



The Johnson Partnership

# University of Washington

Historic Resources Addendum

Magnuson Health Sciences Center and Certain Additions

Roof Replacement Projects

September 6, 2012



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## 1. INTRODUCTION

This Historic Resources Addendum (HRA) provides information regarding the architectural design and historical significance of the Magnuson Health Sciences Center (MHSC) and certain additions, Identified as AA, B, C, D, E, F, G, and J wings, all located in what is known as Medical Center Campus, a portion of the Main Seattle Campus of the University of Washington. The Johnson Partnership prepared this report at the request of the University of Washington's Capital Projects Office.

### 1.1 ABOUT HISTORIC RESOURCES ADDENDA

The University of Washington Master Plan, Seattle Campus was completed in January 2003. This document was intended to guide the development of the campus over the subsequent ten years with the intention of developing the “best means of conserving what is attractive on the campus while providing for development which respects and improves its aesthetic qualities.” The Master Plan, as well as previous planning efforts, includes a project review process intended to ensure that the historic context of the campus is retained and enhanced by new development and that the “historic significance, value and association of the campus is preserved for the community, City, State, and Nation.” In reviewing actions that may impact historic resources, the University uses a multi-step process involving several review points: the Capital Projects Review Board, the Campus Landscape Advisory Committee, the Architectural Advisor to the University, the University Architectural Commission, and the Board of Regents as the final review step. When applicable, faculty with expertise on University campus history and architecture may be consulted on individual projects.

Historic resources are considered through the University's implementation of the State Environmental Policy Act (SEPA) and the preparation of an Architectural Opportunities Report (AOR).<sup>1</sup> An AOR is prepared for campus projects anticipated to be valued over one million dollars and that may affect either significant public spaces and/or the exterior of buildings. The report assesses the architectural context of the site, its historical context and environmental considerations, the Campus Master Plan, and the landscape/open space context. The AOR is reviewed by the Site Planning Committee, the Campus Landscape Advisory Committee, the Provost and/or the Executive Vice President, and the Board of Regents. For any University of Washington project that makes exterior alterations to a building over 50 years old, or is adjacent to a building or a significant campus feature older than 50 years, or an identified significant public space, the University prepares an attachment to the AOR known as Historic Resources Addendum (HRA). The HRA is intended to supplement the project review process.

A building's historic significance is usually determined by its eligibility for listing in the National Register of Historic Places. To be eligible for listing in the National Register of Historic Places a site, structure, or building must be older than fifty years. Listed places possess integrity of location, design, setting, materials, workmanship, feeling and association, and:

- A. Are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. Are associated with the lives of persons significant in our past; or
- C. Embody the distinctive characteristics of a type, period, or method of construction or represent the work of a master, possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. Have yielded, or may be likely to yield, information important in prehistory or history.

The standards and criteria found in National Register of Historic Places Bulletins 15 and 39 are used to evaluate the integrity of a specific site and its associated structures and buildings. Bulletin 15 defines integrity of a property to convey its significance. Integrity is the authenticity of a historic resource's physical identity evidenced by the survival of characteristics existing during the resource's period of significance. Integrity involves several aspects including location, design, setting, material, workmanship,

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<sup>1</sup> The University's SEPA process is set forth in chapter 478-324 WAC.

feeling, and association. To retain historic integrity, a property will always possess several, and usually most, of the aspects. Bulletin 39 defines a resource's period of significance as the span of time during which significant events and activities occurred.

In determining whether a building embodies the distinctive characteristics of a type, period, or method of construction or represent the work of a master, possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction, an examination of a resource's "character-defining features" is used to identify the elements that characterize a building and includes such elements as the building's overall shape, massing, materials, craftsmanship, functional and decorative details, interior proportions, spaces, and attributes, as well as certain aspects relating to its site, landscaping, and overall environment.<sup>2</sup>

University of Washington Digital Collection



Dental clinic at the South end of B wing, circa 1950.

### **1.2 PURPOSE**

This document provides a brief architectural description and a discussion of architectural significance of MHSC and certain additions. These buildings may be impacted by the proposed repairs and improvements to their roof systems. The older portions of the complex are over 50 years in age, and include AA, B, C, D, E, and some of F. With the addition at the end of F wing turning fifty in 2014, and J wing in 2015, all buildings either meet or will shortly meet minimum age criteria for listing in the National Register of Historic Places. The Washington State Historic Preservation Officer (SHPO) recently evaluated MHSC for listing in the National Register as part of the SR 520 Bridge Replacement and HOV Project environmental analysis, and the complex was determined ineligible due to the loss of physical integrity due to the many changes and alterations that have impacted the original buildings. The University of Washington, recognizing that the building is an historic part of its own campus, has elected to commission this HRA to assure sensitive treatment of the older portions of the complex as necessary repairs and rehabilitation projects are designed and implemented. This report offers recommendation for mitigation or treatment of the subject building related to the proposed roofing system repairs and upgrades.

### **1.3 METHODOLOGY**

Research and development of this report were completed during August 2012 by Howard L. Miller, AIA, NCARB, LEED AP, Associate and Larry E. Johnson, AIA, LEED AP, Principal of The Johnson Partnership, 1212 N.E. 65<sup>th</sup> Street, Seattle, WA. Research included review of documentation from the University of Washington's Capital Project Office archives including the original construction drawings and site plans. The existing conditions have been documented, researched and analyzed to enable evaluation and mitigation as necessary for the proposed alterations, repairs and upgrades to the roofing systems.

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<sup>2</sup> U.S. Department of the Interior, National Park Service, "Architectural Character, Identifying the Visual Aspects of Historic Buildings as an Aid to Preserving Their Character," by Lee E. Nelson, National Register Bulletin, no. 17. 1991, 1998.

## 2. GENERAL HISTORICAL BACKGROUND

### 2.1 SITE HISTORICAL CONTEXT: UNIVERSITY OF WASHINGTON MEDICAL CENTER CAMPUS

The majority of the University of Washington's medical facilities, including MHSC, are located on the southern edge of the campus between NE Pacific Street and the maritime related buildings along the Lake Washington Ship Canal and Portage Bay shoreline.

The most southerly section of the original campus was originally a narrow low isthmus, now known as the Montlake Neighborhood, that separated Lake Washington and Lake Union. A narrow ditch was dug through a portion of this isthmus, creating a link between the two lakes between 1860 and 1865. In 1883, the Lake Washington Canal Company widened the "cut" using immigrant Chinese labor crews, allowing the movement of logs from Lake Washington to sawmills located on Lake Union.

In 1887, tracks for the Seattle, Lake Shore & Eastern Railroad were laid through the northern portion of the isthmus, extending northward at the foot of the small bluff that would become the University of Washington's campus, as part of a rail line running east along the northern shore of Lake Union and then around Lake Washington with the aim of crossing Snoqualmie Pass.<sup>3</sup>

The University acquired a 160-acre tract of land north of the "cut" excluding the railway right-of-way in 1891, acquiring additional land on the bluff to the north two years later. The first term on the new campus began on September 4, 1895.<sup>4</sup> Construction on the Lake Washington Ship Canal, envisioned as a direct connection between Puget Sound and Lake Washington, began in late 1910, with an enlarged Montlake Cut facilitating the lowering of Lake Washington approximately nine feet to the level of Lake Union. The change in lake level exposed additional level land along the Lake's western shoreline that abutted the base of the bluff upon which most of the University's early academic buildings were built.

University of Washington Digital Collection



Opening the widened cut in 1910.

University of Washington Digital Collection



Log raft in the Montlake Cut.

A Gothic-inspired drawbridge over the Lake Washington Ship Canal was constructed in 1928 to connect Montlake to NE Pacific Street and what was to become NE 25<sup>th</sup> Street.<sup>5</sup>

<sup>3</sup> Clarence Bagley, *History of Seattle*, Vol. I. (Chicago, IL: S. J. Clarke, 1916), pp. 388 and 392-393.

<sup>4</sup> Johnston, *The Fountain & the Mountain*, pp. 18, 20, and 21.

<sup>5</sup> Smith, *Montlake*, pp. 65-69.

University of Washington Digital Collection



University of Washington Golf Club, circa 1931.

The growth of the facility continued fairly continually with the AA wing added to the southeast end of C wing in 1954 and the addition at the southwest end of F wing in 1964. Two major additions, I wing in 1964 and J wing in 1965, extended to the northwest off wing H along the central hallway and 'spine' of the MHSC complex. In 1970, the addition off the end of D wing was built and in 1972, T wing was built connecting the NE ends of wings D, F and H with the now captured areas in between being roofed. This addition also concealed or removed numerous character defining features of the original buildings.

University of Washington Digital Collection



T wing under construction.

Major changes and building activity occurred on the southern edge of the campus in the late 1940s after World War II, when the Washington State Legislature gave the University permission to develop a medical school program. The first building was planned in 1947, and built in 1948, on the previous grounds of the University Golf Links. The original building is currently referred to as MHSC wings A, B, and C and originally named the Medical-Dental-Nursing School Building, units A, B, and C. Concurrently MHSC wings D, E, F, G, and H were planned and then built in 1949.

University of Washington Digital Collection



MHSC wings A, B, C, D, E, F, G, and H in 1949.

University of Washington Digital Collection



The sculptural elements here are now hidden by T wing.



The most recent expansion occurred in 1994 and 1996 with the additions off the southwest end of H wing and K wing attached to the southwest side of J wing. The hospital portion of the School of Medicine, University of Washington Medical Center, is connected to the MHSC at the southeast end of wing AA and was begun in 1954, and had significant additions in 1960, 1967, 1972, 1990, and other more recent additions. All of the buildings and additions through the 1980s, were designed by Naramore, Bain, Brady, Johanson, McClelland and Jones, or by that firm's direct descendent, NBBJ. Only the most recent additions were designed by other architects.

The Northern Pacific Railway was abandoned in the mid-1970s, and was converted to a pedestrian trail. The Burke Gilman Trail presently serves as a major pedestrian and bicycle transportation route in Seattle, extending along the rail right-of-way from the Ballard Neighborhood to Bothell, where it connects to the Sammamish River Trail.<sup>6</sup>

University of Washington Digital Collection



Medical School complex showing the Hospital on the left and T wing.

## ***2.2 SITE USER: UNIVERSITY OF WASHINGTON SCHOOL OF MEDICINE***

The facilities have been in continuous use since the completion of the first building in 1949. The facility is home to the MHSC which includes the University of Washington School of Medicine, the Schools of of Public Health and Community Medicine, Dentistry, Nursing, Pharmacy, and Social Work as well as five interdisciplinary research centers.

The UW Medical Center was the site of the first long term kidney Dialysis and in 1968, the first kidney transplant in the Pacific Northwest, was the first multidisciplinary pain center in the world, as well as the first heart transplant and knee replacement in the Northwest. The UW Medical Center was the first in the nation to be named a magnet Hospital for nursing care by the American Nursing Credentialing Center, the highest honor they award.

The UW Medical Center advanced diagnostic imaging by having a cyclotron, Magnetic Resonance Imagery (MRI) and positron emission tomography all at the same facility in 1986. In 1990 Dr. E. Donnall Thomas earned the Nobel Peace prize for his pioneering work with bone marrow transplant and cell transplantation while at the UW Medical Center.<sup>7</sup>

## **3. GENERAL SITE DESCRIPTION**

The MHSC is located within what is identified as “South Campus” in the 2003 Campus Master Plan. The subject building and additions are located on a relatively flat expanse of land (originally a wetlands and a former golf course) that stretches from Montlake Boulevard NE to 15<sup>th</sup> Avenue NE, and between NE Pacific Street and NE Columbia Road with Portage Bay further to the southwest. The entire site occupied by the School of Medicine is approximately 29 acres.

The MHSC is located immediately to the northwest of and physically connected to the University of Washington Medical Center. The numerous additions that are attached to the building obscure much of

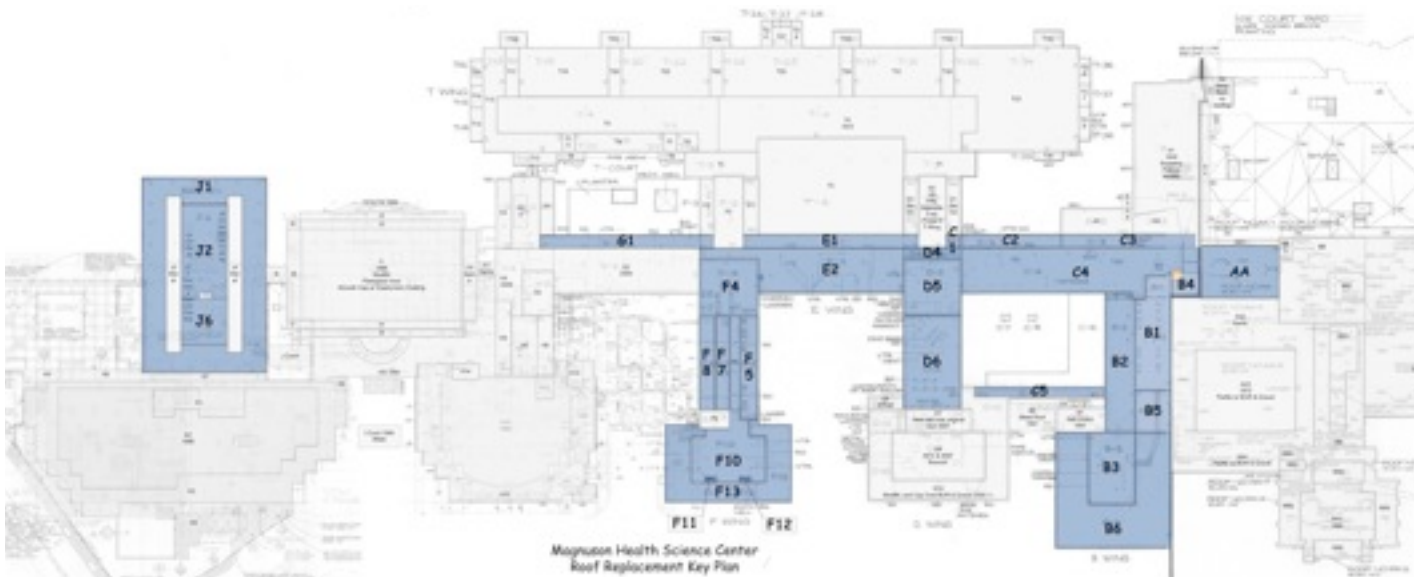
<sup>6</sup> Johnston, *The Campus Guide*, pp. 112-113.

<sup>7</sup> *A Glimpse of History*, University of Washington Medical Center publication

the original building. At the northeast end of the complex is a small annex for MHSC made up of temporary modular elements along with the Hitchcock building which houses Biological Sciences. The buildings along the waterfront to the southwest of the MHSC primarily house marine-related uses and include Ocean Sciences, Marine Sciences, Ocean Technology, Harris Labs, Fisheries Center, and the South Student Center. Directly south of the Medical Center is the Experimental Education Unit and Clinic of the Center on Human Development and Disability. Between the MHSC and the South Campus Student Center is an underground parking garage.

The scope of this addendum shall be limited to the roofs identified as: AA, B1, B2, B3, B4, B5, B6, C1, C2, C3, C4, C5, D4, D5, D6, E1, E2, F4, F5, F6, F7, F8, F10, F11, F12, F13, G1, J1, J2, and J6.

University of Washington Facilities Department



Facility roof plan highlighting the scope of the re-roofing project.

The original buildings are primarily visible from the main entry courtyard to the northeast of A, C, and D wings, and from NE Columbia Road, which runs along the southwest side of the complex. From NE Columbia Road you can see one side of AA wing, and all of B, D, and F wings. J wing is visible from NE Pacific Street and the courtyards, one to the east and one to the west of J wing.



Entry courtyard created by A, C, D, and T wings.



View along NE Columbia Rd.

#### 4. IDENTIFICATION OF CONDITIONS REQUIRING RECOMMENDATIONS

Recommendations will neither be made for portions of the building less than 45 years old, nor for conditions on the older portions of the building that cannot be seen from the adjacent streets and public courtyards. This includes roofs with parapets over 18 inches tall (high parapet), where the changes due to the roof replacement and upgrades are not visible. Those roofs are identified as B5, C1, C2, C5, D5, D6, F4, F5, F7, G1, J1, J2, and J6. The façade-to-roof transitions that cannot be seen from the street or courtyards have been identified as B3, B4 and E1. Those portions of the building that are less than fifty years old and may be more easily adapted to the proposed roofing system have been identified as B1, C3, C5, F6, F8, F10, F11, and F12.

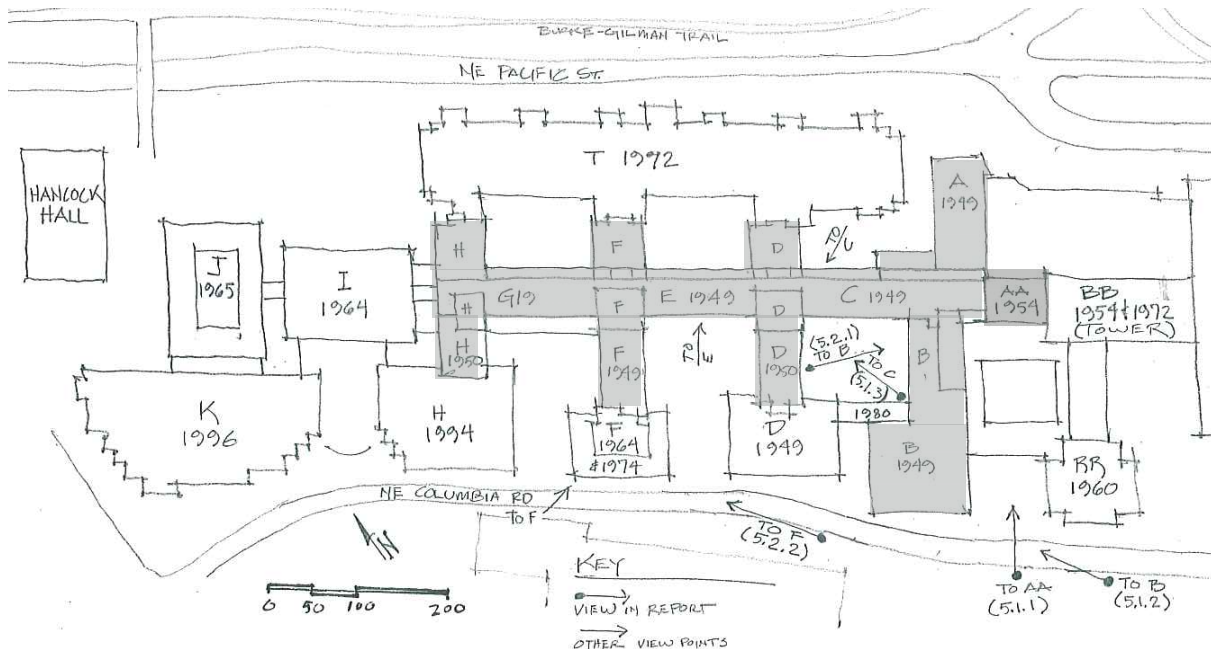


Roof C1 and C2 with high parapet conditions on the left and roof D4 with a gravel stop.



Roof F7 on the left with a low parapet is not visible from below, and F8 has a high parapet.

Recommendations will be provided for the parts of the building that are older than 45 years of age, and where the proposed roof replacement and upgrades will require changes to the existing façade-to-roof transition that will be visible to the public viewing the structure from the street or other public courtyards. This includes roofs with a gravel stop edge condition as well as those roofs where the existing parapet is less than 18 inches tall (low parapet). Roofs with gravel stop conditions have been identified as AA, B6, C3, C4, D4, and E2. Roofs C4, D4, and E2 are all substantially the same condition and will be treated as one condition. Roofs with low parapet walls have been identified as B2, and F13.



Original buildings are shaded and additions dated. The visibility of various roofs are also indicated with specific views noted (Section 5).

If the proposed roofing system requires flashing over the top of any existing terra cotta parapet cap visible from below, an effort should be made to minimize the amount of terra cotta covered by flashing. If stainless steel is currently covering the terra cotta it should be removed and replaced with copper that only covers approximately 2" of the face of the terra cotta.

## 5. FAÇADE-TO-ROOF TRANSITION CONDITIONS

### 5.1 GRAVEL STOP

#### 5.1.1 Roof AA

The existing roof edge has a painted galvanized metal gravel stop over the brick veneer exterior wall below. Much of the paint has flaked off the vertical surface of the gravel stop, which is about 12 inches tall. The existing brick exterior wall is a standard sized tapestry face brick with colors varying from a tan/ocher to a brick red to a dark brown. The roof is a built-up hot-mop tar and felt with gravel ballast. The façade-to-roof AA transition is only visible over the AA loading dock at NE Columbia Road and from the windows of the adjacent buildings including wings B and RR as well as the UW Medical Center 'Aagaard' tower to the Southeast (previously BB wing). It was once visible from Pacific Street NE but the trees have grown and completely obscure the view.

#### 5.1.2 Roof B6

The existing roof edge has a painted galvanized metal cap flashing and gravel stop over a precast concrete wall cap above the vertically extended precast concrete window treatment. The precast concrete appears to have an integral color and is currently unpainted. The roof is a built up hot mop tar and felt membrane with gravel ballast. The façade-to-roof transition is visible primarily from NE Columbia Road and from the windows of the adjacent buildings including the UW Medical Center 'Aagaard' tower to the Southeast and wings AA, RR, C and D.



AA wing seen from NE Columbia Rd.



AA wing seen from NE Pacific St.



B wing seen from NE Columbia Rd.

### **5.1.3 Roofs C4, D4, and E2**

The existing roof edges have copper cap flashing gravel stops over a glazed terra cotta veneer exterior wall below. The copper has attained a natural green patina, and extends about two inches down on the exterior face of the wall and slopes up and back towards the roof at about a 45 degree angle. The terra cotta band runs horizontally forming a visual 'cornice' at the top of the building. In some locations glass blocks make up sections of the band, though they never extend through the top row of terra cotta. The roof is a built-up hot-mop tar and felt membrane with gravel ballast. The façade-to-roof transition is visible primarily from NE Columbia Road looking between B, D, and F wings, from the windows of the adjacent buildings including the UW Medical Center 'Aagaard' tower to the Southeast, as well as from the courtyard created by A, C, D, and T wings (the original main entry to the complex)



C wing seen from the B, C, and D wing courtyard

## **5.2 LOW PARAPET**

### **5.2.1 Roof B2**

The existing roof parapet has a glazed terra cotta cap on copper through flashing over the brick veneer exterior wall below. The copper has attained a natural green patina, projects and extends only about one quarter inch down on the exterior face of the wall, and extends down about four inches on the interior face of the parapet. The top of the parapet is about sixteen inches above the top of the existing roofing. The existing brick exterior wall is a standard sized tapestry face brick with colors varying from a tan/ocher to a brick red to a dark brown. The roof is a built-up hot-mop tar and felt membrane with gravel ballast. The façade-to-roof transition is only visible from the courtyard created by B, C, and D wings, which is itself a roof.



B wing seen from the B, C, and D wing courtyard

### **5.2.2 Roof F13**

The existing roof parapet has a stainless steel cap flashing over the poured concrete parapet and exterior wall below. The metal cap flashing extends about six inches down on the exterior and interior faces of the parapet wall. The top of the parapet is about twelve inches above the top of the existing roofing. The existing poured concrete exterior wall appears to be painted and has a one inch horizontal reveal cast into it about nine inches below the cap flashing. The roof is a built-up hot-mop tar and felt membrane with gravel ballast. The façade-to-roof transition is visible from NE Columbia Road, the courtyards created by D, E, F, G, and H wings as well as the windows of the adjacent buildings.



F wing seen from NE Columbia Rd.

## 6. RECOMMENDATIONS

### 6.1 GENERAL DIRECTION FOR ALL CONDITIONS

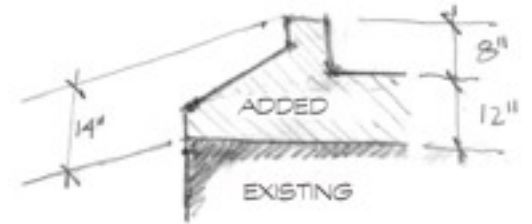
All alterations shall be designed and implemented per “The Secretary of the Interior’s Standards for the Treatment of Historic Properties, with Guidelines for preserving, rehabilitating, restoring & reconstructing Historic Buildings.” Changes should be in keeping with the architectural intent of the original design, yet easily identifiable as non-original. Where possible, all changes should be reversible, should they need to be altered in the future. The visual impact of the changes, as seen from below, should be minimized where feasible.

Current roofing theory tends to prefer roofs with at least some parapet, the gravel stop detail having fallen out of favor due to higher maintenance requirements as a result of thermal expansion and contraction of the metal resulting in damage to the roofing material and leading to water infiltration, as well as the risk of roof ‘blow off.’ The existing building has numerous conditions including low and high parapets as well as the gravel stop condition. Reworking the roof edge to a low parapet would be in keeping with the style and design of the building.

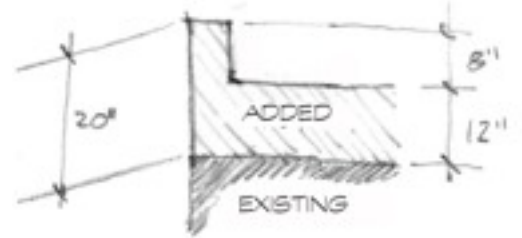
The proposed roofing replacement and improvements will add approximately 12 inches of insulation to the top of the roof structure with the waterproofing membrane on top. This new insulation should be concealed and finished with a parapet that extends approximately eight inches above the highest point of the new roofing system to allow for proper waterproofing and flashing. The design of the extension of the exterior walls to form the low roof parapet should be sensitive to the design of the building and kept to the minimum needed for proper roof function. At the gravel stop conditions this will require either extending the exterior wall about 18 inches above the current height or a stepped back parapet. At the conditions with a low parapet, the amount of added height necessary will vary based on the existing condition.

Recommendations are to facilitate the development of details appropriate to the existing buildings. Recommendations are not to be construed as addressing the integrity of the building envelope.

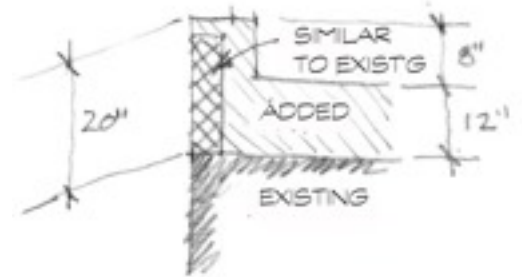
Any roof access safety rails or attachments should be installed in such a manner as to be useful and minimize the visual impact from below. While safety harnesses and attachment points do minimize the visual impact, they may be less practical than guard rails for worker ease of access and range of activity and amount of time required to allow safe access. The safety railing system should be of the variety that has no roof penetrations minimizing the possibility of future roof leaks. The existing metal safety rails on the roof of A wing are an example of rails set back from the roof edge minimizing the visual impact while providing safe roof access. A 42-inch high guardrail should be set back from the edge about 60 inches to minimize visibility from below while still allowing adequate access to the majority of the roof area.



PARAPET WITH STEPPED BACK EXTENSION

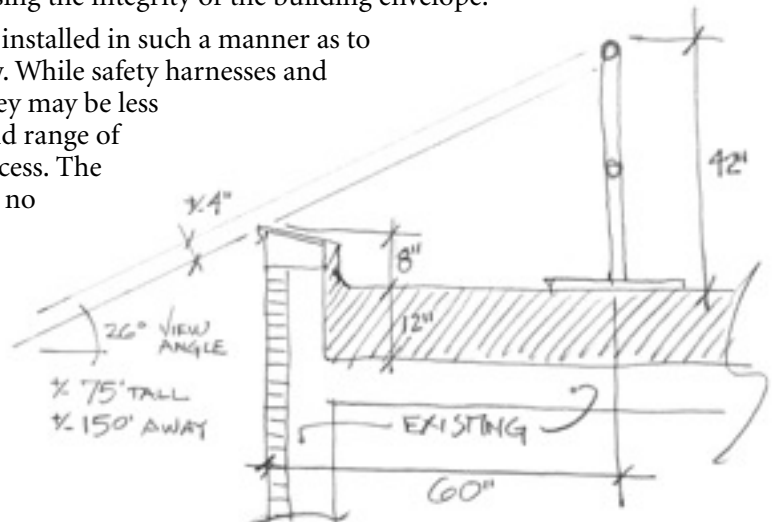


PARAPET EXTENDED WITH DIFFERENT MATERIAL



PARAPET EXTENDED WITH SIMILAR MATERIAL

Visibility of various parapet conditions. The amount of parapet visible is based on a view angle of 18° for a person standing 150 feet away looking at a parapet 54 feet above them.



Visibility of safety rails from below at D5 & F4.



Safety railing on A wing.



Minimal impact of metal railing set back from edge of roof.

There are numerous existing vents on the roof that will need to be raised to accommodate the improvements to the roof. Current code will require those vents to be significantly taller than they are currently, thus more visible. These vents are a normal part of laboratory and medical buildings. Therefore, while an effort should be made to keep the vents back from the roof edges, their visibility from below will be difficult to avoid. The nature of the vents, tall stainless steel pipes, will make them readily identifiable as non-original and they are also considered reversible so that in the future the buildings could easily be brought back to their original condition. Primarily on roof D5, see scope diagram on page 6 for location.



Existing vents on D5, notice the new vent at left.



New and old vents on D5 visible from an adjacent roof.

## 6.2 RECOMMENDATIONS FOR SPECIFIC CONDITIONS

### 6.2.1 Roof AA

In order to raise the exterior wall approximately 18 inches for the roofing improvements, the added exterior wall area should be compatible with the original tapestry brick. An exact match is not expected. An appropriate solution would be to extend the existing brick veneer wall with new tapestry brick capped with a copper cap flashing similar in color and material to the adjacent portions of the building creating a parapet. The difference between the existing original brick and the new brick along with a brick end course separating them, should provide adequate differentiation between old and new while the similar color and finish should allow the added height to blend with the original building.



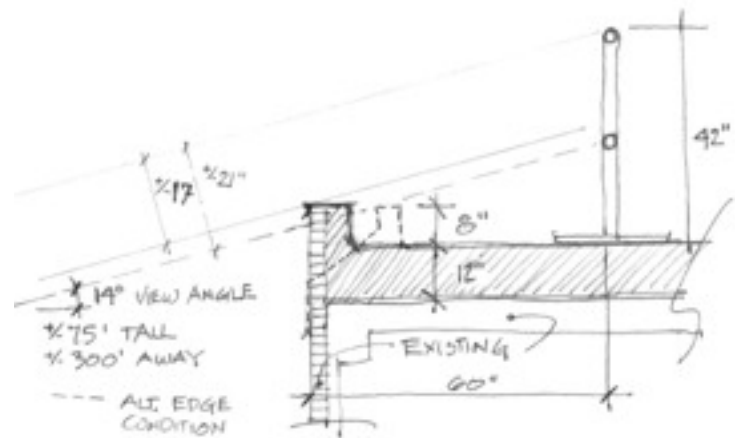
Existing façade-to-roof condition at roof AA.



Recommended façade-to-roof condition at roof AA.



Recommended alternative façade-to-roof condition at roof AA.

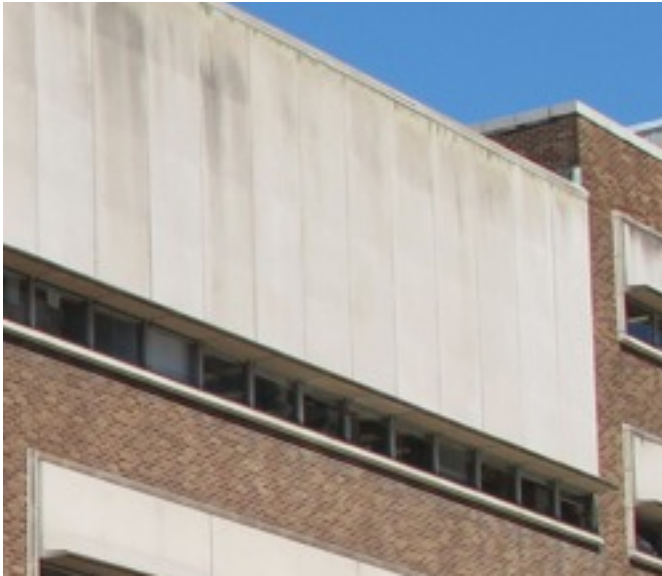


Façade-to-roof conditions and guardrail sight-lines.



### 6.2.2 Roof B6

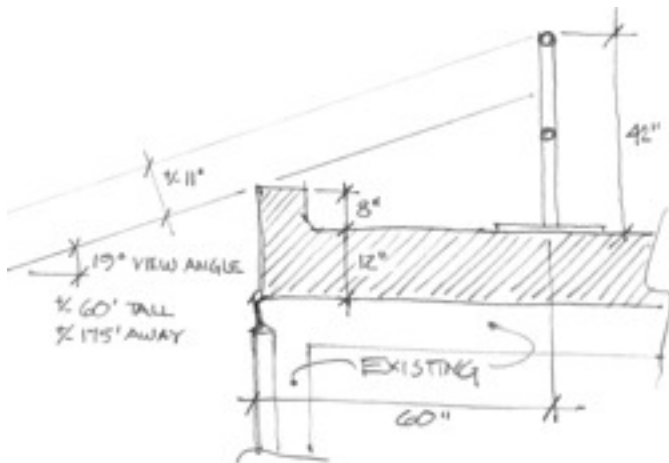
In order to raise the exterior wall approximately 14 inches for the roofing improvements the added exterior wall area should coordinate with the existing concrete façade treatment. An appropriate solution would be to have the new extension be a painted stainless steel clad parapet creating a horizontal element at the top of the building consistent with the vocabulary of the building. The horizontal orientation of the extended parapet will provide adequate differentiation between new and existing while blending with the vocabulary of the façade.



Existing façade-to-roof condition at roof B6.



Recommended façade-to-roof condition at roof B6.



Façade-to-roof condition and guardrail sight-lines.

### 6.2.3 Roofs C4, D4, and E2

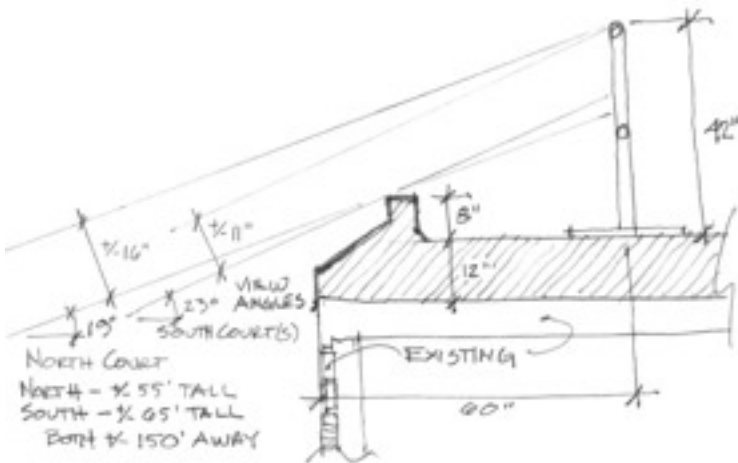
In order to raise the exterior wall approximately 17 inches to create a parapet, the added height should be materially compatible with the existing building materials. An appropriate solution is to extend the height with a stepped back parapet clad in copper. The change in plane from the existing brick wall to the stepped back parapet should provide adequate differentiation between old and new while minimizing the visual impact of the added height.



Existing façade-to-roof condition at roof C4.



Recommended façade-to-roof condition at roof C4, D4, and E2.



Façade-to-roof condition and guardrail sight-lines.

### 6.2.4 Roof B2

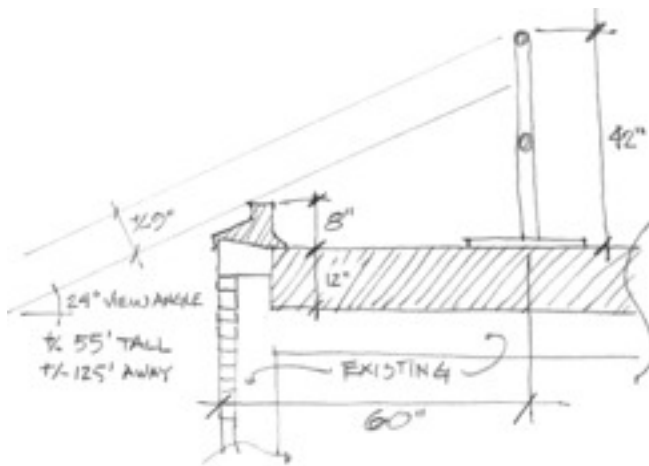
The existing glazed terra cotta capped parapet may only need to be extended approximately four inches to achieve the desired 8-inch curb. The existing terra cotta caps are already severely damaged and may be further damaged in removal and possible replacement. Therefore it may be more desirable to replace the terra cotta caps “in-kind” with matching terra cotta caps or a “faux” terra cotta material that has a similar visible appearance. The flashing should be copper. A metal stepped back condition will minimize the visual impact, while the replaced caps should integrate the added height with the building and maintain the horizontal stripe of the original parapet detail.



Existing façade-to-roof condition at roof B2.



Recommended façade-to-roof condition at roof B2.



Façade-to-roof condition and guardrail sight-lines.

### 6.2.5 Roof F13

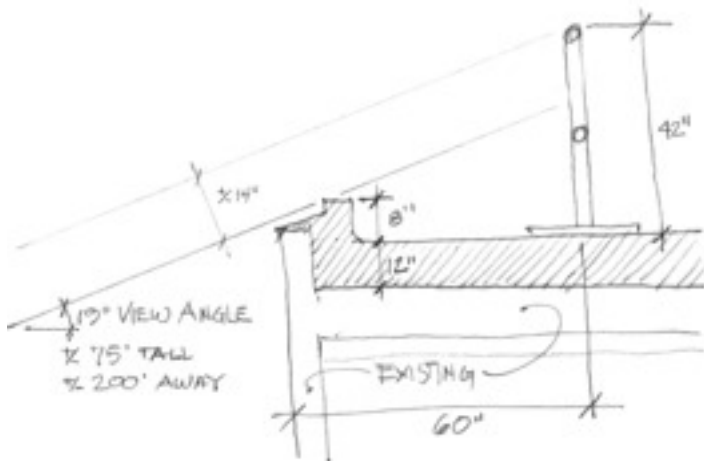
The existing roof parapet will likely need to be extended about six inches. This extension would appropriately be achieved with a stepped back stainless steel clad parapet, creating a horizontal element at the top of the building consistent with the aesthetic vocabulary of the building. The stepped back extended parapet will provide adequate differentiation between new and existing while blending with the vocabulary of the original building.



Existing façade-to-roof condition at roof F13.



Recommended façade-to-roof condition at roof F13.



Façade-to-roof condition and guardrail sight-lines.

## 7. SUMMARY

The buildings covered in this study primarily are the original buildings of the the MHSC. While the SHPO has recently determined that they do not qualify for listing in the National Register of Historic Places, they are historically important to the University of Washington, and thus any changes should be handled sensitively.

Due to the proposed installation of additional roof insulation and a new roofing membrane, two basic roof edge conditions should be addressed: the gravel stop edge condition, and the low parapet edge condition. The recommended approach is to set the added parapet height back from the roof edge, minimizing any visible impact from the public viewpoints of the streets below. Where this strategy is not possible or structurally reasonable, the facade will be extended upward with a compatible material similar, but not identical to the existing material.

The proposed replacement and upgrade to the roofing systems will slightly alter the appearance of the subject buildings. By following the above recommendations, the negative visible impacts to the building's fabric and appearance should be minimized and consistent with the intent of the "The Secretary of the Interior's Standards for the Treatment of Historic Properties, with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings."

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