Division 14 – Conveying Systems

14.1. Refer to **CPSM 6.14 VERTICAL TRANSPORTATION DESIGN STANDARDS** for requirements which must be incorporated into all projects. In the case of a conflict between these Design Standards and the CPSM, the CPSM shall take precedence.

14.2. Planning & Design

a. A planning conference shall be scheduled by the A/E with the ODU Project Manager, building users and Facilities Management to determine project specific elevator requirements. For "service" or "freight" type elevators, the A/E shall verify type of freight and method of moving (i.e. pallet jack) so that the appropriate elevator size and floor load design criteria can be established. Included in that discussion should be the potential for future equipment that may be added to the building and may require special size requirements including door height, (i.e. a mass spectrometer). Based on this discussion, the A/E shall propose the elevator type(s) for approval no later than the Owner Preliminary Design Submittal.

b. When renovation of an existing building includes the area near an elevator, during the schematic design

friendly oil. If a hydraulic elevator is used, the jack cylinder shall
limit corrosion and help contain hydraulic oil leakage underground.
signed so that the glass can be cleaned safely and inexpensively.
Design and Construction to have elevator shafts constructed of

ccess to roofs or other parts of the building unless elevator equipment is fenced or walled in. Electric fuse disconnect switches or circuit breakers for elevator and cab lights shall be adjacent to the door jamb of the main door to the machine room.

c. All machinery and equipment including that associated with machine room less type elevator machinery and controls, shall be accessible by maintenance personnel in a manner similar to the access afforded for maintenance in a typical elevator machine room.

d. Elevator machine and/or equipment rooms shall be acoustically treated.

e. Non-elevator related equipment such as piping and conduit shall not be located in or run through the elevator machine room.

f. Provide a sweep on the machine room door to provide for dust protection

g. Ensure the Unit disconnect switch is visible and clearly labeled.

h. Label elevator oil minder sump disconnect.

14.5. Elevator Pits

a. Elevator pits for hydraulic elevators shall have sump pits for use of a portable sump pump provided by University Facilities Management personnel. Drainage from the elevator pit shall not be connected to any building drainage or sewer system. Sump pits shall be equipped with a float sensor connected to Facilities Management Systems Control. Underground hydraulic piping for elevators shall be Schedule 80.

b. A duplex GFCI electrical receptacle is to be installed three feet above the finished pit floor for use by elevator mechanics.

14.6. Security

a. Elevator phones should be (Talk-A-Thon) and be tied into campus system for automatic monitoring [Point of contact is Assistant Director ITS Converged Technologies, 747-683-3017]. An emergency telephone will be furnished by the Owner for field installation by the contractor.

b. If an elevator cab has a stop that enters only into a mechanical space, the elevator shall require electronic card swipe access for that level.

c. In some instances, an elevator in a **Residence Hall** will require an access control card swipe to allow entrance to resident only floors. Coordinate requirement, locations and connection to owner supplied equipment with the Department of Design and Construction and Residence Life.

d. All keyed electronic switches must be able to accommodate BEST 7 pin cores (i.e. light, fans, stop/start override, etc.).

e. Any cooling required for elevator equipment rooms shall not be connected to district chilled water/building chillers and must be serviced by an independent DX unit.

14.7. Elevator Cab

a. University campus elevators tend to be very heavily used, therefore, both public and freight elevators should be designed with durable, vandal resistant, low maintenance finishes. Parts and components should be easy to replace in the event of damage.

b. Cab finishes shall be specified on the room finish schedule. Floor finish shall be resilient or porcelain tile; carpet is discouraged. Doors and jambs shall be brushed finish stainless steel; painted finishes are prohibited. Wall panels shall be plastic laminate with stainless steel rails on three walls. In Residence Halls, the wall panels shall be stainless steel. The ceiling system and lighting shall be vandal resistant with no exposed lamps within reach inside the cab. An inspection certificate frame shall be mounted in the cab with tamper resistant screws. Provide protective moving blankets and associated hooks as part of the base bid.

c. Preference in Residence Halls elevator cab floors shall be rubber floor tile with “lo-disc” raised circular design for a non-slip surface.

d. Elevator Cab shall be assigned a room number on the first floor plan. See **APPENDIX H - ROOM NUMBERING PROCEDURES.**

14.8. Acceptable Manufacturer’s

a. Project specifications shall include 3 manufacturers that can provide elevator systems/hoistways and cars to fit within the specified requirements/shaft size.

b. Subject to compliance with project specific requirements, the following manufacturers are acceptable to the university:

i. Fujitec America, Inc.

ii. KONE Inc.

iii. Otis Elevator Co.

iv. ThyssenKrupp Elevator.