

RESTORATION AND RENOVATION

The present regimen of restoration and renovation at Pavilion VII has been undertaken with the belief that the building is both a historic artifact and a utilitarian object in continuous use. Major expansions in 1855 and 1913 left it unique among its neighboring pavilions – neither a professor’s residence nor a classroom building, but a public building for use by faculty and guests. That functional change will remain in effect for the foreseeable future. To the extent possible, the present episode of work to renovate and restore Pavilion VII respects past work by others but emphasizes character-defining features of Jefferson’s work as the original author. The objective is to extend the building’s useful life as far as possible into the future while neither “freezing” it in any single era nor making it a museum.

Recovery of the past is, in some cases, relatively easy. Research into early finishes at Pavilion VII correlates well with data from the five pavilion restorations of the past twenty years. On the other hand, Pavilion VII had some unique features requiring considerably more effort to restore. Among these are the double-door front entry, covered by wall plaster for well over a century, and the 1913 skylight, dismantled in 1939. But the urge to recreate must meet the test of practical usage, a particularly risky proposition with skylights. Much more predictable is the reestablishment of early spatial volumes. Pavilion VII offered several such opportunities, notably in the second floor quarters and in the 1913 addition. Simple removal of offending insertions, as indicated in the detailed room notes that follow, sufficed in most cases. Recreation of a small triangular vestibule that may have existed upstairs between the 1817 rooms testifies to Jefferson’s ingenuity as a designer.

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This chapter will address problems and responses to them. As a preface, exterior and interior conditions will be summarized. Following those prefatory comments will be general notes on working methods and detailed notes for each interior space. In all cases historical conditions and ameliorative present-day work are presented as a continuous narrative. Thus, this chapter will serve as the first “open-ended electronic archive” for data from past and present eras, establishing a benchmark for future work. We hope that this new system of data collection for the Academical Village will eventually extend to all other buildings in the precinct.

EXTERIOR

By the late 1990s, Pavilion VII had become the largest of the ten pavilions, though at the beginning it was one of the smallest. Two expansions to the west encroached on former garden space. The 1855 addition extended the entire three-story mass of the original building. In contrast the 1913 addition was one story shorter and three times as wide, thus altering radically the relationship between building and garden. That last addition is easily identified as a product of the early 20th century by its terrace pergola. Subsequently little exterior change occurred, except for removal of a leaky skylight, in the 1930s, and replacement of roofing materials – metal for slate and single-ply membrane for tarred felt-and-gravel built-up roofing – in the 1980s. Masonry walls have remained in decent condition generally, though with some mortar degradation near grade and many instances of awkward pointing repairs. Since the Academical Village rests atop a bed of amphibolite very near grade, Pavilion VII exhibits very few signs of settlement. The 1913 terrace deck, built of reinforced concrete, has long had some cracks and is just now showing that its metal reinforcement cannot serve for more than another five or six years. Three masonry stairs abutting the terrace have been effectively destroyed by wear, water intrusion and dislocation by tree roots. In the early 1990s, a demountable ramp was installed at the terrace, winding inconspicuously through the shrubbery and trees, to address needs of the disabled community. Doors and windows have lasted reasonably well; exterior shutters have suffered the effects of weather and often been replaced or removed. The double-door entry from the colonnaded walkway into the original public room, visible behind a pair of shutters, has proven amenable to

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restoration. Wood trim has generally survived in fair condition, having endured numerous episodes of repainting and localized repair.

ROOFS

The gabled roof of Pavilion VII covers the original building and the 1855 extension. As historical research indicates, roofing for the original segment was likely metal, though none of that has survived. Records suggest that slate roofing might have been installed at Pavilion VII as early as 1837, and one might logically conclude that the 1855 extension first had a slate roof, too. But when chronic roof leakage provoked interest in restoring the entire gabled roof in 1988-89, that work took into consideration the philosophy developed during recent metal restorations at Pavilions VI and X – replication of Jefferson’s small plated metal shingles atop the original building segment in conjunction with late 19th-century standing-seam metal roof technology for later segments – which is especially sensible when adjacent building segments share a common roof plane. Indeed, wedding Jefferson’s early metal shingle system with a slate system in the same roof plane was deemed infeasible. Thus the voluntary step of using only metal, but differentiating the first and second building segments by use of shingle and standing-seam technologies, was adopted. Admittedly this action implies a roof material that the 1855 segment might never have had, and future generations of preservationists may well render different decisions about re-roofing for Pavilion VII. For the 1913 extension, a single-ply membrane roof was installed in the mid-1980s, supplanting a tarred felt-and-gravel built-up roof. The inherent problems of built-up roofing, particularly the tendency to become brittle and rupture, made replacement in kind inadvisable. At the present time, both metal and single-ply membrane roofing appears to be in good condition. The only roof amendment made at this time is in the center of the 1913 addition, where the roof once again includes a large skylight. That work reuses the large steel structural members left in place when the first skylight was removed. Atop that a new wood structure has been inserted, to mediate between the surviving wood roof construction and the new aluminum-paned skylight panels.

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PORCHES

The elevated five-bay front porch, consisting of Doric columns that support the building's extended gabled roof, rests atop an arcaded masonry base, also of five bays. Round columns and rectilinear piers are of brick covered with stucco and many layers of white paint. Porch ceilings at both first and second floors as well as the gable tympanum are of plaster on wood lath. Wood trim surrounds the tympanum. Wood is also used for "Chinese Chippendale" style balustrading between columns. Observations reported from former students attest to low-relief linear scribing on the plastered base, giving the impression of large stone blocks, though physical evidence of that has disappeared, likely due to several generations of repairs. Also, repairs and frequent repainting, attendant to annual commencement exercises, have distorted the clarity and shape of horizontal moldings at the top of each pier shaft. These distortions are similar to those of column capital profiles along the flanking colonnades. Distortion of profiles on porch columns above is less extreme. Both above and below, the extremely rough and painted plaster surface is of very different appearance than is believed to have been the case originally, when columns were likely smoother and unpainted. Financial constraints of the present phase of work prohibit profound change to these piers and columns. Porch flooring was originally wood planking, covered later with soldered metal roofing material to fend off water, especially at the north and south ends. The present work removes that metal and restores the planking directly beneath. In the absence of contrary evidence, this planking is presumed to be of early date, perhaps of the 1817 period. However, it is unique in plank profile, compared to other wood flooring or roofing decking found so far in the Academical Village. Both edges of the upper surface of each plank are canted to create an inward-sloping channel to either side of a flat middle surface. Thus adjacent elevated leading edges of planks form peaks that shed water into the tiny angular troughs. Leakage through planking joints is virtually impossible unless the porch surface is standing in water, which is unlikely due to its frontward slope. [The only similar carpentry device to forestall leakage seen here has been rabbeting of semicircular cross section set approximately $\frac{1}{4}$ inch in from wood roof shingle edges. Comparing the two systems, the flooring offers a better safeguard.] New lighting has been set into the lower ceiling to eliminate two deficiencies of the former Holophane globe lights – glare and inadequate distribution of light. On the upper level, an electrified handmade copper lantern is now

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installed above the doorway.

The 1913 rear terrace consists of a steel-reinforced concrete slab atop a crudely laid brick perimeter wall, with brick steps on axis with the garden and concrete steps north and south of the central projecting section. Semicircular windows in the supporting wall flank the projecting segment. Atop the slab is a pergola composed of masonry columns (probably concrete) and wood framing. Pergola framing shows evidence of replacement, probably more than once throughout the 20th century. Until late in the present phase of construction, the concrete slab seemed serviceable, though cracked. But seepage of water through a crack at the southerly setback invited structural examination, which indicated that the slab's interior metal reinforcement was corroded and no longer adequate. Due to lack of funding and of time to fully resolve the matter prior to reoccupancy by the Colonnade Club, heavy-timber support piers are being installed beneath the slab, with the intention to return to this building in approximately five years and completely replace the slab and supporting perimeter wall. At that time, all three stairs must be rebuilt. Only the center stair remains in use, and that by virtue of a wood stair built to replace the crumbling brick stair. Steel picket railings have now been installed to prevent falling or walking off the terrace. The demountable ramp will likely continue in use indefinitely. As on the front façade, electrified handmade copper lanterns are now installed along the building wall to light the terrace. One new feature is a translucent white canvas cover to protect against rain and sun. This device consists of five separate panels lashed to a lightweight metal frame, elevated just above the wood pergola and sloping toward the garden to shed water and snow. It can also be dismounted if desired or if snow build-up is deemed a problem.

FAÇADES

Pavilion VII has a complex arrangement of facades – four segments facing to the east, three to the north, two to the west, and two to the south. In common with neighboring pavilions, the single façade fronting onto the Lawn exhibits more carefully executed masonry work than the other segments. That façade employs rubbed brick and finely detailed edge-struck, flat-faced mortar joint profiles. Since it has been protected from weathering by the porch roof, that façade still exhibits traces of a red oxide wash

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onto which thin white penciling has been applied at mortar joints. Precise dating of this penciling application is not yet determined. The other façade segments are executed with less finesse and with brick of lesser quality. There, joint profiles are less clear, often weathered beyond recognition and bearing many traces of piecemeal repairs. The typical joint profile on these secondary facades most often resembles an inverted weather joint of very slight inclination and without edge strikes. Brick coloration varies from dark brown to light red-orange, with sufficient tonal change to distinguish the three eras of building at Pavilion VII.

No significant change to any façade segment is being made during the present renovation and restoration work. However, as earth was removed from the parking area just south of the central section to afford easier entry at ground level, previously exposed brick was again made visible. Fortunately 20th-century masonry steps abutting the 1855 wall had not penetrated the outer surface. It also became clear that the door into the 1817 segment had been shortened from the bottom, to meet a later, higher grade level. That alteration was reversed at this time. All wiring and conduit mounted on exterior walls has been removed.

Two windows are being removed as part of the present work at the small toilet room protrusion north of the 1855 segment adjacent to the 1913 wing. That volume now houses an elevator. To ensure fire rating for the elevator shaft, the two former windows are now expressed as recessed brick panels in solid walls.

PARKING AREA AND ALLEYWAY

For the first time in recent history, intensive analysis of the exterior roadway areas south of Pavilion VII and its garden has been conducted. The intention was to determine the nature of previous materials, with the hope of determining a way to replicate the surface of Jefferson's era. The topmost pavement of round and angular stones embedded in tar was in poor condition, bounded by concrete curbing only in the parking zone. Edge conditions along roadway and parking areas were also reconsidered at this time, with the hope of eliminating bollards used for many years to protect garden walls from careless drivers and to prohibit parking along the alley, a designated fire lane. A modest garage structure near Pavilion IX complicated parking and vehicular movement. Plant

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materials alongside parking and alley zones were indifferently placed and threatening to adjacent architectural features. Customary containers for trash collection were all too obvious and invited routine damage by collection to garden walls. Lighting fixtures aside from the University's "Edgewater" post lamps were ordinary spotlights that produced both glare and shadows.

Analysis of roadway materials was not fully satisfying. After prolonged consideration, angular brown gravel of small size was chosen as the basic new material, set into a base of tar. To the extent possible, the roadway was crowned to reflect Jefferson's interest in early macadam road building techniques and his attempts to use them in or around the Academical Village precinct, though the preexistence of elaborate drain systems below grade precluded much use of crowning. Definition of the roadway edge has now been executed in concrete, though more expensive end-set Belgian block would have been preferred. Curb height is reduced as much as possible along roadway edges. Bollards are being eliminated with use of this curbing and also with an eye to installation of low shrubbery against the garden walls, both of which should fend off parking there. The garage has been partially dismantled, to allow better vehicular access. The remaining garage segment has been converted to store trash and recyclable materials, the first such answer to those unsightly facts of life in the Academical Village. The north portion of the former parking area, now slopes downward to a stone entry terrace at Pavilion VII, flanked by new planting. Electrified handmade copper lanterns at first-floor level provide glare-free lighting evenly distributed about the parking area.

INTERIOR

Pavilion VII contains between twenty and thirty rooms plus hallways and two stairways, neither of which dates to the 1817 period. The overall impression prior to the present renovation and restoration effort was one of shabby gentility. Nowhere was decrepitude glaring, but nowhere was the condition of the building better than moderate.

Previous alterations in the 1817 segment included closure of the double-door entry from the colonnaded walkway, removal of the original stair at the entry hall, creation of a wide cased opening between the two first-floor rooms, and major rebuilding of the east end of the northernmost upper room, ostensibly to provide closet space. Early on ,

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windows are being opened in the west wall and, later, closed. Hot-water heating was installed about a century ago in a fairly direct manner, with little attention to the esthetic impact of radiators and piping.

Creation of a lateral stair hall in the 1855 addition allowed the building's awkward two-floor plan to accommodate inhabitants more easily. However these newer spaces lack some of the grace of the first rooms, due to the absence of decorative moldings where walls and ceilings join. Casings for windows and doors were very similar to those in the 1817 segment. Broad plank floors from both eras have remained largely intact. But installation of two bathrooms in the upper stair hall and between the two 1855 bedroom spaces severely damaged the simple grace of all three areas.

The 1913 addition was built to accommodate guests in eight rooms on the first floor, with each pair of rooms sharing a bathroom. That arrangement proved to be objectionable to many. Loss of the skylight in 1939 because of frequent leaking substantially altered the ambience of the large reception room facing the garden. Awkward installation of cooling equipment had closed one of the two hallway exiting onto the rear terrace. Public toilet facilities were marginal. Accommodations for catering, a frequent need at Pavilion VII, were nonexistent. Ground-floor spaces were not utilized well, particularly the large activity room to the south and the centrally located shower facility. Ground-level entry, about two feet below grade, became very awkward as site and building underwent change from time to time.

Programmatically the University deems the building suitable for continued use as a faculty club offering overnight guest accommodations. Of great importance from a restoration perspective has been reestablishment of interior spatial volumes, especially in the early 1817 segment, and of any significant early features now missing or seriously altered. The most tantalizing of these opportunities were reopening of the original double-door entry at the first-floor public room and recreation of the missing skylight in the 1913 addition. By general agreement, the most objectionable features were shared bathrooms in the 1913 addition. Otherwise the building must address present-day needs of a broad guest audience, including both the able-bodied and those with disabilities.

Throughout the building, heating, electrical and plumbing systems, in some cases a century old, needed to be replaced. Window-mounted cooling units served some but not all spaces and were objectionably noisy. Fireplaces throughout the building were inactive due to deterioration of interior flue brickwork, closure of fireplaces and, as was

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discovered in the 1817 segment during investigation, complete absence of fireplace-specific flues. In response to these conditions, new heating, cooling, ventilation, humidity control, lighting and plumbing systems are being installed. For the first time at this building, complete fire detection and suppression systems are being installed. Concern about decayed chimney flues in all ten pavilions has led to a moratorium on use of fireplaces. Current advice from fire experts and engineers predicts use of natural gas and “gas logs” as a safer alternative than wood in these fireplaces. But first a complete gas main system will have to be built to serve the Academical Village, which now has no gas service. Correspondingly all flue systems in the pavilions will require major repairs even for use of “gas logs.” The timing of these rulings and the preliminary need for a substantial gas infrastructure project did not allow Pavilion VII to have operable fireplaces as part of the present campaign of work.

INVESTIGATION

Physical investigation of the building fabric is being conducted with the aims of minimizing intrusion into building fabric and emphasizing the retention of original and otherwise valuable detailing and materials. First generation wood floors are generally intact in each building segment as is corresponding woodwork. Floor tiles applied to wood or concrete flooring are being removed with as little damage as possible. In the 1817 and 1855 building segments where clay “deadening” existed between the ceiling or floor joists, the material and the planking that held it in place are being safeguarded against disturbance or removal as much as possible. All interior doors are being dismantled from their frames and labeled for possible reuse. None of the interior hardware appears to be original except in the 1913 segment. The clearest images obtained about original door hardware are ghosts and cuts. Door trim, window trim, wood base, shoe molding and chair railing associated with walls slated for removal are being labeled for potential reuse. Wood picture rails are being discarded in the few rooms where they had been applied, along with other miscellaneous fasteners, hooks, etc. All dropped ceilings are being removed. All existing electrical conduit, wiring and junction boxes are being removed both on the interior and exterior. All lighting fixtures are being removed; saving for reuse only the sconces in Room 113. The entire building is being inspected

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thoroughly for any evidence of termite damage and rot (finding it to be structurally sound and essentially free of insect damage). Wood repairs are being made in a few locations where members had been cut for installation of utilities. Supplementary support in the form of wood piers are being added beneath Room 102 and the rear terrace.

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Walls and ceilings are being re-plastered as needed where old partitions or other attachments or equipment are removed or where wall damage has occurred. Where re-plastering occurred or where new ceilings or partitions are being created, new metal lath was used to identify the extent of new work. Gypsum board is used where presence of new utilities would predict periodic entry to the wall or ceiling cavity. Gypsum board is being used to rebuild guest room walls in the 1913 segment to remain within budget constraints. All walls scheduled for painting are cured and cleaned prior to painting to prevent delamination. In ground floor areas where interior wall damage from moisture is evident, wall surfaces are thoroughly cleaned and repaired using a stone hardening plaster.

Paint analysis revealed original colors in each building phase. In the 1817 original structure, walls and ceilings had first been whitewashed, wood trim was painted yellowish white, and vertical faces of the baseboards and plinth blocks are being painted dark brown. In the 1855 addition, walls and ceilings were a white distemper, the trim was white, and the vertical faces of the baseboards and plinth blocks were a gloss black. In the 1913 addition, Room 113 had yellow walls, a yellowish-white ceiling and yellowish-white trim. In response to this paint evidence, and decorative advice from many interested parties, the following plan for color use is being adopted. Original paint and trim tones are being recreated in the 1817 segment. For visual continuity, 1817 trim tones are being extended throughout the building and public corridors. A mid-19th century blue discovered at Pavilion I in 1988 is being imported to Pavilion VII, for rooms 104 and 105, to relieve the dominant whiteness. The 1913 wall color in Room 113 is being reestablished, but flanking guest rooms are being painted in green and peach tones as decorative relief.

Interior moldings and trim are being repaired according to original profiles. Few doors can be reused due to demands of fire code reviewers. Reuse of doors on the front

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façade and at the rear public space, Room 113 was finally allowed. Wood doors modeled after 1817-era doors are being installed in public areas on the first floor in both the 1817 and 1855 building segments when no pre-existing doors are extant. Rated wood doors, required by fire code review, are being installed at all guest rooms and the rear guest room corridors, using a commercially available six-panel door type. These doors are not ideal due to the presence of raised moldings, but the extremely high cost of U2-rating tests for specially designed duplicates of the old doors precludes their use. On the ground floor, present-day glass doors with wood frames are being installed where occupants would need to see to areas beyond. Interior wood doors in the 1817 and 1855 building segments are being painted to replicate 1817 graining. Elsewhere doors are painted to match trim. Exterior doors on the east façade only are being grained on both exterior and interior faces.

All interior wood floors are being thoroughly cleaned and stripped with chemical strippers, without the use of razors, sanding or any device that would abrade the wood. Wood floor materials are retained as a general rule. Very limited replacements are necessary on the second floor, where damaged places have been effectively destroyed. Removal of bathrooms there allows consolidation of reusable 1855 floor planks within the two former bedrooms and supplementation with matching reclaimed wood in the hallway. Replacement flooring is reclaimed heart yellow pine, matching the thickness, width, laying patterns and graining patterns of adjacent planks. In new bathrooms, and in the second floor hallway, floors are finished with two coats of sanding sealer and two finish coats of matte finish, oil varnish containing no polyurethane. All wood flooring is cleaned and waxed prior to occupation. The nosings of the stairs and landings, which had been painted later to match trim, are being stripped. Remaining concrete floors in the basement are being repaired and overlaid with either slate pavers or carpet.

All windows are being checked for proper operation and fit of the sash in the window frames, and setting beads are being repositioned to reduce air leakage. Lead weights are being hung on new cords. The few cracked glass panes are being replaced. Any frosted or textured glass is being replaced. Glass replacement utilizes perfectly clear new glass, to avoid future confusion about early materials. All venetian blinds are being replaced with new wood venetian blinds.

All utility systems are being replaced and substantially improved. Thus, several electrical installations are being supplanted by one, and a multitude of odd light fixtures

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are disappearing in favor of new. The only electrical features saved as relics are four reused sconces in the 1913 segment and portions of an early knob-and-tube electrical system, now deactivated and concealed in the attic area atop Room 113. No plumbing fixtures are deemed relics. The few existing plumbing service lines being reused are being brought into compliance with code. The existing radiator heating and window air-conditioning units are being replaced by new HVAC systems, served from central heating and chilling plants from beyond the Academical Village precinct. Pavilion VII is the first pavilion to be connected to the new central grounds chilled water loop. Pavilion VII is receiving a new dry-pipe sprinkler system along with smoke and heat detectors.

New casework and paneling for Pavilion VII is intended to be sympathetic to the relatively undecorated architectural nature of the building, yet recognizably of the present era. All such elements are built of cherry, utilizing simple stile-and-rail construction and flat, recessed panels. While not otherwise used as a building material in the pavilions, cherry was commonly used in Jefferson's time for furniture. As the only unpainted wood in the vertical plane throughout Pavilion VII, this new casework bespeaks its newness while harmonizing with the unpainted wood floors, and the grained door of Jefferson's era.

Any miscellaneous metal or wood attachments on the exterior brickwork are being removed. Typically such elements include wire clamps, wiring conduits, and other paraphernalia associated with utilities. Exterior brickwork is being repointed as necessary, with special attention to chimneys, flashed areas, and wall or roof areas where splashing of rain water has eroded masonry joints. Mortar mixture and pointing techniques matched the original insofar as possible, utilizing a basic lime mortar. To avoid further damage to bricks, a host of Portland cement joint repairs are being left in place.