Summary Section and Mitigated Negative Declaration for:

UCDAVIS

SOUTH VALLEY ANIMAL HEALTH LABORATORY

Initial Study and
Mitigated Negative Declaration

The following Initial Study has been prepared in compliance with CEQA.

PREPARED BY:

OFFICE OF ENVIRONMENTAL STEWARDSHIP AND SUSTAINABILITY

University of California
One Shields Avenue
436 Mrak Hall
Davis, California 95616

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SCH # 2009051101

CONTACT: A. SIDNEY ENGLAND
ASSISTANT VICE CHANCELLOR FOR
ENVIRONMENTAL STEWARDSHIP AND SUSTAINABILITY
530-752-2432

II. PROJECT LOCATION AND DESCRIPTION

1. Project Overview:

UC Davis proposes to construct the South Valley Animal Health Laboratory (SVAHL), a new laboratory and office building of approximately 53,000 gross square feet. The building would provide space for a new veterinary diagnostic testing laboratory adjacent to the existing veterinary medicine research laboratory approximately one-quarter mile east of State Route 99 in Tulare County south of the City of Tulare. In addition to laboratory and office space, the project would include a cremator for animal parts and other biohazardous waste, a back-up generator, an on-site water supply well, a stormwater retention pond, and a new septic system for the disposal of wastewater.

The California Animal Health & Food Safety (CAHFS) Laboratory System is the backbone of California's warning system that helps to protect the health of California's livestock and poultry. CAHFS serves the people of California by safeguarding public health with rapid and reliable diagnosis of animal diseases common to animals and humans, as well as foodborne pathogens. CAHFS operates in partnership with the California Department of Food and Agriculture (CDFA), UC Davis, veterinarians, and livestock and poultry producers.

The proposed SVAHL would consolidate functions currently performed at three separate CAHFS laboratories under the direction of the CDFA. Testing responsibilities of CDFA would be transferred from the current facilities in Tulare and Fresno. CAHFS has been on the forefront of diagnosis of animal diseases and pathogens since its inception. The main purpose of this facility is to provide diagnostic sample analysis to the dairy, cattle, and poultry farming industries in the central valley. The proposed SVAHL would operate with approximately 37 employees, about 26 employees would transfer to the site and the remainder (11) would be employees already working at the site.

This facility will create new preparation laboratories, diagnostic laboratories, large and small animal necropsy laboratories, and all necessary laboratory support, storage, and administrative support functions. The proposed facility would accept avian and livestock sample submissions for complex diagnostic procedures to support on-going food production, food safety, and animal welfare programs overseen by the CDFA. Sample testing would involve primarily blood and tissue samples sent from throughout the region for testing and would also involve

receipt of dead or dying animals delivered to the SVAHL for testing. The SVAHL would provide routine testing for on-going screening programs and would also provide testing and diagnostic services for animals with suspected disease symptoms.

This Initial Study evaluates the potential environmental effects of the proposed project as required by CEQA. The Initial Study identifies potentially significant environmental effects and proposes mitigation measures to reduce the potential impacts to a less-than-significant level. After consideration of any comments received, the University may elect to approve the design of the proposed project and adopt the proposed Mitigated Negative Declaration. Construction on the project could begin in the spring of 2010 and operation of the completed building would be take place in toward the end of 2011.

2. Description of the Project:

Location: The proposed project site is located on a University-owned parcel on Road 112, south of the existing UC Davis Veterinary Medicine Teaching and Research Center (VMTRC) in unincorporated Tulare County (see **Figure 1, Project Location**). The site is approximately 3 miles south of the City of Tulare and about one mile south of the Tulare Municipal Airport. State Route 99 (SR-99) roughly parallels Road 112 approximately 1000 feet west of the site. The parcel is bounded on the north by the VMTRC access road and parking area, by Road 112 on the west, by an unpaved road providing access to a nearby aqueduct and agricultural fields to the south, and by an unpaved road and dry lot for cattle feeding to the east. The parcel on which the SVAHL project would be located is approximately 9 acres in area; the project would occupy about 5 acres of this area. The adjacent VMTRC parcel has an area of approximately 6 acres; the proposed project would affect about 2.5 acres of this area.

The site is currently developed with a modular laboratory and office building, a housing complex consisting of three modular units, and a cremator for animal-related waste. The modular housing units provide housing for approximately 12 students and researchers during veterinary program residencies at the VMTRC. The area around the modular buildings is landscaped with shrubs and mature trees, including several California redwood (*Sequoia sempervirens*). The majority of the site consists of open land vegetated with non-native grasses. The site is relatively flat with little or no noticeable slope. A septic system leach field that serves the existing site uses and the adjacent VMTRC is located east of the buildings.

Project Features and Operations: The proposed SVAHL project would construct a new veterinary diagnostic testing laboratory adjacent to an existing veterinary medicine research laboratory on an existing developed site in a generally undeveloped area south of Tulare, California. The proposed project would include (1) diagnostic testing and research laboratory areas, with some areas categorized as biosafety level 2 (BSL-2) space, (2) a cremator for animals, animal parts and other biohazardous waste, (3) a back-up generator, (4) an on-site water supply well, (5) a stormwater retention pond, and (6) a new septic system for the disposal of wastewater. **Figure 2, Proposed Site Plan**, shows the proposed location of these features.

The proposed SVAHL would consolidate functions currently performed at three separate California Animal Health and Food Safety (CAHFS) laboratories under the direction of the California Department of Food and Agriculture (CDFA). Testing responsibilities of CDFA would be transferred from the current facilities in Tulare and Fresno. The proposed facility would accept avian and livestock sample submissions for complex diagnostic procedures.

The proposed project would include construction of a new laboratory and office building with an area of approximately 53,000 gross square feet. The building would be approximately 46 feet high at the rooftop, with a single story of occupiable space on the ground level. The building would have a partial basement with mechanical space below grade and a mechanical space in the attic level. Some interior spaces would have high ceilings to allow space for laboratory equipment and operations. A material handling lift would provide access to the attic and basement levels. **Figure 3, Conceptual Building Elevations**, shows the conceptual building design.

A dual entry/exit loading dock for animal/sample receiving and waste removal would be located at the southeast corner of the building. A separate "clean" receiving area for package reception would be located on the west side of the building. A cremator for disposal of animal and other biohazardous waste would be located in the building basement. The cremator exhaust would be located on the southeast side of the building to take advantage of the prevailing wind direction, which is predominantly from the northwest; the stack would project above the roofline. A small detached storage building would be located near the northeast corner of the laboratory building.

The building would have metal and concrete framing, steel frame structure,

concrete masonry exterior walls, and insulated, aluminum-framed windows. The roof would be of metal decking.

The existing modular housing units would be moved to a location on the adjacent VMTRC parcel east of the existing barn (see **Figure 2**), in an area that is presently unvegetated, open land. The modular buildings would be connected to the existing utilities on the VMTRC parcel. The remaining modular laboratory and office building would be demolished. The existing cremator would continue to be used.

Laboratory Safety Features: Biosafety ratings range from Level 1 to Level 4 and indicate the varying degrees of building containment and laboratory precautions that must be followed while conducting research with particular organisms. The proposed project would provide research space to meet current BSL-2 standards set by NIH/CDC in the current edition of the publication Biosafety in Microbiological and Biomedical Laboratories (BMBL). This publication defines four biosafety levels that apply to biohazardous materials operations, depending on the risk posed by the organism used. Although these biosafety levels were originally intended to protect human health, the CDC Guidelines are widely used to prevent release of animal pathogens from laboratories. BSL-2 is appropriate for use with biohazardous materials that are considered to be of ordinary (not special) potential hazard and may produce varying degrees of disease through accidental autoinoculation, ingestion, and skin or mucous membrane exposure. For example, certain hospital diagnostic labs are considered BSL-2 facilities.

The SVAHL building would include laboratory space designed to federal and University of California BSL-2 safety standards, with office areas isolated from laboratory and animal/sample holding areas and decontamination facilities. Laboratory areas would be organized based on intended functions and assumed hazard level, with individual spaces located within a layout that would provide multiple layers of safety measures to prevent cross-contamination or accidental exposure and to limit access to authorized personnel only. Internal security features such as individual door locks and keypad access would be used to limit access to laboratory areas.

Laboratory areas would be separated from areas open to the public and from other laboratory personnel who do not work within a particular zone by controlled access zones and decontamination areas. All procedures in which infectious aerosols or spills could be created would be conducted in biosafety cabinets or other forms of primary containment. All waste from the laboratories

would be autoclaved or otherwise decontaminated prior to leaving the facility.

Each lab would have single-pass (non-recirculated) air, with negative pressurization relative to the surrounding spaces (i.e., air would flow into the lab space from outside and not out of the lab into other building spaces). Consistent with federal guidelines, all windows would be sealed, breakage resistant, and inoperable in order to preserve the air flow balance. The layout of the laboratories would allow potential hazards to be divided into zones based on degree of hazard, with directional air flow moving from less hazardous to more hazardous zones within a space. For example, desk areas for computer use where supply air would enter the space would be considered a less hazardous zone, while a chemical fume hood where the air would be exhausted from the space would be considered more hazardous.

Labs designated as BSL-2E spaces would meet all BSL-2 requirements and include HEPA-filtered room exhaust and shower-out capabilities in addition to baseline BSL-2 guidelines.

Utilities and Infrastructure: The proposed project includes a new well and septic system to meet all on-site needs for water supply and sewage disposal. This document describes the possibility that the City of Tulare may evaluate and construct potential future water and wastewater extensions that would bring these municipal services to the road right-of-way immediately west of the project site. If the City of Tulare proceeds with these utility extensions, the VMTRC and SVAHL facilities may elect to connect to one or both of these utilities and this Initial Study includes evaluation of the potential environmental effects of these alternative service connections. This document does not evaluate the physical impacts of system extensions and capacity considerations that the City of Tulare would consider when contemplating the infrastructure expansion projects. Such conditions would need to be evaluated by the City in a future environmental document. However, for informational purposes, this Initial Study includes a discussion of the availability of City water supply and sewage treatment capacity in subsection V.16, Utilities and Service Systems, below.

The proposed project would require the following improvements to utilities and infrastructure:

- **Domestic Water**: Two existing water wells currently serve the site; Well Number 1 is located adjacent to Road 122 on the VMTRC site and Well Number 2 is located at the southeast corner of the site parcel (see **Figure 2**).

Both wells have levels of contaminants such as arsenic and nitrates above the standards for drinking water, and are used only for non-potable purposes, including the on-site fire hydrants. Bottled water is presently used for drinking at the VMTRC.

The proposed SVAHL is projected to use 35,000 to 50,000 gallons of water per day (approximately 39 to 56 acre-feet per year). As part of the proposed project, a new water well that can provide potable water would be constructed on site. The new well would provide water from the deep aquifer that would meet all water quality requirements. The SVAHL lab facility and associated fire suppression and landscaping water system would be supplied by the new well. The existing wells would remain in service and would be used for irrigation of surrounding lands for alfalfa production. The existing well would not be used for non-potable applications (such as landscaping and exterior washdown) in the developed portion of the project site because such uses would require extensive and costly duplication of water supply pipes. The proposed new well and the water storage tank would be located in the southwest portion of the project site

A 250,000-gallon water storage tank would be located on site. The precise location of the tank has not been determined; as shown on Figure 2, it may be located either east or southeast of the proposed building. The tank would be filled from the new well and potable water would be drawn from the tank for daily use. The tank would be maintained at or near full capacity in order to provide adequate water supply and pressure for fire suppression, if needed.

Alternatively, the facility may be connected to the City of Tulare municipal water supply. This would require the future extension of municipal supply lines along Road 112 by the City of Tulare. The nearest existing supply line is located approximately two miles to the north. The service extension lines would be installed entirely within the disturbed area of the Road 112 right of way.

- **Sanitary Sewer**: Wastewater from the existing site uses and the VMTRC currently flows to a septic tank and leach field located on the east side of the project site. This septic tank and leach field would be retained under the proposed project. In addition, a new on-site 3,500-gallon septic tank and leach field would be located adjacent to the existing leach field to handle wastewater from the proposed facility.

  Alternatively, the facility may be connected to the City of Tulare municipal

sanitary sewer system. This would require City of Tulare to extend the municipal sewer lines approximately two miles along Road 112 to the project site. As with the potential water supply lines, the sanitary sewer lines would be installed entirely within the disturbed area of the Road 112 right of way. An effluent decontamination system that would treat biohazardous waste water before discharge to the sanitary sewer system is not required for BSL-2. However, a decontamination system will be part of this project to provide an additional degree of safety and allow for flexibility in future lab uses.

- **Storm Drainage**: A stormwater retention basin would be constructed in the southern portion of the project site, across the access road from the site entrance. Three stormwater retention basins would be located in the eastern portion of the VMTRC site to the north of the SVAHL site, in an area that is presently unvegetated, open land. All site drainage from pavements, roofs, and other impervious surfaces would be routed to these basins, which would be sized to accommodate the 100-year, 24-hour duration storm event.
- **Electricity**: Electricity service is provided to the site by Southern California Edison. Existing buildings are fed from overhead power lines along Road 112. The proposed facility would be served from these lines, with a new service connection routed to a new pad-mounted transformer. A 500-kilowatt emergency generator would be located outside the loading dock area. The generator would be powered by natural gas and would serve all life safety systems such as the fire alarm system, facility interior lighting, security systems, supply and exhaust air systems, pumps to support building heating and cooling systems, HVAC controls, biosafety cabinets, environmental rooms, and sample refrigerators and freezers in laboratory areas. The facility would also have an uninterruptible power supply unit for electronic equipment.
- **Natural Gas**: A gas line from Road 112 serves the site, feeding the existing cremator and water heater, which would remain in use on the site. A new gas line would be installed to supply the cremator in the proposed facility.
- **Hot Water**: Hot water would be generated by a gas-fired boiler with a 1,000-gallon insulated storage tank. Domestic potable hot water would be supplied through a master tempering valve station and circulated at 120 degrees F. A high-temperature hot water system would be circulated at 180 degrees F to glass washers and laundry areas.
- **Chilled Water**: Chilled water would be provided by two electric chillers

located in the building basement. Chilled water would be piped throughout the building.

- **Steam**: Steam would be supplied by two natural-gas-powered boilers located in the building basement, with a common vent stack. Steam at 80 pounds per square inch (psi) would be piped to several locations in the building for autoclaving, equipment decontamination, water heating, and humidification.

Parking and Roadways: Staff, visitors, service trucks, and emergency vehicles would gain access to the project site via Road 112. The existing roads within the VMTRC are in poor condition and would be repaved to accommodate both passenger and heavy service vehicle traffic. A new road surface would also be provided at the shared access road along the southern property boundary to accommodate vehicle traffic including delivery trucks; this roadway would be shared with infrequent traffic accessing an aqueduct located about 1,500 feet to the east of the project site. An entry/exit driveway would be located at the northwest corner of the project site off the existing VMTRC access driveway, and an entry-only driveway would be located at the southeast corner of the site off the access road along the southern boundary of the site. The north and south entrances would be connected via a loop road around the site that would serve as a fire lane. Both entrances would have security gates.

The north entry/exit would provide vehicle access to the diagnostic facility and the "clean" receiving area for staff, visitors, and service vehicles, and would also provide access to the VMTRC. The parking for both staff (approximately 45 parking spaces) and visitors (35 parking spaces) would be adjacent to this entry and would provide access to the administrative wing of the SVAHL building. Visitor parking would also serve as overflow parking for the adjacent VMTRC and the Consumer Education Pavilion. Animal receiving and waste removal service vehicles would exit only at this location.

The south entry would serve heavy service vehicles going to the animal receiving and waste removal loading dock. A truck wash-down area for service vehicles would be located on the path of travel to the north entry/exit, and the one-way path of travel for such vehicles would ensure that they could be decontaminated before exiting the site.

Landscaping: Landscaping on the project site would consist primarily of drought-tolerant plants, including California native plants. To the extent possible, existing trees would be preserved or transplanted on site. Trees would also be planted in

the parking areas, along the Road 112 frontage, and adjacent to the proposed facility to provide screening. The hardscape would use light-colored or reflective surfaces where possible. Earth berms up to 6 feet high would be constructed along Road 112 and the access road along the south side of the project site to provide security and visual screening from the roadways. The perimeter of the site would be fenced.

Sustainable Design Elements: For the proposed SVAHL building, window openings would be limited on the south side of the building, which would be primarily laboratory space. Pervious pavement would be used in the parking lots and, where feasible, in the delivery zones of the facility. The proposed project would comply with the UC Policy on Sustainable Practices. The facility is intended to achieve Silver certification under the U.S. Green Building Council Leadership in Energy and Environmental Design (LEED) Program.

Laboratory buildings typically have high energy consumption relative to other uses. Energy-saving measures that may be included in the project design include day-lighting controls, sensor-operated fixtures, and solar-powered plumbing fixtures where possible.

The site design includes landscaping to reduce heat gain, provide shading, and create effective storm water management.

Construction Schedule and Construction Vehicle Details: Construction of the proposed project is anticipated continue for approximately 18 months. The project is expected to be built in a single phase. Construction staging and contractor parking associated with the proposed project would likely occur on the eastern portion of the parcel containing the project site. When possible, the project will utilize construction vehicles at the project site meeting a minimum fleet average of Tier 1 emission standards. This possible modification to the project description is provided in response to the May 2009 comment letter from the San Joaquin Valley Air Pollution Control District which requested that the University consider such an action. This modification does not change the air quality analysis or impact conclusions provided in Section V.3 (Air Quality).

Population: It is expected that the proposed SVAHL facility would operate with approximately 37 full time equivalent (FTE) employees, including administrative and maintenance support. About 26 of these would be positions transferred from the CDFA facility in Fresno and the remainder would be staff/student positions already located on site.

3. Project Objectives:

The California Animal Health & Food Safety (CAHFS) Laboratory System is the backbone of California's warning system that helps to protect the health of California's livestock and poultry. CAHFS serves the people of California by safeguarding public health with rapid and reliable diagnosis of animal diseases common to animals and humans, as well as foodborne pathogens. CAHFS operates in partnership with the California Department of Food and Agriculture (CDFA), UC Davis, veterinarians, livestock and poultry producers. In addition, food-based surveillance is provided throughout California by CAHFS for all foreign animal diseases not currently found in the United States. The two existing San Joaquin Valley laboratories (Fresno and Tulare) are hampered by severe space limitation, aged facilities, and urban encroachment. The proposed project would replace these laboratories with a new animal diagnostic laboratory facility. It would accept avian and livestock sample submissions for complex diagnostic procedures as a service to California's mammalian and avian livestock industries.

Specific objectives for the proposed facility are to:

- Replace outdated and fragmented testing facilities with modern laboratory facilities and support functions that will maximize efficiencies while maintaining the safety requirements for facilities operating at BSL-2.
- Provide improved client access to a relatively underserved area.
- Increase animal disease surveillance capability.

4. Surrounding land uses and environmental setting:

The project site is located in Tulare County. The county covers an area of over 4,935 square miles and can be divided into three general topographical zones: a valley region in the west; a foothill region east of the valley area; and a mountain region east of the foothills. The project site is located in the western portion of the county, in an area primarily used for agriculture. These agricultural production operations generate significant quantities of airborne particulates. Small and medium-size manufacturing plants are also located in the western part of the county and are increasing in number. A proposed 272-acre Tulare Industrial Complex north of the site is currently in the planning stages.

5. Discretionary approval authority and other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)

   As a public agency principally responsible for approving or carrying out the proposed project, the University of California is the Lead Agency under CEQA and is responsible for reviewing and certifying the adequacy of the environmental document and approving the proposed project. The permits required for the proposed project are listed under **Project Approvals** on page 2 of this document. This CEQA document is intended to support the UC decision-making process; other agencies may use this document to support further CEQA actions if necessary.

SOURCE: Google Earth - 2009, Impact Sciences, Inc. – January 2009

FIGURE **1**

Project Location Map

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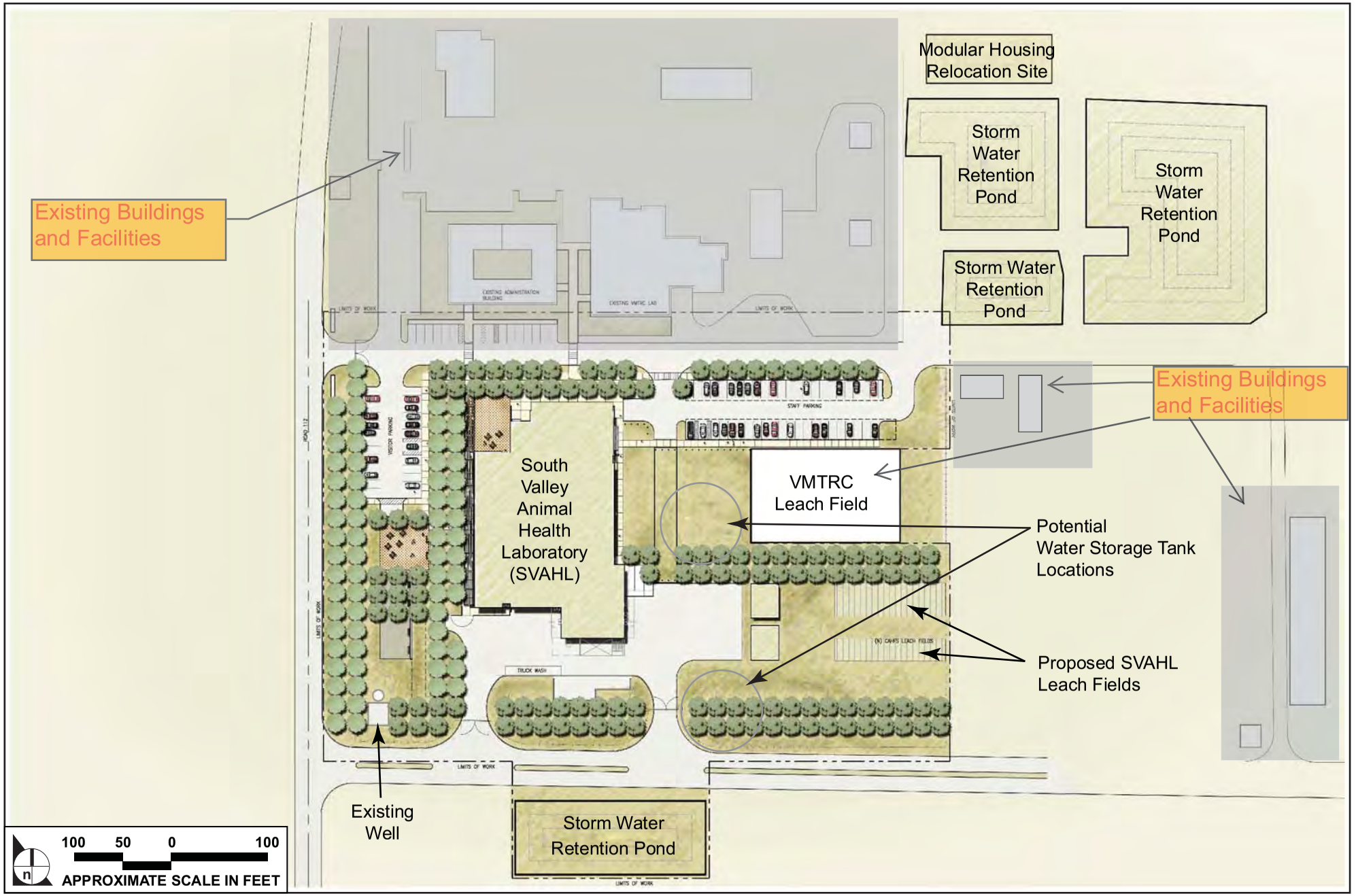


SOURCE: hok Engineering - February 2009

FIGURE **2**

Proposed Site Plan

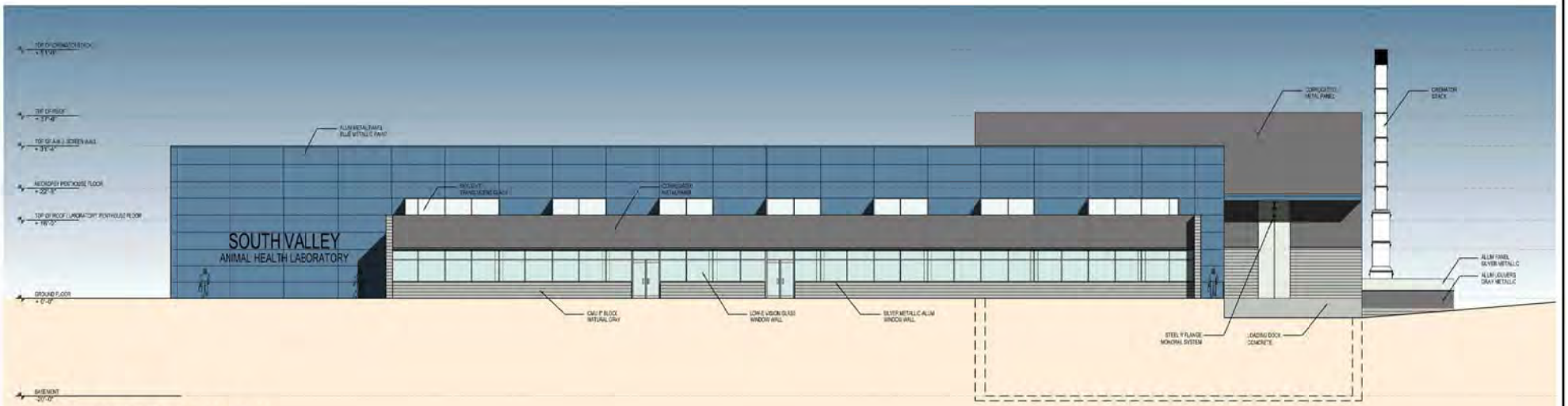
992-003•05/09

SOURCE: hok Engineering - November 2008

FIGURE **3a**

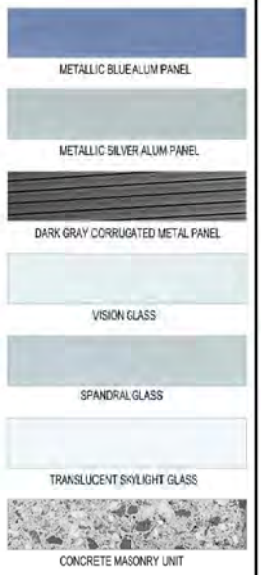
Conceptual Building Elevations

992-003-05/09



WEST ELEVATION

SOUTH ELEVATION



SOURCE: hok Engineering - November 2008

FIGURE **3b**

Conceptual Building Elevations

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III. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially significantly affected by this project as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology/Soils
☐ Hazards & Hazardous Materials	☐ Hydrology/Water Quality	☐ Land Use/Planning
☐ Mineral Resources	☐ Noise	☐ Population/Housing
☐ Public Services	☐ Recreation	☐ Transportation/Traffic
☐ Utilities/Service Systems	☐ Mandatory Findings of Significance	

IV. DETERMINATION: (To be completed by lead agency)

On the basis of the initial evaluation that follows:

☐ The proposed project WOULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ Although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made that will avoid or reduce any potential significant effects to a less than significant level. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ The proposed project MAY have a significant effect on the environment. An ENVIRONMENTAL IMPACT REPORT will be prepared.

VIII. MITIGATION MONITORING PROGRAM

When completing a project, a lead agency must adopt a reporting or monitoring program for the changes to the project that it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment.

Implementation of mitigation measure MM AES-1 will take place during the approval of site plans for the proposed project. The approval of the site plans will be the responsibility of the University of California, Davis.

Implementation of mitigation measures MM AQ-1a through -1j will take place through implementation of standard construction contract requirements. Inspection of these items will be the responsibility of the University of California, Davis.

Implementation of mitigation measures MM BIO-1 and -2 will take place through the use of a qualified biologist who will survey the site. The monitoring will take place prior to the commencement of demolition and construction activities and compliance with the mitigation will be the responsibility of the University of California, Davis. Upon completion of surveys, the biologist will provide written documentation of the monitoring activity and the results of the monitoring activity.

Implementation of mitigation measures MM CUL-1 and -2 will take place through contractor training and, if resources are encountered, the use of a qualified archaeologist who will survey the site. Compliance with the mitigation will be the responsibility of the University of California, Davis. If human remains are found on the site during construction activities, all construction activities will be halted and a qualified archaeologist will be called to the site. The archaeologist will provide a written report that would include the results of the archaeological resource monitoring activity. The University would comply with California Health and Safety Code § 7050.5(b) and would comply with the provisions of PRC § 5097.98 if the remains were determined to be of Native American origin.

Implementation of mitigation measure MM GEO-1 would require a site-specific percolation testing or test borings as part of the design-level site analysis process to determine the final size and design of the proposed septic leach field. Compliance with the Uniform Plumbing Code will be the responsibility of the University of California, Davis. Upon completion of design-level site analysis, the University would approve the final size and design of the proposed septic leach field.

MITIGATED NEGATIVE DECLARATION

Lead Agency: University of California

Project Proponent: University of California, Davis

Project Location: Unincorporated Tulare County, approximately 3 miles south of the City of Tulare and about one mile south of the Tulare Municipal Airport.

Project Description: The proposed South Valley Animal Health Laboratory (SVAHL) project would construct a new veterinary diagnostic testing laboratory adjacent to an existing veterinary medicine research laboratory in a generally undeveloped area south of Tulare, California. The proposed project would include (1) diagnostic testing and research laboratory areas, with some areas categorized as biosafety level 2 (BSL-2) space, (2) a cremator for animals, animal parts and other biohazardous waste, (3) a back-up generator, (4) an on-site water supply well, (5) a stormwater retention pond, and (6) a new septic system for the disposal of wastewater.

Mitigation Measures: **MM AES-1:** Hooded and down-directed lights shall be used for nighttime illumination in parking areas, shipping and receiving docks, and other areas of the site as applicable.

MM AQ-1a: All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover.

MM AQ-1b: All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.

MM AQ-1c: All land clearing, grubbing, scraping, excavation, land leveling, grading, cut & fill, and demolition

activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.

MM AQ-1d: With the demolition of buildings up to six stories in height, all exterior surfaces of the building shall be wetted during demolition.

MM AQ-1e: When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.

MM AQ-1f: All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions.) (Use of blower devices is expressly forbidden.)

MM AQ-1g: Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.

MM AQ-1h: Within urban areas, trackout shall be immediately removed when it extends 50 or more feet from the site and at the end of each workday.

MM AQ-1i: Any site with 150 or more vehicle trips per day shall prevent carryout and trackout.

MM BIO-1: The following actions shall be taken to avoid potential harm to San Joaquin kit fox during construction:

- Grading and construction activities, including demolition, after dusk shall be prohibited unless authorized by the CDFG.

- Prior to commencement of any site-disturbing and/or construction activities, all personnel associated with the project shall attend a worker education training program, conducted by a qualified biologist, to avoid or reduce impacts on sensitive biological resources (e.g., San Joaquin kit fox). At a minimum, as the program relates to the kit fox, the training shall include the kit fox's life history, all measures specified by the qualified biological monitor for the project, and instructions to immediately cease construction activities and contact the USFWS if a kit fox is observed.
- A kit fox fact sheet shall be developed and distributed to all contractors, employers and other personnel involved with the construction of the project.
- All construction personnel shall be instructed on obeying speed limits of 25 mph (or lower) for all construction traffic to minimize the probability of road mortality of the San Joaquin kit fox.
- To prevent entrapment of the San Joaquin kit fox, all excavations, steep-walled holes, or trenches in excess of two feet in depth shall be covered at the close of the work day or provided with one or more escape ramps constructed of earth fill or wooden planks. The trenches shall be inspected for kit fox prior to covering, each morning prior to the onset of field activities, and prior to filling.
- Any pipes, culverts, or similar structures with a diameter of four inches or greater stored overnight at the project site shall be thoroughly inspected for trapped San Joaquin kit foxes before the subject pipe is subsequently buried, capped, or otherwise used or moved in any way. If during the construction phase a kit fox is discovered inside a pipe, that section of pipe will not be moved, or if necessary, be moved only once to remove it from the path of activity, until the kit fox has escaped.
- All food-related trash items such as wrappers, cans, bottles, and food scraps generated shall be disposed of in closed containers only and regularly removed

from the site. Food items may attract San Joaquin kit foxes onto the project site, consequently exposing such animals to increased risk of injury or mortality. No deliberate feeding of wildlife shall be allowed.

MM BIO-2: If activities associated with construction or grading are planned during the bird nesting/breeding season, generally January through March for early nesting birds (e.g., Cooper's hawks or hummingbirds) and from mid-March through September for most bird species (including Swainson's hawk), the University shall have a qualified biologist conduct surveys for active nests. Pre-construction nesting bird surveys must be conducted weekly, within 30 days prior to initiation of ground-disturbing activities to determine the presence/absence of active nests. The surveys shall continue on a weekly basis with the last survey being conducted no more than three days before the start of clearance/construction work. Surveys shall include examination of trees, shrubs, and the ground, within grasslands, for nesting birds, as several bird species known to the area are shrub or ground nesters, including mourning doves. Active bird nests that are found within the construction zone shall be protected by a buffer of 300 feet for most species or 500 feet or raptors, unless the buffer distance is modified by the CDFG, demarcated by construction fencing or other means that will allow avoidance of the nests until young birds have fledged, and no continued use of the nest is observed. If ground-disturbing activities are delayed, additional pre-construction surveys shall be conducted so that no more than three days will have elapsed between the survey and ground-disturbing activities.

MM CUL-1: Prior to the start of any ground-disturbing activities, contractor crews shall be required to attend an informal training session, regarding how to recognize archaeological sites and artifacts. Contractors shall be notified that they are required to watch for such sites and artifacts and to notify the campus if any are found. If a resource is discovered during construction (whether or not

an archaeologist is present), all soil disturbing work within 100 feet of the find shall cease. The campus shall contact a qualified archaeologist to evaluate any uncovered materials and to provide direction for handling of the find, and shall implement a plan for survey, subsurface investigation as needed at the direction of the archaeologist to define the deposit, and assessment of the remainder of the site within the project area to determine whether the resource is significant and would be affected by the project. A written report of the results of investigations will be prepared by a qualified archaeologist and filed with the appropriate Information Center of the California Historical Resources Information System.

MM CUL-2: In the event of a discovery on site of human bone, suspected human bone, or a burial, all excavation in the vicinity will halt immediately and the area of the find will be protected until a qualified archaeologist determines whether the bone is human. If the qualified archaeologist determines the bone is human, or if a qualified archaeologist is not present, the campus will notify the County Coroner of the find before additional disturbance occurs. Consistent with California Health and Safety Code § 7050.5(b), which prohibits disturbance of human remains uncovered by excavation until the Coroner has made a finding relative to PRC 5097 procedures, the campus will ensure that the remains and vicinity of the find are protected against further disturbance. If it is determined that the find is of Native American origin, the campus will comply with the provisions of PRC § 5097.98 regarding identification and involvement of the Native American Most Likely Descendant (MLD).

If human remains cannot be left in place, the campus shall ensure that the qualified archaeologist and the MLD are provided opportunity to confer on archaeological treatment of human remains, and that appropriate studies, as identified through this consultation, are carried out prior to reinterment. The campus shall provide results of all such studies to the local Native American community, and shall

provide an opportunity of local Native American involvement in any interpretative reporting. As stipulated by the provisions of the California Native American Graves Protection and Repatriation Act, the campus shall ensure that human remains and associated artifacts recovered from campus projects are repatriated to the appropriate local tribal group if requested.

MM GEO-1: A site-specific percolation testing or test borings shall be performed as part of the design-level site analysis process to determine the final size and design of the proposed septic leach field. The project shall follow guidelines for septic system design provided in the Uniform Plumbing Code.

Reference: This Mitigated Negative Declaration incorporates by reference in their entirety the text of the Initial Study prepared for the project.

Determination: In accordance with CEQA, a Initial Study was prepared by UC Davis that evaluates the environmental effects of the proposed project. On the basis of the project's Initial Study the campus found that all potentially although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made that will avoid or reduce any potential significant effects to a less than significant level.

Public Review: In accordance with Section 15073 of the CEQA Guidelines, the Draft Initial Study for the project was circulated for public and agency review from May 22, 2009 to June 22, 2009. Appendix C of the Initial Study includes the comments on the Draft Initial Study and the responses to the comments.