

# VA LOMA LINDA CONSTRUCTION STANDARD

## GENERAL

(1) Ensure all contractors performing construction, maintenance, or testing receive safety orientation training. Any deviation must be approved by the Safety Officer.

(2) Ensure that fire drills are conducted at a minimum of two drills per shift per quarter whenever "Interim Life Safety Measures" are required, as determined by the Construction Safety Subcommittee. This starts at project development and is enforced through project completion

(3) Contractor shall submit Infection Control Plan prior to start of construction to be approved by Infection Control coordinator.

(4) Contractor shall submit Fire Safety Plan to be approved by Safety Officer prior to start of construction.

A. Construction Contracted Employees The Construction Contractor is responsible for:

(1) Performing construction operations in a safe manner according to all established safety regulations as stated in his contract.

(2) Complying with the security management program. As a minimum, contractors must notify and obtain permission of the VHA Police, be identified by project and employer, and restricted from unauthorized access. All employees must wear a VA Police issued identification Badge.

(3) Following all construction safety requirements as outlined in 29 CFR - OSHA 1926 - Construction Standards, and our local policies.

(4) Completing the OSHA 10-hour construction worker course, the 30-hour construction course, or other relevant competency training, as determined by the VA CP with input from the Construction Safety Subcommittee. VA Contracted employees must display their OSHA Construction Training Certification Card With their security badge.

(5) Completing the Medical Center's construction safety training before conducting work activities.

(6) Following Infection Control Guideline, Construction and Renovation Projects.

(7) Attending RF radiation training or be escorted by certifying official before accessing the roof area when necessary.

(8) Obtaining a "hot work" permit from the Safety Office before any welding, cutting, soldering, or brazing is to be done, so that the fire alarm system in the area can be programmed out.

(9) Providing a list of hazardous materials to be used in the construction program and the applicable MSDSs.

(10) Providing contractor owned, certified, serviceable fire extinguishers at the construction site.

(11) Cleaning up the construction site and related areas before the end of each work day so as to ensure safe conditions and to eliminate smoke and fire hazards.

(12) Keeping all access to balconies and roof secured.

(13) Removing all construction debris from the construction site and related areas before final inspection and acceptance of the finished project.

### **ARCHITECTURAL**

- A.1 All walls shall extend up to the bottom of interstitial floor.
- A.2 All walls shall have sound insulation.
- A.3 Integrity of Firewall separations shall be maintained on all construction at all times.
- A.4 Provide 1-hour separation between corridors and rooms/suite.
- A.5 Provide fire caulk to all interstitial floor, fire wall and concrete floor penetrations.
- A.6 Provide fire caulk on all penetrations through fire rated walls.
- A.7 Paint Material, color and manufacturer shall match with those currently being used by VA maintenance section.
- A.8 Ceiling acoustical tiles shall match the material being used by VA maintenance section.
- A.9 Use approved VA Loma Linda Standard Signage.
- A.10 Replace all terminal (reheat) boxes with new.
- A.11 Remove asbestos containing VCT tiles and mastic.
- A.12 Carpets in many locations within the hospital were installed over asbestos containing VCT tiles and mastic. Verify with project engineer if asbestos in the subject area has been abated.
- A.13 Bathroom wall tiles shall follow the Public Restroom design with diamond (4x4 tile installed diagonally) striping.
- A.14 Soap Dispensers will be VA supplied and installed. Contractor shall provide space.
- A.15 Corridor Fire doors shall have continuous hinge.
- A.16 Corridor Fire doors shall have flush mounted panic bars.
- A.17 Corridor Fire doors shall have magnetic hold open.

- A.18 All existing doors to remain within the construction area shall be sanded and refinished.
- A.19 All walls to remain within the construction area shall be touched up and repainted.
- A.20 Use 12x12 ceramic floor tiles for toilet floors.
- A.21 Due to presence of Cellular Phone Companies' antennas on the roof of VA Loma Linda, all contractors including A/E that needs access to the roof of the hospital shall be accompanied by personnel that have eight hours of Non-Ionizing Radiation Safety Training.
- A.22 All carpet to be used in the hospital shall be carpet sheet with welded seams to match manufacturer, model number in stock material of hospital maintenance.
- A.23 VALL also prefer the use of sheet vinyl floor in some toilets. Contractor and A/E shall coordinate.
- A.24 Interim Life Safety Measures (ILSM) shall be implemented on all construction projects.
- A.25 Infection control is enforced at the hospital at all times. Contractor construction procedure shall meet infection control policy.
- A.26 A-E / Contractor shall provide complete submittal register both in hard and electronic copies covering all required submittals in each specification section. Follow VALL standard format.
- A.27 Provide construction barrier made out of metal studs and gypboard. Tape joints and provide one coat of paint on construction barrier to maintain infection control in the area.
- A.28 Provide anteroom as proposed on the diagram or where Contractor feels is best for his operation. Anteroom is for preparation of carts prior to transporting debris out of the hospital. Maintain negative air inside anteroom.
- A.29 Provide cover to seal carts while transporting debris out of the hospital. Cover new material especially gypsum boards while being brought into the job site so as not to leave dust along the way.
- A.30 Mop all pathways to remove dust and wheel tracks periodically. Clean carts' wheels by wiping off with wet cloth before taking from and to construction area. Contractors are to use vacant space behind Medical Media building to park their trash bin during demolition phase of the project.
- A.31 All interstitial deck opening shall be sealed off after utility line or ductwork is removed.

## **CIVIL**

### **STRUCTURAL**

- S.1 All disturbed structural parts of the building shall be applied with fire proofing.

### **MECHANICAL**

- M.1 Provide seismic support to all utility lines and ductwork.
- M.2 HVAC supply and return penetration through interstitial floor shall have rigid duct transition and supported by angle bars screwed on to the interstitial floor.
- M.3 Use all rigid ductwork inside interstitial space. Flexible ductwork can only be used under interstitial space floor to connect to HVAC grilles.
- M.4 Replacement of HVAC air handling unit shall be considered on all projects. HVAC air handling unit shall be the same of manufacturer of AHU-26 (serving OR suite).
- M.5 Replace all HVAC return and exhaust fans.
- M.6 Replace all terminal reheat boxes affected by construction.
- M.7 New HVAC controls shall be Direct Digital Controls (DDC).
- M.8 Do not install fire dampers on any exhaust or return air system in the hospital.

### **PLUMBING**

- P.1 All stand-alone sink shall be supported with standard floor bracket.
- P.2 Replace all main sanitary drain serving each module.
- P.3 All drain cleanouts shall be wall mounted and higher than the lowest fixture it serves.
- P.4 All built-in sink shall have ½” solid surface counter.
- P.5 All water closets (toilets) shall be wall hung per VA and ADA standard.
- P.6 Sink faucets shall be electronic motion sensor controlled, plugged in to GFI 110V outlet.
- P.7 All stubs for stop valve connection shall be ½” threaded brass nipple connected to a female threaded elbow inside the wall and secured to studs.

P.8 Provide label to all piping inside interstitial space identifying its content and directional flow.

P.9 All emergency eyewash shall have piped –in drain connection to building drainage system.

## **ELECTRICAL**

E.1 All walls in offices and exam rooms shall have electrical outlets.

E.2 There shall be a minimum of two data drops in each office or exam rooms. One active and one blank. Provide sufficient length of communication cable to reach the farthest communication outlet inside the room.

E.3 All emergency lights shall be on dedicated circuit.

E.4 All offices and exam rooms shall have motion sensor light switch.

E.5 Exterior light fixtures shall be controlled by photo sensor.

E.6 All electrical cover for outlets and light switches shall be stainless steel with engraved circuit numbers on its face to identify the panel and circuit breaker number where it is connected.

E.7 Minimum size of electrical conduit shall be ¾”.

E.8 All electrical outlets shall be gray in color.

E.9 All conductors inside the electrical box shall be labeled identifying circuit numbers.

E.10 All junction boxes inside interstitial space that has conduit penetrating through interstitial floor shall be labeled to identify the room it serves.

E.11 Provide 220 Volts electrical outlets maximum 50 feet apart in corridors for use of hospital’s floor buffer.

E.12 Provide 110 Volts electrical outlets maximum 25 feet apart in corridors for maintenance use.

## **FIRE PROTECTION**

FP.1 Verify existing location of fire extinguishers in the areas affected by construction. Provide additional fire extinguishers as necessary to meet NFPA requirements.

FP.2 All public restrooms shall be equipped with fire alarm and strobes.

FP.3 Verify capacity of existing fire detection and fire alarm system. Expand as necessary. VALL has a planned replacement of fire alarm system throughout the building. Provide provisions for future replacement of fire alarms system.

FP.4 Submit fire alarm drawings including speakers for paging system in electronic form for review by fire alarm contractor.