Appendix P Preservation Alternative ARG Peer Review



17 March 2010

Kirsten Jardine, Environmental Analyst Trixie Martelino, Project Manager PBS&J 353 Sacramento Street, Suite 1000 San Francisco, CA 94911

Re: Stanford Medical Center Project ARG Project Number 07030 BG006

Dear Ms. Jardine and Ms. Martelino:

In response to a request from PBS&J, Architectural Resources Group (ARG) has prepared this letter summarizing our findings in regard to the impacts of the proposed Preservation Alternative for the Stanford University Medical Center Facilities Renewal and Replacement Project (SUMC Project) on historic resources.

The SUMC Project proposes demolition of the historic Main Medical Center Complex and construction of new Stanford Hospital pavilions; renovation and expansion of Lucile Packard Children's Hospital; reconstruction of the medical school; and expansion of medical office space associated with Stanford Hospital Center and Lucille Packard Children's Hospital. The project also involves renovation of the historic Hoover Pavilion and construction of new medical office buildings and a parking structure on the site surrounding the historic building; however, that portion of the project is outside the scope of this review.

The Main Medical Center Complex is a large three-story building designed by Edward Durell Stone, with landscaping designed by Thomas Church. The building was constructed in 1959 with a roughly "H"-shaped footprint; the eastern wings of the complex were infilled in 1963 according to Stone's designs. A plaza with a fountain and landscaped open space located in front of the Main Medical Center Complex were part of Stone's master plan for the complex (see Stanford University Medical Center's *Cultural Resources and the Stanford University Medical Center Facilities Renewal and Replacement Project*, figure 10-29. Figure included as Attachment A to this letter).

The significance and integrity of the Main Medical Center Complex were previously evaluated by ARG in the *Historic Resource Evaluation and Peer Review for the Stanford University Medical Center Project*, dated 1 September 2009. In that evaluation, ARG concluded that the Main Medical Center Complex had sufficient significance and integrity to be eligible for the California Register of Historical Resources under Criteria 1, 2, and 3. Thus, the Main Medical Center Complex is considered a historic resource for the purposes of the California Environmental

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Quality Act (CEQA). The SUMC Project is subject to CEQA because it is discretionary and may impact potential historic resources, including the Main Medical Center Complex. In the *Draft Analysis of Project Impacts* for the SUMC project, dated 5 December 2007, ARG identified the demolition of the Main Medical Center Complex as a significant, unavoidable, and irreversible impact to the historic resource. Demolition of a historic resource cannot be mitigated to a less than significant level.

When a project would result in a significant impact on a resource, CEQA requires that an Environmental Impact Report (EIR) shall describe a range of reasonable alternatives that would "feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project" [CEQA Guidelines Section 15126.6(a)]. The project sponsor has developed a project alternative, identified as the "Preservation Alternative," which is the subject of this review. ARG has been asked to comment on whether the Preservation Alternative would avoid or substantially lessen the significant effect brought by demolition of the Main Medical Center Complex. ARG has not been asked to comment on the feasibility or ability of the Preservation Alternative to attain the most of basic objectives of the project, as that analysis has been made by the project sponsor.

Review Process

ARG's analysis of the Preservation Alternative's impact on the Main Medical Center Complex is based on the following documents.

- A site plan prepared by Stanford University Medical Center, titled "SUMC Facilities Renewal & Replacement Project: Tree Preservation Alternative" dated 8 February 2010 (see attachment C). This site plan shows the Tree Preservation Alternative, which, according to the project sponsor, also represents the project as proposed in the Preservation Alternative for historic resources. Building heights are not indicated.
- A "Historic Preservation Alternative" description prepared by PBS&J undated, sent to ARG on 19 February 2010 (see attachment D).
- Additional information was provided in email correspondence with PBS&J in February 2010.

ARG did not receive building floor plans, elevations, renderings, models, or information on the materials of the proposed new Stanford Hospital component of the Preservation Alternative.

Description of the Preservation Alternative

The following text is from the "Historic Preservation Alternative" description prepared by PBS&J on behalf of the project sponsor, Stanford University:



Historic Preservation Alternative. The Historic Preservation Alternative would preserve all of the essential historic aspects needed to maintain the eligibility of the 1959 Hospital Building complex for listing on the California Register of Historic Resources (CRHR). This Alternative would seek to avoid the SUMC Project's significant and unavoidable impact resulting from demolition of the 1959 Hospital Building complex (see Section 3.8, Cultural Resources). In addition to the retention of the 1959 Hospital Building complex itself, the Historic Preservation Alternative would preserve the historic integrity of Pasteur Drive and its landscaping, which serve as the main approach to the 1959 Hospital Building complex.

The Historic Preservation Alternative would retain the 1959 Hospital Building complex, which includes SoM buildings (Grant, Alway, Lane, and Edwards), along with the following SHC hospital/clinic buildings: West Pavilion ("West"), East Pavilion ("East"), Boswell, and Core. Unlike the SUMC Project, the Historic Preservation Alternative would not construct a new SHC clinic/medical office building in its place. However, the existing buildings at the 1959 Hospital Building complex have a low seismic rating and do not comply with structural and non-structural criteria that must be met by the 2013 and 2030 deadlines imposed by Senate Bill (SB) 1953 for retrofit or replacement of hospital facilities. Accordingly, under the Historic Preservation Alternative, these buildings would not be used as hospital buildings, as defined by the Office of Statewide Health Planning and Development (OSHPD). This alternative would necessitate the same Comprehensive Plan amendments and zoning changes as the SUMC Project, including an amendment to allow for the exceedance over the 50-foot height limit. Annexation would not be needed for this Alternative.

Analysis of Preservation Alternative

ARG developed the following analysis of the Preservation Alternative to determine if it would avoid or substantially lessen one or more of the significant effects identified for the project as proposed. Our analysis primarily relates to the effect of the Preservation Alternative on the eligibility of the Main Medical Center Complex for listing in the California Register of Historical Resources. Should the Preservation Alternative result in loss of this eligibility, it would be considered to cause substantial adverse change in the historic resource, similar to the demolition proposed in the project, and would thus constitute a significant effect on the



environment.¹ The Preservation Alternative has been evaluated in terms of its impact on the integrity of the historic resource, which must be retained for it to remain eligible for the California Register, and the Preservation Alternative has also been evaluated for consistency with *The Secretary of the Interior's Standards* (*The Standards*).

Discussion of Integrity

In the *Historic Resource Evaluation and Peer Review for the Stanford University Medical Center Project*, ARG evaluated the integrity of the current Main Medical Center Complex using the seven aspects of integrity defined in National Register Bulletin 15. ARG concluded that the Main Medical Center Complex retained sufficient integrity of location, design, setting, materials, workmanship, feeling, and association to be eligible for the California Register. The effect of the Preservation Alternative on the integrity of the Main Medical Center Complex is analyzed in the following pages.

Location

Location is the place where the historic property was constructed or the place where the historic event occurred.

The current Main Medical Center Complex and associated landscape features, such as the Thomas Church fountain, Kaplan Lawn, and Pasteur Drive remain in their 1959/1963 location and have not been moved. The alterations and new construction proposed under the Preservation Alternative would not have an impact on the location of the historic resource. Thus, integrity of location would be retained.

Design

Design is the combination of elements that create the form, plan, space, structure, and style of a property.

In ARG's previous evaluation of the current Main Medical Center Complex, it was found to retain integrity of design because its essential physical features are intact. The New Formalist style of the building is clearly communicated—the massing, proportion, fenestration pattern, overhangs, colossal posts, formal plaza, geometric courtyards, columnar supports, exterior materials, and iconic concrete screens are all extant. Although the interior of the building has been significantly altered, and its historic form is no longer evident, the overall design intent remains very clear at the exterior. In addition, Stone's master plan for the

¹ Section 15064.5 of the *CEQA Guidelines* defines "substantial adverse change" as "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource is impaired." Material impairment means altering "in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources eligibility for inclusion" in a local register of historical resources or the California Register of Historical Resources.



complex is clearly evident in the formal plaza with a fountain, open space west of the plaza (currently a one-story building interrupts the open space but does not significantly diminish its open character because of its small scale and transparent materials), and configuration of Pasteur Drive.

Under the Preservation Alternative, the placement of the new pavilions west of the north wing of the Main Medical Center Complex would not result in the loss of planned open space or changes to the plaza. The designed views to and from the Main Medical Center Complex as well as the approach would be largely maintained and the west façade would continue to read as the principal elevation.

The Preservation Alternative describes several other alterations to the Main Medical Center Complex building that would be required by the new use. The following paragraphs analyze the effect of these various alternatives on the historic building.

The building would need to be seismically strengthened to meet OSHPD and City of Palo Alto requirements. The seismic retrofit may involve some form of exterior lateral restraint system (such as braced frames or buttresses) or an interior system (lengthening the shear walls; adding interior brace frames; thickening existing interior walls; or adding beams or beam "collectors" to transfer the loads from the walls to the foundation). The installation of exterior frames or buttresses would significantly diminish the integrity of the building exterior, which presently retains a high degree of design integrity and would likely be an adverse impact. As the interior of the building is already compromised, an interior retrofit solution is preferable. To minimize the impact to the building exterior, any infilling of windows should be to be limited in number and occur on secondary facades, and interior structural frames would need to be designed for minimal visibility through exterior windows or doors.

According to the project description, required mechanical system upgrades would involve:

the installation of stronger and more reliable fire walls; an upgrade of the HVAC duct system; the retrofit of interior walls in order to secure laboratory equipment and gas tanks; the retrofit of exterior glazing system from operable to "sealed" windows; the widening of corridors and the interior circulation areas; the addition of exterior and interior exits, stairs, and elevators to comply with current Fire Code and ADA requirements; and internal space reconfigurations to all for integrated laboratory suites consistent with modern demands.

Installation of new mechanical components along the exterior of the building would likely have a significant impact on the exterior integrity of the building.



As with the structural retrofit options, an interior solution is preferable, as that portion of the building is already compromised. Exterior solutions could compromise the high degree of design integrity. Lowering the ceilings to accommodate ductwork would not have a significant impact on the building's integrity, so long as the lower ceiling heights did not interfere with the exterior fenestration patterns.

The exterior windows would need to be sealed to meet programmatic requirements concerning indoor air pressure and insect control. This could be accomplished with limited effects on the building integrity by retaining the existing double-hung windows, fixing them in a closed position, and installing any necessary seals or other additional hardware at the interior face. Replacing the windows could represent a significant impact to the integrity of the building.

To comply with life safety and disabled-access requirements, new stairs and elevators may be required at the interior or exterior of the building. As with other alterations, these would best be carried out at the interior of the building. It may be possible to install new stairs at the exterior of the building and have a limited effect on its integrity, provided the stairs are located on a secondary façade and are designed to be unobtrusive and compatible with the historic building.

The proposed demolition and reconstruction of interior spaces to allow for the installation of more reliable fire walls and spatial reconfiguration to meet programmatic and accessibility requirements would not have a significant impact on the design integrity of the building, as the interior is already compromised.

In conclusion, ARG finds that the construction of the proposed new Stanford Hospital would not have a negative impact on the design integrity of Stone's Master Plan for the Main Medical Center Complex. The impact of the proposed structural, mechanical, life safety improvements to the Main Medical Center Complex could be minimized to a less than significant level by pursuing an alternative where alterations were carried out at the building interior and designed to comply with *The Standards*. Impacts to windows could be reduced by retaining the existing windows and fixing them in place. If alterations are carried out at the building exterior or the installation of new windows are proposed, the changes should be reviewed for compliance with *The Standards*.

Setting

Setting is the physical environment of a historic property.

In ARG's previous evaluation, it was determined that the setting of the current Main Medical Center Complex had changed, but that its integrity had not been significantly diminished.



As proposed under the SUMC Project (not the Preservation Alternative), Hospital Module Six would be constructed in the Kaplan Lawn, significantly compromising Stone's Master Plan layout, open spaces, landscape features and the immediate setting of the Main Medical Center Complex. Under the Preservation Alternative, Module Six would not be constructed, and the program would be absorbed into the other modules of the new Stanford Hospital.

Unlike earlier construction in the vicinity, which was of a similar height and scale and was consistent with Stone's master plan, the new pavilions would be up to 130 feet in height compared to the 37 foot - 6 inch high Main Medical Center Complex. Stone anticipated additional construction in the vicinity of the Main Medical Center Complex, as evidenced by an early project rendering for the hospital master plan (see Attachment A and B). Stone's design intent was for the central landscaped area (including plaza) to remain open, flanked on all sides by low, pavilion buildings.

The five pavilions of the new Stanford Hospital are separated from the Main Medical Center Complex by an open space that helps to create a scale separation so that their height does not significantly alter the immediate setting of the Main Medical Center Complex. The placement of the southernmost pavilions to the west of the Main Medical Center Complex blocks some views to and from the north wing; however, the entire façade can still be viewed from the two barrels of Pasteur Drive east of Blake-Wilbur Drive. The height of the new Stanford Hospital would impact the setting of the Main Medical Center Complex, but not to the degree that integrity of setting would be lost.

The Pasteur Drive configuration was an important part of the Stone's original Master Plan. Under the Preservation Alternative, some changes will be made to the road configuration: Blake-Wilbur Drive, SUMC Promenade, and loop road around the fountain would be closed to automobile traffic, and a new road would be constructed running north-south through Kaplan Lawn, thereby moving the drop-off loop to the west. The locations of Blake-Wilbur Drive and SUMC Promenade were indicated on Stone's Master Plan; however, their removal does not change the overall configuration of the loop road, open space or approach to the Main Medical Center Complex. In Stone's Master Plan these roads were designed to extend to the north and south, creating a grid. The roads now end at Pasteur Drive and this element of the Master Plan is no longer evident. The removal of these two roads, although an impact, does not significantly affect the setting of the Main Medical Center Complex or Stone's Master Plan.

Closing the drop off loop around the fountain and moving it west would have a more significant impact on the Master Plan design than closing Blake-Wilbur Drive or the SUMC Promenade. The loop was one of the key features of the Master Plan; the relationship between the road configuration and the hospital



integrated the building and landscape. If the roadbed were removed and replaced with landscaping, the original circulation design and relationship between the Main Medical Center Complex and Pasteur Drive would be obscured. However, if the roadway was closed to automobiles as proposed, but the roadway configuration was retained, this element of the Master Plan would still be communicated. It is not necessary for the asphalt and concrete curbs to be preserved, but the new materials of the roadbed should be differentiated from the surrounding paving that historically functioned as sidewalks or plaza. This could be accomplished by using hardscaping that is distinct from the surrounding sidewalks in color or material. Installing street furniture or planting in the roadway should be avoided in order to maintain the circulation pattern.

The Preservation Alternative proposes that several mature trees be relocated to the Kaplan Lawn from the Foundations in Medicine (FIM) site. Historic photographs indicate that clumps of trees were located in the area prior to the construction of the Main Medical Center. Stone integrated the trees into his master plan and retained the block of Kaplan Lawn as open space. Because the Kaplan Lawn area was not formally designed, adding more trees to the area will not change the character of the area.

In conclusion, ARG finds that the proposed new Stanford Hospital would alter the setting of the Main Medical Center Complex, but, if the fountain loop is retained as hardscaping, the Preservation Alternative would not significantly diminish the integrity of setting.

Materials

Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.

In its previous evaluation, ARG determined that integrity of exterior materials had been retained at the current Main Medical Center Complex. The character-defining materials, features, and finishes of the Main Medical Center Complex exterior are largely intact, but the interior finishes of the main public areas have been lost. The plaza, fountain, and courtyard materials are also intact.

At this time, several options exist for implementing structural, mechanical, and other programmatic requirements at the Main Medical Center Complex under the Preservation Alternative. In many cases, the alternative solutions will impact either the exterior or the interior of the Main Medical Center Complex. If new structural frames, mechanical equipment, or life safety improvements are located at the building exterior, they would have a negative impact on the material integrity of the Main Medical Center Complex and could represent an adverse impact. An alternative where work is carried out primarily at the building interior according *The Standards* would not represent an impact and would not



significantly diminish integrity of materials.

Workmanship

Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.

In its previous analysis, ARG found that the workmanship and modern construction methods from the period of construction are intact at the exterior of the current Main Medical Center Complex and at the plaza, and the workmanship is clearly communicated. Integrity of workmanship could be retained by carrying out proposed alterations at the building interior.

Feeling

Feeling is a property's expression of the aesthetic or historic sense of a particular period of time.

ARG previously found that the current building conveys the feeling of the original building, a 1959-1963 New Formalist-style hospital, despite changes to the setting of the Main Medical Center Complex. Although the new Stanford Hospital would somewhat alter the setting of the building, the proposed project would maintain the building, open space, plaza and configuration of Pasteur Drive. As a result, the feeling of a New Formalist hospital and landscape would be intact. The Preservation Alternative preserves integrity of feeling.

Association

Association is the direct link between an important historic event or person and a historic property. According to the National Register guidelines, a property retains association if it is the place where the event or activity occurred and is sufficiently intact to convey that relationship to an observer.

ARG previously found that the current Main Medical Center Complex remained strongly associated with the ground-breaking medical advances that occurred in it. The integrity of association would not be significantly diminished by the construction of the new Stanford Hospital as proposed in the Preservation Alternative. The project would preserve Stone's hospital design and his Master Plan. Although some views would be changed, the entire hospital façade and plaza would be visible from points east of Blake-Wilbur Drive.

Integrity Conclusion

ARG concludes that under the Preservation Alternative the seven aspects of integrity would be retained if the following conditions are met:

- Design alternatives are pursued that limit most proposed alteration work to the interior of the Main Medical Center Complex.
- The historic windows are retained.
- The Pasteur Drive loop around the fountain is retained as hardscape, thereby communicating the original design and circulation pattern.



The *Guide to CEQA* section 15064.5(b) states that "A project with an effect that may cause a substantial adverse change in the significance of a historic resource is a project that may have a significant effect on the environment." The Preservation Alternative would not cause a significant loss of integrity and would not alter in an adverse manner those physical characteristics that convey the Main Medical Center Complex's historical significance and justify its eligibility for inclusion in the California Register of Historical Resources. As a result, the Preservation Alternative would significantly lessen a substantial adverse impact as defined under CEQA. Many of the design details of the new Stanford Hospital and renovation to the Main Medical Center Complex have not been developed and should be reviewed during the design process for consistency with *The Standards*.

Discussion of The Secretary of the Interior's Standards

ARG has also analyzed the Preservation Alternative for its conformance with *The Secretary of the Interior's Standards for the Treatment of Historic Properties*. Generally, a project that follows *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings* is considered mitigated to a less than significant level. *The Standards for Rehabilitation* were analyzed for the SUMC project, as that treatment best approximates the treatment of the Main Medical Center Complex. *Rehabilitation* is defined as "the act or process of making possible a compatible use of a property through repair, alterations, or additions while preserving those features which convey its historical, cultural, or architectural values."

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.

If the Preservation Alternative is implemented, the Main Medical Center Complex would be used as medical offices and clinics, a use very similar to its original hospital function. Although OSHPD standards require changes to the interior of the building, these are not the result of the new use. In addition, if the alterations are undertaken at the building interior, which already has compromised integrity, the historic resource's distinctive materials, features, spaces and spatial relationships would be maintained.

- 2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
 - The Preservation Alternative would preserve the historic character of the property. Materials and features of Main Medical Center Complex, plaza, open space, and the two barrels of Pasteur Drive would be maintained.
- 3. Each property will be recognized as a physical record of its time, place, and use.



Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.

Adding conjectural features or changes that convey a false sense of historical development are not part of the Preservation Alternative.

4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.

There are no changes to the Main Medical Complex or surrounding landscape that have acquired historic significance in their own right. The Core Expansion Building addition to the north façade of the Main Medical Center Complex was constructed in 1973 and does not contribute to the significance of the building. Similarly, the interior alterations have taken place over time and are not associated with the significant events that occurred there.

5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.

Because the interior has been modified, distinctive materials, features finishes and construction techniques are located at the Main Medical Center Complex exterior. If alteration work necessary for implementing structural, mechanical, and other programmatic requirements are undertaken at the building interior, the project will be consistent with Standard 5. If alterations are undertaken at the building exterior, the project may be inconsistent with Standard 5. Similarly, if windows are replaced or interior alterations block window openings, the project may be inconsistent with Standard 5.

6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.

The specific details of the rehabilitation of the Main Medical Center have yet to be developed. As the project progresses, the alterations should be designed to repair rather than replace historic features and should be reviewed for consistency with *The Standards*.

7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.

Currently, chemical or physical treatments are not proposed as part of the Preservation Alternative.

8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.



Archeological resources were not evaluated as part of this review.

9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

New additions to the Main Medical Center Complex are not part of the Preservation Alternative. Because the new Stanford Hospital is completely detached from the Main Medical Center Complex, it will not destroy historic materials or features. If, through use of hardscape, the configuration of Pasteur Drive is maintained (although closed to automobile traffic), the relationships that characterize the property will be maintained. The New Hospital is separated from the Main Medical Center Complex by open space located west of the north wing of the Main Medical Center Complex and north of the Kaplan Lawn. The space serves as a buffer between the 37 foot-6 inch high Main Medical Center Complex and the new Stanford Hospital, which will not exceed 130 feet. As the design for the new hospital is developed, the building should utilize design features that break up the mass of the pavilions so that they relate to the surrounding buildings.

The Preservation Alternative proposes removing the 1973 Core Expansion Building, which currently connects the north façade of the Main Medical Center Complex with D, E, and F Pods to the north. The Core Expansion Building was set far back from the west (primary) façade of the Main Medical Center Complex. If carefully removed and if any damaged or missing materials of the Main Medical Center Complex are replaced based on the original design, the removal will improve the integrity of the building.

10. New additions and adjacent or related new construction will be undertaken in a such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

If interior solutions are pursued for many of the proposed alterations to the Main Medical Center Complex and the original windows are retained, the changes to the character-defining features of that building (all are exterior) will be retained. Because the new Stanford Hospital will be distinct from the Main Medical Center Complex and does not encroach on the plaza, open space, or Pasteur Drive, it could be removed in the future and the historic resources would be unimpaired.

Conclusion

It is ARG's opinion that the Preservation Alternative would maintain the integrity of the Main Medical Center Complex and Master Plan and would be consistent with *The Standards* if several conditions are met:



- The Main Medical Center Complex is rehabilitated according to *The Secretary of the Interior's Standards for Rehabilitation*. Stanford University shall retain a qualified historic preservation professional meeting the *Secretary of the Interior's Professional Qualification Standards* for Historic Architecture to guide and review the rehabilitation work for consistency with *The Standards* during the design and construction phases.
- Alternatives are pursued that limit most proposed alteration work to the interior of the Main Medical Center Complex.
- The historic windows are retained.
- The Pasteur Drive loop around the fountain is retained as hardscape, thereby communicating the original design and circulation pattern.
- The new hospital building utilizes design features that break up the mass and elevations of the tall pavilions so that they relate to the surrounding lower buildings, including the Main Medical Center Complex.

With these conditions, the Preservation Alternative would avoid the significant adverse effect brought by the demolition of the Main Medical Center Complex.

Plans for the rehabilitation of the Main Medical Center Complex are schematic. When and if design details are developed, the project should be reviewed for consistency with *The Standards*.

Please feel free to contact us directly if you have any questions regarding our review of this project.

Sincerely,

Jody Stock Preservation Planner Sara Lardinois Architect

Sara A. Zardinais

Attachments:

- A) Stanford University Medical Center's *Cultural Resources and the Stanford University Medical Center Facilities Renewal and Replacement Project*, figure 10-29.
- B) Aerial Photo of the Open Spaces of the Stone Complex Hospital from Over



<u>Time: Palo Alto, 1947-1980, San Francisco et al.</u>: Arcadia Publishing, 2008, page 55.

- C) A site plan prepared by Stanford University Medical Center, titled "SUMC Facilities Renewal & Replacement Project: Tree Preservation Alternative" dated 8 February 2010. This site plan shows the Tree Preservation Alternative, which, according to the project sponsor, also represents the project as proposed in the Preservation Alternative for historic resources. Building heights are not indicated.
- D) A "Historic Preservation Alternative" description prepared by PBS&J undated, sent to ARG on 19 February 2010.

Attachment A: from Stanford University Medical Center's "Cultural Resources and the Stanford University Medical Center Facilities Renewal and Replacement Project."

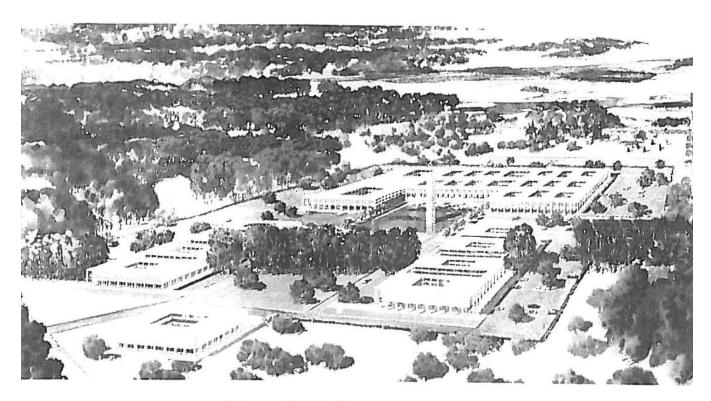
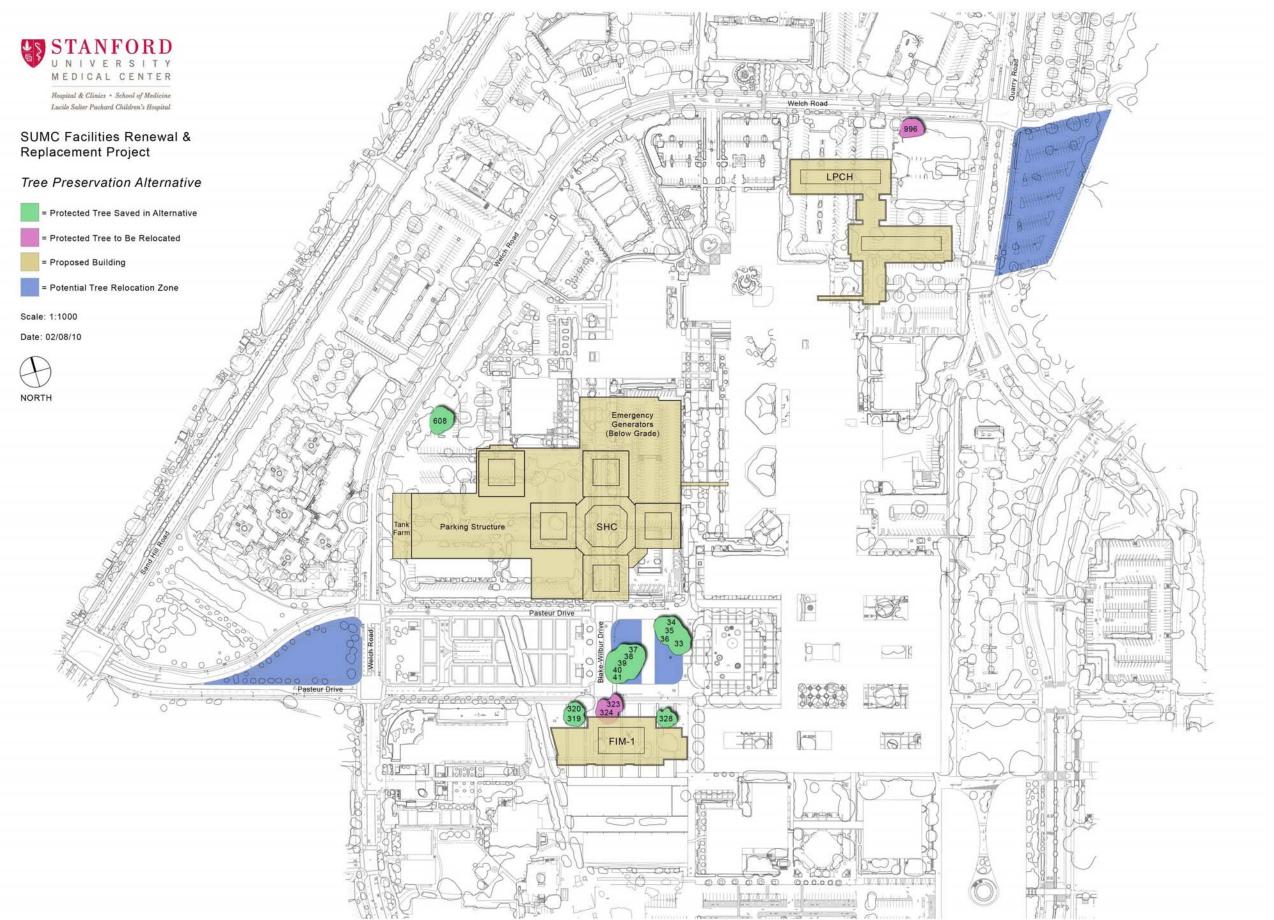


Figure 10-29: Stone's master plan

Attachment B: Aerial Photo of the Open Spaces of the Stone Complex Hospital from Over Time: Palo Alto, 1947-1980, San Francisco et al.: Arcadia Publishing, 2008.





Tree Preservation Alternative - 020810.jpg

Attachment D: PBS&J, Undated

Historic Preservation Alternative. The Historic Preservation Alternative would preserve all of the essential historic aspects needed to maintain the eligibility of the 1959 Hospital Building complex for listing on the California Register of Historic Resources (CRHR). This Alternative would seek to avoid the SUMC Project's significant and unavoidable impact resulting from demolition of the 1959 Hospital Building complex (see Section 3.8, Cultural Resources). In addition to the retention of the 1959 Hospital Building complex itself, the Historic Preservation Alternative would preserve the historic integrity of Pasteur Drive and its landscaping, which serve as the main approach to the 1959 Hospital Building complex.

The Historic Preservation Alternative would retain the 1959 Hospital Building complex, which includes SoM buildings (Grant, Alway, Lane, and Edwards), along with the following SHC hospital/clinic buildings: West Pavilion ("West"), East Pavilion ("East"), Boswell, and Core. Unlike the SUMC Project, the Historic Preservation Alternative would not construct a new SHC clinic/medical office building in its place. However, the existing buildings at the 1959 Hospital Building complex have a low seismic rating and do not comply with structural and non-structural criteria that must be met by the 2013 and 2030 deadlines imposed by Senate Bill (SB) 1953 for retrofit or replacement of hospital facilities. Accordingly, under the Historic Preservation Alternative, these buildings would not be used as hospital buildings, as defined by the Office of Statewide Health Planning and Development (OSHPD). This alternative would necessitate the same Comprehensive Plan amendments and zoning changes as the SUMC Project, including an amendment to allow for the exceedance over the 50-foot height limit. Annexation would not be needed for this Alternative.

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For ease of reference, the term "Core building" consists of the East Core, West Core, and Central Core portions unless otherwise noted. It does not include the 1973 Core Expansion Building.

The SoM buildings in the 1959 Hospital Building complex total approximately 414,977 square feet and the SHC buildings in the 1959 Hospital Building complex total 441,201 square feet. Together, the 1959 Hospital Building complex totals 856,178 square feet. The Historic Preservation Alternative would involve the following actions, which are reflected in Table 5-6:

- The LPCH and Hoover Pavilion Site would be constructed as proposed under the SUMC Project. The expanded LPCH clinic uses would be included in the new LPCH hospital building.
- Hospital Module Six, as proposed under the SUMC Project, would not be constructed in Kaplan Lawn. Retention of the existing layout, open spaces, and landscape features of the approach to the 1959 Hospital Building complex are integral to the preservation of the building's historic integrity. As such, the placement of Hospital Module Six, as proposed under the SUMC Project, would degrade the surroundings and result in a significant impact. Under the Historic Preservation Alternative, the program that is currently proposed for Hospital Module Six within Kaplan Lawn would instead be absorbed into the remaining portion of the SHC hospital building footprint. The resulting SHC hospital building square footage and height (130 feet) would be the same as under the SUMC Project. For more details about the design of the new SHC hospital building, refer to the Tree Preservation Alternative, above, which would apply to the Historic Preservation Alternative as well.
- SHC hospital building site components proposed under the Tree Preservation Alternative would apply to the Historic Preservation Alternative. This includes the relocation of emergency generators to the Advanced Medicine Center; reconfiguration of the ambulance route; relocation of the emergency department entrance to Pasteur Drive; relocation of the patient drop-off loop farther down Pasteur Drive; and the accommodation of public functions along the West Elevation of the SHC hospital building.
- All hospital functions would be moved out of the 1959 Hospital Building complex and into the new SHC hospital building. The SHC would use its 441,201 square feet of space within the 1959 Hospital Building complex for clinic/medical office uses after physical separation from the adjacent buildings by demolishing the Core Expansion Building. This square footage nearly equals the 429,000 square feet of new and replacement SHC clinic/medical office space that is part of the SUMC Project. As such, the 429,000 square feet would not be constructed under this alternative.
- The 1959 Hospital Building complex would be physically separated from the remaining hospital buildings such that it would no longer be considered part of the hospital for purposes of compliance with OSHPD requirements. To accomplish the required physical separation, certain construction steps would need to be taken, as follows:

Table 5-6
Historic Preservation Alternative: Demolition and Replacement (Compared to SUMC Project)^{a,b,c}

		Historic Preservation	SUMC Project
Building	Use	Alternative Demolition/ Replacement (square feet)	Demolition/Replacement (square feet)
Demolitions			
1959 Hospital Building complex	SHC Hospital	0	-133,025
1973 Core Expansion Building	SHC Hospital	-223,850	-223,850
SHC Entry	SHC Hospital	<u>0</u>	<u>-77</u>
1959 Hospital Building complex	SHC Clinic/Medical Office	0	-308,176
1101 Welch Road	SHC Clinic/Medical Office	-40,100	-40,100
701 and 703 Welch Road	Clinic/Medical Office	-79,800	-79,800
1959 Hospital Building complex (Lane, Grant, Alway, Edward)	SoM Research/Laboratory	0	-414,977
Hoover Pavilion- misc. (shops and storage)	Hoover Pavilion Shops and Storage	-13,831	-13,831
Subtotal Demolition		-357,581	-1,213,836
New Buildings ^d			
Replacement SHC Hospital	SHC Hospital	1,100,000	1,100,000
New LPCH Hospital Structure	LPCH Hospital	471,300	471,300
Replacement SHC Clinic/Medical Offices	SHC Clinic/Medical Office	0	429,000
New LPCH Clinic/Medical Offices	LPCH Clinic/Medical Office	50,000	50,000
FIM 1, 2, and 3	SoM Research/Laboratory	0	414,977
Hoover Pavilion New Medical Office	Hoover Pavilion Clinic/Medical Office	60,000	60,000
New Building Subtotal		1,681,300	2,525,277
Net Increase		1,323,719 ^e	1,311,441

Sources:

- a. PBS&J, Memorandum: "Preliminary List of Project Alternatives to the SUMC Facilities Replacement and Renewal and Simon-Properties Stanford Shopping Center Expansion EIR (for discussion)," October 29, 2007.
- b. Alternatives reviewed by Marlene Berkoff, FAIA, Principal, Berkoff Facility Strategies
- c. Barbara Schussman, Bingham McCutchen LLP, Memorandum: "Historic Preservation Alternative," November 12, 2008. *Notes:*
- d. Does not include new parking garages.
- e. There would be a slightly larger net increase in floor area (approximately 12,200 square feet) under the Historic Preservation Alternative than under the SUMC Project because the Historic Preservation Alternative would require less demolition.

- The demolition of the 1973 Core Expansion building would create a physical separation between the 1959 Hospital Building complex and the remaining hospital buildings. However, unlike under the SUMC Project, the demolition would need to be done in a manner that does not adversely affect the structural integrity of the 1959 Hospital Building complex.
- The required physical separation would entail a separation of utilities such that no utility lines would be allowed to run through the 1959 Hospital Building complex and connect with the 1989 Hospital Modernization Project (HMP) building and other buildings that would continue to be used for hospital functions. To accomplish this separation, utility systems would need to bypass the 1959 Hospital Building complex and enter the HMP building directly, while lines that traverse the 1959 Hospital Building complex would be capped. The 1959 Hospital Building complex would continue to be served by the existing utility systems.
- The West, East, Core, and Boswell Buildings would need to be retrofitted in order to house medical office buildings and clinics. The scope and costs of the retrofit work would depend on the type of retrofit approach chosen. One approach would involve some form of exterior lateral restraint system. Other approaches would include interior changes such as lengthening the shear walls; adding interior brace frames; thickening existing interior walls; and adding beams or beam "collectors" to transfer the loads from the walls to the foundation. Interior renovations would not affect the historic integrity of the building and therefore would be preferable to exterior renovations. In addition, other retrofit activities would need to occur including: the replacement of HVAC ducts with larger ducts in order to comply with OSHPD 3 standards; significant modifications to ensure compliance with ADA requirements; the retrofit of interior walls in order to secure equipment and gas tanks; and the addition of storage space.
- SoM would use the Grant, Alway, Lane, and Edwards buildings for research purposes, as opposed to demolishing those buildings and constructing the new FIM buildings, as under the SUMC Project. The reuse of the SoM buildings would require renovation work including: the addition of stronger and more reliable fire walls; an upgrade of the HVAC duct system; the retrofit of interior walls in order to secure laboratory equipment and gas tanks; the retrofit of exterior glazing system from operable to "sealed" windows; the widening of corridors and the interior circulation areas; the addition of exterior or interior exits, stairs, and elevators to comply with current Fire Code and ADA requirements; and internal space reconfiguration to allow for integrated laboratory suites consistent with modern demands.
- The parking lots proposed under the SUMC Project that would be constructed under the Historic Preservation Alternative would include the SHC parking structure at the corner of Welch Road and Pasteur Drive, the underground LPCH parking structure at the corner of Welch Road and Quarry Road, and the Hoover Pavilion parking structure. However, the underground parking lot proposed at the site of the new SHC clinics would have to be constructed elsewhere since it would be located under the 1959 Hospital Building complex. This parking would instead be accommodated elsewhere at the Main SUMC Site, including potentially expanding the existing Pasteur Drive garage and/or increasing the size of the proposed SHC parking structure at the Welch Road/Pasteur Drive intersection.

- A new road would be created running east-west directly down the middle of Kaplan Lawn, replacing the function of two roads that exist today between the two barrels of Pasteur Drive (Blake-Wilbur Drive and the SUMC Promenade). This new road would preserve the existing Protected Tees, highlighting them as a visual amenity in order to frame the approach and arrival sequence to the new SHC facilities. This design would also allow the creation of a new arrival plaza at the pedestrian exist from Parking Structure 4, permitting a safer pedestrian entry sequence to the SHC hospital building. In addition, it would remove a large percentage of vehicle/pedestrian/bicycle interactions along the SUMC Promenade, creating better pedestrian opportunities between the hospitals and the SoM. Kaplan Lawn would be further enhanced with additional landscaping, including the placement of relocated Trees 324 and 324A from the FIM 1 Site.
- Since the overall square footage of the Historic Preservation Alternative would be roughly equal to the square footage under the SUMC Project, the same new zoning would be necessary to allow increased floor area ratios, height limits, and other standards.
- The Historic Preservation Alternative would be constructed and operational by 2025.