# CHAPTER 8 – DESIGN SERVICES: CODES, STANDARDS, AND POLICIES

## SECTION 8.1 GENERAL

This section contains standards and requirements that clarify the applications of VUSBC and mandatory University technical requirements as they pertain to university facilities.

Chapter 8 prescribes standards and requirements that may be higher than the minimum requirements for the private sector owner but are necessary to meet energy, performance, maintenance, safety, and accessibility standards for public buildings. The Architect/Engineer must design to meet the standards and requirements stated in this manual as well as Chapter 4 of the CPSM (Code and Technical Requirements for All Buildings on State Property).

## SECTION 8.2 CODES AND POLICIES

### 8.2.1 Code Administration

DEB is the designated building official for University owned facilities, including those facilities owned by Agency 268, VIMS. DEB was designated to serve as the Building Official by a resolution of the BOV in September 2019. Terms of this appointment are outlined by an MOU dated October 2, 2019.

DEB is delegated authority by DGS to perform reviews of the University's construction project drawings and specifications for conformance with the requirements of the VUSBC. DEB shall perform fire safety reviews for all projects involving new construction, additions, or renovation. The State Fire Marshall Office responsible shall assist with inspections and provide the acceptance letter prior to occupancy.

- Review Procedures: DEB reviews documents for compliance with the VUSBC during its normal review of all projects. Such review does not relieve design consultants from responsibility for designing in accordance with these standards, applicable codes, State and Federal Law.
- Review Initiation: Projects will be initiated with DEB by the University PM using the forms available in BITS.

### 8.2.2 Applicable Codes

Codes and regulations that apply to projects on state property are outlined by Chapter 4 of the CPSM.

### 8.2.3 Additional Codes and Regulations

Certain projects may be required to comply with other codes or regulations, such as federal or special state regulations. Those codes and regulations may take precedence over the VUSBC. All such codes and regulations shall be clearly noted in the preplanning documents and displayed on title sheets of PD and WD.

8.3.2.1 – The mixing of code requirements between different editions of a code is not allowed. Code requirements in one section of a specific code edition are often dependent upon conformance with

requirements in other sections of that edition, therefore the mixing of code requirements between different code editions is not allowed without written authorization from the UBO.

### 8.2.4 Code Implementation

Typically, updates to the VUSBC is adopted every three years. Such adoption incorporates specified editions of model codes (such as 2018, 2021 International Building Code, etc.) along with Virginia modifications to these codes. Posts made by DHCD indicate notice/announcement of the effective dates of the VUSBC editions as well as the dates of referenced standards and amendments.

8.3.4.1 - Code Implementation as it applies to New Work: The applicable code shall be the VUSBC edition in effect at the time outstanding issues have been resolved, PD drawings are approved (HECO-5), and authorization is given to proceed with development of the WD drawings.

- If PD drawings are approved during the 12 months prior to the effective date of a new edition of the VUSBC, the applicable code shall be designated by the University UBO using the D&F format
- Questions on this issue shall be resolved by the UBO using the D&F format.

8.3.4.2 - Reactivated Projects: Prior to reactivating a project that has been inactive for a period during which the effective code has changed, the UBO shall determine which code applies. The plans and specifications shall be revised as necessary to comply.

### 8.2.5 Modifications of Code Requirements

If a modification to the code is believed to be necessary, the A/E shall request such modification or variance in writing at or before the time the PD is submitted. The request shall clearly state the nature of the problem and the supporting rationale and justification for the modification or variance. All requests to waive or grant a variance to the requirements of the VUSBC will be addressed to DEB via the University Architect, PM, and the Director, Design & Construction.

### 8.2.6 State Building Construction in Flood Plain

Executive Order 45 (2019) prohibits the construction of new state-owned buildings within the 100-year flood plain unless a variance is granted by the Director of the Department of General Services for University-owned buildings, and after consultation with the State Coordinator for the National Flood Insurance Program (the Department of Conservation and Recreation (DCR)). See current Commonwealth of Virginia flood plain design standards.

### 8.2.7 Fire Safety Reviews

Fire safety reviews will be conducted by the DEB for all projects.

8.2.7.1 - Fire suppression, fire detection, and fire alarm shop drawings: shall be reviewed and approved prior to the work being installed. Where a complete fire protection system is designed and shown on the construction documents, the drawings and/or specifications shall state that deviations in materials, locations, configurations, or sizes proposed by the Contractor are subject to being reviewed under the provisions of Section 26 of the General Conditions as a “substitution”.

8.2.7.2 - When fire suppression, fire detection, and fire alarm systems are not complete on the

construction documents, then shop drawings or submittal data shall first be reviewed and approved by the A/E of record. The reviewed documents, with any added notations by the A/E, shall be submitted to the appropriate Fire Safety reviewer (responsible State Fire Marshal's Office) for final review and approval.

8.2.7.3 - Safety equipment not required by code, including Fire Detection, Fire Alarm, and Fire Suppression Systems, but are provided at the University's option in state owned buildings and structures shall be provided in accordance with the code. Work that is planned as a complete system but requires phased construction to provide a complete system is acceptable. Providing partial systems to certain spaces such as storage spaces that will improve safety without giving a false sense of security to building occupants will be considered on a case-by-case basis.

8.2.7.4 - Fire Protection and Sprinkler shop drawings and submittal data shall be reviewed and approved by the A/E of record. When the submittal with any added notations is satisfactory to the A/E, the A/E shall so stamp and send such documents to the University PM who shall forward to DEB for review and approval.

### 8.2.8 Off-Site Solar Production

The university has entered into an agreement with Dominion Power for the purchase of electric energy from the Rochambeau Solar Facility. An extensive on-site installation for the university is not practical or feasible due to limited areas on campus. Production from the facility will generally be allocated to new construction and major renovation projects to comply with the Commonwealth's High-Performance Building Act, energy and sustainability requirements of the VUSBC and CPSM, and to demonstrate compliance with GBCI's LEED rating system. Assignment of allocations of solar production shall be made by the University Architect. Equivalent approver authority outlined by section 1.1.6 shall not apply to this section.

## SECTION 8.3 SEPARATE CONTRACTS FOR MATERIAL AND/OR EQUIPMENT

### 8.3.1 General

All procurements must be made in accordance with the University Procurement Rules. All assignments of contracts or materials must be done with the full prior knowledge of all parties to the contract. The use of 'allowances' is not competitive and has been deemed not to conform to the University Procurement Rules. Work outside of the general contract, that is Not In Contract (NIC) for bidding but is to be included in the construction, must be coordinated with the contract documents in one of the following ways:

### 8.3.2 Contractor purchased/Contractor Installed (Subcontractor designated/price set by university)

Drawings and specifications must be included that describe the work including scope of work, materials, installation, testing, and quality control. The Bid Form or RFP must include a statement that informs the Contractor to accept the subcontract and coordinate the work as if the General Contractor had selected the Subcontractor. The Bid Form shall also include the value/quote/negotiated price of the subcontract to be included in the Bid. An example of this is a pre-selected Building Automation Systems Subcontractor.

### 8.3.3 Contractor Furnished (materials contract assigned by the Owner)/Contractor Installed:

Drawings and specifications must be included that describe the work including scope of work, materials, installation, testing and quality control. The Bid Form must include the value/quote/price of the materials

contract and a statement that informs the General Contractor of the intent to assign a specific materials contract and directs the General Contractor to accept and install the materials and coordinate the work as if the General Contractor had purchased the materials. An example of this is laboratory or kitchen equipment.

### 8.3.4 Owner Furnished/Contractor Installed (OFCI):

Drawings and specifications must be included that describe the work including: scope of work, materials, installation, testing, and quality control. The Bid Form must include a statement that informs the General Contractor of the intent to provide specific materials in a specific location and directs the General Contractor to accept and install the materials and coordinate the work as if the General Contractor had purchased the materials. An example of this is existing or pre-purchased laboratory or kitchen equipment. The University shall pay the supplier directly for the materials. (Note: A Determinations & Findings Report approved by the University Architect, is required to use this method of procurement.)

### 8.3.5 University purchased/University installed (or installed by University's separate Contractor)

The Bid Form must include a statement that informs the Contractor of the intent to perform specific work in a specific location and directs the General Contractor to allow the work to proceed and coordinate the work of the owner and other Contractors. An example of this is specialized laboratory equipment.

## SECTION 8.4 PROCUREMENT OF FURNISHINGS AND LOOSE EQUIPMENT

Loose equipment and furnishings are generally items moveable or portable versus permanently installed. It includes such items as residential refrigerators; unattached residential stoves; unattached furniture; printers and computers; and other similar furnishings or loose equipment. The University shall purchase loose equipment in accordance with University Procurement Rules, typically through the University's Department of Procurement. Determinations to purchase furnishings or loose equipment as part of a project or by other means must be approved by the University Architect.

## SECTION 8.5 BUILT-IN EQUIPMENT

Built-in equipment comprises special purpose equipment or furnishings that are permanently built in or attached to general building construction. It includes such items as laboratory fixtures, kitchen cabinets, commercial laundry equipment, auditorium seating, stage rigging, and so forth. Built-in equipment may be procured in the following ways provided the procurement complies with the Management Agreement:

- Purchased as part of the construction contract.
- Purchased prior to award of the construction contract where the supplier agrees to be assigned as a vendor to the Contractor. That price and the vendor's name are then listed on the Bid Form.
- Purchased and installed as a separate contract for both procurement and installation.

# SECTION 8.6 CHESAPEAKE BAY PROGRAM

The University will ensure that their projects are located, designed and constructed to protect the water quality and living resources of the Chesapeake Bay. Adherence to the Chesapeake Bay Watershed Development Policies and Guidelines will be required in the development of all project sitings/designs. This publication is available from the Chesapeake Bay Local Assistance Department.