

UVA Office of University Building Official

Annual Report 2008-2009



Overview

The 2008-2009 year experienced a second year of significant increases in the number of building permits issued over the previous year. Reviews of design and construction documents increased similarly over the previous year as did the number of construction inspections in preparation for final inspections for Certificate of Use and Occupancy.

Notable achievements included issuing 146 building permits and conducting 324 project reviews for 153 projects. The Office of University Building Official also provided inspections and issued 12 Certificates of Use and Occupancy including:

- Ruffin Hall Studio Arts
- Claude Moore Nursing Education Building
- Kellogg Residence Hall
- Carter-Harrison Research Building Tower
- South Chiller Plant Expansion
- Campbell Hall School of Architecture Addition
- Clinical Pedestrian Bridge (from 11th Street parking garage)
- Printing and Copy Services Addition
- Crockett Hall Administration Building - UVA College at Wise

In addition to participation in design development workshops, the staff participated in 15 Value Management studies which identified potential cost savings without loss of function.



Ruffin Hall – Occupied Fall 2008

Background

The Management Agreement between the Commonwealth of Virginia and the University of Virginia pursuant to the Restructured Higher Education Financial and Administrative Operations Act of 2005 provides that the University designate a Building Official responsible for building code compliance. Richard H. Rice, P.E. continued his service as University Building Official through February 2009. Effective February 4, 2009, the Office of University Building Official and its Review Unit were restructured to ensure the office reports directly and solely to the Board of Visitors as is described in the management agreement. Elaine B. Gall, P.E. was designated the University Building Official, and is responsible for:

- Issuing permits for each capital project required by the Virginia Uniform Statewide Building Code to have a building permit;
- Determining the suitability for occupancy of, and issuing certifications for building occupancy for all capital projects requiring such certification.

Review Unit

Under the terms of the Management Agreement the University is required to maintain a Review Unit of qualified professionals to review plans, specifications and documents for compliance with building codes and standards, and to perform required inspections of new construction. The University has maintained a Review Unit since 1991 under delegated State authority, that excluded fire and life safety reviews, for Agencies 207, 209 and 246. When the Medical Center was granted autonomy in 1996, the Review Unit assumed responsibility for all building code functions for Agency 209 facilities, including fire and life safety reviews. With the new authority granted through the Management Agreement in July, 2006, the University Building Official and Review Unit gained full authority for all three agencies. The Office of University Building Official Review Unit is staffed by six professionals licensed by the Commonwealth consisting of four engineers and two architects whose professional qualifications are provided at the end of this report.

The Office of University Building Official also works closely with the State Fire Marshal's office and University Fire Marshals to insure compliance with applicable fire and life safety codes. The office hired a contract employee, retired from the State Fire Marshal's Office, to provide fire safety pre-inspections and coordinate inspections with the State Fire Marshal's Office. No Certificates of Use and Occupancy are issued for capital projects until they have been inspected and approved by the State Fire Marshal.

The Office of University Building Official also stays in constant communication with the UVA project managers and construction administration manager. University Building Official staff visit projects and communicate with contractors, design professionals, and Facilities Management staff throughout the construction process to minimize potential issues that can delay issuance of Certificates of Use and Occupancy.

Members of the University Building Official Review Unit participate in a variety of consulting roles when problems occur needing building construction or engineering expertise. This year, staff provided a study and recommendations after numerous water pipes froze and burst on campus. Recommendations will be implemented by Facilities Management to ensure pipes and other mechanical devices are protected from freezing. Cooking exhaust issues were investigated at JPJ Arena and structural evaluations of existing buildings were performed where deterioration or vehicular damages had occurred to ensure structures were safe or to make recommendations for rectification.

The Office of University Building Official also supports the University community with assistance to building trades personnel with code questions, working with Facilities Management personnel to resolve problems, and providing technical expertise and assistance to University Fire Marshals. In a continuing role of inter-community relations between the University, City of Charlottesville, and County of Albemarle, the Office of University Building Official continues to work closely with local government. In particular, frequent communications occur between staff and local emergency responders to ensure building planning includes first responder access to University Buildings.



Carter-Harrison Research Building
Nearing Completion

Reviews

324 project reviews were completed from May 1, 2008 to April 30, 2009 for a total of 153 projects, up 23% from last year. Major capital projects included:

- Hospital Tower Expansion
- College of Arts and Sciences Building
- Printing and Copy Services Addition
- IT Engineering Building
- Clinical Pedestrian Bridge
- ITC Building
- New Cabell Hall Renovations
- Rugby Administration Building
- Moser LINAC Expansion
- Alderman Road Residence Halls and Student Center
- Smiddy Hall IT Building – UVA College at Wise
- Multipurpose Arena – UVA College at Wise

Of the projects reviewed 55 were Academic projects, 55 were Health System projects, 2 were College at Wise projects, 13 were Housing/Business Operations projects, 11 were Athletics projects, and the remainder were not attributable to these categories. Examples of minor capital outlay projects include seven projects in the Central Grounds Historic District, Hospital Radiology Department renovations, Hospital Level 0 projects for Resident Sleeping areas and Clinical Engineering, and Law School Caplin Auditorium and Elevators.



Future Site for the Emily Couric Clinical Cancer Center and Hospital Bed Expansion

Building Permits and Certificates of Use and Occupancy

148 building permits, up 41% from last year, were processed along with 8 temporary structure (platforms and bleachers) permits from May 1, 2008 to April 30, 2009. All building permits require technical assistance by one or more of the members of the University Building Official's Office in addition to the permit processing itself. Building permits have increased 269% over the 55 permits issued two years ago.

Final Certificates of Use and Occupancy (CUO) were issued for Kellogg Residence Hall, Ruffin Hall, Claude Moore Nursing Education Building, South Chiller Plant Expansion, and Clinical Pedestrian Bridge. In addition Certificates of Use and Occupancy were issued for the Student Center at Wise and Wilsdorf Hall resolving outstanding Temporary Certificates of Use and Occupancy initiated by the Bureau of Capital Outlay Management prior to July 1, 2006. Dell Building 1 was issued a CUO for its change in use from an F-1 Manufacturing and Arts building to a B Business use.

Temporary Certificates of Use and Occupancy were issued for six buildings including Crockett Hall at Wise, Medical Research Building MR-6 (partial occupancy), Addition to Campbell Hall Architecture School, and Printing & Copying Services Addition.

Buildings under construction at this time include South Lawn, Medical Education Building, Emily Couric Clinical Cancer Center, Smiddy Hall/IT Wing at Wise, Art and Drama Center at Wise, Dining Hall at Wise, and Residence Hall at Wise. The Hospital Bed Expansion construction is under way, requiring expedient renovations of the Hospital 0 Level and an addition to Primary Care Center to accommodate relocations of Hospital personnel during the bed expansion project; while at same time Hospital Level 2 Heart Center and 2M Level mechanical infrastructure will soon be under construction to support the needs of the Hospital both for the expansion and renovations. Inspections for all current construction projects are frequent and ongoing at this time.



Claude Moore
Nursing Education
Building

Occupied Summer
2008

Value Management

In conjunction with the Office of the Architect for the University the Review Unit participated in fifteen Value Management studies for eleven capital projects, seven more than during the same period last year. Projects included:

- College of Arts and Sciences Building
- IT Engineering Building
- AFC Chiller Expansion
- New Cabell Hall Renovations
- Alderman Road Residence Halls and Student Commons
- Rugby Administration Building
- Garrett Hall Renovations
- ITC Building
- UVA College at Wise Multi-Purpose Arena



**Future College of Arts and Sciences
Schematic Design Value Management Study**

Support for the University Community

The Office of University Building Official assists organizations in the University community on code and design issues, performing design services for small projects, and participating in professional organizations. As an example, the University Building Official has recently been working with numerous other University departments in planning for the upcoming U2 concert to be held October 1, 2009. Issues considered and resolved included setting maximum occupancy loads for field seating, provisions for additional means of egress, ensuring existing emergency lighting is adequate for persons seated on the field and locations of accessible seating,

Staff has also shared technical expertise and administrative procedures with the College of William and Mary's Review Unit. The University Building Official recently visited a representative from Virginia Tech to provide information related to instituting an Office of University Building Official.



Site of October 1, 2009 U2 Concert

University Building Official and Review Unit Biographical Information

University Building Official: Elaine B. Gall, PE, Certified Building Official

B.S. in Mechanical Engineering from Virginia Tech

M.S. in Fire Protection Engineering from University of Maryland

Certified Building Code Official, Fire Code Official, Fire Protection Inspector, and Fire Protection Plan Reviewer based on certification tests and attendance of related DHCD Code Academy and Department of Fire Programs Training Modules.

Member of the Virginia Building and Code Officials Association, National Fire Prevention Association, and Virginia Fire Services Board Code Committee. Second Vice-President of the Virginia Fire Prevention Association.

- Virginia registered engineer, 23+ years professional experience, all of which includes code and plan review and construction inspection experience. Experience includes serving as Deputy State Fire Marshal and Regional Engineer in Roanoke involved with University of Virginia projects and facilities.
- Primary responsibility is supervision of the Office of University Building Official.
- As Senior Fire Protection Engineer, also responsible for plan review and in-house consultation for fire suppression systems, fire alarms, construction of fire-resistance rated assemblies, fire safety, review of shop drawings for fire alarms and fire protection systems, and construction inspections.

Review Unit Managing Architect: Sandy H. Lambert III, AIA

BS in Architecture, University of Virginia

Member of American Institute of Architects

Completed Virginia Code Academy Core and Advanced Modules

Completing 27th year with The University of Virginia.

- Virginia registered architect, 43 years professional experience, 18 years code review experience at University, (including first Chief Review Architect 1991).
- Primary responsibility is Assistant to the University Building Official, management and supervision of Review Unit, administrator of scheduling for project reviews and value management participation, document reviews for contract administration/construction procurement, architectural and ADA accessibility and contract administration requirements as needed, and building code consultation.
- Primary editor of University Facilities Design Guidelines, contributing editor of University Higher Education Capital Outlay Manual (HECOM), and contributing editor of Facilities Management Division 1 Guideline Specifications; and related training of Facilities Planning and Construction project managers and construction administration managers.
- Building permit supervision and review, temporary event structure permit supervision and review.

Senior Mechanical Engineer: Ronald Herfurth, PE

BS in Mechanical Engineering, Virginia Tech

Continuing education with NFPA fire protection sprinkler training programs

Member of American Society of Heating Refrigeration and Air-Conditioning Engineers
State and International Code Council certified as mechanical plans examiner, plumbing plans examiner, commercial mechanical inspector, and commercial plumbing inspector.

Current position since 1991 (completing his 21th year with The University of Virginia).

- Virginia registered engineer, 30 years of commercial and institutional practice, including 17 years code review experience at the University.
- Primary responsibility is review and in-house consultation for plumbing, heating, ventilation and air conditioning, and energy management and conservation, value management studies, editing of University Facilities Design Guidelines, Certificates of Use and Occupancy inspections.
- Senior administrative assistant to Review Unit Managing Architect and co-editor of University Facilities Design Guidelines.
- Standing member and chairman of interdepartmental Facilities Management HVAC Committee.

Senior Civil/Structural Engineer: Shashi Kavde, PE

BS in Civil Engineering, National Institute of Engineering, Mysore, India

MS in Structural Engineering: Drexel University, Philadelphia, PA

Registered Professional Engineer in Virginia, North Carolina, and New Jersey

Member of American Society of Civil Engineers, American Concrete Institute and American Institute of Steel Construction

Completed Virginia Code Academy Core Module Training as a prerequisite for examination leading to State Certification.

Current position since 1996

- Over 40 years of civil and structural design and construction management for private and government projects (sports, mass transit, industrial, defense, research, environmental facilities, and institutional/residential buildings), plus
- 12 years at the University reviewing Construction Documents for Building Code Compliance and constructability for all projects.
- Additional responsibilities include editing of University Facilities Design Guidelines, HECOM Manual, Value Management Studies, Certificate of Use and Occupancy Inspections, and inter discipline/departmental coordination.
- Expedient inspections and in-house consultation for structural and civil engineering “hot-button” issues for University facilities.

Senior Review Architect: Robert A. Waite, Jr.

BS in Architecture, University of Virginia

Registered Architect in Virginia

Member of the International Code Council

ICC qualified Residential Building and Plumbing Official

Senior Project Manager, University of Virginia and James Madison University 1987-2000

Has also operated private home inspection business since 2000

- Hired in December 2008 to perform document reviews for architectural, ADA accessibility and contract administration requirements.
- Provides building code and accessibility consultation to University employees, design professionals, and contractors.
- Performs inspections for accessibility compliance.

Senior Electrical Engineer: Position vacant at this time

Interviews were held on May 7 and May 12. A July 10 start date is expected.