

14 MITIGATION MONITORING AND REPORTING PROGRAM

14.A INTRODUCTION

This Chapter presents the Mitigation and Monitoring Program for the Stanford University Community Plan and General Use Permit. The mitigation measures are presented in four sections; Compliance with Existing Programs, Planning Measures, Construction Measures and Operation and Maintenance Measures. More mitigation will be required in review of individual projects and will be identified, conditioned, and incorporated into individual project monitoring programs at that time.

- **Section 14.B Compliance with Existing Programs.** This section presents the applicable federal, state, regional, county and local policies and regulations that which the Project must comply.
- **Section 14.C Planning Measures.** This sections contains mitigation measures that are to be implemented during the planning and design of each project. These measures often required refinement of the final project design to accommodate particular constraints.
- **Section 14.D Construction Measures.** This section contains mitigation measures to be implemented prior to, during, and immediately following project construction. These measures generally require the construction manager to follow certain constraints during construction and to repair and rehabilitate impacts resulting from construction of each project
- **Section 14.E Operation and Maintenance Measures.** This section contains mitigation measures to be implemented during operation of the project. These measures generally require monitoring of system operations over time and the modification of operations to reduce adverse environmental impacts.

14.B COMPLIANCE WITH EXISTING PROGRAMS

BIO-7: Implement Santa Clara County's Tree Preservation Ordinance

Development projects will be sited and designed to minimize loss of trees protected by the Santa Clara tree ordinance.

If protected trees will be removed or impacted by project activities, Stanford shall implement the construction management practices and tree replacement requirements set forth in the County's tree ordinance.

Impacts Mitigated: Loss of trees protected by Santa Clara County's tree preservation ordinance.

Lead Agency: Santa Clara County

Implementing Agency: Stanford University

Timing: **Start:** Project design/review.

Complete: End of Construction

14.C PLANNING MEASURES

OS-2: Cluster Development in Lathrop Development District

To mitigate for potential loss of open space in the Lathrop District, the 20,000 square feet of development proposed in the GUP shall be clustered in areas identified in the GUP conditions of approval. Structures that are not for the purposes of occupancy, such as fences or golf course access bridges, may be permitted in other areas of the Lathrop District in accordance with the requirements of the Santa Clara County Zoning Ordinance.

In addition to this measure, areas proposed as Campus Open Space in the CP will offset loss of existing Academic Reserve and Open Space areas within the central campus. Additional measures to mitigate for impacts of housing on El Camino Real are discussed below under Impact OS-4.

Impacts Mitigated: Loss of recognized open space.

Lead Agency: Santa Clara County

Implementing Agency: Stanford University/Santa Clara County

Timing: **Start:** CP/GUP approval and/or individual project design/review.

Complete: Prior to approval of any individual projects in the Lathrop area

OS-3A: Improvement of Parks

In addition to designating lands for use as parks, Stanford shall improve parks in the faculty area in such a way as to provide suitable recreational opportunities for the campus population and shall continue to provide neighborhood recreation opportunities in new residential areas. At a minimum, the park improvement shall provide facilities equal or greater to those lost from development of proposed GUP housing sites.

Impacts Mitigated: Recreational opportunities for existing or new campus residents and facility users.

Lead Agency: Santa Clara County

Implementing Agency: Stanford University

Timing: **Start:** A proposed recreation facility improvement program shall be submitted to the County within twelve months of CP/GUP Approval.

Complete: Phased as residential development under the GUP proceeds.

OS-3B: Dedication of Trails

To replace and expand recreational opportunities in the foothills, Stanford shall also dedicate the trail easements shown on the County Trails Master Plan. Stanford will work with the County Parks Department to clarify the process for developing the easement agreement, to identify the general location and type of uses that will be permitted for the trails being dedicated, and to discuss future construction and management considerations. The proposed location of the trail corridors will need to address conflicts with existing agricultural leases and sensitive riparian habitats along the adjacent creeks. Dedication of the trail corridors does not include a requirement for Stanford to make any improvements to the trail corridors at this time, but such improvement may be agreed to by Stanford and the County Parks Department. Dedication shall be phased as academic and residential

development under the GUP proceeds.

Impacts Mitigated: Recreational opportunities for existing or new campus residents and facility users.

Lead Agency: Santa Clara County

Implementing Agency: Stanford University/Santa Clara County Parks and Recreation Department

Timing: **Start:** Stanford shall identify trail easements and complete Agreements for Trail Easements within one year of CP/GUP Approval.

Complete: Phased as academic and residential development under the GUP proceeds.

OS-4: Protect Visual Quality Along El Camino Real

Stanford University shall develop an overall design for the streetscape on the south side of El Camino Real. The development of CP housing sites “I” and “D” shall be incorporated into this overall design. Landscaping with drought resistant native plants should be encouraged. This overall design shall be prepared in consultation with the City of Palo Alto Planning Division, and shall be submitted to the County Planning Office for approval prior to, or in connection with the first application for development along El Camino Real. Stanford is encouraged to incorporate a 25-foot setback from El Camino Real into the design, consistent with City of Palo Alto zoning requirements for multifamily housing along arterial streets.

Impacts Mitigated: Foreground or middle ground views from a high volume travel way (excluding scenic routes and scenic highways), recreation use areas, or other public use areas.

Lead Agency: Santa Clara County

Implementing Agency: Stanford University

Timing: **Start:** Project design/review.

Complete: Prior to approval of development along El Camino Real.

OS-6: Control Light and Glare

A lighting plan shall be prepared and approved by the County for each development project that would include exterior light sources. The plan shall show the extent of illumination that would be projected from proposed outdoor lighting. State of the art luminaries shall be used where necessary, with high beam efficiency, sharp cut-off, and glare and spill control. Upward glow shall not be allowed in residential or academic uses.

Impacts Mitigated: Light source or glare affecting private residences, passing pedestrians, or motorists.

Lead Agency: Santa Clara County

Implementing Agency: Stanford University

Timing: **Start:** Project design/review.

Complete: Prior to construction

PH-3A: Identify Additional Housing Sites

In conjunction with neighboring communities, Stanford shall continue to identify additional sites, on- and off- campus, that are suitable for housing development and could accommodate additional housing units over and

above the number included in the project. Such sites should be developable within the time period covered by the project and be suitable for the types of housing that would address the current and future shortfall of faculty/staff and postgraduate housing.

Impacts Mitigated: Demand for housing thereby causing indirect environmental impacts.

Lead Agency: Santa Clara County

Implementing Agency: Stanford University/Santa Clara County

Timing: **Start:** CP/GUP approval

Complete: Ongoing

PH-3B: Condition New Academic Space on the Construction of Housing

As a condition of approval for additional academic space, Stanford shall be required to construct housing prior to, or concurrently with, any increase in academic space. Stanford shall provide a cumulative net increase in housing commensurate with academic development that counts toward the GUP building area cap as specified below:

Academic Development (gsf)	# of Housing Units
500,000	605
1,000,000	1,210
1,500,000	1,815

This housing shall be provided on Stanford land in unincorporated Santa Clara County in compliance with the Community Plan. For additional academic development between 1,500,000 and 2,035,000 feet that counts toward the GUP building area cap, Stanford shall provide a net increase in housing at a rate commensurate with academic development by providing 1 additional housing unit for each 884 square feet of development.

Impacts Mitigated: Demand for housing thereby causing indirect environmental impacts.

Lead Agency: Santa Clara County

Implementing Agency: Stanford University/Santa Clara County

Timing: **Start:** CP/GUP approval.

Complete: Prior to construction of additional academic space and time thresholds as defined in the measure.

TR-5A: Tier 1 Intersection Capacity Expansion

Arboretum Road and Palm Drive (Palo Alto and Stanford University).

Mitigation at this intersection would require adding an exclusive northbound left turn lane.

Welch Road and Campus Drive West (Palo Alto and Stanford University).

Mitigation at this intersection would require adding a westbound right turn lane.

Impacts Mitigated: TR-5: Transportation impacts at identified intersections

Lead Agency: Santa Clara County

Implementing Agency: Stanford University

Timing: **Start:** CP/GUP approval.

Complete: No later than 2005

TR-5B: Trip Reduction and Monitoring

Implementation of Measure TR-5B: Trip Reduction would require the implementation of existing and new TDM measures and a monitoring program. This program is anticipated to reduce the amount of commute trips, so that the net commute trips with CP/GUP would not increase.

The use of TDM to control commute trips would allow Stanford to continue working toward the goal of “no net new commute trips”, and also reduce impacts to freeways and other roadways as described in Impacts TR-4 and TR-6. However, direct monitoring by the County will be required to determine compliance with the conditions if Stanford chooses this mitigation alternative. No net new commute trips is defined as no increase in automobile trips during peak commute times in the peak commute direction, as counted at a defined cordon location around the central campus.

Monitoring will continue to gauge the effectiveness of these measures. A traffic monitoring program will need to be developed for the project to determine the baseline for current traffic volumes and to measure traffic over the coming years as the CP/GUP is implemented. Monitoring will be conducted by a qualified consultant retained by the County.

To monitor compliance with the TDM standard, a cordon line will be developed to monitor CP/GUP related traffic. The cordon line would isolate all traffic into and out of Stanford University. A cordon line completely encircles an area and all roads leading into and out of the area to be counted. The following is a preliminary list of the cordon intersections. Figure 4.4-16 from the Draft EIR illustrates the cordon line around Stanford.

1. Campus Drive West, east of Junipero Serra Boulevard
2. Stockfarm Road, south of Sand Hill Road
3. Welch Road, east of Oak Road
4. Quarry Road, east of Campus Drive West
5. Palm Drive, west of Arboretum Road
6. Lasuen Street, west of Arboretum Road
7. Galvez Street, west of Arboretum Road
8. Serra Street, west of El Camino Real
9. Yale Street, north of Stanford Avenue
10. Wellesley Street, north of Stanford Avenue
11. Oberlin Street, north of Stanford Avenue
12. Escondido Road, north of Stanford Avenue
13. Bowdoin Street, north of Stanford Avenue
14. Raimundo Way, north of Stanford Avenue
15. Santa Maria Avenue, east of Junipero Serra Boulevard
16. Campus Drive East, east of Junipero Serra Boulevard

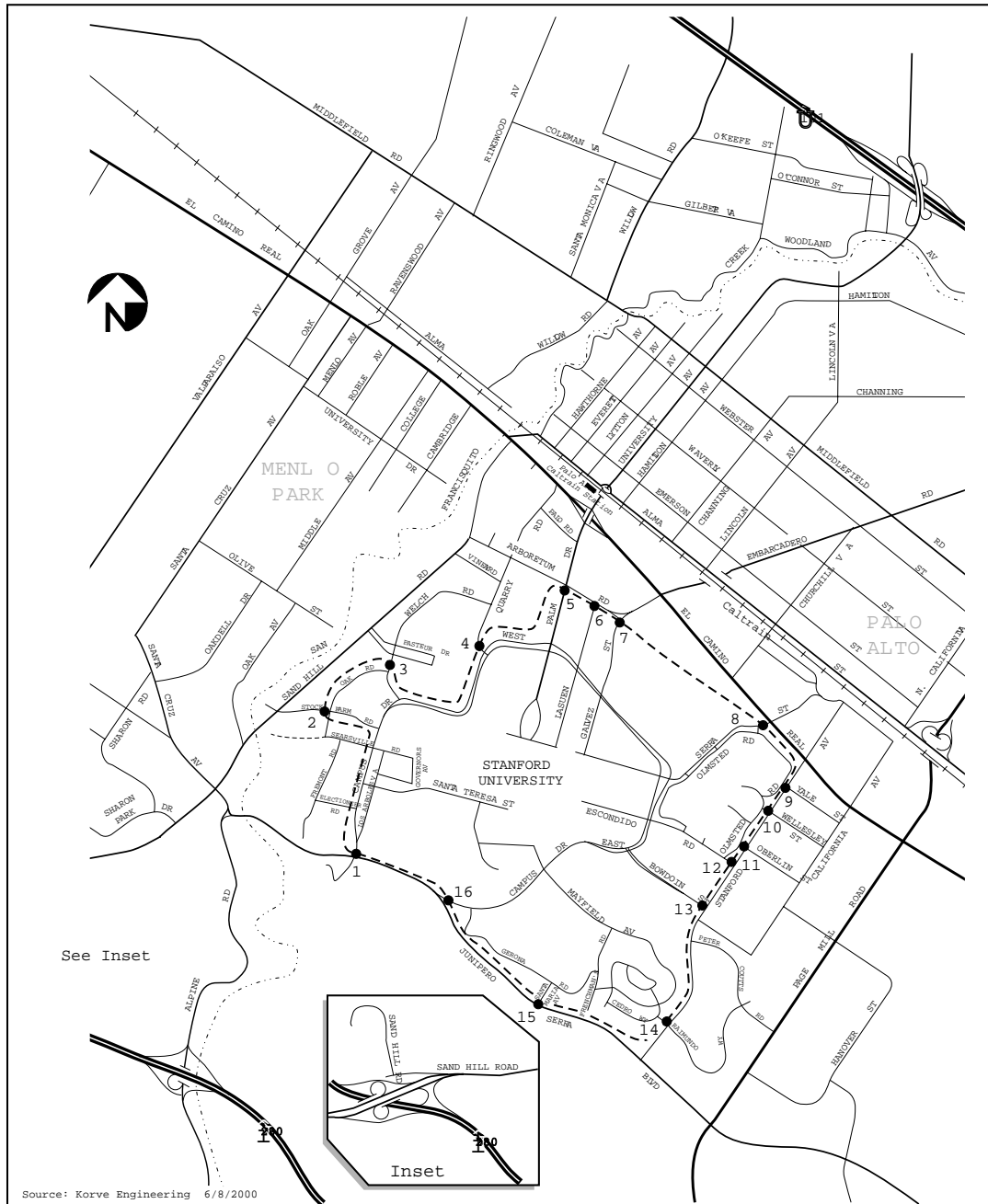
The following steps will be followed for the peak hour traffic monitoring.

1. Traffic Volume Counts. During the AM peak hour and the PM peak hour, the total amount of traffic crossing the cordon line will be counted by travel direction. The monitoring will be from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM. The peak hour within the two-hour count period will be calculated based on total traffic volumes to determine the campus-wide peak

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Source: Korve Engineering 6/8/2000

Stanford University CP/GUP Project EIR

**STANFORD TRAFFIC MONITORING
 CORDON LINE**

Parsons
 Harold Bartholomew
 & Associates, Inc.
 Figure 4.4-16

hours. Counts will be conducted during the regular academic year, which does not include academic breaks or end-of-quarter finals. The three annual counts shall be averaged to determine the annual traffic level for the baseline and each monitoring year.

2. License Plate Survey. All vehicles will also need to be identified in order that through trips can be removed from the total volume. Through trips will be identified by recording the last four digits of the license plate on each vehicle. Five-minute increments of time will be noted on the survey forms in order to determine when a vehicle crosses the cordon in either direction. In the past, approximately 75 percent of the license plates have been able to be recorded for the heavily traveled roadways and nearly 100 percent for the lighter traveled roadways. These percentages will adequately estimate the amount of through traffic across the campus.

3. License Plate Matching. Matching license plates will be determined by comparing numbers that crossed both an entering and exiting cordon within a defined period (e.g., 20 minutes). Vehicles that enter and exit the cordon within the time period will be through trips across the campus without a campus-related purpose.

4. Adjust Cordon Volumes. Several parking lots along Campus Drive West and Stockfarm are inside the cordon, but serve hospital uses. These correctly include Stockfarm, Stockfarm Expansion, Stockfarm Wedge, PS-1, Beckman West, Beckman South, East of Fairchild, MSOB, Welch Road, Oak Road, Dean's Lawn, Evening Shift, Mudd, and Keck. Three lots along Quarry Road are outside the cordon, but serve campus uses. These include Quarry South, Quarry Psychiatry, and Rectangle. The driveways to these lots will be counted with tube counters. Hospital trips will be subtracted from the cordon and campus trips will be added to the cordon count. The cordon count adjustment will also need to factor in the potential for hospital trips to park in the campus lots and campus trips to park in the hospital lots. At the beginning and end of the peak hour each lot will need to be scanned to determine if any incorrect parking has occurred. If campus parking permits are observed in hospital lots, they will be added back into the cordon count. If hospital trips are observed in the campus lots they will be subtracted from the cordon count. All vehicles without a parking permit will be assumed to be correctly parked in their respective lots.

5. Determine Cordon Line Traffic. Total entering and total exiting traffic will be summed for the 16 cordon stations. A single peak hour will be determined for the entire campus based on the traffic volumes. The percent of through trips calculated by the license plate matching from Item 3 above will be removed. The through vehicles will be removed from both the inbound and the outbound traffic since they will have been observed crossing both an entering and exiting cordon line. Finally, the entering and exiting traffic for hospital uses along Campus Drive West and the campus uses in the Quarry Road lots calculated in Item 4 above will be subtracted from or added to the cordon counts

Impacts Mitigated: Transportation impacts due to increased project-generated vehicle trips

Lead Agency: Santa Clara County

Implementing Agency: Stanford University

Timing: **Start:** Baseline traffic counts in first year of GUP approval
Complete: Ongoing on an annual basis, with monitoring to be conducted three times per year.

TR-5C. Cooperative Trip Reduction

Stanford may be recognized for participation in initiatives, either on its own or in cooperation with other jurisdictions or agencies, that contribute to reduction of trips in the area surrounding the campus. The County may elect to credit Stanford towards achievement of the "no net new commute trips" standard for participation in these initiatives, to a degree commensurate with the predicted or actual number of trips reduced and the proportion of the cost of the initiative that Stanford is contributing. Only programs that would lead to trip reduction in the area bounded by US 101, Valparaiso Avenue/Sand Hill Road, Interstate 280, and Arastradero Road/Charleston Road may be considered for this credit.

For each program in which Stanford intends to participate, a proposal shall be submitted to the County Planning Office for review and approval in order to receive the credit. The proposal shall describe the program, identify Stanford's role and contribution to the overall cost, and propose a monitoring method and/or mechanism for calculating commute trips reduced. The County Planning Office may elect to modify the monitoring method or trip reduction calculation proposed, or may choose not to approve credit towards trip reduction for Stanford's participation in the program. Once the County Planning Office has accepted the proposal and the program implementation begins, the County Planning Office will factor a calculation of the trip reduction credit into its conclusion regarding Stanford's annual compliance with the "no net new commute trips" standard, with the continuing requirement that Stanford provide continuing evidence of its participation in the program in a manner that can be independently verified.

Impacts Mitigated: Reduction in off-campus commute trips to compensate for increase in on-campus trips

Lead Agency: Santa Clara County

Implementing Agency: Stanford University/Partnering jurisdictions

Timing: **Start:** Upon proposal by Stanford

Complete: Ongoing on an annual basis

TR-5D. Tier 2 Intersection Capacity Expansion

Tier 2 intersection improvements would only be required if trip reduction monitoring determines that Stanford commute trips are increasing. If cordon counts, as modified by trip reduction credits, exceed the baseline volume as calculated under Measure TR-5B, by 1% or more for any two out of three consecutive years, mitigation of impact to intersections will be required as described below. Many of these intersections are located in jurisdictions other than Santa Clara County, and the County does not have control over approval of the modifications.

If these mitigation measures are needed, Stanford's contribution to the cost of the modifications would be determined by the project's percentage contribution toward the intersections impact. The jurisdiction may choose to use the funds that Stanford contributes for the intersection modifications or for trip reduction measures that benefit the intersection in question. This limitation on Stanford's contribution to the funding does not include those

intersections within Menlo Park for which Stanford has agreed to pay the entire cost of a defined set of modifications, if the City chooses to pursue these changes.

El Camino Real and Valparaiso Avenue (Menlo Park). Mitigation at this intersection would require changing the right-turn only lanes in both the northbound and southbound directions to shared through/right lanes.

El Camino Real and Ravenswood Avenue (Menlo Park). Mitigation at this intersection would require changing the exclusive right turn lanes in both the northbound and southbound directions to shared through/right lanes.

El Camino Real and Middle Avenue (Menlo Park). Mitigation at this intersection would require adding a southbound right turn lane. This improvement is not considered feasible because right-of-way would need to be acquired from the Safeway parcel, the sidewalk would have to be relocated, and landscaping would have to be removed.

Junipero Serra Boulevard and Alpine Road / Santa Cruz Avenue (Menlo Park). Mitigation at this intersection would require adding an eastbound right turn lane.

Sand Hill Road and Sand Hill Circle and I-280 (Menlo Park). Mitigation at this intersection would require adding an exclusive eastbound left turn lane.

Sand Hill Road and Santa Cruz Avenue (Menlo Park). Mitigation at this intersection would require adding a westbound right turn lane.

Sand Hill Road and Oak Avenue (Menlo Park). Mitigation at this intersection would require adding a through lane in both the eastbound and westbound directions.

Middlefield Road and Willow Avenue (Menlo Park). Mitigation at this intersection would require the addition of an eastbound right turn lane. The existing right turn lane is proposed in the future to be a shared through/right. To eliminate impacts at this intersection an eastbound right turn lane will be needed. To make this improvement, right-of-way will need to be acquired, the sidewalk relocated, and existing landscape removed.

El Camino Real and Churchill Avenue (Palo Alto). Mitigation at this intersection would require adding a westbound right turn lane and changing the shared left/right turn to an exclusive left turn lane. This improvement is physically feasible with the purchase of right-of-way, and relocation of the existing curb/gutter and sidewalk. An impact occurs at this intersection only with the Project plus the Arena and Theater scenario.

El Camino Real and Stanford Avenue (Palo Alto). Mitigation at this intersection would require adding an eastbound right turn lane. This mitigation is not considered feasible because right-of-way would need to be acquired, which would affect the business located in the southwest corner of the intersection. This improvement may cause added traffic to Stanford Avenue that would be undesirable from a neighborhood perspective.

Middlefield Road and University Avenue (Palo Alto). Mitigation at this intersection would require adding a northbound right turn lane. This improvement is considered technically feasible. To make this improvement, right-of-way would need to be acquired, the sidewalk relocated, and existing landscaping removed. However, the improvement could be made without affecting existing development.

El Camino Real and Palm Drive / University Avenue (Palo Alto). Mitigation at this intersection would require adding a westbound right turn

lane. This mitigation is considered technically feasible by moving the existing curb, modifying the access to the CalTrain station, and possibly removing mature landscaping.

Junipero Serra Boulevard and Page Mill Road (Congestion Management Plan in Palo Alto). Mitigation at this intersection would require adding a second southbound right turn lane.

Junipero Serra Boulevard and Stanford Avenue (Santa Clara County). Mitigation at this intersection would require adding a second exclusive westbound left turn lane on Stanford Avenue. Adding a second westbound left turn lane is physically possible. Southbound Junipero Serra will need to be widened to receive the second left turn lane. The widening shall be extended to the Page Mill Road intersection as an extension of the right turn lane that is currently being constructed. This improvement may cause added traffic to Stanford Avenue that would be undesirable from a neighborhood perspective.

Junipero Serra Boulevard and Campus Drive West (Santa Clara County). Mitigation at this intersection would require adding a second westbound right turn lane.

Sand Hill Road Widening as Alternate Mitigation. If Sand Hill Road were widened to two lanes in each direction across San Francisquito Creek, along with other improvements identified in the Sand Hill Road project, some of the traffic volumes which use Campus Drive West from the main Stanford Campus and SUMC to I-280 could shift onto Sand Hill Road. The effect of widening Sand Hill Road to a complete arterial would be to reduce Project impacts in some locations. In particular, the shift of traffic from Campus Drive West to Sand Hill Road would eliminate the need for mitigation measures at the intersections of Junipero Serra/Campus Drive West, Santa Cruz/Alpine/Junipero Serra, Santa Cruz/Sand Hill and Sand Hill/Oak Avenue. Mitigation measures identified for Welch Road/Campus Drive West would continue to be necessary in the event that Sand Hill Road is widened. If Menlo Park approved the widening of Sand Hill Road across San Francisquito Creek, it is assumed that they would also approve the entire funded mitigation package from the Sand Hill Road Development Agreement. This agreement included the Sand Hill/Santa Cruz intersection.

Impacts Mitigated: Intersection congestion.

Lead Agency: Santa Clara County

Implementing Agency Various agencies are responsible for these intersections; Stanford is responsible for paying their fair share of improvements

Timing: **Start:** When Stanford commute trips increase as calculated in “no net new commute trips” monitoring.

Complete: When funds are provided.

TR-6A: Reduce Cut Through Traffic on Residential Streets

Stanford shall participate in any future neighborhood traffic studies initiated by the County of Santa Clara, City of Palo Alto or City of Menlo Park that address neighborhood cut-through traffic. Stanford's participation shall be for the purpose of determining how much, if any, of the cut-through traffic is attributable to cars travelling to or from the Stanford central campus. The studies in which Stanford could be required to participate would include those for any neighborhood west of Middlefield Road, south of Willow Road/Santa Cruz Avenue/Sand Hill Road, east of I-280, and north of Page

Mill Road/Oregon Expressway. It is the responsibility of each jurisdiction to contact the County Planning Office at the time of study initiation to alert the Planning Office to the need to enforce this requirement. The relevant jurisdiction may waive this requirement of Stanford if desired at the time of each study. If impacts attributable to Stanford traffic are identified from the studies, Stanford would contribute to the identified mitigation measures to a degree proportional to Stanford's impact.

Impacts Mitigated: Localized traffic impacts resulting from new development.

Lead Agency: Santa Clara County

Implementing Agency: Stanford University and jurisdictions conducting studies

Timing: **Start:** Project design/review.

Complete: Ongoing

TR-6B: Require Site-Specific Traffic Studies for Large GUP Projects

Stanford shall be required by the County to prepare site-specific traffic studies for large projects allowed in the GUP development. These projects will potentially include, but not be limited to: redevelopment of Escondido Village that exceeds 100 units (including but not limited to housing along El Camino Real adjacent to Escondido Village), West Campus and Lagunita faculty/staff housing development, the Performing Arts Center, the sports arena expansion, Stanford Avenue housing, and major parking structures, among others. These traffic studies will address traffic generation, trip distribution, project access, safety and the effects of the project on nearby streets and intersections, pedestrian and bicycle facilities, parking, transit, and other facilities as deemed appropriate by the County Planning Office. Appropriate mitigation measures will be developed in the study, conditioned through the County review and approval process, and implemented by Stanford to reduce these potential impacts to less than significant levels. The scope of the traffic analysis will be reviewed and approved by the County before the study is undertaken, and the County will review and comment on a draft Report before it is finalized.

Impacts Mitigated: Traffic impacts to surrounding residential neighborhoods.

Lead Agency: Santa Clara County

Implementing Agency: Stanford University

Timing: **Start:** Project design/review.

Complete: Ongoing

HWQ-1: Manage Stormwater Runoff

In order to prevent site development from contributing to downstream flooding, Stanford shall accomplish the following:

- Construct and operate storm drainage detention facilities;
- Consider site design features that would decrease post-development runoff, including features presented in the Bay Area Stormwater Management Agencies' "Start at the Source – Design Manual for Stormwater Quality Protection and Site Planning for Urban Stream Protection"; and
- Consider the use of diversion of parking lot and building runoff to vegetated swales, pervious pavement, reduced building foot prints,

infiltration of storm runoff, and other similar measures to reduce peak runoff rates and increased runoff volumes.

The detention facilities and other site features and measures designed, constructed, and implemented by Stanford shall be sufficient to assure that there is no increase in peak downstream storm runoff following development and that the increased post-development runoff volume does not cause downstream flooding. Santa Clara County shall specify the criteria (including the storm event or events and models) that shall be used by Stanford to design detention facilities, site features, or other measures used to prevent impacts caused by increases in post-development storm runoff. The facilities shall be designed to only temporarily store the storm water runoff and not create extended ponding that could result in mosquito breeding. In establishing the appropriate design criteria (e.g., 100 year, 24 hour storm event), Santa Clara County shall consult with Santa Clara Valley Water District regarding the storm events that Stanford shall use in designing facilities that have sufficient capacity to prevent impacts on downstream storm drainage facilities.

Two alternative approaches are possible for implementation of this mitigation measure:

(a) Stanford shall prepare a site-specific hydrology and drainage study for each individual building project. Based on the results of this study, Stanford shall design, construct, and maintain project specific storm drainage system improvements, site features, or measures that are sufficient to assure that the peak storm runoff leaving the project area does not increase and that the increased runoff leaving the project area does not cause downstream flooding. Individual detention facilities, site features, or measures may serve more than one building project, but Stanford must demonstrate adequate capacity to prevent increased runoff as part of the project application. All detention facilities shall be designed to only store the storm water runoff temporarily and not create extended ponding that could result in mosquito breeding. Prior to storm water facility construction, Santa Clara County shall approve the proposed improvements.

(b) As an alternative to preparing site-specific studies for each project, Stanford can elect to prepare a hydrology and drainage study for all or a specified portion of a particular watershed area. Based on the results of this study, Stanford shall design, construct, and maintain storm drainage improvements that include on-site detention facilities, site features, or measures sufficient to assure that the peak storm runoff leaving Stanford lands covered by the study does not increase as a result of new development, and that the increased runoff does not cause downstream flooding. After approval of such stormwater facility construction by Santa Clara County, no further site-specific hydrology and drainage studies would be required for new development, provided that the stormwater facility is in place prior to issuance of new building permits in the subarea addressed by the study.

Impacts Mitigated: Increased storm water runoff

Lead Agency: Santa Clara County

Implementing Agency: Stanford University

Timing: **Start:** Project design/review for each project, or for GUP area on a comprehensive level.

Complete: Prior to construction of each project.

HWQ-2: Maintain Groundwater Recharge

- (a) Stanford shall prepare a site-specific groundwater recharge study for each project that is proposed to occur within the unconfined zone.
- (b) Alternatively, Stanford could prepare a recharge study for development proposed to occur in all or a portion of the unconfined zone. The study or studies may be conducted in conjunction with hydrology and drainage studies as appropriate. The study shall identify the extent that new development will occur in the unconfined zone and the estimated average annual groundwater recharge that occurs in that area under pre-development conditions. Based on the results of this study, Stanford shall design, construct, and maintain facilities (e.g. shallow infiltration basins) that offset “lost” groundwater recharge by increasing recharge in other portions of the unconfined zone. The recharge facilities shall be designed to only temporarily store the storm water runoff and not create extended ponding that could result in mosquito breeding. Prior to construction, Santa Clara County shall approve the “replacement” groundwater recharge facilities. Storm drainage facilities that detain runoff within the project area may also serve as groundwater recharge facilities.
- (c) So as to not pollute the groundwater resource, Best Management Practices and site design features shall be used to maintain the quality of storm runoff diverted by Stanford to groundwater recharge facilities shall be equal or better in quality to the runoff that would have recharged naturally at the developed site.
- (d) In order to avoid overdraft of the groundwater basin during dry periods when Stanford’s Hetch Hetchy allocation may be reduced, Stanford shall develop and implement a plan for responding to such a supply shortage. The plan shall include identification of conservation methods, and an evaluation of other potential sources of supply sources, including any treated water supply that may be soon available to Stanford through Santa Clara Valley Water District.

Impacts Mitigated: Change in groundwater levels

Lead Agency: Santa Clara County

Implementing Agency: Stanford University

Timing: **Start:** Project design/review or for GUP area on a comprehensive basis.

Complete: Prior to construction

HWQ-3: Protect Water Quality

- (a) Stanford shall submit a Notice of Intent (NOI) to the State Water Resources Control Board for the construction activities allowed by the GUP to be covered under NPDES General Permit CAS000002. As an alternative, Stanford may also submit additional NOIs for specific major projects. Stanford shall be required to comply with the terms of the NPDES permit at all construction sites (even sites where less than 5 acres are disturbed). This includes preparation of Storm Water Pollution Prevention Plans (SWPPP) covering all projects involving land disturbance that will be constructed pursuant to the General Use Permit. The SWPPPs shall identify effective Best Management Practices (BMPs) for preventing groundwater pollution caused by any construction activities. The SWPPPs shall also

identify BMPs that have been demonstrated to be effective in preventing storm water pollution caused by runoff occurring during construction. The NOI shall be submitted to the State Water Resources Control Board (SWRCB) with a vicinity map and the appropriate fee prior to commencement of the construction activities as stated in the General Permit. The SWPPP for construction sites covered under the General Permit shall be developed and maintained at each construction site, prior to any land disturbance, and made available upon request.

- (b) Prior to any new construction, Stanford shall perform a survey where development is proposed to occur to determine the location of wells that have not been properly abandoned within the proposed site. If any such wells are located on the site proposed for development, Stanford shall perform an investigation to verify that the well was properly abandoned. If Stanford cannot confirm that the well was properly abandoned, Stanford shall take steps to locate and abandon the well in accordance with State and local standards. Stanford shall request assistance and information from the Santa Clara Valley Water District to locate existing inactive wells on sites to be developed and to confirm procedures for properly destroying inactive wells.
- (c) Prior to any construction, demolition, grading, or landscaping within 50 feet from the top of a bank of a Santa Clara Valley Water District watercourse, Stanford shall obtain a permit from the District.
- (d) During construction, Stanford shall monitor the effectiveness of storm water pollution prevention best management practices at all construction sites during and after storm events.
- (e) As a General Use Permit condition, Santa Clara County shall require that, within the boundaries of the unconfined zone, Stanford shall not engage in new land uses or practices (e.g. storage of chemicals in single wall tanks, application of pesticides that could be transported down to the groundwater supply) that could pose a threat to the groundwater supply. If Stanford leases portions of its property in the unconfined zone, Stanford shall notify and require that the leaseholders comply with the restriction regarding land use practices that could threaten the groundwater supply. Santa Clara County will enforce Stanford's compliance with this restriction.

Impacts Mitigated: Reduction in water quality.

Lead Agency: Santa Clara County

Implementing Agency: Stanford University

Timing: **Start:** Project design/review for each project and on a comprehensive level.

Complete: Prior to construction of each project

HWQ-4: Best Management Practices for Preventing Post-Construction Urban Runoff Pollution

- (a) Stanford shall implement site improvements for new buildings and parking lots that include BMPs that are effective for preventing post-construction storm water and groundwater pollution caused by urban runoff, including grassy swales and vegetated filter strips.
- (b) Prior to construction, Santa Clara County Land Development

Engineering shall review and approve the proposed post-construction BMPs to assure conformance with the Santa Clara County Urban Runoff Management Plan (URMP).

Impacts Mitigated: Reduction in water quality.

Lead Agency: Santa Clara County

Implementing Agency: Stanford University

Timing: **Start:** Project design/review for each project.

Complete: At completion of construction of each project

BIO-1 (a-e): California Tiger Salamander

Option 2: Alternative CTS Mitigation Program (not proposed by project applicant)

(a) In order to ensure that there is no net loss of CTS habitat and to provide for the long-term protection and management of CTS habitat at Stanford:

- (1) Before any development activity in the CTS Management Zone, Stanford shall dedicate an easement over the entirety of Lake Lagunita to the top of the lake banks. The acreage of this easement shall count toward other existing habitat easement dedication requirements as defined below. Prior to Architectural and Site Approval of development of sites in the project area that contain occupied CTS habitat Stanford shall provide for the long-term protection and management, through easements or other equally protective mechanism, of an amount of land equal to 3 times the acreage of the occupied portion of the site to be developed. Occupied CTS habitat includes but is not limited to, the Lower Knoll, Gerona Triangle, and the open areas around Lake Lagunita. Other areas within the CTS management zone shall be surveyed by an independent qualified biologist, hired by the County at the expense of Stanford to determine if they contain occupied CTS habitat as defined through the survey. The survey shall be conducted in accordance with the survey protocol for CTS approved by the California Department of Fish and Game (CDFG) or the USFWS.

As an alternative to the easement at a 3:1 ratio of protected area to disturbed area described above, Stanford may restore, protect, and manage for CTS use areas within 500 meters of Lake Lagunita which do not currently serve as occupied CTS habitat. Areas which may be used for restoration include the driving range and any areas currently developed with buildings, parking areas, or roadways. The restoration area shall be equal in size to the area disturbed by a proposed building project. Restored areas shall be placed in easements subject to all terms described below.

- The total area for which mitigation shall be provided includes building footprints, roads, paved and unpaved parking areas, pathways, ornamental landscape plantings, and any other areas where CTS habitat will be lost or modified, or where CTS access to habitat will be

impeded.

- The first mitigation site shall consist of preserved, created, or restored upland habitat that is located within 500 meters of breeding habitat. Breeding habitat includes Lake Lagunita or created ponds in which successful CTS reproduction has been documented for at least three consecutive seasons with near- or above-normal rainfall, excluding any intervening years with substantially below normal rainfall. The mitigation site shall be contiguous to the breeding habitat, or contiguous to other open space lands that provide migration and dispersal corridors for CTS to the breeding habitat. When all areas that meet this description have been placed in easement protection, easements may be granted on other open space lands that provide migration and dispersal corridors for CTS to breeding habitat.
- A detailed management and monitoring plan shall be created to ensure the long-term maintenance of habitat values on the mitigation lands. The plan shall be approved by the USFWS prior to the Architectural and Site Approval of any project that will affect occupied CTS habitat, and shall address requirements for fencing, vegetation control, enhancement of small mammal populations, maintenance of safe migration and dispersal corridors, and management of other potential sources of mortality (e.g., road kills, utility boxes).
- The habitat mitigation lands shall be protected through adoption of a permanent conservation easement or other long-term land control mechanism that adequately protects CTS habitat. Easements shall remain in effect until such time as protection of CTS is no longer warranted, either through removal from consideration for listing or de-listing under the state or federal Endangered Species Act or other local, state, or federal laws, ordinances and regulations related to the protection of the species, or if the species becomes extinct. Easements may also be abandoned by the County if all buildings constructed under the General Use Permit in the CTS management zone are removed and the habitat is restored for CTS.
- In addition, prior to commencement of construction on occupied CTS habitat that is within 500 meters of Lake Lagunita, land within the foothills area south of JSB shall be enhanced with three new breeding ponds (these new ponds shall be in addition to any breeding ponds created thusfar). The design, management requirements, and success criteria for the ponds shall be established in consultation with the USFWS. The new breeding ponds shall be monitored annually until successful CTS breeding is demonstrated for at least three consecutive seasons of near- to above-normal rainfall, excluding any intervening years with substantially below normal rainfall, prior to building permit issuance. After

successful breeding is demonstrated, development of sites in occupied CTS habitat may proceed with the dedication of suitable upland mitigation lands contiguous to the created ponds.

- All CTS monitoring shall be verified or conducted by an independent, qualified biologist selected and hired by the County of Santa Clara at the expense of Stanford University.
- (b) In order to minimize the potential for loss of individual CTS during project construction, the following measures shall be required for construction of projects in the CTS Management Zone.
- (1) Pre-construction surveys for CTS shall be conducted by an independent, qualified biologist at the beginning of the rainy season prior to construction of any project that would affect potential CTS habitat. Surveys shall be conducted in accordance with CDFG standard procedures for pre-construction surveys. If CTS are found in the construction areas, the University shall consult with CDFG and USFWS to determine if salvage of salamanders is warranted, and if so, what method should be used. The construction area shall be calculated and identified on construction drawings, and the area of impacts shall be monitored by the contractor during construction.
 - (2) Construction vehicles shall be limited to a speed of 10 mph. This speed limit shall be stipulated in all construction contracts and enforced through regular monitoring of construction sites by the County. Any fuels on these sites shall be double contained and excess asphalt shall be removed from the site upon completion of construction.
 - (3) Drift fences (e.g., silt fences or other effective salamander barriers) shall be erected around the project site prior to November 15 to prevent CTS from wandering into areas where they could experience mortality or injury.
- (c) In order to minimize the potential for loss of individual CTS during project operation, the following measures shall be required at sites within the CTS Management Zone.
- (1) Utility boxes and other ground-level fixtures shall be maintained to prevent accidental trapping of salamanders. Outdoor lighting shall be minimized, since artificial light is known to affect amphibian populations. Facilities on the sites shall be kept clean from exposed garbage to avoid attracting potential salamander predators and other nuisance animals. Domestic animals shall not be allowed as regular residents of the sites. The drip-line of oak trees present on site shall be kept clear of structures. Ground squirrel control shall not be allowed except as required in the Lake Lagunita dam and levee pursuant to the requirements of the State Division of Dam Safety. Landscaping features shall be limited to native species, to the extent feasible, that do not require the use of pesticides and fertilizers.
 - (2) Curbs, planters, and other landscape elements shall be designed to direct salamanders away from the building complex, access

road, and parking area. Gravel-covered french drains shall be constructed instead of typical storm drains. Utility boxes with as few openings to the surface as possible shall be selected to prevent accidental trappings of salamanders.

- (d) If the CTS is listed as threatened or endangered by the federal government, an appropriate permit will be obtained from the USFWS. The mitigation measures provided herein shall be superseded by any subsequent HCP approved by the USFWS, so long as the HCP provides at least as much habitat value and protection for CTS.
- (e) Stanford and the County Planning Office shall continue to comply with all requirements and recommendations of the 1998 California Tiger Salamander Management Agreement.
- (f) Within 3 years of General Use Permit approval, Stanford shall construct between one and three passageways for salamanders providing for safe passage across Junipero Serra Boulevard. The number and design of these passageways shall be determined in consultation with the United States Fish and Wildlife Service and submitted to the County Planning Office for approval. If an alternate, equally or more effective measure is approved by the County Planning Office in consultation with the USFWS, such a measure may replace these passageways.

Impacts Mitigated: Impacts to California tiger salamander and loss of habitat.

Lead Agency: Santa Clara County, California DFG and USFWS

Implementing Agency: Stanford University

Timing: **Start:** Project design/review.

Complete: After validation of success; ongoing.

BIO-1 (f-k): Rare, Threatened, and Endangered Plant Protection Program

- (f) The County at the expense of Stanford shall retain an independent qualified biologist to conduct floristically-based surveys for special status plants following the California Department of Fish and Game's "Guidelines for Assessing the Effects of Proposed Developments on Rare and Endangered Plants and Plant Communities" prior to application for approval of any new development project within a riparian, disturbed riparian, oak woodland, annual grassland-oak woodland, or modified oak woodland area as identified in the Community Plan/General Use Permit Environmental Impact Report. Stanford shall notify the County of potential proposed building projects in adequate time to conduct the appropriate surveys at the appropriate time of year. The purpose of these surveys will be to locate and identify any special-status plants that may occur in the proposed construction zone. The survey shall be included with Stanford's application for the necessary planning permits from the County or conducted during the analysis process as appropriate.
- (g) The designated construction zone for new facilities shall be designed to provide, to the extent feasible, an exclusionary buffer from any special-status plant resources discovered (recommend a minimum 30-foot buffer, with exact size of buffer to be determined in consultation with the California Department of Fish and Game on a

case-by-case basis, depending upon the species to be impacted).

- (h) A mesh fence shall be installed at the boundary of exclusionary buffer zones established for special-status plant resources prior to the initiation of ground-disturbing activities.
- (i) Where complete avoidance cannot be achieved, Stanford shall submit a site-specific mitigation and compensation program for the affected resources in consultation with the California Department of Fish and Game and/or the U.S. Fish and Wildlife service.
- (j) All special-status plants within the construction zone shall be transplanted (after seed and cuttings have been secured and propagated for translocation) on Stanford lands in consultation with the California Department of Fish and Game and U.S. Fish and Wildlife Service. Lost special-status plant habitat shall be replaced and/or known rare plant habitat preserved at a ratio to be determined in consultation with CDFG on a case-by-case basis, depending upon the degree of rarity of the species in question.. Seed and cuttings shall be used for translocation efforts as needed to meet the minimum success criteria. Stanford shall provide for long-term protection and management of the replacement habitat, through easements or other equally protective mechanism.
- (k) Stanford shall provide funding for the County to retain a qualified biologist to monitor the mitigation sites annually for five years using success criteria developed in coordination with the California Department of Fish and Game and U.S. Fish and Wildlife Service. The success of the transplantation program shall be considered to have been achieved if 80% or more of the transplanted plants have survived five years after transplantation. The translocation and monitoring shall continue until the success criteria are met.

Impacts Mitigated: Loss of Rare, Threatened, and Endangered Plants, CNPS List 3 and 4 species, and loss of habitat.

Lead Agency: Santa Clara County, California Department of Fish and Game and U.S. Fish and Wildlife Service

Implementing Agency Stanford University

Timing: **Start:** Project design/review.

Complete: Validation of transplantation success.

BIO-3: Active Raptor and Migratory Bird Nest Protection Program

Pre-construction surveys for breeding raptors and migratory birds on the Stanford campus will be conducted to determine the location of active nest sites. If active nest sites are located, Stanford shall consult with a biologist under contract to Santa Clara County, or the California Department of Fish and Game to determine appropriate construction setbacks from the nest sites. No construction activities shall occur within the construction setback during the nesting season of the affected species.

Impacts Mitigated: Disturbance of active raptor nests, migratory bird nests and native wildlife nursery sites.

Lead Agency: Santa Clara County and California Department of Fish and Game

Implementing Agency Stanford University

Timing: **Start:** Project review.

Complete: Ongoing

BIO-5: Protect Oak Woodland Habitat

Stanford will compensate for the loss of oak woodland habitat through the creation, restoration, and long-term preservation of comparable habitat. Opportunities for restoration and long-term preservation of oak woodland habitat are present within the CTS Management Zone. Restoration of oak woodland habitat shall be conducted at a ratio of 1.5:1 (1.5 acres of restored habitat: 1 acre of developed habitat).

Impacts Mitigated: Loss of oak woodland habitat.

Lead Agency: Santa Clara County

Implementing Agency: Stanford University

Timing: **Start:** Project design/review.

Complete: Ongoing

BIO-9: Wetland Avoidance and Replacement

- (a) Prior to application for Architectural and Site Approval of development of sites within the CP area, Stanford shall retain a qualified biologist to conduct a delineation of potential jurisdictional wetlands and other waters of the U.S. present on the site.
- (b) Development projects will be sited and designed to minimize impacts to jurisdictional wetlands or other waters of the U.S.
- (c) If jurisdictional wetlands or other waters of the U.S. will be unavoidably lost as a result of project activities, Stanford shall obtain appropriate authorization from the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act. In coordination with the U.S. Army Corps of Engineers, any wetlands or other waters of the U.S. that are lost as a result of future development in the project area shall be replaced through the creation, preservation, or restoration of wetlands or other waters of the U.S. of equal function and value to those that are lost.

Impacts Mitigated: Loss of wetlands.

Lead Agency: Santa Clara County

Implementing Agency: Stanford University

Timing: **Start:** Within six months of General Use Permit approval, Stanford shall retain a qualified biologist to generally define areas with potential jurisdictional wetlands and other waters of the U.S. Within one year of the GUP approval, this description shall be submitted to the County Planning Office for review and approval. Delineation of wetlands at individual sites shall take place at project design/review for each project.

Complete: At completion of each project.

HA-1: Protection of Historic Resources

- (a) If a construction project to be carried out pursuant to the General Use Permit includes remodeling of, or development that could physically affect, a structure that is included in the Santa Clara County Heritage Resource Inventory, the California Register of Historical Resources,

or the National Register of Historic Places, or that County planning staff determines is eligible for listing or is a potential historic resource, the following shall apply:

1. *Remodeling*: The remodeling shall be conducted following the Secretary of the Interior’s Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings, or the Secretary of the Interior’s Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (1995).

If the structure to be remodeled is not on the County Inventory, but is 50 or more years old, Stanford will assess the structure to evaluate whether it appears eligible for inclusion in the County Inventory, and will submit its assessment to County planning staff for independent review. If County planning staff determines that the structure is potentially eligible for the Inventory, or is a potential historic resource, planning staff will submit the assessment to the Santa Clara County HHC for review. If the structure is determined to be eligible, then the mitigation described above shall be required.

2. *New Development*: New development plans shall be reviewed by the Santa Clara County HHC for appropriateness of design and siting to ensure that the historical significance of the structure is not adversely affected. If the structure is listed on the California Register or the National Register, the HHC shall request SHPO comment prior to approving the proposed project.

- (b) Prior to demolishing any structure that is 50 or more years old, Stanford shall submit an assessment of the structure regarding its eligibility for listing to the County planning staff. If the planning staff determines that the structure is potentially eligible for listing, or is a potential historic resource, then a site-specific analysis of the impact and any feasible mitigation measures, including avoidance of the resource, shall be prepared as part of the environmental review of the project and the demolition will be referred to the Santa Clara County HHC for its recommendation prior to County approval of a demolition permit.
- (c) Mitigation measures to protect The Oval from significant impacts during construction and operation of the proposed parking structure shall include, but not be limited to, all of the following.
- The parking structure shall be designed so that entrance ramps for both vehicular and pedestrian traffic are located far enough to the east and west sides of the Oval, or potentially outside the Oval itself (on the existing roadway or in the “ears” east and west of the Oval), as to not be noticeable by traffic approaching the main Campus on Palm Drive.
 - Above ground ventilation systems, and other necessary structures shall be designed in a manner compatible with a park-like setting (i.e. installing the ventilation ducts below/as part of park benches). Structures will not exceed a ground height of two feet and will be placed to the east and west of the main view corridor so as not to detract the eye from the intended approach to the main Campus.
 - During all construction activities, heavy equipment and earth-

disturbing activities shall be screened from view by temporary construction fencing.

- Following completion of the proposed parking structure, the Oval will be returned to its pre-construction appearance and opened to public access.

Impacts Mitigated: Substantial adverse changes in the significance of historical resources as defined in Section 15064.5 of the CEQA Guidelines.

Lead Agency: Santa Clara County

Implementing Agency: Stanford University

Timing: **Start:** Project design/review for each project.

Complete: At completion of each project.

HA-2: Protection of Archaeological Resources

- (a) Stanford shall provide a map to the County Planning Office, to be maintained as a confidential record, that shows the location of all known prehistoric and historic archaeological resources in the unincorporated Santa Clara County portion of Stanford lands. If a project proposed pursuant to the General Use Permit were sited on a mapped prehistoric archaeological site, further site-specific analysis will be required to determine whether a significant impact would occur. Site-specific mitigation shall be identified by the County in accordance with the provisions of Section 21083.2 of the Public Resources Code.
- (b) Should previously unidentified historic or prehistoric archaeological resources be discovered during construction, the contractor shall cease work in the immediate area and the County and Campus Archaeologist shall be contacted. The County may choose to retain an independent archaeologist to evaluate the site. Stanford's archaeologist shall assess the significance of the find and make mitigation recommendations (e.g., manual excavation of the immediate area), if warranted. If performed by Stanford's archaeologist, the assessment shall be forwarded to County planning staff for independent review. If the County deems it appropriate, the County may hire an independent archaeologist to review the finds, proposed treatment plans, and reports prepared by the Campus Archaeologist.

Construction monitoring shall be conducted at any time ground-disturbing activities (greater than 12 inches in depth) are taking place in the immediate vicinity of archaeological resources discovered as described above. This includes building foundation demolition and construction, tree or tree-root removal, landscape irrigation installation, and utility line excavation.

If data recovery does not produce evidence of significant archaeological resources within the project area, further mitigation shall be limited to construction monitoring, unless additional testing or other specific mitigation measures are determined by a qualified archaeologist (Stanford's archaeologist or an independent archaeologist retained by the County) to be necessary to ensure avoidance of damage to significant archaeological resources. A technical report of findings describing the results of all monitoring shall be prepared in accordance with professional standards. The

archaeological monitoring program shall be implemented by an individual meeting the Secretary of Interior Professional Qualifications Standards in Archaeology (36 CFR 61); individual field monitors shall be qualified in the recognition of archaeological resources of both the historic and/or prehistoric periods and possess sufficient academic and field training as required to conduct the work effectively and without undue delay.

- (c) In the event that human skeletal remains are encountered, the applicant is required by County Ordinance No. B6-18 to immediately notify the County Coroner. Upon determination by the County Coroner that the remains are Native American, the coroner shall contact the California Native American Heritage Commission, pursuant to subdivision (c) of section 7050.5 of the Health and Safety Code and the County Coordinator of Indian affairs. No further disturbance of the site may be made except in compliance with all applicable federal, state, and local laws regarding Native American burials and artifacts. If artifacts are found on the site the Campus Archaeologist shall be contacted along with the County Planning Office. No further disturbance of the artifacts may be made except in compliance with all applicable federal, state, and local laws regarding Native American burials and artifacts.

Impacts Mitigated: Substantial adverse changes in the significance of archaeological resources as defined in Section 15064.5 of the CEQA Guidelines.

Lead Agency: Santa Clara County

Implementing Agency: Stanford University

Timing: **Start:** Project design/review for each project.

Complete: At completion of each project.

PS-1A: Maintain Police Services

- (a) The Stanford Police and PAPD would be informed of the construction, locations, and alternate evacuation and emergency routes to facilitate response times during construction periods.
- (b) Stanford shall provide funding to maintain at least one sworn officer on staff for each 1,000 adjusted daytime population at Stanford.

Impacts Mitigated: Increased demand for police services.

Lead Agency: Stanford University

Implementing Agency: Stanford University/Santa Clara County

Timing: **Start:** Project design/review.

Complete: Ongoing

PS-1B: Maintain Fire Services

Stanford shall inform the Palo Alto Fire Department of construction locations, and alternative evacuation and emergency routes shall be designated to maintain response times during construction periods.

Stanford shall negotiate fire protection services to maintain at least 0.88 fire suppression personnel for each 1,000 additional daytime population at Stanford and to maintain an adequate level of equipment in response to the increased population.

Impacts Mitigated: Increased demand for fire services.

Lead Agency: Stanford University

Implementing Agency: Stanford University/contract fire protection agency

Timing: **Start:** Project design/review.

Complete: Ongoing

PS-1C: Water Conservation and Recycling

- (a) Stanford shall embark on an aggressive program of water conservation and water recycling. The conservation program shall include measures to reduce domestic water use (e.g., retrofit existing residences with low-flow toilets and showerheads) and to reduce use of water for irrigation (e.g., require use of drought-tolerant landscaping). The recycling program shall include consideration of recycled water or gray water use for toilet flushing in new buildings. Stanford will continue to implement water conservation measures for proposed new buildings to minimize future water use. Stanford should consider the use of recycled water for turf irrigation for the golf course, athletic fields, and other landscaped areas.

To implement these recommendations, Stanford shall prepare and submit to the County Planning Office a Water Conservation and Recycling Master Plan, which will lay out the proposed measures for reducing potable water use on campus. The goal of the plan shall be to ensure that Stanford does not exceed its allocation of 3.033 mgd. The Plan shall be prepared following the adoption of the CP and approval of the GUP. Increased water withdrawals from Stanford creeks shall not be used to meet this goal. A ten percent reduction in average daily water use would keep water consumption well within Stanford's existing allocation of 3.0333 mgd, while a six percent reduction (0.18 mgd), would meet the current allocation. A ten percent reduction in average daily water use is feasible with implementation of the program described above.

- (b) If conservation and recycling does not achieve at least a six percent reduction in potable water demand from Hetch Hetchy, the University would have to apply for an increase in the allocation of water from the San Francisco Water Department, and receive approval prior to exceeding the existing allocation. Alternatively, Stanford could reduce its water consumption or seek other sources of water.

Impacts Mitigated: Increase in water consumption.

Lead Agency: Stanford University

Implementing Agency: Stanford University

Timing: **Start:** GUP Approval/individual project design/review

Complete: Ongoing

PS-1D: Improve the Wastewater Collection System

Mitigation described above to reduce water use would also reduce wastewater generation. If parts of the existing collection system are undersized, including the sanitary sewer lines at Yale Street and Stanford Avenue, Stanford shall replace these lines with larger diameter pipes. The

improvements shall be required prior to the approval of projects that would exceed existing capacity. Information of existing capacity and expected wastewater generation for the portion of the system affected shall be provided to the County Planning Office at the time of permit application submittal for a GUP project.

Impacts Mitigated: Adequate wastewater collection system
Lead Agency: Santa Clara County
Implementing Agency: Stanford University
Timing: **Start:** Project design/review.
Complete: Ongoing

PS-2: Maintain School Capacity

By law, the only mitigation of school impacts that the County can require is payment of statutory school impacts fees. The impact will be mitigated to a less than significant level through imposition of statutory school fees.

In order to continue to address school needs, Stanford is encouraged to voluntarily provide a detailed schedule to the PAUSD as soon as feasible indicating the schedule and unit mix of planned housing so that the timing and pattern of enrollment growth (elementary school, middle school, high school) can be estimated with greater certainty by the School District.

Impacts Mitigated: Demand for schools
Lead Agency: Santa Clara County
Implementing Agency: Stanford University
Timing: **Start:** Project design/review.
Complete: Building permit issuance

GI-1: Identify Additional Housing Sites and Implement Traffic and Service Mitigation Measures

The University shall work with the City of Palo Alto, City of Menlo Park, and Santa Clara County to identify additional sites on- and off-campus that would be suitable for housing development to meet the needs of additional workers who will be attracted to the area as a result of the project. Part of this effort shall be the identification of University, city, county, private, state, and federal funding that could be used to assist in the development of housing affordable to low- and moderate-income households and to develop regulatory mechanisms that create incentives for Stanford to participate in off-campus housing initiatives. Provision of additional low- and moderate-income housing would help mitigate the traffic and other impacts of projected employment growth by reducing commute distances and increasing the potential for use of non-auto transportation.

The University shall work with Santa Clara County and the City of Palo Alto to develop and implement appropriate traffic, public services/utilities, and other related mitigation measures to address growth-inducing impacts of the Stanford CP/GUP (refer to Sections 4.4 – Traffic and Circulation, and 4.10 – Public Services and Utilities for measures recommended to mitigate project impacts).

Impacts Mitigated: Growth inducement
Lead Agency: Santa Clara County
Implementing Agency: Stanford University

Timing: **Start:** Project Review
 Complete: Ongoing

14.D CONSTRUCTION MEASURES

HA-3: Protection of Undiscovered Paleontological Materials

In the event that fossilized or unfossilized shell or bone is uncovered during any earth-disturbing operation resulting from development under the proposed project, contractors shall stop work in the immediate area of the find and notify the Campus Archaeologist and the County Building Inspector assigned to the project. The Campus Archaeologist shall visit the site and make recommendations for treatment of the find (including consultation with a paleontologist and excavation, if warranted), which would be sent to the County Building Inspection Office and the County Planning Office. If a fossil find is confirmed, it will be recorded with the USGS and curated in an appropriate repository.

Impacts Mitigated: Adverse impacts to paleontological resources or unique geologic features.

Lead Agency: Santa Clara County

Implementing Agency: Stanford University

Timing: **Start:** Start of Construction

Complete: Ongoing

TR-7: Construction Traffic Control Measures

The following traffic control measures are required to ensure that access is maintained during construction of Stanford GUP projects.

a. Off-street Parking for Construction Related Vehicles. Stanford shall be required to provide adequate off-street parking for all construction-related vehicles throughout the construction period. If adequate parking cannot be provided on the construction sites, a satellite parking area shall be designated, and a shuttle bus shall be operated to transfer construction workers to/from the job site.

b. Maintenance of Pedestrian Access. Stanford shall be prohibited from substantially limiting pedestrian access during construction of the project, without prior approval from the City of Palo Alto, Department of Public Works. Such approval shall require submittal and approval of specific construction management plans to mitigate the specific impacts to a less than significant level. Pedestrians access-limiting actions would include, but not be limited to, sidewalk closures, bridge closures, crosswalk closures or pedestrian re-routing at intersections, placement of construction-related material within pedestrian pathways or sidewalks, and other actions which may affect the mobility or safety of pedestrians during the construction period. If sidewalks are maintained along the construction site frontage, covered walkways shall be provided.

c. Maintenance of Bicycle Access. Stanford shall be prohibited from substantially limiting bicycle access while constructing the project without prior approval from the City of Palo Alto Department of Public Works. Such approval shall require submittal and approval of specific construction management plans to mitigate the specific impacts to a less than significant level. Bicycle access-limiting actions would include, but not be limited to, bike lane closures or narrowing, closing or narrowing of streets that are designated bike routes, bridge closures, placement of construction-related materials within designated bike lanes or along bike routes, and other actions that may affect the mobility or safety of bicyclists during the construction

period.

d. Restriction on Construction Hours. Stanford shall make feasible attempts to limit the number of construction material deliveries from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM on weekdays. When feasible, Stanford shall be required to prohibit or limit the number of construction employees arriving or departing the site between the hours of 4:30 PM and 6:00 PM.

e. Construction Truck Routes. Stanford shall be required to deliver and remove all construction-related equipment and materials on truck routes designated by the Cities of Palo Alto and Menlo Park. Heavy construction vehicles shall be prohibited from accessing the site from other routes. Figure 8.4-15 illustrates the Stanford area truck routes that must be used by all trucks.

f. Phone Number for Complaints. Stanford shall post at least one sign no smaller than 1,296 square inches at all active construction sites. The sign shall contain the name and telephone number or e-mail address of the appropriate Stanford person the public may contact to report alleged violations of this mitigation measure or to register complaints about construction traffic associated with building projects under this GUP. Stanford shall keep a written record of all such complaints and shall provide copies of these records to the County Planning Office as part of the annual report process.

g. Protection and Maintenance of Public Transit Access and Routes. Stanford shall be prohibited from limiting access to public transit, and from limiting movement of public transit vehicles, without prior approval from the VTA or other appropriate jurisdiction. Such approval shall require submittal and approval of a mitigation plan to reduce specific impacts to a less than significant level. Potential actions that would impact access to transit include, but are not limited to, relocating or removing bus stops, limiting access to bus stops or transfer facilities, or otherwise restricting or constraining public transit operations.

h. Construction Impact Mitigation Plan. In lieu of the above mitigation measures, Stanford shall submit a detailed construction impact mitigation plan to County prior to commencing any construction activities with potential transportation impacts. This plan shall address in detail the activities to be carried out in each construction phase, the potential transportation impacts of each activity, and an acceptable method of reducing or eliminating significant transportation impacts. Details such as the routing and scheduling of materials deliveries, construction employee arrival and departure schedules, employee parking locations, and emergency vehicle access shall be described and approved.

i. Construction During Special Events. Stanford shall implement a mechanism to prevent roadway construction activities from reducing roadway capacity during major athletic events or other special events, which attract a substantial number of visitors to the campus. This measure may require a special supplemental permit to be obtained to host such events during significant construction phases.

Impacts Mitigated: Traffic and access impacts from construction activities.

Lead Agency: Santa Clara County

Implementing Agency: Stanford University

Timing: **Start:** Prior to start of Construction

Complete: Ongoing

NOISE-1: Reduce Construction Noise

The following measures shall be used to reduce construction-related noise.

- Comply with all the provisions of the County of Santa Clara and the City of Palo Alto Noise Ordinances, including, but not limited to the restrictions on hours of construction and mechanical equipment noise levels.
- Use of a noise-attenuating jacket around the jackhammer.
- Schedule the construction such that the absolute minimum number of equipment would be operating at the same time.
- Use of the latest technology to mitigate construction equipment noise, i.e., engine enclosures, intake and exhaust silencers, etc.
- Construct 8 to 10 foot high temporary walls along the property lines of the project site adjacent to residential areas, where possible, at the beginning of construction to reduce noise impacts on nearby residents.
- Coordinate classroom relocations with school faculties before demolition or site preparation.
- Maintain good relations with the community such as keeping people informed of the schedule, duration, and progress of the construction, to minimize the public objections to unavoidable noise. Communities should be notified in advance of the construction and the expected temporary noise impacts during the construction period.
- Stanford shall post at least one sign no smaller than 1,296 square inches at all active construction sites. The sign shall contain the name and telephone number or e-mail address of the appropriate Stanford person the public may contact to report alleged violations of this Condition R.1 or to register a complaint about construction noise associated with building projects under this GUP. Stanford shall keep a written record of all such complaints and shall provide copies of these records to the County Planning Office as part of the annual report process. One sign may be used to meet the requirements

Impacts Mitigated: Noise impacts from construction activities.

Lead Agency: Santa Clara County

Implementing Agency: Stanford University

Timing: **Start:** Prior to Start of Construction

Complete: Ongoing

AQ-1: Reduce Diesel Emissions

Mitigation measures beyond those required by BAAQMD for all construction projects would be needed to reduce diesel emissions. Currently, there are few “clean fuel” engines in construction equipment fleets, but it is anticipated that this will change over time. Therefore, as a mitigation measure to minimize diesel engine exhaust particulate emissions, Stanford shall require all construction contractors performing work on projects under the GUP/CP to properly maintain the equipment and, where feasible, use “clean fuel” equipment and emissions control technology (e.g., CNG-fired engines, catalytic converters, particulate traps, turbocharged/intercooled engines, 4° of retard for engine timing). Measures to reduce diesel emission would be considered feasible when they are capable of being used on equipment without interfering substantially with equipment performance.

Impacts Mitigated: Noise impacts from construction activities.

Lead Agency: Santa Clara County

Implementing Agency: Stanford University

Timing: **Start:** Start of Construction

Complete: Ongoing

14.E OPERATION AND MAINTENANCE MEASURES

NOISE-2: Reduce Operational Noise

- Mechanical equipment should be acoustically engineered, with the final engineering design of facilities with such equipment reviewed by a qualified acoustical engineer. Design shall incorporate mufflers, enclosures, and parapets so that the noise generated by these operations would not exceed the noise standard at noise sensitive receptor locations.
- All operational noise sources shall comply with the County Noise Ordinance.
- The project should incorporate design measures to locate noise sources such as loading zones, trash bins, and mechanical equipment as far away from the noise sensitive receptor locations as possible.
- Separate residential uses from parking structures by at least 150 feet.

Impacts Mitigated: Operational noise

Lead Agency: Santa Clara County

Implementing Agency: Stanford University

Timing: **Start:** Project design/review

Complete: Ongoing

PHS-1: Risk Management Plan

Stanford shall disclose the projected quantities and types of hazardous materials associated with each proposed building project and identify measures for storing materials and protecting users from potential risks as part of their application to the County Planning Office. If a specific development project is proposed that would involve quantities of hazardous materials that trigger the California Accidental Release Prevention Law requirements, the University shall prepare a Risk Management Plan and shall implement all measures identified in the accident prevention program to reduce the off-site consequences to a point at which the public would not be exposed to harmful levels of hazardous materials. If feasible, the quantities of hazardous materials stored shall be reduced to below the California Accidental Release Prevention law thresholds, or a less hazardous type of chemical shall be used.

Impacts Mitigated: Accidental release of hazardous materials.

Lead Agency: Santa Clara County

Implementing Agency: Stanford University

Timing: **Start:** Project approval

Complete: Ongoing