Identified Items of Work in Procurements
- (a) Certain procurements will include a list of bid items identified during the goal setting process as possible work for performance by MBE Firms. If the procurement provides a list of Identified Items of Work, the bidder/offeror shall make all reasonable efforts to solicit quotes from MBE Firms to perform that work.
- (b) Bidders/Offerors may, and are encouraged to, select additional items of work to be performed by MBE Firms to increase the likelihood that the MBE Goal(s) will be achieved.
 - 2. Identified Items of Work by Bidders/Offerors
- (a) When the procurement does not include a list of Identified Items of Work or for additional Identified Items of Work, bidders/offerors should reasonably identify sufficient items of work to be performed by MBE Firms.
- (b) Where appropriate, bidders/offerors should break out contract work items into economically feasible units to facilitate MBE participation, rather than perform these work items with their own forces. The ability or desire of a prime contractor to perform the work of a contract with its own organization does not relieve the bidder/offeror of the responsibility to make Good Faith Efforts.

B. Identify MBE Firms to Solicit

- 1. MBE Firms Identified in Procurements
- (a) Certain procurements will include a list of the MBE Firms identified during the goal setting process as available to perform the items of work. If the procurement provides a list of Identified MBE Firms, the bidder/offeror shall make all reasonable efforts to solicit those MBE firms.
- (b) Bidders/offerors may, and are encouraged to, search the MBE Directory to identify additional MBEs who may be available to perform the items of work, such as MBEs certified or granted an expansion of services after the solicitation was issued.
 - 2. MBE Firms Identified by Bidders/Offerors
- (a) When the procurement does not include a list of Identified MBE Firms, bidders/offerors should reasonably identify the MBE Firms that are available to perform the Identified Items of Work.
- (b) Any MBE Firms identified as available by the bidder/offeror should be certified to perform the Identified Items of Work.

C. Solicit MBEs

- 1. Solicit <u>all</u> Identified Firms for all Identified Items of Work by providing written notice. The bidder/offeror should:
- (a) provide the written solicitation at least 10 days prior to bid opening to allow sufficient time for the MBE Firms to respond;
- (b) send the written solicitation by first-class mail, facsimile, or email using contact information in the MBE Directory, unless the bidder/offeror has a valid basis for using different contact information; and
- (c) provide adequate information about the plans, specifications, anticipated time schedule for portions of the work to be performed by the MBE, and other requirements of the contract to assist MBE Firms in responding. (This information may be provided by including hard copies in the written solicitation or by electronic means as described in C. 3 below.)
- 2. "All" Identified Firms includes the MBEs listed in the procurement and any MBE Firms you identify as potentially available to perform the Identified Items of Work, but it does not include MBE Firms who are no longer certified to perform the work as of the date the bidder/offeror provides written solicitations.
- 3. "<u>Electronic Means</u>" includes, for example, information provided *via* a website or file transfer protocol (FTP) site containing the plans, specifications, and other requirements of the contract. If an interested MBE cannot access the information provided by electronic means, the bidder/offeror must make the information available in a manner that is accessible to the interested MBE.
- 4. Follow up on initial written solicitations by contacting MBEs to determine if they are interested. The follow up contact may be made:
- (a) by telephone using the contact information in the MBE Directory, unless the bidder/offeror has a valid basis for using different contact information; or
 - (b) in writing via a method that differs from the method used for the initial written solicitation.
- 5. In addition to the written solicitation set forth in C.1 and the follow up required in C.4, use all other reasonable and available means to solicit the interest of MBE Firms certified to perform the work of the contract. Examples of other means include:
- (a) attending any pre-bid meetings at which MBE Firms could be informed of contracting and subcontracting opportunities; and
- (b) if recommended by the procurement, advertising with or effectively using the services of at least two minority focused entities or media, including trade associations, minority/women community organizations, minority/women contractors' groups, and local, state, and federal minority/women business assistance offices listed on the MDOT Office of Minority Business Enterprise website.

D. Negotiate With Interested MBE Firms

Bidders/Offerors must negotiate in good faith with interested MBE Firms.

- 1. Evidence of negotiation includes, without limitation, the following:
- (a) the names, addresses, and telephone numbers of MBE Firms that were considered;
- (b) a description of the information provided regarding the plans and specifications for the work selected for subcontracting and the means used to provide that information; and
- (c) evidence as to why additional agreements could not be reached for MBE Firms to perform the work.

- 2. A bidder/offeror using good business judgment would consider a number of factors in negotiating with subcontractors, including MBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration.
- 3. The fact that there may be some additional costs involved in finding and using MBE Firms is not in itself sufficient reason for a bidder's/offeror's failure to meet the contract MBE goal(s), as long as such costs are reasonable. Factors to take into consideration when determining whether a MBE Firm's quote is excessive or unreasonable include, without limitation, the following:
- (a) the dollar difference between the MBE subcontractor's quote and the average of the other subcontractors' quotes received by the bidder/offeror;
- (b) the percentage difference between the MBE subcontractor's quote and the average of the other subcontractors' quotes received by the bidder/offeror;
- (c) the percentage that the MBE subcontractor's quote represents of the overall contract amount;
- (d) the number of MBE firms that the bidder/offeror solicited for that portion of the work;
- (e) whether the work described in the MBE and Non-MBE subcontractor quotes (or portions thereof) submitted for review is the same or comparable; and
- (f) the number of quotes received by the bidder/offeror for that portion of the work.
- 4. The above factors are not intended to be mandatory, exclusive, or exhaustive, and other evidence of an excessive or unreasonable price may be relevant.
- 5. The bidder/offeror may not use its price for self-performing work as a basis for rejecting a MBE Firm's quote as excessive or unreasonable.
- 6. The "average of the other subcontractors' quotes received" by the bidder/offeror refers to the average of the quotes received from all subcontractors. Bidder/offeror should attempt to receive quotes from at least three subcontractors, including one quote from a MBE and one quote from a Non-MBE.
- 7. A bidder/offeror shall not reject a MBE Firm as unqualified without sound reasons based on a thorough investigation of the firm's capabilities. For each certified MBE that is rejected as unqualified or that placed a subcontract quotation or offer that the bidder/offeror concludes is not acceptable, the bidder/offeror must provide a written detailed statement listing the reasons for this conclusion. The bidder/offeror also must document the steps taken to verify the capabilities of the MBE and Non-MBE Firms quoting similar work.
- (a) The factors to take into consideration when assessing the capabilities of a MBE Firm, include, but are not limited to the following: financial capability, physical capacity to perform, available personnel and equipment, existing workload, experience performing the type of work, conduct and performance in previous contracts, and ability to meet reasonable contract requirements.
- (b) The MBE Firm's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the efforts to meet the project goal.

E. Assisting Interested MBE Firms

When appropriate under the circumstances, the decision-maker will consider whether the bidder/offeror:

- 1. made reasonable efforts to assist interested MBE Firms in obtaining the bonding, lines of credit, or insurance required by the procuring agency or the bidder/offeror; and
- 2. made reasonable efforts to assist interested MBE Firms in obtaining necessary equipment, supplies, materials, or related assistance or services.

III. Other Considerations

In making a determination of Good Faith Efforts the decision-maker may consider engineering estimates, catalogue prices, general market availability and availability of certified MBE Firms in the area in which the work is to be performed, other bids or offers and subcontract bids or offers substantiating significant variances between certified MBE and Non-MBE costs of participation, and their impact on the overall cost of the contract to the State and any other relevant factors.

The decision-maker may take into account whether a bidder/offeror decided to self-perform subcontract work with its own forces, especially where the self-performed work is Identified Items of Work in the procurement. The decision-maker also may take into account the performance of other bidders/offerors in meeting the contract. For example, when the apparent successful bidder/offeror fails to meet the contract goal, but others meet it, this reasonably raises the question of whether, with additional reasonable efforts, the apparent successful bidder/offeror could have met the goal. If the apparent successful bidder/offeror fails to meet the goal, but meets or exceeds the average MBE participation obtained by other bidders/offerors, this, when viewed in conjunction with other factors, could be evidence of the apparent successful bidder/offeror having made Good Faith Efforts.

IV. Documenting Good Faith Efforts

At a minimum, a bidder/offeror seeking a waiver of the MBE Goal(s) or a portion thereof must provide written documentation of its Good Faith Efforts, in accordance with COMAR 21.11.03.11, within 10 business days after receiving notice that it is the apparent awardee. The written documentation shall include the following:

A. Items of Work (Complete Good Faith Efforts Documentation Attachment E-1C, Part 1)

A detailed statement of the efforts made to select portions of the work proposed to be performed by certified MBE Firms in order to increase the likelihood of achieving the stated MBE Goal(s).

B. Outreach/Solicitation/Negotiation

- 1. The record of the bidder's/offeror's compliance with the outreach efforts prescribed by COMAR 21.11.03.09C(2)(a). (Complete Outreach Efforts Compliance Statement Attachment E-2).
 - 2. A detailed statement of the efforts made to contact and negotiate with MBE Firms including:
- (a) the names, addresses, and telephone numbers of the MBE Firms who were contacted, with the dates and manner of contacts (letter, fax, email, telephone, etc.) (Complete Good Faith Efforts Attachment E-1C, Part 2, and submit letters, fax cover sheets, emails, etc. documenting solicitations); and
- (b) a description of the information provided to MBE Firms regarding the plans, specifications, and anticipated time schedule for portions of the work to be performed and the means used to provide that information.

C. Rejected MBE Firms (Complete Good Faith Efforts Attachment E-1C, Part 3)

- 1. For each MBE Firm that the bidder/offeror concludes is not acceptable or qualified, a detailed statement of the reasons for the bidder's/offeror's conclusion, including the steps taken to verify the capabilities of the MBE and Non-MBE Firms quoting similar work.
- 2. For each certified MBE Firm that the bidder/offeror concludes has provided an excessive or unreasonable price, a detailed statement of the reasons for the bidder's/offeror's conclusion, including the quotes received from all MBE and Non-MBE firms bidding on the same or comparable work. (Include copies of all quotes received.)
- 3. A list of MBE Firms contacted but found to be unavailable. This list should be accompanied by a MBE Unavailability Certificate (see Exhibit A to this Part 1) signed by the MBE contractor or a statement from the bidder/offeror that the MBE contractor refused to sign the MBE Unavailability Certificate.

D. Other Documentation

- 1. Submit any other documentation requested by the Procurement Officer to ascertain the bidder's/offeror's Good Faith Efforts.
- 2. Submit any other documentation the bidder/offeror believes will help the Procurement Officer ascertain its Good Faith Efforts.

Exhibit A

MBE Subcontractor Unavailability Certificate

It is hereby certified that the firm of		
located at	(Name	e of Minority firm)
(Number) (City) vas offered an opportunity to bid on Solicitation No. County by (Name ***********************************	(Street)	
(City)	(State)	(Zip)
was offered an opportunity to bid on Solicitation No.		
in County by		
(Name	of Prime Contractor's Firn	n)
*******************	*******	*********
2.	(Minority Firm), is	either unavailable for the
work/service or unable to prepare a hid for this project for	or the following reason((s)·
Signature of Minority Firm's MBE Representative	Title	
MDOT Certification #	Tele	phone #
	• • • • • • • • • • • • • • • • • • • •	•••••
3. To be completed by the prime contractor if Section 2	2 of this form is <u>not</u> com	npleted by the minority firm.
To the best of my knowledge and belief, said Certified Mithe work/service for this project, is unable to prepare a	a bid, or did not respo	
proposal and has not completed the above portion of thi	s submittal.	
Signature of Prime Contractor	 Title	

MBE ATTACHMENT E-1C

GOOD FAITH EFFORTS DOCUMENTATION TO SUPPORT WAIVER REQUEST

Page ___ of ____

Prime Contractor	Project Description		Solicitation Number
Parts 1, 2, and 3 must be in	CLUDED WITH THIS CERTIFICATE ALON	G WITH ALL DOCUMENTS SUPPO	RTING YOUR WAIVER REQUES
perjury that the contents	wed Attachment E-1B, Waiver s of Parts 1, 2, and 3 of this Atta st of my knowledge, information	achment E-1C Good Faitl	
Company Name		Signature of Representative	
Address	<u> </u>	Printed Name and Title	

Date

City, State and Zip Code

GOOD FAITH EFFORTS DOCUMENTATION TO SUPPORT WAIVER REQUEST

PART 1 — IDENTIFIED ITEMS OF WORK BIDDER/OFFEROR MADE AVAILABLE TO MBE FIRMS

PAGE	OF	

Project Description

Identify those items of work that the	e bidder/offeror made available to MBE Firms.	. This includes, where appropriate, those items	
the bidder/offeror identified and de	termined to subdivide into economically feasib	ole units to facilitate the MBE participation. For	
each item listed, show the anticip	pated percentage of the total contract amoun	nt. It is the bidder's/offeror's responsibility to	

Solicitation Number

the bidder/offeror identified and determined to subdivide into economically feasible units to facilitate the MBE participation. For each item listed, show the anticipated percentage of the total contract amount. It is the bidder's/offeror's responsibility to demonstrate that sufficient work to meet the goal was made available to MBE Firms, and the total percentage of the items of work identified for MBE participation equals or exceeds the percentage MBE goal set for the procurement. Note: If the procurement includes a list of bid items identified during the goal setting process as possible items of work for performance by MBE Firms, the bidder/offeror should make all of those items of work available to MBE Firms or explain why that item was not made available. If the bidder/offeror selects additional items of work to make available to MBE Firms, those additional items should also be included below.

Identified Items of Work		s work the ement?	Does bidder/offeror normally self-perform this work?		Was this work made available to MBE Firms? If no, explain why?	
	□ Yes	□ No	□ Yes	□ No	□ Yes	□ No
	□ Yes	□ No	□ Yes	□ No	□ Yes	□ No
	□ Yes	□ No	□ Yes	□ No	□ Yes	□ No
	□ Yes	□ No	□ Yes	□ No	□ Yes	□ No
	□ Yes	□ No	□ Yes	□ No	□ Yes	□ No
	□ Yes	□ No	□ Yes	□ No	□ Yes	□ No
	□ Yes	□ No	□ Yes	□ No	□ Yes	□ No
	□ Yes	□ No	□ Yes	□ No	□ Yes	□ No
	□ Yes	□ No	□ Yes	□ No	□ Yes	□ No
	□ Yes	□ No	□ Yes	□ No	□ Yes	□ No

Prime Contractor

[☐] Please check if Additional Sheets are attached.

GOOD FAITH EFFORTS DOCUMENTATION TO SUPPORT WAIVER REQUEST

PART 2 - IDENTIFIED MBE FIRMS AND RECORD OF SOLICITATIONS

PAGE __ OF ___

Identify the MBE Firms solicited to provide quotes for the Identified Items of Work made available for MBE participation. Include

Solicitation Number

Project Description

the name of the MBE F up solicitations, whether MBE Firms used to me includes a list of the MB the bidder/offeror shou identifies additional MB also be included below to this form. This list sl or a statement from the (see Exhibit A to MBE work, Part 3 must be con	er the MBE provided a set the participation goal BE Firms identified during a solicit all of those MBE Firms who may be a copies of all written should be accompanied by bidder/offeror that the Attachment E-1B). If	quote, and who all must be including the goal set IBE Firms or exavailable to perfolicitations and by a Minority Communication of the MBE contractors.	ether the MBE in the MBE in the MBE iting process as explain why a specific or Identified It documentation Contractor Unaver refused to signification the MBE in the	s being used to Participation Sc potentially availated in MBE was rems of Work, the of follow-up callsailability Certificanthe Minority Co	meet the hedule. able to ponot solicione adding to MBE ate signer on tractor	e MBE p Note: If erform the ted. If the tional M E Firms red by the Unavail	articipation goal. the procurement he items of work, he bidder/offeror BE Firms should must be attached MBE contractor ability Certificate
Name of	Describe Item of Work	Initial	Follow-up	Details for	Quote	Quote	Reason
Identified MBE Firm & MBF Classification	Solicited	Solicitation Date & Method	Solicitation Date & Method	Follow-up Calls	Rec'd	Used	Quote Rejected
MBE Classification Firm Name: MBE Classification (Check only if requesting waiver of MBE subgoal.) African American- Owned Hispanic American- Owned Asian American- Owned Women-Owned Other MBE Classification		Date & Method Date: Mail Facsimile Email	Date & Method Date: Phone Mail Facsimile Email	Time of Call: Spoke With: Left Message	□ Yes □ No	□ Yes □ No	□ Used Other MBE □ Used Non-MBE □ Self-performing
MBE Classification (Check only if requesting waiver of MBE subgoal.) African American- Owned Hispanic American- Owned Asian American-		Date: □ Mail □ Facsimile □ Email	Date: □ Phone □ Mail □ Facsimile □ Email	Time of Call: Spoke With: □ Left Message	□ Yes □ No	□ Yes □ No	□ Used Other MBE □ Used Non-MBE □ Self-performing

☐ Please check if Additional Sheets are attached.

Owned

Women-Owned

Other MBE
Classification

Prime Contractor

GOOD FAITH EFFORTS DOCUMENTATION TO SUPPORT WAIVER REQUEST

PART 3 – ADDITIONAL INFORMATION REGARDING REJECTED MBE QUOTES

PAGE __ OF ___

Prime Contractor	Project Description	Solicitation Number
This form must be completed if Pa	rt 2 indicates that a MBE quote was rejected because the bidd	er/offeror is using a Non-MBE
or is self-performing the Identified	I Items of Work. Provide the Identified Items Work, indicate	whether the work will be self-
performed or performed by a Non-	MBE, and if applicable, state the name of the Non-MBE. Also	include the names of all MBE
and Non-MBE Firms that provided	a quote and the amount of each quote.	

Describe Identified Items of Work Not Being Performed by MBE (Include spec/section number from bid)	Self-performing or Using Non-MBE (Provide name)	Amount of Non-MBE Quote	Name of Other Firms who Provided Quotes & Whether MBE or Non- MBE	Amount Quoted	Indicate Reason Why MBE Quote Rejected & Briefly Explain
,	□ Self-performing □ Using Non-MBE	\$	□ MBE □ Non-MBE	\$	□ Price □ Capabilities □ Other
	□ Self-performing □ Using Non-MBE	\$	 □ MBE □ Non- MBE	\$	□ Price □ Capabilities □ Other
	□ Self-performing □ Using Non-MBE	\$	□ MBE □ Non- MBE	\$	□ Price □ Capabilities □ Other
	□ Self-performing □ Using Non- MBE	\$	□ MBE □ Non- MBE	\$	□ Price □ Capabilities □ Other
	□ Self-performing □ Using Non- MBE	\$	□ MBE □ Non- MBE	\$	□ Price □ Capabilities □ Other
	□ Self-performing □ Using Non- MBE	\$	 □ MBE □ Non- MBE	\$	□ Price □ Capabilities □ Other

Please check if Additional Sheets are attached
--

MBE Attachment E - 2 OUTREACH EFFORTS COMPLIANCE STATEMENT

Complete and submit this form within 10 working days of notification of apparent award or actual award, whichever is earlier.

In conjunction with the bid/proposal sub	mitted in response to Solicitation No	, I state the following:
Bidder/Offeror identified subcontracti	ing opportunities in these specific work cate	egories:
2. Attached to this form are copies of w firms for these subcontract opportunities	ritten solicitations (with bidding/proposal in s.	structions) used to solicit certified MBE
Bidder/Offeror made the following att	tempts to personally contact the solicited M	IDOT-certified MBE firms:
4. Please Check One:		
$\hfill\Box$ This project does not involve bonding	g requirements.	
	ied MBE firms to fulfill or seek waiver of bo	=
5. Please Check One:		
☐ Bidder/Offeror did attend the pre-bid	/pre-proposal conference.	
☐ No pre-bid/pre-proposal meeting/cor	nference was held.	
☐ Bidder/Offeror did not attend the pre	-bid/pre-proposal conference.	
Company Name	Signature of Representative	
Address	Printed Name and Title	
City, State and Zip Code	 Date	

MBE Attachment E-3A MBE SUBCONTRACTOR PROJECT PARTICIPATION CERTIFICATION

PLEASE COMPLETE AND SUBMIT ONE FORM FOR EACH CERTIFIED MBE FIRM LISTED ON THE MBE PARTICIPATION SCHEDULE (ATTACHMENT E-1A) WITHIN 10 WORKING DAYS OF NOTIFICATION OF APPARENT AWARD. IF THE BIDDER/OFFEROR FAILS TO RETURN THIS AFFIDAVIT WITHIN THE REQUIRED TIME, THE PROCUREMENT OFFICER MAY DETERMINE THAT THE BIDDER/OFFEROR IS NOT RESPONSIBLE AND THEREFORE NOT ELIGIBLE FOR CONTRACT AWARD

CONTRACT AWARD. Provided that		(Prime Contra	actor's Name) is awarded the State contract in conjunction with
Solicitation No	, such Prime Contractor intend	s to enter into	a subcontract with(Subcontractor's Name)
			MDOT Certification Number which will receive
it least \$ which equals	to% of the Total Contract Am	ount for perfo	orming the following products/services for the Contract:
	WORK ITEM, SPECIFICATION NUME TEMS OR WORK CATEGORIES (IF APPLICABLE)	BER, LINE	DESCRIPTION OF SPECIFIC PRODUCTS AND/OR SERVICES
Officer may request additional information of the best of its knowledge, information of the best of its knowledge, information of the procurement Article §14-308(a)(2), a certified minority business enterprises (1) fail to request, resulting the business Enterprises (2) fail to notify the (3) fail to use the certification of the certification	mation, including, without limitation, core the penalties of perjury that: (i) the information and belief, and (ii) has fully contacted Code of Maryland which proposal and: acceive, or otherwise obtain authorization rise in its Bid/Proposal;	opies of the su formation pro omplied with to vides that, exc in from the cert before execution the performance	
PRIME CONTRACTOR			NTRACTOR
Signature of Representative:			e of Representative:
Printed Name and Title:		Printed N	fame and Title:
Firm's Name:		Firm's Na	ame:
Federal Identification Number	:	Federal Id	dentification Number:
Address:		Address:	
Telephone:		Telephon	e:
Date:		Date:	

MBE Attachment E-3B MBE PRIME - PROJECT PARTICIPATION CERTIFICATION

PLEASE COMPLETE AND SUBMIT THIS FORM TO ATTEST EACH SPECIFIC ITEM OF WORK THAT YOUR MBE FIRM HAS LISTED ON THE MBE PARTICIPATION SCHEDULE (ATTACHMENT E-1A) FOR PURPOSES OF MEETING THE MBE PARTICIPATION GOALS. THIS FORM MUST BE SUBMITTED WITHIN 10 WORKING DAYS OF NOTIFICATION OF APPARENT AWARD. IF THE BIDDER/OFFEROR FAILS TO RETURN THIS AFFIDAVIT WITHIN THE REQUIRED TIME, THE PROCUREMENT OFFICER MAY DETERMINE THAT THE BIDDER/OFFEROR IS NOT RESPONSIBLE AND THEREFORE NOT ELIGIBLE FOR CONTRACT AWARD.

ovided that	aniumation with Calinitation No.	(Prime Contractor's Name) with Certifica	ation Number is award
st \$ w	which equals to % of the Total Contract	, such MBE Prime Contractor inte	services for the Contract:
NAICS CODE	WORK ITEM, SPECIFICATION NUMBER, LINE ITEMS OR WORK CATEGORIES (IF APPLICABLE). FOR CONSTRUCTION PROJECTS, GENERAL CONDITIONS MUST BE LISTED SEPARATELY.	DESCRIPTION OF SPECIFIC PRODUCTS AND/OR SERVICES	VALUE OF THE WORK
-			
MDE DDUKE G	ONTER A CITION		
MBE PRIME C			
Signature of Repr	resentative:		
Printed Name and	d Title:		
Firm's Name:			
Federal Identifica	ation Number:		
Address:			
Telephone:			
Date:			

MBE Attachment E-4A

Minority Business Enterprise Participation Prime Contractor Paid/Unpaid MBE Invoice Report

Report #:			ract #:		
		Cont	racting Unit:		
Reporting Period (Month/Year):		Cont	Contract Amount:		
		MBE	E Subcontract Amt:		
Prime Contractor: Report is due to the MBE Liaison by the			ct Begin Date:		
10 th of the month following the month the se	rvices were		ect End Date:		
provided.		Servi	ces Provided:	 	
Note: Please number reports in sequence					
Prime Contractor:			Contact Person:		
Address:					
City:			State:	ZIP:	
Phone:	Fax:		E-mai	1:	
MBE Subcontractor Name:			Contact Person:		
Phone:	Fax:				
Subcontractor Services Provided:					
List all payments made to MBE subcontract	or named above	I ict	dates and amounts of any	outstanding invoices:	
	or mannea above	List	uates and amounts of any	outstanding involves.	
during this reporting period:		List	·	outstanding invoices.	
during this reporting period: <u>Invoice#</u> <u>Amo</u>			Invoice #	Amount	
during this reporting period:		1.	·		
during this reporting period: <u>Invoice#</u> 1.		1.	·		
during this reporting period: <u>Invoice#</u> <u>Amo</u>			·		
during this reporting period: Invoice# Amo 1. 2.		1.	·		
during this reporting period: <u>Invoice#</u> 1.		1.	·		
during this reporting period: Invoice# Amo 2. 3.		1. 2. 3.	·		
during this reporting period: Invoice# Amo 1. 2.		1.	·		
during this reporting period: Invoice# Amo 2. 3. 4.	<u>unt</u>	1. 2. 3. 4.	<u>Invoice #</u>	<u>Amount</u>	
during this reporting period: Invoice# Amo 2. 3.	<u>unt</u>	1. 2. 3. 4.	·	<u>Amount</u>	
during this reporting period: Invoice# Amo 2. 3. 4.	<u>unt</u>	1. 2. 3. 4.	<u>Invoice #</u>	<u>Amount</u>	
during this reporting period: Invoice# Amo 1. 2. 3. 4. Total Dollars Paid: \$	<u>unt</u>	1. 2. 3. 4. Tota	Invoice # I Dollars Unpaid:\$	<u>Amount</u>	
during this reporting period: Invoice# Amo 1. 2. 3. 4. Total Dollars Paid: \$	<u>unt</u>	1. 2. 3. 4. Tota	Invoice # I Dollars Unpaid:\$	<u>Amount</u>	
during this reporting period: Invoice# Amo 1. 2. 3. 4. Total Dollars Paid: \$	ontractor is used for	1. 2. 3. 4. Tota	Invoice # I Dollars Unpaid:\$ ntract, you must use separa	Amount te E-4A forms	
during this reporting period: Invoice# 1. 2. 3. 4. Total Dollars Paid: \$	ontractor is used for	1. 2. 3. 4. Tota	Invoice # I Dollars Unpaid:\$ Intract, you must use separa	Amount te E-4A forms	
during this reporting period:	ontractor is used for ents that the MBE p. eported separately in	1. 2. 3. 4. Tota this contribute with Attack	Invoice # I Dollars Unpaid:\$ Intract, you must use separa ill use for purposes of meet hment E-4B	Amount te E-4A forms ting the MBE	
during this reporting period: Invoice# Amo 1. 2. 3. 4. Total Dollars Paid: \$	ontractor is used for ents that the MBE peported separately in electronic) of this for	1. 2. 3. 4. Tota this contribute with Attack	Invoice # I Dollars Unpaid:\$ Intract, you must use separa ill use for purposes of meet hment E-4B	Amount te E-4A forms ting the MBE	
during this reporting period:	ontractor is used for ents that the MBE peported separately in electronic) of this for	1. 2. 3. 4. Tota this contribute with Attack	Invoice # I Dollars Unpaid:\$ Intract, you must use separa ill use for purposes of meet hment E-4B	Amount te E-4A forms ting the MBE	
during this reporting period: Invoice# 1. 2. 3. 4. Total Dollars Paid: \$	ontractor is used for ents that the MBE pareported separately in electronic) of this for	1. 2. 3. 4. Tota this continue with Attachorm to	Invoice # I Dollars Unpaid:\$ Intract, you must use separa ill use for purposes of meet hment E-4B the following addresses (a	Amount te E-4A forms ting the MBE electronic copy	
during this reporting period: Invoice# 1. 2. 3. 4. Total Dollars Paid: \$	ontractor is used for ents that the MBE pareported separately in electronic) of this for	1. 2. 3. 4. Tota this continue with Attachorm to	Invoice # I Dollars Unpaid:\$ Intract, you must use separa ill use for purposes of meet hment E-4B the following addresses (a	Amount te E-4A forms ting the MBE electronic copy	
during this reporting period: Invoice# Amo 1. 2. 3. 4. Total Dollars Paid: \$	ontractor is used for ents that the MBE pareported separately in electronic) of this for	1. 2. 3. 4. Tota this continue with Attachorm to	Invoice # I Dollars Unpaid:\$ Intract, you must use separa ill use for purposes of meet hment E-4B the following addresses (a	Amount te E-4A forms ting the MBE electronic copy	
during this reporting period: Invoice# Amo 1. 2. 3. 4. Total Dollars Paid: \$	ontractor is used for ents that the MBE peported separately in electronic) of this for preferred):	1. 2. 3. 4. Tota this contribution Attach	Invoice # I Dollars Unpaid:\$ Intract, you must use separa ill use for purposes of meet hment E-4B the following addresses (compare) Date:	Amount te E-4A forms ting the MBE electronic copy	
during this reporting period:	ontractor is used for ents that the MBE peported separately in electronic) of this for preferred):	1. 2. 3. 4. Tota this contribution Attach	Invoice # I Dollars Unpaid:\$ Intract, you must use separa ill use for purposes of meet hment E-4B the following addresses (compare) Date:	Amount te E-4A forms ting the MBE electronic copy	

Kathy Bordenski

University of Maryland, Baltimore

Strategic Sourcing and Acquisition Services

220 Arch Street, Rm. 02-100

Baltimore, MD 21201 Phone: 410.706.5122 Fax: 410.706.8577 eMail: kbordenski@umaryland.edu

This form must be completed monthly by all MBE subcontractors.

Sample MBE ATTACHMENT E-5

Minority Business Enterprise Participation Subcontractor Paid/Unpaid MBE Invoice Report

Report#:				
Reporting Period (Month/Year):				
MBE Subcontract Amt:				
Report is due by the 10 th of the month following the month	Project Begin Date:			
the services were performed.	Project End Date:			
	Services Provided:			
	•			
MBE Subcontractor Name:				
MDOT Certification #:				
Contact Person:	E-mail:			
Address:				
City:	State:	ZIP:		
	Fax:			
Thone.	ı ux.			
Subcontractor Services Provided:				
List all payments received from Prime Contractor during	List dates and amoun	ts of any unpaid invoices over 30		
reporting period indicated above.	days old.	-		
Invoice Amt Date	Invoice Amt	Date		
1.	1.			
2.	2.			
3.	3.			
		•		
Total Dollars Paid: \$	Total Dollars Unpaid:	: \$		
Prime Contractor:	Cor	ntact Person:		
**Return one copy of this form to the following ad	dress (electronic copy wit	h signature & date is		
**Return one copy of this form to the following ad preferred):	dress (electronic copy wit	h signature & date is		
preferred):				
preferred): Signature:(Required)	Date:			
preferred):	Date:			
preferred): Signature:(Required)	Date:			
preferred): Signature:(Required)	Date:			
preferred): Signature: (Required) Print Name:	Date:			
preferred): Signature:(Required) Print Name:	Date:			

Baltimore, MD 21201 Phone: 410.706.5122 Fax: 410.706.8577 eMail: kbordenski@umaryland.edu

MBE Attachment E-4B

Minority Business Enterprise Participation MBE Prime Contractor Report

MBE Prime Contractor:				ract #:		
Certification Number:					:	
Report #:				Contract Amount: Total Value of the Work to the Self-Performed for		
Reporting Period (Month/Year):						
MBE Prime Contractor: Report is due to the MBE Liaison			purposes of Meeting the MBE participation			
by the of the month following the month the services were		goal/	subgoals:			
provided.			Proje	ct Begin Da	te:	
Note: Please number reports in so	equence		Proje	ect End Date	:	
Contact Person:						
Address:						
City:				State:		ZIP:
Phone:	Fax	:			E-mail:	
Invoice Number	Value of the Work	NAICS Co	ode		Description of th	e Work
Return one copy (hard or signature and date is pre		his form to th	ie follo	wing addre	sses (electronic cop	y with
Signature:				Date	·	
(Required	1)					
Print Name:				Title:		
Kathy Bordenski University of Maryland, Baltimore Strategic Sourcing and Acquisition 220 Arch Street, Rm. 02-100						

Baltimore, MD 21201 Phone: 410.706.5122 Fax: 410.706.8577 eMail: kbordenski@umaryland.edu

MBE ATTACHMENT E-5

Minority Business Enterprise Participation Subcontractor Paid/Unpaid MBE Invoice Report

Report#:		tract #	
		tracting Unit:	
Reporting Period (Month/Year):		E Subcontract Amount:	
		ect Begin Date:	
Report is due by the of the month following the month		ect End Date:	
services were performed.	Serv	ices Provided:	
MBE Subcontractor Name:			
WIDE Subcontractor Name.			
MDOT Certification #:			
Contact Person:		E-mail:	
Address:			
Addicss.			
City:		State:	ZIP:
Phone:	Fax:		
College Acres Consider a Decorate I. I.			
Subcontractor Services Provided:			
		latas and amazints of anzi iin	noid invioiona aven 20
List all payments received from Prime Contractor during		lates and amounts of any un	paid invoices over 30
reporting period indicated above.	days	old.	
			paid invoices over 30 <u>Date</u>
reporting period indicated above. Invoice Amt Date 1.	days	old.	
reporting period indicated above. <u>Invoice Amt</u> <u>Date</u>	days	old.	
reporting period indicated above. Invoice Amt Date 1. 2.	1. 2.	old.	
reporting period indicated above. Invoice Amt Date 1.	days	old.	
reporting period indicated above. Invoice Amt Date 1. 2. 3.	1. 2. 3.	old. <u>Invoice Amt</u>	<u>Date</u>
reporting period indicated above. Invoice Amt Date 1. 2.	1. 2. 3.	old.	<u>Date</u>
reporting period indicated above. Invoice Amt Date 1. 2. 3. Total Dollars Paid: \$	1. 2. 3. Total	old. Invoice Amt Dollars Unpaid: \$	<u>Date</u>
reporting period indicated above. Invoice Amt Date 1. 2. 3. Total Dollars Paid: \$	1. 2. 3.	old. Invoice Amt Dollars Unpaid: \$	<u>Date</u>
reporting period indicated above. Invoice Amt Date 1. 2. 3. Total Dollars Paid: \$	days 1. 2. 3. Total	old. Invoice Amt Dollars Unpaid: \$ erson:	<u>Date</u>
reporting period indicated above. Invoice Amt Date 1. 2. 3. Total Dollars Paid: \$ Prime Contractor: Return one copy (hard or electronic) of this form	days 1. 2. 3. Total	old. Invoice Amt Dollars Unpaid: \$ erson:	<u>Date</u>
reporting period indicated above. Invoice Amt Date 1. 2. 3. Total Dollars Paid: \$	days 1. 2. 3. Total	old. Invoice Amt Dollars Unpaid: \$ erson:	<u>Date</u>
reporting period indicated above. Invoice Amt Date 1. 2. 3. Total Dollars Paid: \$ Prime Contractor: Return one copy (hard or electronic) of this form signature and date is preferred):	days 1. 2. 3. Total Contact Pe	old. Invoice Amt Dollars Unpaid: \$ erson: owing addresses (electronic of	Date copy with
reporting period indicated above. Invoice Amt Date 1. 2. 3. Total Dollars Paid: \$ Prime Contractor: Return one copy (hard or electronic) of this form	days 1. 2. 3. Total Contact Pe	old. Invoice Amt Dollars Unpaid: \$ erson:	Date copy with
reporting period indicated above. Invoice Amt Date 1. 2. 3. Total Dollars Paid: \$ Prime Contractor: Return one copy (hard or electronic) of this form signature and date is preferred): Signature:(Required)	days 1. 2. 3. Total Contact Pe	old. Invoice Amt Dollars Unpaid: \$ erson: owing addresses (electronic of the control of t	Date Copy with
reporting period indicated above. Invoice Amt Date 1. 2. 3. Total Dollars Paid: \$ Prime Contractor: Return one copy (hard or electronic) of this form signature and date is preferred): Signature:	days 1. 2. 3. Total Contact Pe	old. Invoice Amt Dollars Unpaid: \$ erson: owing addresses (electronic of the control of t	Date copy with
reporting period indicated above. Invoice Amt Date 1. 2. 3. Total Dollars Paid: \$ Prime Contractor: Return one copy (hard or electronic) of this form signature and date is preferred): Signature:(Required)	days 1. 2. 3. Total Contact Pe	old. Invoice Amt Dollars Unpaid: \$ erson: owing addresses (electronic of the control of t	Date Copy with

169

Baltimore, MD 21201 Phone: 410.706.5122 Fax: 410.706.8577 eMail: kbordenski@umaryland.edu

University of Maryland, Baltimore

220 Arch Street, Rm. 02-100

Strategic Sourcing and Acquisition Services

MBE Attachment E-6

<u>Liquidated Damages Provisions for Non-Construction Contracts Containing MBE</u> <u>Participation Goals</u>

This contract requires the contractor to make good faith efforts to comply with the Minority Business Enterprise ("MBE") Program and contract provisions. The State and the Contractor acknowledge and agree that the State will incur damages, including but not limited to loss of goodwill, detrimental impact on economic development, and diversion of internal staff resources, if the Contractor does not make good faith efforts to comply with the requirements of the MBE Program and MBE contract provisions. The parties further acknowledge and agree that the damages the State might reasonably be anticipated to accrue as a result of such lack of compliance are difficult to ascertain with precision.

Therefore, upon a determination by the State that the Contractor failed to make good faith efforts to comply with one or more of the specified MBE Program requirements or contract provisions, the Contractor agrees to pay liquidated damages to the State at the rates set forth below. The Contractor expressly agrees that the State may withhold payment on any invoices as a set-off against liquidated damages owed. The Contractor further agrees that for each specified violation, the agreed upon liquidated damages are reasonably proximate to the loss the State is anticipated to incur as a result of such violation.

- a. Failure to submit each monthly payment report in full compliance with COMAR 21.11.03.13B (3): \$30.59 per day until the monthly report is submitted as required.
- b. Failure to include in its agreements with MBE subcontractors a provision requiring submission of payment reports in full compliance with COMAR 21.11.03.13B (4): \$ 107.07 per MBE subcontractor.
- c. Failure to comply with COMAR 21.11.03.12 in terminating, canceling, or changing the scope of work/value of a contract with an MBE subcontractor and/or amendment of the MBE participation schedule: the difference between the dollar value of the MBE participation commitment on the MBE participation schedule for that specific MBE firm and the dollar value of the work performed by that MBE firm for the contract.
- d. Failure to meet the Contractor's total MBE participation goal and subgoal commitments: the difference between the dollar value of the total MBE participation commitment on the MBE participation schedule and the MBE participation actually achieved.
- e. Failure to promptly pay all undisputed amounts to an MBE subcontractor in full compliance with the prompt payment provisions of this contract: \$100.00 per day until the undisputed amount due to the MBE subcontractor is paid.

Notwithstanding the use of liquidated damages, the State reserves the right to terminate the contract and exercise all other rights and remedies provided in the contract or by law."

EXHIBIT I

IFB88597WG

ASHLAND INDUSTRIAL SERVICES VTS AUDIT (INCLUDES: Material Deficiency List, Individual Reports, and Installation & Modernization Data)



Ashland Industrial Services

Training. Inspections. Consulting. Project Management.

1 North Main Street Shrewsbury, PA 17361 877.347.8801; hello@aisco.org

Executive Summary

Ashland conducted a maintenance audit of the entire UMB elevator inventory over the last two (2) months, and has produced the attached reports, including a synthesized Excel spreadsheet of maintenance deficiencies as well as an Excel spreadsheet listing equipment age and when it was modernized or when it is recommended for modernization. A comparison of this data with our reports produced 12 months ago evidences sporadic maintenance practices, details of which are **emboldened** throughout our reports, "**outstanding items from previous year's reports**." This lack of maintenance is directly contributing to major component failures that the University then brings in a third party to repair, which is costly and inefficient. Proper preventative maintenance programs would reduce the University's annual vertical transportation budget significantly, eliminating the need for the majority of the larger repairs.

In summarizing our findings, first off, the following items listed below should take highest priority:

- 1) Repair and/or replace car door restrictor devices to operate as designed. This condition needs to be addressed as soon as possible in order to prevent the car doors from being forced open in an elevator entrapment situation. The units have been identified in the report and the deficiency has been listed in **bold** to bring attention to each unit needing attention.
- 2) Increase door maintenance frequency and reduce closing pressure on doors that exceed maximum allowed.
 - a) Door maintenance should be performed on a more consistent basis. Any unit with excessive door pressure above 30 foot pounds is a safety hazard and should be adjusted.
 - b) Performing door maintenance on a consistent basis will increase reliability and reduce noisy door operation.
- 3) Schedule the required safety tests and file the necessary paperwork to obtain current operating certificates to be displayed in each elevator cab.
 - a) *Most* of the elevators have current elevator operating certificates; however, some have recently expired.
 - b) Testing paperwork is kept in most of the elevator machine rooms and is easily accessible when placed in the clear plastic folders that are located inside the elevator machine rooms or elevator controller doors.

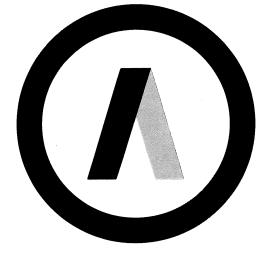
- 4) Test Fireman's Service monthly and keep up-to-date records.
 - a) Some Fireman's Service test logs are outdated and need to be kept up-to-date.
- 5) Increase preventive maintenance frequency and keep up-to-date records in each elevator machine room as required by Code.

What this list demonstrates is that general housekeeping for vertical transportation equipment is a concern throughout the Campus. Indeed, due to the severity and quantity of the violations, whether regarding passenger safety or equipment care/costs, and in perspective of the list of still outstanding items from last year's report, Quality Control audits should be performed on a quarterly basis, whether by Ashland or University supervision.

Moreover, we believe that proper training of all individuals working in and around the equipment and the importance of safety devices needs to be emphasized and clearly communicated. Having a clear understanding of industry-safe rules and practices, any competent technician working in and around the equipment should be well aware of the hazards to themselves as well as the public. For example, the multitude of machine room doors left open (allowing the general public to be able to walk into moving equipment and high voltage environments), door restricting devices intentionally disabled, the storing of used/spare parts inventory and tools unsecured on car tops (all of which could fall down the hoistway), endanger both mechanics and passengers. We also believe that campus-wide monitoring system would enable the VT staff to more quickly and efficiently respond to calls, as well as enable the University's supervision staff to track historical data for reoccurring issues.

We should also mention that during our time on-site, we encountered many individuals who had a genuine interest in what we were doing. Once we informed them, they seemed absolutely delighted that the University was taking measures to correct longstanding concerns among the University community regarding what many feel to be unreliable equipment. Indeed, given the extreme amount of negative feedback we received regarding elevators in the University, we recommend that a campus-wide satisfaction survey of elevators should be conducted in order for the University to more clearly perceive the nature and effectiveness of its VT equipment.

In closing, we *strongly* encourage the University to take advantage of our proposed PowerPoint presentation/discussion of our findings and photographs to all UMAB stakeholders, so that a robust strategy for implementing corrective actions can take shape.



Ashland Industrial Services www.aisco.org

Master Deficiency List

MAINTENANCE DEFICIENCIES

	Address	Unit ID	TYPE	Deficiecy
100 N. Greene St.		PE1	Т	oom HVAC non-operational. 5-roof level will not lock.
				Lubricate and adjust brake pins.
108 N. Greene St.		PEI	н	A/C not working in machine room (outstanding from last year's report).
				and holstway door equipment preventive matterbance is overcue (outstanding from last year's report).
Comment Beat Street	000 Dian G*	1210		COITECT CAI UDOU OPERAGUOI (UOOTS STAIL) OPERAGUOI (UO
ı	7 rine 3t.	rei	G F	Defect a coors for smooth, no square operation (outstanding from last year's report).
ozo W. Lexington St.		PF?	→ E	oglate unetwirke door opperation of an opperation of a opperation of
737 W Lombard St		PE1		A TIGITUAT TOOSE THE TOTAL TO THE THE THE THE THE TOTAL THE
		į		Vivo enti natività scopio machine noto con Control con
				Clean car and hoistway door sills of dirt & debris (outstanding from last year's report).
				Adjust jerky door operation, slamming closed and jerking open (outstanding from last year's report).
				Emergency communication non-operational.
				Fourth-floor hatch door sill groved from worn gib.
				Counterweight roller guide wheels worn.
				Fire Service log not up-to-date.
		DE2	þ	Provide Category 1 test lags.
		rez	G	The repetitory to when the many consistent of the construction of
				React insolution of our thorough of the state of the stat
				Archain to A vive assembly functionaling from the say 5 grass 1 seption 1. Archain program in and not finitely finite from the fold functionaling from last visar's report?
				. Comes recovering the strength of the control of t
				Clean car and hoistway door silk of dirt. & debrits doubt and between the control of the control
				Remove razs and oilen't from elevator car too (outstanding from last vear's renort)
				Adjust jerky dyor meration fourtesanding from last vear's renorth
				Against January Constitution and Again Topics. Refute donc closin presents to within influent maximum (nutrianding from last wear's remort)
				Accord cools usually pressure to writing the according to the cool of the cool
				Propried carson to even and parameter your.
Allied Health	100 Penn St	Machine Room		Provide self-closing machine.
				ractions are common toron, away pipelas to Occasional good open (custamining from tast year s report). Provide ARC twin fire extrainisher (outstanding from last year's renort)
				Provide freman's carrier for fast party. Into 2017.
				Remove used and a service using year. Aut sort in
				Clean machine room floar to third suite search of the control of t
				occia macinita non 100 monto de 1878 d Provide Category 1 actor ou notation de 1878 d
		PE1	Ή	Troute category 1 test tag. Provide correct FEDF (file monitorine realities 3 ann (not 6 ann)
			:	strong control of the constraints and the control of the control o
				bright out on part arter repairing leaves tourstanding from last year's report).
				Clean pit noor (outstanding from ast year's report).
				Clean car and hoistway door sills of dirt & debris (outstanding from last year's report).
				Provide correct car top ID / equipment number (outstanding from last year's report).
				Provide correct F6 fixe, manufacturer requires 5 amp (not 5 amp).
		PE2	H	Replace worn car door operator belts (outstanding from last year's report).
				Adjust pick up rollers and replace worn and missing rollers (outstanding from last year's report).
				Provide correct car ID.
				P. Is non-tunctioning.
				Clear pit note (outstanding from last year's report).
				DOOF TESTICOL IS OUT OF THE TESTING THE TE
				Empty oil drip pan atter repairing leaks (outstanding from last year's report).
Demolar Democrat Dide	CCC W Dalkingso Ct.	Martin		Chean car and postway door sils of dirt & debris (outstanding from last year's report).
	y w. Dalimore St.	Macillie Nooili	F	Vibrate Annual Action of Large.
		1	-	escan covación per ano constituir de la
				Clean car and hoistway door sills of this debris (outstanding from last veal's report).
				Adjust hall call waiting times to meet ADA requirements.
		PE2	H	Clean elevator pit and car top, including removing spare parts.
				Lubricate doors for smooth, no squeak operation
				Adjust hall call waiting times to meet ADA requirements.

report).	ast year's report). ast year's report). isst year's report). year's report). st year's report).	ast year's report). port). r's report). (outstanding from last year's report).).).
Bighth-floor gib missing screw. Clean car and hoistway door sills of dirt & debris (outstanding from last year's report). Adjust hall call waiting times to meet ADA requirements Lubricate doors for smooth, no squeak operation Remove spare parts (rollers) from car top. Clean elevator pit and car top, including removing spare parts. Elevator machine room A/C unit filter needs cleaning.	Provide fireman's service test logs. Adjust and ulbricace earl/nistwo donors for smooth operation. Adjust and ulbricace earl/nistwo donors for smooth operation. Adjust and ulbricace earl/nistwo donors for smooth operation. Adjust door operating times to meet industry standards. Clean pit of dirt and debris (outstanding from last year's report). Provide Category I test tags. Repair non-functioning door restrictor (outstanding from last year's report). Provide category I test tags. Repair non-functioning door restrictor (outstanding from last year's report). Replace governor switch cover. Adjust and lubricate car/loistway doors for smooth operation. Adjust door operating times to meet industry standards. Clean pit of dirt and debris (outstanding from last year's report). Replace worn car door gibs (outstanding from last year's report). Adjust door operating times to meet industry standards. Clean pit of dirt and debris (outstanding from last year's report). Repair flooring at hoistway sill entrance, IR (outstanding from last year's report). Repair flooring at hoistway sill entrance, IR (outstanding from last year's report). Replace two (2) bed door operation him machine room). Remove bloss from pit. Clean car top of dirt and debris (outstanding from last year's report). Replace two (2) bed door operation him machine room). Remove stonage from inside elevator. Energency Communication is non-operational. Adjust door operating inness to meet industry standards. Clean pit of dirt and debris (outstanding from last year's report). Clean for this debris (outstanding from last year's report). Renergency Communication is non-operational. Adjust door operating inness indusing grown las	Machine room door does not close or lock fully (both cars) (outstanding from last year's report). Replace hoistway door spirator at B level (outstanding from last year's report). Adjust hall call waiting time to meet standards (outstanding from last year's report). Adjust hall call waiting time to meet standards (outstanding from last year's report). Adjust door operation to within standards (outstanding from last year's report). Provide category 1 test tag. Clean inside of controller of carbon dust. Provide wire nut on bare wires inside controller. Provide wire maintenance overdue on door equipment (outstanding from last year's report). Adjust and conclosing pressure (outstanding from last year's report). Adjust hall call waiting time to meet standards (outstanding from last year's report). Adjust door operation to within standards (outstanding from last year's report).
F F	T T T Screw Dr	н н
PE3	Machine Rooms PE1 PE2 PE3 PE4 WCL	PE1
•	621 W. Lombard St.	31 S. Greene St.
	Campus Center	Dental Museum

Minimia Rooms	schine Rooms		A-tevel tool opens to garage tools, which is a safety concern (as it relates to egress) and in violation of A17.1 2005.
	į		Provide annual test tags (Category 1). Oroanize nnints and etore in monar location
	i		Organize prints and solor in proper location.
	1	٤	FIGURE HELDING SECTION (CESTION). Hall Breille is missing at 8 floor land surrance frame (autetranding from last moon's manage)
	1	4	tran Diante is missing at a fund token draine (buttantum from that year 1 report.) Turnerione and comment constituted arises the transfer token from the fundamental and the form of the fundamental arises the fundamental arises the fundamental arises from the fundamental arises fro
O A G G G G A R E G G G A B H P G G G G A B H R G G G G A R E R E R E R E R E R E R E R E R E R			Decompts which content of potational motive when the arms of the content of the c
O A C C C O A A R V C C C A A C C C A B F V Q C C C A F V G C C A B F V Q C C C A F V G C C C A F V G C C C A C F V C C C C A C F V C C C C A C F V C C C C A C C C C A C C C C A C C C C			Tropenty and a governor tope that is taken our counter weight safety filter. Proposition connectes well as the safety of the safety of the safety filters.
O A G G G G A A F F G G G A B F F P G G G A B F F P G G G A B F F F G G G A F F F F F F F F F F F F F			Detective operator purely during into ben.
O A G G G G A A E G G G A E E G G G A E E G G G A E E G G G A E E G G G A E E G G G A E E G G G A E E G G G A E E G G G A E E G G G A E E E G G A E E E E			Neutroby parts and tools into cal top.
O A G G G G A E E G G G A E E G G G A E G G G A E G G G A E G G G A E G G G A E G G G A E G G G G			THE LOCK COVER INSSUITS SALEW. DATES TAKEN CITY
O A G G G G A A G G G G A G G G G A B H P P G G G G A G G G G A G G G G A G G G G			Notate Longer Juga. A mula insmodition postificate nast due
0 A 2 C C C A A Z C C C A A C C C A A C C C A A A A			Commentation of an execution indicators inside and Constatoralises from last usuals
O A C C C C A R V C C C C A B C C O A B F P P C C C A B F P P C C C A B F P P C C C A B F P P C C C A B P P P P P P P P P P P P P P P P P P			Collect, state of the post of the state of t
O A G G G G A E E G G G A E E G G G A E E G G G A E E G G G A E E G G G A E E G G G A E E G G G A E E G G G A E G G G G			Crear ear and notways sins of our of or deposits of the control of
- + + + + + + + + + + + + + + + + + + +	cid	E	Clean elevator pit of dirt & debris (outstanding irom last year's report).
0 4 6 6 6 6 4 E E E E E E E E E E E E E E	rez	-	\(\text{Verm}\) \(Verm
O A G G G G A W V C C G G A G G G A W V C C G A W V C C G G A W V C C G G A W V C C C A W V C C C A W V C C C C A W V C C C C A W V C C C C A W V C C C C A W V C C C C A W V C C C C A W V C C C C A W V C C C C A W V C C C C A W V C C C C C A W V C C C C C C A W V C C C C C C C C C C C C C C C C C C			Annual inspection certificate past due.
다 나 나 나 나 나 H 전 2 2 2 2 2 2 2 2 3 2 3 3 4 4 5 2 2 3 3 3 5 4 5 5 3 3 3 5 5 6 5 3 3 3 5 5 6 5 3 3 5 5 6 5 3 3 5 5 6 5 5 5 5			COFFECT STAGOWY CAP POSITION INDICATORS INSIDE CADS (OURSTANDING FROM 1881 Year's report).
C A C C C C A A R V C C C C C C C A C C C C A C C C C C A C C C C C A C C C C C C A C C C C C C A C			Clean car and hoistway siles of dirt & debris (outstanding from last year's report).
H H P P P P P P P P P P P P P P P P P P	į	1	Clean elevator pit of dirt & debris (outstanding from last year's report).
O P C C C C P P C C C C C C C C P P C C C P P C C C C P P C C C C P P C C C C P P C C C C P P C C C C P P C C C C P P C C C C C C P P C C C C C C P P C C C C C P P C C C C C P P C C C C C C C P P C	PE3	-	Greenfield worn on operator shaft.
H H H G G G G G G G G G G G G G G G G G			Investigate noisy machine.
O B G G G G G G G G G G G G G G G G G G			Annual inspection certificate past due.
0 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			Correct "shadowy" car position indicators inside cabs (outstanding from last year's report).
0 9 9 6 6 0 0 9 8 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			Clean car and hoistway sills of dirt & debris (outstanding from last year's report).
다 나 나 나 H H H P G G G G G G G G G G G G G G G G			Clean elevator pit of dirt & debris (outstanding from last year's report).
O A C C C O A A R V C C O C C C C C C C C C C A C C C C C C	PE4	Т	Operator belt cracked.
O B G G G G G G G G G G G G G G G G G G			Investigate squeaky counterweight roller guides.
H H C C C C A A A C C C C C C C C C C C			Hobble counterweight shackles.
0 9 9 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			Annual inspection certificate past due.
о в в в в в в в в в в в в в в в в в в в			Correct "shadowy" car position indicators inside cabs (outstanding from last year's renort).
O A C C C C C A A R C C C C C C C C A C C C C			Clean car and hoistway sills of dirt & debris (outstanding from last year's report).
O A A G C C O A A A G C C C O C C C C O C C C C C C C C C C			Clean elevator pit of dirt & debris (outstanding from last year's renort)
H H C C C C C C C C C C C C C C C C C C	PES	Τ	Annual inspection certificate past due
н н н н дей бай бай бай бай бай бай бай бай бай ба			Correct "shadowy" car position indicators inside cabs (ourstanding from last year's report).
н н н к г г г г г г г г г г г г г г г г			Clean car and hoistway sills of dirt & dehris (autstanding from last year's reneat)
H H P G G G A A A Reg C G G G G G G G G G G G G G G G G G G			Clean at a contract of the Republic Contract of the Contract o
H H C C C C C C C C C C C C C C C C C C	DE6	F	Coral develop in to that to detect of the continuous from the coral develop in the coral develop in the continuous of the continuous of the continuous of the continuous of the coral development of the continuous of the coral development of the continuous of the continuous of the continuous of the continuous of the coral development of the continuous of
н В В В В В В В В В В В В В В В В В В В	27	-	Luoivate an noisiway te ea tuon equipment.
н ш			Neptuce organizes on whisper-mex wheels in pit and adjust tension (outstanding from last year's report).
н ш			Kenove water from pir.
н #			Keplace defective counterweight roller guide (top lett-hand, rear).
н н			Annual inspection certificate past due.
F #			Correct "shadowy" car position indicators inside cabs (outstanding from last year's report).
н ш			Clean car and hoistway sills of dirt & debris (outstanding from last year's report).
н			Clean elevator pit of dirt & debris (outstanding from last year's report).
ш	SE7	Η	Door equipment overdue for regular preventive maintenance procedures.
ш			Replace missing screws in car one aring nanel
ш			Monitor/replace damaged travel cable
н			removes the control of the control o
н			ocusina tepi suore ou paris. I ond suicides disconnected
щ			Lotata wegation autosumeconte autosa de autosa de autosa de autosa de autosa de autos de auto
н			Average overlapped and the attached to duct.
н			Annual inspection past under due. Annual inspection certificate neer due
н			fundam napowoon wonthware pass univ.
Ħ			Collect State on the State of t
н			Crean car and notsiway Silis of on the A debris Outstanding from last year's report).
:	рня	Ή	Cream erevator pir or unit oc uconts (outstanning nom ast year s report). Chan nit
comman inspection continued past due. Correct "shadowy" car position indicators inside cabs (outstanding from last year's report).	LEO	4	Creal pit. A ming promoment continues and due
Correct "shadowy" car position indicators inside cabs (outstanding from last year's report).			Anilian inspection on threate past due.
(/and) (

650 W. Baltimore St.

Dental School

Donaldson Brown Center	200 Mt. Ararat Farm Rd	PE1	T	Clean elevator pit of dirt & debris (outstanding from last year's report). Operating certificate has expired.
		DW	Manual	Operating certificate has expired.
Environmental Health Services (EHS)	714 W. Lombard St.	Machine Room		Update Firenan's Service Test Log (outstanding from last year's report). Provide hydraulic oil loss log.
				HVAC system control in the control i
		PE1	H	Lubricate doors for smooth, no squeak operation (outstanding from last year's report).
General Research Bido	111 Penn St	PF1	Ŀ	Adjust stow door poperation (outsidanding from last year's report). Check for men and noise
0			ı	Emergency Communication phone volume is low.
				Sump pump overflow on pit floor.
				Replace burnt out PI bulbs.
				Adjust door operation, jerky upon activation of electronic edge detector (custanding from last year's report). Berform door uniquenate adjust hole and nick in rulars and remarks conserior.
				r criotino maniferance, agust toes anu pires pan agueaxy operation. Key switch beets are worn.
		PE2	Т	Provide Unit ID on COP.
				Adjust door operation, jerky upon activation of electronic edge detector (autstanding from last year's report).
				Perform door maintenance; adjust locks and pick up rollers and squeaky operation.
				Replace burnt out PI bulbs.
				Sump pump overflow on pit floor. Key swirch herels are wom
Grand Garage	5 N. Paca St.	Machine Room		And in the control of
				Provide preventive maintenance log
				Provide Category 1 test tags.
		PE1	Τ	Investigate metal shavings on machine bed plate.
				Clean fust of a riop.
				Clean dat and hostway door suis of drift & debris (outstanding from last year's report).
				DOOS TO STATE TYPE AUGUST CATIONS WAY GOODS TOT STROOM UPON ACTIVATION OF GOOD CODE CODE CODES TO THE STATE OF THE STROOM OF TO STATE OF THE STROOM OF THE S
				random se consumer clean off surface rust and natur. UMB should investigate water intrusion issues to mewant from hannenine seain fourtrandine from last year's renorth
				Lubricate door operator chains and replace rusty components (outstanding from last year's report).
				Clean rope dust from machines: determine cause and correct (outstanding from last vear's renort).
				Water dripping on elevator machine room floor from holes in roof metal.
				Cut excessive dead end hoist cable and mount clips, per code.
		PE2	T	Lubricate machine brake pins (outstanding from last year's report).
				Investigate metal shavings on machine bed plate.
				Operator bumper stop missing.
				Clean tristed car top.
				Clean car and hoistway door sils of dirt & debris (outstanding from last year's report).
				Doots require YM—adjust car/houstway doors for smooth operation upon activation of door edge detector (outstanding from last year's report). Doors require YM—adjust car/houstway doors for smooth operation upon activation of door edge detector (outstanding from last year's report).
				11 is issue to the clean of the inflore net and naint. INAR chould investing a vester intricin issues to resone from hereveriding from lose scant of a second
				cent of process to the control of th
				Clean rope dust represent determine cause and correct (outstanding from lart vear's report.)
				Water dripping on elevator machine room floor from holes in roof metal.
		PE3	Τ	Clean gear oil residue and excessive metal shavings from around the machine (outstanding from last year's report).
				Reinstall brake machine cover (outstanding from last year's report).
				Repair brake switch assembly.
				Replace missing rope gripper cover.
				Lubricate machine brake pins (outstanding from last year's report).
				Adjust machine brake to prevent hard pick and set during normal operation (outstanding from last year's report).
				Provide Fire Service testing paperwork.
				Clean dar and hoistway door sills of dirt & debris (outstanding from last year's report). Clean dar man hoistway door sills of the debris (outstanding from last year's report).
				process of the contract of the
				Car top needs to be cleaned; clean off surface rust and paint; UMB should investigate water intrusion issues to prevent from happening again (outstanding from last year's report).
				Lubricate door operator chains and replace rusty components (outstanding from last year's report).
				Clean rope dust from machines; determine cause and correct (outstanding from last year's report).
		PEG	E	Water dripping on elevator machine room floor from holes in roof metal.
		FE4	-	Adjust car door clutor to prevent scraping during normal operation (outstanding from last year's report). Designed or the terror cells.

Clean car top and reinstall door operator cover left on car top (there are bare wires hanging out of operator) (outstanding from last year's report). Investigate and correct vibration of elevator cab during normal operation (outstanding from last year's report, excessive vibration). Car operating panel elevator ID demonstrates #4 when it's car #3 (outstanding from last year's report). Adjust and lubricate car/hoistway doors for smooth operation (outstanding from last year's report). Correct door closing pressure to within allowable maximum (outstanding from last year's report). Lubricate door operator chains and replace rusty components (outstanding from last year's report). Clean rope dust from machines; determine cause and correct (outstanding from last year's report). Clean excessive metal shavings from around geared traction machine and investigate cause and correct. Adjust door operating times to meet industry standards (outstanding from last year's report). Wipe down geared traction machine and clean up gear oil (outstanding from last year's report). Clean car and hoistway door sills of dirt and debris (outstanding from last year's report). Operating certificate has expired.

Repair non-functioning A/C in PE3 machine room (outstanding from last year's report). Clean car and hoistway sills of dirt & debris (outstanding from last year's report). low down transition is way too long, adjust to meet floor to floor performance time. Clean car and hoistway sills of dirt & debris (outstanding from last year's report). Provide car top ID / equipment number (outstanding from last year's report). Repair emergency communication in car (outstanding from last year's report). Provide hall Braille at entrance jambs (outstanding from last year's report). Water dripping on elevator machine room floor from holes in roof metal. Clean down all machine room equipment, contaminated with carbon dust. Clean elevator car top (outstanding from last year's report). Counterweight roller guide, bottom left-hand, is defective. Found elevator machine room door propped open. Found elevator machine room door propped open. Elevator machine room door found propped open. Correct loose door gibs-floors 1, 2, 3, and 5. Organize prints and spare parts in machine room Unit attempts to run with top landing door open. Remove rags and spray can from car top area. Clean elevator car top; remove extra covers. Tighten all door gibs, as many were loose. Fire Service Phase II sign is illegible. Oil dripping from overhead on car top. Provide Annual Category 1 test tag. Missing handy box cover under car. Provide Annual Category 1 test tag. Replace missing COP cover screws. Screw Dr Was not operating during our visit. Clean elevator pit of dirt & debris. Operating certificate has expired. Operating certificate has expired. Operating certificate has expired. Provide Category 1 test tags. Alarm bell is non-operational. Car top light nonoperational. Fire service testing past due. Annual inspection past due. Greenfield to fan broken. Updated fire service log. Check loose door gibs. Update fire service log. Н Machine Rooms WCL PE2 $\overline{PE3}$ PEl 660 W. Redwood St. HS / HS Library

Car top needs to be cleaned; clean off surface rust and paint; UMB should investigate water intrusion issues to prevent from happening again (outstanding from hast year's report).

Doors require PM—adjust car/hoistway doors for smooth operation upon activation of door edge detector (outstanding from last year's report).

Clean car and hoistway door sills of dirt & debris (outstanding from last year's report).

Provide Fire Service testing paperwork.

Pit needs to be cleaned.

Provide rust inhibitive paint at bottom of doors where gibs mount. Selector tape is dry, causing guides to vibrate while running.

Replace defective door operator belt.

Address cracked travel cable jacket. Clean pit. *Unit out of service at time of inspection; drive removed. Adjust and lubricate car/hoisway doors for smooth operation (outstanding from last year's report). Clean car and hoisways door sills of fir and debris (outstanding from last year's report). Adjust door operating times to meet industry standards (outstanding from last year's report). Correct door closing pressure to within allowable maximum (outstanding from last year's report). Provide Category 1 test tags. Clean pit of dirt and debris (outstanding from last year's report). Check, replace and/or tighten car door gibs (outstanding from last year's report). Repair non-functioning door restrictor (rera) (outstanding from last year's report). Repair non-functioning door restrictor (rera) (outstanding from last year's report). Adjust pick up rollers for proper operation and lubricate (outstanding from last year's report). Provide pit light. Repair on debris (outstanding from last year's report). Provide pit light. Repair on on HVAC non-operational. Elevator machine room door propped open. Replace missing door operator cover. Replace missing door operator belt. Replace missing door operator belt.	Provide fireman's service test logs. Clean car and hoistway sills of dirt & debris (outstanding from last year's report). Clean elevator pit of dirt & debris (outstanding from last year's report). Clean elevator pit of dirt & debris (outstanding from last year's report). Adjust door operating times to meet industry standards. Seal missing from over speed governor assembly. Replace operator cover. Adjust door open limit to eliminate pinch point when door is fully open. Replace left-hand worn car door gib; fire tab is rubbing sill. Adjust brake pick, elevator starting through brake. Adjust car door closing pressure to within industry standards. Clean car and hoistway sills of dirt & debris (outstanding from last year's report). Clean elevator pit of dirt & debris (outstanding from last year's report). Clean elevator pit of dirt & debris (outstanding from last year's report). Clean car and hoistway sills of dirt & debris (outstanding from last year's report). Clean elevator pit of dirt & debris (outstanding from last year's report). Clean elevator pit of dirt & debris (outstanding from last year's report). Clean elevator pit of dirt & debris (outstanding from last year's report). Clean elevator pit of dirt & debris (outstanding from last year's report). Clean elevator pit of dirt & debris (outstanding from last year's report). Clean elevator pit of dirt & debris (outstanding from last year's report). Clean elevator pit of dirt & debris (outstanding from last year's report). Clean elevator pit of dirt & debris (outstanding from last year's report). Clean car top, removing old batteries. Replace door operating line of the & debris (outstanding from debris debris debris debris debris (outstanding from debris deb	Crean can am unosaway also tunt ce ucura (outstanding from last year's report). Clean elevator pit of dirt & debris (outstanding from last year's report). Adjust door operating times to meet industry standards. Repair broken steady plates on car frame (outstanding from last year's report). Adjust door operation to prevent stamming during openchlose cycles. No emergency stop switch in deflector sheave "cat walk" overhead area (outstanding from last year's report). Wips down geared traction machine to remove gear oil residue (outstanding from last year's report). Clean up spare parts and remove used parts from machine room floor. Clean up spare parts and remove used parts from machine room floor. Clean elevator car top (outstanding from last year's report). Half of the secondary lights are out. Car door gibts are bad. Door operator belts need to be replaced. Provide maintenance for all door equipment. Clean car and hoistway sills of dirt & debris (outstanding from last year's report). Clean elevator pit of dirt & debris (outstanding from last year's report). Adjust door operating times to meet industry standards. Hobble hoist ropes on counterweight frame (outstanding from last year's report).
⊢ ⊢		- Н
PE3	Matchine Kooms PE1 PE2 PE2 PE3 PE3	PBS 889
	oso W. Baltimore St.	
	realiti Sciences I (FLSFI)	

Replace emergency battery light pack in car operating panel. Machine room door not self-closing. Add second retainer dip to counterweight cable dead end. Add second retainer dip to the car cable dead end. Add second retainer clip to the car cable dead end. Oil loss log filled out through June of 2017 (this is a traction elevator). Clean machine from floor check metal shavines around machine.	HVAC not functioning properly, floor fans being used and door being left open. Provide correct type of fire extinguisher (outstanding from last year's report). Clean car top (outstanding from last year's report). Pti lights out. Clean dirt and debris from hoistway door equipment. Provide hoistway door gibs where missing. Tighten door relating cable (outstanding from last year's report). Tighten door relating cable (outstanding from last year's report). Tighten loose door gibs, 1" and 4" floors. Tighten loose door gibs, 1" and 4" floors. Clean sitragal missing on bottom portion of door. Clean sills.	Counterweight roller guide guard rubbing at top of hoistway. Clean car top (outstanding from last year's report). Phi lights out. Provide hoistway door gibs where missing. Clean dirt and debris from hoistway door equipment. Provide Category 1 test tags. Remove rags from car top (outstanding from last year's report). Door gib missing on 5*—floor door.	Remove garbage and used parts (outstanding from last year's report). Update friemals service test of the contestanding from last year's report). Update friemals service test of the contestanding from last year's report). Clean elevator machine room, organizing garts, cabinets, and prints. Clean elevator machine room, organizing garts, cabinets, and prints. Clean oper data around machine, determine cause and correct (outstanding from last year's report). Replace motor encoder cover. Provide unit ID # on COP. Replace bad counterweight roller—frame rubbing rail. Replace bad counterweight roller—frame rubbing rail. Replace bad counterweight roller—frame rubbing rail. Replace bad counterweight roller—frame from the contestanding from last year's report). Monitor damaged traveling cable (previously taped up). Adjust and lubricate car/hoistway doors for smooth operation (outstanding from last year's report). Clean car and hoistway doors fills of dirt and debris and spare parts (outstanding from last year's report). Clean elevator car top of dirt and debris and spare parts (outstanding from last year's report). Clean elevator car top of dirt and debris and spare parts (outstanding from last year's report). Clean elevator car top of dirt and debris and parts (outstanding from last year's report). Clean elevator car top of dirt and debris and spare parts (outstanding from last year's report). Clean elevator car top of dirt and debris and spare parts (outstanding from last year's report). Clean elevator car top of dirt and debris and spare parts (outstanding from last year's report). Clean elevator car top of dirt and debris and spare parts (outstanding from last year's report). Clean elevator car top of dirt and debris and parts elevative car direct (outstanding from last year's report). Clean elevator car top of dirt and debris and parts elevative car direct (outstanding from last year's report). Provide unit ID #s on COP.	Replace defective pick-up roller, 5" floor. Replace defective counterweight roller. Door equipment requires maintenance. Door equipment requires maintenance. Correct gap at bottom of car a door and return jamb (creating a pinching hazard). Adjust and lubricate ear/hoistway doors for smooth operation (outstanding from last year's report). Clean car and hoistway door sills of dirt and debris (outstanding from last year's report). Clean pit of dirt and debris and parts (outstanding from last year's report). Clean elevator car top of dirt and debris and spare parts (outstanding from last year's report). Repair broken green-field connection on door operator (outstanding from last year's report).
		0		F
	E T	E	z T	<u></u>
	Machine Room	PE2 Material Lift	Machine Rooms PE1	PE3
	20 Penn St.		725 W. Lombard St.	
	Health Science II (HSF II)		Med Biotec Center (IHV)	

Clean geared machine of gear oil contamination and repair leaks (outstanding from last year's report). Gear oil level is low. Clean rope dust around machine, determine cause and correct (outstanding from last year's report). Replace cracked pick-up rollers and missing roller and bottom floor. Replace cracked pick-up rollers and missing roller and bottom floor. Repair or relace as steady adjusters, which are not functioning. Load weighted eisconeacted, sitting on crosshead. Car PI display malfunctioning. Replace MOV hanging off contactor in controller. Frame of platform has rusted through and needs replacing (outstanding from last year's report). Replace hoist ropes and monitor for rouging (outstanding from last year's report). Unit was on safety during inspection. Last Annual inspection and explationary 2, 2017.	Update fremant's service tests log; late entry was June 2017 (outstanding from last year's report). Adjust slow-down leveling transition to meet floor to floor times (outstanding from last year's report). Emergency Communication error. Clean sills. Clean sills.	Update Firenairy Service Test Log (outstanding from last year's report). Update Firenairy Service Test Log (outstanding from last year's report). Card door septemate from hostway door when testing door pressure, adjust clutch. Clean up pit and remove water on pit floor (outstanding from last year's report). Clean down elevator rails, contaminated with dirt and debris (outstanding from last year's report). Elevator cavitating at top landing (low on oil). Fire Service Past I and Plass II signs ilegible. Fire Service Past I and Plass II signs ilegible. Correct cart door restrictor, hitfure facets hetwest R. and I level.	Remove hydraulic oil residue from floor (outstanding from last year's report). Provide Category 1 test tags. Adjust and lubricate squeaky door operation (outstanding from last year's report). Adjust performance times to meet standards (outstanding from last year's report). Provide unit ID numbering on COP, car top, and pit equipment. Lobby hall push button/Fire Service bezel, worn. Emergency Communication non-operational. Adjust and lubricate squeaky door operation (outstanding from last year's report). Adjust performance times to meet standards (outstanding from last year's report). Adjust performance times to meet standards (outstanding from last year's report). Adjust boor Open Limit (DOL) to obtain fill lopen (outstanding from last year's report).	Provide correct type of fire extinguisher in machine room (outstanding from last year's report). Provide pit light bulb in pit (outstanding from last year's report). Operating certificate has expired, July 2017. Provide hall Braile on entrance frames (outstanding from last year's report). Adiust slide unides to reduce car movement.	Replace bulbs in pit lights (outstanding from last year's report). Reseal geared machine to correct excessive leaking (outstanding from last year's report). Provide Category 1 Annual Inspection test tags. Provide Category 1 Annual Inspection test tags. Provide Category 1 Annual Inspection test tags. Load weigher cable broken. Provide maintenance on door equipment. Clean sills. Replace cacked counterweight rollers.
Clean geared machin Gear oil level is low. Clean rope dust aro. Replace cracked picl Car top and hoistwa Repair or replace cal Load weighter discor Car PI display malfu Replace MOV hangi Frame of platform h Remove dirt and del Clean drum machine Replace hoist ropes Unit was on safety d Last Annual Inspect Last Annual Inspect	Update fireman Adjust slow-dd Emergency Co Emergency Do Clean sills. Adjust door of Clean sills. Clean car top. Clean car top.	Update Firems Car door separa Clean up pit and Clean down elev Elevator cavitati Replace damage Fire Service Pla	Remove hydra Provide Careg Adjust perfor Adjust perfor Provide unit 1 Lobby hall pu Emergency C Adjust and lui Adjust perfor Provide unit 1 Adjust perfor Adjust perfor	Provide correct to Provide pit light by Operating certifical Provide hall Brail Adiust slide guide	Replace bulbs Reseal geared Provide Categ Provide Fire S Door restrict Load weigher Provide maint Clean sills Replace crack Hobble count
H T (drum)		H	н н	Ħ	H
Dock Lift Side WL	Machine Room PE1 PE2 PE2 PE3	Machine Room PE1	Machine Room PE1	Machine Room PE1	PEI
	622 W. Lexington St.	520 W. Fayette St.	653 W. Pratt St.	55 Wade Ave.	10 S. Pine St.
	Lexington Garage	MD Bar Association	MEIMSS	MPRC (Catonsville, MD)	MSTF

Replace bad car roller guide. Clean hoistway. Clean pit. Replace bulbs in pit lights (outstanding from last year's report). Replace bulbs in car door restrictor device (outstanding from last year's report).	Provide bulb guard on car top control station (outstanding from last year's report). Replace worn car door operator belts (outstanding from last year's report). Replace broken zip its utilized for hobbling of hoist ropes, car and counterweight (outstanding from last year's report). Provide Category I Annual Inspection test tags. Clean down hoistway. Replace missing door gib, 8th floor. Clean down poistway. Replace bulbs in pit lights (outstanding from last year's report). Replace bulbs in pit lights (outstanding from last year's report). Replace traveling cable, appears to have been damaged (outstanding from last year's report). Replace traveling cable, appears to have been damaged (outstanding from last year's report). Replace traveling cable, appears to have been damaged (outstanding from last year's report). Replace traveling cable, appears to have been damaged (outstanding from last year's report). Replace traveling cable, appears to have fall contact with face of rail surface (outstanding from last year's report). Provide Catecory I Annual Inspection test tags.	Provide maintenance on door equipment. Clean sills. Clean and investigate rope dust around machine (outstanding from last year's report). Provide Category 1 Annual Inspection test tags. Appears to be locked out of service, Ashland thus did not evaluate.	Organize spare parts and discard old parts in machine room (outstanding from last year's report). Modernization started.	Modernization started. Clean elevator car top of dirt, debris, parts and tools (outstanding from last year's report). Sweep elevator rat routstanding from last year's report). Clean and adjust hoistway door equipment for smooth operation (outstanding from last year's report). Adjust door operating times to within industry acceptable standards (outstanding from last year's report). Dispatching issues. Correct Unit ID on COP.	Clean elevator car top of dirt, debris, parts and tools (outstanding from last year's report). Sweep elevator pit (outstanding from last year's report). Clean rope dust from machine and determine cause (outstanding from last year's report). Clean and adjust hoistway door equipment for smooth operation (outstanding from last year's report). Adjust door operating times to within industry acceptable standards (outstanding from last year's report). Dispatching issues. Organize spare parts and discard old parts in machine room (outstanding from last year's report).	Correct Unit IJ on COF. Clean elevator car top of dirt, debris, parts and tools (outstanding from last year's report). Clean elevator car top of dirt, debris, parts and tools (outstanding from last year's report). Sweep elevator pit (outstanding from last year's report). Clean and adjust hoistway door equipment for smooth operation (outstanding from last year's report). Adjust door operating times to within industry acceptable standards (outstanding from last year's report). Dispatching issues. Correct Unit ID on COP.	Clean elevator car top of dirt, debris, parts and tools (outstanding from last year's report). Sweep elevator pit (outstanding from last year's report). Clean and adjust hoistway door equipment for smooth operation (outstanding from last year's report). Adjust door operating times to within industry acceptable standards (outstanding from last year's report). Dispatching issues. Correct Unit ID on COP. DOL needs adjustment, front and rear, to allow full open (outstanding from last year's report). Preventive maintenance on all door equipment overdue (outstanding from last year's report).	Provent doors from samming dosed. Provide Unit ID on COP. No car top inspection operation. Provide pit light. Replace controller cover. Last Amnual inspection was May of 2016. Update Fireman's Service Test Log in machine room. Annual elevator testing appears overdue.
Ŧ	H	т н	T		(-	H	н	
PE2	PE3	FE4 PE5	PE1	į	PE2	PE3	PE4	
			W. Fayette St.					

Pearl Street Garage

Clean elevator machine room. Remove foreign equipment stored in machine room. Update Fireman's Service Test Log in machine room. Annual elevator testing appears overdue. Clean elevator machine room. Remove foreign equipment stored in machine room. Remove for replace old smoke detectors in elevator machine room. Replace burned out cab light. Replace and repain and repaint (outstanding from last year's report).	Perform door maintenance, along and lubricate locks and pick up rollers (outstanding from last year's report). Provide door operator maintenance and lubrication. Clean surface rust. Lubricate selector tape guides. Clean it. Repair damaged traveling cable. Repair damaged traveling cable. Perform door maintenance, adjust and lubricate locks and pick up rollers (outstanding from last year's report). Repair damaged traveling cable. Repair damaged traveling cable. Perform door maintenance and lubrication. Clean surface rust. Lubricate selector rape guides. Clean guides door operator maintenance and lubricate locks and pick up rollers (outstanding from last year's report). Perform door maintenance, adjust and lubricate locks and pick up rollers (outstanding from last year's report). Provide Category 1 test tags. Clean guides. Clean guides.	Machine rooms are clean. Organize prints and store in proper location (outstanding from last year's report). Provide fireman's service test log (autstanding from last year's report). No current test tags (Category 1) on controller. Pit needs to be cleaned (outstanding from last year's report). Clean car and hoistway door sills of dirt and debris. Adjust door operating firms to meet industry standards. Lubricate machine brake pins (outstanding from last year's report). Emergency communication non-operational. Pit needs to be cleaned (outstanding from last year's report). Clean car and hoistway door sills of dirt and debris. Adjust door operating times to meet industry standards. Lubricate machine brake pins (outstanding from last year's report). Emergency communication non-operational. Pit needs to be cleaned (outstanding from last year's report). Emergency communication non-operational. Pit needs to be cleaned (outstanding from last year's report). Emergency communication non-operational. Adjust door operating times to meet industry standards. Emergency communication non-operational. Annual inspection past due. Clean pit. Replace bad counterweight roller guide. Pit needs to be cleaned (outstanding from last year's report). Clean pit. Replace bad counterweight of guit and debris. Clean car and hoistway door sills of dirt and debris.
н н	H H ' H	
FES	PE1 PE2 PE3	Machine Rooms PE1 PE2 PE3 PE3
	120 S. Penn St.	20 N. Pine St.
	Penn Street Garage	Pharmacy Hall

Clean metal shavings from around machine drive sheave, determine cause and correct (outstanding from last year's report). Clean up rope dust from around machine, investigate and correct cause. Door bucks (entrances) are rusting due to moisture exposure (outstanding from last year's report). Fasten car station panel to cab; replace missing hardware (outstanding from last year's report). Clean car and hoistway door sills of dirt and debris (outstanding from last year's report). Selector tape is rusted; lubricate guides. Pit and car top need to be cleaned (outstanding from last year's report). Clean car and hoistway door sills of dirt and debris (outstanding from last year's report). Clean car and hoistway door sills of dirt and debris (outstanding from last year's report). Clean car and hoistway door sills of dirt and debris (outstanding from last year's report). Clean oil from drip pan below pump & pump motor (outstanding from last year's report). Adjust DOL for full open of car/hoistway doors (outstanding from last year's report). Replace bulbs in car station push buttons (outstanding from last year's report). Pit and car top need to be cleaned (outstanding from last year's report). No HVAC in machine room (outstanding from last year's report). Emergency Communication volume very low and static-sounding. Pit needs to be cleaned (outstanding from last year's report). Adjust door operation (doors jerk open and slam closed). Adjust door operating times to meet industry standards. Clean pit area (outstanding from last year's report). Clean pit area (outstanding from last year's report). Clean car top (outstanding from last year's report). Clean car top (outstanding from last year's report). Clean car top (outstanding from last year's report). Clean car and hoistway door sills of dirt and debris. Door bucks (entrances) are rusting due to moisture. Provide Category 1 test tags. Smoke and heat and Annual inspection past due. Clean door equipment and provide maintenance. Car sill groove worn from worn out door gib. Emergency communication nonoperational. Annual inspection paperwork missing date. Repair non-functioning door restrictor. Annual inspection paperwork missing date. Elevator machine room door will not lock. Selector tape is rusted; lubricate guides. Counterweight shackle, hobble broken. PM brakes (very dry with rusted pins). Annual inspection certificate past due. Replace missing door operator cover. Clean inside controller dust build-up. Replace 20-amp fuse in 4-amp circuit. Annual inspection certificate past due. Replace missing car top light guard. Smoke and heat testing not current. Door operator belt to be replaced. Clean and lubricate door equipment. Smoke and heat testing not current. Provide Category 1 test tags. Provide Category 1 test tags. Car top light nonoperational. Replace door operator belt. Replace missing PI lights. Traveling cable damaged. Remove rags from car top. Remove water from pit. Replace selector cover. Repair dim pit lights. Clean pit. Η Machine Rooms PE2 PE2 PE5 ΡΕΙ PEI 500 W. Redwood St. 646 W. Pratt St. Pratt Street Garage

Plaza Garage

Clean door equipment and provide maintenance.

PM brakes (very dry with rusted pins).

Adjust door operating times to meet industry standards.

Car top light switch appears to have been wired to car door edge detector? Correct same (outstanding from last year's report). Clean rope dirt & debris from around traction machine, determine cause and repair (outstanding from last year's report). Re-install shield on resistor bank in elevator controller cabinet (outstanding from last year's report). Adjust / lubricate hoistway doors for automatic closing (outstanding from last year's report). Clean car and hoistway door sills of dirt and debris (outstanding from last year's report). Clean car and hoistway door sills of dirt and debris (outstanding from last year's report). Hoistway door preventive maintenance is overdue (outstanding from last year's report). Clean car and hoistway door sills of dirt & debris (outstanding from last year's report). Hoistway door preventive maintenance is overdue (outstanding from last year's report). Hoistway door preventive maintenance is overdue (outstanding from last year's report). Clean car and hoistway door sills of dirt & debris (outstanding from last year's report). Clean elevator pit of dirt & debris (outstanding from last year's report). Clean car and hoistway door sills of dirt & debris (outstanding from last year's report). Clean elevator car top-rags, oil cans, grease (outstanding from last year's report). Clean elevator car top—rags, oil cans, grease (outstanding from last year's report). Clean elevator car top-rags, oil cans, grease (outstanding from last year's report). Pit lights are dim; investigate and correct (outstanding from last year's report). Pit lights are dim; investigate and correct (outstanding from last year's report). Pit and car top need to be cleaned (outstanding from last year's report). Clean elevator pit of dirt & debris (outstanding from last year's report). Clean elevator pit of dirt & debris (outstanding from last year's report). Pit and car top need to be cleaned (outstanding from last year's report). Phone line connection hanging off wall in machine room. Phone line connection hanging off wall in machine room Clean door equipment and provide maintenance. Clean door equipment and provide maintenance. Stop switch on operator not stopping elevator. Wrong unit certificate in certificate frame. Check and correct fuse sizes in controller. Wrong unit certificate in certificate frame. Selector tape is rusted; lubricate guides. Selector tape is rusted; lubricate guides. PM brakes (very dry with rusted pins). PM brakes (very dry with rusted pins). Clean inside controller dust build-up. Clean inside controller dust build-up. Replace broken stud on brake switch. Replace 5-amp fuse in 4-amp circuit. Governor cable dragging on jaw. Rope gripper pad rubbing cables. Governor cable dragging on jaw. Traveling cable jacket is cracked. Rope gripper pad rubbing cables. Break switch cover is missing. Provide Category 1 test tags. Provide Category 1 test tags. Bottom floor doors squeak. Adjust floor stopping height. Car top roller guides bad. Update Fire Service logs. Update Fire Service logs. Clean oil from car top. Adjust floor stops. Grease on car top. Screw Dr Г H WCL PE3 PE2 PE3 PE4 PE1

> Saratoga Garage & Offices

Provide Category 1 test tags.

Update Fire Service logs.

Correct car arrival lanterns; "up" and "down" are active at the same time.

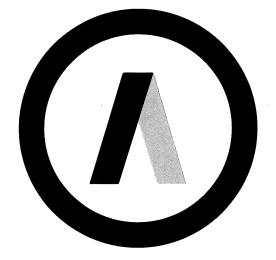
Door operator chain is loose and dry; lubricate and adjust.

Clean inside controller dust build-up.

Door restrictor is non-operational.

Wong unit certificate in certificate frame. Cab floor tile is separating, causing a tripping hazard, Replace bottom section of hatch duct cover. Door operator mechanical stop is broken. Clean elevator car top—rags, oil carse, grease (outstanding from last year's report). Holishway door preventive maintenance is overdue (outstanding from last year's report). Clean car and hoistway door greventive maintenance is overdue (outstanding from last year's report). Clean elevator pit of dirt & debris (outstanding from last year's report). Clean elevator pit of dirt & debris (outstanding from last year's report). Provide Category I test ags. Wrong unit certificate in certificate frame. Car top light switch appears to have been wired to car door edge detector? Correct same (outstanding from last year's report). Clean elevator car top—rags, oil cars, grease (outstanding from last year's report). Clean ear and hoistway door greventive maintenance is overdue (outstanding from last year's report). Clean car and hoistway door greventive maintenance is overdue (outstanding from last year's report). Clean elevator pit of dirt & debris (outstanding from last year's report). Clean elevator or top—replace frame. Wrong unit certificate frame. Wrong unit certificate frame. Wrong unit certificate in certificate frame. Remove rags and other equipment from car top (outstanding from last year's report). Remove rags and other equipment from car top (outstanding from last year's report).	Clean hoistway door equipment, pick up rollers full of lint & dirt (all cars) (outstanding from last year's report). Clean car and hoistway door sills of dirt & debris (PE3) (outstanding from last year's report). Adjust car & hall call dwell times to meet industry standards (PE1 & PE2) (outstanding from last year's report). Replace burnt out bubbs in auxiliary car operating panel (outstanding from last year's report). Emergency Communication non-operational. Adjust cab steady plate rollers to reduce side-to-side movement. Clean hoistway door quipment, pick up rollers full of lint & dirt fall cars) (outstanding from last year's report). Clean car and hoistway door guipment, pick up rollers full of lint & dirt fall cars) (outstanding from last year's report). Adjust car & hall call dwell times to meet industry standards (PE1 & PE2) (outstanding from last year's report). Repair broken conduit on car top (outstanding from last year's report). Repair broken conduit on car top (outstanding from last year's report). Revated main car operating panel, wires exposed at bottom of fixture (outstanding from last year's report). Revated main car operating panel, wires exposed at bottom of fixture (outstanding from last year's report). Repair broken conduit on car top (outstanding from last year's report). Repair controller hanging from wires. Clean to and hoistway door equipment, pick up rollers full of lint & dirt (all cars) (outstanding from last year's report). Clean car and hoistway door sell comet industry standards (PE1 & PE2) (outstanding from last year's report). Clean car top of dirt & debris (outstanding from last year's report). Clean car top of dirt & debris (outstanding from last year's report). Clean car top of dirt & debris (outstanding from last year's report). Clean car top of or depris (outstanding from last year's report).	Adjust performance times to meet industry standards. (all cars) (outstanding from last year's report). Adjust performance times to meet industry standards. (all cars) (outstanding from last year's report). Top floor hall push button pushed out. Adjust rope gripper pad; cables are rubbing pad. Adjust performance times to meet industry standards. (all cars) (outstanding from last year's report). Repair non-functioning car door restrictor (outstanding from last year's report). Adjust rope gripper pad, cables are rubbing pad. Could not access.	Hoistway door equipment requires clean down (outstanding from last year's report). F5 fuse oversized, should be 3 AMP not 5 (outstanding from last year's report). Clean car top and elevator pit area (outstanding from last year's report). Clean car top and elevator post area (outstanding from last year's report). Clean and lubricate all door equipment. Repair non-functioning energency telephone in elevator cab. Emergency phone works, however, volume is low. Repair non-functioning door restrictor. Car top very dusty.
E E	F F F	T T Screw Dr	н н
PE4	PE2 PE3	PE1 PE2 WCL	PE1
	655 W. Lombard St.	655 W. Lombard St.	525 W. Redwood St.
	School of Nursing (South)	School of Nursing (North)	School of Social Work

tean and lubricate all door equipment. ate certificate expired in 2015. Adjust hoistway door panels from standing in open position (outstanding from last year's report). Tighten pick-up roller on 1 st floor.	Cache nationate curve inscrime trans. Repair non-function curve inscrime to make: Repair non-functioning door restrictor. Replace door operator belt. Replace door operator belt. Lubricate and adjust door operation to eliminate squeaking (outstanding from last year's report). Replace rear car top light. Replace rear car top light. Replace missing rear flast-speed door gib (found in pit).	Adjust performance times to meet industry standards. Provide Category 1 test tags. Lubricate door equipment to eliminate squeaky operation (outstanding from last year's report). Clean down hoistway door equipment, contaminated with dirt & debris (outstanding from last year's report). Replace missing door restrictor. Replace missing door operator cover. Replace worn car door gibs. Clean car top of dirt and debris (outstanding from last year's report).	Adjust performance times to meet industry standards. Provide Category 1 test tags. Install belats on pump motor, as required (two [2] belts missing) (outstanding from last year's report). Replace worn car door gibs. Replace worn car door gibs. Replace worn of gibs. Monitor jack packing for oil loss. Clean car top of girt and debris (outstanding from last year's report). Clean down bistway door equipment, contaminated with dirt. & debris (outstanding from last year's report). Juhricate door equipment to eliminate sometry of contention (outstanding from last year's report).	Adjust performance times to meet industry standards. Repair nord-functioning door restrictor. Repair nord-functioning door restrictor. Repair everyor machine room wall (sheetrock damage). Adjusts performance times to meet industry standards. Provide Category 1 test tags.
ರಹ	Adjust performance times to meet industry si Provide Category 1 test tags. Repair non-functioning door restrictor. Replace door operator belt. Adjust performance times to meet industry si Provide Category 1 test tags. Lubricate and adjust door operation to elimit Replace rear car top light. Right-band pit can full/overflowing on floor. Replace missing rear fist-speed door gib (foo Replace missing rear fist-speed door gib (foo	Adjust performance times to meet indust. Provide Category 1 test tags. Lubricate door equipment to eliminat. Clean down hoistway door equipment Repair ron-functioning door restri- Repair non-functioning door restri- Repair broken green field connector cover. Replace wom car door gibs. Clean car top of dirt and debris (outs)	Adjust performance times to meet in Provide Cargegoy 1 test tags. Install belts on pump motor, as re Replace worn car door gibs. Repair car top light. Monitor jack packing for oil loss. Clean car top of dirt and debris (Adjust performance times to meet industry Provide Category 1 test tags. Repair non-functioning door restrictor. Repair elevator machine room wall (sheert Adjust performance times to meet industry Provide Category 1 test tags. Replace rear car top light fixture. Rendace worm car midde
Screw Dr T	н н	ж	н	н н
WCL PE1	PE1	PE3	PE4	PES
524 W. Redwood St.	500 W. Baltimore St.			
	Law School			



Ashland Industrial Services www.aisco.org

Individual Reports



for

UMB 100 N. Greene St.

Ashland conducted a maintenance audit during the fourth week of August, 2017, in order to determine the maintained condition of the elevator at 100 N. Greene Street. The office building is served by one (1) overhead traction passenger elevator that was modernized in 2013 by ELCON. The unit is relatively well maintained with only a few minor deficiencies noted.

The major elevator components systems should serve this building well for the next 15–20 years with no major upgrades needed. Car tops, pit areas and machine room space are relatively clean.

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST1906)

DATE: August 24, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

COMPLIANCE ITEM/CATEGORY	S	U	CONDITION COMMENTS
ASME A17.1 Safety Code	X		Per 2010 Code Year.
Cab Enclosure (layout, door size, illumination and flooring)	X		
Car Operating Panel(s) (design, location and function)	X		
Car Signals and Communications (indicators and communications)	X		
Car and Corridor Entrances (size, signage and Re-opening device)	X	-	
Corridor Fixtures (operation, signals and location)	X		
Operational Functions (automatic leveling and door timing)	X		
Additional Notes a	nd E	valı	nation Clarifications
Modernized in 2013.			

	ELEV.	ACCEPTABLE
Single Speed Side Opening	NO.	STANDARDS
42" wide X 84" high	PE1	FOR THIS
	(Front)	EQUIPMENT
A. SPEED - UP DIRECTION	350	333 – 367
(FPM)		
B. SPEED - DOWN	353	333 – 367
DIRECTION (FPM)	333	333 - 307
C. DOOR OPENING TIME	3.5*	2.5 - 2.7
(SEC)	3.3"	2.3 – 2.7
D. DOOR CLOSING TIME	4 1 4	2.0. 4.0
(SEC)	4.1*	3.8 - 4.0
E. DOOR OPEN DURATION	2.5	2.0
- CAR CALL (SEC)	3.5	3.0 minimum
F. DOOR OPEN DURATION	4 = 4	5 O
- HALL CALL (SEC)	4.5*	5.0 minimum
G. DOOR OPEN DURATION		
- AFTER PROTECTIVE	2.2*	.5 – 1.0
SHIELD IS RE-	2.2"	.3 – 1.0
ESTABLISHED (SEC)		
H. FLOOR TO FLOOR		
PERFORMANCE TIME	21.0*	12.5 - 13.5
(SEC)		
I. STOPPING ACCURACY	1/8	. 1/
(INCHES)	1/8	± ½
J. CAR DOOR CLOSING	25	20
PRESSURE (LBS)	25	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

PE1:

- 1. Machine room HVAC non-operational.
- 2. Door-to-roof level will not lock.
- 3. Lubricate and adjust brake pins.
- 4. Provide brake maintenance.

Vertical Transportation Systems Profile

Location:

100 N. Greene Street

Building Type:

Research Offices

Unit I.D:

PE1

Type of System(s):

Overhead Geared Traction

A. General Information: PE1

MD State I.D. Number:

ST1906

Capacity (lbs.)/Loading:

2500 / Passenger

Rated Speed (fpm):

350

Floors Served:

Seven (7) @ LL, L, 2-6

Rear Openings

One (1) @ 1R

Machine Type:

Hollister OH64 Geared Traction

Control Type:

Virginia Controls, MVFCL

Sequence of Operation:

Simplex

Door Configuration/Size:

Two Speed Side Opening/42" wide x 84" high

O.E.M. /Date of Installation: Modernization Contractor/Date: Present Service Company: Unknown ELCON / 2013

Date / Type of Last Testing:

UMB Elevator Shop September 2016 / Annual



for

UMB Biomedical Research Facility, 108 N. Greene St.

Ashland conducted a maintenance audit during the fourth week of August, 2017, in order to determine the maintained condition of the elevator at 108 N. Greene Street. The office building is served by one (1) direct lift hydraulic passenger elevator that was newly installed in 1994 by Otis. The unit is in need of regular preventive maintenance and improved housekeeping

The major elevator components systems should serve this building well for the next 5–10 years with no major upgrades needed. Car tops, pit areas and machine room space are relatively clean, with evidence of some housekeeping taking place.

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST1944)

DATE: August 24, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

COMPLIANCE ITEM/CATEGORY	S	U	CONDITION COMMENTS				
ASME A17.1 Safety Code	X		Per 1990 Code Year.				
Cab Enclosure (layout, door size, illumination and flooring)	X						
Car Operating Panel(s) (design, location and function)	X						
Car Signals and Communications (indicators and communications)	X						
Car and Corridor Entrances (size, signage and Re-opening device)	X						
Corridor Fixtures (operation, signals and location)	X						
Operational Functions (automatic leveling and door timing)	X						
Additional Notes and Evaluation Clarifications							
Installed in 1994.							

	ELEV.	ELEV.	ACCEPTABLE
Two Speed Side Opening	NO.	NO.	STANDARDS
48" wide X 84" high	PE1	PE1	FOR THIS
	(Front)	(Rear)	EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	122*	N/A	95 - 105
B. SPEED - DOWN DIRECTION (FPM)	106*	N/A	95 - 105
C. DOOR OPENING TIME (SEC)	2.6	2.6	2.6 – 2.8
D. DOOR CLOSING TIME (SEC)	4.2*	4.0	5.2 – 5.4
E. DOOR OPEN DURATION - CAR CALL (SEC)	6.0	4.4	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	7.0	7.5	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	1.0	1.5*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	19.0	N/A	18.5 – 19.5
I. STOPPING ACCURACY (INCHES)	1/4	1/4	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	16	25	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

 $\ensuremath{\mathrm{N/E}}$ - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

PE1:

1. A/C not working in machine room (outstanding from last year's report).

2. Car and hoistway door equipment preventive maintenance is overdue (outstanding from last year's report).

3. Correct car door operation (doors slam open and rub when closing).

Vertical Transportation Systems Profile

Location:

108 N. Greene Street (Biomedical Research Facility)

Building Type:

Research Offices

Unit I.D:

PE1

Type of System(s):

Direct Lift Hydraulic

A. General Information: PE1

MD State I.D. Number:

ST1944

Capacity (lbs.)/Loading:

4000 / Passenger

Rated Speed (fpm):

100

Floors Served:

Seven (7) @ B, 1R, 1 – 4, P

Rear Openings:

One (1) @ 1R

Machine Type:

Submersible Pump Unit Otis HCL Microprocessor

Control Type:

Simplex

Sequence of Operation: Door Configuration/Size:

Two Speed Side Opening/48" wide x 84" high

O.E.M. /Date of Installation:

Otis Elevator / 1994

Modernization Contractor/Date:

N/A

Present Service Company:

UMB Elevator Shop

Date / Type of Last Testing:

September 2016 / Annual



for

UMB Campus Center Book Store, 222 N. Pine St.

Ashland conducted a maintenance audit during the fifth week of August, 2017, in order to determine the maintained condition of the elevator at 222 N. Pine Street. The office building is served by one (1) holeless hydraulic passenger elevator that was newly installed in 2004 by TKE. The unit is relatively well maintained with only a few minor deficiencies noted.

The major elevator components systems should serve this building well for the next 10–15 years with no major upgrades needed. Car tops, pit areas and machine room space are relatively clean.

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST5421)

DATE: August 28, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

COMPLIANCE ITEM/CATEGORY	S	U	CONDITION COMMENTS		
ASME A17.1 Safety Code	X		Per 2000 Code Year.		
Cab Enclosure (layout, door size, illumination and flooring)	X				
Car Operating Panel(s) (design, location and function)	X				
Car Signals and Communications (indicators and communications)	X				
Car and Corridor Entrances (size, signage and Re-opening device)	X				
Corridor Fixtures (operation, signals and location)	X				
Operational Functions (automatic leveling and door timing)	X				
Additional Notes and Evaluation Clarifications					
Installed in 2004.					

Single Speed Side Opening 42" wide X 84" high	ELEV. NO. 1	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	120*	95 - 105
B. SPEED - DOWN DIRECTION (FPM)	116*	95 - 105
C. DOOR OPENING TIME (SEC)	3.0*	2.2 – 2.4
D. DOOR CLOSING TIME (SEC)	4.5	4.4 – 4.6
E. DOOR OPEN DURATION - CAR CALL (SEC)	5.0	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	6.0	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	2.6*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	20.0*	18.5 – 19.5
I. STOPPING ACCURACY (INCHES)	1/4	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	20	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

 $N\!/A$ - denotes standard is "Not Applicable" to these systems. $N\!/O$ - denotes "Not Operative" at time of evaluation.

PE1

1. Lubricate doors for smooth, no squeak operation (outstanding from last year's report).

Vertical Transportation Systems Profile

Location:

222 Pine Street

Building Type:

Office Annex

Unit I.D:

PE1

Type of System(s):

Holeless Hydraulic

A. General Information: PE1

MD State I.D. Number:

ST5421

Capacity (lbs.)/Loading:

3500 / Passenger

Rated Speed (fpm):

100

Floors Served:

Two (2) @ 1 & 2

Machine Type:

TKE I-2 Valve with submersible pump

Control Type:

TAC20 Microprocessor Controls

Sequence of Operation:

Simplex

Door Configuration/Size:

Single Speed Side Opening/42" wide x 84" high

O.E.M. /Date of Installation:

ThyssenKrupp Elevator / 2004

Modernization Contractor/Date:

N/A

Present Service Company:

UMB Elevator Shop July 2017 / 1 year

Date / Type of Last Testing:



for

UMB 620 W. Lexington St.

Ashland conducted a maintenance audit during the fifth week of August, 2017, in order to determine the maintained condition of the elevators at 620 W. Lexington Street. The office building is served by two (2) overhead traction passenger elevators that were newly installed in 2008 by TKE. The units are relatively well maintained with only a few minor deficiencies noted.

The major elevator components systems should serve this building well for the next 10–15 years with no major upgrades needed. Car tops, pit areas and machine room space are relatively clean.

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST5559) and PE2 (ST5560)

DATE: August 29, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

COMPLIANCE ITEM/CATEGORY	S	U	CONDITION COMMENTS	
ASME A17.1 Safety Code	X		Per 2003 Code Year.	
Cab Enclosure (layout, door size, illumination and flooring)	X			
Car Operating Panel(s) (design, location and function)	X			
Car Signals and Communications (indicators and communications)	X			
Car and Corridor Entrances (size, signage and Re-opening device)	X			
Corridor Fixtures (operation, signals and location)	X			
Operational Functions (automatic leveling and door timing)	X			
Additional Notes and Evaluation Clarifications				
Installed in 2008.				

Two Speed Side Opening 54" wide X 96" high	ELEV. NO. PE1	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	350	333 – 367
B. SPEED - DOWN DIRECTION (FPM)	350	333 – 367
C. DOOR OPENING TIME (SEC)	3.1	3.0 – 3.2
D. DOOR CLOSING TIME (SEC)	5.7	6.0 – 6.2
E. DOOR OPEN DURATION - CAR CALL (SEC)	3.5	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	4.9	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	2.0*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	16.8	16.5 – 17.5
I. STOPPING ACCURACY (INCHES)	1/8	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	29	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

 $\ensuremath{\mathrm{N/E}}$ - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

Single Speed Side Opening 42" wide X 84" high	ELEV. NO. PE2	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	350	333-367
B. SPEED - DOWN DIRECTION (FPM)	350	333-367
C. DOOR OPENING TIME (SEC)	3.8*	2.4 - 2.6
D. DOOR CLOSING TIME (SEC)	5.0*	2.8 - 3.0
E. DOOR OPEN DURATION - CAR CALL (SEC)	3.3	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	5.0	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	1.2	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	16.7*	14.5 – 15.5
I. STOPPING ACCURACY (INCHES)	1/8	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	30+*	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

PE1

1. Replace defective door operator belt and pulley.

PE2

1. Tighten loose pickup roller on 5th floor.

Vertical Transportation Systems Profile

Location:

620 Lexington Street

Building Type:

Office Building PE1 & PE2

Unit I.D: Type of System(s):

Overhead Geared Traction

A. General Information: PE1

MD State I.D. Number:

ST5559

Capacity (lbs.)/Loading:

5000 / Passenger

Rated Speed (fpm):

350

Floors Served:

Six (6) @ 1 - 6

Machine Type:

TKE Geared Traction TAC50 – 04 Controls

Control Type:

Duplex

Sequence of Operation: Door Configuration/Size:

Two Speed Side Opening/54" wide x 96" high

O.E.M. /Date of Installation:

ThyssenKrupp Elevator / 2008

Modernization Contractor/Date:

N/A

Present Service Company:

UMB Elevator Shop

Date / Type of Last Testing:

December 2013 / 5 year

May 2017 / Annual

B. <u>General Information</u>: PE2

MD State I.D. Number:

ST5560

Capacity (lbs.)/Loading:

3500 / Passenger

Rated Speed (fpm):

350

Floors Served:

Six (6) @ 1 - 6

Machine Type:

TKE Geared Traction TAC50 – 04 Controls

Control Type: Sequence of Operation:

Duplex

Door Configuration/Size:

Single Speed Side Opening/42" wide x 96" high

O.E.M. /Date of Installation:

ThyssenKrupp Elevator / 2008

Modernization Contractor/Date:

N/A

Present Service Company:

UMB Elevator Shop December 2013 / 5 year

Date / Type of Last Testing:

May 2017 / Annual



for

UMB School of Medicine, 737 W. Lombard St.

Ashland conducted a maintenance audit during the second week of August, 2017, in order to determine the maintained condition of the elevators at 737 W. Lombard Street. The office building is served by two (2) passenger elevators that are in need of modernization. The units are in poor condition due to age and lack of regular preventive maintenance procedures.

Modernization scheduled on both cars to start in January of 2018. Safety violations should be addressed and PM performed during the interim.

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST2101) & PE2 (ST1800)

DATE: August 10, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

S	U	CONDITION COMMENTS
		CONDITION COMMENTS
X		Per installation date of 1980 & 1983
X		
X		
X		
	X	Hall Braille too "low" (PE1 & PE2)
X		
X		
	X X X X	X

Additional Notes and Evaluation Clarifications

Both elevators are scheduled to be modernized in 2018.

Two Speed Center Opening 66" wide X 84" high	ELEV. NO. PE1	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	315	285 – 315
B. SPEED - DOWN DIRECTION (FPM)	280*	285 – 315
C. DOOR OPENING TIME (SEC)	3.9*	2.7 – 2.9
D. DOOR CLOSING TIME (SEC)	4.0*	5.4 – 5.6
E. DOOR OPEN DURATION - CAR CALL (SEC)	3.9	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	4.0*	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	3.2*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	12.5	12.5 – 13.5
I. STOPPING ACCURACY (INCHES)	3/8-1/2	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	30+*	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

 $N\!/A$ - denotes standard is "Not Applicable" to these systems. $N\!/O$ - denotes "Not Operative" at time of evaluation

		
Single Speed Center Opening 36" wide X 84" high	ELEV. NO. PE2	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	59*	120 – 130
B. SPEED - DOWN DIRECTION (FPM)	90*	120 - 130
C. DOOR OPENING TIME (SEC)	2.6*	1.5 – 1.7
D. DOOR CLOSING TIME (SEC)	3.7*	3.0 – 3.2
E. DOOR OPEN DURATION - CAR CALL (SEC)	6.6	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	6.6	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	6.6*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	24.0*	15.5 – 16.5
I. STOPPING ACCURACY (INCHES)	3/8	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	30	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

<u>PE1</u>

- 1. A/C unit having difficulty keeping machine room cool (outstanding from last year's report).
- 2. Wipe down geared traction machine and blow out carbon and copper dust buildup in generator end bell (outstanding from last year's report).
- 3. Clean car and hoistway door sills of dirt & debris (outstanding from last year's report).
- 4. Adjust jerky door operation, slamming closed and jerking open (outstanding from last year's report).
- 5. Emergency communication non-operational.
- 6. Fourth-floor hatch door sill grooved from worn gib.
- 7. Counterweight roller guide wheels worn.
- 8. Fire Service log not up-to-date.
- 9. Provide Category 1 test tags.

PE2

- 1. Emergency battery lowering unit appears to be disconnected (outstanding from last year's report).
- 2. Clean machine room floor of hydraulic fluid (outstanding from last year's report).
- 3. Repair leaky pump & valve assembly (outstanding from last year's report).
- 4. A/C unit frozen up and not functioning; fan is running but not cold (outstanding from last year's report).
- 5. Empty oil drip pan after repairing leaks (outstanding from last year's report).
- 6. Clean car and hoistway door sills of dirt & debris (outstanding from last year's report).
- 7. Remove rags and oil can (and oiler) from elevator car top (outstanding from last year's report).
- 8. Adjust jerky door operation (outstanding from last year's report).
- 9. Reduce door closing pressure to within industry maximum (outstanding from last year's report).
- 10. Replace missing leveling switch cover and panaforty cover.
- 11. Provide Category 1 test tags.

Vertical Transportation Systems Profile

Location:

737 W. Lombard St.

Building Type: Unit I.D:

Offices PE1 & PE2

Type of System(s):

Overhead Geared Traction (PE1)

Direct Lift Hydraulic (PE2)

A. General Information: PE1

MD State I.D. Number:

ST2101

Capacity (lbs.)/Loading:

8000 / Passenger

Rated Speed (fpm):

300

Floors Served: Machine Type: Control Type:

Six (6) @ B, 1 - 5 Otis Geared Traction Otis Relay / Solid State

Sequence of Operation: Simplex

Door Configuration/Size: O.E.M. /Date of Installation: Two Speed Center Opening/66" wide x 84" high

Otis Elevator / 1980

Modernization Contractor/Date:

N/A **UMB Elevator Shop**

Present Service Company: Date / Type of Last Testing:

April 2017 / Annual

B. General Information: PE2

MD State I.D. Number:

Capacity (lbs.)/Loading:

2500 / Freight 125

ST1800

Rated Speed (fpm):

Five (5) @ 1 - 5

Floors Served:

Otis Dry V-Belt pump unit

Machine Type: Control Type:

Otis Relay / Solid State

Sequence of Operation:

Simplex

Door Configuration/Size:

Single Speed Center Opening/36" wide x 84" high

O.E.M. /Date of Installation:

Otis / 1983

Modernization Contractor/Date:

N/A

Present Service Company:

UMB Elevator Shop

Date / Type of Last Testing:

April 2017 / Annual



for

UMB Allied Health Building, 100 S. Penn St.

Ashland conducted a maintenance audit during the third week of August, 2017, in order to determine the maintained condition of the elevators at 100 S. Penn Street. The office building is served by two (2) direct lift hydraulic passenger elevators that were installed in 1997 by Dover/TKE. The units are in need of regular preventive maintenance procedures with many items overdue.

The major elevator components systems should serve this building well for the next 2–3 years with selective component upgrades needed to ensure reliable operation. Car tops, pit areas and machine room space are dirty, with elevator door operation requiring adjustments.

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST1936) and PE2 (ST1937)

DATE: August 16, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

S	U	CONDITION COMMENTS
X		Per 1992 Code Year.
X		
X	,	
X		
X		
	X	Hall Lantern gongs not functioning (both cars).
	X	Adjust car & hall dwell times.
	X X X X	X X X X X

Additional Notes and Evaluation Clarifications

Installed in 1997, repairs to existing equipment will meet the ADA requirements.

Single Speed Side Opening 42" wide X 84" high	ELEV. NO. PE1	ELEV. NO. PE2	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	186*	186*	165 – 185
B. SPEED - DOWN DIRECTION (FPM)	155*	140*	165 – 185
C. DOOR OPENING TIME (SEC)	2.4	2.6*	2.2 – 2.4
D. DOOR CLOSING TIME (SEC)	4.2*	3.8*	4.4 – 4.6
E. DOOR OPEN DURATION - CAR CALL (SEC)	5.0	1.5*	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	5.0	7.0	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	.8	.8	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	14.1*	14.0*	14.5 – 15.5
I. STOPPING ACCURACY (INCHES)	1/8	1/8	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	28	25	30 max.

^{*} DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

Elevator Machine Room:

- 1. Provide self closing machine room door, sweep appears to be keeping door open (outstanding from last year's report).
- 2. Provide ABC type fire extinguisher (outstanding from last year's report).
- 3. Provide fireman's service test logs (last entry, July 2017).
- 4. Remove used parts and trash (outstanding from last year's report).
- 5. Provide Category 1 test tag.

Common Items:

- 1. Clean machine room floor of hydraulic fluid (outstanding from last year's report).
- 2. Empty oil drip pan after repairing leaks (outstanding from last year's report).
- 3. Clean pit floor (outstanding from last year's report).
- 4. Clean car and hoistway door sills of dirt & debris (outstanding from last year's report).

PE1

- 1. Provide correct car top ID / equipment number (outstanding from last year's report).
- 2. Provide correct F6 fuse; manufacturer requires 3 amp (not 5 amp).
- 3. Provide correct FEPC fuse; manufacturer requires 3 amp (not 5 amp).

PE2

- 1. Replace worn car door operator belts (outstanding from last year's report).
- 2. Adjust pick up rollers and replace worn and missing rollers (outstanding from last year's report).
- 3. Provide correct car ID.
- 4. PI is non-functioning.
- 5. Door restrictor is non-operational.

Vertical Transportation Systems Profile

Location:

100 Penn St.

Building Type:

Offices

Unit I.D:

PE1 & PE2

Type of System(s):

Direct Lift Hydraulic

General Information: PE1 & PE2 A.

MD State I.D. Number:

ST1936 / ST1937

Capacity (lbs.)/Loading:

3500 / Passenger

Rated Speed (fpm):

175

Floors Served:

Five (5) @ 1 - 5

Machine Type:

Dover Dry V-Belt Pump Unit with I-3 valve

Control Type:

Dover WCR (relay)

Sequence of Operation:

Duplex

Door Configuration/Size:

Single Speed Center Opening/42" wide x 84" high

O.E.M. /Date of Installation:

Dover (TKE) / 1997

Modernization Contractor/Date:

N/A

Present Service Company:

UMB Elevator Shop

Date / Type of Last Testing:

January 2017 / Annual



for

UMB Bressler Research Building, 655 W. Baltimore St.

Ashland conducted a maintenance audit during the second week of August, 2017, in order to determine the maintained condition of the elevators at 655 W. Baltimore Street. The research building is served by three (3) overhead traction passenger elevators that were modernized in 2009 by TKE. The building is also served by a large freight elevator with power operated, bi-parting freight doors. The units are relatively well maintained with only a few minor deficiencies noted.

The major elevator components systems should serve this building well for the next 10–15 years with no major upgrades needed.

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST1273), PE2 (ST1274), PE3 (ST1275), and FE4 (ST1276)

DATE: August 9, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

S	U	CONDITION COMMENTS		
X		Per 2004 Code Year.		
X				
X				
X				
X				
X				
	X	Adjust hall call dwell times.		
Additional Notes and Evaluation Clarifications				
	X X X X X	X X X X X X X X		

	,			
Single Speed Center Opening 42" wide X 84" high	ELEV. NO. PE1	ELEV. NO. PE2	ELEV. NO. PE3	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	450	450	447	440 – 460
B. SPEED - DOWN DIRECTION (FPM)	450	450	440	440 – 460
C. DOOR OPENING TIME (SEC)	2.3*	2.4*	2.8*	1.8 – 2.0
D. DOOR CLOSING TIME (SEC)	3.5	3.8	3.8	3.6 – 3.8
E. DOOR OPEN DURATION - CAR CALL (SEC)	3.0	3.2	3.2	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	4.1*	4.2*	3.8*	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	.9	.7	1.2*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	12.9*	14.7*	13.0*	10.5 – 11.5
I. STOPPING ACCURACY (INCHES)	1/4	1/4	1/4	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	22	20	20	30 max.

^{*} DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

Elevator Machine Room:

1. Provide Annual Category 1 test tags.

PE1, PE2 & PE3

- 1. Lubricate doors for smooth, no squeak operation (PE1, PE2 & PE3).
- 2. Adjust hall call waiting times to meet ADA requirements (PE1, PE2 & PE3).
- 3. Clean car and hoistway door sills of dirt & debris (PE1 & PE3).
- 4. Remove spare parts (rollers) from car top (PE3).
- 5. Clean elevator pits and car tops, including removing spare parts (PE1, PE2 & PE3).
- 6. Eighth-floor gib missing screw (PE3).

FE4

1. Elevator machine room A/C unit filter needs cleaning.

Vertical Transportation Systems Profile

Location:

655 W. Baltimore St.

Building Type:

Bressler Research Building (BRB)

Unit I.D:

PE1, PE2, PE3 & FE4

Type of System(s):

Overhead Geared Traction

A. General Information: PE1, PE2 & PE3

MD State I.D. Number:

ST1273, ST1274, ST1275

Capacity (lbs.)/Loading:

3000 / Passenger

Rated Speed (fpm):

450

Floors Served:

Fourteen (14) @ 1 - 14

Machine Type:

TKE, GD 2 (hung driver)

Control Type:

TAC 50 Microprocessor Controls

Sequence of Operation:

Three car group

Door Configuration/Size:

Single Speed Center Opening/42" wide x 84" high

O.E.M. /Date of Installation:

Armor Elevator / 1970's

Modernization Contractor/Date:

TKE / 2009

Present Service Company:

UMB Elevator Shop

Date / Type of Last Testing:

October 2016 / 1-year

B. General Information: FE4

MD State I.D. Number:

ST1276

Capacity (lbs.)/Loading:

4000 / Freight

Rated Speed (fpm):

250

Floors Served:

Fourteen (14) @ 1 - 14

TKE GD 2 (hung driver

Machine Type:

TKE, GD 2 (hung driver)

Control Type:

TAC 50 Microprocessor Controls

Sequence of Operation: Simplex

3

Door Configuration/Size:
O.E.M. /Date of Installation:
Modernization Contractor/Date:
Present Service Company:
Date / Type of Last Testing:

Power Operated Bi-Parting/96" wide x 96" high Armor Elevator / 1970s TKE / 2009 UMB Elevator Shop October 2016 / Annual



for

UMB Campus Center, 621 W. Lombard St.

Ashland conducted a maintenance audit during the fourth week of August, 2017, in order to determine the maintained condition of the elevators at 621 W. Lombard Street. The Campus Center is served by two (2) overhead geared traction passenger elevators and one (1) overhead geared traction service elevator that were newly installed in 2009 by TKE, one (1) hole-less hydraulic elevator that was installed in June of 2013 by Delaware Elevator, and one (1) wheelchair lift located in the gym. The units are relatively well maintained with only a few minor deficiencies noted.

The major elevator components systems should serve this building well for the next 10–15 years with no major upgrades needed. Car tops, pit areas and machine room space are relatively clean. The PE1 car door restrictor should be repaired as soon as possible (outstanding from last year's report).

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST5570), PE2 (ST5571), PE3 (ST5572), PE4 (ST5755), and WCL (ST5574)

DATE: August 24, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

COMPLIANCE ITEM/CATEGORY	S	U	CONDITION COMMENTS
ASME A17.1 Safety Code	X		Per 2004 Code Year.
Cab Enclosure (layout, door size, illumination and flooring)	X		·
Car Operating Panel(s) (design, location and function)	X		
Car Signals and Communications (indicators and communications)	X		
Car and Corridor Entrances (size, signage and Re-opening device)	X		
Corridor Fixtures (operation, signals and location)	X		
Operational Functions (automatic leveling and door timing)	X		

Single Speed Center Opening 42" wide X 84" high	ELEV. NO. PE1	ELEV. NO. PE2	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	372*	347	333 – 367
B. SPEED - DOWN DIRECTION (FPM)	350	347	333 – 367
C. DOOR OPENING TIME (SEC)	1.9*	2.1*	1.2 – 1.4
D. DOOR CLOSING TIME (SEC)	3.5*	3.9*	2.4 – 2.6
E. DOOR OPEN DURATION - CAR CALL (SEC)	3.0	4.0	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	5.0	3.2*	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	1.5*	2.0*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	16.2*	15.6*	11.5 – 12.5
I. STOPPING ACCURACY (INCHES)	1/4	3/8	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	30+*	25	30 max.

^{*} DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

	ELEV.	ELEV.	ACCEPTABLE
Two Speed Side Opening	NO.	NO.	STANDARDS
48" wide X 84" high	PE3	PE3	FOR THIS
	Front	Rear	EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	350	N/A	333 – 367
B. SPEED - DOWN DIRECTION (FPM)	350	N/A	333 – 367
C. DOOR OPENING TIME (SEC)	2.4*	2.6*	2.8 - 3.0
D. DOOR CLOSING TIME (SEC)	4.0*	3.7*	5.6 – 5.8
E. DOOR OPEN DURATION - CAR CALL (SEC)	5.0	4.7	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	6.0	6.0	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	3.0*	3.0*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	17.8*	N/A	16.5 – 17.5
I. STOPPING ACCURACY (INCHES)	1/4	1/4	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	30+*	30+*	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation

Single Speed Center Opening 42" wide X 84" high	ELEV. NO. PE4	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	100	95 – 105
B. SPEED - DOWN DIRECTION (FPM)	104	95 – 105
C. DOOR OPENING TIME (SEC)	3.2*	2.6 – 2.8
D. DOOR CLOSING TIME (SEC)	5.0*	5.2 – 5.4
E. DOOR OPEN DURATION - CAR CALL (SEC)	1.8*	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	6.1	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	1.5*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	27.0*	17.5 – 18.5
I. STOPPING ACCURACY (INCHES)	1/4	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	23	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

Maintenance Deficiencies

Elevator Machine Rooms:

- 1. Provide fireman's service test logs.
- 2. Remove used parts and organize.

Common Items (all cars):

- 1. Adjust and lubricate car/hoistway doors for smooth operation.
- 2. Adjust door operating times to meet industry standards.
- 3. Clean pit of dirt and debris (outstanding from last year's report).
- 4. Clean hoistway door equipment of fuzz build up; fire hazard (outstanding from last year's report).
- 5. Provide Category 1 test tags.

PE1

- 1. Repair non-functioning door restrictor (outstanding from last year's report).
- 2. Provide emergency alarm operation.
- 3. Clean car top of dirt and debris.
- 4. Replace governor switch cover.

PE2

1. Replace worn car door gibs (outstanding from last year's report).

PE3

- 1. Adjust door lock pick-up and re-install door lock cover @ 2 (outstanding from last year's report).
- 2. Repair flooring at hoistway sill entrance, 1R (outstanding from last year's report).
- 3. Permanently attach life safety speaker to elevator car top (outstanding from last year's report).
- 4. Replace two (2) bad door operator belts.
- 5. Remove hose from pit.
- 6. Clean car top of dirt and debris.

PE4

- 1. Update oil loss log (last entry, May 2017).
- 2. Replace cab hand rail (found in machine room).
- 3. Remove storage from inside elevator.
- 4. Emergency Communication is non-operational.

WCL

- 1. Certificate of operation has expired.
- 2. Unit operates as designed, used very infrequently.
- 3. No manual lowering means.
- 4. Needs lubrication.
- 5. Top door in a bind; not closing fully on automatic.

Vertical Transportation Systems Profile

Location:

621 W. Lombard St.

Building Type:

Meeting Rooms & Fitness Center

Unit I.D:

PE1 & PE2, PE3

Type of System(s):

Overhead Geared Traction

A. General Information: PE1 & PE2

MD State I.D. Number: Capacity (lbs.)/Loading:

ST5570 / ST5571 4500 / Passenger

Rated Speed (fpm):

350

Floors Served:

Six (6) @ LL, 1 - 5

Machine Type:

ThyssenKrupp (TKE) GD-1

Control Type:

TKE TAC-50

Sequence of Operation:

Duplex

Door Configuration/Size:

Single Speed Center Opening/42" wide x 84" high

O.E.M. /Date of Installation:

TKE / 2009

Modernization Contractor/Date:

N/A

Present Service Company: Date / Type of Last Testing:

UMB Elevator Shop January 2017 / 1 year

•

MD State I.D. Number:

B. General Information: PE3

ST5572

Capacity (lbs.)/Loading:

5000 / Passenger - Service

Rated Speed (fpm):

350

Floors Served:

Eight (8) @ LL, 1R, 1 – 5, PH

Front Openings:

Four (4) @ LL, 1, 2 & 4

Rear Openings: Machine Type:

Four (4) @ 1R, 3, 5 & PH TKE GD-1

Control Type:

TKE TAC-50

Sequence of Operation:

Simplex

sequence of Operation.

Two Speed Side Opening/48" wide x 84" high

Door Configuration/Size: O.E.M. /Date of Installation:

TKE / 2009

Modernization Contractor/Date:

N/A

Present Service Company:

UMB Elevator Shop

Date / Type of Last Testing:

January 2017 / 1 year

C. General Information: PE4

MD State I.D. Number:

ST5755

Capacity (lbs.)/Loading:

2500 / Passenger

Rated Speed (fpm):

100

Floors Served:

Two (2) @ LL, 1

Front Openings:

Two (2) @ LL, 1

Rear Openings:

N/A

Machine Type:

Submersible Hydraulic

Control Type: Sequence of Operation:

Simplex

bequence of operation.

Virginia Control

Door Configuration/Size:

Single Speed Side Slide/42" wide x 84" high

O.E.M. /Date of Installation:

Delaware / 2013

Modernization Contractor/Date:

Present Service Company: Date / Type of Last Testing:

D. General Information: WCL

MD State I.D. Number: Capacity (lbs.)/Loading:

Rated Speed (fpm): Floors Served:

Machine Type:

Control Type:

Sequence of Operation:
Door Configuration/Size:
O.E.M. /Date of Installation:

Modernization Contractor/Date:

Present Service Company:

Date / Type of Last Testing:

N/A

UMB Elevator Shop February 2017 / 1 year

ST5574

750 / Passenger

30

Two (2) @ 4 & Running Track

Screw drive Constant pressure

Push button

Manual swing door / 42" w by 84" h National Wheel-O-Vator / Unknown

N/A

UMB Elevator Shop

August 2016 / Annual (overdue)



for

UMB Dental Museum, 31 S. Greene St.

Ashland conducted a maintenance audit during the fourth week of August, 2017, in order to determine the maintained condition of the elevators at 31 S. Greene Street. The museum building is served by two (2) direct lift hydraulic passenger elevators that were newly installed in 1996 by KONE Elevator. The units are in need of regular preventive maintenance procedures.

The major elevator components systems should serve this building well for the next 5–7 years with no major upgrades needed. Car tops, pit areas and machine room space need attention and the car door closing pressure of both elevators needs to be adjust to within Code allowable maximum.

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST1999) and PE2 (ST1328)

DATE: August 23, 2017
"U" DENOTES UNSATISFACTORY

"S" DENOTES SATISFACTORY

COMPLIANCE ITEM/CATEGORY	S	U	CONDITION COMMENTS
ASME A17.1 Safety Code	X		Per 1994 Code Year.
Cab Enclosure (layout, door size, illumination and flooring)	X		
Car Operating Panel(s) (design, location and function)	X		
Car Signals and Communications (indicators and communications)		X	Hand held telephone.
Car and Corridor Entrances (size, signage and Re-opening device)	X		
Corridor Fixtures (operation, signals and location)	X		·
Operational Functions (automatic leveling and door timing)		X	Adjust car & hall call waiting times.
Additional Notes a	nd E	valu	nation Clarifications

Installed in 1996.

Single Speed Side Opening 42" wide X 84" high	ELEV. NO. PE1	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	156*	95 - 105
B. SPEED - DOWN DIRECTION (FPM)	91*	95 - 105
C. DOOR OPENING TIME (SEC)	5.9*	2.0 – 2.2
D. DOOR CLOSING TIME (SEC)	3.8*	4.0 – 4.2
E. DOOR OPEN DURATION - CAR CALL (SEC)	5.0	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	2.1*	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	2.2*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	22.0*	16.5 – 17.5
I. STOPPING ACCURACY (INCHES)	1/2	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	30+*	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

	ELEV.	ELEV.	ACCEPTABLE
Two Speed Center Opening	NO.	NO.	STANDARDS
66" wide X 120" high	PE2	PE2	FOR THIS
·	(Front)	(Rear)	EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	87*	N/A	95 - 105
B. SPEED - DOWN DIRECTION (FPM)	73*	N/A	95 - 105
C. DOOR OPENING TIME (SEC)	3.2	2.4*	3.0 – 3.2
D. DOOR CLOSING TIME (SEC)	6.3*	3.8*	6.0 - 6.2
E. DOOR OPEN DURATION - CAR CALL (SEC)	1.5*	1.8*	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	3.2*	N/E	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	1.8*	1.5*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	15.0*	N/A	18.5 – 19.5
I. STOPPING ACCURACY (INCHES)	3/8	3/8	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	30+*	30+*	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

Maintenance Deficiencies

PE1:

- 1. Machine room door does not close or lock fully (both cars) (outstanding from last year's report).
- 2. Replace hoistway door spirator at B level (outstanding from last year's report).
- 3. Correct car door closing pressure (outstanding from last year's report).
- 4. Adjust hall call waiting time to meet standards (outstanding from last year's report).
- 5. Adjust door operation to within standards (outstanding from last year's report).
- 6. Provide Category 1 test tag.
- 7. Clean inside of controller of carbon dust.
- 8. Provide wire nut on bare wires inside controller.

PE2:

- 1. Preventive maintenance overdue on door equipment (outstanding from last year's report).
- 2. Hoistway door panels are rusting at "A" level entrance; clean of rust and repaint (outstanding from last year's report).
- 3. Correct car door closing pressure (outstanding from last year's report).
- 4. Adjust hall call waiting time to meet standards (outstanding from last year's report).
- 5. Adjust door operation to within standards (outstanding from last year's report).
- 6. Adjust gap at bottoms of car doors.
- 7. Provide Category 1 test tag.
- 8. A-level door opens to garage doors, which is a safety concern (as it relates to egress) and in violation of A17.1 2005.

Vertical Transportation Systems Profile

Location:

31 S. Greene Street

Building Type:

Museum

Unit I.D:

PE1 & PE2

Type of System(s):

Direct Lift Hydraulic

A. General Information: PE1

MD State I.D. Number:

ST1999

Capacity (lbs.)/Loading:

3500 / Passenger

Rated Speed (fpm):

100

Floors Served:

Four (4) @ B, 1 - 3

Machine Type:

Submersible Pump Unit

Control Type:

Montgomery/KONE 2100 HC Microprocessor

Sequence of Operation:

Simplex

Door Configuration/Size:

Single Speed Side Opening/42" wide x 84" high

O.E.M. /Date of Installation:

Montgomery/KONE / 1996

Modernization Contractor/Date:

N/A

Present Service Company:

UMB Elevator Shop

Date / Type of Last Testing:

March 2017 / Annual

B. General Information: PE2

MD State I.D. Number: Capacity (lbs.)/Loading: Rated Speed (fpm):

Floors Served: Rear Openings: Machine Type: Control Type:

Sequence of Operation:
Door Configuration/Size:
O.E.M. /Date of Installation:
Modernization Contractor/Date:

Present Service Company: Date / Type of Last Testing:

ST2128

7000 / Freight

100

Five (5) @ B, A, 1-3

One (1) @ A (Street Level Entrance)

Dry V-Belt type unit

Montgomery/KONE 2100 HC Microprocessor

Simplex

Two Speed Center Opening/66" wide x 120" high

Montgomery/KONE / 1996

N/A

UMB Elevator Shop March 2017 / Annual



for

UMB Donaldson Brown Center, 200 Mt. Ararat Farm Rd.

Ashland conducted a maintenance audit during the fifth week of August, 2017, in order to determine the maintained condition of the elevators at 200 Mt Ararat Farm Road. The conference center is served by one (1) small basement traction passenger elevator and one (1) manually operated (via pull rope) dumbwaiter that were installed by Otis Elevator in the 1960s. The units are relatively well maintained with only a few minor deficiencies noted.

The major elevator components systems should serve this building well for the next 10–15 years with no major upgrades needed. The passenger elevator does not meet current ADA requirements but is "grandfathered" due to its age and the cost related to meeting the requirements. The passenger elevator can accommodate a wheel chair but as the chart demonstrates below, none of the 1990 ADA requirements are met.

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST1478), and DW2 (ST1479)

DATE: August 28, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

		_	
COMPLIANCE ITEM/CATEGORY	S	U	CONDITION COMMENTS
ASME A17.1 Safety Code	X		Per date of installation.
Cab Enclosure (layout, door size, illumination and flooring)		X	Doesn't meet minimum inside clear width of 80 inches.
Car Operating Panel(s) (design, location and function)		X	No push button illumination and height of controls above 35" height for stop switch.
Car Signals and Communications (indicators and communications)		X	No emergency communication in the car.
Car and Corridor Entrances (size, signage and Re-opening device)		X	Manual doors.
Corridor Fixtures (operation, signals and location)		X	No illumination for push buttons and hall stations located above 42" from finished floor.
Operational Functions (automatic leveling and door timing)		X	Manual doors.

Additional Notes and Evaluation Clarifications

Unit does not meet any of the ADA requirements but is grandfathered in, based on date of installation. It can be demonstrated that the small "residential elevator" can facilitate a wheel chair, but the unit is mostly utilized to move furniture and food carts to the 2nd floor of the house.

Recorded Operating Performance

*Not performed on either unit.

Maintenance Deficiencies

1. The operating certificates have expired for both units.

Vertical Transportation Systems Profile

Location:

200 Mt Ararat Farm Road (Perry County)

Building Type:

Convention / Meeting Space

Unit I.D:

PE1 & DW2

Type of System(s):

Basement Traction (PE1)

Manual Rope (DW2)

A. General Information: PE1

MD State I.D. Number:

ST1478

Capacity (lbs.)/Loading:

750 / Passenger

Rated Speed (fpm):

100

Floors Served:

Three (3) @ 1, 2 & Attic

Machine Type:

Otis Basement Geared Traction

Control Type:

Otis Relay Slate-back controls

Sequence of Operation:

Single Automatic Pushbutton (SAP) Manual Swing Door/36" wide x 80" high

Door Configuration/Size:

Power operated car gate

O.E.M. /Date of Installation:

Otis / 1950's

Modernization Contractor/Date:

N/A

Present Service Company:

UMB Elevator Shop

Date / Type of Last Testing:

Certificate Expired in June 2016

B. General Information: DW2 - Dumbwaiter

MD State I.D. Number:

ST1479

Capacity (lbs.)/Loading: Rated Speed (fpm):

100 / Passenger Manual rope pull

Floors Served:

Three (3) @ 1, 2 & Attic

2

Machine Type: Control Type:

Sequence of Operation:
Door Configuration/Size:
O.E.M. /Date of Installation:
Modernization Contractor/Date:

Present Service Company:

Date / Type of Last Testing:

N/A

Manual rope pull

Manual

Manual doors with waist level loading

Unknown

N/A

UMB Elevator Shop

Certificate Expired in November 2015



for

UMB Environmental Health Services, 714 W. Lombard St.

Ashland conducted a maintenance audit during the second week of August, 2017, in order to determine the maintained condition of the elevators at 714 W. Lombard Street. The office building is served by one (1) direct lift hydraulic passenger elevator that was newly installed in 2004 by TKE. The unit is relatively well maintained with only a few minor deficiencies noted.

The major elevator components systems should serve this building well for the next 7–10 years with no major upgrades needed. Car tops, pit areas and machine room space are relatively clean.

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST1941)

DATE: August 10, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

COMPLIANCE ITEM/CATEGORY	S	U	CONDITION COMMENTS
ASME A17.1 Safety Code	X		Per 1990 Code Year
Cab Enclosure (layout, door size, illumination and flooring)	X		
Car Operating Panel(s) (design, location and function)	X		
Car Signals and Communications (indicators and communications)	X		
Car and Corridor Entrances (size, signage and Re-opening device)	X		
Corridor Fixtures (operation, signals and location)	X		
Operational Functions (automatic leveling and door timing)		X	Adjust car & hall call dwell times
Additional Notes ar	nd E	valu	nation Clarifications
Installed in 2004.			

1	ACCEPTABLE
ELEV.	STANDARDS
NO.	FOR THIS
1	EQUIPMENT
	EQUIFIMENT
110*	95 - 105
100	95 - 105
100	75 - 105
2.04	2.2 2.4
3.0*	2.2 - 2.4
7.4*	4.4 – 4.6
3.2	3.0 minimum
2.54	7.0
3.5*	5.0 minimum
2.24	5 10
2.3*	.5 – 1.0
21.0*	18.5 – 19.5
1./0	. 17
1/8	± ½
10	20
19	30 max.
	NO. 1 110* 100 3.0* 7.4* 3.2 3.5*

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

 $N\!/A$ - denotes standard is "Not Applicable" to these systems. $N\!/O$ - denotes "Not Operative" at time of evaluation.

Maintenance Deficiencies

Elevator Machine Room:

- 1. Update Fireman's Service Test Log (outstanding from last year's report).
- 2. Provide hydraulic oil loss log.
- 3. HVAC system needs cleaning.

<u>PE1</u>

- 1. Lubricate doors for smooth, no squeak operation (outstanding from last year's report).
- 2. Adjust slow door operation (outstanding from last year's report).

3.

Vertical Transportation Systems Profile

Location:

714 W. Lombard Street

Building Type:

Environmental Health Services (EHS)

Unit I.D:

PE1

Type of System(s):

Direct Lift Hydraulic

A. General Information: PE1

MD State I.D. Number:

ST1941

Capacity (lbs.)/Loading:

3500 / Passenger

Rated Speed (fpm):

100

Floors Served:

Three (3) @ 1 - 3

Machine Type:

Dover I-2 Valve with submersible pump

Control Type:

DMC-1 Microprocessor Controls

Sequence of Operation:

Simplex

Door Configuration/Size:

Single Speed Side Opening/42" wide x 84" high

O.E.M. /Date of Installation:

Dover Elevator (TKE) / 1994

Modernization Contractor/Date:

N/A

Present Service Company:

UMB Elevator Shop

Date / Type of Last Testing:

January, 2017 / 1 year



for

UMB General Research Building, 111 Penn St.

Ashland conducted a maintenance audit during the third week of August, 2017, in order to determine the maintained condition of the elevators at 111 Penn Street. The office building is served by two (2) basement geared traction passenger elevators that were modernized by ELCON in 1994. The units are relatively well maintained with only a few minor deficiencies noted. The car door closing pressure of PE1 requires adjustment to within Code allowable maximum.

The major elevator component systems should serve this building well for the next 7–10 years with no major upgrades needed. Car tops, pit areas and machine room space are relatively clean.

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST1364) and PE2 (ST1365)

DATE: August 16, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

COMPLIANCE ITEM/CATEGORY	S	U	CONDITION COMMENTS
ASME A17.1 Safety Code	X		Per 1987 Code Year.
Cab Enclosure (layout, door size, illumination and flooring)	X		
Car Operating Panel(s) (design, location and function)	X		
Car Signals and Communications (indicators and communications)	X		
Car and Corridor Entrances (size, signage and Re-opening device)	X		
Corridor Fixtures (operation, signals and location)	X		
Operational Functions (automatic leveling and door timing)	X		
Additional Notes a	nd E	valu	nation Clarifications
Modernized in 1994.			

Single Speed Center Opening 39" wide X 84" high	ELEV. NO. PE1	ELEV. NO. PE2	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	177*	162*	190-210
B. SPEED - DOWN DIRECTION (FPM)	180*	162*	190-210
C. DOOR OPENING TIME (SEC)	2.2*	2.2*	1.2 - 1.4
D. DOOR CLOSING TIME (SEC)	2.0*	2.4	2.4 – 2.6
E. DOOR OPEN DURATION - CAR CALL (SEC)	7.3	4.5	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	6.0	6.9	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	1.8*	1.8*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	13.6	12.8	12.5 – 13.5
I. STOPPING ACCURACY (INCHES)	1/4	1/4- 3/8	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	30+*	28	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

 $\ensuremath{\mathrm{N/E}}$ - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation

Maintenance Deficiencies

Common Items:

- 1. Adjust door operation, jerky upon activation of electronic edge detector (outstanding from last year's report).
- 2. Perform door maintenance; adjust locks and pick up rollers and squeaky operation.
- 3. Key switch bezels are worn.
- 4. Check for machine vibration and noise (PE1).
- 5. Emergency Communication phone volume is low (PE1).
- 6. Replace burnt out PI bulbs.
- 7. Provide Unit ID on COP (PE2).
- 8. Sump pump overflow on pit floor.

Vertical Transportation Systems Profile

Location:

General Research Building

Building Type:

Offices

Unit I.D:

PE1 & PE2

Type of System(s):

Basement Geared Traction

General Information: PE1 & PE2 A.

MD State I.D. Number:

Capacity (lbs.)/Loading:

Rated Speed (fpm):

Floors Served:

Machine Type:

Control Type:

Sequence of Operation:

Door Configuration/Size:

O.E.M. /Date of Installation: Modernization Contractor/Date:

Present Service Company:

Date / Type of Last Testing:

ST1364 / ST1365

3000 / Passenger

200

Four (4) @ B, 1 - 3

Hollister Whitney Geared

MCE, VVMC-1000-PTC-SCR

Duplex

Single Speed Center Opening / 39" W x 84" H

General Elevator / 1970's

Elevator Control Service (ELCON) / 1994

UMB Elevator Shop

June 2016 / 1 year



for

UMB Grand Parking Garage, 5 N. Paca St.

Ashland conducted a maintenance audit during the third week of August, 2017, in order to determine the maintained condition of the elevators at 5 N. Paca Street. The garage is served by four (4) overhead geared traction passenger elevators that were modernized in 2011 by Delaware Elevator. The units require some attention to housekeeping and increased preventive maintenance frequency. Water intrusion into the elevator hoistways appears to be a continuing issue and needs addressed to prevent the equipment from deteriorating further.

The major elevator components systems should serve this building well for the next 10–15 years with no major upgrades needed. Car tops, pit areas and machine room space are relatively clean. Water intrusion is evident on all car tops and needs to be investigated and corrected to prevent further degradation of the equipment.

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST1816), PE2 (ST1817), PE3 (ST1818), and PE4 (ST1819)

DATE: August 17, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

COMPLIANCE ITEM/CATEGORY	S	U	CONDITION COMMENTS
ASME A17.1 Safety Code	X		Per 2007 Code Year
Cab Enclosure (layout, door size, illumination and flooring)	X		
Car Operating Panel(s) (design, location and function)	X		
Car Signals and Communications (indicators and communications)	X		
Car and Corridor Entrances (size, signage and Re-opening device)	X		
Corridor Fixtures (operation, signals and location)	X		
Operational Functions (automatic leveling and door timing)	X		

Additional Notes and Evaluation Clarifications

Completed a modernization / upgrade in 2011.

Recorded Operating Performance

Single Speed Side Opening 42" wide X 84" high	ELEV. NO. 1	ELEV. NO. 2	ELEV. NO. 3	ELEV. NO. 4	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	350	350	350	350	333 – 367
B. SPEED - DOWN DIRECTION (FPM)	350	350	350	350	333 – 367
C. DOOR OPENING TIME (SEC)	2.4*	2.0	1.9	3.0*	1.8 – 2.0
D. DOOR CLOSING TIME (SEC)	4.5*	5.0*	4.0*	4.6*	3.6 – 3.8
E. DOOR OPEN DURATION - CAR CALL (SEC)	3.6	4.0	3.5	4.0	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	5.5	5.8	5.6	5.6	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	1.7*	1.5*	1.7*	1.4*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	14.2	14.7*	13.6	14.5	13.5 – 14.5
I. STOPPING ACCURACY (INCHES)	1/4	1/8	1/8	1/8	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	28	28	30+*	30	30 max.

^{*} DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

Maintenance Deficiencies

Elevator Machine Room:

- 1. Provide fireman's service test log (outstanding from last year's report).
- 2. Provide preventive maintenance log.
- 3. Provide Category 1 test tags.

Common Items:

- 1. Clean car and hoistway door sills of dirt & debris (outstanding from last year's report).
- 2. Doors require PM—adjust car/hoistway doors for smooth operation upon activation of door edge detector (outstanding from last year's report).
- 3. Pits need to be cleaned.
- 4. Car tops need to be cleaned; clean off surface rust and paint; UMB should investigate water intrusion issues to prevent from happening again (outstanding from last year's report).
- 5. Lubricate door operator chains and replace rusty components (outstanding from last year's report).
- 6. Clean rope dust from machines; determine cause and correct (outstanding from last year's report).
- 7. Water dripping on elevator machine room floor from holes in roof metal.

PE1

- 1. Investigate metal shavings on machine bed plate.
- 2. Clean rusted car top.
- 3. Cut excessive dead end hoist cable and mount clips, per code.

PE2

- 1. Lubricate machine brake pins (outstanding from last year's report).
- 2. Investigate metal shavings on machine bed plate.
- 3. Operator bumper stop missing.
- 4. Clean rusted car top.

PE3

- 1. Clean gear oil residue and excessive metal shavings from around the machine (outstanding from last year's report).
- 2. Reinstall brake machine cover (outstanding from last year's report).
- 3. Repair brake switch assembly.
- 4. Replace missing rope gripper cover.
- 5. Lubricate machine brake pins (outstanding from last year's report).
- 6. Adjust machine brake to prevent hard pick and set during normal operation (outstanding from last year's report).
- 7. Provide Fire Service testing paperwork.

<u>PE4</u>

- 1. Adjust car door clutch to prevent scraping during normal operation (outstanding from last year's report).
- 2. Replace car door hanger roller.
- 3. Adjust door operation; provide PM.
- 4. Replace defective door operator belt.
- 5. Provide rust inhibitive paint at bottom of doors where gibs mount.
- 6. Selector tape is dry, causing guides to vibrate while running.

- 7. Repair brake switch.
- 8. Provide Fire Service testing paperwork.

Vertical Transportation Systems Profile

Location:

5 N. Paca Street

Building Type:

Garage

Unit I.D:

B.

PE1 & PE2, PE3 & PE4

Type of System(s):

Overhead Geared Traction

A. General Information: PE1 & PE2

MD State I.D. Number: Capacity (lbs.)/Loading:

3500 / Passenger

Rated Speed (fpm):

350

Floors Served:

Ten (10) @ G, 3 – 10, R

Machine Type:

Hollister Whitney Geared Traction

Control Type:

Virginia Controls MVFCL

Sequence of Operation:

Duplex

Door Configuration/Size:

Single Speed Side Opening/42" wide x 84" high

O.E.M. /Date of Installation:

Unknown / 1980's

ST1816 / ST1817

Modernization Contractor/Date:

Delaware Elevator Company / 2011

Present Service Company: Date / Type of Last Testing:

UMB Elevator Shop August 2016 / 5 year

General Information: PE3 & PE4

MD State I.D. Number:

Capacity (lbs.)/Loading:

ST1818 / ST1819 3500 / Passenger

Rated Speed (fpm):

350

Floors Served:

Ten (10) @ 1 - 10

Machine Type:

Hollister Whitney Geared Traction

Control Type:

Virginia Controls MVFCL

Sequence of Operation:

Duplex

Door Configuration/Size:

Single Speed Side Opening / 42" wide x 84" high

O.E.M. /Date of Installation:

Unknown / 1980's

Modernization Contractor/Date:

Delaware Elevator Company / 2011

Present Service Company:

UMB Elevator Shop August 2016 / 5 year

Date / Type of Last Testing: Augu



for

UMB Howard Hall, 660 W. Redwood St.

Ashland conducted a maintenance audit during the second week of August, 2017, in order to determine the maintained condition of the elevators at 660 W. Redwood Street. The research building is served by two (2) overhead geared traction passenger elevators that were modernized in 2011 by ELCON. PE3 was modernized in 1995 by Dover Elevator. The units are experiencing sporadic preventive maintenance practices and the frequency of visits needs to increase.

The major elevator components systems should serve this building well for the next 10–15 years with no major upgrades needed for PE1 & PE2. PE3 should be scheduled for a controller modernization within 3-5 years as parts become more scarce for this equipment. Car tops, pit areas and machine room space require improved housekeeping practices even though PE1 & PE2 went through a major modernization 5 years ago. Operating certificates recently expired in July 2017 for all traction elevators and the WCL.

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST1230), PE2 (ST2062), PE3 (ST2061), WCL (ST2206), and Dock Leveler

DATE: August 9, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

COMPLIANCE ITEM/CATEGORY	S	U	CONDITION COMMENTS
ASME A17.1 Safety Code	X		Per 2007 Code Year (PE1 & PE2) Per 1993 Code Year (PE3)
Cab Enclosure (layout, door size, illumination and flooring)	X		
Car Operating Panel(s) (design, location and function)	X		
Car Signals and Communications (indicators and communications)		X	No Hall Braille (PE3)
Car and Corridor Entrances (size, signage and Re-opening device)	X		
Corridor Fixtures (operation, signals and location)	X		
Operational Functions (automatic leveling and door timing)	X		·

PE1 & PE2 modernized in 2011 PE3 modernized in 1995

Recorded Operating Performance

Single Speed Center Opening 48" wide X 84" high	ELEV. NO. 1	ELEV. NO. PE2 (Front)	ELEV. NO. PE2 (Rear)	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	250*	238*	N/A	333 – 367
B. SPEED - DOWN DIRECTION (FPM)	255*	240*	N/A	333 – 367
C. DOOR OPENING TIME (SEC)	1.6	1.8	2.2*	1.7 – 1.9
D. DOOR CLOSING TIME (SEC)	2.8	3.7*	2.0*	2.5 – 2.7
E. DOOR OPEN DURATION - CAR CALL (SEC)	2.8*	2.8*	3.0	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	5.0	5.2	5.1	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	1.5*	.9	.9	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	15.0*	19.2*	N/A	11.5 – 12.5
I. STOPPING ACCURACY (INCHES)	1/4	1/4	1/4	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	25	25	26	30 max.

^{*} DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

Two Speed Side Opening 48" wide X 84" high	ELEV. NO. PE3	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	347	333 – 367
B. SPEED - DOWN DIRECTION (FPM)	346	333 – 367
C. DOOR OPENING TIME (SEC)	2.8	2.8 – 3.0
D. DOOR CLOSING TIME (SEC)	3.8*	4.5 – 4.7
E. DOOR OPEN DURATION - CAR CALL (SEC)	3.2	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	5.0	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	1.2*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	13.0*	14.5 – 15.5
I. STOPPING ACCURACY (INCHES)	1/4	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	25	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation

Maintenance Deficiencies

PE1

- 1. Organize prints and spare parts in machine room of PE1 & PE2.
- 2. Clean elevator pit area of dirt & debris (PE1 & PE2).
- 3. Remove rags and spray can from car top area.
- 4. Clean elevator car top; remove extra covers.
- 5. Operating certificate has expired.
- 6. Clean excessive metal shavings from around geared traction machine and investigate cause & correct.
- 7. Alarm bell nonoperational.
- 8. Check loose door gibs.
- 9. Missing handy box cover under car.
- 10. Provide Annual Category 1 test tag.
- 11. Update fire service log.
- 12. Found elevator machine room door propped open.

PE2

- 1. Investigate and correct vibration of elevator cab during normal operation (outstanding from last year's report, excessive vibration).
- 2. Repair emergency communication in car (outstanding from last year's report).
- 3. Slow down transition is way too long, adjust to meet floor to floor performance time.
- 4. Clean car and hoistway sills of dirt & debris (outstanding from last year's report).
- 5. Clean elevator car top (outstanding from last year's report).
- 6. Oil dripping from overhead on car top.
- 7. Counterweight roller guide, bottom left-hand, is defective.
- 8. Tighten all door gibs, as many were loose.
- 9. Operating certificate has expired.
- 10. Found elevator machine room door propped open.
- 11. Provide Annual Category 1 test tag.
- 12. Update fire service log.

PE3

- 1. Clean down all machine room equipment, contaminated with carbon dust.
- 2. Provide hall Braille at entrance jambs (outstanding from last year's report).
- 3. Car operating panel elevator ID demonstrates #4 when it's car #3 (outstanding from last year's report).
- 4. Clean car and hoistway sills of dirt & debris (outstanding from last year's report).
- 5. Wipe down geared traction machine and clean up gear oil (outstanding from last year's report).
- 6. Clean car top and reinstall door operator cover left on car top (there are bare wires hanging out of operator) (outstanding from last year's report).
- 7. Phone nonoperational.
- 8. Operating certificate has expired.
- 9. Car top light nonoperational.
- 10. Greenfield to fan broken.
- 11. Replace missing COP cover screws.
- 12. Elevator machine room door found propped open.
- 13. Annual inspection past due.
- 14. Fire service testing past due.

<u>WCL - ST2206</u>

- 1. Was not operating during our visit.
- 2. Unit attempts to run with top landing door open.
- 3. Operating certificate has expired.

Vertical Transportation Systems Profile

Location:

660 W. Redwood St.

Building Type:

Research Facility PE1 & PE2, PE3

Unit I.D: Type of System(s):

Overhead Geared Traction

A. General Information: PE1 & PE2

MD State I.D. Number:

ST1230 / ST2062 4000 / Passenger (PE1)

Capacity (lbs.)/Loading:

6500 / Passenger (PE2)

Rated Speed (fpm):

350 (PE1) 250 (PE2)

Floors Served:

Seven (7) a B, 1 – 6 (PE1, Front only)

Ten (10) @ SB, B, P, 1, M, 2 – 6 (PE2)

Rear Openings: Machine Type: Control Type:

Three (3) @ SB, P & M (PE2) Hollister OH Geared Traction Virginia Control, MVFCL

Sequence of Operation:

Duplex

Door Configuration/Size: O.E.M. /Date of Installation: Single Speed Center Opening/48" wide x 84" high

General Elevator / 1975 (PE2)

Modernization Contractor/Date: Present Service Company: Date / Type of Last Testing:

ELCON / 2011 **UMB** Elevator Shop July 2017 / 5-year

B. General Information: PE3

MD State I.D. Number:

ST2061

Capacity (lbs.)/Loading:

8500 / Passenger - Service

Rated Speed (fpm):

350

Floors Served:

Seven (7) a B, 1 – 6

Machine Type:

Dover (TKE) GD 300 Geared Traction

Control Type:

Dover T4 microprocessor

Sequence of Operation:

Simplex

Door Configuration/Size:

Two Speed Side Opening/54" wide x 84" high

O.E.M. /Date of Installation:

General Elevator / 1960s Dover Elevator / 1995

Modernization Contractor/Date: Present Service Company:

UMB Elevator Shop

Date / Type of Last Testing:

July 2016 / Annual

C. <u>General Information:</u> WCL

MD State I.D. Number:

Capacity (lbs.)/Loading:

Rated Speed (fpm):

Floors Served:

Machine Type:

Control Type:

Sequence of Operation:

Door Configuration/Size: O.E.M. /Date of Installation:

Modernization Contractor/Date:

Present Service Company:

Date / Type of Last Testing:

ST2206

750 / Passenger

30

Two (2) @ 1 & 2

Screw drive

Constant pressure

Push button

Manual swing door / 42" w by 84" h

National Wheel-O-Vator / Unknown

N/A

UMB Elevator Shop

July 2016 / Annual



for

UMB Health Science Library, 601 W. Lombard Street

Ashland conducted a maintenance audit during the fourth week of August, 2017, in order to determine the maintained condition of the elevators at 601 W. Lombard Street. The Library is served by three (3) overhead traction passenger elevators that were newly installed in 1998 by Montgomery / KONE. As demonstrated by the list of deficiencies, these units require improved preventive maintenance procedures.

The major elevator components systems should serve this building well for the next 3–5 years with controller and door operator upgrades needing completed. Car tops, pit areas and machine room space are dirty and the car door closing pressure needs to be adjusted to within Code allowable maximum to prevent passenger from being hit/hurt by closing elevator doors. The drive was removed from PE2 at the time of inspection.

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST2209), PE2 (ST2208), and PE3 (ST2207)

DATE: August 23, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

COMPLIANCE ITEM/CATEGORY	S	U	CONDITION COMMENTS		
ASME A17.1 Safety Code	X		Per 1994 Code Year.		
Cab Enclosure (layout, door size, illumination and flooring)	X				
Car Operating Panel(s) (design, location and function)	X				
Car Signals and Communications (indicators and communications)	X				
Car and Corridor Entrances (size, signage and Re-opening device)	X	-			
Corridor Fixtures (operation, signals and location)	X				
Operational Functions (automatic leveling and door timing)	X				
Additional Notes and Evaluation Clarifications					
Installed in 1997					

Single Speed Center Opening 42" wide X 84" high	ELEV. NO. PE1	ELEV. NO. PE2	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	350	347	333 – 367
B. SPEED - DOWN DIRECTION (FPM)	350	350	333 – 367
C. DOOR OPENING TIME (SEC)	4.9*	3.2*	1.2 – 1.4
D. DOOR CLOSING TIME (SEC)	4.7*	4.3*	2.4 – 2.6
E. DOOR OPEN DURATION - CAR CALL (SEC)	5.0	5.0	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	4.7	5.0	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	2.2*	3.0*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	15.3*	14.0*	11.5 – 12.5
I. STOPPING ACCURACY (INCHES)	1/4	1/2+*	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	30+*	30+*	30 max.

^{*} DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

	ELEV.	ELEV.	ACCEPTABLE
Two Speed Side Opening	NO.	NO.	STANDARDS
48" wide X 84" high	PE3	PE3	FOR THIS
	(Front)	(Rear)	EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	350	N/A	333 – 367
B. SPEED - DOWN DIRECTION (FPM)	350	N/A	333 – 367
C. DOOR OPENING TIME (SEC)	3.7*	3.5*	2.8 - 3.0
D. DOOR CLOSING TIME (SEC)	4.0*	4.5*	5.6 – 5.8
E. DOOR OPEN DURATION - CAR CALL (SEC)	5.0	2.5*	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	4.0*	3.5*	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	.6	3.0*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	16.0*	N/A	16.5 – 17.5
I. STOPPING ACCURACY (INCHES)	1/4	1/4	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	30+*	30+*	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation

Maintenance Deficiencies

Elevator Machine Rooms:

1. Repair non-functioning A/C in PE3 machine room (outstanding from last year's report).

Common Items (all cars):

- 1. Adjust and lubricate car/hoistway doors for smooth operation (outstanding from last year's report).
- 2. Clean car and hoistway door sills of dirt and debris (outstanding from last year's report).
- 3. Adjust door operating times to meet industry standards (outstanding from last year's report).
- 4. Correct door closing pressure to within allowable maximum (outstanding from last year's report).
- 5. Provide Category 1 test tags.

PE1

- 1. Provide car top ID / equipment number (outstanding from last year's report).
- 2. Fire Service Phase II sign is illegible.
- 3. Correct loose door gibs—floors 1, 2, 3, and 5.
- 4. Address cracked travel cable jacket.
- 5. Clean pit.

PE2 (*Unit out of service at time of inspection; drive removed; thus could not verify items 1–9 below.)

- 1. Repair hole in hoistway wall with fire caulk from cables rubbing up against dry wall.
- 2. Repair non-function car door restrictor.
- 3. Clean geared traction machine of gear oil residue and remove soaked pads. Correct leaks.
- 4. Provide car top ID / equipment number.
- 5. Correct "roll back" of machine during normal operation.
- 6. Replace non-functioning cab ceiling bulbs.
- 7. Replace non-functioning car traveling lantern bulbs.
- 8. Provide safety (coated) bulbs in cab lighting fixtures.
- 9. Tighten loose door gibs @ LL.

PE3

- 1. Clean pit of dirt and debris (outstanding from last year's report).
- 2. Check, replace and/or tighten car door gibs (outstanding from last year's report).
- 3. Repair non-functioning door restrictor (rear) (outstanding from last year's report).
- 4. Adjust pick up rollers for proper operation and lubricate (outstanding from last year's report).
- 5. Provide necessary hoistway door gibs where missing (outstanding from last year's report).
- 6. Clean elevator car top of dirt and debris (outstanding from last year's report).
- 7. Provide pit light.
- 8. Replace LD level interlock cover.
- 9. Repair 5th floor hall push button; push back into face plate.
- 10. Elevator machine room HVAC non-operational.
- 11. Elevator machine room door propped open.
- 12. Replace missing door operator cover.
- 13. Replace missing door operator belt.

Vertical Transportation Systems Profile

Location: Building Type: HS / HS Library Offices & Library

Unit I.D:

PE1 & PE2, PE3

Type of System(s):

Overhead Geared Traction

General Information: PE1 & PE2 A.

MD State I.D. Number: Capacity (lbs.)/Loading:

Rated Speed (fpm):

Floors Served:

Machine Type:

Control Type:

Sequence of Operation:

Door Configuration/Size:

O.E.M. /Date of Installation:

Modernization Contractor/Date:

Present Service Company: Date / Type of Last Testing: ST2209 / ST2208 3500 / Passenger

350

Six (6) @ LL, 1 - 5

Montgomery/KONE Geared Traction

Montgomery MIPROM 21

Duplex

Single Speed Center Opening/42" wide x 84" high

Montgomery-KONE / 1998

N/A

UMB Elevator Shop

July 2015 / 5 year July 2017 / 1 year

B. General Information: PE3

MD State I.D. Number:

Capacity (lbs.)/Loading:

Rated Speed (fpm):

Floors Served:

Front Openings: Rear Openings:

Machine Type:

Control Type:

Sequence of Operation: Door Configuration/Size:

O.E.M. /Date of Installation:

Modernization Contractor/Date:

Present Service Company: Date / Type of Last Testing: ST2207

4500 / Passenger - Service

Eight (8) @ LL, LD, 1 - 5, PH

Six (6) @ LL, 1-5 Two (2) @ LD & PH

Montgomery/KONE Geared Traction

Montgomery MIPROM 21

Simplex

Two Speed Side Opening/48" wide x 84" high

Montgomery-KONE / 1997

N/A

UMB Elevator Shop

July 2015 / 5 year

July 2017 / 1 year



for

UMB Health Sciences Facility 1, 685 W. Baltimore St.

Ashland conducted a maintenance audit during the second week of August, 2017, in order to determine the maintained condition of the elevators at 685 W. Baltimore Street. The research building is served by five (5) overhead traction passenger elevators that are original as installed in 1995 by Dover/TKE. As evidenced by the list of deficiencies, a preventive maintenance plan needs to be implemented that would address the items listed.

The major elevator components systems should serve this building well for the next 3–5 years with controller and door operator upgrades to be completed in order to keep the units operational and reliable. Car tops, pit areas and machine room space require improved housekeeping and the missing seals on the over speed governor assemblies (PE1 & PE3) should be investigated and corrected as soon as possible. Cab steady plates need to be replaced on PE4.

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST1591), PE2 (ST1592), PE3 (ST1593), PE4 (ST1596), and PE5 (ST1597)

DATE: August 9, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

COMPLIANCE ITEM/CATEGORY	S	U	CONDITION COMMENTS
ASME A17.1 Safety Code	X		Per 1990 Code Year
Cab Enclosure (layout, door size, illumination and flooring)	X		
Car Operating Panel(s) (design, location and function)	X		
Car Signals and Communications (indicators and communications)	X		·
Car and Corridor Entrances (size, signage and Re-opening device)	X		
Corridor Fixtures (operation, signals and location)	X		
Operational Functions (automatic leveling and door timing)	X		

Single Speed Center Opening 42" wide X 84" high	ELEV. NO. PE1	ELEV. NO. PE2	ELEV. NO. PE3	ELEV. NO. PE5	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	340	329*	340	343	333 – 367
B. SPEED - DOWN DIRECTION (FPM)	340	350	324*	340	333 – 367
C. DOOR OPENING TIME (SEC)	1.8	1.2*	2.4*	4.5*	1.7 – 1.9
D. DOOR CLOSING TIME (SEC)	3.2*	3.5*	3.0*	4.7*	2.5 – 2.7
E. DOOR OPEN DURATION - CAR CALL (SEC)	3.3	3.8	3.9	4.3	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	5.0	5.0	4.7*	4.7	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	1.0	1.7*	3.9*	2.8*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	11.6	12.0*	13.8*	16.7*	10.5 – 11.5
I. STOPPING ACCURACY (INCHES)	1/4	1/4	1/4	1/8	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	28	28	25	N/O	30 max.

^{*} DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

 $N\!/A$ - denotes standard is "Not Applicable" to these systems. $N\!/O$ - denotes "Not Operative" at time of evaluation

Two Speed Side Opening 48" wide X 84" high	ELEV. NO. PE4 (Front)	ELEV. NO. PE4 (Rear)	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	350	N/A	333-367
B. SPEED - DOWN DIRECTION (FPM)	355	N/A	333-367
C. DOOR OPENING TIME (SEC)	2.0*	3.0*	2.7 – 2.9
D. DOOR CLOSING TIME (SEC)	2.4*	2.8*	4.5 – 4.7
E. DOOR OPEN DURATION - CAR CALL (SEC)	2.0*	4.4	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	4.0*	4.0*	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	1.0	1.0	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	11.4*	N/A	11.5 – 12.5
I. STOPPING ACCURACY (INCHES)	1/4	1/4	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	28	30+*	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

Maintenance Deficiencies

Elevator Machine Rooms:

- 1. Organize prints and store in proper location.
- 2. Provide fireman's service test logs.

Common Items (all cars):

- 1. Clean car and hoistway sills of dirt & debris (outstanding from last year's report).
- 2. Clean elevator pits of dirt & debris (outstanding from last year's report).
- 3. Adjust door operating times to meet industry standards.

PE1, PE2 & PE3

- 1. Replace cracked and missing door pick-up rollers (PE3) (outstanding from last year's report).
- 2. Seal missing from over speed governor assembly (PE1 & PE3).
- 3. Adjust door open limit to eliminate pinch point when door is fully open (PE1).
- 4. Replace operator cover (PE1).
- 5. Replace left-hand worn car door gib; fire tab is rubbing sill (PE1).
- 6. Adjust brake pick; elevator starting through brake (PE1).
- 7. Remove drip rags from around machine and repair leaks (PE2).
- 8. Adjust car door closing pressure to within industry standards (PE1 & PE2).
- 9. Clean car top, removing old batteries (PE3).
- 10. Replace door operator belt (PE3).
- 11. Hobble counterweight shackles (PE3).

PE4

- 1. Repair broken steady plates on car frame (outstanding from last year's report).
- 2. Adjust door operation to prevent slamming during open/close cycles.
- 3. No emergency stop switch in deflector sheave "cat walk" overhead area (outstanding from last year's report).
- 4. Wipe down geared traction machine to remove gear oil residue (outstanding from last year's report).
- 5. Clean up spare parts and remove used parts from machine room floor.
- 6. Clean elevator car top (outstanding from last year's report).
- 7. Half of the secondary lights are out.
- 8. Car door gibs are bad.
- 9. Door operator belts need to be replaced.
- 10. Provide maintenance for all door equipment.

PE5

- 1. Hobble hoist ropes on counterweight frame (outstanding from last year's report).
- 2. Replace emergency battery light pack in car operating panel.
- 3. Machine room door not self-closing.
- 4. Clean car top.
- 5. Add second retainer clip to counterweight cable dead end.
- 6. Add second retainer clip to the car cable dead end.
- 7. Oil loss log filled out through June of 2017 (this is a *traction* elevator).
- 8. Replace missing car PI lights.
- 9. Clean machine room floor; check metal shavings around machine.

Vertical Transportation Systems Profile

Location:

685 W. Baltimore St.

Building Type: Unit I.D:

Offices & Laboratories PE1, PE2 & PE3, PE4, PE5

Type of System(s):

Overhead Geared Traction (PE1 – PE3, PE5)

Off-set Geared Traction (PE4)

A. General Information: PE1, PE2 & PE3

MD State I.D. Number:

ST1591 / ST1592 / ST1593

Capacity (lbs.)/Loading:

3500 / Passenger

Rated Speed (fpm):

350

Floors Served:

Six (6) @ 1 - 6

Machine Type:

Dover GD-1 Geared Traction

Control Type:

Dover Traflomatic 4 microprocessor

Sequence of Operation:

Triplex (3 car group)

Door Configuration/Size:

Single Speed Center Opening/42" wide x 84" high

O.E.M. /Date of Installation:

Dover TKE / 1995

Modernization Contractor/Date:

N/A

Present Service Company: Date / Type of Last Testing: UMB Elevator Shop March 2017 / Annual

General Information: PE4 B.

MD State I.D. Number:

ST5096

Capacity (lbs.)/Loading:

5000 / Passenger

Rated Speed (fpm):

350

Floors Served:

Eight (8) @ L, LD, 2 - 6, PH

Rear Openings:

Two (2) @ LD & 6

Machine Type: Control Type:

Dover GD-240 Geared Traction Dover Traflomatic 4 microprocessor

Sequence of Operation:

Simplex

Door Configuration/Size:

Two Speed Side Opening/48" wide x 84" high

O.E.M. /Date of Installation:

Dover TKE / 1995

Modernization Contractor/Date:

N/A

Present Service Company:

UMB Elevator Shop

Date / Type of Last Testing:

No Date on Paperwork / Annual

C. General Information: PE5

MD State I.D. Number:

ST1597

Capacity (lbs.)/Loading:

3500 / Passenger

Rated Speed (fpm):

350

Floors Served:

Five (5) @ 1 - 5

Machine Type:

Dover GD-1 Geared Traction

Control Type:

Dover Traflomatic 4 microprocessor

Sequence of Operation:
Door Configuration/Size:
O.E.M. /Date of Installation:
Modernization Contractor/Date:
Present Service Company:
Date / Type of Last Testing:

Simplex
Single Speed Center Opening/42" wide x 84" high
Dover TKE / 1995
N/A
UMB Elevator Shop
March 2017 / Annual



Executive Summary

for

UMB Health Sciences Facility II, 20 Penn. St.

Ashland conducted a maintenance audit during the second week of August, 2017, in order to determine the maintained condition of the elevators at 20 Penn Street. The research building is served by two (2) overhead traction passenger elevators that are original as installed in 2002 by Otis Elevator. The units are relatively well maintained with only a few deficiencies noted pertaining to door adjustments and preventive maintenance procedures.

The major elevator components systems should serve this building well for the next 10–15 years with no major upgrades needed. Car tops, pit areas and machine room space require improved housekeeping on a more consistent basis. Moreover, provide door maintenance and check all door gibs.

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST5013) & PE2 (ST5014), and Material Lift

DATE: August 10, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

COMPLIANCE ITEM/CATEGORY	S	U	CONDITION COMMENTS
ASME A17.1 Safety Code	X		Per 1998 Code Year.
Cab Enclosure (layout, door size, illumination and flooring)	X		
Car Operating Panel(s) (design, location and function)	X		
Car Signals and Communications (indicators and communications)	X		
Car and Corridor Entrances (size, signage and Re-opening device)	X		
Corridor Fixtures (operation, signals and location)	X		·
Operational Functions (automatic leveling and door timing)	X		
Additional Notes at	nd E	valu	nation Clarifications
Installed in 2002.			

	-				
	ELEV.	ELEV.	ACCEPTABLE		
Single Speed Center Opening	NO.	NO.	STANDARDS		
48" wide X 84" high	PE1	PE2	FOR THIS		
			EQUIPMENT		
A. SPEED - UP DIRECTION (FPM)	350	350	333 – 367		
B. SPEED - DOWN	250	250	222 267		
DIRECTION (FPM)	350	350	333 – 367		
C. DOOR OPENING TIME	1.6	1.8	20 22		
(SEC)	1.0	1.8	2.0 - 2.2		
D. DOOR CLOSING TIME	2.14	2.5	25 27		
(SEC)	3.1*	3.5	3.5 - 3.7		
E. DOOR OPEN DURATION	2.24	0.54	20 ::		
- CAR CALL (SEC)	2.2*	2.5*	3.0 minimum		
F. DOOR OPEN DURATION	5.0	<i>c</i> 2			
- HALL CALL (SEC)	5.2	5.3	5.0 minimum		
G. DOOR OPEN DURATION					
- AFTER PROTECTIVE	1.0	1.0	5 1 O		
SHIELD IS RE-	1.0	1.0	.5 - 1.0		
ESTABLISHED (SEC)					
H. FLOOR TO FLOOR					
PERFORMANCE TIME	10.5*	11.9*	12.5 - 13.5		
(SEC)					
I. STOPPING ACCURACY	1/8	1/8	± ½		
(INCHES)	1/0	1/0	± γ ₂		
J. CAR DOOR CLOSING	20.14	20.4	20.4	20.14	20
PRESSURE (LBS)	30+*	30+*	30 max.		

^{*} DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

Maintenance Deficiencies

Elevator Machine Room:

- 1. HVAC not functioning properly, floor fans being used and door being left open.
- 2. Provide correct type of fire extinguisher (outstanding from last year's report).

Common Items (all cars):

- 1. Clean car tops (outstanding from last year's report).
- 2. Pit lights out.
- 3. Provide hoistway door gibs where missing.
- 4. Clean dirt and debris from hoistway door equipment.
- 5. Provide Category 1 test tags.

PE1

- 1. Tighten door relating cable (outstanding from last year's report).
- 2. Tighten loose door gibs, 1st and 4th floors.
- 3. Bottom floor door astragal missing on bottom portion of door.
- 4. Clean sills.
- 5. Counterweight roller guide guard rubbing at top of hoistway.

PE2

- 1. Remove rags from car top (outstanding from last year's report).
- 2. Door gib missing on 5th -floor door.

Material Lift

1. Clean leaves and debris from unit.

Vertical Transportation Systems Profile

Location:

20 Penn St.

Building Type:

Research Facility

Unit I.D:

PE1 & PE2

Type of System(s):

Overhead Geared Traction

A. General Information: PE1 & PE2

MD State I.D. Number:

ST5013 / ST5014

Capacity (lbs.)/Loading:

4000 / Passenger

Rated Speed (fpm):

350

Floors Served:

Eight (8) @ B, G, 1-6

Machine Type:

Otis 18ATF Geared Traction

Control Type:

Otis 311 Microprocessor

Sequence of Operation:

Duplex

Door Configuration/Size:

Single Speed Center Opening/48" wide x 84" high

O.E.M. /Date of Installation:

Otis / 2002

Modernization Contractor/Date:

N/A

Present Service Company:

UMB Elevator Shop

Date / Type of Last Testing:

January 2017 / Annual

B. General Information: Material Lift

Unable to obtain data.



Executive Summary

for

UMB Medical Biotechnology Center, 725 W. Lombard St.

Ashland conducted a maintenance audit during the third week of August, 2017, in order to determine the maintained condition of the elevators at 725 W. Lombard Street. The research building is served by three (3) overhead traction passenger elevators that are original as installed in 1997 by Dover/TKE. The units require improved preventive maintenance procedures based on the list of deficiencies noted.

The major elevator components systems should serve this building well for the next 3–5 years with controller and door operator upgrades warranted to provide reliable elevator service to the building. Door equipment needs to be maintained and PM needs to be addressed. There is no apparent PM or housekeeping present.

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST1945), PE2 (ST1946), PE3 (ST1947), Sidewalk Lift (ST2005), and Dock Leveler

DATE: August 16, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

COMPLIANCE ITEM/CATEGORY	S	U	CONDITION COMMENTS
ASME A17.1 Safety Code	X		Per 1994 Code Year
Cab Enclosure (layout, door size, illumination and flooring)	X		
Car Operating Panel(s) (design, location and function)	X		
Car Signals and Communications (indicators and communications)	X		
Car and Corridor Entrances (size, signage and Re-opening device)	X		
Corridor Fixtures (operation, signals and location)	X		•
Operational Functions (automatic leveling and door timing)	X		

Installed in 1997.

Recorded Operating Performance

Single Speed Side Opening 42" wide X 84" high	ELEV. NO. PE1	ELEV. NO. PE2	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	340	345	333 – 367
B. SPEED - DOWN DIRECTION (FPM)	345	362	333 – 367
C. DOOR OPENING TIME (SEC)	2.5*	3.5*	2.2 – 2.4
D. DOOR CLOSING TIME (SEC)	2.9*	4.0*	4.4 – 4.6
E. DOOR OPEN DURATION - CAR CALL (SEC)	3.0	2.7*	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	4.0*	4.0*	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	0.2*	0.5	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	13.1*	14.5*	11.5 – 12.5
I. STOPPING ACCURACY (INCHES)	1/4	1/4	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	28	28	30 max.

^{*} DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

	·	
Two Speed Side Opening 54" wide X 84" high	ELEV. NO. PE3	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	362	333 – 367
B. SPEED - DOWN DIRECTION (FPM)	350	333 – 367
C. DOOR OPENING TIME (SEC)	2.4*	3.2 – 3.4
D. DOOR CLOSING TIME (SEC)	4.3*	6.4 – 6.6
E. DOOR OPEN DURATION - CAR CALL (SEC)	3.3	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	4.2*	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	.7	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	16.3*	13.5 – 14.5
I. STOPPING ACCURACY (INCHES)	1/8	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	30+*	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation

Maintenance Deficiencies

Elevator Machine Rooms:

- 1. Remove garbage and used parts (outstanding from last year's report).
- 2. Update fireman's service test logs.
- 3. Elevator machine room door blocked open.
- 4. Clean elevator machine room, organizing parts, cabinets, and prints.

Common Items (all cars):

- 1. Adjust and lubricate car/hoistway doors for smooth operation (outstanding from last year's report).
- 2. Clean car and hoistway door sills of dirt and debris (outstanding from last year's report).
- 3. Clean pit of dirt and debris and parts (outstanding from last year's report).
- 4. Clean elevator car tops of dirt and debris and spare parts (outstanding from last year's report).

PE1

- 1. Clean geared machine of gear oil contamination and repair leak (outstanding from last year's report).
- 2. Clean rope dust around machine, determine cause and correct (outstanding from last year's report).
- 3. Replace motor encoder cover.
- 4. Provide unit ID # on COP.
- 5. Replace bad counterweight roller—frame rubbing rail.
- 6. Replace panaforty cover.
- 7. Replace broken pickup roller, 3rd floor.
- 8. Monitor damaged traveling cable (previously taped up).

PE2

- 1. Clean geared machine of gear oil contamination and repair leaks (outstanding from last year's report).
- 2. Clean rope dust around machine, determine cause and correct (outstanding from last year's report).
- 3. Provide unit ID #s on COP.
- 4. Door restrictor non-operational.
- 5. Replace defective pick-up roller, 5th floor.
- 6. Replace defective counterweight roller.
- 7. Door equipment requires maintenance.
- 8. Correct gap at bottom of car door and return jamb (creating a pinching hazard).

PE3

- 1. Repair broken green-field connection on door operator (outstanding from last year's report).
- 2. Clean geared machine of gear oil contamination and repair leaks (outstanding from last year's report).
- 3. Gear oil level is low.
- 4. Clean rope dust around machine, determine cause and correct (outstanding from last year's report).
- 5. Replace cracked pick-up rollers and missing roller and bottom floor.
- 6. Car top and hoistway door metal rusting from outside vent, allowing moisture in hoistway.
- 7. Repair or replace cab steady adjusters, which are not functioning.
- 8. Load weigher disconnected, sitting on crosshead.

- 9. Car PI display malfunctioning.
- 10. Replace MOV hanging off contactor in controller.

Dock Leveler

- 1. Frame of platform has rusted through and needs replacing (outstanding from last year's report).
- 2. Remove dirt and debris from under platform (outstanding from last year's report).

Side Walk Lift (ST2005)

- 1. Clean drum machine, evidence of water exposure (outstanding from last year's report).
- 2. Replace hoist ropes and monitor for rouging (outstanding from last year's report).
- 3. Unit was on safety during inspection.
- 4. Last Annual Inspection was performed February 2, 2017.
- 5. Replace rusted electrical conduit in machine room.

Vertical Transportation Systems Profile

Location:

IHV Building

Building Type:

Offices, Research Labs

Unit I.D:

PE1 & PE2, PE3

Type of System(s):

Overhead Geared Traction

A. General Information: PE1 & PE2

MD State I.D. Number:

ST1945 / ST1946

Capacity (lbs.)/Loading:

3500 / Passenger

Rated Speed (fpm):

350 Seven (7) @ B, 1 – 6 (PE1)

Floors Served:

Six (6) @ 1 – 6 (PE2)

Machine Type:

Dover (TKE) GD-1

Control Type:

Dover (TKE) Traflomatic IV (T4)

Sequence of Operation:

Duplex

Door Configuration/Size:

Single Speed Side Opening/42" wide x 84" high

O.E.M. /Date of Installation:

Dover (TKE) / 1997

Modernization Contractor/Date:

N/A

Present Service Company:

UMB Elevator Shop June 2017 / Annual

Date / Type of Last Testing:

August 2017 / Ainidar
August 2015 /5 year

B. General Information: PE3

MD State I.D. Number:

ST1947

Capacity (lbs.)/Loading:

5000 / Passenger - Service

Rated Speed (fpm):

350

Floors Served:

Eight (8) @ B, 1 - 6, P Dover (TKE) GD-240

Machine Type: Control Type:

Dover (TKE) Traflomatic IV (T4)

Sequence of Operation:

Simplex

Door Configuration/Size:

Two Speed Side Opening/54" wide x 84" high

O.E.M. /Date of Installation: Modernization Contractor/Date: Present Service Company: Date / Type of Last Testing: Dover (TKE) / 1997 N/A UMB Elevator Shop June 2017 / Annual August 2015 / 5 year



Executive Summary

for

UMB Law School and Law Library, 500 W. Baltimore St.

Ashland conducted a maintenance audit during the fourth week of August, 2017, in order to determine the maintained condition of the elevators at 500 W. Baltimore Street. The school building is served by seven (7) passenger elevators that are original as installed in 2002 by Dover/TKE. The units are relatively well maintained with only a few minor deficiencies noted.

The major elevator components systems should serve this building well for the next 10–15 years with no major upgrades needed. Car tops, pit areas and machine room space are relatively clean.

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST3035), PE2 (ST3036), PE3 (ST3037), PE4 (ST3038), PE5 (ST1287), PE6 (ST3039), and PE7 (ST3040)

DATE: August 24, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

COMPLIANCE ITEM/CATEGORY	S	U	CONDITION COMMENTS		
ASME A17.1 Safety Code	X		Per 1987 Code Year.		
Cab Enclosure (layout, door size, illumination and flooring)	X				
Car Operating Panel(s) (design, location and function)	X				
Car Signals and Communications (indicators and communications)	X				
Car and Corridor Entrances (size, signage and Re-opening device)	X				
Corridor Fixtures (operation, signals and location)	X				
Operational Functions (automatic leveling and door timing)	X				
Additional Notes and Evaluation Clarifications					
Installed in 2002.					

Single Speed Side Opening 48" wide X 84" high	ELEV. NO. PE1	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	350	333 - 367
B. SPEED - DOWN DIRECTION (FPM)	350	333 - 367
C. DOOR OPENING TIME (SEC)	4.0*	2.4 – 2.6
D. DOOR CLOSING TIME (SEC)	5.3*	4.8 – 5.0
E. DOOR OPEN DURATION - CAR CALL (SEC)	3.0	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	6.0	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	2.0*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	17.0*	15.5 – 16.5
I. STOPPING ACCURACY (INCHES)	1/4	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	23	30 max.

^{*} DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

 $N\!/A$ - denotes standard is "Not Applicable" to these systems. $N\!/O$ - denotes "Not Operative" at time of evaluation.

	ELEV.	ELEV.	ACCEPTABLE
Two Speed Side Opening	NO.	NO.	STANDARDS
42" wide X 84" high	PE2	PE2	FOR THIS
	Front	Rear	EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	89*	N/A	115 – 135
B. SPEED - DOWN DIRECTION (FPM)	94*	N/A	115 – 135
C. DOOR OPENING TIME (SEC)	3.5*	2.4*	1.2 – 1.4
D. DOOR CLOSING TIME (SEC)	4.7*	4.0*	2.4 – 2.6
E. DOOR OPEN DURATION - CAR CALL (SEC)	5.5	4.0	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	5.1	4.3*	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	5.0*	4.5*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	20.0*	N/A	11.5 – 12.5
I. STOPPING ACCURACY (INCHES)	1/4	1/4	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	30+*	19	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

Two Speed Side Opening 48" wide X 84" high	ELEV. NO. PE3	ELEV. NO. PE4	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	125	125	115 – 135
B. SPEED - DOWN DIRECTION (FPM)	111*	103*	115 – 135
C. DOOR OPENING TIME (SEC)	3.5	2.0*	3.0 – 3.2
D. DOOR CLOSING TIME (SEC)	4.0*	5.0*	6.0 – 6.2
E. DOOR OPEN DURATION - CAR CALL (SEC)	4.3	2.5*	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	4.0*	4.5*	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	3.5*	4.6*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	20.0*	22.0	18.5 – 19.5
I. STOPPING ACCURACY (INCHES)	1/4	1/4	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	30	25	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

 $N\!/A$ - denotes standard is "Not Applicable" to these systems. $N\!/O$ - denotes "Not Operative" at time of evaluation.

Single Speed Center Opening 42" wide X 84" high	ELEV. NO. PE5	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	122	115 – 135
B. SPEED - DOWN DIRECTION (FPM)	130	115 - 135
C. DOOR OPENING TIME (SEC)	3.2*	1.2 – 1.4
D. DOOR CLOSING TIME (SEC)	3.0*	2.4 – 2.6
E. DOOR OPEN DURATION - CAR CALL (SEC)	3.6	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	3.0*	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	4.3*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	19.0	13.5 – 14.5
I. STOPPING ACCURACY (INCHES)	1/4	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	30+*	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

 $N\!/A$ - denotes standard is "Not Applicable" to these systems. $N\!/O$ - denotes "Not Operative" at time of evaluation.

			
	ELEV.	ELEV.	ACCEPTABLE
Single Speed Side Opening	NO.	NO.	STANDARDS
42" wide X 84" high	PE6	PE6	FOR THIS
	Front	Rear	EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	125	N/A	115 – 125
B. SPEED - DOWN DIRECTION (FPM)	76*	N/A	115 – 125
C. DOOR OPENING TIME (SEC)	4.0*	2.6*	1.8 - 2.0
D. DOOR CLOSING TIME (SEC)	4.5*	4.3*	3.6 – 3.8
E. DOOR OPEN DURATION - CAR CALL (SEC)	4.1	2.2*	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	4.4*	4.4*	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	4.5*	3.7*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	22.0*	N/A	14.5 – 15.5
I. STOPPING ACCURACY (INCHES)	1/4	1/4	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	27	28	30 max.

^{*} DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

	ELEV.	ELEV.	ACCEPTABLE
Single Speed Center Opening	NO.	NO.	STANDARDS
42" wide X 84" high	PE7	PE7	FOR THIS
	Front	Rear	EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	105	N/A	95 – 105
B. SPEED - DOWN DIRECTION (FPM)	99	N/A	95 – 105
C. DOOR OPENING TIME (SEC)	2.6*	2.0*	1.2 – 1.4
D. DOOR CLOSING TIME (SEC)	4.1*	3.0*	2.4 - 2.6
E. DOOR OPEN DURATION - CAR CALL (SEC)	5.5	4.0	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	5.5*	4.3*	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	5.5*	4.5*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	15.0*	N/A	14.5 – 15.5
I. STOPPING ACCURACY (INCHES)	1/4	1/4	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	24	25	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems.

N/O - denotes "Not Operative" at time of evaluation

Maintenance Deficiencies

Common Items:

- 1. Adjust performance times to meet industry standards.
- 2. Provide Category 1 test tags.

PE1

- 1. Repair non-functioning door restrictor.
- 2. Replace door operator belt.

PE2

- 1. Lubricate and adjust door operation to eliminate squeaking (outstanding from last year's report).
- 2. Replace rear car top light.
- 3. Right-hand pit can full/overflowing on floor.
- 4. Replace missing rear fast-speed door gib (found in pit).

PE3 & PE4

- 1. Lubricate door equipment to eliminate squeaky operation (PE3) (outstanding from last year's report).
- 2. Clean down hoistway door equipment, contaminated with dirt & debris (outstanding from last year's report) (PE3).
- 3. Repair non-functioning door restrictor (PE3).
- 4. Replace missing door operator cover (PE3).
- 5. Repair broken green field connector on car top (PE3).
- 6. Replace worn car door gibs (PE3).
- 7. Clean car top of dirt and debris (PE3) (outstanding from last year's report).
- 8. Install belts on pump motor, as required (two [2] belts missing) (PE4) (outstanding from last year's report).
- 9. Replace worn car door gibs (PE4).
- 10. Repair car top light (PE4).
- 11. Monitor jack packing for oil loss (PE4).
- 12. Clean car top of dirt and debris (PE4) (outstanding from last year's report).
- 13. Clean down hoistway door equipment, contaminated with dirt & debris (outstanding from last year's report) (PE4).
- 14. Lubricate door equipment to eliminate squeaky operation (PE4) (outstanding from last year's report).

PE5

- 1. Repair non-functioning door restrictor.
- 2. Plug unused escutcheons in lobby doors.
- 3. Repair elevator machine room wall (sheetrock damage).

PE6

- 1. Replace rear car top light fixture.
- 2. Replace worn car guides.

PE7

1. Replace two (2) cab lights.

Vertical Transportation Systems Profile

Location: Building Type: Law School & Law Library Classrooms, Offices & Library

Unit I.D:

PE1 through PE7

Type of System(s):

Overhead geared traction (PE1) Direct Lift Hydraulic (PE2 – PE7)

A. General Information: PE1

MD State I.D. Number:

ST3035

Capacity (lbs.)/Loading:

4000 / Passenger

Rated Speed (fpm):

Floors Served: Machine Type: Control Type:

Seven (7) @ G, 1 – 5, PH Dover GD1 Overhead Geared

Dover (TKE) TAC50

Sequence of Operation:

Simplex

Door Configuration/Size: O.E.M. /Date of Installation: Single Speed Side Opening/48" wide x 84" high

Dover (TKE) / 2002

Modernization Contractor/Date:

N/A

Present Service Company: Date / Type of Last Testing: **UMB Elevator Shop** July 2015 / 5 year

July 2017 / 1 year

B. General Information: PE2

MD State I.D. Number:

ST3036

Capacity (lbs.)/Loading:

4500 / Passenger

Rated Speed (fpm): Floors Served:

Three (3)

125

Front Openings:

@ G & 1 @R

Rear Opening: Machine Type:

Dover I-2 Valve with submersible pump

Control Type:

DMC-1 Microprocessor Controls

Sequence of Operation:

Simplex

Door Configuration/Size:

Two Speed Side Opening/48" wide x 84" high

O.E.M. /Date of Installation:

Dover (TKE) / 2002

Modernization Contractor/Date:

N/A

Present Service Company:

UMB Elevator Shop September 2016 / 1 year

Date / Type of Last Testing:

C. General Information: PE3 & PE4

MD State I.D. Number: Capacity (lbs.)/Loading: ST3037 / ST3038 4500 / Passenger

Rated Speed (fpm):

125

Floors Served:

Five (5) @ 1 - 5

Machine Type: Control Type:

Dover I-2 Valve with dry V-belt **DMC-1 Microprocessor Controls**

Sequence of Operation:

Duplex

Door Configuration/Size:

O.E.M. /Date of Installation:

Modernization Contractor/Date:

Present Service Company: Date / Type of Last Testing: Two Speed Side Opening/48" wide x 84" high

Dover (TKE) / 2002

N/A

UMB Elevator Shop August 2017 / 1 year

D. General Information: PE5 (Library)

MD State I.D. Number:

Capacity (lbs.)/Loading:

Rated Speed (fpm):

Floors Served:

Machine Type:

Control Type:

Sequence of Operation:

Door Configuration/Size: O.E.M. /Date of Installation:

Modernization Contractor/Date: Present Service Company:

Date / Type of Last Testing:

ST1287

2500 / Passenger

125

Four (4) @ 1 - 4

Dover I-2 Valve with submersible pump

DMC-1 Microprocessor Controls

Simplex

Single Speed Center Opening/42" wide x 84" high

Otis Elevator / 1979 Dover (TKE) / 2002 **UMB** Elevator Shop August 2016 / 1 year

E. General Information: PE6 (Library)

MD State I.D. Number:

Capacity (lbs.)/Loading:

Rated Speed (fpm): Floors Served:

Front Openings:

Rear Opening:

Machine Type:

Control Type:

Sequence of Operation:

Door Configuration/Size:

O.E.M. /Date of Installation:

Modernization Contractor/Date:

Present Service Company:

Date / Type of Last Testing:

ST3039

3000 / Passenger

125 Five (5)

@ 1 & 2

@ R, 3 & 4

Dover I-2 Valve with dry V-belt

DMC-1 Microprocessor Controls

Simplex

Single Speed Side Opening/42" wide x 84" high

Dover (TKE) / 2002

N/A

UMB Elevator Shop

August 2017 / 1 year

F. General Information: PE7

MD State I.D. Number:

Capacity (lbs.)/Loading:

Rated Speed (fpm):

Floors Served:

Front Openings:

Rear Openings:

Machine Type:

Control Type:

Sequence of Operation:

ST3040

3500 / Passenger

100

Three (3)

@ L

@1&2

Dover I-2 Valve with submersible pump

DMC-1 Microprocessor Controls

Simplex

Door Configuration/Size:
O.E.M. /Date of Installation:
Modernization Contractor/Date:
Present Service Company:
Date / Type of Last Testing:

Single Speed Center Opening/42" wide x 84" high Dover (TKE) / 2002 N/A UMB Elevator Shop May 2017 / 1 year



Executive Summary

for

UMB Lexington Street Parking Garage, 622 W. Lexington St.

Ashland conducted a maintenance audit during the fifth week of August, 2017, in order to determine the maintained condition of the elevators at 622 W. Lexington Street. The parking garage is served by four (4) overhead gearless traction passenger elevators that were modernized in 2016 by United Elevator Company. The units are relatively well maintained with only a few minor deficiencies noted.

The major elevator components systems should serve this building well for the next 15–20 years with no major upgrades needed. Car tops, pit areas and machine room space are relatively clean.

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST2102), PE2 (ST2103), PE3 (ST2104) and PE4 (ST2105)

DATE: August 29, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

COMPLIANCE ITEM/CATEGORY	S	U	CONDITION COMMENTS		
ASME A17.1 Safety Code	X		Per 2013 Code Year.		
Cab Enclosure (layout, door size, illumination and flooring)	X				
Car Operating Panel(s) (design, location and function)	X				
Car Signals and Communications (indicators and communications)	X				
Car and Corridor Entrances (size, signage and Re-opening device)	X				
Corridor Fixtures (operation, signals and location)	X				
Operational Functions (automatic leveling and door timing)	X				
Additional Notes and Evaluation Clarifications					
Completed a modernization / upgrade in January 2016.					

Single Speed Center Opening 42" wide X 84" high	ELEV. NO. PE1	ELEV. NO. PE2	ELEV. NO. PE4	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	343	343	352	333 – 367
B. SPEED - DOWN DIRECTION (FPM)	344	343	350	333 – 367
C. DOOR OPENING TIME (SEC)	2.6*	2.6*	2.8*	1.2 – 1.4
D. DOOR CLOSING TIME (SEC)	4.3*	2.8*	3.0*	2.4 – 2.6
E. DOOR OPEN DURATION - CAR CALL (SEC)	3.7	4.1	3.2	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	5.7	5.5	5.0	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	1.8*	2.0*	1.6*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	16.4*	15.1*	13.3*	11.5 – 12.5
I. STOPPING ACCURACY (INCHES)	1/8	1/8	1/4	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	28	30+*	28	30 max.

^{*} DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

Two Speed Side Opening 42" wide X 84" high	ELEV. NO. PE3	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	351	333-367
B. SPEED - DOWN DIRECTION (FPM)	350	333-367
C. DOOR OPENING TIME (SEC)	3.8*	3.2 - 3.4
D. DOOR CLOSING TIME (SEC)	4.0*	6.4 – 6.6
E. DOOR OPEN DURATION - CAR CALL (SEC)	1.6*	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	5.9	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	1.2	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	16.0*	14.5 – 15.5
I. STOPPING ACCURACY (INCHES)	1/8	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	22	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

Maintenance Deficiencies

Elevator Machine Room:

1. Update fireman's service test log; last entry was June 2017 (outstanding from last year's report).

<u>PE1</u>

- 1. Adjust slow-down leveling transition to meet floor to floor times (outstanding from last year's report).
- 2. Emergency Communication jewel missing in lobby hall station.
- 3. Emergency phone communication error.
- 4. Clean sills.

PE2

- 1. Adjust machine brake for quiet operation; brake sets "hard" (outstanding from last year's report).
- 2. Adjust door open limit to eliminate pinch point hazard between car door and return.

PE3

- 1. Clean sills.
- 2. Clean car top.

PE4

- 1. Clean car top.
- 2. Phone recording volume is too low on dispatcher's end.

Vertical Transportation Systems Profile

Location:

622 W. Lexington St.

Building Type:

Garage

Unit I.D:

PE1 & PE2, PE3 & PE4

Type of System(s):

Overhead Gearless Traction

A. <u>General Information:</u> PE1 & PE2

MD State I.D. Number:

ST2102 / ST2103

Capacity (lbs.)/Loading:

2500 / Passenger

Rated Speed (fpm):

350

Floors Served:

Nine (9) @ 1 - 9

Machine Type:

Hollister Whitney Gearless Traction

Control Type:

Virginia Controls MVFCL

Sequence of Operation:

Duplex

Door Configuration/Size:

Single Speed Center Opening/42" wide x 84" high

O.E.M. /Date of Installation:

Schumacher / Unknown

Modernization Contractor/Date:

United Elevator Company / 2015

Present Service Company:

UMB Elevator Shop January 2016 / 5 year

Date / Type of Last Testing:

May 2017 / Annual

B. General Information: PE3 & PE4

MD State I.D. Number: Capacity (lbs.)/Loading:

Rated Speed (fpm): Floors Served: Machine Type: Control Type:

Sequence of Operation: Door Configuration/Size:

O.E.M. /Date of Installation: Modernization Contractor/Date: Present Service Company: Date / Type of Last Testing: ST2104 / ST2105 4000 / Passenger (PE3) 2500 / Passenger (PE4)

350

Ten (10) @ 1 - 10

Hollister Whitney Gearless Traction

Virginia Controls MVFCL

Duplex

Two Speed Side Slide / 42" wide x 84" high (PE3) Single Speed Center Opening/42" wide x 84" high (PE4)

Schumacher / Unknown

United Elevator Company / 2015

UMB Elevator Shop January 2016 / 5 year May 2017 / Annual



Executive Summary

for

UMB MD Bar Association, 520 W. Fayette St.

Ashland conducted a maintenance audit during the fourth week of August, 2017, in order to determine the maintained condition of the elevator at 520 W. Fayette Street. The office building is served by one (1) direct lift hydraulic passenger elevator that was originally installed in 1985. The unit is in poorly maintained condition, requires upgrades and improved preventive maintenance frequency.

The major elevator components systems should be modernized within the next 6–12 months to improve reliability of the elevator and extend the net useful life for an additional 20 years.

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST1442)

DATE: August 24, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

COMPLIANCE ITEM/CATEGORY	S	U	CONDITION COMMENTS	
ASME A17.1 Safety Code	X		Per 1985 install date.	
Cab Enclosure (layout, door size, illumination and flooring)	X			
Car Operating Panel(s) (design, location and function)	X			
Car Signals and Communications (indicators and communications)		X	Hand held telephone receiver.	
Car and Corridor Entrances (size, signage and Re-opening device)		X	Safety edge only, dual electric eyes.	
Corridor Fixtures (operation, signals and location)	X			
Operational Functions (automatic leveling and door timing)	X			
Additional Notes and Evaluation Clarifications				
Budgeted for modernization in 2017.				

Single Speed Side Opening 42" wide X 84" high	ELEV. NO.	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	122*	95 - 105
B. SPEED - DOWN DIRECTION (FPM)	113*	95 - 105
C. DOOR OPENING TIME (SEC)	2.0*	2.2 – 2.4
D. DOOR CLOSING TIME (SEC)	3.8*	4.4 – 4.6
E. DOOR OPEN DURATION - CAR CALL (SEC)	4.0	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	4.5*	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	2.0*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	14.0*	17.5 – 18.5
I. STOPPING ACCURACY (INCHES)	1/4	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	20	30 max.

^{*} DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

 $N\!/A$ - denotes standard is "Not Applicable" to these systems. $N\!/O$ - denotes "Not Operative" at time of evaluation.

Maintenance Deficiencies

Elevator Machine Room:

1. Update Fireman's Service Test Log (outstanding from last year's report).

<u>PE1</u>

- 1. Car door separates from hoistway door when testing door pressure, adjust clutch.
- 2. Clean up pit and remove water on pit floor (outstanding from last year's report).
- 3. Clean down elevator rails, contaminated with dirt and debris (outstanding from last year's report).
- 4. Elevator cavitating at top landing (low on oil).
- 5. Replace damaged safety edge boot.
- 6. Fire Service Phase I and Phase II signs illegible.
- 7. Correct car door restrictor hitting fascia between B- and 1 level.

Vertical Transportation Systems Profile

Location:

MD Bar Association

Building Type:

Offices

Unit I.D:

PE1

Type of System(s):

Direct Lift Hydraulic

A. General Information: PE1

MD State I.D. Number:

ST1442

Capacity (lbs.)/Loading:

2500 / Passenger

Rated Speed (fpm):

100

Floors Served:

Five (5) @ B, 1 - 4

riodis serveu.

Dover (TKE) I-2 Valve with Dry V-Belt Drive

Machine Type: Control Type:

Dover Solid State with Card Rack

Sequence of Operation:

Simplex

Door Configuration/Size:

Single Speed Side Opening/42" wide x 84" high

O.E.M. /Date of Installation:

Dover Elevator / 1985

Modernization Contractor/Date:

N/A

Present Service Company:

UMB Elevator Shop

Date / Type of Last Testing:

August 2016 / Annual



Executive Summary

for

UMB MEIMSS Building, 653 W. Pratt St.

Ashland conducted a maintenance audit during the fifth week of August, 2017, in order to determine the maintained condition of the elevators at 653 W. Pratt Street. The office building is served by two (2) direct lift hydraulic passenger elevators that are original as installed in 1997 by Otis Elevator. The units are relatively well maintained with only a few minor deficiencies noted.

The major elevator components systems should serve this building well for the next 7–10 years with no major upgrades needed. Car tops, pit areas and machine room space are relatively clean, but hydraulic oil needs to be cleaned from the machine room floor.

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST1461) and PE2 (ST1513)

DATE: August 29, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

COMPLIANCE ITEM/CATEGORY	S	U	CONDITION COMMENTS	
ASME A17.1 Safety Code	X		Per 1994 Code Year.	
Cab Enclosure (layout, door size, illumination and flooring)	X			
Car Operating Panel(s) (design, location and function)	X			
Car Signals and Communications (indicators and communications)	X			
Car and Corridor Entrances (size, signage and Re-opening device)	X			
Corridor Fixtures (operation, signals and location)	X			
Operational Functions (automatic leveling and door timing)	X			
Additional Notes and Evaluation Clarifications				
Installed in 1997.				

Two Speed Side Opening 54" wide X 96" high	ELEV. NO. PE2	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	122*	145 – 155
B. SPEED - DOWN DIRECTION (FPM)	80*	145 – 155
C. DOOR OPENING TIME (SEC)	3.6*	2.6 – 2.8
D. DOOR CLOSING TIME (SEC)	4.7*	5.2 – 5.4
E. DOOR OPEN DURATION - CAR CALL (SEC)	2.0*	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	3.5*	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	1.2*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	21.5*	18.5 – 19.5
I. STOPPING ACCURACY (INCHES)	1/4-3/8	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	22	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

		ACCEPTABLE
Single Speed Side Opening	ELEV.	STANDARDS
42" wide X 84" high	NO.	FOR THIS
12 Wide It of high	PE1	EQUIPMENT
A. SPEED - UP DIRECTION		
(FPM)	156*	145 – 155
B. SPEED - DOWN DIRECTION	110*	145 – 155
(FPM)	110"	143 – 133
C. DOOR OPENING TIME	2.24	2.4 - 2.6
(SEC)	3.2*	2.4 - 2.0
D. DOOR CLOSING TIME	474	4.9.5.0
(SEC)	4.7*	4.8 - 5.0
E. DOOR OPEN DURATION -	0.04	20 ::
CAR CALL (SEC)	2.2*	3.0 minimum
F. DOOR OPEN DURATION -	2.04	50
HALL CALL (SEC)	3.9*	5.0 minimum
G. DOOR OPEN DURATION -		
AFTER PROTECTIVE	1.0	.5 – 1.0
SHIELD IS RE-	1.0	.5 – 1.0
ESTABLISHED (SEC)		
H. FLOOR TO FLOOR		
PERFORMANCE TIME	20.5*	16.5 – 17.5
(SEC)		
I. STOPPING ACCURACY	1/4-3/8	± ½
(INCHES)	1/ = 3/0	- /2
J. CAR DOOR CLOSING	26	30 max.
PRESSURE (LBS)	20	Jo max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

Elevator Machine Room:

- 1. Remove hydraulic oil residue from floor (outstanding from last year's report).
- 2. Provide Category 1 test tags.

Common Items (all cars):

- 1. Adjust and lubricate squeaky door operation (outstanding from last year's report).
- 2. Adjust performance times to meet standards (outstanding from last year's report).
- 3. Provide unit ID numbering on COP, car top, and pit equipment.
- 4. Lobby hall push button/Fire Service bezel, worn.

PE1

1. Emergency Communication non-operational.

PE2

1. Adjust Door Open Limit (DOL) to obtain full open (outstanding from last year's report).

Vertical Transportation Systems Profile

Location:

653 W. Pratt Street

Building Type:

Office Building

Unit I.D:

PE1 & PE2

Type of System(s):

Direct Lift Hydraulic

A. General Information: PE1

MD State I.D. Number:

ST1461

Capacity (lbs.)/Loading:

4500 / Passenger

Rated Speed (fpm):

150

Floors Served:

Five (5) @ 1 - 5

Machine Type:

Submersible Pump Unit

Control Type: Sequence of Operation: Otis 211

Door Configuration/Size:

Duplex

O.E.M. /Date of Installation:

Two Speed Side Opening/48" wide x 84" high Otis Elevator / 1997

Modernization Contractor/Date:

N/A

Present Service Company:

UMB Elevator Shop

Date / Type of Last Testing:

February 2017 / 1 year

В. General Information: PE2

MD State I.D. Number:

ST1513

Capacity (lbs.)/Loading:

3500 / Passenger

Rated Speed (fpm):

150

Floors Served:

Five (5) @ 1 - 5

Machine Type:

Submersible Pump Unit

Control Type:

Otis 211

Sequence of Operation:

Duplex

Door Configuration/Size:

Single Speed Side Opening/42" wide x 96" high

O.E.M. /Date of Installation:

Otis Elevator / 1997

Modernization Contractor/Date:

N/A

Present Service Company:

UMB Elevator Shop February 2017 / 1 year

Date / Type of Last Testing:



Executive Summary

for

UMB MPRC, 55 Wade Ave., Catonsville, MD

Ashland conducted a maintenance audit during the fifth week of August, 2017, in order to determine the maintained condition of the elevator at 55 Wade Avenue in Catonsville, MD. The research/office building is served by one (1) direct lift hydraulic passenger elevator that was originally installed in 1968. The unit is maintained well for its age but requires upgrades. The operating certificate expired in July 2017.

The major elevator components systems should be modernized within the next 6–12 months to improve reliability of the elevator and extend the net useful life for an additional 20 years.

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST1089)

DATE: August 28, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

COMPLIANCE ITEM/CATEGORY	S	U	CONDITION COMMENTS
ASME A17.1 Safety Code	X		Per 1968 install date.
Cab Enclosure (layout, door size, illumination and flooring)	X		
Car Operating Panel(s) (design, location and function)		X	Stop switch is 58 inches from finished floor.
Car Signals and Communications (indicators and communications)		X	Hand held telephone receiver.
Car and Corridor Entrances (size, signage and Re-opening device)		X	Hall Braille is required.
Corridor Fixtures (operation, signals and location)		X	Hall stations are 54 inches from finished floor.
Operational Functions (automatic leveling and door timing)		X	Adjust hall and car call dwell times to within ADA requirements.

Additional Notes and Evaluation Clarifications

ADA violations can be resolved relatively easily with upgrading the fixtures, installing hall Braille, etc. But this should be done when undergoing a complete modernization.

Two Speed Side Opening 48" wide X 84" high	ELEV. NO. 1	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	101	95 - 105
B. SPEED - DOWN DIRECTION (FPM)	73*	95 - 105
C. DOOR OPENING TIME (SEC)	2.4*	2.6 – 2.8
D. DOOR CLOSING TIME (SEC)	4.8*	5.2 – 5.4
E. DOOR OPEN DURATION - CAR CALL (SEC)	1.5*	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	1.7*	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	0*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	19.0*	17.5 – 18.5
I. STOPPING ACCURACY (INCHES)	1/4	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	24	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

Elevator Machine Room:

1. Provide correct type of fire extinguisher in machine room (outstanding from last year's report).

PE1

- 1. Provide pit light bulb in pit (outstanding from last year's report).
- 2. Operating certificate has expired, July 2017.
- 3. Provide hall Braille on entrance frames (outstanding from last year's report).
- 4. Adjust slide guides to reduce car movement.

Vertical Transportation Systems Profile

Location:

55 Wade Avenue, Catonsville, MD

Building Type:

Research / Offices

Unit I.D:

PE₁

Type of System(s):

Direct Lift Hydraulic

A. General Information: PE1

MD State I.D. Number:

ST1089

Capacity (lbs.)/Loading:

4000 / Passenger

Rated Speed (fpm):

100

Floors Served:

Five (5) @ B, 1 - 4

Machine Type:

Submersible pump unit

Machine Type:

Relay with Wye-Delta starter

Control Type: Sequence of Operation:

Simplex

Door Configuration/Size:

Two Speed Side Opening/48" wide x 84" high

O.E.M. /Date of Installation:

Elevator Engineering Inc. / 1968

Modernization Contractor/Date:

N/A

Present Service Company:

UMB Elevator Shop

Date / Type of Last Testing:

September 2016 / Annual



Executive Summary

for

UMB MSTF, 10 S. Pine St.

Ashland conducted a maintenance audit during the second week of August, 2017, in order to determine the maintained condition of the elevators at 10 S. Pine Street. The classroom building is served by three (3) overhead geared traction passenger elevators and one (1) freight elevator that were modernized in 2004 by TKE. The units require improved preventive maintenance procedures based on the list of deficiencies noted.

The major elevator components systems should serve this building well for the next 10–15 years with no major upgrades needed. Housekeeping and preventive door maintenance are overdue.

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST1277), PE2 (ST1278), PE3 (ST1279), and FE4 (ST1280)

DATE: August 10, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

COMPLIANCE ITEM/CATEGORY	S	U	CONDITION COMMENTS
ASME A17.1 Safety Code	X		Per 2002 Code Year
Cab Enclosure (layout, door size, illumination and flooring)	X		
Car Operating Panel(s) (design, location and function)	X		
Car Signals and Communications (indicators and communications)	X		
Car and Corridor Entrances (size, signage and Re-opening device)	X		
Corridor Fixtures (operation, signals and location)	X		
Operational Functions (automatic leveling and door timing)	X		
Additional Notes a	nd E	valu	nation Clarifications
All elevators modernized in 2004			

Single Speed Center Opening 42" wide X 84" high	ELEV. NO. PE1	ELEV. NO. PE2	ELEV. NO. PE3	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	350	350	350	333 – 367
B. SPEED - DOWN DIRECTION (FPM)	350	350	350	333 – 367
C. DOOR OPENING TIME (SEC)	3.2*	4.5*	3.8*	1.5 – 1.7
D. DOOR CLOSING TIME (SEC)	4.4*	4.2*	4.8*	2.3 – 2.5
E. DOOR OPEN DURATION - CAR CALL (SEC)	3.3	3.8	3.6	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	4.5*	5.2	5.6	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	1.0	.8	1.0	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	15.0*	16.0*	16.6*	11.5 – 12.5
I. STOPPING ACCURACY (INCHES)	1/4	1/8	1/8	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	30	30+*	30+*	30 max.

^{*} DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

PE1

- 1. Replace bulbs in pit lights (all cars) (outstanding from last year's report).
- 2. Reseal geared machine to correct excessive leaking (outstanding from last year's report).
- 3. Provide Category 1 Annual Inspection test tags.
- 4. Provide Fire Service testing log.
- 5. Door restrictor non-operational.
- 6. Load weigher cable broken.
- 7. Provide maintenance on door equipment.
- 8. Clean sills.
- 9. Replace cracked counterweight rollers.
- 10. Hobble counterweight shackles.
- 11. Replace bad car roller guide.
- 12. Clean hoistway.
- 13. Clean pit.

PE2

- 1. Repair non-functioning car door restrictor device (outstanding from last year's report).
- 2. Provide bulb guard on car top control station (outstanding from last year's report).
- 3. Replace worn car door operator belts (outstanding from last year's report).
- 4. Replace broken zip ties utilized for hobbling of hoist ropes, car and counterweight (outstanding from last year's report).
- 5. Provide Category 1 Annual Inspection test tags.
- 6. Clean car top, pit, and sills.
- 7. Replace missing door gib, 8th floor.
- 8. Clean down hoistway.

PE3

- 1. Clean elevator pit of dirt and debris (outstanding from last year's report).
- 2. Replace traveling cable, appears to have been damaged (outstanding from last year's report).
- 3. Replace hoistway door gibs where missing (8th floor) (outstanding from last year's report).
- 4. Adjust counterweight roller guides to make full contact with face of rail surface (outstanding from last year's report).
- 5. Provide Category 1 Annual Inspection test tags.
- 6. Provide maintenance on door equipment.
- 7. Clean sills.

FE4

- 1. Clean and investigate rope dust around machine (outstanding from last year's report).
- 2. Provide Category 1 Annual Inspection test tags.

PE5

Unit appears to be locked out of service. Ashland did not evaluate this unit because it appears that the unit has been out of service for some time.

Vertical Transportation Systems Profile

Location:

10 S. Pine St.

Building Type:

Research / Teaching Facility

Unit I.D:

PE1, PE2 & PE3, FE4

Type of System(s):

Overhead Geared Traction

A. General Information: PE1, PE2 & PE3

MD State I.D. Number:

Capacity (lbs.)/Loading: 3000 / Passenger

Rated Speed (fpm):

350

Floors Served:

Nine (9) @ 1 – 9 (PE1 & PE2)

ST1277 / ST1278 / ST1279

Ten (10) @ B, 1-9 (PE3)

Machine Type:

Dover (TKE) GD-1 Geared Traction

Control Type:

TAC 50 microprocessor

Sequence of Operation:

Triplex (3 car group)

Door Configuration/Size:

Single Speed Center Opening/42" wide x 84" high

O.E.M. /Date of Installation:

Armor / 1975

Modernization Contractor/Date:

Dover (TKE) / 2004 UMB Elevator Shop

Present Service Company:

2017 / Annual

Date / Type of Last Testing:

July 2015 / 5 year

B. General Information: FE4

MD State I.D. Number:

Capacity (lbs.)/Loading:

Rated Speed (fpm):

ST1280 8000 / Freight

Floors Served:

200

Daan Onaninan

Thirteen (13) @ B, G, PED, 2 – 9, PH, MEZ One (1) @ G

Rear Openings: Machine Type:

Dover (TKE) GD 300 Geared Traction

Control Type:

TAC 50 microprocessor

Sequence of Operation:

Simplex

Door Configuration/Size:

PEELE Power Doors/54" wide x 84" high

O.E.M. /Date of Installation:

Armor / 1975

Modernization Contractor/Date:

Dover (TKE) / 2004 UMB Elevator Shop

Present Service Company: Date / Type of Last Testing:

2017 / Annual

September 2015 / 5 year



Executive Summary

for

UMB Pearl Street Garage & Offices, 622 W. Fayette St.

Ashland conducted a maintenance audit during the third week of August, 2017, in order to determine the maintained condition of the elevators at 622 W. Fayette Street. The parking garage is served by three (3) overhead geared traction passenger elevators that are original as installed in 1990 by Otis Elevator. The units are in fair condition for their age and are scheduled for a complete modernization in 2017. The office areas are served by one (1) direct lift hydraulic passenger elevator, one (1) direct lift hydraulic freight elevator, a material lift and hydraulic dock leveler unit which were installed in 1992.

The major elevator components systems in the parking garage elevators have reached the end of their net useful life and should be modernized. The passenger and freight elevators in the office area also should be budgeted for control and door operator upgrades within the next 3–5 years. Preventive maintenance procedures need improvement along with housekeeping.

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST1266), PE2 (ST1207), PE3 (ST1208), PE4 (ST1209), FE5 (ST1931), and Dock Leveler (ML6)

DATE: August 17, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

COMPLIANCE ITEM/CATEGORY	S	U	CONDITION COMMENTS
ASME A17.1 Safety Code	X		Per 1987 Code Year
Cab Enclosure (layout, door size, illumination and flooring)	X		
Car Operating Panel(s) (design, location and function)		X	No Braille on car stations
Car Signals and Communications (indicators and communications)		X	Hand held telephone receiver
Car and Corridor Entrances (size, signage and Re-opening device)	X		
Corridor Fixtures (operation, signals and location)	X		
Operational Functions (automatic leveling and door timing)	X		

Additional Notes and Evaluation Clarifications

Scheduled to be modernized / upgraded in 2016-2017. (PE1 - PE3) Original as installed in 1992. (PE4)

Recorded Operating Performance

Single Speed Side Opening 42" wide X 84" high	ELEV. NO. PE1	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	N/O	333-367
B. SPEED - DOWN DIRECTION (FPM)	309*	333-367
C. DOOR OPENING TIME (SEC)	2.4	2.2 - 2.4
D. DOOR CLOSING TIME (SEC)	4.0	4.4 – 4.6
E. DOOR OPEN DURATION - CAR CALL (SEC)	3.9	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	3.5*	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	2.4*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	14.2*	14.5 – 15.5
I. STOPPING ACCURACY (INCHES)	3/8	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	30+*	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

 $N\!/A$ - denotes standard is "Not Applicable" to these systems. $N\!/O$ - denotes "Not Operative" at time of evaluation.

Single Speed Center Opening 42" wide X 84" high	ELEV. NO. PE2	ELEV. NO. PE3	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	N/O	N/O	333-367
B. SPEED - DOWN DIRECTION (FPM)	320*	327*	333-367
C. DOOR OPENING TIME (SEC)	1.4	2.8*	1.2 - 1.4
D. DOOR CLOSING TIME (SEC)	3.4*	3.4*	2.4 – 2.6
E. DOOR OPEN DURATION - CAR CALL (SEC)	5.6	3.7	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	5.5	4.1*	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	5.7*	3.9*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	13.0*	13.0*	11.5 – 12.5
I. STOPPING ACCURACY (INCHES)	3/8	3/8	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	30+*	30+*	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation

			
Single Speed Center Opening 42" wide X 84" high	ELEV. NO. PE4 Front	ELEV. NO. PE4 Rear	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	N/E	N/A	95 – 105
B. SPEED - DOWN DIRECTION (FPM)	N/E	N/A	95 - 105
C. DOOR OPENING TIME (SEC)	1.6	1.5	1.4 - 1.6
D. DOOR CLOSING TIME (SEC)	2.9	3.6*	2.8 – 3.0
E. DOOR OPEN DURATION - CAR CALL (SEC)	3.4	3.5	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	5.0	5.4	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	1.0	.6	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	15.5	N/A	15.5 – 16.5
I. STOPPING ACCURACY (INCHES)	1/4	1/4	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	22	24	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

 $N\!/A$ - denotes standard is "Not Applicable" to these systems. $N\!/O$ - denotes "Not Operative" at time of evaluation

Elevator Machine Room (PE1 – PE3):

- 1. Organize spare parts and discard old parts (outstanding from last year's report).
- 2. Clean rope dust from PE2 machine and determine cause (outstanding from last year's report).
- 3. Modernization started on PE1.

Common Items (all cars):

- 1. Clean elevator car tops of dirt, debris, parts and tools (outstanding from last year's report).
- 2. Sweep elevator pits (outstanding from last year's report).
- 3. Clean and adjust hoistway door equipment for smooth operation (outstanding from last year's report).
- 4. Adjust door operating times to within industry acceptable standards (outstanding from last year's report).
- 5. Dispatching issues.
- 6. Correct Unit ID on COP.

Elevator Machine Room (PE4 & FE5):

- 1. Update Fireman's Service Test Log.
- 2. Annual elevator testing appears overdue.
- 3. Clean elevator machine room.
- 4. Remove foreign equipment stored in machine room.

PE4

- 1. DOL needs adjustment, front and rear, to allow full open (outstanding from last year's report).
- 2. Preventive maintenance on all door equipment overdue (outstanding from last year's report).
- 3. Prevent doors from slamming closed.
- 4. Provide Unit ID on COP.
- 5. No car top inspection operation.
- 6. Provide pit light.
- 7. Replace controller cover.
- 8. Last Annual inspection was May of 2016.

FE5

- 1. Annual inspection overdue (May 2016).
- 2. Remove or replace old smoke detectors in elevator machine room.
- 3. Replace burned out cab light.

Dock Leveler (ML6)

- 1. Platform rusty; clean and repaint (outstanding from last year's report).
- 2. Lubricate all pivot points.

Vertical Transportation Systems Profile

Location:

622 W. Fayette Street

Building Type:

Garage

Unit I.D:

PE1, PE2 & PE3, PE4, FE5

Type of System(s):

Overhead Geared Traction

General Information: PE1 A.

MD State I.D. Number:

Capacity (lbs.)/Loading:

Rated Speed (fpm):

Floors Served:

Machine Type:

Control Type:

Sequence of Operation:

Door Configuration/Size:

O.E.M. /Date of Installation:

Modernization Contractor/Date:

Present Service Company:

Date / Type of Last Testing:

ST1266

3500 / Passenger

350

Seven (7) @ G, 2 - 6, R

Otis "270 Wrap" Geared Traction

Otis Relay

Three (3) car group

Single Speed Side Slide / 42" wide x 84" high

Otis / 1990

N/A

UMB Elevator Shop July 2015 / 5 year

B. General Information: PE2 & PE3

MD State I.D. Number:

Capacity (lbs.)/Loading:

Rated Speed (fpm):

Floors Served:

Machine Type:

Control Type:

Sequence of Operation:

Door Configuration/Size:

O.E.M. /Date of Installation:

Modernization Contractor/Date:

Present Service Company: Date / Type of Last Testing:

ST1207 / ST1208

3000 / Passenger

350

Six (6) @ G, 3 - 6, R

Otis "270 Wrap" Geared Traction

Otis Relay

Three (3) car group

Single Speed Center Opening/42" wide x 84" high

Otis / 1990

N/A

UMB Elevator Shop

July 2015 / 5 year

C. General Information: PE4

MD State I.D. Number:

Capacity (lbs.)/Loading:

Rated Speed (fpm):

Floors Served:

Rear Openings: Machine Type:

Control Type:

Sequence of Operation: Door Configuration/Size: ST1209

3500 / Passenger

100

Three (3) @ 1, L, 2

Two (2) @ 1 & 2

Otis Dry V-belt pump unit Otis Relay / Solid State

Simplex

Single Speed Center Opening/42" wide x 84" high

O.E.M. /Date of Installation:

Modernization Contractor/Date:

Present Service Company: Date / Type of Last Testing: Otis Elevator / 1992

N/A

UMB Elevator Shop Annual / May 2016.

D. General Information: FE5

MD State I.D. Number:

Capacity (lbs.)/Loading:

Rated Speed (fpm):

Floors Served:

Machine Type:

Control Type:

Sequence of Operation:

Door Configuration/Size:

O.E.M. /Date of Installation:

Modernization Contractor/Date:

Present Service Company: Date / Type of Last Testing:

ST1931

6000 / Freight

100

Two (2) @ G & 1

Dover submersible pump unit

Dover Relay (WCR)

Simplex

Manual bi-parting freight doors/96" wide x 96" high

Dover Elevator / 1992

N/A

UMB Elevator Shop May 2016 / Annual



Executive Summary

for

UMB Penn Street Parking Garage, 120 S. Penn St.

Ashland conducted a maintenance audit during the fourth week of August, 2017, in order to determine the maintained condition of the elevators at 120 S. Penn Street. The parking garage is served by three (3) overhead geared traction passenger elevators that were modernized in 2012 by Delaware Elevator. The units are relatively well maintained with only a few minor deficiencies noted.

The major elevator components systems should serve this building well for the next 15–20 years with no major upgrades needed. Car tops and pit areas show signs of surface rust on all equipment.

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST1235), PE2 (ST1236), and PE3 (ST1237)

DATE: August 23, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

X		Per 2010 Code Year.
37		
X		
X		
X		
X		
X		
nd E	evalu	nation Clarifications
	X X X	X X

				
Single Speed Center Opening 42" wide X 84" high	ELEV. NO. PE1	ELEV. NO. PE2	ELEV. NO. PE3	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	350	346	350	333-367
B. SPEED - DOWN DIRECTION (FPM)	350	348	370*	333-367
C. DOOR OPENING TIME (SEC)	2.6*	2.0*	1.6*	2.2 - 2.4
D. DOOR CLOSING TIME (SEC)	4.9*	5.5*	4.6	4.4 – 4.6
E. DOOR OPEN DURATION - CAR CALL (SEC)	4.0	4.0	4.0	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	6.0	6.0	6.0	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	1.8*	2.4*	1.8*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	14.0	14.0	13.0	13.5 – 14.5
I. STOPPING ACCURACY (INCHES)	1/8	1/4	1/2	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	30+	25	30	30 max.

^{*} DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation

Common Items (all cars):

- 1. Perform door maintenance; adjust and lubricate locks and pick up rollers.
- 2. Provide door operator maintenance and lubrication.
- 3. Clean surface rust.
- 4. Lubricate selector tape guides.
- 5. Clean pits.
- 6. Provide Category 1 test tags.
- 7. Clean car tops.

PE1:

- 1. Clean car top.
- 2. Repair damaged traveling cable.
- 3. Clean door equipment and lubricate.

PE2:

1. Adjust and lubricate loose, rusted operator chain.

PE3:

- 1. Adjust and lubricate loose, rusted operator chain.
- 2. Replace broken MOV on relays BK1, BK2, and BK4.

Vertical Transportation Systems Profile

Location:

120 S. Penn Street

Building Type:

Garage

Unit I.D:

PE1, PE2 & PE3

Type of System(s):

Overhead Gearless Traction

General Information: PE1, PE2 & PE3 A.

MD State I.D. Number:

ST1235 / ST1236 / ST1237

Capacity (lbs.)/Loading:

3500 / Passenger

Rated Speed (fpm):

350

Floors Served:

Ten (10) @ 1 - 10

Machine Type:

Hollister Whitney AC Gearless Virginia Controls, MVFCL

Control Type:

Three (3) car group

Sequence of Operation:

Single Speed Side Opening / 42" W x 84" H

Door Configuration/Size:

Unknown / 1980's

O.E.M. /Date of Installation: Modernization Contractor/Date:

Delaware Elevator / 2012

Present Service Company:

UMB Elevator Shop

Date / Type of Last Testing:

January 2017 / Annual



Executive Summary

for

UMB Pharmacy Hall, 20 N. Pine St.

Ashland conducted a maintenance audit during the second week of August, 2017, in order to determine the maintained condition of the elevators at 20 N. Pine Street. The school building is served by five (5) overhead geared traction passenger elevators of which three (3) were modernized in 2009 by Delaware Elevator and two (2) were newly installed by Otis in 2009. The units are relatively well maintained with housekeeping needing some improvement. Hoistway door equipment requires increased preventive maintenance frequency. Annual safety tests appear to be overdue for many of the units, as well as many of the annual certificates.

The major elevator components systems should serve this building well for the next 15–20 years with no major upgrades needed.

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST1289), PE2 (ST1290), PE3 (ST1291), PE4 (ST5610), and PE5 (ST5611)

DATE: August 8, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

COMPLIANCE ITEM/CATEGORY	S	U	CONDITION COMMENTS
COMPLIANCE ITEM/CATEGORT	3		CONDITION COMMENTS
ASME A17.1 Safety Code	X		Per 2007 Code Year
Cab Enclosure (layout, door size, illumination and flooring)	X		
Car Operating Panel(s) (design, location and function)	X		
Car Signals and Communications (indicators and communications)	X		
Car and Corridor Entrances (size, signage and Re-opening device)	X		
Corridor Fixtures (operation, signals and location)	X		
Operational Functions (automatic leveling and door timing)	X		

Additional Notes and Evaluation Clarifications

Completed a modernization / upgrade in 2009 (PE1, PE2 & PE3) Newly installed in 2009 (PE4 & PE5)

Recorded Operating Performance

Single Speed Center Opening 42" wide X 84" high	ELEV. NO. PE1	ELEV. NO. PE2	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	350	350	333 – 367
B. SPEED - DOWN DIRECTION (FPM)	350	350	333 – 367
C. DOOR OPENING TIME (SEC)	1.8*	2.6*	1.2 – 1.4
D. DOOR CLOSING TIME (SEC)	4.5*	3.8*	2.4 – 2.6
E. DOOR OPEN DURATION - CAR CALL (SEC)	3.6	5.0	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	5.5	5.4	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	.8	2.2	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	13.0*	11.4	11.5 – 12.5
I. STOPPING ACCURACY (INCHES)	1/8	1/8	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	26	26	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

Single Speed Side Opening	ELEV.	ACCEPTABLE
Single Speed Side Opening 42" wide X 84" high	NO.	STANDARDS FOR THIS
	PE3	EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	350	333-367
B. SPEED - DOWN	350	333-367
DIRECTION (FPM)	330	333 307
C. DOOR OPENING TIME (SEC)	3.2*	2.4 - 2.6
D. DOOR CLOSING TIME	4.7	4.8 - 5.0
(SEC)	1.,	1.0 3.0
E. DOOR OPEN DURATION	5.0	3.0 minimum
- CAR CALL (SEC)	2.0	3,0 111111111111111
F. DOOR OPEN DURATION	7.0	5.0 minimum
- HALL CALL (SEC)	,	
G. DOOR OPEN DURATION		
- AFTER PROTECTIVE	3.0*	.5 – 1.0
SHIELD IS RE-		
ESTABLISHED (SEC) H. FLOOR TO FLOOR		
PERFORMANCE TIME	17.0	14.5 – 15.5
(SEC)	17.0	17.5 15.5
I. STOPPING ACCURACY	1/0 1/4	. 17
(INCHES)	1/8-1/4	± ½
J. CAR DOOR CLOSING	25	30 max.
PRESSURE (LBS)	23	ou max.

^{*} DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

Two Speed Side Opening 48" wide X 84" high	ELEV. NO. PE4	ELEV. NO. PE5	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	350	355	333 – 367
B. SPEED - DOWN DIRECTION (FPM)	355	342	333 – 367
C. DOOR OPENING TIME (SEC)	2.9	2.6	2.8 – 3.0
D. DOOR CLOSING TIME (SEC)	4.2	4.9	5.6 – 5.8
E. DOOR OPEN DURATION - CAR CALL (SEC)	4.2	4.1	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	6.5	6.5	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	1.8	2.1*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	18.1*	20.7*	16.5 – 17.5
I. STOPPING ACCURACY (INCHES)	1/8	1/8	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	29	27	30 max.

^{*} DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation

Elevator Machine Rooms:

- 1. Machine rooms are clean.
- 2. Organize prints and store in proper location (outstanding from last year's report).
- 3. Provide fireman's service test log (outstanding from last year's report).
- 4. No current test tags (Category 1) on controller.

Common Items (all cars):

- 1. Pits need to be cleaned (outstanding from last year's report).
- 2. Clean car and hoistway door sills of dirt and debris.
- 3. Adjust door operating times to meet industry standards.

PE1

- 1. Lubricate machine brake pins (outstanding from last year's report).
- 2. Emergency communication non-operational.

PE2

- 1. Lubricate machine brake pins (outstanding from last year's report).
- 2. Remove surface rust and paint machine (outstanding from last year's report).
- 3. Emergency communication non-operational.

PE3

- 1. Emergency communication non-operational.
- 2. Annual inspection past due.
- 3. Annual inspection certificate past due.
- 4. Fireman's Service testing past due.
- 5. Clean pit.
- 6. Replace bad counterweight roller guide.

PE4

- 1. Clean metal shavings from around machine drive sheave, determine cause and correct (outstanding from last year's report).
- 2. Clean up rope dust from around machine, investigate and correct cause.
- 3. Annual inspection paperwork missing date.
- 4. Smoke and heat testing not current.
- 5. Clean pit.
- 6. Replace selector cover.
- 7. Annual inspection certificate past due.

PE5

- 1. Clean car top (outstanding from last year's report).
- 2. Annual inspection paperwork missing date.
- 3. Annual inspection certificate past due.
- 4. Smoke and heat testing not current.
- 5. Traveling cable damaged.
- 6. Emergency communication nonoperational.
- 7. Counterweight shackle, hobble broken.
- 8. Replace door operator belt.
- 9. Smoke and heat and Annual inspection past due.

- 10. Car top light nonoperational.
- 11. Door operator belt to be replaced.

Vertical Transportation Systems Profile

Location:

20 N. Pine Street

Building Type:

School

Unit I.D:

PE1 & PE2, PE3, PE4 & PE5

Type of System(s):

Overhead Geared Traction

A. General Information: PE1 & PE2

> MD State I.D. Number: Capacity (lbs.)/Loading:

ST1289 / ST1290 2500 / Passenger

Rated Speed (fpm):

350

Floors Served:

Seven (7) @ 1 - 7

Machine Type:

Hollister Whitney Geared Traction

Control Type:

Virginia Controls, MVFCL

Sequence of Operation:

Duplex

Door Configuration/Size:

Single Speed Center Opening/42" wide x 84" high

O.E.M. /Date of Installation: Modernization Contractor/Date:

Armor Elevator / 1981 Delaware Elevator / 2009

Present Service Company:

UMB Elevator Shop

Date / Type of Last Testing:

2017 / Annual

В. General Information: PE3

MD State I.D. Number:

ST1291

Capacity (lbs.)/Loading:

3500 / Passenger - Service

Rated Speed (fpm):

Floors Served:

Seven (7) @ 1 - 7

Machine Type:

Hollister Whitney Geared Traction

Control Type:

Virginia Controls, MVFCL

Sequence of Operation:

Simplex

Door Configuration/Size:

Single Speed Side Opening/42" wide x 84" high

O.E.M. /Date of Installation:

Armor Elevator / 1981 Delaware Elevator / 2009

Modernization Contractor/Date: Present Service Company:

UMB Elevator Shop

Date / Type of Last Testing:

July 2016 / 5-year

C. General Information: PE4 & PE5

MD State I.D. Number:

ST5610 / ST5611 4500 / Passenger

Capacity (lbs.)/Loading: Rated Speed (fpm):

Floors Served:

Nine (9) a B, 1 – 8 (PE4)

Machine Type:

Seven (7) @ 1 - 7 (PE5) Hollister Whitney Geared Traction

Control Type:

Virginia Controls, MVFCL

Sequence of Operation:
Door Configuration/Size:
O.E.M. /Date of Installation:
Modernization Contractor/Date:
Present Service Company:
Date / Type of Last Testing:

Duplex Two Speed Side Opening / 48" wide X 96" high Otis / 2009 N/A UMB Elevator Shop June 2016 / Annual



Executive Summary

for

UMB Plaza Garage, 500 W. Redwood St.

Ashland conducted a maintenance audit during the fifth week of August, 2017, in order to determine the maintained condition of the elevators at 500 W. Redwood Street. The parking garage is served by two (2) direct lift hydraulic passenger elevators that are original as installed in 1997 by Dover Elevator. The units are heavily used and there is a project underway to add an additional elevator to serve the garage, making a duplex set of elevators. Preventive maintenance procedures are lacking by evidence of the deficiency list. Due to the heavy use these units would appear to need "after hours" maintenance because the facility can't afford to have a unit out of service for very long, if at all.

The major elevator components systems should serve this building well for the next 5–7 years with no major upgrades needed. In the pit areas there is evidence of water intrusion, water and debris that requires cleaning and water sealing the pits. The hydraulic oil needs to be cleaned from the machine room floor.

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST2065) and PE2 (ST2278) (*PE2 scheduled for replacement, under contract with Delaware Elevator)

DATE: August 30, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

COMPLIANCE ITEM/CATEGORY	S	U	CONDITION COMMENTS
ASME A17.1 Safety Code	X		Per 1992 Code Year.
Cab Enclosure (layout, door size, illumination and flooring)	X		
Car Operating Panel(s) (design, location and function)	X		
Car Signals and Communications (indicators and communications)	X		
Car and Corridor Entrances (size, signage and Re-opening device)	X		
Corridor Fixtures (operation, signals and location)	X		
Operational Functions (automatic leveling and door timing)	X		

Additional Notes and Evaluation Clarifications

Modernized in 1997 (PE1) Installed new in 1996 (PE2)

Recorded Operating Performance

Single Speed Center Opening 42" wide X 84" high	ELEV. NO. PE1	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	150*	95 - 105
B. SPEED - DOWN DIRECTION (FPM)	115*	95 - 105
C. DOOR OPENING TIME (SEC)	4.7*	1.4 – 1.6
D. DOOR CLOSING TIME (SEC)	4.7*	2.8 – 3.0
E. DOOR OPEN DURATION - CAR CALL (SEC)	7.8	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	3.9*	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	4.0*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	22.0*	15.5 – 16.5
I. STOPPING ACCURACY (INCHES)	1/2	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	25	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

Single Speed Side Opening 42" wide X 84" high	ELEV. NO. PE2	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	N/E	95 - 105
B. SPEED - DOWN DIRECTION (FPM)	N/E	95 - 105
C. DOOR OPENING TIME (SEC)	3.6*	2.2 – 2.4
D. DOOR CLOSING TIME (SEC)	4.1	4.4 – 4.6
E. DOOR OPEN DURATION - CAR CALL (SEC)	1.5*	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	3.9*	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	.5	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	19.5	18.5 – 19.5
I. STOPPING ACCURACY (INCHES)	1/2	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	30+*	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

Elevator Machine Rooms:

1. No HVAC in room (PE2) (outstanding from last year's report).

Common Items

- 1. Clean car tops (outstanding from last year's report).
- 2. Clean pit areas (outstanding from last year's report).
- 3. Clean car and hoistway door sills of dirt and debris (outstanding from last year's report).
- 4. Provide Category 1 test tags.

PE1

- 1. Replace bulbs in car station push buttons (outstanding from last year's report).
- 2. Door bucks (entrances) are rusting due to moisture exposure (outstanding from last year's report).
- 3. Clean oil from drip pan below pump & pump motor (outstanding from last year's report).
- 4. Clean and lubricate door equipment.
- 5. Car sill groove worn from worn out door gib.
- 6. Elevator machine room door will not lock.

PE2

- 1. Fasten car station panel to cab; replace missing hardware (outstanding from last year's report).
- 2. Adjust DOL for full open of car/hoistway doors (outstanding from last year's report).
- 3. Replace missing PI lights.
- 4. Adjust door operation (doors jerk open and slam closed).
- 5. Replace missing door operator cover.
- 6. Remove rags from car top.
- 7. Door bucks (entrances) are rusting due to moisture.

Vertical Transportation Systems Profile

Location:

500 W. Redwood St.

Building Type:

Garage

Unit I.D:

PE1 & PE2

Type of System(s):

Direct Lift Hydraulic

A. General Information: PE1

MD State I.D. Number:

ST2065

Capacity (lbs.)/Loading:

3500 / Passenger

Rated Speed (fpm):

Floors Served:

Five (5) @ P (Plaza), S, 1/2, 3/4 & 5/6 (PE1)

Machine Type:

Dry V-Belt Pump Unit

Control Type:

Dover LMH

Sequence of Operation:

Simplex

Door Configuration/Size:

O.E.M. /Date of Installation:

Single Speed Center Opening/42" wide x 84" high

Unknown / Unknown

Modernization Contractor/Date: Present Service Company: Date / Type of Last Testing: Dover (TKE) / 1997 UMB Elevator Shop January 2017 / 1 year

B. General Information: PE2

MD State I.D. Number: Capacity (lbs.)/Loading:

Rated Speed (fpm): Floors Served:

Machine Type:

Control Type:

Sequence of Operation:

Door Configuration/Size:

O.E.M. /Date of Installation:

Modernization Contractor/Date:

Present Service Company: Date / Type of Last Testing: ST2278

3500 / Passenger

100

Four (4) @ S (Street), 1/2, 3/4 & 5/6 (PE2)

Dry V-Belt Pump Unit

Dover DMC-1

Simplex

Single Speed Side Opening/42" wide x 84" high

Dover (TKE) / 1997

N/A

UMB Elevator Shop January 2017 / 1 year



Executive Summary

For

UMB Pratt Street Parking Garage, 646 W. Pratt St.

Ashland conducted a maintenance audit during the fourth week of August, 2017, in order to determine the maintained condition of the elevators at 646 W. Pratt Street. The parking garage is served by four (4) overhead geared traction passenger elevators that were modernized in 2008 by ELCON.

The major elevator components systems should serve this building well for the next 10–15 years with no major upgrades needed. All equipment requires regularly scheduled preventative maintenance; equipment reflects major neglect.

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST1281), PE2 (ST1282), PE3 (ST1283) & PE4 (ST1284), and WCL (ST5574 *located in gym, and for details see report for Campus Center, 621 W. Lombard St.)

DATE: August 23, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

COMPLIANCE ITEM/CATEGORY	S	U	CONDITION COMMENTS
ASME A17.1 Safety Code	X		Per 2003 Code Year.
Cab Enclosure (layout, door size, illumination and flooring)	X		
Car Operating Panel(s) (design, location and function)	X		,
Car Signals and Communications (indicators and communications)	X		
Car and Corridor Entrances (size, signage and Re-opening device)	X		
Corridor Fixtures (operation, signals and location)	X		
Operational Functions (automatic leveling and door timing)	X		
Additional Notes a	nd E	valu	nation Clarifications
Completed a modernization / upgrade in 2008.			

	I	T T	T T		ACCEPTABLE
Single Speed Center Opening	ELEV. NO.	ELEV. NO.	ELEV. NO.	ELEV. NO.	ACCEPTABLE STANDARDS
42" wide X 84" high	1	2	3	4	FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	350	350	350	350	333 – 367
B. SPEED - DOWN DIRECTION (FPM)	350	347	350	350	333 – 367
C. DOOR OPENING TIME (SEC)	2.2*	3.2*	2.4*	2.2*	1.2 – 1.4
D. DOOR CLOSING TIME (SEC)	2.5	3.3*	1.8*	2.6	2.4 – 2.6
E. DOOR OPEN DURATION - CAR CALL (SEC)	4.0	4.5	3.0	3.9	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	1.8*	8.7	7.0	6.6	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	1.0	1.2*	0.5	1.1*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	14.0*	13.7*	16.0*	N/E	11.5 – 12.5
I. STOPPING ACCURACY (INCHES)	1/8-1/4	1/8	1/4-1/2	1/4	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	30+*	23	30	27	30 max.

^{*} DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

Elevator Machine Rooms:

1. Provide Category 1 test tags.

Common Items (all cars):

- 1. Pits and car tops need to be cleaned (outstanding from last year's report).
- 2. Clean car and hoistway door sills of dirt and debris (outstanding from last year's report).
- 3. Selector tape is rusted; lubricate guides.
- 4. PM brakes (very dry with rusted pins).
- 5. Clean door equipment and provide maintenance.
- 6. Clean inside controller dust build-up.

PE1

- 1. Emergency Communication volume very low and static-sounding.
- 2. Repair non-functioning door restrictor.
- 3. Replace missing car top light guard.
- 4. Remove water from pit.
- 5. Repair dim pit lights.
- 6. Replace 20-amp fuse in 4-amp circuit.

PE2

- 1. Door operator chain is loose and dry; lubricate and adjust.
- 2. Door restrictor is non-operational.
- 3. Correct car arrival lanterns; "up" and "down" are active at the same time.
- 4. Adjust floor stops.
- 5. Replace 5-amp fuse in 4-amp circuit.

PE3

- 1. Adjust / lubricate hoistway doors for automatic closing (outstanding from last year's report).
- 2. Pit lights are dim; investigate and correct (outstanding from last year's report).
- 3. Bottom floor doors squeak.
- 4. Adjust floor stops.
- 5. Replace broken stud on brake switch.
- 6. Governor cable dragging on jaw.
- 7. Rope gripper pad rubbing cables.
- 8. Check and correct fuse sizes in controller.
- 9. Phone line connection hanging off wall in machine room.

PE4

- 1. Pit lights are dim; investigate and correct (outstanding from last year's report).
- 2. Governor cable dragging on jaw.
- 3. Rope gripper pad rubbing cables.
- 4. Phone line connection hanging off wall in machine room.

Vertical Transportation Systems Profile

Location:

646 W. Pratt Street

Building Type:

Garage

Unit I.D:

PE1 & PE2, PE3 & PE4

Type of System(s):

Overhead Geared Traction

A. General Information: PE1, PE2 & PE3

MD State I.D. Number:

ST1281 / ST1282 / ST1283

Capacity (lbs.)/Loading:

2500 / Passenger

Rated Speed (fpm):

350

Floors Served:

Eleven (11) @ B2, B1, 1 - 9

Machine Type:

Hollister Whitney Geared Traction

Control Type:

Swift Futura

Sequence of Operation:

Duplex (PE1 & PE2)

Simplex (PE3)

Door Configuration/Size:

Single Speed Center Opening/42" wide x 84" high

O.E.M. /Date of Installation:

Unknown/ 1983

Modernization Contractor/Date:

Elevator Control Service (ELCON) / 2008

Present Service Company: Date / Type of Last Testing: UMB Elevator Shop December 2014 / 5 year

January 2017 / Annual

B. General Information: PE4

MD State I.D. Number:

ST1284

Capacity (lbs.)/Loading:

2500 / Passenger

Rated Speed (fpm):

350

Floors Served:

Two (2) @ 7 & 10

Machine Type:

Hollister Whitney Geared Traction

Control Type:

Swift Futura

Sequence of Operation:

Simplex

Door Configuration/Size:

Single Speed Center Opening/42" wide x 84" high

O.E.M. /Date of Installation:

Unknown/ 1983

Modernization Contractor/Date:

Elevator Control Service (ELCON) / 2008 UMB Elevator Shop

Present Service Company:

December 2014 / 5 year

Date / Type of Last Testing:

January 2017 / Annual

Note: PE4 serves the fitness center on the 10th floor of the parking garage. Access is through the 4th floor of the Campus Center which is the 7th floor of the parking garage. This car only serves floors 7 and 10 of the garage, all other car call buttons are inactive.



Executive Summary

for

UMB Saratoga Garage & Offices, 220 N. Arch St.

Ashland conducted a maintenance audit during the third week of August, 2017, in order to determine the maintained condition of the elevators at 220 N. Arch Street. The office building is served by two (2) overhead geared traction passenger elevators and the parking garage below the offices is served by three (3) overhead geared traction passenger elevators that are all original as installed in 2003 by Otis Elevator. The units are relatively well maintained with most of the deficiencies related to items in the elevator hoistways. Testing appears to be overdue on the garage elevators and should be scheduled as soon as possible.

The major elevator components systems should serve this building well for the next 10–15 years with no major upgrades needed. Housekeeping needs to improve for the garage elevators and preventive maintenance is sporadic, at best.

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST5073), PE2 (ST5072), PE3 (ST5069), PE4 (ST5070), and PE5 (ST5071)

DATE: August 17, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

COMPLIANCE ITEM/CATEGORY	S	U	CONDITION COMMENTS
ASME A17.1 Safety Code	X		Per 2000 Code Year.
Cab Enclosure (layout, door size, illumination and flooring)	X		
Car Operating Panel(s) (design, location and function)	X		
Car Signals and Communications (indicators and communications)	X		
Car and Corridor Entrances (size, signage and Re-opening device)	X		
Corridor Fixtures (operation, signals and location)	X		
Operational Functions (automatic leveling and door timing)	X		

Two Speed Side Opening 48" wide X 96" high	ELEV. NO. PE1	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	365	333 – 367
B. SPEED - DOWN DIRECTION (FPM)	345	333 – 367
C. DOOR OPENING TIME (SEC)	3.7*	2.7 – 2.9
D. DOOR CLOSING TIME (SEC)	5.7*	4.0 – 4.2
E. DOOR OPEN DURATION - CAR CALL (SEC)	2.0*	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	4.2*	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	.8	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	16.8*	13.5 – 14.5
I. STOPPING ACCURACY (INCHES)	5/8*	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	25	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation

Single Speed Center Opening 42" wide X 84" high	ELEV. NO. PE2	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	350	333 – 367
B. SPEED - DOWN DIRECTION (FPM)	350	333 – 367
C. DOOR OPENING TIME (SEC)	1.5	1.5 – 1.7
D. DOOR CLOSING TIME (SEC)	3.6*	2.3 – 2.5
E. DOOR OPEN DURATION - CAR CALL (SEC)	4.3	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	5.0	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	1.0	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	11.6	11.5 – 12.5
I. STOPPING ACCURACY (INCHES)	1/4	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	30+*	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

 $N\!/A$ - denotes standard is "Not Applicable" to these systems. $N\!/O$ - denotes "Not Operative" at time of evaluation

Single Speed Center Opening 42" wide X 84" high	ELEV. NO. PE3	ELEV. NO. PE5	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	350	350	333 – 367
B. SPEED - DOWN DIRECTION (FPM)	350	350	333 – 367
C. DOOR OPENING TIME (SEC)	1.4	1.2	1.5 – 1.7
D. DOOR CLOSING TIME (SEC)	4.0*	3.5*	2.3 – 2.5
E. DOOR OPEN DURATION - CAR CALL (SEC)	2.4*	2.5*	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	4.0*	4.2*	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	1.0	.7	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	11.8	10.3	11.5 – 12.5
I. STOPPING ACCURACY (INCHES)	1/4	1/4	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	30+*	30+*	30 max.

^{*} DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

Single Speed Center Opening 48" wide X 84" high	ELEV. NO. PE4	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	350	333 – 367
B. SPEED - DOWN DIRECTION (FPM)	350	333 – 367
C. DOOR OPENING TIME (SEC)	1.3	1.7 – 1.9
D. DOOR CLOSING TIME (SEC)	3.3*	2.5 – 2.7
E. DOOR OPEN DURATION - CAR CALL (SEC)	2.1*	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	4.2*	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	.9	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	9.9	12.0 – 13.0
I. STOPPING ACCURACY (INCHES)	1/4	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	30+*	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation

Maintenance Deficiencies

Common Items:

- 1. Clean elevator car tops—rags, oil cans, grease (outstanding from last year's report).
- 2. Hoistway door preventive maintenance is overdue (outstanding from last year's report).
- 3. Clean car and hoistway door sills of dirt & debris (outstanding from last year's report).
- 4. Clean elevator pits of dirt & debris (outstanding from last year's report).
- 5. Update Fire Service logs.
- 6. Provide Category 1 test tags.

PE1

- 1. Wrong unit certificate in certificate frame.
- 2. Stop switch on operator not stopping elevator.
- 3. Car top roller guides bad.
- 4. Grease on car top.
- 5. Clean rope dirt & debris from around traction machine; determine cause and repair (outstanding from last year's report).
- 6. Re-install shield on resistor bank in elevator controller cabinet (outstanding from last year's report).
- 7. Adjust floor stopping height.

PE2

- 1. Wrong unit certificate in certificate frame.
- 2. Car top light switch appears to have been wired to car door edge detector? Correct same (outstanding from last year's report).
- 3. Clean oil from car top.
- 4. Traveling cable jacket is cracked.
- 5. Break switch cover is missing.

PE3

- 1. Wrong unit certificate in certificate frame.
- 2. Cab floor tile is separating, causing a tripping hazard.
- 3. Replace bottom section of hatch duct cover.
- 4. Door operator mechanical stop is broken.

PE4

- 1. Wrong unit certificate in certificate frame.
- 2. Car top light switch appears to have been wired to car door edge detector? Correct same (outstanding from last year's report).

PE5

- 1. Wrong unit certificate in certificate frame.
- 2. Remove rags and other equipment from car top (outstanding from last year's report).
- 3. Emergency Communication calls out, but operator cannot hear.
- 4. COP Panel is open/unlocked at bottom.

Vertical Transportation Systems Profile

Location:

220 N. Arch St.

Building Type:

Parking Garage & Offices PE1 & PE2, PE3, PE4 & PE5

Unit I.D: Type of System(s):

Overhead Geared Traction

General Information: PE1& PE2 (Office) A.

MD State I.D. Number:

ST5073 / ST5072 5000 / Passenger (PE1)

Capacity (lbs.)/Loading:

3500 / Passenger (PE2)

Rated Speed (fpm):

Floors Served:

Five (5) @ G, 12 – 14, PH (PE1)

Four (4) @ G, 12 - 14 (PE2)

Machine Type: Control Type:

Otis 18ATF Geared Traction Otis LMCSS Microprocessor

Sequence of Operation:

Duplex

350

Door Configuration/Size:

Two Speed Side Slide/48" wide x 84" high (PE1)

Single Speed Center Opening/42" wide x 84" high (PE2)

O.E.M. /Date of Installation:

Otis / 2003

Modernization Contractor/Date:

N/A

Present Service Company: Date / Type of Last Testing: **UMB Elevator Shop** April 2017 / Annual

General Information: PE3, PE4 & PE5 (Garage) В.

MD State I.D. Number:

ST5069 / ST5070 / ST5071 3500 / Passenger (PE3 & PE5)

Capacity (lbs.)/Loading:

4000 / Passenger (PE4)

Rated Speed (fpm):

350

Floors Served:

Eleven (11) @ 1 – 11

Machine Type:

Otis 18ATF Geared Traction Otis LMCSS Microprocessor

Control Type: Sequence of Operation:

Triplex (3 car group)

Door Configuration/Size:

Single Speed Center Opening/42" wide x 84" high (PE3 & 5) Single Speed Center Opening/48" wide x 84" high (PE4)

Otis / 2003

O.E.M. / Date of Installation:

N/A

Modernization Contractor/Date:

UMB Elevator Shop

Present Service Company: Date / Type of Last Testing:



Executive Summary

for

UMB School of Dentistry, 650 W. Baltimore St.

Ashland conducted a maintenance audit during the second week of August, 2017, in order to determine the maintained condition of the elevators at 650 W. Baltimore Street. The school building is served by eight (8) elevators, one of which is a holeless hydraulic passenger elevator. The other seven (7) units are overhead geared traction passenger elevators. All equipment is original as installed in 2006 by TKE. As demonstrated by the lengthy list of deficiencies, preventive maintenance is overdue on all of the traction elevators. Annual safety tests appear to be overdue for all traction elevators. Annual safety test certificates appear to be past due. Annual inspection was due June 2017.

The major elevator components systems should serve this building well for the next 15–20 years with no major upgrades needed. Housekeeping also needs to improve and operational adjustments to the door equipment is required to meet industry performance standards.

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST5433), PE2 (ST5434), PE3 (ST5435), PE4 (ST5436), PE5 (ST5437), PE6 (ST5439), SE7 (ST5438), and PE8 (ST5440)

DATE: August 8, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

COMPLIANCE ITEM/CATEGORY	S	U	CONDITION COMMENTS
ASME A17.1 Safety Code	X		Per 2004 Code Year
Cab Enclosure (layout, door size, illumination and flooring)	X		
Car Operating Panel(s) (design, location and function)	X		
Car Signals and Communications (indicators and communications)	X		
Car and Corridor Entrances (size, signage and Re-opening device)	X		
Corridor Fixtures (operation, signals and location)	X		
Operational Functions (automatic leveling and door timing)	X		

All units installed new in 2006 – 2007

Recorded Operating Performance

Two Speed Side Opening 48" wide X 84" high	ELEV. NO. PE1	ELEV. NO. PE2	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	350	350	333 – 367
B. SPEED - DOWN DIRECTION (FPM)	350	350	333 – 367
C. DOOR OPENING TIME (SEC)	3.2*	6.0*	2.7 – 2.9
D. DOOR CLOSING TIME (SEC)	6.1*	6.3*	4.5 – 4.7
E. DOOR OPEN DURATION - CAR CALL (SEC)	4.5	4.2	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	3.9	5.0	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	3.0	2.0	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	19.2*	18.0*	14.5 – 15.5
I. STOPPING ACCURACY (INCHES)	1/8	1/8	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	22	20	30 max.

^{*} DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

Single Speed Center Opening 42" wide X 84" high	ELEV. NO. PE3	ELEV. NO. PE4	ELEV. NO. PE5	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	450	450	450	425 – 475
B. SPEED - DOWN DIRECTION (FPM)	450	450	450	425 - 475
C. DOOR OPENING TIME (SEC)	3.2*	2.6*	2.2*	1.7 – 1.9
D. DOOR CLOSING TIME (SEC)	5.9*	5.5*	5.8*	2.5 – 2.7
E. DOOR OPEN DURATION - CAR CALL (SEC)	5.7	4.3	6.5	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	6.1	5.5	6.3	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	2.4*	2.2*	3.0*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	15.8*	14.7*	18.0*	10.5 – 11.5
I. STOPPING ACCURACY (INCHES)	1/4	1/8	1/8	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	24	N/O	24	30 max.

^{*} DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation

Single Speed Center Opening 42" wide X 84" high	ELEV. NO. PE6	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	450*	333-367
B. SPEED - DOWN DIRECTION (FPM)	450*	333-367
C. DOOR OPENING TIME (SEC)	2.9*	1.7 – 1.9
D. DOOR CLOSING TIME (SEC)	4.7*	2.5 – 2.7
E. DOOR OPEN DURATION - CAR CALL (SEC)	3.1	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	4.3*	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	1.5*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	14.6*	11.5 – 12.5
I. STOPPING ACCURACY (INCHES)	1/8	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	30+*	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

 $N\!/A$ - denotes standard is "Not Applicable" to these systems. $N\!/O$ - denotes "Not Operative" at time of evaluation.

Two Speed Center Opening 66" wide X 84" high	ELEV. NO. SE7	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	350	333-367
B. SPEED - DOWN DIRECTION (FPM)	350	333-367
C. DOOR OPENING TIME (SEC)	4.7*	2.8 - 3.0
D. DOOR CLOSING TIME (SEC)	8.0*	4.3 – 4.5
E. DOOR OPEN DURATION - CAR CALL (SEC)	3.1	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	4.4*	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	2.0*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	11.6	11.5 – 12.5
I. STOPPING ACCURACY (INCHES)	1/4	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	24	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

Two Speed Side Opening 48" wide X 84" high	ELEV. NO. PE8	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	76*	140 – 160
B. SPEED - DOWN DIRECTION (FPM)	93*	140 - 160
C. DOOR OPENING TIME (SEC)	3.0	2.7 - 2.9
D. DOOR CLOSING TIME (SEC)	4.5	4.5 – 4.7
E. DOOR OPEN DURATION - CAR CALL (SEC)	3.0	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	6.7	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	2.1*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	25.8*	18.5 – 19.5
I. STOPPING ACCURACY (INCHES)	1/2	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	20	30 max.

^{*} DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

 $N\!/A$ - denotes standard is "Not Applicable" to these systems. $N\!/O$ - denotes "Not Operative" at time of evaluation.

Maintenance Deficiencies

Elevator Machine Rooms:

- 1. Organize prints and store in proper location.
- 2. Provide fireman's service test log.
- 3. Provide annual test tags (Category 1).

Common Items: (all cars)

- 1. Correct "shadowy" car position indicators inside cabs (outstanding from last year's report).
- 2. Clean car and hoistway sills of dirt & debris (outstanding from last year's report).
- 3. Clean elevator pits of dirt & debris (outstanding from last year's report).

PE1 & PE2

- 1. Hall Braille is missing at 5 floor level entrance frame (PE1) (outstanding from last year's report).
- 2. Investigate and correct operational noise when traveling between 5th and 6th floor levels (PE1) (outstanding from last year's report).
- 3. Properly attach governor rope that is taped on counterweight safety hitch (PE1).
- 4. Defective operator pulley cutting into belt (PE1).
- 5. Remove parts and tools from car top (PE1).
- 6. Interlock cover missing screw (PE1).
- 7. Rotate Danger Sign (PE1).
- 8. Annual inspection certificate past due (PE1).
- 9. Clean car top (PE2).
- 10. Annual inspection certificate past due (PE2).

PE3, PE4 & PE5

- 1. Greenfield worn on operator shaft (PE 3).
- 2. Investigate noisy machine (PE3).
- 3. Annual inspection certificate past due (PE3).
- 4. Replace light bulb on car top (PE4).
- 5. Operator belt cracked (PE4).
- 6. Investigate squeaky counterweight roller guides (PE4).
- 7. Hobble counterweight shackles (PE4).
- 8. Annual inspection certificate past due (PE4).
- 9. Annual inspection certificate past due (PE5).

PE6

- 1. Lubricate all hoistway & car door equipment.
- 2. Replace bearings on whisper-flex wheels in pit and adjust tension (outstanding from last year's report).
- 3. Remove water from pit.
- 4. Replace defective counterweight roller guide (top left-hand, rear).
- 5. Annual inspection certificate past due.

SE7

- 1. Door equipment overdue for regular preventive maintenance procedures.
- 2. Replace missing screws in car operating panel.

- 3. Monitor/replace damaged travel cable.
- 4. Clean car top; remove old parts.
- 5. Load weigher disconnected.
- 6. Repair broken greenfield where it attaches to duct.
- 7. Annual inspection past due.
- 8. Annual inspection certificate past due.

PE8

- 1. Clean pit.
- 2. Annual inspection certificate past due.

Vertical Transportation Systems Profile

Location:

650 W. Baltimore St.

Building Type:

Offices & Classrooms

Unit I.D:

B.

PE1 & PE2, PE3, PE4 & PE5, PE6, SE7, PE8

Type of System(s):

Overhead Geared Traction PE1 – PE6, SE7

Holeless Hydraulic PE8

A. General Information: PE1 & PE2

MD State I.D. Number:

ST5433 / ST5434

Capacity (lbs.)/Loading:

4500 / Passenger

Rated Speed (fpm):

350

Floors Served:

Six (6) @ 1 - 6

Machine Type:

Dover GD-2 Geared Traction

Control Type:

TKE TAC50

Sequence of Operation:

Duplex

Door Configuration/Size:

Two Speed Side Opening/48" wide x 84" high

O.E.M. /Date of Installation:

Dover TKE / 2006

Modernization Contractor/Date:

N/A

Present Service Company: Date / Type of Last Testing: **UMB** Elevator Shop June 2016 / Annual

General Information: PE3, PE4 & PE5

MD State I.D. Number:

ST5435 / ST5436 / ST5437

Capacity (lbs.)/Loading:

4000 / Passenger

Rated Speed (fpm):

450

Floors Served:

Ten (10) @ G, 1 - 9

Dover GD-300 Geared Traction

Machine Type: Control Type:

TKE TAC50

Sequence of Operation:

Triplex (3 car group)

Door Configuration/Size:

Single Speed Center Opening/42" wide x 84" high

O.E.M. /Date of Installation:

Dover TKE / 2006

Modernization Contractor/Date:

N/A

Present Service Company:

UMB Elevator Shop

Date / Type of Last Testing:

June 2016 / Annual

C. General Information: PE6

MD State I.D. Number:

Capacity (lbs.)/Loading:

Rated Speed (fpm):

Floors Served:

Machine Type:

Control Type:

Sequence of Operation:

Door Configuration/Size:

O.E.M. /Date of Installation:

Modernization Contractor/Date:

Present Service Company:

Date / Type of Last Testing:

ST5439

3500 / Passenger

350

Twelve (12) @ LL, G, 1-9, PH

Dover GD-300 Geared Traction

TKE TAC50

Simplex

Single Speed Center Opening/42" wide x 84" high

Dover TKE / 2006

N/A

UMB Elevator Shop

June 2016 / Annual

D. General Information: SE7

MD State I.D. Number:

Capacity (lbs.)/Loading:

Rated Speed (fpm):

Floors Served:

Machine Type:

Control Type:

Sequence of Operation:

Door Configuration/Size:

O.E.M. /Date of Installation:

Modernization Contractor/Date:

Present Service Company:

Date / Type of Last Testing:

ST5438

8000 / Passenger

350

Twelve (12) @ LL, G, 1-9, PH

Dover GD-300 Geared Traction

TKE TAC50

Simplex

Two Speed Center Opening/66" wide x 84" high

Dover TKE / 2006

N/A

UMB Elevator Shop

June 2016 / Annual

E. General Information: PE8

MD State I.D. Number:

Capacity (lbs.)/Loading:

Rated Speed (fpm):

Floors Served:

Machine Type:

Control Type:

Sequence of Operation:

Door Configuration/Size:

O.E.M. /Date of Installation:

Modernization Contractor/Date:

Present Service Company:

Date / Type of Last Testing:

ST5440

4500 / Passenger

Two (2) @ G & 1

Submersible pump unit

TKE TAC20

Simplex

Two Speed Side Opening/48" wide x 84" high

Dover TKE / 2007

N/A

UMB Elevator Shop

June 2016 / Annual



Executive Summary

for

UMB School of Nursing, 655 W. Lombard St.

Ashland conducted a maintenance audit during the third week of August, 2017, in order to determine the maintained condition of the elevators at 655 W. Lombard Street. The school building is served by three (3) overhead geared traction passenger elevators that are original as installed in 1998 by Otis Elevator in the South Wing and two (2) overhead geared traction passenger elevators that were modernized in 2004 by TKE in 2004. The units require improved preventive maintenance procedures and frequency as demonstrated by the list of deficiencies.

The major elevator components systems in the South Wing should serve this building well for the next 5–7 years with no major upgrades needed. The elevator equipment in the North Wing should serve the building well for the next 10–15 years. Improvement in housekeeping is also needed with rags, tools and replacement parts left on car tops, etc.

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST1537), PE2 (ST1551), and PE3 (ST1568) (SOUTH WING)

DATE: August 16, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

COMPLIANCE ITEM/CATEGORY	S	U	CONDITION COMMENTS
ASME A17.1 Safety Code	X	i	Per installation date of 1998.
Cab Enclosure (layout, door size, illumination and flooring)	X		
Car Operating Panel(s) (design, location and function)	X		
Car Signals and Communications (indicators and communications)	X		
Car and Corridor Entrances (size, signage and Re-opening device)	X		
Corridor Fixtures (operation, signals and location)	X		
Operational Functions (automatic leveling and door timing)		X	Car & Hall Call dwell times

Additional Notes and Evaluation Clarifications

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST1245), PE2 (ST1246) (NORTH WING), and WCL (ST1676)

DATE: August 16, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

COMPLIANCE ITEM/CATEGORY	S	U	CONDITION COMMENTS
ASME A17.1 Safety Code	X		Per modernization date of 2004.
Cab Enclosure (layout, door size, illumination and flooring)	X		
Car Operating Panel(s) (design, location and function)	X		
Car Signals and Communications (indicators and communications)	X		
Car and Corridor Entrances (size, signage and Re-opening device)	X		
Corridor Fixtures (operation, signals and location)	X		
Operational Functions (automatic leveling and door timing)	X		
Additional Notes a	nd E	valu	nation Clarifications

Recorded Operating Performance (SOUTH WING)

Single Speed Center Opening 42" wide X 84" high	ELEV. NO. PE1	ELEV. NO. PE2	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	350	350	333 - 367
B. SPEED - DOWN DIRECTION (FPM)	345	350	333 - 367
C. DOOR OPENING TIME (SEC)	1.5	5.4*	1.5 – 1.7
D. DOOR CLOSING TIME (SEC)	5.3*	3.4*	3.0 – 3.2
E. DOOR OPEN DURATION - CAR CALL (SEC)	2.5*	4.2	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	3.9*	3.8*	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	0.5	0.5	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	14.0*	16.3*	14.5 – 15.5
I. STOPPING ACCURACY (INCHES)	1/8	1/8	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	15	25	30 max.

^{*} DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

Recorded Operating Performance (SOUTH WING)

	,	
Two Speed Side Opening 54" wide X 84" high	ELEV. NO. PE3	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	350	333 – 367
B. SPEED - DOWN DIRECTION (FPM)	350	333 – 367
C. DOOR OPENING TIME (SEC)	2.9	2.8 – 3.0
D. DOOR CLOSING TIME (SEC)	5.4*	5.6 – 5.8
E. DOOR OPEN DURATION - CAR CALL (SEC)	3.8	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	7.0	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	1.8*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	15.0	14.5 – 15.5
I. STOPPING ACCURACY (INCHES)	1/8	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	30+*	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation

Recorded Operating Performance (NORTH WING)

Single Speed Center Opening 42" wide X 84" high	ELEV. NO. PE1	ELEV. NO. PE2	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	350	350	333 – 367
B. SPEED - DOWN DIRECTION (FPM)	350	345	333 – 367
C. DOOR OPENING TIME (SEC)	3.7*	4.0*	1.5 – 1.7
D. DOOR CLOSING TIME (SEC)	5.5*	5.3	3.0 – 3.2
E. DOOR OPEN DURATION - CAR CALL (SEC)	3.9	4.2	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	6.0	6.0	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	1.8*	1.6*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	17.4*	16.3*	11.5 – 12.5
I. STOPPING ACCURACY (INCHES)	1/8	1/8	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	22	30	30 max.

^{*} DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

Maintenance Deficiencies

SOUTH WING (PE1, PE2 & PE3)

Pit & Hoistway

- 1. Clean hoistway door equipment, pick up rollers full of lint & dirt (all cars) (outstanding from last year's report).
- 2. Clean car and hoistway door sills of dirt & debris (PE3) (outstanding from last year's report).

Operational Items:

1. Adjust car & hall call dwell times to meet industry standards (PE1 & PE2) (outstanding from last year's report).

PE1

- 1. Repair broken conduit on car top (outstanding from last year's report).
- 2. Replace burnt out bulbs in auxiliary car operating panel (outstanding from last year's report).
- 3. Emergency Communication non-operational.
- 4. Adjust cab steady plate rollers to reduce side-to-side movement.

PE2

- 1. Remove rags from car top (outstanding from last year's report).
- 2. Repair broken conduit on car top (outstanding from last year's report).
- 3. Re-attach main car operating panel, wires exposed at bottom of fixture (outstanding from last year's report).
- 4. Replace door operator cover; PM door equipment.
- 5. Secure relay in controller hanging from wires.

PE3

- 1. Repair broken conduit on car top (outstanding from last year's report).
- 2. Clean car top of dirt & debris (outstanding from last year's report).
- 3. PM and clean hoistway door equipment.
- 4. Machine worm seal is leaking.

NORTH WING (PE1 & PE2)

Operational Items:

1. Adjust performance times to meet industry standards. (all cars) (outstanding from last year's report).

PE1

- 1. Provide unit ID on COP.
- 2. Top floor hall push button pushed out.
- 3. Adjust rope gripper pad; cables are rubbing pad.

PE2

- 1. Repair non-functioning car door restrictor (outstanding from last year's report).
- 2. Provide unit ID on COP.

3. Adjust rope gripper pad; cables are rubbing pad.

Wheel Chair Lift:

1. Could not access.

Vertical Transportation Systems Profile

Location: Building Type: 655 W. Lombard St. Classrooms & Labs

Unit I.D:

PE1 & PE2, PE3, PE1 & PE2 (North Wing)

Type of System(s):

Overhead Geared Traction

A. General Information: PE1 & PE2 (SOUTH WING)

MD State I.D. Number:

ST1537 & ST 1551 3500 / Passenger

Capacity (lbs.)/Loading: Rated Speed (fpm):

350

Floors Served:

Seven (7) @ G, 2 - 7

Machine Type: Control Type:

Otis Geared Traction 18ATF Machine Otis 311 Microprocessor Controls

Sequence of Operation:

Door Configuration/Size:

Single Speed Center Opening/42" wide x 84" high

O.E.M. /Date of Installation:

Otis Elevator / 1998

Modernization Contractor/Date:

N/A

Present Service Company: Date / Type of Last Testing: **UMB** Elevator Shop June 2015 / 5 year June 2017 / Annual

B. General Information: PE3 (SOUTH WING)

MD State I.D. Number:

ST1568

Capacity (lbs.)/Loading:

5000 / Freight

Rated Speed (fpm):

350

Floors Served:

Eight (8) @ G, 2 – 7, PH

Machine Type:

Otis Geared Traction 18ATF Machine Otis 311 Microprocessor Controls

Control Type: Sequence of Operation:

Simplex

Door Configuration/Size:

Two Speed Side Opening/54" wide x 84" high Otis Elevator / 1998

O.E.M. /Date of Installation:

Modernization Contractor/Date:

N/A

Present Service Company: Date / Type of Last Testing: **UMB Elevator Shop** July 2015 / 5 year June 2017 / Annual

C. General Information: PE1 & PE2 (NORTH WING)

MD State I.D. Number: Capacity (lbs.)/Loading: ST1245 & ST1246

3500 / Passenger

Rated Speed (fpm):

Floors Served: Machine Type:

Control Type:

Sequence of Operation:
Door Configuration/Size:
O.E.M. /Date of Installation:
Modernization Contractor/Date:
Present Service Company:

Present Service Company: Date / Type of Last Testing:

D. General Information: WCL

MD State I.D. Number: Capacity (lbs.)/Loading: Rated Speed (fpm):

Floors Served: Machine Type: Control Type:

Sequence of Operation:
Door Configuration/Size:
O.E.M. /Date of Installation:
Modernization Contractor/Date:

Present Service Company: Date / Type of Last Testing: 350

Six (6) @ B, 1 - 5

TKE Geared Traction GD-1 Machine TKE TAC50 Microprocessor Controls

Duplex

Single Speed Center Opening/42" wide x 84" high

Payne Elevator / 1980's

TKE / 2004

UMB Elevator Shop June 2015 / 5 year October 2016 / Annual

N/O

ST1676

750 / Passenger

30

Two (2) @ 1 & Basement

Screw drive Constant pressure Push button

Manual swing door / 42" w by 84" h

Primus Lirus / Unknown

N/A

UMB Elevator Shop Could not access.



Executive Summary

for

UMB School of Social Work, 525 W. Redwood St.

Ashland conducted a maintenance audit during the fourth week of August, 2017, in order to determine the maintained condition of the elevators at 525 W. Redwood Street. The classroom building is served by two (2) direct lift hydraulic passenger elevators and one (1) basement traction passenger elevator (*located at 524 W. Redwood St.) that all were modernized in 2009 by Delaware Elevator. The units are relatively well maintained with only a few minor deficiencies noted.

The major elevator components systems should serve this building well for the next 15–20 years with no major upgrades needed. Housekeeping needs to improve as identified by items listed on the deficiency list.

The Americans with Disabilities Act (ADA) Elevator Systems Compliance Survey

ELEVATOR I.D.: PE1 (ST2127), PE2 (ST2128), and WCL (ST5065); and PE1 at 524 W. Redwood St. (ST1212)

DATE: August 24, 2017

"S" DENOTES SATISFACTORY

"U" DENOTES UNSATISFACTORY

COMPLIANCE ITEM/CATEGORY	S	U	CONDITION COMMENTS
ASME A17.1 Safety Code	X		Per 2004 Code Year.
Cab Enclosure (layout, door size, illumination and flooring)	X		
Car Operating Panel(s) (design, location and function)	X		
Car Signals and Communications (indicators and communications)	X		
Car and Corridor Entrances (size, signage and Re-opening device)		X	PE2 light ray non-functioning.
Corridor Fixtures (operation, signals and location)	X		
Operational Functions (automatic leveling and door timing)	X		

Additional Notes and Evaluation Clarifications

All cars were modernized in 2009.

Recorded Operating Performance

Single Speed Center Opening 42" wide X 84" high	ELEV. NO. PE1	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	160	140 – 160
B. SPEED - DOWN DIRECTION (FPM)	152	140 – 160
C. DOOR OPENING TIME (SEC)	3.7*	1.4 – 1.6
D. DOOR CLOSING TIME (SEC)	4.3*	2.8 – 3.0
E. DOOR OPEN DURATION - CAR CALL (SEC)	3.0	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	5.3	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	1.2*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	18.8*	15.5 – 16.5
I. STOPPING ACCURACY (INCHES)	1/4	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	17	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

	ELEV.	ELEV.	ACCEPTABLE
Two Speed Side Opening	NO.	NO.	STANDARDS
48" wide X 84" high	PE2	PE2	FOR THIS
	(Front)	(Rear)	EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	153	N/A	140 – 160
B. SPEED - DOWN DIRECTION (FPM)	145	N/A	140 – 160
C. DOOR OPENING TIME (SEC)	5.1*	5.5*	2.8 – 3.0
D. DOOR CLOSING TIME (SEC)	6.1*	6.0*	5.6 – 5.8
E. DOOR OPEN DURATION - CAR CALL (SEC)	2.2*	3.0	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	5.5	6.0	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	2.0	2.2*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	20.0*	N/A	18.5 – 19.5
I. STOPPING ACCURACY (INCHES)	1/4	1/4	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	17	17	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

N/A - denotes standard is "Not Applicable" to these systems. N/O - denotes "Not Operative" at time of evaluation.

Recorded Operating Performance (PE1 524 W. Redwood St.)

		
Single Speed Side Opening 36" wide X 84" high	ELEV. NO. PE1	ACCEPTABLE STANDARDS FOR THIS EQUIPMENT
A. SPEED - UP DIRECTION (FPM)	50*	95 - 105
B. SPEED - DOWN DIRECTION (FPM)	50*	95 - 105
C. DOOR OPENING TIME (SEC)	3.0*	1.8 – 2.0
D. DOOR CLOSING TIME (SEC)	6.5*	3.6 – 3.8
E. DOOR OPEN DURATION - CAR CALL (SEC)	4.5	3.0 minimum
F. DOOR OPEN DURATION - HALL CALL (SEC)	6.9	5.0 minimum
G. DOOR OPEN DURATION - AFTER PROTECTIVE SHIELD IS RE- ESTABLISHED (SEC)	2.0*	.5 – 1.0
H. FLOOR TO FLOOR PERFORMANCE TIME (SEC)	30.0*	15.5 – 16.5
I. STOPPING ACCURACY (INCHES)	1/4	± ½
J. CAR DOOR CLOSING PRESSURE (LBS)	18	30 max.

* DENOTES UNACCEPTABLE CONDITION BASED ON STANDARDS SPECIFIED.

N/E - denotes "No Evaluation" of referenced standard performed.

 $N\!/A$ - denotes standard is "Not Applicable" to these systems. $N\!/O$ - denotes "Not Operative" at time of evaluation

Maintenance Deficiencies

PE1:

- 1. Hoistway door equipment requires clean down (outstanding from last year's report).
- 2. F5 fuse oversized; should be 3 AMP not 5 (outstanding from last year's report).
- 3. Clean car top and elevator pit area (outstanding from last year's report).
- 4. Emergency Communication non-operational.
- 5. Clean and lubricate all door equipment.

PE2:

- 1. Repair non-functioning emergency telephone in elevator cab.
- 2. Emergency phone works; however, volume is low.
- 3. Repair non-functioning door restrictor.
- 4. Car top very dusty.
- 5. Clean and lubricate all door equipment.

WCL:

1. State certificate expired in 2015.

PE1, 524 W. Redwood St:

- 1. Adjust hoistway door panels from standing in open position (outstanding from last year's report).
- 2. Tighten pick-up roller on 1st floor.
- 3. Clean and lubricate drive machine brake.

Vertical Transportation Systems Profile

Location:

525 W. Redwood Street

Building Type:

Offices / Classrooms

Unit I.D:

PE1, PE2 & PE3

Type of System(s):

Direct Lift Hydraulic

A. General Information: PE1

MD State I.D. Number:

ST2127

Capacity (lbs.)/Loading:

2500 / Passenger

Rated Speed (fpm):

150

Floors Served:

Five (5) @ 1 - 5

Machine Type:

Submersible Pump Unit Virginia Controls V3HS

Control Type:

Simplex

Sequence of Operation:

Single Speed Center Opening/42" wide x 84" high

Door Configuration/Size:

Unknown / Unknown

O.E.M. /Date of Installation: Modernization Contractor/Date:

Delaware Elevator / 2009

Present Service Company:

UMB Elevator Shop

Date / Type of Last Testing:

November 2016 / 1 year

B. General Information: PE2

MD State I.D. Number:

Capacity (lbs.)/Loading:

Rated Speed (fpm):

Floors Served: Machine Type:

Control Type:

Sequence of Operation: Door Configuration/Size:

O.E.M. /Date of Installation: Modernization Contractor/Date:

Present Service Company: Date / Type of Last Testing: ST2128

4000 / Passenger

150

Six (6) @ 1, 1R, 2 - 5 Submersible Pump Unit Virginia Controls V3HS

Simplex

Two Speed Side Opening/48" wide x 84" high

Unknown / Unknown Delaware Elevator / 2009 UMB Elevator Shop November 2016 / 1 year

C. General Information: WCL

MD State I.D. Number: Capacity (lbs.)/Loading:

Rated Speed (fpm):

Floors Served:

Machine Type: Control Type:

Sequence of Operation:

Door Configuration/Size: O.E.M. /Date of Installation:

Modernization Contractor/Date:

Present Service Company: Date / Type of Last Testing: ST5065

750 / Passenger

30

Two (2) @ 1 & Auditorium

Screw drive Constant pressure Push button

Manual swing door / 42" w by 42" h National Wheel-o-vator / Unknown

N/A

UMB Elevator Shop November 2016 / 1 year

D. General Information: PE1 (524 W. Redwood St.)

MD State I.D. Number:

Capacity (lbs.)/Loading:

Rated Speed (fpm):

Floors Served:

Machine Type:

Control Type:

Sequence of Operation: Door Configuration/Size:

O.E.M. /Date of Installation:

Modernization Contractor/Date: Present Service Company: Date / Type of Last Testing: ST1212

2000 / Passenger

100

Four (4) @ B, 1 - 3

Hollister Basement Geared Traction

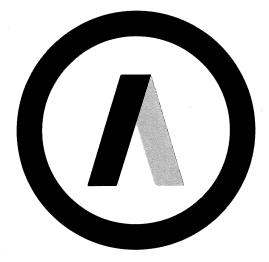
Virginia Controls / MVFCL

Simplex

Single Speed Side Opening/42" wide x 84" high

Otis / 1960's

Delaware Elevator / 2009 UMB Elevator Shop August 2016 / 1 year



Ashland Industrial Services www.aisco.org

Installation & Modernization Data

Installation & Modernization Data

Building Name	Address	Year Installed	Year Modernized	Notes	Age
100 N. Greene St.			2013	Virginia Controls MVFCL	4
108 N. Greene St.		1994		Otis HCL	23
Campus Center Book Store	222 Pine St.	2004		Dover DMC-1	13
620 W. Lexington St.		2008		TKE TAC50) 6
737 W. Lombard St.		1980		Scheduled to be modernized in 2017 (PE1 & PE2)	37
Allied Health	100 Penn St.	1987		Dover Relay (WCR)	30
Bressler Research Bldg	655 W. Baltimore St.	New Automatical Control of the Automatical Contr	2009	TKE TAC50	∞
Campus Center	621 W. Lombard St.		2009	TKE TAC50	∞
Dental Museum	31 S. Greene St.	1996		KONE Miprom	21
Dental School	650 W. Baltimore St.	2006		TKE TAC50	11
Donaldson Brown Center	200 Mt. Ararat Farm Rd	1955		Otis Relay	62
Environmental Health (EHS)	714 W. Lombard St.	1994		Dover DMC-1	23
General Research Bldg	111 Penn St.		1994	MCE - PTC 1000 SCR	23
Grand Garage	5 N. Paca St.		2011	Virginia Controls MVFCL	9
Howard Hall	660 W. Redwood St.		2011	Virginia Controls MVFCL (PE1 & PE2), Dover T4 (PE3)	9
HS / HS Library	601 W. Lombard St.	1997		KONE Miprom 21	20
Health Sciences I (HSF1)	685 W. Baltimore St.	1994		Dover T4	23
Health Science II (HSF II)	20 Penn St.	2002		Otis 311	15
Med Biotec Center (IHV)	725 W. Lombard St.	1997		Dover T4	20
Law School & Law Library	500 West Baltimore St.	2002		Dover T4 (PE1), Dover DMC-1 (PE2 - PE7)	15
Lexington Garage	622 W. Lexington St.		2015	Virginia Controls MVFCL	2
MD Bar Association	520 W. Fayette St.	1985		Dover Solid State with card rack	32
MEIMSS	653 W. Pratt St.	1997		Otis 211	20
MPRC (Catonsville, MD)	55 Wade Ave.	1968		Elevator Technologies	49
MSTF	10 S. Pine St.	2004		TKE TAC50	13
Pearl St Garage & Offices	622 W. Fayette St.	1991		Otis Relay (PE1 - PE4), Dover Relay (FE5)	16
Penn Street Garage	120 S. Penn St.		2012	Virginia Controls MVFCL	5
Pharmacy Hall	20 N. Pine St.		2009	Virginia Controls MVFCL	∞
Plaza Garage	500 W. Redwood St.	1997		Dover LMH (PE1), Dover DMC-1 (PE2)	20
Pratt Street Garage	646 W. Pratt St.		2008	Swift Futura	6
Saratoga Garage & Offices	220 N. Arch St.	2003		Otis LMCSS	14
School of Nursing (South)	655 W. Lombard St.	1998		Otis 311	19

Virginia Controls MVFCL

Under contract to be modernized

Modernize in 7 - 10 years Modernize in 1 - 2 years Modernize in 3 - 5 years

655 W. Lombard St. 525 W. Redwood St.

School of Nursing (North) School of Social Work Key:

2004 2009

Age 14 Average

TKE TAC50