Chapter 4
Other CEQA Considerations

4.1 Significant Unavoidable Environmental Impacts

Section 21100(b)(2)(A) of the California Environmental Quality Act (CEQA) requires that an Environmental Impact Report (EIR) identify any significant environmental effects that cannot be avoided if the Stanford University Medical Center Facilities Renewal and Replacement Project (SUMC Project) is implemented. Most impacts identified for the SUMC Project would either be less than significant or could be mitigated to a less-than-significant level. However, the SUMC Project would result in some significant impacts that cannot be mitigated to less-than-significant levels. The SUMC Project would have significant and unavoidable project and cumulative impacts related to:

- Deterioration of intersection level of service during Peak Hour conditions at three Menlo Park intersections (Middlefield Road and Willow Road, Bayfront Expressway and Willow Road, and University Avenue and Bayfront Expressway);
- Increased average daily traffic on four Menlo Park roadway segments, on Marsh Road, Sand Hill Road, Willow Road, and Alpine Road;
- Emission of criteria air pollutants (NOx) during construction, on both a project level and cumulative level;
- Emission of criteria air pollutants (ROG, NOx, PM_{10}) during operation, on both a project level and cumulative level;
- Contribution to cumulative emissions of toxic air contaminants;
- Emission of greenhouse gases, which would contravene the City’s ability to meet emission reduction goals in the Palo Alto Climate Protection Plan and which would have a cumulatively considerable contribution to global climate change;
- Temporary but substantial noise during construction, on both a project level and cumulative level;
- Emission of ambulance noise along a new route along Sand Hill Road into the proposed Durand Way extension, so that noise levels at roadside residences would increase by a level considered unacceptable under the City’s Comprehensive Plan;
- Demolition of an historical structure, the 1959 Hospital Building complex (also referred to as the Stone Building complex), which is a significant and unavoidable impact on both a project and cumulative level; and
- Removal of up to 71 Protected Trees, as defined in City of Palo Alto’s Tree Protection and Management Regulations, which is a significant and unavoidable impact on both a project level and a cumulative level.
Due to these significant unavoidable environmental effects, approval of each the SUMC Project would require the adoption of a Statement of Overriding Considerations, indicating that the City of Palo Alto is aware of the significant environmental consequences and believes that the benefits of approving the SUMC Project outweigh its unavoidable significant environmental impacts.

### 4.2 Significant Irreversible Environmental Changes

Section 21100(b)(2)(B) of CEQA requires that an EIR identify any significant effect on the environment that would be irreversible if the SUMC Project were implemented. Section 15126.2(c) of the CEQA Guidelines identifies irreversible environmental changes as those involving a large commitment of nonrenewable resources or irreversible damage resulting from environmental accidents.

The SUMC Project would result in an increase of approximately 1.3 million square feet of new hospital and medical office/clinic space within the SUMC Sites, comprised of the Main SUMC Site and the Hoover Pavilion Site (see Table 2-5 in Section 2, Project Description). Total floor space within the SUMC Sites would increase from roughly 2.4 million square feet to roughly 3.7 million square feet at buildout of the SUMC Project. During construction, the SUMC Project would involve a commitment of nonrenewable resources, including building materials and fossil fuels. Also, due to the large increase in floor space at the SUMC Sites, it can be reasonably foreseen that post-construction commitment of nonrenewable resources would increase from current levels, although the amount and rate of consumption of these resources would not result in the unnecessary, inefficient, or wasteful use of resources. It is also possible that new technologies or systems would emerge, or would become more cost-effective, to further reduce the reliance upon nonrenewable natural resources. Sustainable measures that are included in the design of the SUMC Project are listed under Subsection 2.5, Changes Proposed Under the SUMC Project, in Section 2, Project Description.

Accidents, such as the release of hazardous materials, may trigger irreversible environmental damage. The 1.3-million-square-foot increase of floor space used for medical purposes would result in increased use, handling, storage, and generation of hazardous and medical wastes as described in Section 3.12, Hazardous Materials. As shown in Table 3.12-6 of Section 3.12, Hazardous Materials, the post-construction amounts of hazardous materials at the SUMC Sites would exceed the existing amounts of chemicals and hazardous materials currently on site. However, the difference in volumes is minimal and, as explained in Section 3.12, would therefore not pose a significant impact. The SUMC Project sponsors would be required to comply with applicable requirements pertaining to the use and storage of these substances.

The Hoover Pavilion Site contains contaminated soils, which could be disturbed during construction. As such, the risk associated with hazardous materials and waste from construction of the SUMC Project would increase compared with existing conditions posing a potentially significant impact. However, Mitigation Measure HM-3.1 through HM-3.4, as described in Section 3.12, would be required and would reduce the impacts to less than significant. Additionally, safety requirements and the goals and policies adopted in by federal, State, and local governments, as well as the current SUMC policies and regulations regarding handling of hazardous materials, would reduce the public
health and safety risks to less-than-significant levels, so that significant irreversible changes from accidental releases would not be anticipated. Mitigation measures and the federal, State, and local government’s regulations are identified in Section 3.12, Hazardous Materials.

4.3 GROWTH-INDUCING IMPACTS

Section 15126.2(d) of the CEQA Guidelines states that an EIR should discuss “…the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment.” Growth can be induced in a number of ways, including through the elimination of obstacles to growth, through the stimulation of economic activity within the region, or through precedent-setting action. CEQA requires a discussion of how a project could foster population, employment, or housing growth in the areas surrounding the project, as well as an analysis of how any such induced growth could tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. This section of the EIR discusses the manner in which the SUMC Project could affect growth in the City of Palo Alto, and the larger Bay Area.

In accordance with the CEQA Guidelines, Section 15126.2, this discussion of growth inducement is not intended to characterize growth induced by the SUMC Project as necessarily beneficial, detrimental, or of little significance to the environment. The growth inducement discussion is provided for informational purposes so that the public and local decision-makers have an appreciation of the potential long-term growth implications of the SUMC Project.

In discussing growth inducement, it is useful to distinguish between direct and indirect growth. Direct population and housing growth occurs on a project site as a result of new facilities (buildings) being constructed, or an increase in developed space. Indirect employment growth occurs beyond a project site but is stimulated by the project’s direct growth. Indirect growth is tied to increased direct and indirect investment and spending associated with the new direct growth. Further, a project may indirectly induce construction of housing in the surrounding community if existing and planned regional housing supplies are not sufficient to accommodate direct growth in employment associated with the project. When CEQA refers to induced growth, CEQA means all growth—direct, indirect, or otherwise defined. For clarity, the discussion below distinguishes between direct growth from the construction and use of project facilities, and all secondary growth, or indirect growth.

Direct and Indirect Housing Growth. Section 3.13, Population and Housing, states that the SUMC Project would not directly increase population by adding homes or displace housing or residents. However, it would indirectly induce growth by providing additional jobs.

As discussed in Section 3.13, Population and Housing, the SUMC Project would increase on-site employment (adjusted for part-time employment) by 2,242 in 2025. The increased employment could indirectly result in the need for additional housing in the City and other jurisdictions within commuting distance. As discussed in the Housing Needs Analysis for the SUMC Project (see Appendix K), a regional demand for 1,303 new housing units could result from the SUMC Project employment. As

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discussed in Section 3.13, the secondary housing growth associated with the SUMC Project would be 0.28 percent of the projected household growth in the Bay Area region, 0.5 percent of household growth in Santa Clara County, 0.9 percent of household growth in San Mateo County, and 1.7 percent of the projected household growth within the City of Palo Alto. Therefore, the SUMC Project would not significantly impact the 2025 forecasted household growth within the City and other jurisdictions within the region, and the demand for housing as a result of the SUMC Project would be less than significant.

**Direct and Indirect Job Growth.** Direct job increases are expected as a result of the SUMC Project, as described above. The SUMC Project would also result in indirect job growth. The direct spending associated with construction activities would stimulate production of associated products and services in the economy during construction. This indirect job growth would not be substantial in terms of the local or Bay Area economy, due to its temporary nature.

Construction of the SUMC Project would directly, but temporarily, increase construction employment. As described in Section 3.4 Transportation, the maximum number of on-site construction workers at one time would be up to 2,200 for all SUMC Project Sites combined. Given the limited duration and standard nature of the construction anticipated, the demand for construction employment would likely be met within the existing and future labor market in the City of Palo Alto, in Santa Clara County, or within the Bay Area. Neither a substantial quantity of specialized labor nor construction workers from outside the region would be expected to be induced to relocate temporarily or to commute extraordinarily long distances.

Indirect growth could also be generated through the expenditure patterns of employees associated with the SUMC Project. For example, future workers would spend money in the local economy, and the expenditure of that money would result in additional jobs.

To estimate this potential “multiplier effect” associated with SUMC related jobs, ABAG has developed local (Type I) and regional (Type II) economic multipliers for the San Francisco Bay Region based on an input-output model.1 The economic multipliers measure the direct, indirect, and induced employment caused by a project. The jobs that would be generated by the SUMC Project would be classified as Health Services from ABAG’s list of industries with a Type I multiplier of 1.24 and a Type II multiplier of 1.60. This means that for every medical job created, there would be 0.24 indirect and induced jobs created locally and 0.60 jobs created regionally. Applying the local and regional economic multipliers to the 2,242 new jobs directly resulting from the SUMC Project, the SUMC Project would result in about 538 local and 1,345 regional indirect and induced jobs. Therefore, the combined total local employment growth (direct and indirect employment) with the SUMC Project would be about 2,780 new jobs, and the combined regional employment growth would be about 4,125 new jobs. This increase in regional employment represents 0.09 percent of the projected 4,788,330 total jobs within the San Francisco Bay Region by 2025.2

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2 ABAG, *Projections 2005*. 
Infrastructure Capacity/Land Use Changes. The SUMC Project is an urban infill project that would increase density within a developed site and that would not involve construction of major new roadways or utility systems in undeveloped areas, which in turn would stimulate development in those undeveloped areas. Thus, the SUMC Project would not induce growth by removing infrastructure barriers or by providing new infrastructure to geographic areas that were not previously served, nor would it create new transportation access to a previously inaccessible area.

As discussed in Section 3.15, Utilities, increased electrical connections would be needed to meet the increased energy demand from the SUMC Project. The SUMC Project may require additional electrical feeder cables to supply its increase in electricity demand. The SUMC Project sponsors would be required by the City to install the needed electrical feeder cables, which would require trenching along Quarry Road, Welch Road, Pasteur Drive, and on the SUMC Site. The upsizing and upgrading of the utility distribution systems for the SUMC Sites is considered a component of the SUMC Project (see Section 2, Project Description). Any changes to these utility systems would be sized to address the proposed on-site growth and would not induce additional growth beyond that associated with the SUMC Project.

Summary. In conclusion, growth and the rate of growth shape both the physical and social structure of communities. As indicated above, the SUMC Project would not result in direct population growth in the City of Palo Alto and Santa Clara County. The SUMC Project would, however, result in indirect housing demand, and direct and indirect employment growth, but not in excess of current regional ABAG projections. This growth in the number of jobs in the City of Palo Alto and Santa Clara County would not result in indirect population growth over ABAG regional population projections.

4.4 Cumulative Impacts

CEQA Guidelines Section 15355 defines cumulative impacts as “…two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.” The combination of the SUMC Project with other reasonably foreseeable probable future projects in the vicinity or region affected by the SUMC Project, defines the cumulative scenario. Cumulative impacts and the SUMC Project’s contribution to the cumulative impacts are addressed in Sections 3.2 through 3.15 of this EIR. These sections identify feasible mitigation measures that would reduce the SUMC Project’s cumulatively considerable contributions to cumulative impacts to less than cumulatively considerable levels. These sections also identify those contributions to cumulative impacts that would be cumulatively considerable even with the implementation of feasible mitigation measures. Please refer to those sections of the EIR for a discussion of cumulative impacts.

3 Jim Bujtor, Utilities Engineering Division, City of Palo Alto, electronic communication with PBS&J, November 18, 2008