



WASHINGTON STATE
UNIVERSITY

Addendum No. 1
October 21, 2022

Vancouver Science & Engineering Building
Elevator Modernization
Washington State University
Vancouver, WA

Project No. 1581-2022
Washington State University
Facilities Services, Capital

Addendum No. 1
October 21, 2022**Vancouver Science & Engineering Building Elevator Modernization**
Washington State University
Vancouver, WA**Bid Date: October 27, 2022**

1. This Addendum forms a part of the Contract Documents and modifies the original Bidding Documents dated September 30, 2022, and any prior addenda, as noted below.
2. Please acknowledge receipt of this addendum on the Form of Proposal.

This Addendum consists of 36 total pages including the following Attachments:

Pre-Bid Meeting 10/12/2022: Meeting Minutes
Section 142400 – Elevator Alterations

Changes to prior Addenda:

N/A

Changes to Bidding Requirements:**1-1. SECTION 00 11 13 – Advertisement for Bids**

- Item 1. Replace “The modernization and upgrade of one hydraulic elevator located at WSUV Science & Engineering Building. The selected contractor will be responsible for a design build type project incorporating the performance characteristics specified in the contract documents. The contractor is required to coordinate all work with Facilities Services and the other trades that may be performing related work in, or around the elevator hoistway. Proposals must include all necessary labor, tools, transportation, services, supervision, materials, and equipment required to modernize one hydraulic elevator and make alterations and additions to the building life safety and electrical systems as needed to comply with all applicable codes. Substantial Completion must be achieved no later than May 15th, 2023. Proposals **MUST** BE based on this Contract Time.”

Make read

“The modernization and upgrade of one hydraulic elevator located at WSUV Science & Engineering Building. The selected contractor

*will be responsible for a design build type project incorporating the performance characteristics specified in the contract documents. The contractor is required to coordinate all work with Facilities Services and the other trades that may be performing related work in, or around the elevator hoistway. Proposals must include all necessary labor, tools, transportation, services, supervision, materials, and equipment required to modernize one hydraulic elevator and make alterations and additions to the building life safety and electrical systems as needed to comply with all applicable codes. Substantial Completion must be achieved no later than **June 15th, 2023**. Proposals **MUST BE** based on this Contract Time."*

- Item 2. Replace "Bids will be received prior to 2:00 p.m.; October 25, 2022 by fax 509-335-9304 or email to contracts@wsu.edu. Proposals will then be publicly opened and read aloud at 2:30 p.m. by Zoom <https://wsu.zoom.us/j/99637803721?from=addon> or Phone 253-215-8782 and entering Meeting ID 996 3780 3721. Attendance in person is not allowed."

Make read:

*"Bids will be received prior to 2:00 p.m.; **October 27, 2022** by fax 509-335-9304 or email to contracts@wsu.edu. Proposals will then be publicly opened and read aloud at 2:30 p.m. by Zoom <https://wsu.zoom.us/j/99637803721?from=addon> or Phone 253-215-8782 and entering Meeting ID 996 3780 3721. Attendance in person is not allowed."*

Changes to Specifications:

SP 1-1. SECTION 00 01 10 – Table of Contents

- Item 1. Add: 142400 Elevator Alternations and Upgrades

SP 1-2. SECTION 005000 – Agreement between Owner and Contractor

- Item 1. Replace " 4.3 Substantial Completion and Final Completion. Contractor shall achieve Substantial Completion of the Work by May 15, 2023, subject to adjustments as provided in the Contract Documents, and shall achieve Final Completion not later than Thirty (30) Days thereafter. Contractor represents to Owner that the Contract Time is adequate for full performance of the Work. Contractor shall also achieve any interim milestones and phasing requirements set forth in the Contract Documents."

Make read:

*“4.3 Substantial Completion and Final Completion. Contractor shall achieve Substantial Completion of the Work by **June 15, 2023**, subject to adjustments as provided in the Contract Documents, and shall achieve Final Completion not later than Thirty (30) Days thereafter. Contractor represents to Owner that the Contract Time is adequate for full performance of the Work. Contractor shall also achieve any interim milestones and phasing requirements set forth in the Contract Documents.”*

SP 1-3. SECTION 142400 – Elevator Alternations and Upgrades

- Item 1. Replace previously issued section and replace with updated section attached. Note: all changes have been highlighted in yellow.

Changes to Drawings:

None

END OF ADDENDUM No. 1

PRE-BID MEETING MINUTES

WSUV Science & Engineering Building Elevator Modernization Vancouver, Washington

PRE-BID MEETING

Meeting Date: 10/12/2022

The meeting notes and minutes will be routed to plan holders with the addendum that follows this meeting.

PROJECT SPECIFICS

- Introductions
 - Project Officer, **Jason Baerlocher**
 - Local onsite contacts, **Dennis Giles / Bill Hooper**
 - Designer of Record, **ATIS-JSG Elevator Consultants – Michael Fagan**
 - Those on the call, please add your name, firm name, phone number and email to the chat section of the meeting so that your attendance can be recorded for the record.
- Project Description
 - Fully Modernize and Upgrade the WSUV Science & Engineering Building Elevator
 - The estimate for the project, not including taxes, is \$350,000-\$450,000
 - Schedule for completion by ~~May 15th, 2023~~. ** Changed via Addendum 1 to June 15, 2023.
- Bid Form
 - Bid Date is ~~Tuesday October 25, 2022~~, at 2pm ** Changed via Addendum 1 to Thursday October 27, 2022
 - *Review the Form of Proposal*
 - Alternates - NA
 - *Allowances-NA*
 - *Unit prices -NA*
 - Sales Tax
- General
 - This is an active campus. There are students, faculty, and visitors who either will not be aware of construction or will be distracted. Contractors must routinely work around the pedestrian population on campus as well as control noise and other construction related activities to minimize the effect on the campus.
 - WSU is committed to a completely accessible campus. This means that when construction activities interfere with accessible pathways, that the General Contractor is responsible for putting in place temporary facilities (ramps, pathways, etc.,) to assure that all accessible pathways are available.
 - Harassment in the workplace is not tolerated at WSU. All trades are required to conduct themselves such that harassment, real or perceived, does not occur. Offending individuals will be permanently removed from the project.

PRE-BID MEETING MINUTES

- Project Specific

- Pre-Bid Meeting is not mandatory.
- Division 0 and Division 1. Make sure and read Division 0 and Division 1 there are Contractor requirements that you need to be aware of.
- Refer to Section 00 21 13, "Low Responsible Bidder". Contractor responsibility will be evaluated. Be prepared to submit the required information within 48 hours of receipt of request.
- Discuss the building site. Science & Engineering Building will be *occupied during the elevator modernization and materials and tool storage is limited. Coordination and location of all storage space must be approved by WSU. Barricades and protection of work areas shall be required and maintained by the Elevator Contractor. Elevator Contractor to include time each week for using elevator to deliver WSU users materials to all building floors during the project on a scheduled day and 4-hour window each week. No passengers permitted*
- Review the requirement(s) for haul routes and deliveries.
- Parking Permits will be required for all vehicles parked on campus, only vehicles necessary to perform the work should be parked on site all other vehicles need to park in available campus parking lots. <https://www.vancouver.wsu.edu/parking-services>
- Reasonable certainty of non-disturbance of asbestos. Based on the age of the facility and the scope of the project, disturbance of asbestos materials is not anticipated.
 - o Note that composite elevator brake/friction pads are considered a suspect asbestos material. Building materials other than glass, fiberglass, wood, metal, and rubber are considered suspect asbestos containing materials and should these materials be impacted by project work, the Contractor shall contact WSU to evaluate whether the materials contain asbestos.
- The Contractor is to always have a Superintendent on the project when construction occurs.
- **Work Hours: 7am Start**
 - o <https://www.codepublishing.com/WA/ClarkCounty/html/ClarkCounty09/ClarkCounty0914/ClarkCounty0914010.html>

PRE-BID MEETING MINUTES

GENERAL ADMINISTRATION/MANAGEMENT

- MWBE PARTICIPATION

Washington State University is committed to the enhancement of opportunities for minority and women owned and controlled firms in public contracting. While neither required nor a part of bidder responsiveness, the use of solicitation of minority and women's business enterprise firms is expressly encouraged.

- PROJECT CLARIFICATIONS

- 1st draft O&M Manuals are required for "Substantial Completion".
- As-Built Drawings are required for "Substantial Completion".

- ADDENDUM

- Questions and substitution requests must be received by **Monday, October 17, 2022**
- Addenda expected to be issued no later than **October 18, 2022**

PROJECT SITE VISIT

The bidders may schedule a site visit with **Dennis Giles**.

SECTION 142400

RFP FOR HYDRAULIC ELEVATOR

**Science & Engineering
Building Elevator**

ALTERATIONS & UPGRADES

**CONTROLLER
RELATED SIGNAL FIXTURES
AND HYDRAULICS**

PART 1 – GENERAL

- 1.01 Intent: The intent of this specification is to provide for the modernization and upgrade of one hydraulic elevator located at WSUV Science & Engineering Building Elevator and described herein. The selected contractor will be responsible for a design build type project incorporating the performance characteristics of this specification and related attachments. The contractor is required to coordinate all work with the University and Facilities and the other trades that may be performing related work in, or around the elevator hoistway. Proposed delivery dates and time lines with phasing of upgrades, and site work should be included in the contractor's proposal.

The contractor is invited to submit value engineering alternates with their base bid for various items where unique products or systems that will reduce the project time and /or costs.

Summary

This Section includes the requirements for designing, furnishing, and installing elevator upgrades including new controller, wiring, operating panels and signal fixtures cab finishes, and hydraulic system upgrades.

Provide Alarm, Electrical and Mechanical upgrades by other specialty trades as needed to support elevator project and be coordinated with elevator work and test program.

The contractor must closely co-ordinate the elevator upgrades & installation with related work by other specialty trades.

Due to the critical nature of this elevator and related down time; The elevator contractor will start work only after all equipment has been received, inspected and delivered to the

site to assure minimal down time. Elevator Contractor will review electrical, alarm, life safety, sprinkler and security work for completeness and input compatibility before commencing to make certain no avoidable delays are encountered at time of AHJ acceptance inspection. Actual dates to be scheduled and coordinated with the UNIVERSITY Facilities and Building Security for contractor access and execution of all work.

1.02 References

The following references are incorporated into the requirements of the Work as described herein. The limits and scope of these references will be as per *References and Definitions*. The current standards at the time of the performance of any Work apply to the Work.

- A. American Society of Mechanical Engineers (ASME)
 - 1. ASME A17.1, *Safety Code for Elevators and Escalators*
 - 2. ASME A17.2, *Guide for Inspection of Elevators, Escalators, and Moving Walks*
 - 3. ASME A17.3, *Safety Code for Existing Elevators and Escalators*
 - 4. ASME B20.1, *Safety Standard for Conveyors and Related Equipment*
- B. International Codes Council (ICC) A117.1, *Accessible and Useable Buildings and Facilities*
- C. *Americans with Disabilities Act Accessibility Guidelines (ADAAG)*
- D. ASTM International (ASTM)
 - 1. A36, *Structural Steel*
 - 2. A167, *Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip*
 - 3. A240, *Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications*
 - 4. A276, *Standard Specification for Stainless Steel Bars and Shapes*
 - 5. A554, *Standard Specification for Welded Stainless Steel Mechanical Tubing*
 - 6. A653, *Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process*
 - 7. A1008, *Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Solution Hardened, and Bake Hardenable*
 - 8. A1011, *Standard Specification for Steel, Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength*
 - 9. B221, *Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes*

10. E84, *Standard Test Method for Surface Burning Characteristics of Building Materials*
 - E. American Welding Society (AWS) D1.1, *Structural Welding Code, Steel*
 - F. Institute of Electrical and Electronics Engineers (IEEE), *National Electrical Safety Code*
 - G. National Fire Protection Association NFPA 80, *Standard For Fire Doors and Other Opening Protectives*
 - H. Underwriters Laboratories (UL) 10B, *Fire Tests of Door Assemblies*
 - I. Federal Standards (FS)
 1. FS TT-P-641, *Primer Coating, Zinc Dust/Zinc Oxide (for Galvanized Surfaces)*
 2. FS TT-P-645, *Primer, Paint, Zinc Chromate, Alkyd Type*
 - I. National Elevator Industry, Inc. (NEII), *Elevator Industry Field Employees' Safety Handbook*
 - J. Codes: In accordance with the latest applicable edition requirements of the following and as specified:
 1. ASME: A17.1; & 3 Safety Code for Elevators and Escalators.
 2. A.D.A.: Americans with Disabilities Act.
 3. Washington State Department Of Labor and Industries
273 Linderson Way SW
Tumwater, WA 98501-5414 360-902-5800
 4. Any local /state codes that supersede any of the above
- 1.03 Definitions:
Definitions of terms as described in ASME A17.1 apply to this Section.
- 1.04 Quality of Work
- A. In addition to the requirements *Correction of Defective Work*, of, *General Conditions*, "defective work" includes, but is not limited to: Operation or control system failures; car performance below required minimum; excessive wear, unusual deterioration, or aging of materials or finishes; unsafe conditions; the need for excessive maintenance; abnormal noise or vibration, and similar unsatisfactory conditions.
 - B. All installed Work is subject to the warranty requirements described below.
 - C. The Contractor must supply sufficient skilled workers to execute the Work described in this Section, as per the existing contract documents and requirements of the Document. In addition, the Workers must hold certifications as described in *Summary of Work*.

- D. The Contractor must, in the presence of the University Project Engineer and Regulatory Agencies as required, perform all tests as required by codes, permits, and these Technical Specifications in accordance with procedures described in ASME A17.2. and applicable codes.
- E. The Contractor must supply personnel and equipment for testing and final review by the Engineer prior to the acceptance of the Work.
- F. The work shall be guaranteed for 1 year upon the acceptance of owner.

1.05 Deleted

1.06 Deleted

2.01 Deleted

2.02 Firm Bid

- A. All prices quoted shall be firm and no escalation in price will be permitted to the contract, the successful bidder will be notified within 90 days from submission of bid.
- B. If authorization to proceed with manufacture and installation is deferred beyond this 90 day period, the bid amount shall be subject to adjustment to reflect changes in the cost of labor and materials. For adjustment, it is agreed that:
 - 1. 33% of the bid price shall be increased or decreased by the percentage of increase or decrease shown by the Index of Wholesale Commodity Prices for Metals and Metal Products published by the U.S. Department of Labor, Bureau of Statistics, for the month during which the control equipment is first ready for shipment as compared with the Index in effect on the bid due date.
 - 2. 33% of the bid price shall be increased or decreased by the percentage of increase or decrease in the average straight-time base rate of hourly wages paid to employees in the elevator manufacturer's factory for the month during which the control equipment is first ready for shipment, as compared with the average straight-time rate in effect on the bid due date. The average base rate per hour for each month shall be determined from the third payroll week of the month as certified by a firm of independent certified public accounts selected by the Elevator Contractor.
 - 3. 34% of the bid price shall be increased or decreased by the percentage of increase or decrease in straight-time hourly rate for elevator constructors in the locality where the equipment is to be installed on the date of starting the installation, compared with the straight-time rate in effect on the date of this bid. The term "straight-time hourly rate" for elevator constructors in

this paragraph shall equal the actual hourly rate paid to the elevator constructors plus the fringe benefits granted in lieu or in addition to, hourly rate increases.

4. Documentation regard to price adjustment shall be submitted within 10 days after notification by the Owner to proceed. Owner reserves the right to assess the impact of any price adjustment against the budget and shall notify the elevator Contractor within 15 days of receipt of price adjustment documentation if the project is not to proceed.
- 2.03 Withdrawal or Rejection of Bids: The Owner reserves the right to reject all bids and to waive all informalities and is not bound to accept the low bid. Any bidder may withdraw their bid prior to the scheduled time for the receipt of bids. Prices quoted in bid shall be guaranteed for a period of 90 days after the date of the bid.
- 2.04 Addenda: Addenda issued before the bid due date shall be considered a part of the specifications and their receipt shall be acknowledged by the bidder.
- 2.05 Demonstration of Similar Work Each bidder will be requested to demonstrate to the Owner and the Elevator Consultant competed jobs similar in scope and size to the one herein specified.
- 2.06 Deleted
- 2.07 Evaluation of Proposals: The Owner's analysis and evaluation of proposals for the purpose of making the contract award will include the following (not necessarily listed in the order of importance):
- A. Cost of installation
 - B. Completeness of proposal, including all information and material requested.
 - C. Experience with type of work required by this specification.
 - D. Completion schedule.
 - E. Cost of warranty period and maintenance programs.

2.08 Deleted

2.09 QUALITY ASSURANCE

- A. In all cases, where a device or a part of the equipment is herein referred to in the singular number, it is intended that such reference shall apply to as many such devices or parts as are required to complete the installation.
- B. All terms in these specifications have their definition given in the latest edition of the State of Washington, ASME and American National Standards Institute, Safety Code for Elevators, Dumbwaiters, and Escalators ASME A17.1, including revisions and authorized changes in effect on the date of these specifications.
- C. Document Verification: In order to discover and resolve any conflicts or lack of definition which might create construction problems, the bidders shall review the contract documents for compatibility with their respective products. Review and verification shall include, but not be limited to, architectural, structural, electrical, and mechanical drawings, and the specifications. Bidder's specific exceptions and/or clarifications shall be attached to their written quotation. The absence of such written exceptions and/or clarification shall indicate bidder's full acceptance of provisions of the contract documents.
- D. Elevator Contractors -Bidder: The elevator alterations shall be supplied installed by approved contractor. Alternate equipment suppliers must receive approval by the Consultant a minimum of 5 days prior to bid date.
- E. Warranty:
 - 1. The materials and workmanship of the elevator apparatus installed shall comply in every respect with these specifications and any defects not due to ordinary wear and tear or improper use or care by Purchaser, which may develop within one year from date of final acceptance of each elevator unit shall be corrected to the satisfaction of the University at no additional cost.
 - 1. The elevator contractor shall make all modifications, adjustments, improvements, etc., to the elevator system necessary to meet the performance requirements specified in Section 2 Part 2 of these specifications.
 - 2. Comply with the applicable provisions of the following Codes and/or authorities:

- F. Comply with the applicable provisions of the following Codes and/or authorities:
1. Safety Code for Elevators, Dumbwaiters, Escalators, and Moving Walks, ASME A17.1, latest edition and supplements.
 2. Inspectors' Manual, ASME A17.2.1-2012, or latest edition and supplements.
 3. National Electrical Code, NFPA. 70, latest edition and supplements.
 4. Life Safety Code, NFPA No. 101, latest edition and supplements, and latest edition and supplements.
 5. Washington State Elevator Code, latest edition and supplements.
 6. Americans with Disabilities Act.
 7. Applicable UBC requirements.
 8. As directed by local Fire Marshall.
 9. In the event of conflict, the more stringent Code requirements shall apply.

2.10 MATERIALS

The Contractor must provide materials and finishes for exposed parts, including, but not limited to car fixtures, and hoist way signal equipment, as indicated below.

- A. Stainless Steel Sheet: ASTM A240, Type 304, 14 gauge unless otherwise specified.
- B. Stainless Steel Bars: ASTM A276, Type 304.
- C. Stainless Steel Tubing: ASTM A554, Type 304.
- D. Aluminum Extrusion: ASTM B221.
- E. Plastic Laminate: ASTM E84 Class A and NEMA LD3.1, Fire-Rated Grade GP-50, Type 7, 0.050" $\pm$ 0.005" thick.
- F. Fire-Retardant Treated Backer Panels: Minimum 3/4" thick backer panel for plastic laminate veneer, edged and faced as shown, provided with suitable anti-warp backing; meet ASTM E84 Class "I" rating with a flame-spread rating of 25 or less, as per code and permit requirements.

PART 1 - GENERAL1.01 WORK INCLUDED Modernize one Hydraulic Elevator:

- A. Elevator Name / Location- WSUVNCVR /Designation/No. 1
Permit # 0013899PH.
2500 Lb. Capacity
- B. Provide everything necessary for and incidental to the satisfactory completion of the elevator installation as specified herein and indicated on the contract documents.
- C. Conform to applicable conditions of General, Special, and Supplemental Conditions.

1.02 Related Work By Other Trades:

- A. Legal Hoistway and (Confined Space) Pit:
 - 1. Protect open elevator hoistway and entrances during construction, CA-OSHA Safety Regulations and Safety Program Requirements. Provide suitable barricades approved by the University.
 - 2. Provide a smoke detector and access door in hoistway at top of shaft when required by Fire Codes.
 - 3. Patch walls if needed for pushbutton stations, hall lanterns, position indicators or other signal fixtures.
 - 5. Retain/Replace/Install Pit ladder, structural supports for car buffer impact loads, and rail loads.
 - 6. Provide new Lithonia type LED Lighting fixtures and GFI Protection in elevator Pit and coordinate with elevator contractor for safe access and supervision
 - 7. Protect car, door entrance frames & assemblies, and special building finishes from damage.
- A. Legal Machine Rooms:
 - Electrical Services, Conductors and Alarm Modules and Related Devices.
 - 1. Elevator Machine Room: Re-configure lighting and power feeders as necessary to accommodate pump motor and control equipment.

3. Provide G.F.I. protected Elevator pit, machine room convenience outlets, per NEC Code.
4. Provide three phase power to terminals of elevator controller unit in the elevator machine room.
5. Provide two single phase power circuits, to be terminated adjacent to the elevator controller for car lighting and hydraulic oil cooler & blower (if required). Include individual disconnect switch at location to be shown on elevator contractor's shop drawings. Vent cooler to outside the elevator machine room or into building ventilation system.
6. Provide temporary power and lighting as required by Elevator Contractor to install, test, and adjust elevator equipment.
7. Modify existing Smoke / Alarm System as necessary to meet current A-17.1. Code requirements for hydraulic elevators; Provide products of combustion sensors (NFPA No. 72D or as specified) in each elevator lobby, hoistway, and machine room to initiate Fireman's return feature, per Code requirements. Provide alarm panel sensor wires from Fire Panel to be terminated in separate junction boxes located adjacent to the elevator controller, located in elevator machine room.
8. The University will schedule and facilitate the install all upgrades as may be required by in advance of the elevator contractor starting work for electrical, Lighting, GFI protected circuits and related alarm modules, including shunt trip operation, Fireman's Flashing Hat, also including coordination with, but not limited to Alarm, Life Safety, Sprinkler and Security.
9. These life safety and electrical wiring upgrades and devices will be installed as required per Code and wiring terminated in the machine room in appropriate junction boxes for final termination in advance of starting elevator work and ready for elevator wiring terminations at completion of elevator upgrades.
9. Additional mechanical upgrades to the machine room and pit will be detailed and drawings produced as may be needed for approved materials and be prepared for installation immediately at the time the elevator is removed from service by the elevator contractor.
10. Note new LED Lighting fixtures to be Lithonia LED Strip Lighting or equal for elevator machine room. Pit lighting fixtures to be installed vertically above 48" from pit floor in a suitable location.
11. Provide adequate cooling if required to assure elevator equipment operates in the 65 to 95 degrees Fahrenheit range for all possibilities.

12. In no instance shall vegetable based oils be used as hydraulic fluid.

1.03 SUBMITTALS

- A. Dimensioned Shop Drawings: Contractor shall provide one complete submittal of scaled shop drawings for all work. Before beginning fabrication, shop drawings showing the plan views of the machine room, car details, entrance details, and details of the Car and Hall signal fixtures shall be prepared and submitted to the Port for approval. Refer to submittal procedures, including preparation and transmittals. Shop drawings shall be submitted within 30 days after Contract award. Each shop drawing shall be clearly identified by title and owner's elevator number. Corrections made to shop drawings during the review process shall be incorporated on the drawings and/or responded to and acknowledged by the Elevator Contractor. Elapsed time due to "revise and resubmit" or "rejected" action, indicated on submittals due to inaccurate data or incomplete definition shall not affect equipment delivery or installation schedule for more than three weeks.
- B. Samples: Submit three samples of each required finish, not including those intended for painting after installation. Submit 3" x 12" samples or 12" lengths of actual finished materials. Samples shall be reviewed for color, pattern and texture only. Compliance with other requirements is the exclusive responsibility of the Elevator Contractor. Include signal equipment units, to show proposed pushbuttons, lights, graphics, Braille plates, and mounting provisions. Submittals shall be made within 10 days of award, verbal or written.
- C. Allotted approval process time shall be a minimum of one month from date individual product submittal is received by Owner's Representative.
- D. Within 30 days of project award Contractor shall submit a complete schedule detailing activities of each major phase of the project

1.04 PERMITS, TESTS, AND INSPECTION

- A. Elevator Contractor Shall Obtain and Pay For:
 - 1. All necessary legal requirements, permits, licenses and inspection fees necessary to complete the elevator installation.
 - 2. Perform tests as required by WA L&I, local governing authorities and/or the current ASME A17.2. Elevator Inspectors' Manual.

- B. Perform such tests in the presence of authorized representatives of such authorities.
- C. Provide labor and equipment to perform tests and final reviews indicated in Specification.

1.05 MAINTENANCE

- A. Interim: The selected contractor shall regularly maintain the elevator under a full maintenance program from the time of award thru to final acceptance.
 - 1. The warranty period herein specified shall not commence until the final inspection by the State and permit issued and after the final acceptance by the Owner's Representative is issued.
- B. Warranty Maintenance and Service Period:
 - 1. The Elevator Contractor shall furnish full maintenance on equipment described herein for a period of 12 months, commencing on date of final acceptance by Owner, including 24-hour emergency callback service. The maintenance shall include systematic examinations, adjustment, cleaning, and lubrication of all equipment based upon the terms and conditions of the preventive maintenance agreement. The Elevator Contractor shall also repair or replace electrical and mechanical parts whenever required and shall use only parts produced by the manufacturer of the equipment installed. Maintain elevator machine room, car tops, hoistway, and pit in clean condition.

PART 2 - PRODUCTS2.01 SUMMARY

A. Elevator:

NUMBER:	Permit # 0013899 PH
CAPACITY:	2500 Pounds
SPEED:	Retain Existing Speed based on exiting motor horsepower of 50 HP @ 150 F.P.M. - Up, Down - No Load, Full Load
SUPERVISORY CONTROL:	Provide New: Control - Selective Collective - Microprocessor-Based Non-Proprietary, w Serial Link signals
Manufacturers:	SmartRise Elevator Controls Elevator Controls Corporation, ECC Motion Control Engineering
STANDBY POWER:	Existing Standby Power Generator
MOTOR CONTROL:	Provide New: A.C. Siemens Solid State Motor Starter.
STOPS:	Retain Existing: 3 STOPS
OPENINGS:	Retain Existing: 3 Front
FLOORS SERVED:	Retain Existing: B-1-2
ENTRANCES:	Retain Existing:
DOORS:	Retain Existing:
ENTRANCE DOOR TYPE:	Retain Existing - 2SSO

DOOR OPERATION:	Replace with linear type door operation
DOOR PROTECTION:	Replace Door Detector – Infrared with 3D capabilities, Optical Full Height Screen Device with Overhead Scanning. Provide with LED lighting to display on edge Red for closing-Green for opening.
MACHINE:	Provide new power unit with new Maxton, EECO or equivalent control valve. Valve to be located above oil reservoir inside tank.
HYDRAULIC CYLINDER:	Retain Existing - Refurbish, Provide new packing and ball type shut off valves in machine room and pit.
GUIDE RAILS:	Refurbish -Realign and tighten connections and bracket bolts.
BUFFERS:	Retain Spring Buffers and pit structures- paint and refurbish.
PIT:	Retain Existing -Seal Pit from Groundwater Penetration.
CAR ENCLOSURE:	Retain Existing and Upgrade with new finishes Design Interior: Front Wall, Return Panel Transom And Car Door – SS # 4 Provide New Car Operating Panel include horizontal COP panel located above handrail for Special needs. (See Photos) (COPs).
KEY SCHEDULE	Provide new: Group 1, Group 2 Group 3 - 4 sets of keys. Locate hoistway access switches in terminal landing fixtures.
SIGNALS:	Provide New: MAD or Innovation CAR & HALL FIXTURES <i>(All devices to utilize TFD Display with LEDs for call acknowledgment, numerals and direction, All device face plates to be mounted with stainless steel torque head machine screws - spanner head not acceptable)</i>
REGISTRATION LIGHTS:	Provide New: LED ILLUMINATION FOR CAR AND CORRIDOR PUSHBUTTONS, SINGLE RISER Use MAD or Innovation Fixtures: COP - Surround Tag Button w/ Pacific Rim w button center and Full Face button illumination. LED COLOR TBD

POSITION INDICATORS:	Provide New: TFD display LED IN CAR with voice annunciation. PI integral to screen.
HALL LANTERN:	Provide New: RELOCATE AND PROVIDE SURFACE MOUNTED TYPE WITH ADJUSTABLE VOLUME CONTROL - ELECTRONIC CHIME OR TONE (TWICE FOR DOWN DIRECTION) VANDAL PROOF W/LED. MOUNT VERTIALLY ABOVE PUSH BUTTONS AT 72" PROVIDE BLANK COVERS FOR EXISTING LOCATIONS AS NEEDED.
COMMUNICATION SYSTEM:	Provide New: COP SELF-DIALING EMERGENCY PHONE, WITH HANDS FREE OPERATION AND VISUAL CALL MONITORING AND ACKNOWLEDGMENT LED, UL SHIELDED WIRING FROM BOX TO CAR CONTROLLER IN ELEVATOR MACHINE ROOM. TERMINATE PHONE WIRING AND COMMUNICATIONS LOCATED IN FOUR SQUARE BOX MOUNTED ON SIDE OF CONTROLLER.
FIXTURE SUBMITTALS:	Provide New: REFER TO MAD or INNOVATION BROCHURES DEPICTING MANUFACTURER'S APPROVED FIXTURE DESIGNS FOR BID.
ADDITIONAL FEATURES:	Provide New : ELSCO SPRING MOUNTED 6" CAR ROLLER GUIDES or OEM equivalent Slide Guides Provide New: CAR TOP INSPECTION STATION. Provide New: EMERGENCY ALARM BELL AND LED CAR LIGHTING 5000 LUX - MAN D TEC LED SYSTEM WITH DIMMER. LOCATE FIXTURES IN NEW ISLAND CEILING OR APPROVED EQUAL. Provide New: EMERGENCY OPERATION FIRE FIGHTER'S SERVICE PHASE 1 & 2. Provide New: DISABLED ACCESS ACCOMMODATIONS PER A.D.A. REQUIREMENTS - WHITE ON BLACK ; PROVIDE CAST PLATES AS MANUFACTURED BY ENTRADA, SCS, VISIONMARK, OR APPROVED EQUIVALENT. Provide New: CAR OPERATING PANELS WITH HINGED CAR STATION AND SECURITY INTERFACE.

Provide New: HOISTWAY ACCESS SWITCHES
ON TERMINAL LANDINGS.

Provide New: INDEPENDENT SERVICE
FEATURE. FAN WITH TOGGLE SWITCH

Retain Existing: CAR SILL

Provide New: MOUNT ALL FIXTURE FACE
PLATES WITH TAMPER-RESISTANT TORQUE
HEAD STAINLESS SCREWS
SPANNER TYPE SCREWS -NOT PERMITTED.

12-MONTH WARRANTY FULL SERVICE
MAINTENANCE WITH 24-HOUR CALL-BACK
SERVICE

Provide New: SUBMERSIBLE HYDRAULIC PUMP
ASSEMBLY MEI, BOREMAX OR EQUAL WITH
MUFFLER. MUFFLER TO NOT USE INTERNAL
RUBBER BAFFLES. TANK RESERVOIR TO HAVE
HINGED COVER, OPERATING VALVE AND
MUFFLER AND HOLD 2 X VOLUME OF SYSTEM.
PROVIDE SITE GLASS FOR VISUAL
REFERENCE OF OIL LEVEL.
PROVIDE NEW MASON BR TYPE SOUND
ISOLATION PADS FOR PUMP UNIT AND OIL LINE
SUPPORTS.

PROVIDE NEW and MODIFY: PROVIDE OIL LINE
BETWEEN MACHINE ROOM AND PIT HANGER
BRACKETS WITH SOUND ISOLATION PADS,
MASON BR TYPE. REFURBISH COUPLINGS TO
PREVENT LEAKAGE.

Provide New: FOR MACHINE ROOM AND PIT,
BALL TYPE SHUT OFF AND SEISMIC VALVES.

Provide New: SEISMIC DESIGNS AND
OPERATION.

Provide New: WIRING DIAGRAMS, OPERATING
INSTRUCTIONS, AND PARTS ORDERING
INFORMATION

Provide New: DRAKA OR EQUAL, TRAVELING
CABLE EQUIPPED TO SUPPORT FUTURE
TECHNOLOGY UPGRADES CONTAINING
MULTIPLE SHIELDED PAIRS, COAXIAL, AND
FIBER OPTIC COMPONENTS.

PART 3 - EXECUTION

3.01 GENERAL

- A. As per Article 1.05 of this Section, the Contractor must provide Shop Drawings in accordance with Articles 3.02 - 3.04 below for approval, and then must furnish and install all items as per UNIVERSITY approved Shop Drawings and meeting the stated performance requirements.
- B. For all described Work, See below Cab Fixtures & Controller.
- C. Construct all Work in accordance with the seismic provisions described in ASME A17.1, Section 8.4.
- D. Provide all required safety plan, staging, demolition, hoisting and movement to, on and from the site including new equipment and tools as part of the Work for each Phase. All contractor personnel must be badged by the Contractor and UNIVERSITY for access.
- E. Provide hoist way, pit, and machine room OSHA approved safety barricades and proper signage as required. Protect elevator equipment during execution of the Work to remain in place until the UNIVERSITY Engineer accepts the Work.
- F. Perform all cutting and patching for elevator installation as necessary as part of the Work.
- G. Provide all materials and perform all Work in strict accordance with ASME A17.1 & 3, and ADAAG.

3.02 Cab Fixtures Upgrade:

- A. Perform all work as necessary to install new cab upgrades as described below.
- B. Car Enclosure: Reuse and modify existing cab enclosure.
 - 1. Provide two Car Operating Panels with Security interface.
 - 2. Provide new Island type ceiling with a minimum of two LED dimmable lighting fixtures. 5000 Lux, LED lighting.
 - 3. Technology Cable: Provide separate DRAKA traveling cable from car controller in machine room to car top, plus 3'-0" excess loop at both ends. Terminate Technology cable in separate junction box adjacent to controller in machine room and top of car.
 - 4. Draka Smpte 311 Fibre HDTV Camera Cable, Pu
Cable or approved Equal: 12 (12) pair of shielded wires and two (2) RG-6/U type coaxial cables for future card reader. Provide two (2) pair 14 gauge wires for future CCTV power. Provide connectors for installation of CCTV camera in car.

5. Retain Existing: 1-1/2" round stainless handrails on side and rear of cab walls
8. Provide new cab wall finishes per selection of vendor proposed design elevator finishes or equal materials.
9. Contractor may at their option remove existing cab and provide new cab for labor efficiency.

3.03 Performance Requirements for Controller

Provide New microprocessor, digital architecture, and design. Furnish and install new controller and NEMA 1 enclosure with including the following:

- A. **Controller:** Smart Rise, MCE, Elevator Controls **or other approved controls:** Selective Collective Microprocessor based design. Non-Proprietary system with fully digital control using serial link communications for all data inputs and outputs. Control hardware design must not exceed two programmable circuit boards, to be used interchangeably between car and controller with software peer parameters.
 1. Design elevator control system to provide hoist way access switches at all landings, for improved workplace safety and safe access for car top operation.
 2. Controller must have embedded Lift Net software system for future campus system network monitoring purposes. Proprietary monitoring systems will not be considered.
 3. Controller must provide a TFT LED screen in controller. Screen to provide all information and data to provide without the use of service tools or handheld devices. Display must be able to fully adjust all parameters, display status, and communication and signal fixtures and diagnose faults and events. All faults and events to be held in non-volatile memory for future downloads and automatically recorded to cloud based data management site available to Facility for access at all times.
- B. **Door Operation:** Provide New Linear Door Operator: Adjust door control for proper operation & closing speed to close at 2 FPS or less. Provide Code required kinetic energy data recorded on front of door operator.
 1. Car Doors must always open automatically when the car arrives at the main landing (1).
 2. Infra-red door protection devices with overhead transom scanner for 3 D protection. Edge must be provided with red and green LED illumination during opening and closing cycles and with 3-D detection capabilities.

- C. Automatic Stopping Accuracy: An automatic stopping device designed to govern the stopping accuracy of the car to $\pm 1/16$ " above or below the landing sill. The stopping operation must be effective to avoid over travel and under travel of the car, and must maintain the stopping accuracy regardless of the load in the car or direction of travel.
1. Provide digital leveling system to provide stabilized leveling not to exceed 4-5 seconds, and provide satisfactory stopping at floors in both directions.
- D. Life Safety & Emergency Features:
1. Standby Lighting and Alarm Bell – Provide standard recharging battery operated alarm bell and interface with cab LED lighting system for loss of power.
 2. Emergency Operation: Equip the elevator control system to operate and recall the car in fire or other emergency condition. Provide dedicated terminals on the controller for connection of signal wiring from life safety input sensors. Alarm module inputs to be located in close proximity to elevator controller. conduit and wiring from machine room input sensor modules to elevator controller to be provided by elevator contractor. Operation and visual/audible signal must operate until return is complete or automatic operation restored.
 3. If Standby Power system exists: Upon power failure, elevator must automatically transfer to existing emergency power system. If not battery lowering system must be supplied.
 4. Provide Manual lowering on operating valve as redundant means of lowering car to release passenger at bottom landing.
 4. Upon restoration of normal power supply to the building, the elevator must automatically resume normal operation.
- E. Independent Service: Provide new controls for operation of the elevator from car buttons only. Under this operation, door closing must be by constant pressure on desired door close or floor button.
- F. Code Blue Star of Life Operation: Reuse existing platform size and door configuration.
- G. Controller must be equipped with Siemens Soft Start electronic motor starter mechanism.
- H. Controller must be manufactured with embedded Lift Net monitoring system software to be available for activation by Owner.
1. Controller must not require any secondary tool, hand held device or laptop computer to perform any set up of parameters, adjusting,

troubleshooting or maintenance. All faults and events and parameter adjustments to be displayed on controller LED TFD board

2. All faults and events recorded must remain in non-volatile memory during loss of power and until downloaded for review and cleared by technician. Controller Memory for faults and events to be minimum 100 GB.

H. Controller cabinet to be mounted on machine room wall. using NEMA 1 Cabinet Enclosure and or independently mounted on Unistrut frame work independent and separate from pump unit.

I. Elevator Cab Fixtures, Equipment, and Appurtenances: At minimum, the Contractor must design, furnish, and install approved fixtures and designs as follows:

1. All electrical controls and signal fixtures, and wire complete.
2. Emergency lighting: Provide new
3. Car Operating Panel (COP) and related fixtures, complete.
4. Communication systems as described herein below.
5. Car Operating Panel: Provide new applied hinged Panels with locking devices for COP panel access – Hinged cover with brushed satin stainless steel No. 4. With ADA compliant LED buttons, full button face illumination and TFT LED screen on panel to display car position, direction, and messaging. MAD OR INNOVATION Fixtures or approved equal. Provide connection with existing security system.
 - a, Provide new second COP horizontal for handicapped access on side wall of cab for special needs access and operation. Provide shop drawing of proposed design and location for approval. Locate panel immediately above Handrail.
 - b. Provide adjustable volume, audible voice announcement in car for special needs.

J. Hall Pushbutton & Signal Fixtures. MAD or INNOVATION Fixtures or equal.

1. Provide new landing push button fixtures with TFT LED Screens in button fixture for car direction and position indicator.
2. Hall lanterns LED Display to be located on wall at 84".
2. Provide engraved graphics and surface mounted panels.
3. Provide full face hall button illumination.
4. Provide emergency telephone line monitoring, warning signal and bypass means for loss of telephone connection.

K. Provide new door hardware and interlocks Rewire all Door interlocks and provide proper ground.

- L. Submit catalog information and proposed drawings with related information for all materials for approval before fabrication.

3.04 Machine Room Equipment:

- A. Remove existing controller and properly dispose of all materials.
- B. Arrange equipment in machine room to maximize available space while meeting code requirements. Provide shop drawing of proposed layout for approval.
- C. Pump Unit: Replace Existing Pump unit with new submersible unit. Drain and dispose hydraulic system oil and replace with new ISO 32 oil. Provide new pump tank reservoir assembly design to accommodate 200% of oil needed for system. Provide oil cooler with cooling fan vented to outside of machine room. Muffler not to contain rubber baffles or any other decomposable components.
- D. Selector/encoder: Furnish and install a solid-state, hatch tape, or moving crosshead type, electrically or mechanically coupled to elevator car frame and employing digital encoding of car position to controller for absolute positioning and stabilized & accurate leveling operation.
- E. Leveling: Furnish and install equipment to provide a sustained leveling in up or down direction not to exceed five (5) seconds before car stopping floor level.
- F. Automatic Stopping Accuracy: Furnish and install an automatic stopping device that is designed to govern the stopping accuracy of the car to 1/16". The stopping operation must be precise & effective to avoid over travel and under travel of the car and must maintain the stopping accuracy regardless of the load in the car or direction of travel without releveling.
- G. Oil Return Pump: Furnish and install a new automatic oil return pump in pit with flood switch, oil return lines from cylinder packing head to pump reservoir for automatic return to machine room pump reservoir. Oil Return pump system to employ an audible alarm for activation of the flood switch. A counter to be provided in machine room to record the number of cycles of operation of the return pump operated every 30 days using a calendar display and non-volatile memory system.
- H. Furnish and install a seismic rupture valve in the elevator pit.
- I. Co-ordinate elevator upgrades with electrician to install code compliant shunt trip operation and inputs and Fireman's flashing hat per code.

3.06 CLEANUP

- A. Keep work areas orderly and free from debris during progress of project. Remove packaging materials as equipment is installed.

- B. Remove all loose materials and filings resulting from this work from hoistway surfaces.
- C. Clean machine room equipment and floor of dirt, oil and grease and paint walls and floor with enamel.
- D. Clean hoistway, car, car enclosures, entrances, operating and signal fixtures, handrails and trim of dirt, oil, grease and fingerprints.

3.07 Acceptance Inspection and Tests

- A. General: Final acceptance of the installation shall be made only after all field quality control reviews and tests are complete, identified corrective measures are complete, and all submittal information and certificates have been received, and the Owner's representative satisfied that the following have been satisfactorily completed. (Furnish labor, materials, and equipment necessary for tests. Notify contractor five days in advance for final inspection and tests).
 - 1. Workmanship and equipment comply with specification.
 - 2. Contract speed, capacity and floor to floor performance comply with specification.
 - 3. Performance of following are to be demonstrated and proven satisfactory:
 - a. Starting, acceleration, running.
 - b. Deceleration, leveling, stopping.
 - c. Door operation and door close pressure. Adjust door closing times as appropriate for the facility occupants.
 - d. Equipment operation noise levels.
 - e. Signal fixture utility.
 - f. Overall ride quality.
 - 4. Test Results:
 - a. In all test conditions speed and performance times specified shall be met, leveling accuracy shall be maintained without re-leveling and ride quality shall be acceptable to the Owner's representative.
 - b. A full capacity one hour running test, stopping at each floor for 10 seconds in up and down direction may be required.
- B. Performance Guarantee: Should these tests reveal any defects or poor workmanship, any variance or noncompliance with the requirements of the specified code and/or ordinances or any variance or noncompliance with the requirements of these specifications, the following work and/or repairs shall be completed at no expense to the Owner.

1. Replace all equipment or components that do not meet Code or specification requirements.
 2. Perform all work and furnish all labor, materials, and equipment necessary to complete the specified operation and/or performance.
 3. Perform all re-testing required by the governing Code Authority and the Owner to verify the specified operation and/or performance.
- C. Field Review Scheduling: The Elevator Consultant shall schedule installation progress reviews and final equipment and installation review with the Elevator Contractor after operating permit has been issued by Washington State Department of Labor and Industries. The Elevator Contractor must provide written reply to all corrective measures indicated on progress and/or final review reports.
- D. Corrective measures indicated in the written review shall require no more than one follow up review to verify Contractor's compliance. The Elevator Contractor shall reimburse the UNIVERSITY Elevator Consultant at normal billing rates for appointments not kept, or when additional follow up reviews are required due to the Elevator Company's non-conformance with initial review of corrective items.

3.08 Owner's Information

- A. Submittals: Provide written information necessary for proper maintenance and adjustment of the equipment prior to final acceptance.
1. Straight line schematic wiring diagrams of installed elevator control circuits with index of location and function of all components. Provide three neatly bound final corrected sets within 30 days after job acceptance for the Owner's file.
 2. Maintenance Control Plan with all tasks, protocols and frequency of scheduled events.
 3. Lubricating instructions, including recommended grade of lubricants. Provide three neatly bound copies.
 4. Parts catalogs for all replaceable parts including ordering forms and instructions. Provide three neatly bound copies.

End of Specification Scope:

Attachments:

Site photos

Lithonia Lighting Fixtures

University Insurance Requirements

Site Photos:



Site Photos:





Site Photos:





Site Photos:





Attachment:



FEATURES & SPECIFICATIONS



INTENDED USE — Inspired by classic fluorescent strip channels, this LED fixture offers a traditional appearance that incorporates the latest technology. Available in several lengths and lumen packages. Ideal for use in commercial, retail, office, warehouse and display applications. **Certain airborne contaminants can diminish the integrity of acrylic and/or polycarbonate.**

[Click here for Acrylic-Polycarbonate Compatibility table for suitable uses.](#)

CONSTRUCTION — Compact design channel and cover are formed from code-gauge cold-rolled steel. Easy to install row aligner included with 2LL versions for continuous row mounting. High-gloss, baked white enamel finish (standard).

OPTICS — LEDs provided 80+ color rendering index (CRI) at 4000K. Diffuse polycarbonate lens provides smooth, linear illumination which is designed to resemble the classic look of traditional fluorescent tubes. Lumen output up to 1,150 lumens per foot.

ELECTRICAL — The fixture is tested to withstand a maximum line surge of 2.5kV/2kA ring wave for indoor locations. MVOLT versions also tested to withstand a maximum line surge of 2kV/1kA combination wave for indoor locations. For applications requiring higher level of protection, additional surge protection must be provided.

INSTALLATION — Fixture may be surface or suspension mounted with appropriate mounting options. Aligner locks in place for easy continuous row mounting. Luminaire should be installed in applications where ambient temperatures do not exceed 95°F (35°C) for 4' and 8' models or 104°F (40°C) for 2' models.

LISTINGS — CSA certified to US and Canadian safety standards and listed suitable for damp locations. Minimum starting temperature at -40°F (-40°C). Maximum ambient operating temperature of 95°F (35°C) for 4' and 8' models. Maximum ambient operating temperature of 104°F (40°C) for 2' models.

WARRANTY — 5-year limited warranty. Complete warranty terms located at www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

NOTE: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25°C. Specifications subject to change without notice.

MNSL

LED Striplight



ORDERING INFORMATION

Lead times will vary depending on options selected. Consult with your sales representative.

Catalog number	Description	Lumens	Wattage	Voltage	Color Temperature	Color Rendering Index	Pallet Quantity
MNSL L23 1LL 120V 40K 80CRI	2' 1-Light 120V LED Strip Light	1150	12	120V	40K 4000K	80CRI 80 CRI	576
MNSL L24 2LL MVOLT 40K 80CRI	2' 2-Light MVOLT LED Strip Light	2200	25	MVOLT (120-277V)	40K 4000K	80CRI 80 CRI	336
MNSL L46 1LL 120V 40K 80CRI	4' 1-Light 120V LED Strip Light	2300	25	120V	40K 4000K	80CRI 80 CRI	288
MNSL L48 2LL MVOLT 40K 80CRI	4' 2-Light MVOLT LED Strip Light	4500	50	MVOLT (120-277V)	40K 4000K	80CRI 80 CRI	168
MNSL L96 2LL MVOLT 40K 80CRI	8' 2-Light MVOLT LED Strip Light	8200	90	MVOLT (120-277V)	40K 4000K	80CRI 80 CRI	252