COUNTY OF SANTA CRUZ

PLANNING DEPARTMENT
701 OCEAN STREET, 4TH FLOOR, SANTA CRUZ, CA 95060
(831) 454-2580 FAX: (831) 454-2131 TDD: (831) 454-2123
KATHLEEN MOLLOY PREVISICH, PLANNING DIRECTOR
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MITIGATED NEGATIVE DECLARATION

Project: Behavioral Health Unit (BHU) **APN(S): 026-011-06**

Project Description: Proposal to purchase the property to develop a new County Behavioral Health Unit facility (BHU) and an Evaluation Services Unit (ES) of approximately 15,000 square feet, retain the existing veterinarian hospital, demolish the other existing buildings (Autorella and a multi-business retail building), decommission an existing well, approve a rezone of the project parcel from Service Commercial (C-4) to Public Facility (PF), and approve a General Plan Amendment from Service Commercial to Public Facility/Institutional Land Use.

Project Location: The project site is located on the southwest corner of the intersection of Soquel Avenue and Capitola Road extension in the unincorporated community of Live Oak.

Applicant: County of Santa Cruz, Health Services Agency

Staff Planner: Matthew Johnston; email: pln458@co.santa-cruz.ca.us

This project will be considered at a public hearing by both the Planning Commission and the Board of Supervisors. The times and dates have not been set. When scheduling does occur, these items will be included in all public hearing notices for the project.

California Environmental Quality Act Mitigated Negative Declaration Findings:

Find, that this Mitigated Negative Declaration reflects the decision-making body's independent judgment and analysis, and; that the decision-making body has reviewed and considered the information contained in this Mitigated Negative Declaration and the comments received during the public review period; and that revisions in the project plans or proposals made by or agreed to by the project applicant would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur; and, on the basis of the whole record before the decision-making body (including this Mitigated Negative Declaration) that there is no substantial evidence that the project as revised will have a significant effect on the environment. The expected environmental impacts of the project are documented in the attached Initial Study on file with the County of Santa Cruz Planning Department located at 701 Ocean Street, 4th Floor, Santa Cruz, California.

Required Mitigation Measures or Conditions:

☐ None

☒ Are Attached

Review Period Ends: May 31, 2011

Note: This Document is considered Draft until it is Adopted by the Appropriate County of Santa Cruz Decision-Making Body

Date: 5/6/2011

MATT JOHNSTON, Environmental Coordinator
(831) 454-3201

County of Santa Cruz

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ENVIRONMENTAL COORDINATOR
NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION

Pursuant to the California Environmental Quality Act, the following project has been reviewed by the County Environmental Coordinator to determine if it has a potential to create significant impacts to the environment and, if so, how such impacts could be solved. A Negative Declaration is prepared in cases where the project is determined not to have any significant environmental impacts. Either a Mitigated Negative Declaration or Environmental Impact Report (EIR) would be prepared for projects that may result in a significant impact to the environment.

Public review periods are provided for these Environmental Determinations according to the requirements of the County Environmental Review Guidelines, depending upon whether State agency review is required or whether an EIR is required. The environmental document is available for review at the County Planning Department located at 701 Ocean Street, in Santa Cruz. You may also view the environmental document on the web at www.sccoplanning.com under the Planning Department menu. If you have questions or comments about these determinations please contact Matt Johnston of the Environmental Review staff at (831) 454-3201

The County of Santa Cruz does not discriminate on the basis of disability, and no person shall, by reason of a disability, be denied the benefits of its services, programs or activities. If you require special assistance in order to review this information, please contact Bernice Romero at (831) 454-3137 (TDD number (831) 454-2123 or (831) 763-8123) to make arrangements.

111074 Behavioral Health Unit APN(S): 026-011-06

Proposal to purchase the property to develop a new County Behavioral Health Unit facility (BHU) and an Evaluation Services Unit (ES) of approximately 15,000 square feet, retain the existing veterinarian hospital, demolish the other existing buildings (Autorella and a multi-business retail building), decommission an existing well, approve a rezone of the project parcel from Service Commercial (C-4) to Public Facility (PF), and approve a General Plan Amendment from Service Commercial to Public Facility/Institutional Land Use.

ZONE DISTRICT: Commercial (C-4)
APPLICANT: County of Santa Cruz, Health Services Agency
OWNER: Moises and Bertha Estrada
PROJECT PLANNER: Matthew Johnston
EMAIL: pln458@co.santa-cruz.ca.us
ACTION: Negative Declaration with mitigations
REVIEW PERIOD: May 11, 2011 TO May 31, 2011
This project will be considered at a public hearing by both the Planning Commission and the Board of Supervisors. The times and dates have not been set. When scheduling does occur, these items will be included in all public hearing notices for the project.

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MITIGATION MONITORING AND REPORTING PROGRAM

for the

Application No. 111074 (Behavioral Health Unit, May 2011)

Environmental Impacts	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
Geology/Soils				
GEO-1: Impacts to slope stability	In order to mitigate the hazards associated with potential failure of the southern wall, the applicant shall submit a plan that includes any one of the three options identified in the report either independently or in conjunction with each other. The plan shall include a letter from the project soils engineer that supports the proposed plan.	Planning Staff	Plan and letter submittal	Prior to issuance of a building permit
Biological Resources				
BIO-1:Impacts to nesting birds and roosting bats	Schedule tree removal for November 1 through February 1, outside of both birds and bats nesting seasons.	Applicant	Pre-construction meeting confirmation	Preconstruction
BIO-2:Impacts to roosting bats	If trees must be removed outside of the timeframe above, a qualified biologist shall conduct surveys for special status bats 3-4 weeks prior to site disturbance. If active roosts are present in trees to be retained, roosting bats shall be excluded from trees to be removed prior to any disturbance. In trees to be retained, no disturbance zones, set by the biologist based on the particular species present, shall be fenced off around the subject tree to ensure other construction activities do not harm sensitive species. The maternity roosting season for bats is March1 – July 3. Tree removal should be scheduled outside of the maternal roosting period if special status bats are present. Before any trees are removed during the maternal roosting season, a qualified biologist shall perform surveys. If maternal roosts are present, disturbance shall be avoided until roosts are unoccupied. The biologist shall be responsible for ensuring bat roosts are vacated.	Applicant	Pre-construction meeting confirmation and monitoring during construction	Preconstruction and ongoing throughout the project implementation.

Environmental Impacts	Mitigation Measures	Responsibility for Compliance	Method of Compliance	Timing of Compliance
BIO-3:Impacts to nesting birds	If trees must be removed outside of the timeframe above, a qualified biologist shall conduct surveys for raptor or migratory songbird nests 3-4 weeks prior to site disturbance. If active raptor or migratory bird nests are found in trees to be retained, the biologist shall be required to be on site during any initial vegetation or ground disturbance activities (e.g. vegetation clearing, grading, excavation, tree pruning/removal) that could potentially impact listed species. The biologist shall be responsible for setting and maintaining the disturbance buffers from active nests during construction activities, and buffers and exclusionary measures shall be implemented only after consultation with CDFG. If no active nests are present on the subject parcel, tree removal can proceed provided the mitigations in BIO-2 above have been implemented.	Applicant	Pre-construction meeting confirmation and monitoring during construction	Preconstruction and ongoing throughout the project implementation.
Cultural Resources				
CR-1: Impacts to an archaeological resource	In order to ensure no impacts to archeological resources, a qualified archeological monitor shall be present during excavation activities.	Applicant	Pre-construction meeting confirmation	Preconstruction and ongoing throughout excavation.
Utilities and Service Systems				
USS-1: Impacts to landfill capacity	In order to mitigate the impact of the construction waste generated by this project on the landfill's capacity, the applicant and/or property owner shall recycle and reuse materials, as appropriate, and to the maximum extent possible. Notes to this affect shall be included on the final building permit plan set. At a minimum, construction and demolition waste shall be processed through the Buena Vista Construction and Demolition Waste program.	Applicant	Plan submittal	Prior to issuance of a building permit

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CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) ENVIRONMENTAL REVIEW INITIAL STUDY

Date: May 9, 2011 **Application Number:** 111074

Staff Planner: Matthew Johnston

I. OVERVIEW AND ENVIRONMENTAL DETERMINATION

APPLICANT: County of Santa Cruz **APN(s)**: 026-011-06

OWNER: Moises and Bertha Estrada **SUPERVISORAL DISTRICT**: 3

PROJECT LOCATION:

Proposed project is located at 2202, 2220, and 2280 Soquel Avenue, on the southwest corner of Soquel Avenue and Capitola Road Extension, in the Live Oak area, just outside of the City of Santa Cruz limits. (Attachment 1)

SUMMARY PROJECT DESCRIPTION:

Proposal to purchase the property to develop a new County Behavioral Health Unit facility (BHU) and an Evaluation Services Unit (ES) of approximately 15,000 square feet, retain the existing veterinarian hospital, demolish the other existing buildings (Autorella and a multi-business retail building), decommission an existing well, approve a rezone of the project parcel from Service Commercial (C-4) to Public Facility (PF), and approve a General Plan Amendment from Service Commercial to Public Facility/Institutional Land Use.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED: All of the following potential environmental impacts are evaluated in this Initial Study. Categories that are marked have been analyzed in greater detail based on project specific information.

- ☒ Geology/Soils
- ☒ Hydrology/Water Supply/Water Quality
- ☐ Biological Resources
- ☐ Agriculture and Forestry Resources
- ☐ Mineral Resources
- ☐ Visual Resources & Aesthetics
- ☐ Cultural Resources
- ☐ Hazards & Hazardous Materials
- ☐ Noise
- ☐ Air Quality
- ☐ Greenhouse Gas Emissions
- ☐ Public Services
- ☐ Recreation
- ☐ Utilities & Service Systems
- ☒ Land Use and Planning
- ☐ Population and Housing

☒ Transportation/Traffic

☐ Mandatory Findings of Significance

DISCRETIONARY APPROVAL(S) BEING CONSIDERED:

☒ General Plan Amendment
☐ Land Division
☒ Rezoning
☒ Development Permit
☐ Coastal Development Permit
☒ Grading Permit
☐ Riparian Exception
☒ Other: Purchase of Property

NON-LOCAL APPROVALS

Other agencies that must issue permits or authorizations:

DETERMINATION: (To be completed by the lead agency)
On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☒ I find that 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 or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Matt Johnston
Matthew Johnston
Environmental Coordinator

5/6/2011
Date

II. BACKGROUND INFORMATION

EXISTING SITE CONDITIONS

Parcel Size: 1.49 acres
Existing Land Use: Service and Commercial
Vegetation: Minimal landscaping, bordered by trees south and east
Slope in area affected by project: ☒ 0 - 30% ☒ 31 – 100%
Nearby Watercourse: Arana Gulch
Distance To: 120 feet

ENVIRONMENTAL RESOURCES AND CONSTRAINTS

Water Supply Watershed: No
Groundwater Recharge: No
Timber or Mineral: No
Agricultural Resource: No
Biologically Sensitive Habitat: No
Fire Hazard: No
Floodplain: No
Erosion: No
Landslide: potential
Liquefaction: potential
Fault Zone: No
Scenic Corridor: No
Historic: No
Archaeology: No
Noise Constraint: No
Electric Power Lines: No
Solar Access: Good
Solar Orientation: West
Hazardous Materials: None
Other:

SERVICES

Fire Protection: Central Fire
School District: Live Oak/Santa Cruz
Sewage Disposal: Santa Cruz Sanitation
Drainage District: 5
Project Access: Soquel Avenue
Water Supply: City of Santa Cruz

PLANNING POLICIES

Zone District: C-4
Special Designation: N/A
General Plan: Service Commercial, Urban Open Space

Urban Services Line:	☒ Inside	☐ Outside
Coastal Zone:	☐ Inside	☒ Outside

ENVIRONMENTAL SETTING AND SURROUNDING LAND USES:

The subject parcel is bounded by Soquel Avenue, an arterial street, to the north, Capitola Road Extension, a collector street, to the east, a cemetery to the south, and an office building to the west. The Arana Gulch stream channel runs east to west on the other side of Soquel Avenue, approximately 120 feet from the subject parcel. The channel crosses Soquel Avenue approximately 325 feet to the west of the subject parcel. Drainage from the subject parcel currently sheet-flows off the parking area into the gutter and storm water system along Soquel Avenue.

The parcel consists of three relatively flat building pads, stepping down from east to west, currently occupied by an auto painting and body shop on the upper pad to the east, a retail shop complex, and a veterinary clinic to the west. The eastern building pad

is separated from the other two pads by a small retaining wall, and unretained cut slopes exist along or in close proximity to the eastern and southern boundaries.

The parcel is almost entirely paved, with the exception of the cut slopes and the area above them, and several small landscaping features. Mature trees overshadow the cut slope to the south, adjacent to the cemetery parcel. (Attachment 2)

Surrounding land uses include a cemetery to the south, an office building to the west, commercial retail to the east, and a high school and residential neighborhood across Soquel Avenue to the north and northwest respectively.

PROJECT BACKGROUND:

Santa Cruz County currently provides psychiatric evaluation services and acute short stay psychiatric healthcare through Dominican Hospital /Catholic Healthcare West.

The County has the potential to significantly improve the local mental health system and manage acute care costs over the long-term by moving from a general hospital-based model to a Stand-alone Psychiatric Health Facility model. The rising operational cost for psychiatric services in the hospital environment tends to divert resources away from community-based mental health services which can, over time, prevent psychiatric crises and thereby reduce the demand for acute care. Through this project, a new facility will be constructed and the psychiatric program currently housed on Dominican's campus will be relocated to a new site.

DETAILED PROJECT DESCRIPTION:

Two services will be housed in the new facility, the Evaluation Services Unit (ES) and the Behavioral Health Unit (BHU). The ES is a 24/7 staffed clinic providing psychiatric evaluation, treatment recommendations and referrals, crisis intervention, and screening for both minors and adults. The BHU is a 24/7, 16 bed short-stay psychiatric health facility proving evaluation and stabilization for acute psychiatric crises, nursing care, medication monitoring, psychiatric consultation, and referrals. Both voluntary and involuntary clients needing acute care for mental health may be admitted into the BHU after being screened by the ES unit.

The proposed project includes the purchase of the subject parcel by the County of Santa Cruz. The County will demolish the existing auto paint and body shop and the retail center, while retaining the veterinary office. The County will then construct the proposed 15,000 square foot facility.

III. ENVIRONMENTAL REVIEW CHECKLIST

A. GEOLOGY AND SOILS

Would the project:

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
1.	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
	A. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
	B. Strong seismic ground shaking?	☐	☐	☒	☐
	C. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
	D. Landslides?	☐	☒	☐	☐

Discussion (A through D): The project site is located outside of the limits of the State Alquist-Priolo Special Studies Zone (County of Santa Cruz GIS Mapping, California Division of Mines and Geology, 2001). However, the project site is located approximately 9.5 miles southwest of the San Andreas fault zone, and approximately 6.5 miles southwest of the Zayante fault zone. While the San Andreas fault is larger and considered more active, each fault is capable of generating moderate to severe ground shaking from a major earthquake. Consequently, large earthquakes can be expected in the future. The October 17, 1989 Loma Prieta earthquake (magnitude 7.1) was the second largest earthquake in central California history.

All of Santa Cruz County is subject to some hazard from earthquakes. However, the project site is not located within or adjacent to a county or state mapped fault zone. A geotechnical investigation for the proposed project was performed by Bauldry Engineering, dated March 2011 (Attachment 3). The report concluded that the underlying geology transitions from bedrock to the east to deep alluvium to the northwest. The proposed facility will be located on the eastern portion of the parcel, and the report notes that if the facility is built to current building code standards, in the event of a large magnitude quake it would be damaged but would not collapse. The

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

report includes recommended design parameters to further reduce the impacts from seismic ground-shaking.

Regarding liquefaction, the underlying geology beneath the proposed parking area and a portion of the existing veterinary clinic appears to be fill material from the early development of the site, transitioning to the northwest into deep alluvium. The report recognizes the potential for liquefaction in this area and recommends over-excavation and recompaction and installation of geogrid, or equivalent, in the parking area, and recommends against infiltration or detention of stormwater on this site. There is no indication that the new facility, if it is situated in the proposed location and incorporates the recommendations of the report, will be subject to liquefaction.

Regarding slope stability, there are un-retained slopes affecting the south and east boundaries of the subject parcel. The eastern slope was determined to be geologically stable, with some minor incidents of sloughing of topsoil. See A.4 below for further discussion of this issue. The southern slope has evidence of periodic small-block failure that should continue during the life of the proposed project. The report recommends three options for mitigating the hazards associated with potential failure: the wall can be entirely retained, it can have all loose rock scaled from the face, or a debris wall can be constructed at the base of the cut face. In order to mitigate the hazards associated with potential failure of the southern wall, prior to issuance of a building permit the applicant shall submit a plan that includes any one of the three options identified in the report either independently or in conjunction with each other. The plan shall include a letter from the project soils engineer that supports the proposed plan.

2.	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☒	☐	☐

The report cited above concluded that there is a potential risk from periodic small scale failure of the southern un-retained cut slope, and from liquefaction of the northwest portion of the site. The recommendations contained in the geotechnical report will be implemented to reduce this potential hazard to a less than significant level.

3.	Develop land with a slope exceeding 30%?	☐	☐	☒	☐

Discussion: There are slopes that exceed 30% on the property. However, no improvements are proposed on slopes in excess of 30%.

4.	Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐

Discussion: The report cited above identifies some potential for erosion exists along

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

the eastern slope of the subject parcel. Prior to approval of a grading or building permit, the project must have an approved Erosion Control Plan, which will specify detailed erosion and sedimentation control measures. The plan will include provisions for disturbed areas to be planted with ground cover and to be maintained to minimize surface erosion. Implementation of this required plan will reduce potential impacts from erosion to less than significant.

5.	Be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007), creating substantial risks to life or property?	☐	☐	☐	☒

Discussion: The geotechnical report for the project did not identify any elevated risk associated with expansive soils.

6.	Place sewage disposal systems in areas dependent upon soils incapable of adequately supporting the use of septic tanks, leach fields, or alternative waste water disposal systems where sewers are not available?	☐	☐	☐	☒

Discussion: No septic systems are proposed. The project would connect to the Santa Cruz County Sanitation District, and the applicant would be required to pay standard sewer connection and service fees that fund sanitation improvements within the district as a Condition of Approval for the project.

7.	Result in coastal cliff erosion?	☐	☐	☐	☒

Discussion: The proposed project is not located in the vicinity of a coastal cliff or bluff; and therefore, would not contribute to coastal cliff erosion.

B. HYDROLOGY, WATER SUPPLY, AND WATER QUALITY
Would the project:

1.	Place development within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒

Discussion: According to the Federal Emergency Management Agency (FEMA) National Flood Insurance Rate Map, dated March 2, 2006, no portion of the project site lies within a 100-year flood hazard area.

2.	Place within a 100-year flood hazard area structures which would impede or	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

redirect flood flows?

Discussion: According to the Federal Emergency Management Agency (FEMA) National Flood Insurance Rate Map, dated March 2, 2006, no portion of the project site lies within a 100-year flood hazard area.

3.	Be inundated by a seiche, tsunami, or mudflow?	☐	☐	☐	☒

Discussion: The subject parcel is located about 50 feet above sea level and is not expected to be inundated by a seiche or tsunami. The parcel is over 25 feet higher than the nearby stretch of Arana Gulch, and it is not anticipated that a mudflow in Arana Gulch would impact this site.

4.	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐

Discussion: The project would obtain water from the City of Santa Cruz and would not rely on private well water. Although the project would increase water demand by about 1,730 gallons per day (Attachment 4), the applicant is required to obtain a will-serve letter from the City of Santa Cruz to ensure that adequate supplies are available to serve the project. As this is an existing water connection, expansion of water demand as a result of this project will be offset through payment to the City of Santa Cruz of system maintenance fees that go towards implementation of water conservation measures.

The project is not located in a mapped groundwater recharge area.

5.	Substantially degrade a public or private water supply? (Including the contribution of urban contaminants, nutrient enrichments, or other agricultural chemicals or seawater intrusion).	☐	☐	☒	☐

Discussion: The project would not discharge runoff either directly or indirectly into a public or private water supply. The subject parcel has an abandoned well located on-site that is no longer in use. In order to ensure ground water resources are not contaminated, this well will be destroyed according to County Code section 7.70.100

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

prior to project final. The change in use from Auto repair and painting to a behavioral health and evaluation facility is expected to reduce the potential for release of contaminants into the environment.

6. Degrade septic system functioning? ☐ ☐ ☐ ☒

Discussion: There is no indication that existing septic systems in the vicinity would be affected by the project.

7. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding, on- or off-site? ☐ ☐ ☒ ☐

Discussion: The project site has a drainage area of about 60,516 square feet, of which the existing impermeable area measures about 43,640 square feet. (Attachment 2) The proposed project would result in an impervious area of about 42,402 square feet and includes some on-site detention. Drainage on site currently sheet flows across the parking areas to the street side gutter and into the storm drain system at Arana Gulch. The proposed project will alter the drainage patterns slightly through the installation of storm drains within the subject parcel parking areas that daylight at three locations through the curb on Soquel Avenue. The proposed project includes the installation of pervious pavement to slow rainfall. Drainage calculations estimate a slight reduction in stormwater runoff (0.03-0.05 cubic feet per second) in 10 and 100 year storm events. Based upon this and the minor decrease in impervious area, there will not be a substantial or significant change in the existing drainage pattern.

8. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems, or provide substantial additional sources of polluted runoff? ☐ ☐ ☐ ☒

Discussion: Regarding capacity of existing storm water systems, see B.7 above.

Regarding contaminants, the existing use on the upper building pad is an auto-body shop and auto paint shop, both of which are generally considered potential sources of polluted runoff. With no expected change in the veterinary clinic or parking areas, replacement of these uses and the retail area with a residential treatment facility is expected to reduce the potential for polluted runoff.

9. Expose people or structures to a significant risk of loss, injury or death ☐ ☐ ☐ ☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
involving flooding, including flooding as a result of the failure of a levee or dam?				

Discussion: There are no levees or dams in the project area.

10.	Otherwise substantially degrade water quality?	☐	☐	☐	☒

Discussion: See B.5 and B.8 above.

C. BIOLOGICAL RESOURCES

Would the project:

1.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game, or U.S. Fish and Wildlife Service?	☐	☐	☐	☒

Discussion: According to the California Natural Diversity Data Base (CNDDB), maintained by the California Department of Fish and Game, there are no known special status plant or animal species in the site vicinity, and there were no special status species observed in the project area.

2.	Have a substantial adverse effect on any riparian habitat or sensitive natural community identified in local or regional plans, policies, regulations (e.g., wetland, native grassland, special forests, intertidal zone, etc.) or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒

Discussion: There are no mapped or designated sensitive biotic communities on or adjacent to the project site.

3.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native or migratory wildlife	☐	☒	☐	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

nursery sites?

Discussion: The proposed project includes the removal of approximately 35 trees over 4 inches in diameter along the perimeter of the subject parcel, as recommended by the project arborist (Attachment 5). Removal of mature trees may potentially impact protected nesting bird or bats species.

1. In order to avoid impacts to special status bats, tree removal activities shall be limited to the months between November 1 and March 1, if feasible.
    a. If trees must be removed outside of the timeframe above, a qualified biologist shall conduct surveys for special status bats 3-4 weeks prior to site disturbance. If active roosts are present in trees to be retained, roosting bats shall be excluded from trees to be removed prior to any disturbance. In trees to be retained, no disturbance zones, set by the biologist based on the particular species present, shall be fenced off around the subject tree to ensure other construction activities do not harm sensitive species.
    b. The maternity roosting season for bats is March1 – July 3. Tree removal should be scheduled outside of the maternal roosting period if special status bats are present. Before any trees are removed during the maternal roosting season, a qualified biologist shall perform surveys. If maternal roosts are present, disturbance shall be avoided until roosts are unoccupied. The biologist shall be responsible for ensuring bat roosts are vacated.
2. In order to avoid impacts to raptors and migratory songbirds, tree removal activities shall be limited to the months between September 1 and February 1, if feasible.
    a. If trees must be removed outside of the timeframe above, a qualified biologist shall conduct surveys for raptor or migratory songbird nests 3-4 weeks prior to site disturbance.
        i. If active raptor or migratory bird nests are found in trees to be retained, the biologist shall be required to be on site during any initial vegetation or ground disturbance activities (e.g. vegetation clearing, grading, excavation, tree pruning/removal) that could potentially impact listed species. The biologist shall be responsible for setting and maintaining the disturbance buffers from active nests during construction activities, and buffers and exclusionary measures shall be implemented only after consultation with CDFG.
        ii. If no active nests are present on the subject parcel, tree removal can proceed provided the mitigations in 1. above have been implemented.

4.	Produce nighttime lighting that would substantially illuminate wildlife	☐	☐	☐	☒

habitats?

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Discussion: The subject property is located in an urbanized area and is surrounded by existing residential development that currently generates nighttime lighting. There are no sensitive animal habitats within or adjacent to the project site.

5.	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒

Discussion: There are no wetlands located on the subject parcel.

6.	Conflict with any local policies or ordinances protecting biological resources (such as the Sensitive Habitat Ordinance, Riparian and Wetland Protection Ordinance, and the Significant Tree Protection Ordinance)?	☐	☐	☒	☐

Discussion: The subject parcel is not located within the Coastal Zone and therefore the Significant Tree Ordinance does not apply to the trees proposed for removal. However, County Code section 13.11.075 regarding landscaping requires projects to incorporate mature existing trees into the project design, and allows removal of dead, dying or diseased trees, nuisance trees, and trees that threaten development due to instability, only after evaluation by a landscape architect or licensed arborist. (Attachment 5) In order to ensure proper protection of existing trees and appropriate replacement of trees to be removed in conformance with County Code section 13.11.075(a)(2)(iv), prior to issuance of the building permit, project plans shall be revised to include a landscaping plan that includes the following components:

1. Identify trees to be retained.
2. Include tree protection notes.
3. Include the number of trees to be removed and suitable replacement trees, as recommended in the Arborist report.
4. Trees shall be replaced at a 1:1 ratio for non-native trees, a 2:1 ratio for native trees other than coast live oak, and a 3:1 ratio for coast live oak.
5. At least 10% of the replacement trees shall be 24" box trees, at least 25% of the trees shall be 15 gallon, and at least 25% shall be from seed or acorn, or similar starts.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

6. Include success criteria and monitoring regime.

Implementation of the landscaping plan will ensure conformance with County Code section 13.11.075.

7.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Discussion: The proposed project would not conflict with the provisions of any adopted Habitat Conservation Plan Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, no impact would occur.

D. AGRICULTURE AND FOREST RESOURCES

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

1.	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒

Discussion: The project site does not contain any lands designated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. In addition, the project does not contain Farmland of Local Importance. Therefore, no Prime Farmland, Unique Farmland, Farmland of Statewide or Farmland of Local Importance would be converted to a non-agricultural use. No impact would occur from project implementation.

2.	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Discussion: The project site is zoned for commercial use, which is not considered to be an agricultural zone. Additionally, the project site's land is not under a Williamson Act Contract. Therefore, the project does not conflict with existing zoning for agricultural use, or a Williamson Act Contract. No impact is anticipated.

3.	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒

Discussion: The project is not adjacent to land designated as Timber Resource.

4.	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒

Discussion: No forest land occurs on the project site or in the immediate vicinity. No impact is anticipated.

5.	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Discussion: The project site and surrounding area does not contain any lands designated as Prime Farmland, Unique Farmland, Farmland of Statewide Importance or Farmland of Local Importance as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. Therefore, no Prime Farmland, Unique Farmland, Farmland of Statewide, or Farmland of Local Importance would be converted to a non-agricultural use. In addition, the project site contains no forest land, and no forest. Therefore, no impacts are anticipated.

E. MINERAL RESOURCES

Would the project:

1.	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒

Discussion: The site does not contain any known mineral resources that would be of

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

value to the region and the residents of the state. Therefore, no impact is anticipated from project implementation.

2.	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Discussion: The project site is zoned for commercial use, which is not considered to be an Extractive Use Zone (M-3) nor does it have a Land Use Designation with a Quarry Designation Overlay (Q) (County of Santa Cruz 1994). Therefore, no potentially significant loss of availability of a known mineral resource of locally important mineral resource recovery (extraction) site delineated on a local general plan, specific plan or other land use plan would occur as a result of this project.

F. VISUAL RESOURCES AND AESTHETICS

Would the project:

1.	Have an adverse effect on a scenic vista?	☐	☐	☐	☒

Discussion: The project would not directly impact any public scenic resources, as designated in the County's General Plan (1994), or obstruct any public views of these visual resources.

2.	Substantially damage scenic resources, within a designated scenic corridor or public view shed area including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒

Discussion: The project site is not located along a County designated scenic road, public viewshed area, scenic corridor, within a designated scenic resource area, or within a state scenic highway. Therefore, no impact is anticipated.

3.	Substantially degrade the existing visual character or quality of the site and its surroundings, including substantial change in topography or ground surface relief features, and/or development on a ridgeline?	☐	☐	☐	☒

Discussion: The existing visual setting is commercial retail. The proposed project is designed and landscaped so as to fit into this setting.

4.	Create a new source of substantial	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
light or glare which would adversely affect day or nighttime views in the area?				

Discussion: The project would create an incremental increase in night lighting. However, this increase would be small, and would be similar in character to the lighting associated with the surrounding existing uses.

G. CULTURAL RESOURCES

Would the project:

1.	Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5?	☐	☐	☐	☒

Discussion: The existing structure(s) on the property is/are not designated as a historic resource on any federal, state or local inventory.

2.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?	☐	☒	☐	☐

Discussion: The subject parcel is mapped for archeological resources, however, due to paving or structures being present on all level surfaces of the parcel, preliminary archeological surveys are not feasible. (Attachment 1) In order to ensure no impacts to archeological resources, a qualified archeological monitor shall be present during excavation activities. Pursuant to County Code Section 16.40.040, if at any time in the preparation for or process of excavating or otherwise disturbing the ground, any human remains of any age, or any artifact or other evidence of a Native American cultural site which reasonably appears to exceed 100 years of age are discovered, the responsible persons shall immediately cease and desist from all further site excavation and comply with the notification procedures given in County Code Chapter 16.40.040.

3.	Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

Discussion: Pursuant to Section 16.40.040 of the Santa Cruz County Code, if at any time during site preparation, excavation, or other ground disturbance associated with this project, human remains are discovered, the responsible persons shall immediately cease and desist from all further site excavation and notify the sheriff-coroner and the Planning Director. If the coroner determines that the remains are not of recent origin, a full archeological report shall be prepared and representatives of the local Native California Indian group shall be contacted. Disturbance shall not resume until the significance of the archeological resource is determined and appropriate mitigations to preserve the resource on the site are established.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
4. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

Discussion: There are no identified paleontological resources or unique geologic features on site

H. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

1. Create a significant hazard to the public or the environment as a result of the routine transport, use or disposal of hazardous materials?	☐	☐	☒	☐

Discussion: Soiled linen and contaminated exam room waste will be stored inside the building in approved containers as required by federal and state licensing and certification standards until being picked up by laundry or medical waste services.

2. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☒

Discussion: Soiled sheets and other medical waste generated at this facility would not rise to the level of a significant hazard to the community. No other hazardous materials are proposed to be used as a result of this project.

3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐

Discussion: The subject parcel is within one-quarter mile of an existing school, however, there are no emissions associated with the proposed use, and the only hazardous materials expected to be routinely present are medical waste as described in H.1 above. The proposed project will replace a use (auto paint shop) that is typically associated with hazardous emissions, resulting in a beneficial impact.

4. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

hazard to the public or the environment?

Discussion: The project site is included on the April 8, 2011 list of hazardous sites in Santa Cruz County compiled pursuant to the specified code. This site formerly held a gas station. This site was determined to be remediated and closed in 1997.

5. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? ☐ ☐ ☐ ☒

Discussion:

6. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? ☐ ☐ ☐ ☒

Discussion:

7. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? ☐ ☐ ☐ ☒

Discussion: This project will have no effect on emergency response or evacuation.

8. Expose people to electro-magnetic fields associated with electrical transmission lines? ☐ ☐ ☐ ☒

Discussion: No electrical transmission lines are present in the vicinity of the subject parcel.

9. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? ☐ ☐ ☐ ☒

Discussion: The project design incorporates all applicable fire safety code requirements and includes fire protection devices as required by the local fire agency.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

I. TRANSPORTATION/TRAFFIC

Would the project:

1.	Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☐	☒

Discussion: The proposed project includes improvements to the pedestrian pathways in the vicinity of the subject parcel, including sidewalks along Capitola Extension and Soquel Avenue, and encourages the use of bicycles by staff members by providing a secure area for bicycle commuters to store their bicycles. The facility is also on a major bus route.

2.	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☒

Discussion:

3.	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐

Discussion: The County has identified a potential hazard concerning a left turn exit from the proposed facility. The traffic island in Soquel Avenue may not allow sufficient space to safely enter traffic. The applicant is required to obtain an encroachment permit from the City of Santa Cruz Department of Public Works for all improvements within the right of way associated with this project, prior to the issuance of a development permit. The proposed improvements must satisfy the City's standards for safety regarding the traffic island. This may require a modification of that island to provide the necessary space. As this is a requirement of the encroachment permit, no mitigation is necessary.

4.	Result in inadequate emergency access?	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Discussion: The project's road access meets County standards and has been approved by the County Sherriff. The proposed design has been modified at the Sherriff's request to facilitate their use of the facility.

5.	Cause an increase in parking demand which cannot be accommodated by existing parking facilities?	☐	☐	☐	☒

Discussion: The project meets the code requirements for the required number of parking spaces and therefore new parking demand would be accommodated on site.

6.	Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☒

Discussion: The proposed project would comply with current road requirements to prevent potential hazards to motorists, bicyclists, and/or pedestrians.

7.	Exceed, either individually (the project alone) or cumulatively (the project combined with other development), a level of service standard established by the County General Plan for designated intersections, roads or highways?	☐	☐	☐	☒

Discussion: According to the traffic study performed by Hexagon Transportation Consultants, dated March 9, 2011 (Attachment 6), the proposed project is anticipated to reduce daily vehicular trips by 290 trips when compared to the existing uses. This is a beneficial impact on the intersections in the vicinity.

J. NOISE

Would the project result in:

1.	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒

Discussion: The project is not expected to create any increase in the existing noise environment. The activities associated with the proposed facility are primarily inside the structure, as opposed to auto-body work that generates periodic elevated noise levels. In addition, emergency service vehicles that carry clients to the facility do not, as a standard policy, use sirens.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
2. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒

Discussion: No groundborne vibration or groundborne noise levels are expected to be generated as a result of this project.

3. Exposure of persons to or generation of noise levels in excess of standards established in the General Plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☒

Discussion: See J.1 above.

4. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	☒

Discussion: Noise generated during construction would increase the ambient noise levels for adjoining areas. Construction would be temporary, however, and given the limited duration of this impact it is considered to be less than significant.

5. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Discussion:

6. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Discussion:

K. AIR QUALITY

Where available, the significance criteria established by the Monterey Bay Unified Air Pollution Control District (MBUAPCD) may be relied upon to make the following determinations. Would the project:

1. Violate any air quality standard or	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

contribute substantially to an existing or projected air quality violation?

Discussion: The North Central Coast Air Basin does not meet state standards for ozone and particulate matter (PM_{10}). Therefore, the regional pollutants of concern that would be emitted by the project are ozone precursors (Volatile Organic Compounds [VOCs] and nitrogen oxides [NO_x]), and dust.

Given that modest no new traffic that would be generated by the project there is no indication that new emissions of VOCs or NO_x would exceed MBUAPCD thresholds for these pollutants and therefore there would not be a significant contribution to an existing air quality violation.

Project construction may result in a short-term, localized decrease in air quality due to generation of dust. However, standard dust control best management practices, such as periodic watering, will be implemented during construction to reduce impacts to a less than significant level.

2. Conflict with or obstruct implementation of the applicable air quality plan? ☐ ☐ ☐ ☒

Discussion: The project would not conflict with or obstruct implementation of the regional air quality plan. See K-1 above.

3. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? ☐ ☐ ☐ ☒

Discussion: See K-1 above.

4. Expose sensitive receptors to substantial pollutant concentrations? ☐ ☐ ☐ ☒

Discussion: The proposed facility is not expected to produce any pollutant concentrations.

5. Create objectionable odors affecting a substantial number of people? ☐ ☐ ☐ ☒

Discussion: The proposed facility is not expected to produce any objectionable odors.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

L. GREENHOUSE GAS EMISSIONS

Would the project:

1.	Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☐	☒

Discussion: The proposed project, like all development, would be responsible for an incremental increase in green house gas emissions by usage of fossil fuels during the site grading and construction. At this time, Santa Cruz County is in the process of developing a Climate Action Plan (CAP) intended to establish specific emission reduction goals and necessary actions to reduce greenhouse gas levels to pre-1990 levels as required under AB 32 legislation. Until the CAP is completed, there are no specific standards or criteria to apply to this project. All project construction equipment would be required to comply with the Regional Air Quality Control Board emissions requirements for construction equipment. The proposed project incorporates measures to encourage bicycle commuting for employees, and is expected to reduce overall traffic associated with the project site. As a result, impacts associated with the temporary increase in green house gas emissions are expected to be less than significant.

2.	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	☒

Discussion: See the discussion under L-1 above. No impacts are anticipated.

M. PUBLIC SERVICES

Would the project:

1.	Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
	a. Fire protection?	☐	☐	☐	☒
	b. Police protection?	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
c. Schools?	☐	☐	☐	☒
d. Parks or other recreational activities?	☐	☐	☐	☒
e. Other public facilities; including the maintenance of roads?	☐	☐	☐	☒

***Discussion (a through e)*:** The proposed project allows for the relocation of existing public mental health services to a location that is currently serviced by the local police and fire departments. No change in public services is anticipated.

N. RECREATION

Would the project:

1. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒

***Discussion*:** The proposed project allows for the relocation of existing public mental health services. No change in public services is anticipated.

2. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

***Discussion*:** The proposed project is a secure facility that includes a small yard for recreation. No off-site recreational activities are associated with this type of facility.

O. UTILITIES AND SERVICE SYSTEMS

Would the project:

1. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☒

***Discussion*:** See B.7 above for discussion of drainage.

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
2.	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐

Discussion: The project would connect to an existing municipal water supply. See B.4 above for discussion.

Municipal sewer service currently serves the subject parcel. Modifications to the existing sewer line on-site are required in order to meet the County of Santa Cruz Sanitation District design criteria to accommodate an increase in waste prior to final project approval. The City of Santa Cruz wastewater treatment plant has sufficient capacity to handle the incremental increase in wastewater.

3.	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	☒

Discussion: The project's wastewater flows would not violate any wastewater treatment standards.

4.	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐

Discussion: See B.4 above for discussion of water resources.

5.	Result in determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒

Discussion: County of Santa Cruz Sanitation District has reviewed the proposed project and has confirmed the capacity is available to service the proposed use.

6.	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☒	☐	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact

Discussion: The project would make an incremental contribution to the reduced capacity of regional landfills. Although this contribution would be relatively small and would be of similar magnitude to that created by existing land uses around the project, demolition waste makes up about 22% of the waste stream entering the local landfill. According to the County Public Works Website, the Buena Vista Landfill has less than 16 years of life remaining. In order to mitigate the impact of the construction waste generated by this project on the landfill's capacity, the applicant and/or property owner shall recycle and reuse materials, as appropriate, and to the maximum extent possible. Notes to this affect shall be included on the final building permit plan set. At a minimum, construction and demolition waste shall be processed through the Buena Vista Construction and Demolition Waste program.

7.	Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

Discussion: Solid waste, other than medical waste, will be collected by the County's subcontractor, GreenWaste Recovery of Santa Cruz County. See H.1 for discussion of medical waste.

P. LAND USE AND PLANNING

Would the project:

1.	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

Discussion: The subject parcel is currently zoned Service Commercial, which is the appropriate zoning and general Plan designation for the current use. In order for the proposed use to be consistent with County Zoning and General Plan designations, the proposed project includes both a General Plan amendment and rezoning to Public Facilities. In order to approve a rezoning of the subject parcel the following finding must be made: That the proposed rezoning is necessary to provide for a community-related use which was not anticipated when the Zoning Plan was adopted. A secure psychiatric facility is a community related resource that was formerly housed at Dominical Hospital. The need for a new facility was not anticipated; therefore the finding can be made.

With the change in General Plan and zoning designations the proposed use will be in conformance with applicable land use policies and regulations.

2.	Conflict with any applicable habitat	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
conservation plan or natural community conservation plan?				
3. Physically divide an established community?	☐	☐	☐	☒

Discussion: The project would not include any element that would physically divide an established community.

Q. POPULATION AND HOUSING
Would the project:

1. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒

Discussion: The proposed project would not induce substantial population growth in an area because the project does not propose any physical or regulatory change that would remove a restriction to or encourage population growth in an area including, but limited to the following: new or extended infrastructure or public facilities; new commercial or industrial facilities; large-scale residential development; accelerated conversion of homes to commercial or multi-family use; or regulatory changes including General Plan amendments, specific plan amendments, zone reclassifications, sewer or water annexations; or LAFCO annexation actions.

2. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion: The proposed project would not displace any existing housing since the site is currently in commercial use.

3. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Discussion: The proposed project would not displace any existing housing since the site is currently in commercial use.

R. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
1. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐

Discussion: Resources have been identified as potentially significant that could be impacted by the project include archeological resources. However, a mitigation requiring a monitor on-site during all excavation activities has been required. As a result, there is no substantial evidence that, with the required mitigation, significant effects associated with this project would result. Therefore, this project has been determined not to meet this Mandatory Finding of Significance.

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
2. Does the project have impacts that are individually limited, but cumulatively considerable? ("cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☒	☐	☐

Discussion: In addition to project specific impacts, this evaluation considered the projects potential for incremental effects that are cumulatively considerable. There were determined to be potentially significant cumulative effects related to landfill capacity. However, a mitigation to re-use and/or recycling of deconstruction materials has been included. As a result, there is no substantial evidence that, after mitigation, there are cumulative effects associated with this project. Therefore, this project has been determined not to meet this Mandatory Finding of Significance.

	Potentially Significant Impact	Less than Significant with Mitigation	Less than Significant Impact	No Impact
3. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Discussion: As a result of this evaluation, there were determined to be potentially significant effects to human beings related to geology and soils, due to the potential failure of a vertical cut-slope and liquefaction of a portion of the subject parcel. However, mitigation that includes stabilization of an un-retained cut slope and over-excavation and recompaction of unconsolidated fill has been included. As a result, there is no substantial evidence that, after mitigation, there are adverse effects to human beings associated with this project. Therefore, this project has been determined not to meet this Mandatory Finding of Significance.

IV. TECHNICAL REVIEW CHECKLIST

	REQUIRED	DATE COMPLETED
Agricultural Policy Advisory Commission (APAC) Review	Yes ☐ No ☒	
Archaeological Review	Yes ☐ No ☒	
Biotic Report/Assessment	Yes ☐ No ☒	
Geologic Hazards Assessment (GHA)	Yes ☐ No ☒	
Geologic Report	Yes ☐ No ☒	
Geotechnical (Soils) Report	Yes ☒ No ☐	April 14, 2011
Riparian Pre-Site	Yes ☐ No ☒	
Septic Lot Check	Yes ☐ No ☒	
Other: Traffic and parking analysis	Yes ☒ No ☐	March 9, 2011

V. REFERENCES USED IN THE COMPLETION OF THIS ENVIRONMENTAL REVIEW INITIAL STUDY

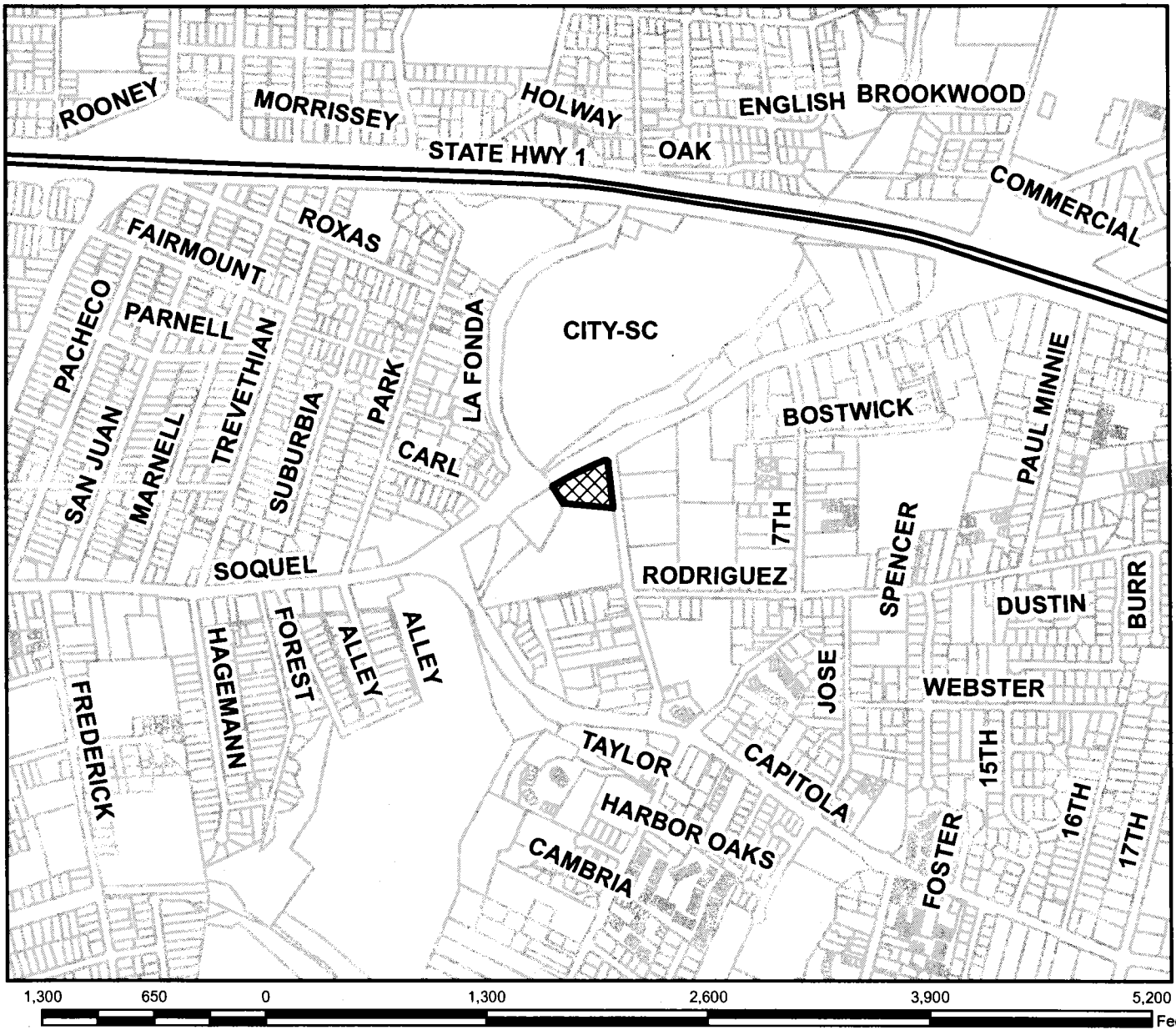
County of Santa Cruz Department of Public Works website

County of Santa Cruz 1994.
1994 General Plan and Local Coastal Program for the County of Santa Cruz, California. Adopted by the Board of Supervisors on May 24, 1994, and certified by the California Coastal Commission on December 15, 1994.

VI. ATTACHMENTS

1. *Vicinity Map, Map of Zoning Districts; Map of General Plan Designations; and Assessors Parcel Map.*
2. *Tentative Map & Preliminary Improvement Plans*, prepared by Ifland Engineers, April 15, 2011.
3. *Geotechnical Investigation (Conclusions and Recommendations)*, prepared by Bauldry Engineering, Inc., dated April, 2011 (Full report on file with the County of Santa Cruz Planning Department)
4. *Water Demand Memo,* prepared by Pacific Design Group, dated April 15, 2011
5. *Tree Assessment and Inventory,* prepared by Nigel Belton, Arbor Art Tree Service, dated April, 2011
6. *Traffic Study (Conclusions and Recommendations)*, prepared by Hexagon Transportation Consultants, Inc., dated March 9, 2011

Vicinity Map



LEGEND

- APN: 026-011-06
- Assessors Parcels
- State Highways
- SANTA CRUZ

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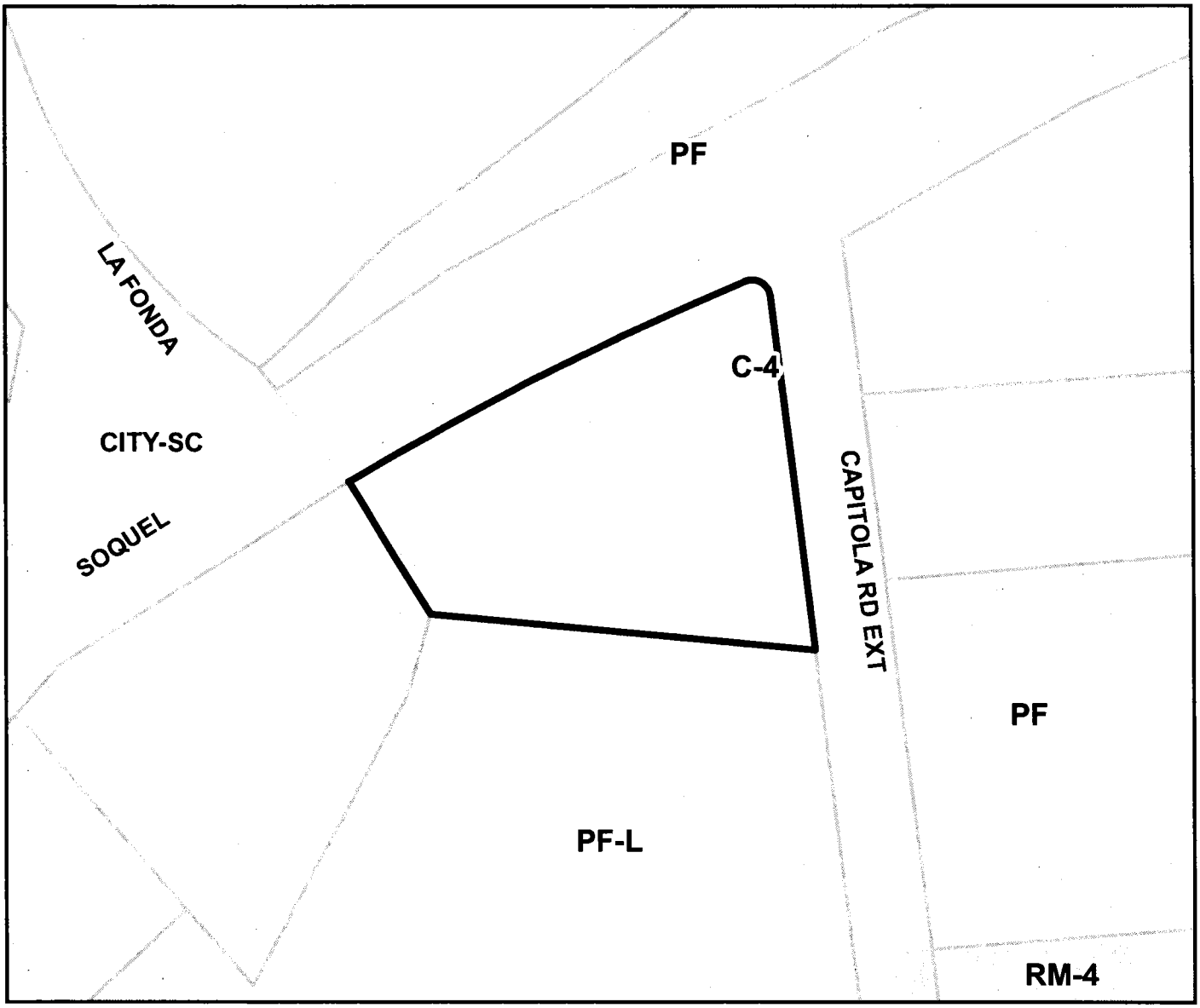
Map Created by
County of Santa Cruz
Planning Department
May 2011

ATTACHMENT 1

Zoning Map



LEGEND

- APN: 026-011-06
- Assessors Parcels
- SANTA CRUZ
- COMMERCIAL-SERVICE
- PUBLIC FACILITY
- RESIDENTIAL-MULTI FAMILY

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Map Created by
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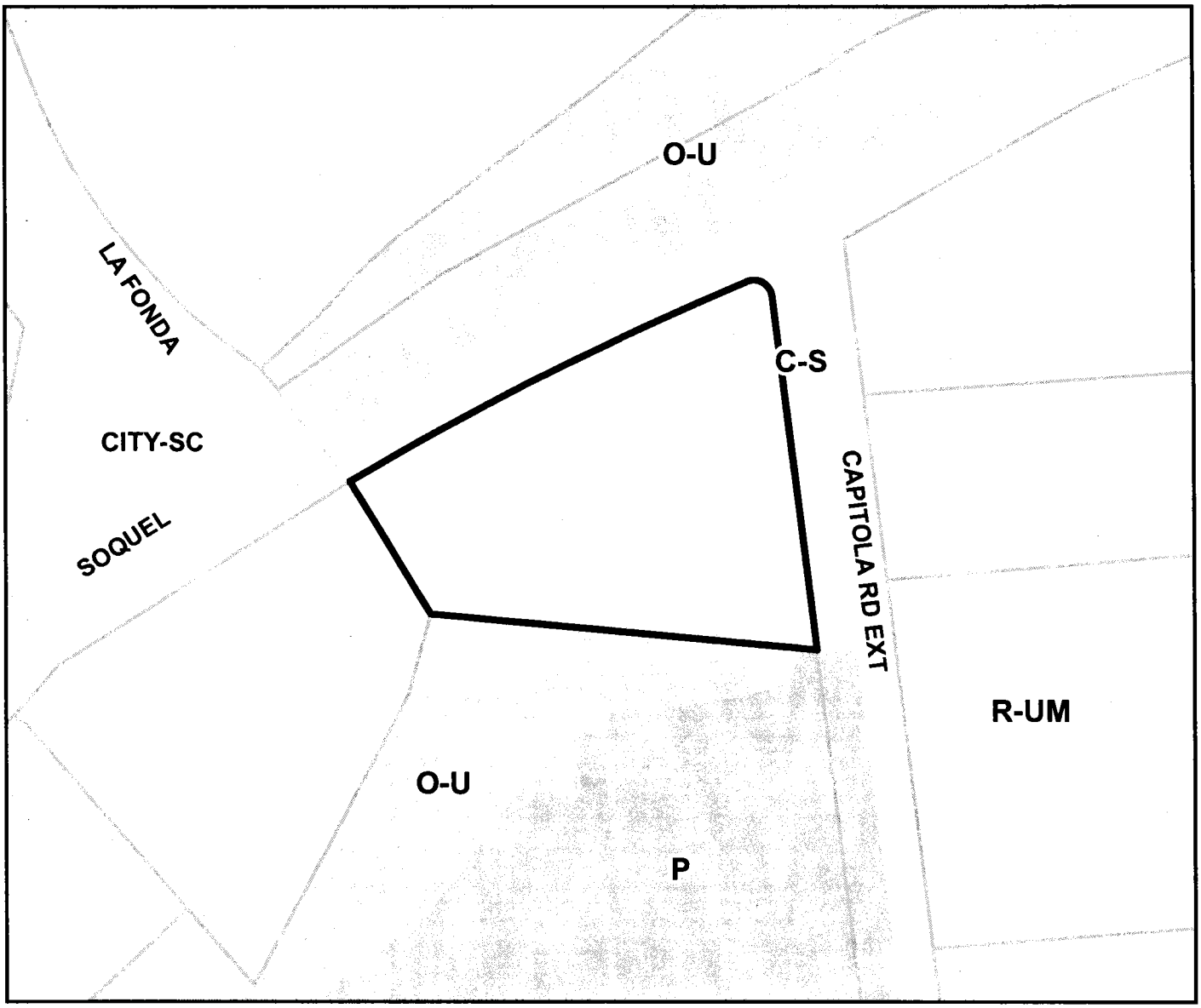
Planning Department
May 2011

ATTACHMENT 1

General Plan Designation Map



LEGEND

- APN: 026-011-06
- Assessors Parcels
- SANTA CRUZ
- Commercial-Service
- Residential - Urban Medium Density
- Urban Open Space
- Public Facilites

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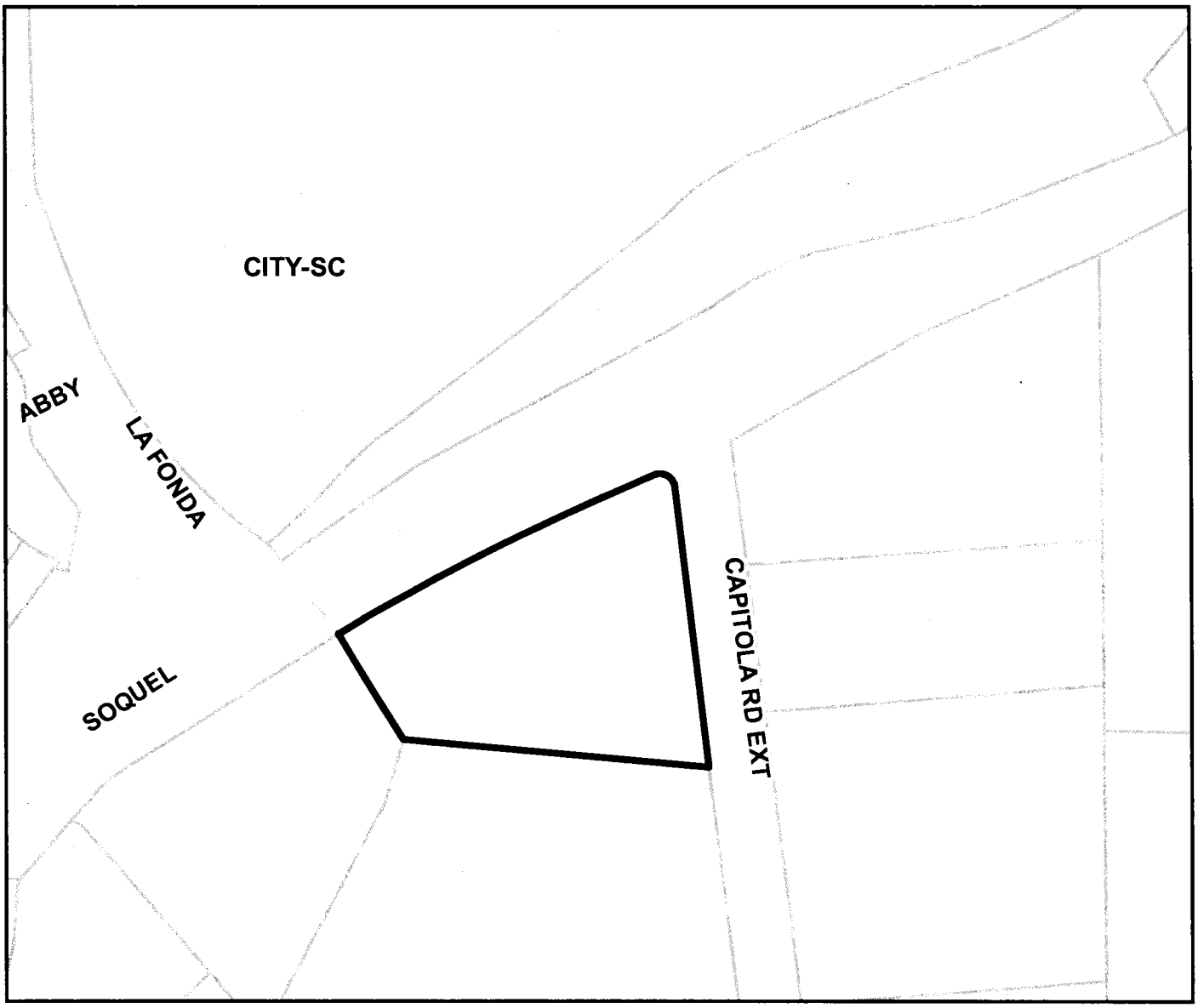
Map Created by
County of Santa Cruz
Planning Department
May 2011

ATTACHMENT 1

Archaelogy Resource Map



LEGEND

- APN: 026-011-06
- Assessors Parcels
- Archeologic Resources
- SANTA CRUZ

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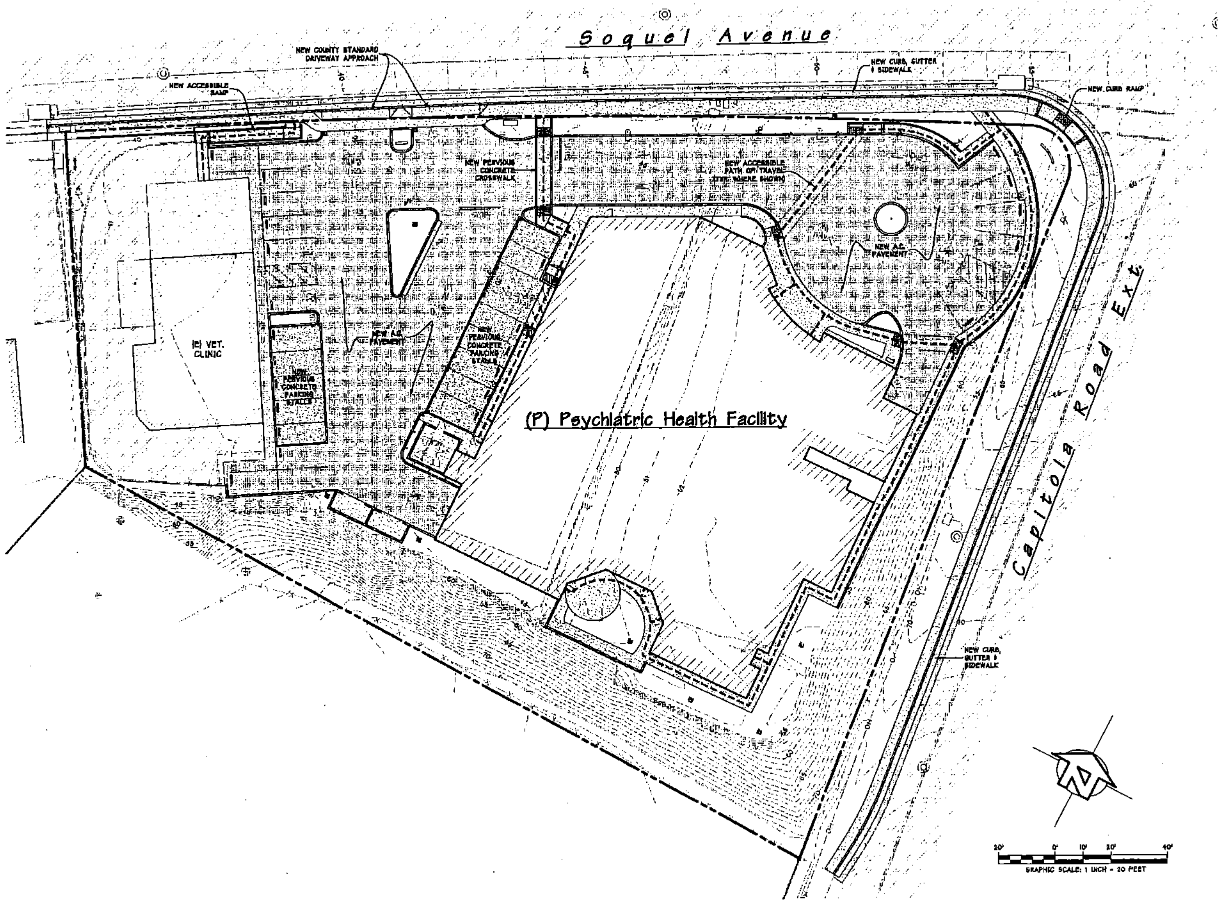
Map Created by
County of Santa Cruz
Planning Department
May 2011

ATTACHMENT 1

ATTACHMENT 1



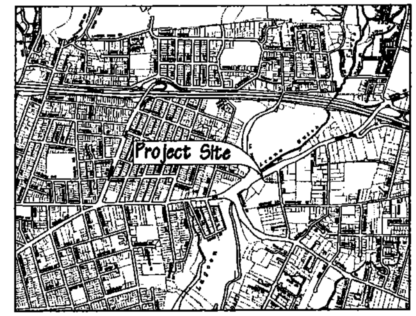
General Development Plan

SCALE: 1" = 20'

Benchmark

XXX

Vicinity Map



Index of Sheets

SHEET NO.	DESCRIPTION
C1	GENERAL DEVELOPMENT PLAN
C2	EXISTING CONDITIONS & DEMOLITION PLAN
C3	SITE PLAN
C4	SITE UTILITY PLAN
C5	SITE GRADING & DRAINAGE PLAN
C6	DETAILS & SECTIONS
C7	STANDARD CONSTRUCTION DETAILS
C8	STANDARD CONSTRUCTION DETAILS
EC1	EROSION CONTROL PLAN

Approvals

DEPARTMENT OF PUBLIC WORKS
COUNTY OF SANTA CRUZ STATE OF CALIFORNIA
REVIEWED BY

SANITATION ENGINEERING:
SURVEY DEVELOPMENT REVIEW
STORMWATER MANAGEMENT:
TRAFFIC AND ROAD PLANNING:
SANITATION OPERATIONS:
APPROVAL RECOMMENDED ______ ASST. DIR., SPECIAL SERVICES DATE ______ ASST. DIR., TRANSPORTATION DATE
APPROVED ______ DIRECTOR OF PUBLIC WORKS DATE

PLANNING DEPARTMENT
COUNTY OF SANTA CRUZ STATE OF CALIFORNIA
REVIEWED BY

ENVIRONMENTAL PLANNER:
STAFF PLANNER:
APPROVED ______ PLANNING DIRECTOR DATE

CENTRAL FIRE PROTECTION DISTRICT
COUNTY OF SANTA CRUZ STATE OF CALIFORNIA
REVIEWED BY

REMARKS:
APPROVED ______ FIRE MARSHAL DATE

PROFESSIONAL ENGINEER — STATE OF CALIFORNIA — CIVIL

REVISION | DATE
APPROVED
For Plan Check Only
DAVID HEINRICHSEN (RCE NO. 49187) DATE

IFLAND ENGINEERS
CIVIL ENGINEERING • LAND PLANNING • STRUCTURAL DESIGN
5200 SOQUEL AVE, SUITE 101
SANTA CRUZ, CA 95062
TEL (831) 426-5313
FAX (831) 426-1763
www.iflandengineers.com

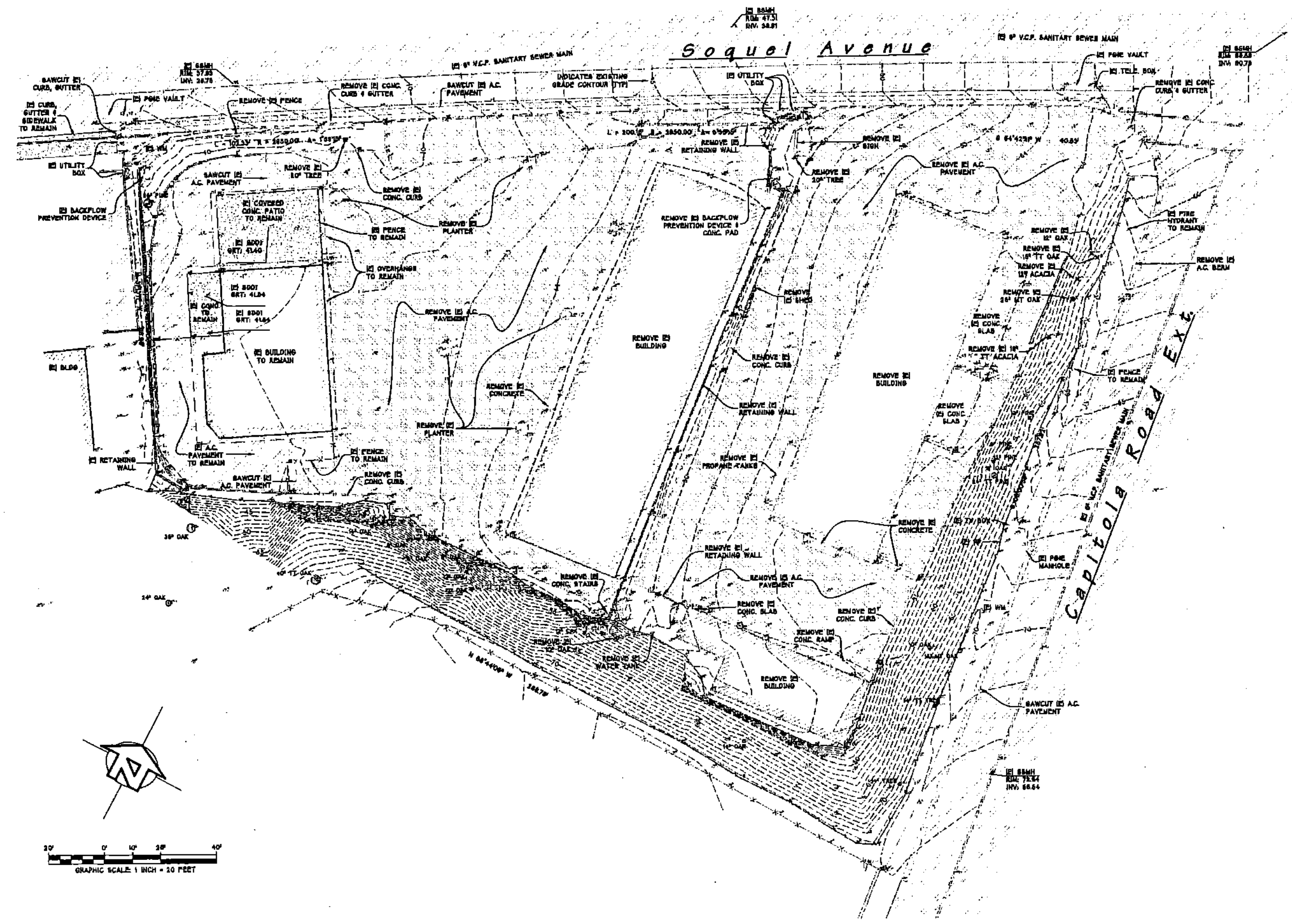
General Development Plan
Santa Cruz Health
2202 Soquel Avenue, Santa Cruz, CA

APN: 026-011-06

DATE	DESIGN	DRAWN
5/03/11	JON/RYAN	RYAN

SHEET C1
JOB NO. 11006

ATTACHMENT 2



Existing Conditions & Demolition Plan

SCALE: 1" = 20'

Demolition Notes

1. BUILDINGS TO BE DEMOLISHED WILL BE VACATED AND THEIR USE DISCONTINUED BEFORE START OF THE WORK.
2. OWNER ASSUMES NO RESPONSIBILITY FOR BUILDINGS AND STRUCTURES TO BE DEMOLISHED.
3. PROVIDE NOT LESS THAN 72 HOURS NOTICE OF ACTIVITIES THAT WILL AFFECT OPERATIONS OF ADJACENT OCCUPIED BUILDINGS.
4. PROTECT ADJACENT WALKWAYS, BUILDING ENTRIES, AND OTHER BUILDING FACILITIES DURING DEMOLITION OPERATIONS. MAINTAIN EXITS FROM EXISTING ADJACENT BUILDINGS.
5. PROMPTLY REPAIR DAMAGE TO ADJACENT BUILDINGS CAUSED BY DEMOLITION OPERATIONS.
6. CLEAN ADJACENT STRUCTURES AND IMPROVEMENTS OF DUST, DIRT, AND DEBRIS CAUSED BY BUILDING DEMOLITION OPERATIONS. RETURN ADJACENT AREAS TO CONDITION THAT EXISTED BEFORE BUILDING DEMOLITION OPERATIONS BEGAN.
7. CONDUCT BUILDING DEMOLITION AND DEBRIS REMOVAL OPERATIONS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, WALKWAYS, AND OTHER ADJACENT OCCUPIED AND USED FACILITIES.
8. ERECT AND MAINTAIN PARTITIONS AND TEMPORARY ENCLOSURES TO LIMIT DUST, NOISE, AND DIRT MIGRATION TO OCCUPIED PORTIONS OF ADJACENT BUILDINGS.
9. USE WATER MIST AND OTHER SUITABLE METHODS TO LIMIT SPREAD OF DUST AND DIRT. COMPLY WITH GOVERNING ENVIRONMENTAL-PROTECTION REGULATIONS. DO NOT USE WATER WHEN IT MAY DAMAGE ADJACENT CONSTRUCTION OR CREATE HAZARDOUS OR OBJECTIONABLE CONDITIONS, SUCH AS ICE, FLOODING, AND POLLUTION
10. VERIFY THAT UTILITIES HAVE BEEN DISCONNECTED AND CAPPED BEFORE STARTING DEMOLITION OPERATIONS.
11. LOCATE, IDENTIFY, DISCONNECT, AND SEAL OR CAP OFF INDICATED UTILITIES SERVING BUILDINGS AND STRUCTURES TO BE DEMOLISHED. DO NOT START DEMOLITION WORK UNTIL UTILITY DISCONNECTING AND SEALING HAVE BEEN COMPLETED AND VERIFIED IN WRITING.
12. OWNER WILL ARRANGE TO SHUT OFF INDICATED UTILITIES WHEN REQUESTED BY CONTRACTOR.
13. MAINTAIN UTILITY SERVICES TO REMAIN AND PROTECT FROM DAMAGE DURING DEMOLITION OPERATIONS.
14. DO NOT INTERRUPT EXISTING UTILITIES SERVING ADJACENT OCCUPIED OR OPERATING FACILITIES UNLESS AUTHORIZED IN WRITING BY OWNER AND AUTHORITIES HAVING JURISDICTION.
15. PROVIDE AND MAINTAIN INTERIOR AND EXTERIOR SHORING, BRACING, OR STRUCTURAL SUPPORT TO PRESERVE STABILITY AND PREVENT UNEXPECTED MOVEMENT OR COLLAPSE OF CONSTRUCTION BEING DEMOLISHED.
16. STRENGTHEN OR ADD NEW SUPPORTS WHEN REQUIRED DURING PROGRESS OF DEMOLITION.
17. DEMOLISH INDICATED EXISTING BUILDING COMPLETELY AND SITE IMPROVEMENTS ACCORDING TO CIVIL DRAWINGS. USE METHODS REQUIRED TO COMPLETE THE WORK WITHIN LIMITATIONS OF GOVERNING REGULATIONS.
18. IT IS NOT EXPECTED THAT HAZARDOUS MATERIALS WILL BE ENCOUNTERED IN THE WORK. IF MATERIALS SUSPECTED OF CONTAINING HAZARDOUS MATERIALS ARE ENCOUNTERED, DO NOT DISTURB; IMMEDIATELY NOTIFY ARCHITECT AND OWNER. HAZARDOUS MATERIAL WILL BE REMOVED BY OWNER UNDER A SEPARATE CONTRACT.
19. DEMOLISH FOUNDATION WALLS AND OTHER BELOW-GRADE CONSTRUCTION.
20. ON-SITE STORAGE OR SALE OF REMOVED ITEMS OR MATERIALS IS NOT PERMITTED.
21. UNLESS OTHERWISE INDICATED, DEMOLITION WASTE BECOMES PROPERTY OF CONTRACTOR.
22. REMOVE DEMOLITION WASTE MATERIALS FROM PROJECT SITE AND LEGALLY DISPOSE OF THEM IN AN EPA-APPROVED LANDFILL ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.
23. DO NOT ALLOW DEMOLISHED MATERIALS TO ACCUMULATE ON-SITE.
24. REMOVE AND TRANSPORT DEBRIS IN A MANNER THAT WILL PREVENT SPILLAGE ON ADJACENT SURFACES AND AREAS.
25. DO NOT BURN DEMOLISHED MATERIALS.
26. HISTORIC ITEMS, RELICS, ANTIQUES, AND SIMILAR OBJECTS INCLUDING, BUT NOT LIMITED TO, CORNERSTONES AND THEIR CONTENTS, COMMEMORATIVE PLAQUES AND TABLETS, AND OTHER ITEMS OF INTEREST OR VALUE TO OWNER THAT MAY BE UNCOVERED DURING DEMOLITION REMAIN THE PROPERTY OF OWNER. CAREFULLY SALVAGE IN A MANNER TO PREVENT DAMAGE AND PROMPTLY RETURN TO OWNER.
27. INSTALL PROTECTIVE FENCING AT ALL TREES TO REMAIN, WITHIN, OR NEAR, THE DEMOLITION/CONSTRUCTION LIMITS.
28. INSTALL TEMPORARY CONSTRUCTION FENCING AT PERIMETER OF CONSTRUCTION SITE TO PREVENT ACCESS BY UNAUTHORIZED INDIVIDUALS.

NOTE:

THE BOUNDARY AND/OR TOPOGRAPHIC DATA SHOWN HEREON WAS PROVIDED TO IFLAND ENGINEERS, INC. BY IFLAND SURVEY AND IS BASED UPON A FIELD SURVEY DATED MARCH, 2011

WHILE IFLAND ENGINEERS HAS MADE A SITE VISIT TO FIELD CHECK THE DATA PROVIDED, WE ASSUME NO RESPONSIBILITY FOR THE ACCURACY, COMPLETENESS AND SUFFICIENCY OF THE BOUNDARY AND/OR TOPOGRAPHIC DATA.

For Plan Check Only

IFLAND ENGINEERS

CIVIL ENGINEERING • LAND PLANNING • STRUCTURAL DESIGN

Existing Conditions & Demolition Plan

Santa Cruz County PHF/PES

2202 Soquel Avenue, Santa Cruz, CA

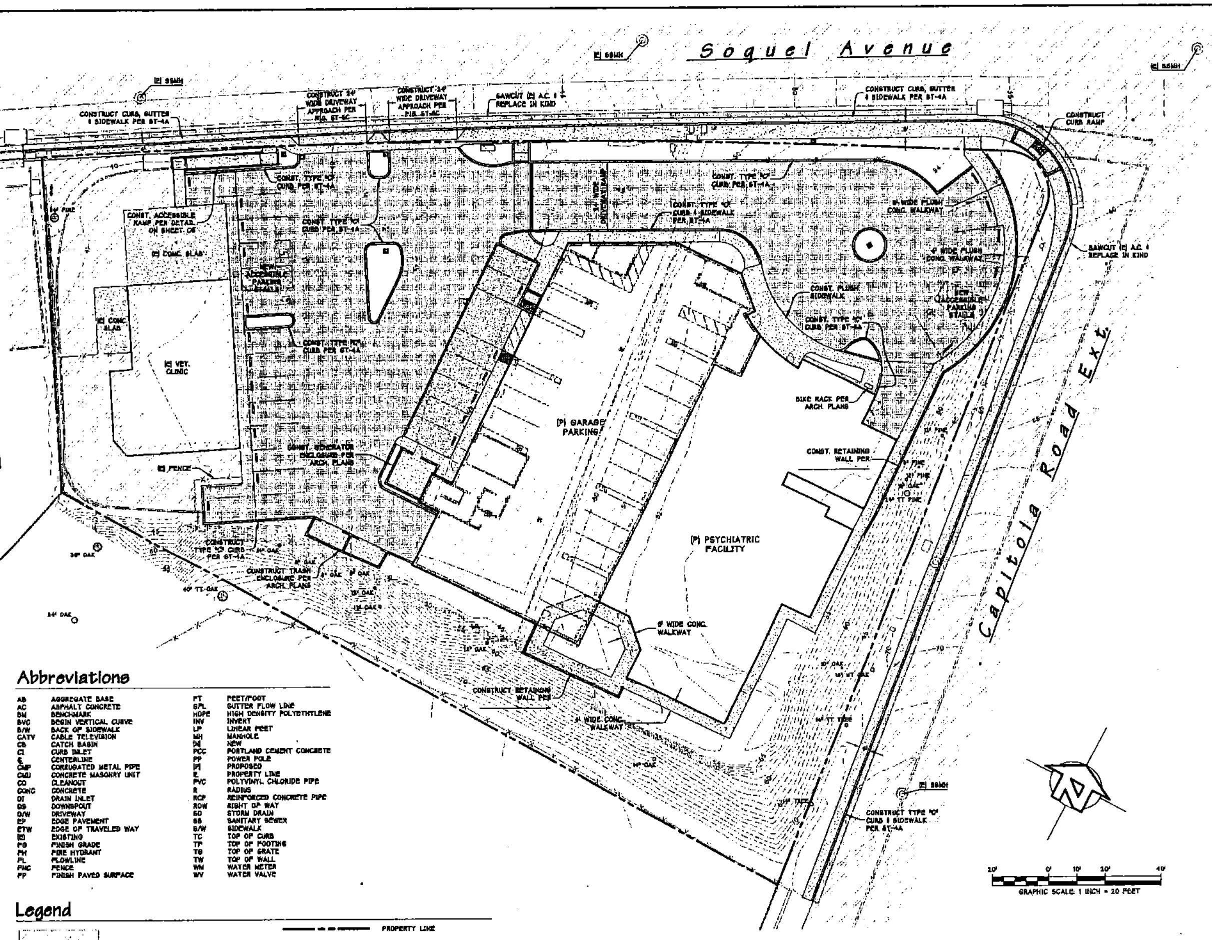
APN: 026-011-06

DATE	DESIGN	DRAWN
4/20/11	JON/RYAN	RYAN

SHEET C2

JOB NO. 11006

ATTACHMENT 2



Site Plan

SCALE: 1" = 20'

Abbreviations

AB	AGGREGATE BASE	FT	FEET/FOOT
AC	ASPHALT CONCRETE	GFL	GUTTER FLOW LINE
BM	BENCHMARK	HDPE	HIGH DENSITY POLYETHYLENE
BVC	BEGIN VERTICAL CURVE	INV	INVERT
B/W	BACK OF SIDEWALK	LF	LINEAR FEET
CATV	CABLE TELEVISION	MH	MANHOLE
CB	CATCH BASIN	(N)	NEW
CI	CURB INLET	PCC	PORTLAND CEMENT CONCRETE
℄	CENTERLINE	PP	POWER POLE
CMP	CORRUGATED METAL PIPE	(P)	PROPOSED
CMU	CONCRETE MASONRY UNIT	℞	PROPERTY LINE
CO	CLEANOUT	PVC	POLYVINYL CHLORIDE PIPE
CONC	CONCRETE	R	RADIUS
DI	DRAIN INLET	RCP	REINFORCED CONCRETE PIPE
DS	DOWNSPOUT	ROW	RIGHT OF WAY
D/W	DRIVEWAY	SD	STORM DRAIN
EP	EDGE PAVEMENT	SS	SANITARY SEWER
ETW	EDGE OF TRAVELED WAY	S/W	SIDEWALK
(E)	EXISTING	TC	TOP OF CURB
FG	FINISH GRADE	TF	TOP OF FOOTING
FH	FIRE HYDRANT	TG	TOP OF GRATE
FL	FLOWLINE	TW	TOP OF WALL
FNC	FENCE	WM	WATER METER
FP	FINISH PAVED SURFACE	WV	WATER VALVE

Legend

- EXISTING A.C. PAVEMENT
- EXISTING CONCRETE
- PROPOSED ASPHALT PAVEMENT — 3" AC OVER 8" CLASS 2 AGG. BASE
- PROPOSED SITE CONCRETE — 4" PCC OVER 1" SAND
- PROPOSED BASEMENT SLAB CONCRETE — 4" PCC OVER 2" SAND
- PROPOSED PERVIOUS CONCRETE — PER DETAIL ON SHEET C6
- PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING GRADE CONTOUR (300)
- FINISHED GRADE CONTOUR (300)
- EXISTING STORM DRAIN (SD)
- EXISTING SANITARY SEWER (SS)
- EXISTING WATER LINE (W)
- PROPOSED STORM DRAIN
- PROPOSED SANITARY SEWER
- PROPOSED WATER LINE (W)
- PROPOSED RETAINING WALL
- PROPOSED STORM DRAIN INLET

General Notes

1. ALL CONSTRUCTION SHALL COMPLY WITH APPLICABLE REQUIREMENTS IN THE CURRENT EDITION OF THE "COUNTY OF SANTA CRUZ DESIGN CRITERIA."
2. THE OWNER/DEVELOPER SHALL DESIGNATE A DISTURBANCE COORDINATOR TO RESPOND TO CITIZEN COMPLAINTS AND INQUIRIES FROM AREA RESIDENTS DURING CONSTRUCTION. A 24-HOUR CONTACT NUMBER SHALL BE CONSPICUOUSLY POSTED ON THE JOB SITE. THE NAME, PHONE NUMBER AND PURPOSE OF THE DISTURBANCE SHALL BE RECORDED BY THE DISTURBANCE COORDINATOR. THE DISTURBANCE COORDINATOR SHALL INVESTIGATE COMPLAINTS AND TAKE REMEDIAL ACTION, IF NECESSARY, WITHIN 24 HOURS OF RECEIPT OF THE COMPLAINT OR INQUIRY.
3. ALL CONSTRUCTION SHALL BE LIMITED TO THE TIME BETWEEN 8:00 AM AND 5:00 PM WEEKDAYS UNLESS A TEMPORARY EXCEPTION TO THIS TIME RESTRICTION IS APPROVED IN ADVANCE BY COUNTY PLANNING TO ADDRESS AN EMERGENCY SITUATION. NON-NOISE PRODUCING ACTIVITIES, SUCH AS INTERIOR PAINTING, SHALL NOT BE SUBJECT TO THIS RESTRICTION.
4. ALL FIGURE (FIG) REFERENCES, UNLESS OTHERWISE SPECIFIED, REFER TO STANDARD DRAWINGS IN THE CURRENT EDITION OF THE "COUNTY OF SANTA CRUZ DESIGN CRITERIA."
5. NO CHANGES IN THE APPROVED IMPROVEMENT PLANS SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE DIRECTOR OF PUBLIC WORKS.
6. NO LAND CLEARING, GRADING OR EXCAVATING SHALL TAKE PLACE BETWEEN OCTOBER 15 AND APRIL 15 AND THE EARTHWORK FOR THE SUBDIVISION IMPROVEMENTS SHALL COMMENCE ON OR PRIOR TO AUGUST 15TH OR SHALL BE DELAYED UNTIL ON OR AFTER APRIL 15TH.
7. BETWEEN OCTOBER 15 AND APRIL 15, EXPOSED SOIL SHALL BE PROTECTED FROM EROSION AT ALL TIMES. DURING CONSTRUCTION SUCH PROTECTION MAY CONSIST OF MULCHING AND/OR PLANTING OF NATIVE VEGETATION OF ADEQUATE DENSITY. BEFORE COMPLETION OF THE PROJECT, ANY EXPOSED SOIL ON DISTURBED SLOPES SHALL BE PERMANENTLY PROTECTED FROM EROSION. REFER TO EROSION CONTROL PLAN FOR DETAILS.
8. NO LAND DISTURBANCE SHALL TAKE PLACE PRIOR TO THE ISSUANCE OF BUILDING PERMITS, EXCEPT THE MINIMUM REQUIRED TO INSTALL STREET IMPROVEMENTS, PROVIDE ACCESS FOR COUNTY REQUIRED TESTS OR TO CARRY OUT OTHER WORK SPECIFICALLY REQUIRED BY ANOTHER OF THESE CONDITIONS.
9. THE CONTRACTOR SHALL APPLY WATER TO ALL EXPOSED EARTH SURFACES AT INTERVALS SUFFICIENT TO PREVENT AIRBORNE DUST FROM LEAVING THE PROJECT SITE. ALL EXPOSED EARTH SHALL BE WATERED DOWN AT THE END OF THE WORK DAY.
10. WHILE IN TRANSIT TO AND FROM THE PROJECT SITE, ALL TRUCKS TRANSPORTING FILL SHALL BE EQUIPPED WITH TARPS.
11. ALL GRADING WORK AND CONSTRUCTION OF IMPROVEMENTS SHALL BE DONE IN ACCORDANCE WITH RECOMMENDATIONS SPECIFIED IN THE GEOTECHNICAL REPORTS PREPARED FOR THIS PROJECT BY AMSO CONSULTING ENGINEERS, DATED APRIL 15, 2005 & JULY 26, 2005 AS WELL AS THE SUPPLEMENTAL LETTER BY DEES & ASSOCIATES, INC. DATED JANUARY 23, 2008. DEES & ASSOCIATES, INC. SHALL INSPECT THE COMPLETED PROJECT AND CERTIFY IN WRITING THAT THE IMPROVEMENTS HAVE BEEN CONSTRUCTED IN CONFORMANCE WITH THE GEOTECHNICAL REPORT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADHERENCE TO ALL RECOMMENDATIONS MADE BY THE GEOTECHNICAL ENGINEER.
12. PURSUANT TO SECTIONS 16.40.040 AND 16.42.100 OF THE COUNTY CODE, IF AT ANY TIME DURING SITE PREPARATION, EXCAVATION, OR OTHER GROUND DISTURBANCE ASSOCIATED WITH THIS DEVELOPMENT, ANY ARTIFACT OR OTHER EVIDENCE OF AN HISTORIC ARCHEOLOGICAL RESOURCE OR A NATIVE AMERICAN CULTURAL SITE IS DISCOVERED, THE RESPONSIBLE PERSONS SHALL IMMEDIATELY CEASE AND DESIST FROM ALL FURTHER SITE EXCAVATION AND NOTIFY THE SHERIFF-CORONER IF THE DISCOVERY CONTAINS HUMAN REMAINS, OR THE PLANNING DIRECTOR IF THE DISCOVERY CONTAINS NO HUMAN REMAINS. THE PROCEDURES ESTABLISHED IN SECTIONS 16.40.010 AND 16.42.100, SHALL BE OBSERVED.
13. ALL CONSTRUCTION STAKING FOR CURB, GUTTER, SIDEWALK, SANITARY SEWER, STORM DRAINS AND WATER LINES SHALL BE DONE UNDER THE SUPERVISION OF A LICENSED LAND SURVEYOR OR REGISTERED CIVIL ENGINEER.
14. FOR DESIGN AND CONSTRUCTION PURPOSES, "FACE OF CURB" AS SHOWN ON THESE PLANS SHALL BE DEFINED AS THE CONTROL LINE FROM WHICH THE LOCAL AGENCY REQUIRES THE STREET WIDTH TO BE DETERMINED.
15. THE DIRECTOR OF PUBLIC WORKS, OR HIS AUTHORIZED REPRESENTATIVE, SHALL HAVE THE AUTHORITY TO "STOP WORK" IF THE WORK IS NOT BEING DONE IN ACCORDANCE WITH THE APPROVED IMPROVEMENT PLANS.
16. THE CONTRACTOR SHALL NOTIFY THE COUNTY CONSTRUCTION ENGINEER (831-454-2160) 24 HOURS PRIOR TO START OF CONSTRUCTION.
17. ALL REQUIRED OFF-SITE IMPROVEMENTS SHALL BE SUBSTANTIALLY COMPLETE TO THE SATISFACTION OF THE COUNTY DIRECTOR OF PUBLIC WORKS PRIOR TO THE GRANTING OF OCCUPANCY FOR ANY NEW UNIT.
18. THE CONTRACTOR SHALL NOTIFY THE SANITATION DISTRICT INSPECTOR (831-454-2160), OR LEAVE MESSAGE AT (831-466-2896) BEFORE 9:00 A.M. AT LEAST 24 HOURS PRIOR TO THE CONNECTION OF ANY BUILDING SEWER TO THE SEWER LATERAL, OR TO THE ABANDONMENT THEREOF. (IN THE CASE OF ABANDONMENTS, NO DEMOLITION PERMITS WILL BE ISSUED UNTIL SAID SEWER LINE HAS BEEN ABANDONED.)
19. UNDERGROUND UTILITY LOCATIONS SHOWN ARE COMPILED FROM INFORMATION SUPPLIED BY UTILITY AGENCIES, AND ARE APPROXIMATE ONLY. CONTRACTOR SHALL VERIFY LOCATIONS OF AFFECTED UTILITY LINES PRIOR TO ANY TRENCHING OR EXCAVATING. FOR LOCATION, CALL USA (800-642-2444).
20. ANY EXISTING UTILITIES THAT ARE REQUIRED TO BE RELOCATED AS A PART OF THIS CONSTRUCTION SHALL BE RELOCATED AT THE DEVELOPER'S EXPENSE.
21. IF SIDEWALK IS NOT PLACED MONOLITHICALLY WITH CURB AND GUTTER, PLACE #4 DOWELS 18" LONG AT 4' O.C. IN BACK OF CURB 3" BELOW TOP OF CURB, 6" INTO CONCRETE, AS PER STANDARD FIG. ST-4A.
22. CONTRACTOR SHALL FIELD VERIFY ALL UNDERGROUND UTILITIES AND SUBSTRUCTURES. PRIOR TO FURTHER CONSTRUCTION, THE ENGINEER MUST BE NOTIFIED, IN WRITING, OF ANY DISCREPANCIES THAT MAY EXIST.
23. ALL WORK ADJACENT TO, OR WITHIN A COUNTY ROAD SHALL BE SUBJECT TO THE PROVISIONS OF CHAPTER 9.70 OF THE COUNTY CODE, INCLUDING OBTAINING AN ENCROACHMENT PERMIT, WHERE REQUIRED. WHERE FEASIBLE, ALL IMPROVEMENTS ADJACENT TO, OR AFFECTING A COUNTY ROAD SHALL BE COORDINATED WITH ANY PLANNED COUNTY-SPONSORED CONSTRUCTION ON THAT ROAD. OBTAIN AN ENCROACHMENT PERMIT FROM THE DEPARTMENT OF PUBLIC WORKS FOR ANY WORK PERFORMED IN THE PUBLIC RIGHT OF WAY. ALL WORK SHALL BE CONSISTENT WITH THE DEPARTMENT OF PUBLIC WORKS DESIGN CRITERIA UNLESS OTHERWISE SPECIFICALLY EXCEPTED BY THE CONDITIONS OF APPROVAL.
24. WATER SERVICES FOR SITE SHALL BE INSTALLED BY THE CONTRACTOR ACCORDING TO THE CITY OF SANTA CRUZ WATER DEPARTMENT REQUIREMENTS PER DETAILS BY ENGINEER AND THE WATER DEPARTMENT.
25. ALL REQUIREMENTS OF THE CENTRAL FIRE PROTECTION DISTRICT SHALL BE MET. THIS SHALL INCLUDE ALL REQUIREMENTS RELATING TO SMOKE DETECTORS, ADDRESS NUMBERS, FIRE ALARM, AUTOMATIC SPRINKLER SYSTEM, ACCESS WIDTHS AND TURNAROUNDS, AND FIRE HYDRANTS.
26. PRIOR TO CONSIDERATION FOR FORMAL COUNTY ACCEPTANCE OF THE IMPROVEMENTS, AS-BUILT PLANS WILL BE PREPARED BY COUNTY STAFF. ANY CHANGES FROM THE IMPROVEMENT PLANS NOT PREVIOUSLY APPROVED BY THE PLANNING COMMISSION WILL REQUIRE NEGOTIATION AND ADJUSTMENT TO THE SATISFACTION OF THE COUNTY. NO CHANGES WILL BE MADE IN THE FIELD WITHOUT SAID APPROVAL.
27. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE VERIFICATION OF CONSTRUCTION QUANTITIES PRIOR TO BIDDING ON ANY ITEM. QUANTITY REFERENCES SHOWN ON THESE PLANS, OR ENGINEER'S ESTIMATES ARE FOR ESTIMATING PURPOSES ONLY AND SHALL NOT BE CONSIDERED AS A BASIS FOR CONTRACTOR PAYMENT. CONSULTANT SHALL NOT BE RESPONSIBLE FOR ANY FLUCTUATIONS IN SUCH QUANTITIES AND ESTIMATES.
28. THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO, OR USES OF, THESE PLANS. ALL CHANGES MUST BE IN WRITING AND MUST BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
30. UNLESS OTHERWISE NOTED, THE TERMS "INSTALL" AND "CONSTRUCT" MEAN THAT THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL MATERIALS, PRODUCTS, EQUIPMENT, AND LABOR FOR SAID INSTALLATION AND CONSTRUCTION.
30. STATIONS AND DIMENSIONED LOCATIONS OF ALL SEWER AND STORM DRAIN MANHOLES AND RELATED STRUCTURES AND THEIR GRATE, RIM, FLOWLINE OR INVERT ELEVATIONS SHALL TAKE PRECEDENCE OVER ANY PIPE LENGTHS OR SLOPES SHOWN ON THE PLAN AND PROFILE DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY SUCH SLOPES AND LENGTHS TO BE IN AGREEMENT WITH SURVEY LAYOUT PRIOR TO CONSTRUCTION.
31. FOR ROAD WORK INVOLVING A PAVEMENT CONFORM SECTION BETWEEN THE LIP OF GUTTER AND THE EXISTING PAVED ROAD, THE CONFORM SHALL BE EXTENDED AS FAR AS NECESSARY TO ACHIEVE A STREET CROSS SLOPE OF 2% - 4%.
32. MONUMENTATION WILL BE VERIFIED BY THE COUNTY CONSTRUCTION ENGINEER. LOCATION OF EXTERNAL MONUMENTS WILL BE VERIFIED FOR ALL TRACTS. LOCATION OF OTHER MONUMENTATION WILL BE VERIFIED AT RANDOM.
33. THE COUNTY SHALL PROVIDE PERMANENT SIGNAGE AND STRIPING. THE COST OF THE SIGNAGE AND STRIPING SHALL BE BORNE BY THE DEVELOPER AND PAID FOR AS PART OF THE DEPOSIT MADE TO THE COUNTY AT THE TIME OF THE RECORDATION OF THE FINAL MAP. THE CONTRACTOR SHALL PROVIDE TEMPORARY DELINEATION, COORDINATE PERMANENT STRIPING AND ENSURE THAT PROPER DELINEATION EXISTS AT ALL TIMES.
34. THE CONTRACTOR SHALL OBTAIN AN ENCROACHMENT PERMIT FROM COUNTY DEPARTMENT OF PUBLIC WORKS FOR ANY UTILITY TRENCH WORK WITHIN COUNTY RIGHT-OF-WAY NOT SPECIFICALLY SHOWN ON THESE PLANS.

NOTE:
IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONSTRUCTION CONTRACTOR AGREES THAT HE WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR THE JOB SITE CONDITIONS DURING THE CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE APPLIED CONTINUOUSLY AND NOT LIMITED TO NORMAL WORKING HOURS. THE CONSTRUCTION CONTRACTOR ALSO AGREES TO DEFEND, INDEMNIFY AND HOLD THE DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH PERFORMANCE OF THE WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL.

IFLAND ENGINEERS
CIVIL ENGINEERING ■ LAND PLANNING ■ STRUCTURAL DESIGN
5300 SOQUEL AVE. SUITE 101
SANTA CRUZ, CA 95062
TEL (831) 426-5313
FAX (831) 426-1763
www.iflandengineers.com

BY	REVISION	DATE

APPROVED
For Plan Check Only
DAVID HEINRICHSEN (RCE NO. 49167) DATE

REGISTERED PROFESSIONAL ENGINEER — DAVID HEINRICHSEN — NO. C49167 — CIVIL — STATE OF CALIFORNIA

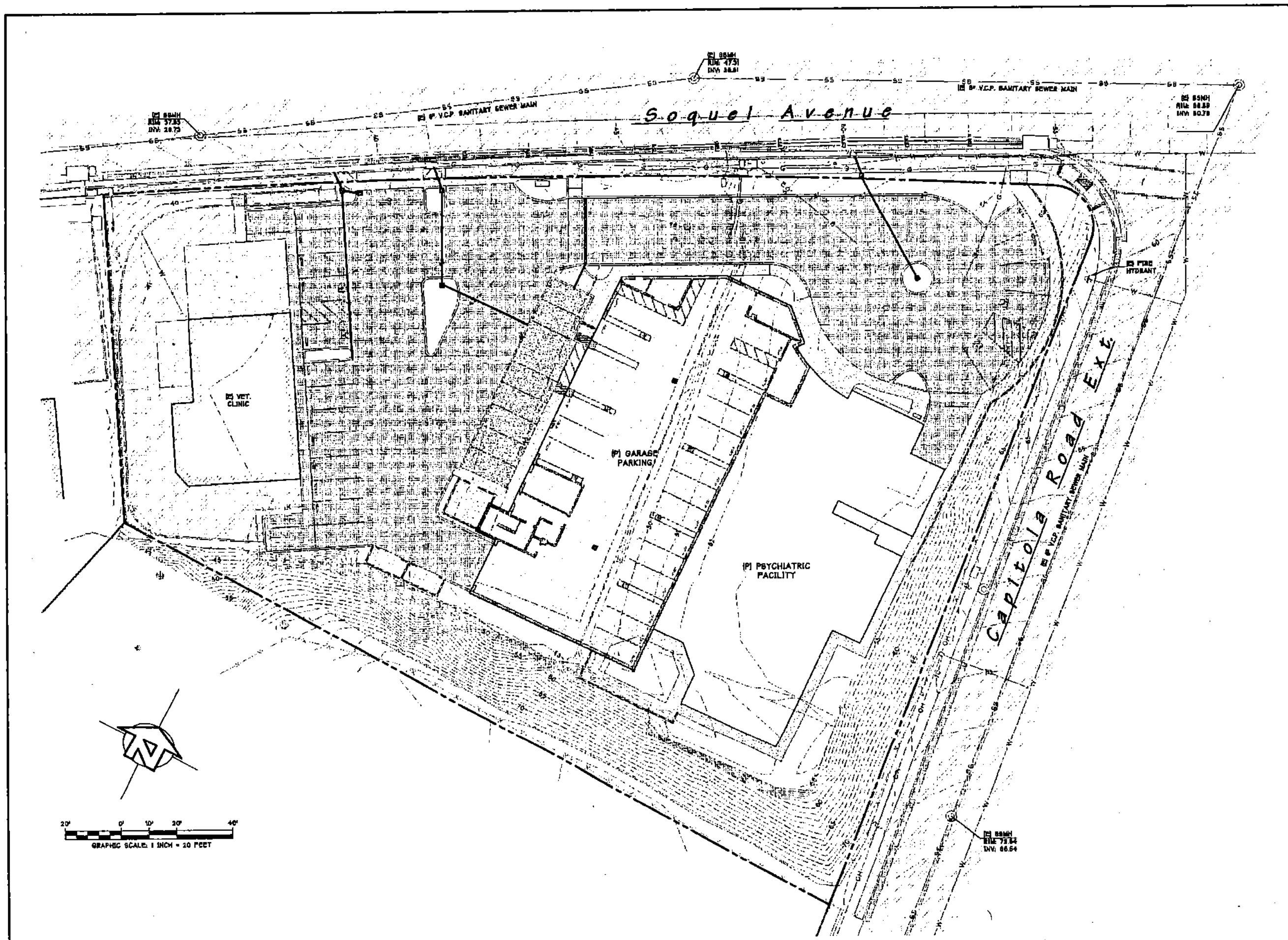
Site Plan
Santa Cruz County PHF/PES
2202 Soquel Avenue, Santa Cruz, CA

APN: 026-011-06

DATE	DESIGN	DRAWN
4/20/11	JON/RYAN	RYAN

SHEET C3
JOB NO. 11006

ATTACHMENT 2



Site Utility Plan

SCALE: 1" = 10'

City of Santa Cruz Water Department Notes

1. ALL WORK ON THE WATER SYSTEM MUST BE CONSTRUCTED IN CONFORMANCE WITH THE LATEST VERSION OF CITY OF SANTA CRUZ WATER DEPT (SCWD) STANDARD SPECIFICATIONS.
2. A MINIMUM OF 2 WORKING DAYS NOTICE SHALL BE GIVEN TO THE SCWD BEFORE CONSTRUCTION ON ANY PORTION OF THE WATER SYSTEM. OBTAIN ALL APPLICABLE WATER SYSTEM PERMITS AT THE SCWD. CALL 831-420-5210 FOR INFORMATION AND TO SCHEDULE WATER SERVICE, FIRE HYDRANT AND BACKFLOW ASSEMBLY INSPECTIONS.
3. MINIMUM SEPARATIONS FROM OTHER PARALLEL AND CROSSING UTILITIES MUST BE MAINTAINED PER CURRENT STANDARD TECHNICAL SPECIFICATIONS.
4. UTILITY LOCATIONS ARE APPROXIMATE. VERIFICATION OF ACTUAL UTILITIES AND LOCATIONS IS THE RESPONSIBILITY OF THE CONTRACTOR. CALL UNDERGROUND SERVICE ALERT AT LEAST TWO WORKING DAYS BEFORE DIGGING AT 800-227-2600.
5. CONTRACTOR SHALL PROVIDE A MINIMUM OF TWO WORKING DAYS NOTICE TO SCWD FOR INSPECTION OF SERVICES THAT ARE TO BE RETIRED, MODIFIED OR RELOCATED. CONTRACTOR SHALL EXPOSE CORPORATION STOPS FOR SCWD STAFF TO OPERATE. AN ACTIVE WATER METER MAY BE RELOCATED UP TO 5' HORIZONTALLY USING THE PIPE FREEZE METHOD OR BY TEMPORARILY CLOSING THE CORPORATION STOP. RETIRED METER BOXES ARE TO BE REMOVED BY CONTRACTOR AND ALL SIDEWALK & PAVING RESTORED. SERVICE LINES SHALL NOT BE CRIMPED AS A METHOD OF RETIREMENT OR SERVICE LINE MODIFICATION OR RELOCATION.
6. APPROVAL BY THE SCWD FOR THE FIRE SERVICE INSTALLATION SHALL BE FOR THE SERVICE LINE LOCATION AND THE CONNECTION TO THE CITY WATER SYSTEM. THE FIRE SERVICE SIZE AND DESIGN APPROVAL ARE THE RESPONSIBILITY OF THE LOCAL FIRE PROTECTION AGENCY.
7. TEMPORARY REDUCED PRESSURE BACKFLOW PREVENTION ASSEMBLY INSTALLATION(S) PER SCWD STANDARDS ARE REQUIRED FOR ALL CONSTUCTION WATER USE.

Central Fire Protection District (CFPD)

1. THESE PLANS ARE IN COMPLIANCE WITH CALIFORNIA BUILDING AND FIRE CODES (2007) AS AMENDED BY THE CFPD.
2. THE PROPOSED STRUCTURE SHALL BE SPRINKLERED AS OUTLINED IN THE 2007 CALIFORNIA BUILDING CODE.
3. THE FIRE FLOW REQUIREMENT FOR THE SUBJECT PROPERTY IS ______ GALLONS PER MINUTE.
4. AVAILABLE FIRE FLOW FOR THE SUBJECT PROPERTY IS _____ GALLONS PER MINUTE.
5. NEW/UPGRADED HYDRANTS, AND/OR UPGRADED ROADWAYS SHALL BE INSTALLED PRIOR TO CONSTRUCTION (CFC 901.3).
6. AN UNDERGROUND FIRE PROTECTION SYSTEM WORKING DRAWING MUST BE PREPARED BY THE DESIGNER/INSTALLER. WORKING DRAWINGS SHALL COMPLY WITH THE DISTRICT UNDERGROUND FIRE PROTECTION SYSTEM INSTALLATION POLICY HANDOUT.
7. BUILDING SHALL BE PROTECTED BY AN APPROVED AUTOMATIC SPRINKLER SYSTEM COMPLYING WITH THE EDITION OF NFPA 13 CURRENTLY ADOPTED IN CHAPTER 35 OF THE CALIFORNIA BUILDING CODE.
8. THE FDC SHALL BE LABELED WITH THE ADDRESS OF THE BUILDING THAT IT SERVES, WITH 2" PEAL AND STICK PLASTIC REFLECTIVE NUMBERS.
10. ROOF COVERINGS TO BE NO LESS THAN CLASS "B" RATED ROOF.
11. DESIGNER/INSTALLER SHALL SUBMIT TWO (2) SETS OF PLANS, CALCULATIONS, AND CUT SHEETS FOR THE AUTOMATIC SPRINKLER SYSTEM TO THE CFPD AGENCY FOR APPROVAL. INSTALLATION SHALL FOLLOW THE CFPD GUIDE SHEET.
12. THE JOB COPIES OF THE BUILDING AND FIRE SYSTEMS PLANS AND PERMITS MUST BE ON-SITE DURING INSPECTIONS.
13. THE SUBMITTER, DESIGNER AND INSTALLER CERTIFY THAT THESE PLANS AND DETAILS COMPLY WITH APPLICABLE SPECIFICATIONS, STANDARDS, CODES AND ORDINANCES, AGREE THAT THEY ARE SOLELY RESPONSIBLE FOR COMPLIANCE WITH APPLICABLE SPECIFICATIONS, STANDARDS, CODES AND ORDINANCES, AND FURTHER AGREE TO CORRECT ANY DEFICIENCIES NOTED BY THE APTOS/LA SELVA FIRE PROTECTION DISTRICT REVIEW, SUBSEQUENT REVIEW, INSPECTION OR OTHER SOURCE, AND, TO HOLD HARMLESS AND WITHOUT PREJUDICE, THE REVIEWER AND REVIEWING AGENCY.

Sanitary Sewer Notes

1. ALL SANITARY SEWER WORK SHALL CONFORM TO PART 4. "SANITARY SEWER DESIGN" OF THE SANTA CRUZ COUNTY DESIGN CRITERIA.
2. PIPE MATERIAL SHALL BE PVC SDR 26 OR EQUAL.
3. TRENCH BACKFILL SHALL BE PER SCCO FIGURES SS-2A, AND SS-2B.
4. BACK FLOW PREVENTION DEVICES SHALL BE INSTALLED ON ALL LATERALS WHERE THE FINISHED FLOOR ELEVATION IS LESS THAN ONE FOOT ABOVE THE RIM ELEVATION OF THE NEAREST UPSTREAM MANHOLE OR CLEAN OUT. THE VALVES SHALL BE LOCATED IN SUCH A WAY AS TO PREVENT ANY DAMAGE TO ADJACENT PROPERTY AS A RESULT OF SEWAGE RELEASED THROUGH THE DEVICE, AS NOTED ON FIGURE SS-14.
5. ALL UTILITIES SHALL BE INSTALLED UNDERGROUND.
6. ALL LATERAL CLEANOUTS SHALL BE OUTSIDE OF THE PUBLIC RIGHT OF WAY.
7. LATERALS SHALL BE CONSTRUCTED PERPENDICULAR TO THE SEWER MAIN.
8. EACH NEW SANITARY SEWER LATERAL NOT IMMEDIATELY CONNECTED TO A DWELLING UNIT SHALL BE MARKED WITH A 2" X 4" X 5' REDWOOD STAKE MARKER TO 12" ABOVE FINISH GRADE AT THE END OF EACH NEW LATERAL STUB-OUT. AN "S" SHALL BE PAINTED ON THE MARKER AND THE END OF EACH LATERAL SHALL BE PROPERLY CAPPED. ALL LATERALS INSTALLED IN NEW DEVELOPMENTS SHALL ALSO BE MARKED BY STAMPING AN "S" IN THE CURB JUST ABOVE THE LATERAL.
9. INSULATED COPPER WIRE (NO. 10) SHALL BE PLACED ALONG TOP OF ALL GRAVITY AND FORCE MAINS. THE WIRE SHALL RUN BETWEEN MANHOLES, CLEANOUTS, OR OTHER APPROPRIATE FACILITIES, BROUGHT TO THE SURFACE AND BOLTED OR OTHERWISE SECURELY AFFIXED TO THE MANHOLE OR CLEANOUT COVER OR OTHER APPROPRIATE METAL STRUCTURE.
10. SANITARY SEWER MANHOLE COVERS SHALL HAVE CLOSED PICKHOLES. SANITARY SEWER MANHOLES, SUBJECT TO SURFACE OR STORM WATER, SHALL HAVE WATERTIGHT LIDS.
11. THE EXISTING SEWER LATERALS MUST BE PROPERLY ABANDONED (INCLUDING INSPECTION BY SANTA CRUZ COUNTY SANITATION DISTRICT) PRIOR TO ISSUANCE OF DEMOLITION PERMIT OR RELOCATION OR DISCONNECTION OF STRUCTURE. AN ABANDONMENT PERMIT FOR DISCONNECTION MUST BE OBTAINED FROM THE DISTRICT.

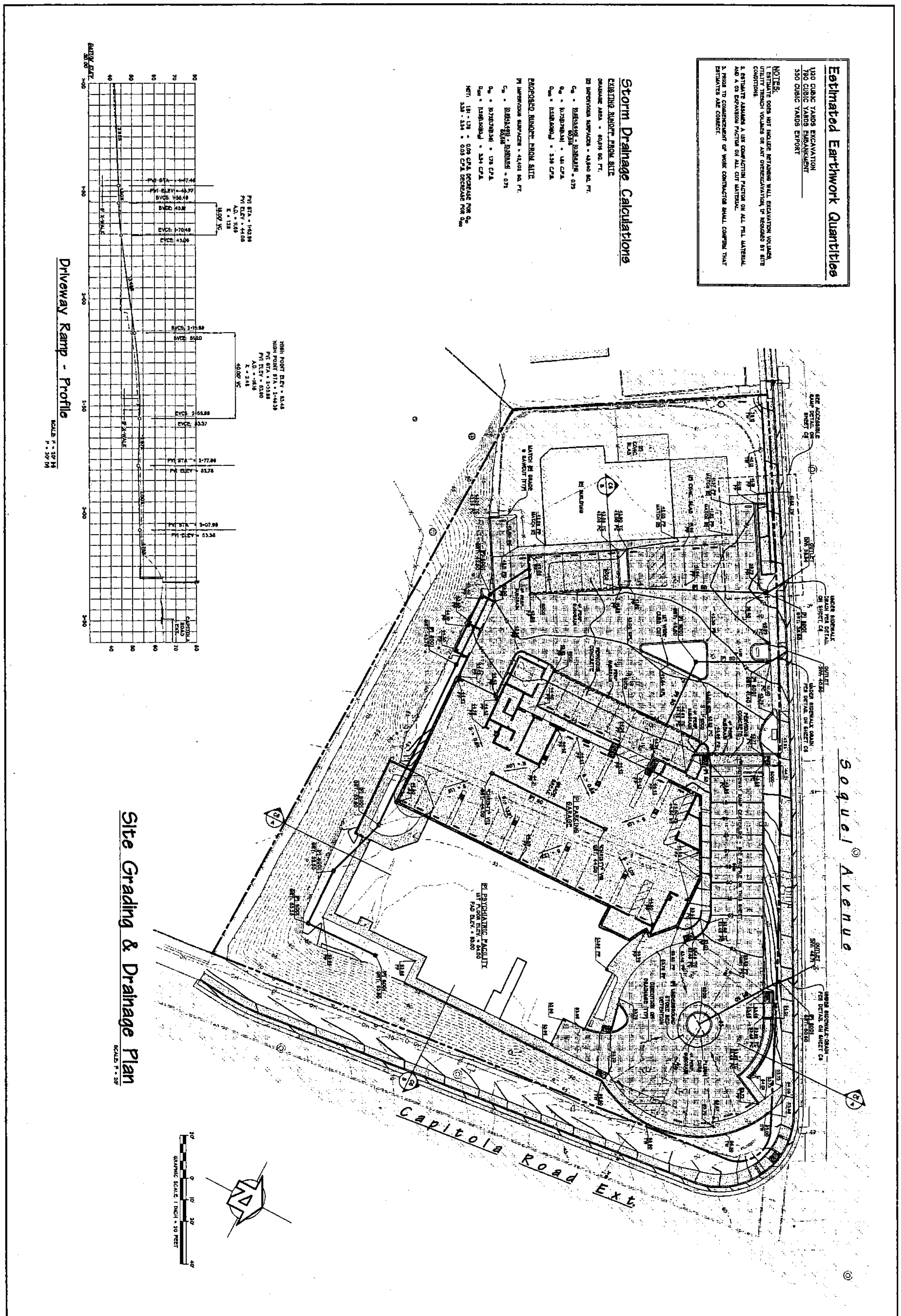
SHEET	C4
JOB NO.	11006
APN:	026-011-06
DATE	4/20/11
DESIGN	JON/RYAN
DRAWN	RYAN

Site Utility Plan
Santa Cruz County PHF/PES
2202 Soquel Avenue, Santa Cruz, CA

IFLAND ENGINEERS
CIVIL ENGINEERING • LAND PLANNING • STRUCTURAL DESIGN
5200 SOQUEL AVE. SUITE 101
SANTA CRUZ, CA 95062
TEL (831) 426-5313
FAX (831) 426-1763
www.iflandengineers.com

For Plan Check Only
DAVID HENRICKSEN (RCE NO. 49187)

ATTACHMENT 2



Site Grading & Drainage Plan			
APN: 026-011-06	Santa Cruz County PHF/PES	IFLAND ENGINEERS	For Plan Check Only
DATE 8/03/11	DESIGN JON/RYAN	DRAWN RYAN	2202 Soquel Avenue, Santa Cruz, CA

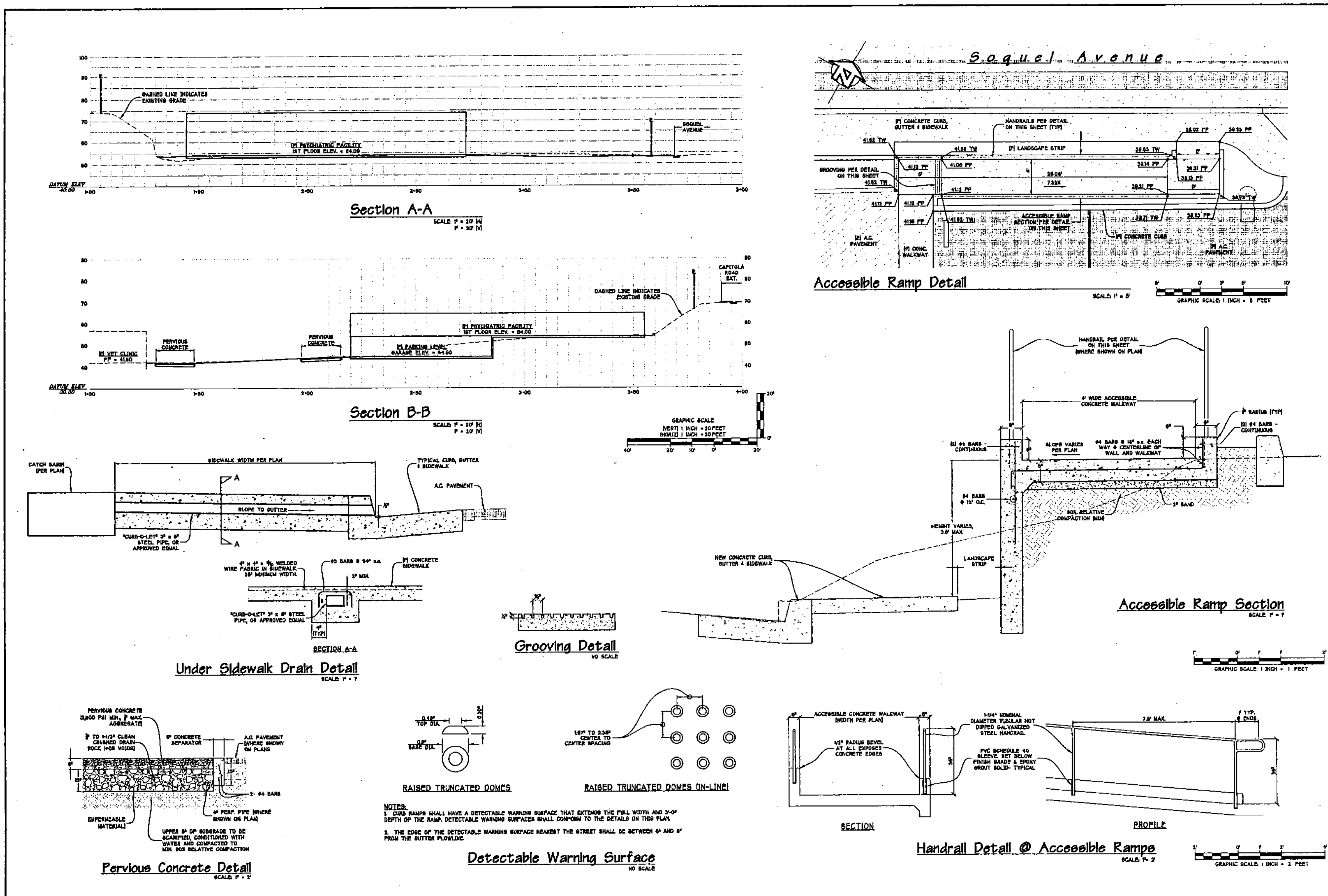
SHEET C5

JOB NO. 11006

IFLAND ENGINEERS — 8200 SOQUEL AVE. SUITE 101, SANTA CRUZ, CA 95062 — CIVIL ENGINEERING • LAND PLANNING • STRUCTURAL DESIGN

DAVID HEINRICHSEN RCE NO. 49167

ATTACHMENT 2



Details & Sections
Santa Cruz County PHF/PES
2202 Soquel Avenue, Santa Cruz, CA

APN: 026-011-06

DATE	DESIGN	DRAWN
5/03/11	RYAN/JON	RYAN

SHEET C6

JOB NO. 11006

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5300 SOQUEL AVE, SUITE 101
SANTA CRUZ, CA 95062

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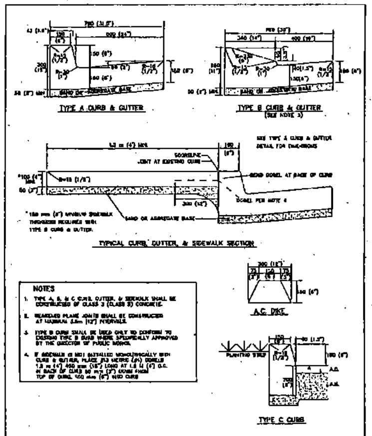
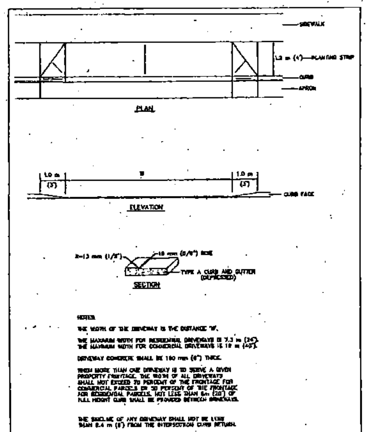


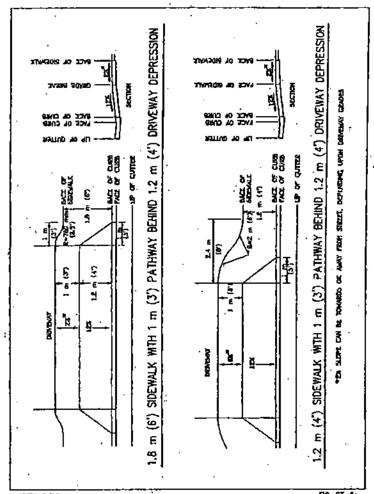
CURB, GUTTER, SIDEWALK, AND DIKE DETAILS
N.T.S.
ALL DIMENSIONS IN MILLIMETERS UNLESS NOTED OTHERWISE

REV. 12/05 FIG. ST-4a

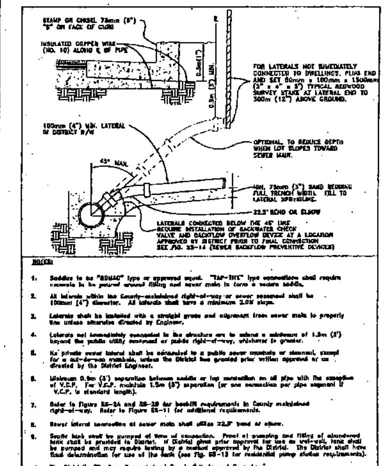


TYPICAL DRIVEWAY DEPRESSION
N.T.S.
ALL DIMENSIONS IN MILLIMETERS UNLESS NOTED OTHERWISE

REV. 12/05 FIG. ST-8a



REV. 6/08 FIG. ST-6a



SEWER LATERAL CONNECTION DETAILS
FIG. SS-13

NOTE: THE STANDARD DETAILS ON THIS PAGE ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER DOES NOT ACCEPT RESPONSIBILITY FOR THE CURRENCY OF THE DATA CONTAINED ON SAID DETAILS AND ENCOURAGES THE CONTRACTOR TO OBTAIN CURRENT COPIES FOR USE ON THE PROJECT. SHOULD ANY DISCREPANCIES BECOME EVIDENT BETWEEN THESE PLANS AND THE CURRENT DETAIL, THE ENGINEER SHALL BE CONSULTED PRIOR TO CONSTRUCTION.

For Plan Check Only

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CIVIL ENGINEERING • LAND PLANNING • STRUCTURAL DESIGN

Standard Construction Details
Santa Cruz County PHF/PES
2202 Soquel Avenue, Santa Cruz, CA

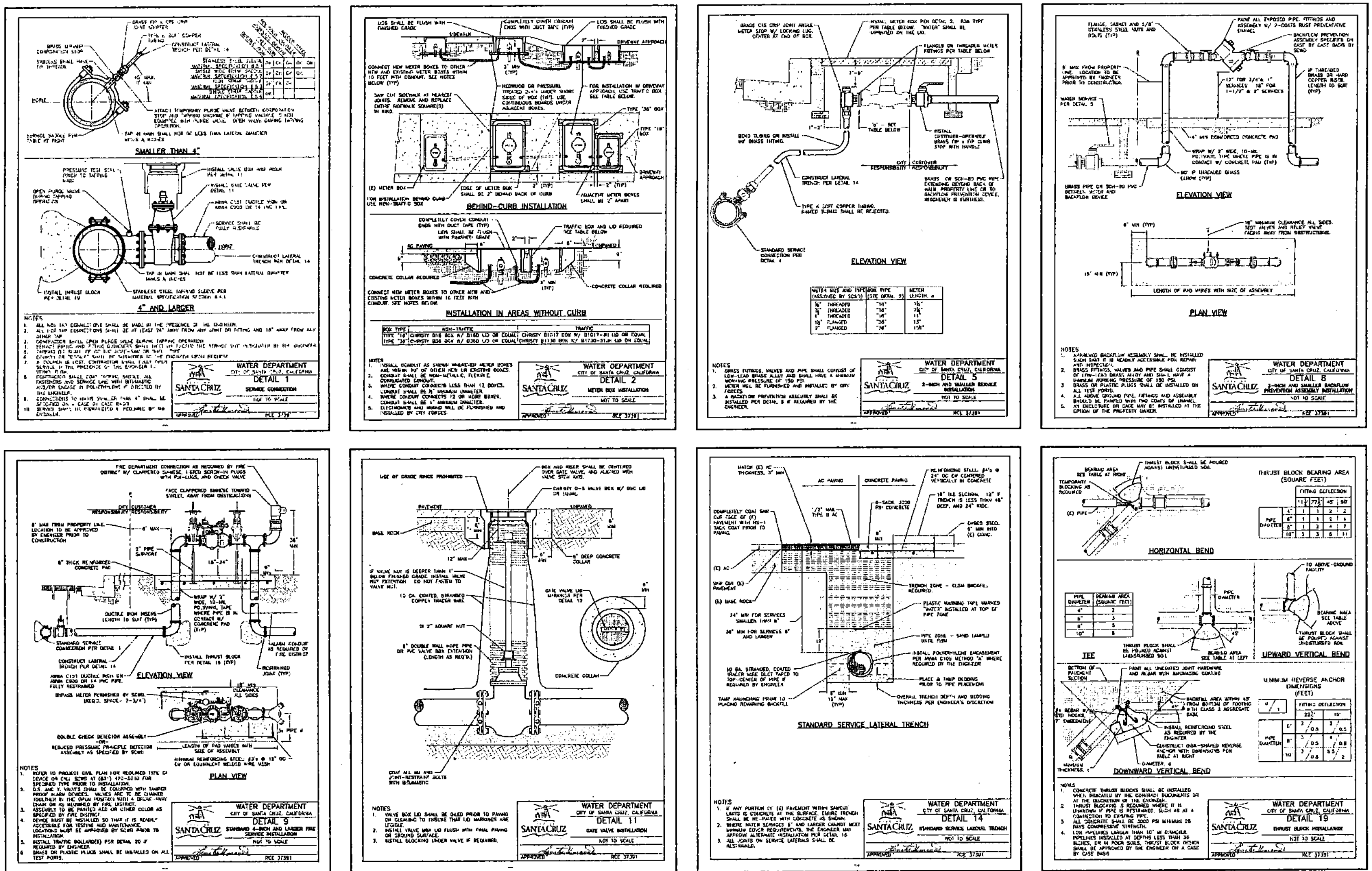
APN: 026-011-06

DATE 3/8/11

SHEET C7

JOB NO. 11006

ATTACHMENT 2



NOTE: THE STANDARD DETAILS ON THIS PAGE ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER DOES NOT ACCEPT RESPONSIBILITY FOR THE CURRENCY OF THE DATA CONTAINED ON SAID DETAILS AND ENCOURAGES THE CONTRACTOR TO OBTAIN CURRENT COPIES FOR USE ON THE PROJECT. SHOULD ANY DISCREPANCIES BECOME EVIDENT BETWEEN THESE PLANS AND THE CURRENT DETAIL, THE ENGINEER SHALL BE CONSULTED PRIOR TO CONSTRUCTION.

For Plan Check Only

IFLAND ENGINEERS
CIVIL ENGINEERING • LAND PLANNING • STRUCTURAL DESIGN

Standard Construction Details
Santa Cruz County PHF/PES
2202 Soquel Avenue, Santa Cruz, CA

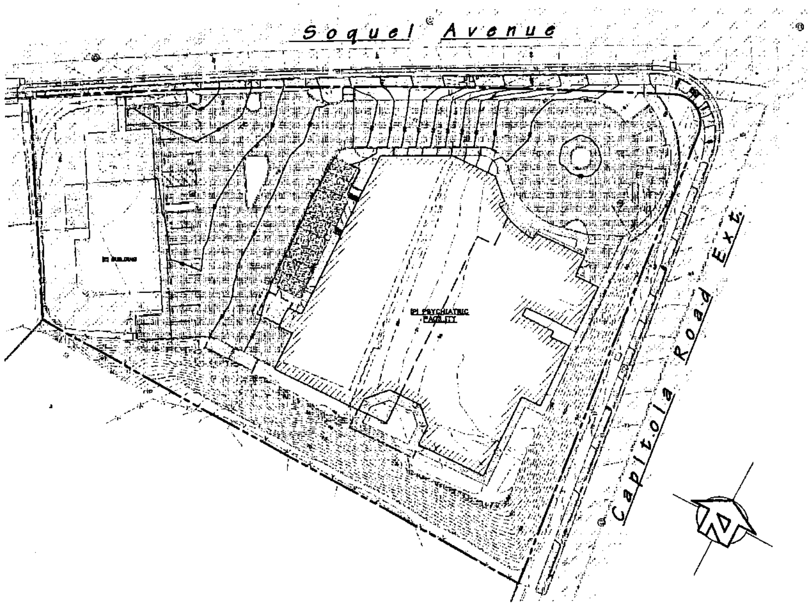
APN: 026-011-06

DATE 5/8/11

SHEET C8

JOB NO. 11006

ATTACHMENT 2



Erosion Control Plan

SCALE: 1" = 30'

GRAPHIC SCALE: 1 INCH = 30 FEET

Erosion Control Notes

1. NO LAND CLEARING, GRADING OR EXCAVATION SHALL BE DONE BETWEEN OCTOBER 15th AND APRIL 15th. ANY DEVIATION FROM THIS CONDITION REQUIRES REVIEW AND APPROVAL OF A SEPARATE WINTER EROSION CONTROL PLAN BY CITY OF SANTA CRUZ INSPECTOR PRIOR TO BEGINNING CONSTRUCTION. THE DEVELOPER SHALL BE RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING SITE EROSION CONTROL AT ALL TIMES.

2. UNNECESSARY GRADING AND DISTURBING OF SOIL SHALL BE AVOIDED.

3. BETWEEN OCTOBER 15th AND APRIL 15th EXPOSED SOIL SHALL BE PROTECTED FROM EROSION AT ALL TIMES. HAY BALES, FILTER BERMS, SILT FENCES OR OTHER MEANS SHALL BE EMPLOYED TO PREVENT SEDIMENT FROM LEAVING THE SITE OR ENTERING ANY WATER COURSE.

4. DURING CONSTRUCTION, NO TURBID WATER SHALL BE PERMITTED TO ENTER THE CHANNEL OR STORM DRAIN SYSTEM. USE OF SILT AND GREASE TRAPS, FILTER BERMS OR SILT FENCES SHALL BE USED TO PREVENT SUCH DISCHARGE.

5. ALL AREAS ON- AND OFF-SITE EXPOSED DURING CONSTRUCTION ACTIVITIES, IF NOT PERMANENTLY LANDSCAPED PER PLAN, SHALL BE PROTECTED BY MULCHING AND/OR PLANTING OF THE FOLLOWING SCS APPROVED EROSION CONTROL MIX AT A RATE OF 35 LBS. PER ACRE.

BLANDO BROME	80%
ROSE CLOVER (PELLET INOCULATED)	35%
CREEPING RED FESCUE	15%
ZORRO ANNUAL FESCUE	TRACE
WILDFLOWERS	TRACE

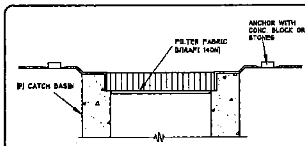
6. ALL EXCAVATED MATERIAL SHALL BE REMOVED TO AN APPROVED DISPOSAL SITE OR DISPOSED OF ON-SITE IN A MANNER THAT WILL NOT CAUSE EROSION.

7. ANY MATERIAL STOCKPILED DURING CONSTRUCTION SHALL BE COVERED WITH PLASTIC.

8. UPON COMPLETION OF CONSTRUCTION, ALL REMAINING EXPOSED SOILS SHALL BE PERMANENTLY REVEGETATED PER LANDSCAPING PLAN.

9. CONCRETE WASHOUT FACILITIES ARE PROHIBITED WITHIN 100 FEET OF THE RIPARIAN CORRIDOR. CONTRACTOR SHALL MAINTAIN A CONCRETE WASHOUT FACILITY OFFSITE.

10. IT IS THE DEVELOPER'S RESPONSIBILITY TO SEE THAT ADDITIONAL MEASURES, NECESSARY TO CONTROL SITE EROSION AND PREVENT SEDIMENT TRANSPORT OFF-SITE ARE IMPLEMENTED.



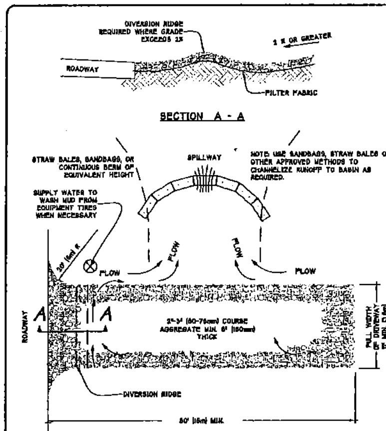
Drop Inlet Filter Fabric Sediment Barrier

INSPECTION AND MAINTENANCE:

FILTER FABRIC BARRIERS SHALL BE INSPECTED WEEKLY AFTER EACH SIGNIFICANT STORM - 1 INCH RAINFALL (25.4 MM) IN 24 HOUR PERIOD. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.

SEDIMENT SHOULD BE REMOVED WHEN IT REACHES 3" MAXIMUM HEIGHT. AT THAT TIME INSPECT THE FILTER MATERIAL FOR TEARS AND CLEAN OR REPLACE AS REQUIRED.

THE REMOVED SEDIMENT SHALL BE DISTRIBUTED EVENLY ACROSS AREAS ON-SITE, CONFORM WITH THE EXISTING GRADE AND BE REVEGETATED OR OTHERWISE STABILIZED PER EROSION CONTROL NOTES.



NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.

3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABLIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

Temporary Gravel Construction Access

CONSTRUCTION SPECIFICATIONS:

THE AGGREGATE SIZE FOR CONSTRUCTION OF THE PAD SHALL BE 2-3 INCH (50-75 MM) STONE. PLACE THE GRAVEL TO THE SPECIFIC GRADE AND DIMENSIONS SHOWN ON THE PLANS, AND SMOOTH IT.

THE THICKNESS OF THE PAD SHALL NOT BE LESS THAN 6 INCHES (152 MM). USE GEOTEXTILE FABRICS, IF NECESSARY, TO IMPROVE STABILITY OF THE FOUNDATION IN LOCATIONS SUBJECT TO SEEPAGE OR HIGH WATER TABLE.

THE WIDTH OF THE PAD SHALL NOT BE LESS THAN THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS AND IN ANY CASE SHALL NOT BE LESS THAN 12 FEET (3.6 M) WIDE.

THE LENGTH OF THE PAD SHALL BE AS REQUIRED, BUT NOT LESS THAN 50 FEET (15.2 M).

LOCATE CONSTRUCTION ENTRANCES AND EXITS TO LIMIT SEDIMENT LEAVING THE SITE AND TO PROVIDE FOR MAXIMUM UTILITY BY ALL CONSTRUCTION VEHICLES. AVOID ENTRANCES WHICH HAVE STEEP GRADES AND ENTRANCES AT CURVES IN PUBLIC ROADS.

THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR MAINTENANCE OF ANY MEASURES USED TO TRAP SEDIMENT.

ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY SHALL BE REMOVED IMMEDIATELY.

PROVIDE DRAINAGE TO CARRY WATER TO A SEDIMENT TRAP OR OTHER SUITABLE OUTLET.

WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. SEE SEDIMENT BASIN BMP.

ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE THROUGH USE OF SAND BAGS, GRAVEL, STRAW BALES, OR OTHER APPROVED METHODS.

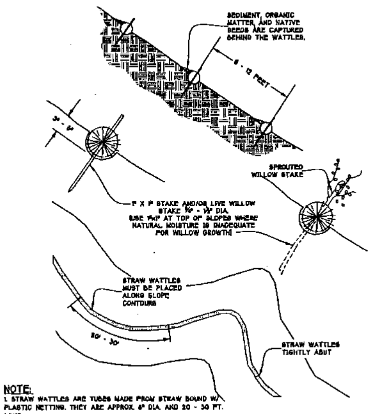
INSPECTION AND MAINTENANCE:

MAINTAIN THE GRAVEL PAD IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE CONSTRUCTION SITE.

REPLACE GRAVEL MATERIAL WHEN SURFACE VOIDS ARE VISIBLE.

AFTER EACH RAINFALL, INSPECT ANY STRUCTURE USED TO TRAP SEDIMENT AND CLEAN IT OUT AS NECESSARY.

IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED, WASHED, OR TRACKED ONTO PUBLIC ROADWAYS. REMOVE ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS WITHIN 24 HOURS.



NOTE:
1. STRAW WATTLES ARE TUBES MADE FROM STRAW BOUND W/ PLASTIC NETTING. THEY ARE APPROX. 8" DIA. AND 20 - 30 FT. LONG.

2. STRAW WATTLES TRAP SEDIMENT AND REDUCE SHEET & RILL EROSION BY REDUCING SLOPE GRADIENT, INCREASING INFILTRATION RATES AND BY PRODUCING A FAVORABLE ENVIRONMENT FOR PLANT ESTABLISHMENT.

3. STRAW WATTLE INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE WATTLE IN A TRENCH, 3" - 5" DEEP, DUG ON CONTOUR. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND WATTLE.

Straw Wattles

CONSTRUCTION SPECIFICATIONS

PREPARE SLOPE BEFORE THE WATTLING PROCEDURE IS STARTED. SHALLOW GULLIES SHOULD BE SMOOTHED AS WORK PROGRESSES.

DIG SMALL TRENCHES ACROSS SLOPE ON CONTOUR, TO PLACE WATTLES IN. THE TRENCH SHOULD BE DEEP ENOUGH TO ACCOMMODATE HALF THE THICKNESS OF THE WATTLE. WHEN THE SOIL IS LOOSE AND UNCOMPACTED, THE TRENCH SHOULD BE DEEP ENOUGH TO BURY THE WATTLE 2/3 OF ITS THICKNESS BECAUSE THE GROUND WILL SETTLE. IT IS CRITICAL THAT WATTLES ARE INSTALLED PERPENDICULAR TO WATER MOVEMENT, PARALLEL TO THE SLOPE CONTOUR.

START BUILDING TRENCHES AND INSTALL WATTLES FROM THE BOTTOM OF THE SLOPE AND WORK UP.

CONSTRUCT TRENCHES AT CONTOUR INTERVALS OF THREE TO EIGHT FEET APART DEPENDING ON STEEPNESS OF SLOPE. THE STEEPER THE SLOPE, THE CLOSER TOGETHER THE TRENCHES.

LAY THE WATTLE ALONG THE TRENCHES FITTING IT SNUGLY AGAINST THE SOIL. MAKE SURE NO GAPS EXIST BETWEEN THE SOIL AND THE STRAW WATTLE.

USE A STRAIGHT BAR TO DRIVE HOLES THROUGH THE WATTLE AND INTO THE SOIL FOR THE WILLOW OR WOODEN STAKES.

DRIVE THE STAKE THROUGH THE PREPARED HOLE INTO THE SOIL. LEAVE ONLY ONE OR TWO INCHES OF STAKE EXPOSED ABOVE WATTLE. IF USING WILLOW STAKES REFER TO USDA SOIL CONSERVATION SERVICE TECHNICAL GUIDE, BIOENGINEERING, FOR GUIDELINES TO PREPARING LIVE WILLOW MATERIAL.

INSTALL STAKES AT LEAST EVERY FOUR FEET APART THROUGH WATTLE. ADDITIONAL STAKES MAY BE DRIVEN ON THE DOWNSLOPE SIDE OF THE TRENCHES ON HIGHLY EROSIVE OR VERY STEEP SLOPES.

INSTALLATION AND MAINTENANCE

INSPECT THE STRAW WATTLE AND THE SLOPES AFTER SIGNIFICANT STORMS. MAKE SURE THE WATTLES ARE IN CONTACT WITH THE SOIL.

REPAIR ANY RILLS OR GULLIES PROMPTLY.

RESEED OR REPLANT VEGETATION IF NECESSARY UNTIL THE SLOPE IS STABILIZED.

SHEET EC1	APN: 026-011-06		
	DATE 4/20/11	DESIGN JON/RYAN	DRAWN RYAN
JOB NO. 11006			

Erosion Control Plan
Santa Cruz County PHF/PES
2202 Soquel Avenue, Santa Cruz, CA

IFLAND ENGINEERS
CIVIL ENGINEERING • LAND PLANNING • STRUCTURAL DESIGN
5200 SOQUEL AVE. SUITE 101
SANTA CRUZ, CA 95062
TEL (831) 426-5313
FAX (831) 426-1763
www.iflandengineers.com

BY | REVISION | DATE
APPROVED
For Plan Check Only
DAVID HENRICHSEN (RCE NO. 49167) DATE

REGISTERED PROFESSIONAL ENGINEER · DAVID HEINRICHSEN · NO. C49167 · CIVIL · STATE OF CALIFORNIA

ATTACHMENT 2

GEOTECHNICAL INVESTIGATION
FOR
PROPOSED PSYCHRIATIC HEALTH FACILITY
2220 - 2280 SOQUEL AVENUE
APN 026-011-06
SANTA CRUZ COUNTY, CALIFORNIA

FOR
IFLAND ENGINEERS
SANTA CRUZ, CALIFORNIA

BY
BAULDRY ENGINEERING, INC.
CONSULTING GEOTECHNICAL ENGINEERS
1106-SZ972-H54
APRIL 2011

ATTACHMENT 3

Bauldry Engineering, Inc.

CONSULTING GEOTECHNICAL ENGINEERS

718 SOQUEL AVENUE, SANTA CRUZ, CA 95062 (831) 457-1223 FAX (831) 457-1225

1106-SZ972-H54
April 28, 2011

Ifland Engineers, Inc.
Live Oak Business Park
5200 Soquel Avenue, #101
Santa Cruz, CA 95062

Subject: Geotechnical Investigation
Proposed Psychiatric Health Facility
2220 – 2280 Soquel Avenue
Santa Cruz County, California
APN 026-011-06

Dear Mr. Ifland,

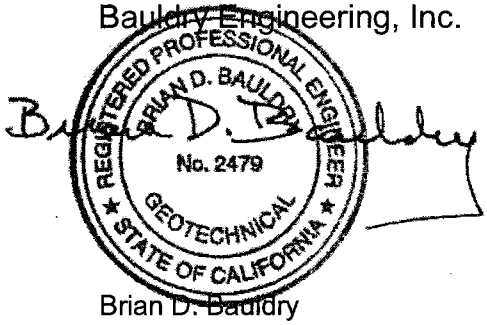
In accordance with your authorization, we have performed a geotechnical investigation for the proposed Santa Cruz County Psychiatric Health Facility located on Soquel Avenue in the Live Oak area of Santa Cruz County, California.

The accompanying report presents our conclusions and recommendations as well as the results of the geotechnical investigation on which they are based. The conclusions and recommendations presented in this report are contingent upon our review of the plans during the design phase of the project, and our observation and testing during the construction phase of the project.

If you have any questions concerning the data, conclusions, or recommendations presented in this report, please call our office.

Very truly yours,

Bauldry Engineering, Inc.



Brian D. Bauldry
Principal Engineer
G. E. 2479
Exp. 12/31/12

C:\PubData\Projects\2011\1106-SZ972-H54 - Psychriatic Health Facility - Ifland\1106 GI.doc
Copies: Ifland Engineers, Inc., Pacific Design Group

ATTACHMENT 3

TABLE OF CONTENTS

ATTACHMENT 3

GEOTECHNICAL INVESTIGATION

PURPOSE OF INVESTIGATION

The purpose of our investigation was to explore the subsurface conditions in the area of the proposed construction and based on our findings provide geotechnical engineering recommendations for the design and construction of the proposed Psychiatric Health Facility.

SCOPE OF SERVICES

This report describes the geotechnical investigation and presents results, including recommendations, for the proposed development. If the proposed design and construction differ significantly from that planned at the time this report was written, the conclusions and recommendations provided in this report are null and void unless the changes are reviewed by our firm, and the conclusions and recommendations presented in this report are modified, or verified, in writing.

Our scope of services for this project has consisted of:

1. Discussions with you and the Project Architects with Pacific Design Group.
2. Review of the following maps and reports:
   a. The Conceptual Site and Grading Plan
   b. The environmental report prepared by Weber, Hayes & Associates, titled "Phase II Soil and Groundwater Sampling" and dated May 12, 2010.
   c. The letter regarding underground tanks prepared by Richard Erlin Jr. and dated June 22, 1994.
   d. Geologic Map of Santa Cruz County, California, Brabb, 1989.
   e. Preliminary Landslide Deposits in Santa Cruz County, California, Cooper-Clark, 1975.
   f. Map Showing Quaternary Geology and Liquefaction Potential of Santa Cruz County, California, Dupré, 1975.
   g. Map Showing Faults and Their Potential Hazards in Santa Cruz County, California; Hall, Sarna-Wojcicki, Dupré, 1974.
   h. Santa Cruz County's online Geographic Information System "GISWEB Interactive Mapping Application" http://gis.co.santa-cruz.ca.us/internet/wwwgisweb/viewer.htm
3. The drilling and logging of 9 test borings.
4. A reconnaissance and stability assessment of the rock cut slopes.
5. Laboratory analysis of retrieved soil samples.
6. Engineering analysis of the field and laboratory results.
7. Preparation of this report documenting our investigation and presenting recommendations for the design of the project.

Our scope of services did not include any environmental assessment or investigation for the presence of hazardous or toxic materials in the soil, groundwater, or air; on, below, or proximal to the site.

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SITE DESCRIPTION

Location

The project site is located at the southwest corner of the intersection of Soquel Avenue and Capitola Road Extension in Santa Cruz County, California. The Assessor Parcel Number is 026-011-06.

Site Topography and Setting

The subject property currently consists of three relative flat building pads, which are currently occupied by three buildings. The three buildings are surrounding by paved parking areas and other site improvements. From east to west the existing buildings are an auto painting shop (2280 Soquel Avenue), a retail shop complex (2220 Soquel Avenue) and a veterinary clinic (2202 Soquel Avenue). The auto painting shop's building pad is higher than the retail complex and veterinary clinic building pads and is separated from the lower building pads by a small retaining wall. Un-retained cut slopes currently exist along or in close proximity to the eastern and southern property boundaries.

Proposed Development

The proposed project consists of the demolition of the auto painting shop and the retail complex and the construction of a new Psychiatric Health Facility in the general area that these two buildings currently occupy. It is our understanding that the veterinary clinic in the western section of the property is to remain and is not part of the proposed project.

As currently proposed, the new Psychiatric Health Facility will in general be a one-story facility with a footprint on the order of 12,000 to 15,000 ft^2. It is our understanding that the new facility will include a partial lower floor parking garage and may include a few administrative components on a second story. Currently the lower floor parking garage is planned to occupy the current retail complex building pad. The existing retaining wall will be reconstructed east of its current location to allow for a larger lower floor for the parking garage. The existing parking lot will be improved and rearranged.

Earth Materials

The southeastern sector of the subject property is mapped on the USGS Geologic Map of Santa Cruz County (Brabb 1989) as being underlain by the Purisima Formation (Tp; Pliocene and Upper Miocene), which typically consists of yellowish-gray siltstone with interbeds of fine grained sandstone. The western and northern sectors are mapped as being underlain by Alluvial Deposits (Qal; Holocene), which typically consist of unconsolidated heterogeneous moderately sorted silt and sand containing discontinuous lenses of clay and silty clay. The Alluvial Deposits may locally include large amounts of gravel and may include younger and older flood plain deposits consisting of unconsolidated fine grained sand, silt, and clay.

Purisima Formation sandstone is observed along the eastern and southern cut-slopes and was encountered in all our test borings. Sandstone was encountered at the ground surface in our borings drilled east of the retail complex and near the base of the southern cut slope. Sandstone was encountered in our borings west of the retail complex at depths ranging from 2 to 14½ below ground surface. Our borings indicate that the depth to sandstone east of the retail complex increases from south to north and east to west. The sandstone appeared to be directly overlain in one boring (Boring B-5) by a shallow layer of native soil. The native soil and the sandstone in the other borings east of the retail complex were overlain by undocumented fill. The fill contained abundant sandstone clasts and appears to be the spoils from the cuts across the property that created the current building pads. It should be anticipated that the depth to bedrock and the thickness of the fill will continue to increase as you move westward across the site.

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Although alluvial deposits were not encountered in our borings, it is feasible that the soil in western sector of the existing parking lot and beneath the veterinary clinic building pad will be comprised of fill underlain by alluvium.

Our field and laboratory testing indicates that the existing fill sand the sandstone possess low to very low expansive properties.

Groundwater

Groundwater was not encountered in any of our borings drilled in February 2011. It should be noted that the borings were open only for the duration of drilling, which may not have been sufficient time for a stabilized water table to develop. The groundwater conditions encountered during our drilling reflect the conditions at the specific locations and times drilled. It must be anticipated that the perched and regional groundwater tables may vary with location and will fluctuate with variations in rainfall, runoff, irrigation and other changes to the conditions existing at the time our measurements were made.

The environmental report prepared by Weber, Hayes & Associates, titled "Phase II Soil and Groundwater Sampling" states that in March 2010 groundwater was encountered at a depth of 14 feet below ground surface near the northwest corner of the veterinary clinic and at a depth of 10½ feet below ground surface near the northwest corner of the paint shop. Please refer to the Weber, Hayes & Associates report for details.

At the time of our site reconnaissance a small seep was observed in the southern cut slope behind the auto paint shop.

GEOTECHNICAL HAZARDS

Seismic Shaking and CBC Design Parameters

The project should be designed assuming that significant seismic shaking will occur during the lifetime of the project. Generally, shaking will be more intense the closer the site is to an earthquake epicenter, however, seismic shaking can be intensified by local topography and soil conditions.

Mapped active or potentially active faults which may significantly affect the site are listed in the following table. The fault distances are approximate and based on a review of the following documents:

- Geologic Map of Santa Cruz County, California, Brabb, 1989.
- Map Showing Faults and Their Potential Hazards in Santa Cruz County, California; Hall, Sarna-Wojcicki, Dupré, 1974.

Fault	Distance (miles)
San Andreas	9½
San Gregorio	11¼
Zayante	6½
Monterey Bay –Tularcitos	5¾

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The following peak ground accelerations (PGA) were obtained for the project site from the USGS Seismic Hazards Program online probabilistic assessment tool.

Probability of Exceedance	PGA
2% in 50 years	0.66g
10% in 50 years	0.42g

Structures built in accordance with the latest edition of the California Building Code may be damaged during a large magnitude earthquake but should not collapse. We recommend the project be designed using the following seismic design parameters.

2010 CBC Seismic Design Parameters

Proposed Building Location*	Existing Cut Pad – East of Geotechnical Boring Numbers 7 - 9	
Site Class	C – Soft Rock	
Mapped Spectral Response Accelerations	S_S = 1.500g	(T = 0.2 sec.)
	S_1 = 0.600g	(T = 1.0 sec.)
Site Coefficients	F_a = 1.0	(T = 0.2 sec.)
	F_v = 1.3	(T = 1.0 sec.)
Adjusted Maximum Considered Earthquake Spectral Response Acceleration Parameters	S_{MS} = 1.500g	(T = 0.2 sec.)
	S_{M1} = 0.780g	(T = 1.0 sec.)
Design Spectral Response Acceleration Parameters	S_{DS} = 1.000g	(T = 0.2 sec.)
	S_{D1} = 0.520g	(T = 1.0 sec.)

Design parameters were obtained from the Ground Motion Parameter Calculator provided by the USGS website: http://earthquake.usgs.gov/research/hazmaps/design/

*Supplemental seismic design criteria will be required should the proposed building be located west of geotechnical borings 7 - 9. It should be noted that west of geotechnical borings 7 – 9 our investigation indicates that the depth to rock descends rather quickly relative to the ground surface and the site may transition to alluvium, which is potentially liquefiable. Please refer to the site plan in Appendix A for boring locations.

Landsliding and Rock Slope Stability

Slope Stability of Cut Slopes

The project site is bordered on the east and south sides by un-retained cut slopes. The earth material exposed along the face of the cut slopes consists of sandstone bedrock overlain by a veneer of soil. The stability of rock slopes is typically governed by discontinuities in the rock including bedding planes, fracture surfaces, joints and fault planes. Groundwater can reduce the stability of rock slopes by producing hydrostatic pressure and a reduction of shear strength along the discontinuities.

Southern Cut Slope

The slope along the southern side of the property generally descends from the property line at a gradient of roughly 1¼:1 to 2:1 (H:V) before transitioning to a steep to near vertical un-retained cut along the base of the slope. The upper slope is covered by numerous mature oak, acacia and other trees with a brush and grass understory. The near vertical cut ranges in height from roughly 7 to 15 feet.

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The rock exposed along the face of the cut was fine-grained sandstone. The rock was generally unfractured (fracture spacing ≥6 feet) to moderately fractured (fracture spacing between 8 inches and 2 feet) with some localized areas of more intense fracturing. A well-developed primary joint set was observed to be steeply and adversely dipping out of the slope and lying subparallel to the face of the cut. The sandstone just below the surface was moderately weathered. A thin veneer of highly weathered rock was observed over much of the cut face. This veneer indicates that a significant portion of original cut may have weathered in-place and has not failed. The weathered rock at the face of the cut was very soft. The rock below the surface was soft to moderately hard. The joint surfaces were rough. The trees along the top of the cut have generated a significant amount of root wedging. The root wedging appears to have and to be dislodging rock blocks from the face of the cut.

Localized areas of the southern cut slope have periodically failed with small wedges and blocks of rock accumulating at the base of the slope. Our site reconnaissance indicates that in the past some sizable blocks have dislodged and fallen from the face of the cut. Scars on the face of the slope indicate that past wedge and block failures have extended 12 to 18 inches back from the face of the slope face.

It is our opinion that predominately small block failures will occur during the lifetime of the project, however, the potential for a large block failure is present especially during seismic shaking. We observed a large block of rock around the middle of the southern cut slope, which we consider the "worst case" potential for failure with respect to size and orientation. The slope face in this area is generally 80 degrees from horizontal, and the large block has a primary joint occurrence that has a strike relatively parallel with the slope face and dips at approximately 56 degrees out at the toe of the slope. Should this "worst case" block fail as one piece it would be a trapezoidal block approximately 20 feet long, 13 feet high and 4 feet thick.

Based on the history of failure, the height of the slope and the characteristics of the rock exposed along the face of the cut, it is our opinion that there are three primary options for mitigating the hazards associated with potential failure along the southern cut slope. These options can be used alone or in conjunction with each other.

Option 1 is to retain the slope. This option should effectively stabilize the slope.

Option 2 is to scale all loose rock from the face of the slope. This option should reduce the potential for large block failure but some small blocks could episodically fall particularly as the scaled slope weathers and root wedging progresses. It should be anticipated that scaling will lay the top of the slope back 4 to 6 feet, or more, and require the removal of trees along the existing edge of slope. Scaling may need to be performed episodically as root wedging and weathering progress. It should be anticipated that the shallow soils overlying the bedrock will continue to erode, as they are now, and be deposited at the toe of the slope. Periodic inspection and removal of rock and soil debris should be anticipated during the life of the project.

Option 3 is to construct a debris wall designed to resist the impact force of falling rocks and with a large enough catchment area to contain the debris. The garage walls may be designed as a debris wall. Our analysis of the "worst case" condition using a 20 foot long trapezoidal block that is 4 feet thick and 13 feet high resulted in a 6 foot high debris wall located 5 feet from the toe of the slope. We recommend the "worst case" wall be designed to resist an impact force of 350 psf with a uniform distribution along the length of the wall. Other wall heights and setbacks are feasible should scaling be performed and will depend on the results of the scaling operation. It should be noted that if the larger potential block failures are scaled from the slope that both the impact forces and the catchment area of the wall can be reduced. Periodic inspection and removal of debris should be anticipated during the life of the project. All rock and soil debris that accumulates behind the wall will need to be removed in a timely manner.

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Eastern Cut Slope

The cut slope along the eastern boundary of the subject property has a gradient of roughly 1½:1 (H:V). Based on our observations, the eastern cut slope is performing adequately. Some sloughing of the surface soil appears to occur episodically. This sloughing is considered an erosion issue rather than a slope stability issue. It should be anticipated that periodic maintenance will be required to remove soil that erodes and migrates to the base of the slope.

Liquefaction

The central, northern and western portions of the site have been mapped on the Santa Cruz County's online Geographic Information System as having a high potential for liquefaction. The southeastern portion of the site is not mapped as liquefiable.

Liquefaction tends to occur typically in soils composed of loose sands and non-cohesive silts of restricted permeability. In order for liquefaction to occur there must be the proper soil type, soil saturation, and cyclic accelerations of sufficient magnitude to progressively increase the water pressures within the soil mass. Non-cohesive soil shear strength is developed by the point to point contact of the soil grains. As the water pressures increase in the void spaces surrounding the soil grains, the soil particles become supported more by the water than the point to point contact. When the water pressures increase sufficiently, the soil grains begin to lose contact with each other, resulting in the loss of shear strength and continuous deformation of the soil where the soil appears to liquefy.

The portion of the property where the Psychiatric Health Facility building is currently proposed is either shallowly or directly underlain by bedrock. Groundwater was not encountered in our borings drilled adjacent to or within the proposed building footprint. Our investigation indicates that the area west of geotechnical borings 7 – 9, where the new Psychiatric Health Facility building is currently proposed, is not liquefiable.

The proposed parking area west of the proposed Psychiatric Health Facility building is underlain by fill that overlies native soils. The native soils overlie bedrock. The native soils are mapped as alluvium. It should be anticipated that the alluvial soils located west of geotechnical borings 7 – 9 may be susceptible to liquefaction. Towards the southern cut slope the proposed western parking area transitions to bedrock, a non-liquefiable material.

Loose Undocumented Fill

Our borings indicate that the existing undocumented fill located west of geotechnical borings 7 through 9 is generally loose to medium dense. The asphalt pavement that overlies the fill is significantly distressed. Close spaced alligator cracking and rutting in the travelled lanes was observed. Our observations indicate that the fill is compressible and has settled. It should be anticipated that the existing fill will continue to settle especially if new loads are applied.

PRELIMINARY CORROSION TESTING

Corrosivity Test Results

A sample of the bedrock and the existing fill were collected in order to provide a preliminary corrosion evaluation for the proposed project. The samples were tested for concentrations of chloride (Cl) and sulfate (SO_4), pH values and minimum resistivity. The analytical results are summarized below. The laboratory test results are included in Appendix B of this report.

Summary of Corrosivity Results

Location	Boring B-2	Boring B-5
Depth of Sample	1 to 1½ feet	2 to 2½ feet
Soil Type	SANDSTONE	Silty SAND with gravel (existing fill)
pH Value (CA DOT #643)	4.0	6.8
Minimum Resistivity (CA DOT #643)	700 ohms-cm	510 ohms-cm
Chloride (CA DOT #422)	97 ppm	74 ppm
Sulfate (CA DOT #417)	1865 ppm	1385 ppm

Caltrans considers a site to be corrosive if one or more of the following conditions exist:

- Chloride concentration is 500 ppm or greater
- Sulfate concentration is 2000 ppm or greater
- The pH is 5.5 or less
- Minimum resistivity is less than 1500 ohms-cm

The samples tested indicate that the soil and bedrock materials at the site are considered corrosive under Caltrans guidelines due to low minimum resistivity (both samples) and low pH (sample B-2).

Given these preliminary test results, the prior use of the site as an auto paint and body shop, which stored solvents and other chemical and the prior use of the site as a gasoline station, we recommend a corrosion specialist be contacted to provide a detailed corrosion analysis.

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CONCLUSIONS AND RECOMMENDATIONS

PRIMARY GEOTECHNICAL ISSUES

1. Site Viability

The results of our investigation indicate that from a Geotechnical Engineering standpoint the project is viable and the property may be developed as proposed. It is our opinion that provided our recommendations are followed; the proposed Psychiatric Health Facility can be designed and constructed to a level of seismic and non-seismic risk and performance as defined in Appendix C for a structure whose use after a disaster would be either critically needed or particularly convenient. The other structures associated with the project can be designed and constructed to an "ordinary" level of seismic risk and performance as defined below:

> "**Ordinary Risk**": Resist minor earthquakes without damage: resist moderate earthquakes without structural damage, but with some non-structural damage: resist major earthquakes of the intensity or severity of the strongest experienced in California without collapse, but with some structural damage as well as non-structural damage. In most structures it is expected that structural damage, even in a major earthquake, could be limited to reparable damage. (Source: Meeting the Earthquake Challenge, Joint Committee on Seismic Safety of the California Legislature, January 1974).

If the property owner desires a higher level of performance for this project, supplemental design and construction recommendations will be required.

2. Primary Geotechnical Constraints

Based on our field and laboratory investigations, it is our opinion that the primary geotechnical issues associated with the design and construction of the Psychiatric Health Facility at the subject site are the following:

a. **Loose Un-documented Fill:** Our borings indicate that loose undocumented fill is located west of geotechnical borings 7 – 9, which were drilled just west of the existing retail shop complex (2220 Soquel Avenue). The fill appears to include spoils from the previous grading across the property that created the current building pads and the existing cut slopes. The fill in borings 7 through 9 ranged from 3 to 6 feet in depth. As indicated by boring 5, with a fill depth of 13 feet, and the presence of the Arana Gulch drainage channel to the north and west, it should be anticipated that the depth to bedrock and the thickness off fill increases as you move north and west across the property.

   The asphalt pavement that overlies the fill is significantly distressed. Extensive alligator cracking and rutting in the travelled lanes was observed. Our test borings and site observations indicate that the fill is compressible and has settled. It should be anticipated that the existing fill will continue to settle especially if new loads are applied.

b. **Differential Bearing Conditions and Settlement:** The settlement potential and bearing capacities of the near surface earth materials vary significantly across the site. Sandstone directly or shallowly underlies the paint and body shop and the retail shop building sites while loose undocumented fill underlies the parking lot west of the retail shop. The sandstone has a significantly higher bearing capacity and a significantly lower settlement potential than the existing fill. Differential bearing conditions and ground settlement can result in unacceptable damage to structures

If the new Psychiatric Health Facility building is located, as currently proposed, within or east of the existing retail shop complex building footprint, the new structure can be founded on shallow spread footings that bear directly upon competent sandstone. If the proposed location is shifted to the west of the retail shop complex, the new building will be partially underlain by sandstone and partially underlain by loose fill. This condition could necessitate a pier and grade beam foundation in conjunction with a pier supported mat, which is a more costly foundation system. Based on the currently proposed siting, we have provided recommendations for a shallow foundation system in this report. If the proposed Psychiatric Health Facility is shifted to the west of the retail shop, supplemental recommendations will be required.

c. **Un-retained Cut Slopes:** The project site is bordered on the east and south sides by un-retained cut slopes. The earth material exposed along the face of the cut slopes consists of sandstone bedrock overlain by a veneer of soil. Some sloughing of the surface soil appears to occur episodically along the eastern slope. This sloughing is considered an erosion issue rather than a slope stability issue.

   Localized areas of the southern cut slope have periodically failed with small wedges and blocks of rock accumulating at the base of the slope. Our site reconnaissance indicates that in the past some sizable blocks have dislodged and fallen from the face of the cut. it is our opinion that there are three primary options for mitigating the hazards associated with potential failure along the southern cut slope, scaling, retaining and/or constructing a debris wall. These options can be used alone or in conjunction with each other.

   It should be anticipated that periodic maintenance will be required to remove soil that erodes and migrates to the base of the slopes.

d. **Potential Corrosive Earth Materials:** Our preliminary testing for corrosion potential indicates that the soil and bedrock materials at the site are considered corrosive under Caltrans guidelines due to low minimum resistivity and low pH. Given these preliminary test results, the prior use of the site as an auto paint and body shop, which stored solvents and other chemical and the prior use of the site as a gasoline station, we recommend a corrosion specialist be contacted to provide a detailed corrosion analysis.

e. **Storm Water Percolation and Infiltration:** Because the site is either directly underlain by sandstone bedrock or a deep loose undocumented fill that is susceptible to hydrocompression settlement, we recommend that percolation pits or infiltration trenches not be used for the disposal of surface water at this site.

POST REPORT SERVICES

3. Plan Review

Grading, foundation, retaining wall and drainage plans should be reviewed by the Geotechnical Engineer during their preparation and prior to contract bidding to insure that the recommendations of this report have been included and to provide additional recommendations, if needed.

4. Construction Observation and Testing

Field observation and testing must be provided during construction by a representative of Bauldry Engineering, Inc. to enable them to form an opinion regarding the adequacy of the site preparation, the acceptability of fill materials, and the extent to which the foundation, retaining wall, drainage, and earthwork construction, including the degree of compaction, comply with the specification requirements.

Any work related to foundation, retaining wall, drainage, or earthwork construction, or grading performed without the full knowledge of and not under the direct observation of Bauldry Engineering, Inc., the Geotechnical Engineer, will render the recommendations of this report null and void.

5. Notification and Preconstruction Meeting

The Geotechnical Engineer should be notified at least four (4) working days prior to any site clearing and grading operations on the property in order to observe the stripping and disposal of unsuitable materials, and to coordinate this work with the grading contractor. During this period, a pre-construction conference should be held on the site, with at least the owner's representative, the general and grading contractors and one of our engineers present. At this time, the project specifications and the testing and construction observation requirements will be outlined and discussed.

EARTHWORK AND GRADING

6. Demolition

The initial preparation of the site will consist of the removal of the existing structures, foundations, abandoned underground utilities, concrete slabs, all subsurface obstructions, trees, and root balls, as necessary. All debris must be completely removed. Septic tanks and leach lines, if found, must be completely removed. Soils contaminated with deleterious material should be removed from the site. The extent of this soil removal will be designated by the Geotechnical Engineer in the field.

All voids, including those created by the demolition of the structures, foundations, subsurface obstructions, utilities, septic tanks, leach lines, or trees and root balls must be backfilled with properly compacted non-expansive native soils that are free of organic and other deleterious materials or with approved import fill.

NOTE: Any abandoned wells encountered shall be capped in accordance with the requirements of the County Health Department. The strength of the cap shall be equal to the adjacent soil and shall not be located within 5 feet of a structural footing.

7. Stripping

Following the initial site preparation and demolition, surface vegetation and organically contaminated topsoil should be stripped from the area to be graded. This organic rich soil may be stockpiled for future landscaping. The required depth of stripping will vary with the time of year and must be based upon visual observations of the Geotechnical Engineer. It is anticipated that the depth of stripping may be 2 to 4 inches.

8. Subgrade Preparation

Building Pad: Following the demolition and backfilling of voids, all native soil and fill exposed beneath or within 5 feet of the building footprint should be removed down to sandstone. If the new Psychiatric Health Facility building is constructed within or east of the existing retail shop building footprint, as currently proposed, we anticipate that sandstone will be encountered at or slightly below design grades.

If necessary to establish design grades, the excavated soil may be replaced as an engineered fill. To mitigate the potential for differential settlement and bearing conditions, all new fill placed directly beneath the building footprint should be compacted to 95% of its maximum dry density.

Pavement areas: The excavation and recompaction in the roadway and parking areas will depend on location and depth to bedrock.

Following the stripping, pavement areas should be excavated to the design grades. Where native and existing fill soils remain, these materials should be removed down to sandstone or a depth of 3 feet below design subgrade, whichever is shallower. Wherever feasible, soil removal and recompaction should extend a minimum of 3 feet beyond the edge of pavement.

The earth materials exposed at the base of the excavation should be scarified, moisture conditioned and compacted. A layer of Tensar TriAx TX160 geogrid, or other approved geogrid, should be placed over the compacted base of the excavation. The excavated soil and aggregate base material may then be placed in thin lifts. There should be a minimum of 24 inches of engineered fill (recompacted subgrade soil) beneath the Class 2 aggregate base section.

The intent of the above subgrade preparation recommendation is to mitigate the potential for significant pavement distress and to reduce future maintenance and repair costs to a tolerable level. Given the depth of the undocumented fill, some settlement could still occur beneath the pavement areas. The geogrid and recompacted subgrade, as recommended above, should mitigate but not eliminate the potential for distress to the pavement due to fill settlement and the potential that repair and maintenance costs will exceed typical routine costs. A lesser over-excavation and thinner recompacted subgrade section would increase the potential for significant pavement distress and increase future maintenance and repair costs. A deeper subgrade over-excavation and thicker recompacted subgrade section would further decrease the potential for significant pavement distress and future maintenance and repair costs.

9. Compaction Requirements

The minimum compaction requirements are outlined in the table below:

Minimum Compaction Requirements

Percent of Maximum Dry Density	Location
95%	• All fill placed directly beneath the building footprint • All aggregate base and subbase in pavement areas • The upper 8 inches of subgrade in pavement areas • All utility trench backfill in pavement areas
90%	All remaining native soil and fill material
The maximum dry density will be obtained from a laboratory compaction curve run in accordance with ASTM Procedure #D1557. This test will also establish the optimum moisture content of the material. Field density testing will be in accordance with ASTM Test #D2922.	

10. Moisture Conditioning

The moisture conditioning procedure should result in soil with a relatively uniform moisture content of 1 to 3 percent over optimum at the time of compaction. If the soil is dry water may need to be added. If the soil is wet, it will need to be dried back. The native soil may require a diligent and active drying and/or mixing operation to reduce or raise the moisture content to the levels required to obtain adequate compaction.

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11. Engineered Fill Material

Native soil and/or imported fill may be used as engineered fill for the project as indicated below.

Re-use of the native soil will require the following:

a. Segregation of any expansive soil encountered during the excavation operation. All excavated expansive soil should be removed from the construction area.
b. Removal of organics, deleterious material, and cobbles larger than 3 inches.
c. Thorough mixing and moisture conditioning of approved native soil.

All imported engineered fill material should meet the criteria outlined below:

a. Granular, well graded with sufficient binder to allow utility trenches to stand open.
b. Minimum Sand Equivalent of 20 and Resistance "R" Value of 30.
c. Free of deleterious material, organics and rocks larger than 2 inches in size.
d. Non-expansive with a Plasticity Index below 12.

Samples of any proposed imported fill planned for use on this project should be submitted to the Geotechnical Engineer for appropriate testing and approval not less than 4 working days before the anticipated jobsite delivery.

12. Erosion Control

The surface soils are classified as moderately to highly erodable. All finished and disturbed ground surfaces, including all cut and fill slopes, should be prepared and maintained to reduce erosion. The protection of the slopes should be installed as soon as practicable so that sufficient growth will be established prior to inclement weather conditions. It is vital that no slope be left standing through a winter season without the erosion control measures having been provided. The ground cover should be continually maintained to minimize surface erosion.

CUT AND FILL SLOPES

13. Cut and Fill Slope Height and Gradient

Cut and fill slopes shall not exceed a 2:1 (horizontal to vertical) gradient and a 5 foot vertical height unless specifically reviewed by the Geotechnical Engineer. All fill slopes should be constructed with engineered fill meeting the minimum density requirements of this report.

14. Fill Slope Keyways

Fill slopes should be keyed into the native slopes with an 8 foot wide base keyway that is sloped negatively at least 2% into the bank. The depth of the keyways will vary, depending on the materials encountered. It is anticipated that the depth of the keyways may be 2 to 4 feet, but at all locations shall be at least 2 feet into firm material. Subsequent keys may be required as the fill section progress upslope. The Geotechnical Engineer will designate keys in the field. See the Keyway Detail in Appendix A for general details.

15. Subsurface Drainage

Our recommended cut and fill slope gradients assume that the soil moisture is a result of precipitation penetrating the slope face, and not a result of subsurface seeps or springs, which can destabilize slopes with hydrostatic pressure. All groundwater seeps encountered during construction should be adequately drained to maintain stable slopes at the recommended gradients. Drainage facilities may include subdrains, gravel blankets, rock-filled surface trenches or horizontally drains. The Geotechnical Engineer will determine the drainage facilities required during the grading operations.

16. Cut and Fill Slope Setbacks

The tops and toes of all un-retained cut and fill slopes should be set back in accordance with County guidelines, unless an alternative is approved by our office.

FOUNDATIONS – SPREAD FOOTINGS – BEDROCK BUILDING PAD

17. General Design and Construction Recommendations

It is our opinion that reinforced concrete spread footings are an appropriate system to support the proposed new Psychiatric Health Facility building, provided the building is located as currently proposed east of geotechnical borings 7 - 9. Supplemental recommendations will be required if the building is located at or west of geotechnical borings 7 - 9. Please refer to the site plan in Appendix A for the boring locations.

The footings should extend down to and be directly underlain by firm bedrock. There is a potential that this may require the footings in the northwest corner of the building to be deepened.

Foundations should be setback from the top and toes of slopes in accordance with County guidelines, unless an alternative is approved by the County and our office.

The footings should contain steel reinforcement as determined by the Project Structural Engineer in accordance with applicable standards.

Footing excavations must be observed by a representative of Bauldry Engineering, Inc. before steel is placed and concrete is poured to insure bedding into proper material.

18. Minimum Footing Dimensions

We recommend that footing widths be based on allowable bearing values but not less than the minimum requirements shown in the table below.

Minimum Footing Dimensions

Structure Type	Footing Width	Footing Depth
1 and 2 Story Structure	15 inches	16 inches
3 Story Structure	18 inches	24 inches

Footing embedment depths are measured from the lowest undisturbed interior or exterior ground surface adjacent to the footing, such as the ground surface at the base of a crawl space.

19. Allowable Bearing Capacity

Footings constructed to the given criteria may be designed for the following allowable bearing capacities:

- 2,000 psf for Dead plus Live Load
- a 1/3rd increase for Seismic or Wind Load

The maximum anticipated total settlement for a foundation designed to the above criteria is ½ inch. The maximum anticipated differential settlement is ¼ inch.

SLAB-ON-GRADE FLOOR SYSTEMS

20. General

Concrete slab-on-grade floors may be used for ground level construction on sound bedrock or engineered fill. The slab-on-grade floors should be constructed in accordance with the recommendations provided in the EARTHWORK AND GRADING section of this report.

We recommend that slabs be structurally integrated with the footings. Slab thickness, reinforcement, doweling, and dummy joints or similar type crack control devices should be determined by the Project Structural Engineer.

21. Moisture Control – Capillary Break

All concrete slabs-on-grade should be underlain by a minimum 4 inch thick capillary break of ¾ inch clean crushed rock. Neither Class 2 baserock nor sand should be used as the capillary break material.

Where floor coverings are anticipated or vapor transmission may be a problem, a vapor retarder should be placed between the capillary break and the floor slab in order to reduce the potential for moisture to condensate under the floor coverings. We recommend using a robust vapor retarder such as Stego Wrap Class A Vapor Retarder, or an equivalent system, that has been designed to retard the passage of moisture from the ground into concrete slab-on-grade floors. Proprietary vapor retarders and moisture control systems must be designed and installed in accordance with the manufacturer's specifications.

NOTE: We have provided generalized recommendations associated with standard construction practices for the reduction of moisture transmission through concrete slab-on-grade floors. Bauldry Engineering, Inc. is not a moisture-proofing specialist. A waterproofing or moisture proofing specialist should be consulted for project specific moisture protection recommendations.

22. Subgrade Moisture Conditioning

It is important that the subgrade soils be adequately moisture conditioned prior to concrete placement. Requirements for pre-wetting the subgrade soil will depend on soil type and seasonal moisture conditions, and will be determined by the Geotechnical Engineer at the time of construction.

RETAINING WALLS AND LATERAL PRESSURES

23. Retaining Walls General

The lower level parking garage is proposed to be constructed with the back wall designed as a retaining wall. Conventional retaining walls may also be constructed along the existing cut slopes. The following recommendations should be incorporated into the design of walls that retain sandstone cuts.

24. Retaining Wall Foundations

Spread Footings: Retaining walls may be founded using a spread footing foundation. All footings should be embedded such that the base of the footing is embedded a minimum of 12 inches into firm sandstone. Retaining wall footings constructed in accordance with the preceding conditions may be designed for the following allowable bearing capacities. Should the footing sizes vary significantly from those provided below, supplemental design criteria should be provided.

Retaining Wall Footings

Footing Width	Embedment Depth	Bearing Capacity
3 feet	12 inches	2,300 psf
≥4 feet	12 inches	2,700 psf

Design for a "coefficient of friction" of 0.40 between the base of footing and the sandstone.

ATTACHMENT 3

Piers: Conventional retaining walls may be founded on piers designed in accordance with the following criteria:

a. Minimum pier embedment will depend upon a lateral force analysis performed by your structural engineer.

b. Minimum pier size should be 18 inches in diameter and all pier holes must be free of loose material on the bottom.

c. The allowable end-bearing capacity for a 5 foot pier is 6,000 psf, with a 1/3rd increase for wind or seismic loading. The allowable end-bearing capacity may be increased by 1,000 psf per foot of depth below 5 feet to a maximum of 10,000 psf. If an allowable end-bearing capacity greater than 10,000 psf is required, supplemental recommendations will be provided.

d. All pier construction must be observed by a representative of Bauldry Engineering, Inc. Any piers constructed without the full knowledge and continuous observation of Bauldry Engineering, Inc. will render the recommendations of this report invalid.

The piers should contain steel reinforcement as determined by the Project Structural Engineer.

25. Soldier Pile Retaining Walls

Soldier pile retaining walls should be constructed with timber or concrete lagging spanning between steel H beams founded in cast-in-place concrete piers. Timber lagging, including field cuts, must be preserved in accordance with CALTRANS Specifications, Section 58 and AWPA Standard M4.

26. Lateral Pressures

Retaining walls should be fully drained and designed using the following criteria:

a. When walls are free to yield an amount sufficient to develop the active earth pressure condition (about ½% of height), design for active earth pressures as listed below. When walls are restrained at the top design for at-rest pressures.

Slope of Backfill	Active Earth Pressure	At-Rest Earth Pressure
Horizontal	38 psf/ft of depth	60 psf/ft of depth
2:1 (H:V)	56 psf/ft of depth	80 psf/ft of depth

Should the slope behind the retaining walls be other than those outlined above, the active earth or at-rest pressures for the particular slope angle may be obtained by interpolation.

b. For spread footings use a resisting passive earth pressure against the footing of 350 psf/ft of depth. Neglect passive pressure in the top 12 inches of footing embedment.

e. Passive pressures of 400 psf/ft of depth can be developed, acting over a plane 2 times the pier diameter. Neglect passive pressure in the top 2 feet of the pier.

c. For live or dead loads which transmit a force to the wall refer to the Surcharge Pressure Diagram in Appendix A.

ATTACHMENT 3

d. Seismic forces, where required, should be applied to retaining walls as determined by the project structural engineer in accordance with applicable codes and standards, and SEAOC guidelines. The lateral seismic forces listed in the following table are based on the Mononobe - Okabe pseudostatic method of analysis and when appropriate should be used in conjunction with the active earth pressures. The resultant seismic force on the wall acts at a point ⅓H up from the base of the wall where H is the height of the retained soil in feet. Supplemental recommendations will be provided if the structural engineer requires an alternative method of analysis.

Restraint Condition	Resultant Seismic Force (lbs.)
Free to Yield	5 H^2
Non-Yielding	11 H^2

27. Retaining Wall Drains

The above criteria are based on fully drained conditions. We recommend the retaining wall be constructed with a drain meeting the following criteria:

a. The drain should be constructed using either permeable material meeting the State of California Standard Specification Section 68-1.025, Class 1, Type A or ¾ inch open-graded crushed rock.

b. The drainage material should be a minimum of 12 inches in width and should extend to within 12 inches of the ground surface. Compacted native soil should be placed over the drain to the ground surface.

c. If permeable material is selected, Mirafi 140 filter fabric, or equivalent, should be placed horizontally over the top of the permeable material. If ¾ inch open-graded crushed rock is selected, Mirafi 180 filter fabric, or equivalent, should be placed along all sides of the drain where rock is in contact with soil.

d. A 4-inch diameter rigid perforated plastic or metal drainpipe should be placed 3 inches above the base of the permeable material.

e. The drain line and should be discharged to an approved location away from the footing area.

28. Surface Drainage Above Retaining Walls

Retaining walls should be constructed with measures that prevent surface drainage from flowing over the top of the walls. A lined "V"-ditch should be constructed adjacent to and along the top of walls, where necessary, to collect surface runoff from slopes above a wall and prevent the runoff from flowing over the top of the wall. "V"-ditches should transport the collected water to a solid pipe that discharges at an approved location away from the wall and other structures. Cobbles placed over Mirafi 140 filter fabric, or equivalent, may be used to line "V" ditches.

29. Compaction of Backfill

The area behind the wall and permeable material should be compacted with approved soil to a minimum relative dry density of 90%

ATTACHMENT 3

PACIFIC DESIGN GROUP
Architecture • Interiors • Planning

April 15, 2011

Dear Alice:

Our mechanical engineer, Sean Pourvakil, with LP Consulting Engineers, Inc., has calculated the flow rates for the existing retail building and Autorella and the flow rates for the new BHU at 2202 Soquel Ave.

The existing flow rates for the existing retail and Autorella are:
Demand: 74 GPM
Consumption: 353 GPD

The flow rates for the new BHU, based on the current plans are projected to be:
Demand: 90 GPM
Consumption: 2085 GPD

Please let me know if you have any questions.

Sincerely,

Don Mear,
Sr. Project Architect

18071 Irvine Blvd., Tustin, CA 92780 Tel: (714) 832-5100 Fax: (714) 832-1999 wwww.pdg-arch.com

ATTACHMENT 4

ARBOR ART
Tree Service

AN INITIAL TREE ASSESSMENT AND INVENTORY REGARDING THE SITE OF THE PROPOSED BEHAVIORAL HEALTH UNIT ON THE CORNER OF SOQUEL AVENUE AND CAPITOLA ROAD EXTENTION SANTA CRUZ

SITE INSPECTION ON APRIL 20, 2011
BY: NIGEL BELTON
WCISA CERTIFIED ARBORIST – WE410A

PREPARED AT THE REQUEST OF:
DON MEAR
SENIOR PROJECT ARCHITECT
PACIFIC DESIGN GROUP
18071 IRVINE BLVD
TUSTIN, CA 92780

JOB: BHU INVENTORY - 2011

WE-410A

Ph / Fax (831) 688-1239
P.O. Box 1744 ~ Aptos, CA 95001 ~ CCL # 657930 ~ nigelbelton@sbcglobal.net

ATTACHMENT 5

AN INITIAL TREE ASSESSMENT AND INVENTORY REGARDING THE SITE OF THE PROPOSED BEHAVIORAL HEALTH UNIT ON THE CORNER OF SOQUEL AVENUE AND CAPITOLA ROAD EXTENTION SANTA CRUZ

PAGE 1.

Background and Assignment:

This initial inventory and tree evaluation has been provided at the request of Don Mear, Senior Project Architect for the proposed development of the Santa Cruz County Behavioral Health Unit at the corner of Soquel Avenue and Capitola Road Extension, Santa Cruz.

The inventory and assessment will identify by species all trees on the frontages of Soquel Avenue and Capitola Road Extension that are four inches in diameter and larger when measured at 54 inches above grade (the standard DBH measurement). The inventory will also identify those trees measured at over four inches DBH located along the eastern bank of this site that should be removed due to encroachment and safety concerns. The subject trees have been tagged and numbered in the field to correspond with this inventory.

This inventory and evaluation will rate the condition of individual trees based on their health and structural condition. It will make recommendations regarding the preservation or removal of individual trees based on their condition ratings and locations. This report will include general notes regarding other trees located on the south bank that have not been included in the inventory below.

Discussion and Recommendations:

The Trees On The Soquel Avenue Frontage;

The first three trees in this survey that are located on the frontage of Soquel Avenue should be considered to be in fair condition when taking into consideration their health and structures.

The Italian Stone Pine (Pinus pinea) on the south side of the veterinary hospital has a poor structure and is subsequently vulnerable to major limb failures unless appropriate pruning and cable installation work is undertaken. The American Sweet Gum (Liquidambar styraciflua) has a poor structure and is likely to cause infrastructure damage to adjacent sidewalk surfaces. The Hollywood Juniper (Juniperus torulosa) located between the block of retail shops and the body shop is not a particularly attractive specimen.

AN INITIAL TREE ASSESSMENT AND INVENTORY REGARDING THE SITE OF THE PROPOSED BEHAVIORAL HEALTH UNIT ON THE CORNER OF SOQUEL AVENUE AND CAPITOLA ROAD EXTENTION SANTA CRUZ

PAGE 2.

The Trees Growing On The Bank Adjacent To Capitola Road Extension;

The trees growing on the bank adjacent to the Capitola Road Extension consist of the following species:
- Coast Live Oak (Quercus agrifolia)
- Baileys Acacia (Acacia baileyana)
- Monterey Pine (Pinus radiata)
- Locust Tree (Robinia speudoacacia)
- Creek Willow (Salix sp.)

I recommend that all of the Coast Live Oak Trees located on the bank adjacent to Capitola Road Extension are retained and pruned to remove dead wood and to improve their structures. These are native trees that appear to be well adapted to growing in this area. They are attractive and should not require a lot of maintenance to maintain their health and safety over the long term.

I recommend that all the Baileys Acacia Trees are removed and that the stumps are killed because this invasive species will compete with the adjacent Oaks for resources over the long term. This species is generally more vulnerable to whole tree failures than the other trees on this site.

I recommend that all the Monterey Pines on this bank are removed because of the risk of whole tree failures in this environment. These Pines are growing on a steep bank in a thin layer of soil that is perched on a layer of underlying sand stone. The trees are tall and some of them exhibit strong leans and weight biases which will make them vulnerable to whole tree failures when these soils are wet and have reduced structural integrity. Some of the Pines are declining in health.

I recommend that consideration be given to removing all the Locust Trees on this site and the killing of the stumps and the root systems. These trees are located on the banks in the proximity of the south east corner of this property. This is an invasive species that spreads by root suckers. The locust trees on this site generally exhibit fair health and poor structures and do not have good aesthetic value. The space under these trees has been overtaken by invasive weed species including wild Black Berries and Poison Oak which should be removed. I noted that this area has become a repository for garbage.

The Creek Willows are generally poor specimens and I recommend that they considered for removal and replacement with other native species.

I recommend that the trees that are removed on this bank are replaced with Coast Live Oaks, Toyons (Heteromeles arbutifolia) and other native species that are well adapted this environment.

AN INITIAL TREE ASSESSMENT AND INVENTORY REGARDING THE SITE OF THE PROPOSED BEHAVIORAL HEALTH UNIT ON THE CORNER OF SOQUEL AVENUE AND CAPITOLA ROAD EXTENTION SANTA CRUZ

The Trees Growing On The South Bank;

The trees growing on the south bank primarily consist of Locust Trees, Coast Live Oaks and Toyons.

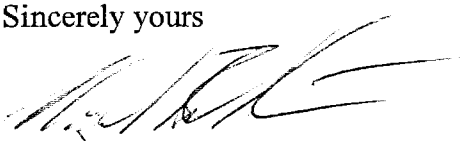
The Locust Trees in this area should be removed as previously discussed.

All the Coast Live Oaks and Toyons in this area should be retained unless they have been identified as being predisposed to falling into the proposed building site. There are many smaller diameter Oaks and Toyons on this bank. These trees have developed canopies that have orientated to the west due to the light competition from the row of large Monterey Cypress Trees on the adjacent property. Many of the oaks on the lower edge of the bank are poorly anchored to the slope.

I noted a row of seven large Monterey Cypress Trees (Cupressus macrocarpa) located on the adjacent cemetery. I recommend that prior to occupancy the new building owner, in partnership with the cemetery will evaluate these trees regarding their structural integrity.

Please do not hesitate to contact me if I can be of further assistance.

Sincerely yours



Nigel Belton

Attachment – A tree survey plan showing the locations of trees six inches diameter and larger

ATTACHMENT 5

AN INITIAL TREE ASSESSMENT AND INVENTORY REGARDING THE SITE OF THE PROPOSED BEHAVIORAL HEALTH UNIT ON THE CORNER OF SOQUEL AVENUE AND CAPITOLA ROAD EXTENTION SANTA CRUZ

TREE NO. AND SPECIES	DBH	TREE CONDITION – DISCUSSION AND RECOMMENDATIONS
1. Italian Stone Pine (Pinus pinea)	14-18-14	Location – At the west end of the Soquel Avenue frontage. Condition - Good health – Poor structure Suitability for preservation – Fair Comments - This Pine can be retained and pruned (with the option of cable installations) to improve its structural integrity, however, the tree's poor structure and predisposition to failure makes replacement with a more suitable species a worthwhile consideration in this context.
2. American Sweet Gum (Liquidambar styraciflua)	14-12-12	Location – Soquel Avenue frontage. Condition – Good health – Poor structure Suitability for preservation - Fair This tree has three poorly attached stems/trunks. It has areas of fungal decay on two stems. The tree is damaging surrounding infrastructure.
3. Hollywood Juniper (Juniperis torulosa)	8-11	Location – Soquel Avenue frontage. Condition – Good health – Fair structure Suitability for preservation – Fair Comments – This tree has been poorly pruned in the past and has poor to fair aesthetic values.
4. Coast Live Oak (Quercus agrifolia)	10– 7	Location – On the bank on the Capitola Road Extension near the corner of Soquel Avenue. Condition – Good health – Fair structure Suitability for preservation – Good Comments – I recommend pruning to improve structure, aesthetic values and visual access for security reasons. Note that all the pruning recommendations regarding the Coast Live Oaks on the bank adjacent to Capitola Road Extension will pertain to these goals. - There are numerous smaller Coast Live Oaks under four inches DBH that are not identified in the survey areas. I recommend that all of these young trees are preserved.
5. Coast Live Oak	10	Location – Adjacent to tree #4. Condition- Good health – Poor structure Suitability for preservation – Good Comments – Prune as recommended for tree #4.
6. Baileys Acacia (Acacia baileyana)	12.5	Location – On the lower bank adjacent to Capitola Road Extension Condition – Good health and fair structure Suitability for preservation – Poor Comments – I recommend the removal of all the Baileys Acacia Trees. This species is invasive and is prone to whole tree failure when large.

ATTACHMENT 5

TREE NO. AND SPECIES	DBH	TREE CONDITION – DISCUSSION AND RECOMMENDATIONS
7. Coast Live Oak	7.5–7.5 -8	Location – Capitola Road Extension Condition – Good health – Poor structure Suitability for preservation – Good Comments – Preserve and prune
8. Baileys Acacia	7	Location – Capitola Road Extension Condition – Good health – Poor structure Suitability for preservation – poor Comments – Remove this tree
9. Monterey Pine (Pinus radiata)	10.5	Location – Capitola Road Extension Condition – Poor health and structure Suitability for preservation – Poor Comments – This declining tree is poorly anchored to the bank and is predisposed to whole tree failure into the building site.
10.Monterey Pine	8.5	Location – Capitola Road Extension Condition – Fair health and a poor structure Suitability for preservation – Poor Comments – This tree leans heavily to the west and is vulnerable to whole tree failure.
11.Coast Live Oak	5	Location – Capitola Road Extension Condition – Good health and a fair structure Suitability for preservation – Good Comments – Preserve and prune.
12.Monterey Pine	12.5	Location - Capitola Road Extension Condition – Poor health and structure Suitability for preservation – Poor Comments – This diseased and declining tree leans south west and is vulnerable to whole tree failure.
13.Coast Live Oak	6–5	Location – Capitola Road Extension Condition – Good health and a poor structure Suitability for preservation – Good Comments – Preserve and prune
14.Monterey Pine	17.5–9.5	Location – Capitola Road Extension Condition – Fair health and structure Suitability for preservation – Poor Comments – This tree leans south eastwards on a steep bank and exhibits a heavy weight bias. It is vulnerable to whole tree failure.
15.Coast Live Oak	6.5-5-6	Location – Capitola Road Extension Condition – Good health and a poor structure Suitability for preservation – Good Comments – Retain and prune this tree.
15A.Coast Live Oak	10	Location – Mid way down the bank next to the Capitola Road Extension Condition – Good health and a fair structure Suitability for preservation – Good Comments – Covered by Poison Oak. Retain and prune. Remove the Poison Oak.

ATTACHMENT 5

TREE NO AND SPECIES	DBH	TREE CONDITION- DISCUSSION AND RECOMMENDATIONS
16.Creek Willow (Salix sp.)	4-3	Location – Capitola Road Extension. Located on the upper bank adjacent to the street. Condition – Fair health and a poor structure Suitability for preservation – Poor Comments – Encroaching on the street.
17.Locust Tree (Robinia pseudoacacia)	5	Location – Near the southern end of the bank adjacent to the Capitola Road Extension Condition – Fair health and structure Suitability for preservation – Poor Comments – I recommend the removal of all the Locust Trees. These trees have poor aesthetic values and generally have poor structures. The Locust Trees spread aggressively through root suckers and are an invasive species. I noted that the under story ground cover consisted of invasive weed species such as wild berries and Poison Oak. This area has served as a repository for garbage. The area of Locust Trees should be replaced with attractive native species such as Coast Live Oak and Toyon (Heteromeles arbutifolia) which are already established on this site. The invasive weed species should be entirely removed before any new tree planting commences.
18.Creek Willow	8	Location – Mid bank near the Capitola Road Extension Condition – Fair health and poor structure Suitability for preservation – Poor Comments – This tree has fallen over and is entangled with Poison Oak and berry vines. The Willow should be replaced with recommended native species after the invasive weeds have been removed from the site.
19.Locust Tree	8.5-9.5	Location – Adjacent to the Street on Capitola Road Extension. Condition – Fair health and poor structure Suitability for preservation – Poor Comments – Recommended for removal. Note that it has been topped under the overhead utility lines.
20.Locust Tree	13.5	Location – On the upper bank adjacent to Capitola Road Extension Condition – Fair health and structure Suitability for preservation – Poor Comments – Recommended for removal. Topped for utilities.
21.Locust Tree	5	Location – On the lower bank adjacent to the Capitola Road Extension Condition – Fair health and structure Suitability for preservation – poor Comments – Recommended for removal
22.Locust Tree	12-8-6-8	Location – At the top of the bank adjacent to Capitola Road Extension Condition – Fair health and structure Suitability for preservation – Poor Comments – Recommended for removal. Topped for utilities.
23.Locust Tree	13	Location – At the top of the bank adjacent to Capitola Road Extension Condition – Fair health and structure Suitability for preservation – Recommended for removal

ATTACHMENT 5

TREE NO AND SPECIES	DBH	TREE CONDITION- DISCUSSION AND RECOMMENDATIONS
24.Locust Tree	5-6-7	Location – Adjacent to Capitola Road Extension Condition – Fair health and a poor structure Suitability for preservation – Poor Comments – Recommended for removal
25.Locust Tree	8	Location – Adjacent to the Capitola Road Extension Condition – Fair health and poor structure Suitability for preservation – Poor Comments - Recommended for removal
26.Locust Tree	7-4	Location – At the top of the bank adjacent to the Capitola Road Extension Condition – Fair health and a poor structure Suitability for preservation – Poor Comments - Recommended for removal
27.Locust Tree	9.5	Location – On the bank near the south boundary adjacent to the Capitola Road Extension Condition – Fair health and structure Suitability for preservation – Poor Comments – Recommended for removal
28.locust Tree	6.5	Location – On the south bank above the building site Condition – Fair health and structure Suitability for preservation – Poor Comments – Recommended for removal
29.Locust Tree	5.5	Location – On the south bank Condition – Fair health and structure Suitability for preservation – Poor Comments – Recommended for removal
30.Locust Tree	8.5	Location – On the south bank Condition – Fair health and Structure Suitability for preservation – Poor Comments – Recommended for removal
31.Locust Tree	4.5	Location – On the south bank Condition – Fair health and structure Suitability for preservation – Poor Comments – Recommended for removal
32.Locust Tree	5.5	Location – On the south bank Condition – Fair health and structure Suitability for preservation – Poor Comments – Recommended for removal
33.Locust Tree	6	Location – On the south bank Condition – Fair health and structure Suitability for preservation – Poor Comments – Recommended for removal
34.Coast Live Oak	8	Location – Mid way up the south bank Condition – Good health and structure Suitability for preservation – Good Comments – Retain and prune as needed

ATTACHMENT 5

TREE NO AND SPECIES	DBH	TREE CONDITION- DISCUSSION AND RECOMMENDATIONS
35.Coast Live Oak	12	Location – Mid way up the south bank Condition – Good health and a poor structure Suitability for preservation – Poor Comments – This tree leans over the existing body shop and the proposed building site. Recommended for removal as it is vulnerable to falling.
36.Locust Tree	4	Location – On the lower south bank Condition – Fair health and a poor structure Suitability for preservation – Poor Comments – This tree has partially fallen and is recommended for Removal
37.Coast Live Oak	5	Location – On the lower south bank Condition – Good health and a fair structure Suitability for preservation – Good Comments – Retain and prune
38.Coast Live Oak	6	Location – On the lower south bank Condition – Fair health and a poor structure Suitability for preservation - Poor Comments – This tree will have to be removed as it has fallen on the existing body shop. Note that there is a row of many smaller Coast Live Oaks and Toyons along this section of the south bank above the existing body shop and the block of retail shops. Some of these trees exceed four inches diameter at breast height but they have not been listed individually in this survey unless they require removal or pruning due to their condition, a vulnerability to failure or because of encroachments into the proposed building site. These trees are generally in good health but are predominantly leaning west due to the competition for light from the large Monterey Cypress Trees (Cupressus macocarpa) located on the adjacent property.
39.Coast Live Oak	5.5	Location – This tree leans into the site from the edge of the south bank Condition – Good health and a poor structure Suitability for preservation – Good Comments – Prune back the encroachment or remove entirely
40.Coast Live Oak	6	Location – On the edge of the lower south bank above the existing tank Condition – Good health and a poor structure Suitability for preservation – Poor Comments – Recommended for removal because it encroaches on to the existing tank and the proposed building site
41.Coast Live Oak	6.5	Location – On the lower edge of the south bank above the retail shops. Condition – Good health and a fair structure Suitability for preservation – Poor Comments – Recommended for removal. Vulnerable to falling.

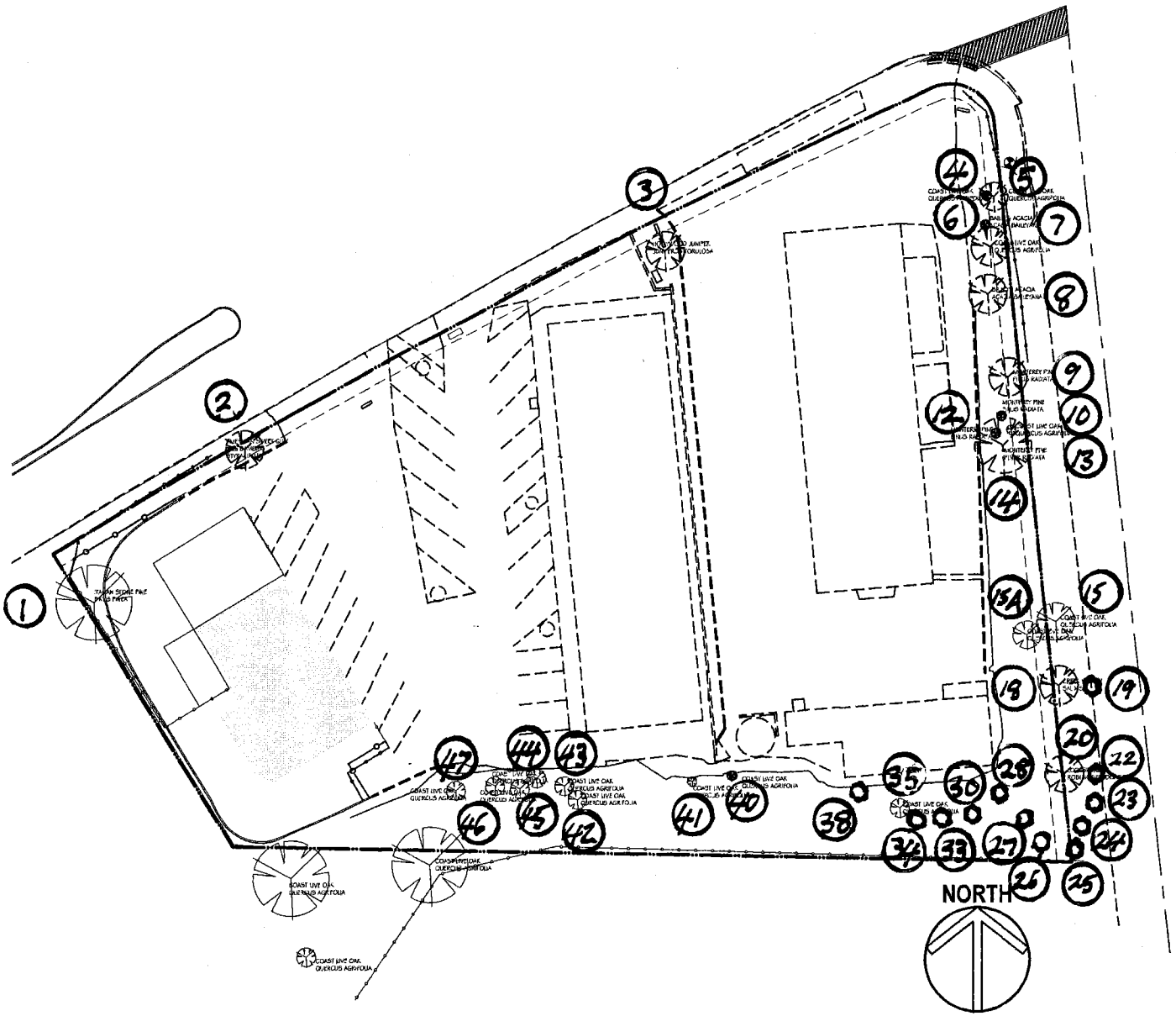
ATTACHMENT 5

TREE NO AND SPECIES	DBH	TREE CONDITION- DISCUSSION AND RECOMMENDATIONS
42.Coast Live Oak	9	Location – On the edge of the lower bank above the west side of the existing retail shops. Condition – Good health and a poor structure Suitability for preservation – Poor Comments – Recommended for removal because it encroaches over the proposed building site and is vulnerable to failure.
43.Coast Live Oak	7	Location – On the lower edge of the south bank above the retail parking Area Condition – Good health and a poor structure Suitability for preservation – Poor Comments – Recommended for removal due to vulnerability to failure
44.Coast Live Oak	4	Location – On the edge of the south bank above the parking retail area Condition – Poor health and structure Suitability for preservation – Poor Comments – Recommended for removal due to location and vulnerability to falling
45.Coast Live Oak	5	Location – Near Tree #44. above the parking area Condition – Fair health and a poor structure Suitability for preservation – Poor Comments – Recommended for removal due to location and vulnerability to falling.
46.Coast Live Oak	11.5	Location – Located on the edge of the south bank above the retail parking Area Condition – Good health and a poor structure Suitability for preservation – Poor Comments – Recommended for removal because it leans heavily out over the parking area and is vulnerable to failure.
47.Coast Live Oak	5	Location – Near tree #46. Condition – Good health and a fair structure Suitability for preservation – Poor Comments – Recommended for removal due to its location on the edge of the bank and vulnerability to failure.

ATTACHMENT 5

Tree Inventory - Behavioral Health Unit - Santa Cruz - 5/2/2011

ATTACHMENT 5



HEXAGON TRANSPORTATION CONSULTANTS, INC.

Memorandum

Date:	March 9, 2011
To:	Rama Khalsa, Santa Cruz County Health Services Agency Administrator
From:	At van den Hout
Subject:	Trip Generation Analysis for the Proposed Relocated Behavioral Health Unit

The 18-bed Dominican Hospital/Catholic Healthcare West Behavioral Health Unit (BHU) in Santa Cruz provides outpatient psychiatric evaluation services and inpatient psychiatric services for patients who need to be admitted for short-term acute care. Dominican Hospital is planning to close the BHU at the end of 2013, and the County will relocate these services to a new, 16-bed stand-alone facility. The proposed site for the relocated BHU is at 2202-2280 Soquel Avenue (at the corner of Capitola Road Extension) in Santa Cruz. This site currently contains three buildings, including a 2,455 square feet Veterinarian Hospital, a 5,660 square feet retail building, and a 6,478 square feet auto-body and paint shop. The Veterinarian Hospital will remain but the retail building and the auto-body paint shop will be demolished and replaced by the relocated BHU.

This memo provides an analysis of the change in daily and peak-hour trip generation after the two existing buildings are replaced by the relocated BHU. This trip generation comparison was conducted to satisfy Santa Cruz County's traffic impact analysis requirement for this project. Any new uses proposed by Dominican Hospital/CHW for the building which housed the former BHU will be subject to a separate planning permit process.

Trip Generation Analysis

The trip generation rates for the relocated BHU were based on the parking survey that was conducted at the existing BHU in November, 2010. Standard trip generation rates were applied to predict the traffic resulting from the existing buildings at the site. Trip generation data are published in the Institute of Transportation Engineers' (ITE) publication, *Trip Generation, Eighth Edition*. The applicable land use category for the retail building is the Specialty Retail Center (ITE Land Use Code 814) and for the auto-body and paint shop, the Automobile Care Center (ITE Land Use Code 942).

The trip generation analysis was conducted for the weekday daily, AM and PM peak hours of traffic. The AM peak hour of traffic is generally between 7:00 and 9:00 AM, and the PM peak hour is typically between 4:00 and 6:00 PM. It is during these periods on an average day that the most congested traffic conditions occur.

Based on the data from the parking survey, the proposed BHU would generate 91 daily trips: 16 trips during the AM peak hour and 13 trips during the PM peak hour. Using ITE trip generation rates, 381 daily vehicle trips are estimated for the two buildings that are currently occupying the site: 24 trips during the AM peak hour and 38 trips during the PM peak hour. After subtracting

ATTACHMENT 6

these existing trip credits, it is estimated that the relocated BHU would generate 290 fewer daily trips than these existing land uses: 8 fewer trips during the AM peak hour and 25 fewer trips during the PM peak hour (see Table 1). Trip generation from the Veterinarian Hospital is not included in this analysis because it will remain in business.

Table 1
Project Trip Generation Estimates

					AM Peak Hour				PM Peak Hour			
Land Use	ITE Code	Size (ksf)	Daily Rate/ksf	Daily Trips	Peak-Hour Rate/ksf	In	Out	Total	Peak-Hour Rate/ksf	In	Out	Total
Proposed Use												
Relocated Behavioral Health Unit /1/				91		11	5	16		1	12	13
Existing Use												
Retail /2/	814	5.660	44.32	251	0.90	3	2	5	2.71	7	9	16
Auto-body and Paint Shop /3/	942	6.478	20 /4/	130	2.94	12	7	19	3.38	11	11	22
Subtotal				381		15	9	24		18	20	38
Net New Trips Generated				**-290**		**-5**	**-3**	**-8**		**-17**	**-8**	**-25**

Notes:
/1/ Trips calculated from BHU Parking Study, Hexagon, November 2010
/2/ AM peak hour rate for retail is assumed to be one third of PM peak hour rate (Source: San Diego Municipal Code, Land Development Code, Trip Generation Manual, Revised May 2003)
/3/ Source: Institute of Transportation Engineers, Trip Generation, 8th Edition.
/4/ The ITE Trip Generation Manual does not report a daily trip rate for this land use type. Daily trip rate obtained from the San Diego Municipal Code, Land Development Code, Trip Generation Manual, Revised May 2003)

ATTACHMENT 6