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

NOTICE OF ENVIRONMENTAL REVIEW PERIOD

SANTA CRUZ COUNTY

APPLICANT: **Steve Elmore**

APPLICATION NO.: **07-0406**

PARCEL NUMBER (APN): **030-061-02**

The Environmental Coordinator has reviewed the Initial Study for your application and made the following preliminary determination:

XX Negative Declaration
(Your project will not have a significant impact on the environment.)

XX Mitigations will be attached to the Negative Declaration.

_____ No mitigations will be attached.

_____ Environmental Impact Report
(Your project may have a significant effect on the environment. An EIR must be prepared to address the potential impacts.)

As part of the environmental review process required by the California Environmental Quality Act (CEQA), this is your opportunity to respond to the preliminary determination before it is finalized. Please contact Matt Johnston, Environmental Coordinator at (831) 454-3201, if you wish to comment on the preliminary determination. Written comments will be received until 5:00 p.m. on the last day of the review period.

Review Period Ends: **January 22, 2011**

Staff Planner: **Robin Bolster-Grant**

Phone: **(831) 454-5357**

Date: **December 22, 2010**

NAME: Bei-Scott at 41st and Soquel
APPLICATION: 07-0406
A.P.N: 030-061-02, 03, 04, 11, 14

NEGATIVE DECLARATION MITIGATIONS

1. In order to ensure all geotechnical, grading, and erosion control requirements are in place, the applicant shall organize a pre-grading/pre-construction meeting to be held onsite with County Engineering and Environmental Planning Staff, and the project team prior to any land disturbance.

2. In order to mitigate impacts of nighttime lighting on the adjacent riparian habitat, prior to issuance of a building permit, the applicant shall submit a lighting plan to the Planning Department for review and approval. The plan shall reflect that permanent outdoor lighting shall be minimized and shall be shielded by fixture design or other means to minimize illumination of riparian habitat. Light sources that do not attract insects (e.g. yellow or sodium vapor bulbs) shall be used if outdoor lighting is necessary (e.g. security or handicap access structures).

3. In order to mitigate impacts of potentially hazardous materials, the applicant shall ensure that paint, stains, and other materials used during construction are recycled at an appropriate facility after use. Prior to building permit final, the applicant or owner shall submit recycling receipts to the project planner.

4. In order to mitigate the impacts of temporary construction debris to less than significant, the applicant shall submit a plan to recycle and/or reuse excess post-construction materials, for review and approval by Planning Staff prior to building permit issuance.

5. In order to minimize the impact of construction activities on air quality, the following mitigation measures will be imposed: Water graded/excavated areas at least twice daily, prohibit all grading activities during periods of high wind (over 15 mph), haul trucks shall maintain at least 2'-0" of freeboard, cover all trucks hauling dirt, sand, or loose materials, plant vegetative ground cover in disturbed areas as soon as possible, cover inactive storage piles, install wheel washers at the entrance to construction site for all exiting trucks, and pave or apply base rock to all roads at construction site.

6. In order to ensure that the demolition of existing structures does not violate any air quality standard, the following mitigation measures will be required: Prior to demolition work of buildings constructed prior to 1980, areas of the on-site structures shall be sampled as part of an asbestos survey in compliance with the National Emission Standards for Hazardous Air Pollutants (NESHAP). If asbestos is found in any building, asbestos-related work, including demolition, involving 100 square feet or more of asbestos containing materials shall be performed by a licensed asbestos consultant and asbestos shall be removed and disposed of in

compliance with applicable State laws. At least 10 days prior to demolition of existing structures the Monterey Bay Unified Air Pollution Control District (MBUAPCD) shall be notified and an MBUAPCD Notification of Demolition and Renovation Checklist shall be submitted to both MBUAPCD and the County.

County of Santa Cruz

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CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) ENVIRONMENTAL REVIEW INITIAL STUDY

Date: December 6, 2010 **Application Number:** 07-0406

Staff Planner: Robin Bolster-Grant

I. OVERVIEW AND ENVIRONMENTAL DETERMINATION

APPLICANT: Steven Elmore **APN(s)**: 030-061-02, 030-161-3, 030-061-04, 030-061-11 and 030-061-14

OWNER: Bei-Scott Company, LLC **SUPERVISORAL DISTRICT**: 1st

PROJECT LOCATION: Property located on the north side of Soquel Drive at the intersection with 41st Avenue, at 4101 Soquel Drive.

SUMMARY PROJECT DESCRIPTION: Proposal to demolish one retail building, two residences, eight accessory structures and one commercial storage structure and construct four new commercial structures, one of 2,692 square feet (Bldg A), one of 2,440 square feet (Bldg B), one of 5,349 square feet (Bldg C) and one of 4,185 square feet (Bldg D). Project includes approximately 6,000 cubic yards of excavation. Requires a Commercial Development Permit, Preliminary Grading Review, Design Review, Soils Report Review and a Riparian Exception

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
- ☐ Noise
- ☒ Air Quality
- ☐ Greenhouse Gas Emissions
- ☐ Public Services
- ☐ Recreation
- ☐ Utilities & Service Systems

- ☐ Cultural Resources
- ☐ Hazards & Hazardous Materials
- ☒ Transportation/Traffic
- ☒ Land Use and Planning
- ☐ Population and Housing
- ☐ 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:

NON-LOCAL APPROVALS

Other agencies that must issue permits or authorizations:

Monterey Bay Regional Air Quality Control Board. Notification of Demolition and Renovation required for demolition of existing structures

May require a Construction Activities Storm Water General NPDES Permit from State Water Resources Control Board if construction activity results in land disturbance greater than one acre.

California Department of Fish & Game. May require a Streambed Alteration Permit to allow the proposed grading activities within the channel of an ephemeral stream.

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.

Matthew Johnston
Environmental Coordinator

12/20/2010
Date

II. BACKGROUND INFORMATION

EXISTING SITE CONDITIONS

Parcel Size: 2.3 acres (five parcels under common ownership)
Existing Land Use: Mixed commercial and residential
Vegetation: Eucalyptus grove interspersed with oak trees adjacent to arroyo
Slope in area affected by project: ☒ 0 - 30% ☒ 31 – 100%
Nearby Watercourse: Unnamed ephemeral tributary to Soquel Creek
Distance To: Tributary located at the back of the project site. Soquel Creek is approximately 0.5 miles to the east of the site.

ENVIRONMENTAL RESOURCES AND CONSTRAINTS

Water Supply Watershed: No
Groundwater Recharge: No
Timber or Mineral: No
Agricultural Resource: No
Biologically Sensitive Habitat: Riparian corridor associated with unnamed ephemeral stream at north of property
Fire Hazard: No
Floodplain: No
Erosion: Low Potential
Landslide: None
Liquefaction: Low

Fault Zone: No
Scenic Corridor: No
Historic: No
Archaeology: Portion mapped
Noise Constraint: No

Electric Power Lines: No
Solar Access: Adequate
Solar Orientation: South
Hazardous Materials: Low Potential
Other:

SERVICES

Fire Protection: Central Fire
School District: Soquel Elementary
Sewage Disposal: Santa Cruz County Sanitation District

Drainage District: Zone 5
Project Access: Soquel Drive
Water Supply: Santa Cruz Water Dept.

PLANNING POLICIES

Zone District: C-2 (Community Commercial)
General Plan: C-C (Community Commercial)/O-U (Urban Open Space)

Special Designation: None

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

ENVIRONMENTAL SETTING AND SURROUNDING LAND USES:

The project site is comprised of five separate parcels located within the Soquel Planning Area. The parcels are under common ownership and will be combined into a single lot. The project site fronts Soquel drive, an arterial County-maintained road and includes a private right-of-way, which provides primary access to 14 residences. The southern three-fourths of the site is generally level, with the rear (northern) part of the lot sloping sharply (30-50%) toward the arroyo associated with the ephemeral drainage. The arroyo crosses through APNs 030-061-04 and 030-061-14. A dense grove of eucalyptus trees and oaks is located in and around the arroyo. The site is bounded by residences to the north, a vacant parcel to the east, and commercial buildings to the south (paint store and Redwood shopping center) and west (automotive repair shop).

The subject parcels are currently developed with a legal, non-conforming residence and duplex, a vacuum repair shop, a commercial storage structure and several accessory structures. With the exception of the eucalyptus and oak grove to the north, the parcels contain little natural vegetation

PROJECT BACKGROUND:

The existing structures on the five parcels date from the late 1940s to the early 1960s and include a duplex, two commercial buildings and a non-conforming single-family dwelling. The structures are all considered to be legal, non-conforming. Past commercial uses on the site have included an ice-cream shop, Christmas tree lot, furniture refinishing and sales shop, dress shop, and vacuum cleaner repair business.

Planned Urban Roadway Improvements specified in the Santa Cruz County General Plan include a future two-lane collector street, extending 41st Avenue through the subject site. The extension was envisioned to serve the O'Neill Ranch redevelopment project to the north of the subject site, however that project was abandoned. The General Policy remains in place; therefore any development approved on the subject site must be designed to accommodate any such future roadway expansion.

In April 2000, an application was made to construct a Home Depot on 14 parcels, including APNs 030-061-02, 030-061-03, and 030-061-04. The application was subsequently abandoned in October of 2001. In 2005, A Design Review Group (DRG) was held to discuss an earlier iteration of the subject proposal and comments were gathered from various reviewing agencies and incorporated into the current application.

The subject application was made in August 2007.

DETAILED PROJECT DESCRIPTION:

The applicant proposes to demolish all existing structures on the five subject parcels and to construct four new commercial structures, one of 2,692 square feet (Bldg A), one of 2,440 square feet (Bldg B), one of 5,349 square feet (Bldg C) and one of 4,185 square feet (Bldg D). Tenants have not yet been identified for the commercial space; however the project includes a Master Occupancy Program, which will allow all commercial uses permitted for the C-2 (Community Commercial) zone district as

provided in Section 13.10.332 of the County Code, with the exception of any use that would exceed the 64 proposed parking spaces.

The proposal includes construction of a driveway located at the intersection of Soquel Drive and 41st Avenue, which is currently a signalized T-intersection with northbound, eastbound and westbound approaches. The project driveway will form the fourth leg, the southbound approach of the intersection, with new signal standards, signage and pedestrian improvements proposed at the entrance to the site. Additionally two new driveways would connect the shopping center to Greenbrae Lane, the private right-of-way to the west. Travel along the western driveways would be restricted to incoming traffic from Greenbrae. The only outgoing traffic from the subject site onto Greenbrae would be emergency vehicle traffic.

The parking and driveways areas would consist of both asphalt and pervious pavement, with pervious pavement areas set back from the rear slope at the north of the property. Drainage from the site is designed to discharge to the ephemeral drainage at the north of the site, with a plastic membrane placed along edges of the pervious pavement to prevent collected water from flowing out from under the pavement. Roof runoff would discharge onto the pervious pavement.

Additional drainage improvements at the site include the placement of 9 new area drains. The two northern area drains would be fitted with silt and grease traps and discharge into two outlets placed within an existing drainage swale at the northern portion of the site. The outlets connect to two 12-inch culverts emptying via a 12-inch tee into energy dissipaters made of rubble riprap and broken stone.

Because of the extent of non-engineered fill on the property, the proposed improvements require approximately 6,000 cubic yards of excavation and stripping, 6,000 cubic yards of fill and recompaction, with about 3,000 cubic yards of material proposed to be exported off site. Grading is required to re-contour and stabilize unconsolidated fill adjacent to the arroyo at the north end of the site. The existing slope will be re-graded to a 2:1 slope and a retaining wall is proposed to be constructed along the top of the slope, at a maximum height of 5'-6". The applicant also proposes to remove approximately 25-30 eucalyptus and oak trees from the rear slope to accommodate the re-contouring and slope stabilization. A revegetation plan has been prepared for this portion of the site and includes replanting eleven Coast live oaks and seven California buckeyes along with shrubs and ground cover. Additional landscaping is proposed throughout the site, with concentrations of plantings along the eastern side of Greenbrae Lane and the Soquel Drive frontage in order to soften the visual impact of the shopping center.

In conjunction with the General Plan Policy that calls for the possible future extension of 41st Avenue through the site, the proposal includes an offer of dedication of a 28-foot right-of-way and a 5-foot sidewalk easement coincident to the area of possible roadway expansion. The County is not currently in a position to accept the dedication; therefore the offer will be held until future consideration of the extension. The project also includes frontage right-of-way dedications along Soquel Drive and the abandonment of an existing 20-foot right-of-way at the eastern portion of the site.

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 8.4 miles southwest of the San Andreas fault zone, and approximately 13.3 miles northeast of the San Gregorio 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 proposal was performed by Dees & Associates (Attachment 3). The report concluded that geological hazards, such as seismically induced ground cracking, fault rupture and liquefaction do not present a greater than ordinary risk to the proposed structures.

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

The fill slope at the rear of the site shows signs of moderate to severe erosion and is proposed to be re-graded to provide a stable 2:1 slope. Plan review letters submitted by the project geotechnical engineer indicate that the proposed grading and erosion control plans conform to the recommendations made in the geotechnical report and subsequent addenda. Additionally, a retaining wall is proposed along the top of the re-contoured slope to ensure additional long-term stability and to prevent impacts to the adjacent riparian system.

Implementation of the additional requirements included in the review letter prepared by Environmental Planning staff (Attachment 4) will serve to further ensure that the proposed development will not expose people or structures to substantial adverse effects due to geological hazards.

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?	☐	☐	☒	☐

Discussion: The report cited in Section A1 concluded that the fill slope at the north of the property is susceptible to landsliding and erosion. The recommendations contained in the geotechnical report, including the removal of non-competent fill material and re-grading the slope, will be implemented to reduce this potential hazard to a less than significant level. Conditions of project approval require a final plan review letter be submitted to ensure that the plans submitted with the building application comply with the report recommendations and require a pre-construction meeting that includes the grading contractor and the County Geologist.

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%. The unstable slope at the north will be re-graded as discussed in Section A3.

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

Discussion: The unstable fill slope to the north of the project shows signs of previous erosion. Therefore the slope would be re-graded to a 2:1 (horizontal to vertical) slope angle and compacted engineered fill would be placed at the top of the slope, providing a more stable profile. Additionally, a 5'-5" tall retaining wall will be constructed along the top of the slope to provide additional stability. The drainage system includes a number of area drains and culverts to prevent sheet flow and a large amount of the parking area would be constructed of pervious pavement. Surface runoff from the parking areas would be collected and discharged at the base of the slope of the

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

drainage valley. Project conditions of approval require all slopes steeper than 2:1 (horizontal to vertical) be protected from erosion with an erosion blanket until vegetative cover can be established.

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. Therefore no impact is anticipated.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
2. Place within a 100-year flood hazard area structures which would impede or 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. Therefore no impact is anticipated.

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

Discussion: The project site is located 1.25 miles inland and is not in the vicinity of an ocean bluff. Therefore no impact is anticipated.

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 City of Santa Cruz and would not rely on private well water. Additionally, the proposed commercial development replaces three legal residences and a commercial use on the property. According to the City of Santa Cruz, commercial and industrial water use accounts for 26% of total use, whereas residential water use accounts for 65%. Therefore, replacing the existing residential uses with the proposed commercial use is not expected to substantially increase the water use on the site, and may result in less water use over all.

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 in that the site is not located within a groundwater recharge zone or water supply watershed.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 proposed structures and parking lot would add impervious surface to the site, but would not substantially alter the existing drainage pattern of the site. A substantial amount of the parking area uses pervious pavement and storm water runoff would be directed to a series of area drains that collect and discharge into the existing drainage swale to the north of the site. The storm drains would discharge to two large energy dissipaters in order to slow the rate of flow into the ephemeral drainage channel. Drainage calculations, submitted by the applicant, have been reviewed and preliminarily approved by the Department of Public Works Storm Water management Staff and the property owner would be required to submit final drainage plans and calculations for review and approval by the Public Works Storm Water Management Department prior to building/grading permit issuance.

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: Drainage Calculations prepared by Roper Engineering, dated August 25, 2008, have been reviewed for potential drainage impacts and accepted by the Department of Public Works (DPW) Drainage Section staff. The calculations show that post-development runoff rates will not exceed pre-development rates. The runoff rate from the property would be controlled by the use of pervious pavement for a large portion of the proposed parking area. Additionally, building downspouts would be directed onto the pervious paved areas. DPW staff has determined that existing storm water facilities are adequate to handle the increase in drainage associated with the project. Refer to response B-5 for discussion of urban contaminants and/or other polluting runoff.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
9. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☒	☐

Discussion: The ephemeral stream to the north of the property is not a mapped floodplain. Additionally, post-development runoff rates do not exceed pre-development rates; therefore any increased runoff associated with the proposed project will be accommodated by the proposed drainage facilities without significantly impacting surrounding people or structures.

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

Discussion: Silt and grease traps are proposed for several of the new area drains on the site, and a plan for maintenance will be required by the DPW Storm Water Management Section in order to minimize the effects of urban pollutants on the ephemeral drainage. Additionally, a detailed erosion control plan is required to be submitted for approval by Environmental Planning staff prior to building permit issuance. Therefore, the potential for contaminated runoff or siltation to impact the nearby watercourse is low.

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.

The lack of suitable habitat and the disturbed nature of the site make it unlikely that any special status plant or animal species occur in the area.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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: The project is located in the vicinity of an unnamed ephemeral stream. In accordance with Section 16.20.080(o) of the County Grading Regulations, the proposed grading activities are restricted to dry season (April 15th through October 15th). Additionally the County Erosion Control Ordinance requires an erosion control plan indicating proposed methods for the control of runoff, erosion, and sediment movement be submitted and approved prior to issuance of building permits. These measures will reduce the potential for erosion and sedimentation resulting from proposed grading activities to a less than significant level.

No commercial or industrial activities are proposed that would generate a substantial amount of contaminants. The parking and driveway associated with the project would incrementally contribute urban pollutants to the environment; however, the contribution would be minimal given the size of the driveway and parking area. In order to reduce the potential impacts to the riparian corridor from urban contaminants, silt and grease traps and a plan for maintenance are proposed at the two drains adjacent to the corridor.

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 nursery sites?	☐	☐	☒	☐

Discussion: The proposed project does not involve any activities that would interfere with the movements or migrations of fish or wildlife, or impede use of a known wildlife nursery site.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
4. Produce nighttime lighting that would substantially illuminate wildlife habitats?	☐	☒	☐	☐

Discussion: The development area is adjacent to a riparian corridor, which could be adversely affected by a new or additional source of light that is not adequately deflected or minimized. The following mitigation measures will be added to the project, such that any potential impact will be reduced to a less than significant level: All exterior lighting shall be directed away from the corridor and adjacent properties, light sources shall not be visible from the riparian area or surrounding properties, light sources must be shielded by landscaping, fixture design or other physical means, lighted parking areas shall utilize low-rise light standards to a maximum height of 15 feet, exterior lighting shall be high-pressure sodium vapor, metal halide, fluorescent, or equivalent energy-efficient fixtures.

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: No wetlands are identified on site.

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 proposed development includes grading activities in proximity to a riparian corridor and is therefore regulated by several County ordinances protecting biological resources. The project would not conflict with County ordinances or policies in that the proposed development complies with the mandatory findings supporting approval of a Riparian Exception pursuant to Section 16.30.060 of the County Riparian Corridor and Wetlands Protection Ordinance. The Riparian Protection Ordinance requires adequate restoration and revegetation of the disturbed portions of the corridor and a detailed restoration plan will be submitted for review and approval by Environmental Planning staff prior to building permit issuance.

The riparian corridor is defined as Sensitive Habitat under Chapter 16.32 of the County Code. The proposal complies with the provisions of the Sensitive Habitat Protection Ordinance in that the protective measures discussed under C2 and C4 above will help

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

to minimize any disturbance or degradation of the riparian corridor as a result of the proposed commercial development.

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.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
2. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒

Discussion: The project site is zoned Community Commercial (C-2), 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 and would not affect timber resources.

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 within radius of 1 mile 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 land occurs within 1 mile of the proposed project site. Therefore, no impacts are anticipated.

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

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 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 Community Commercial (C-2) 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.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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 an underutilized commercial property. The site is adjacent to a riparian corridor; however the proposed project is designed and landscaped to provide a barrier between the corridor and the proposed commercial activities. The resulting development would enhance the visual character of the area by incorporating natural landscaping, maintained over the life of the development, without degrading the natural topography or natural character of the corridor to the north.

4. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Discussion: The project would contribute an incremental amount of night lighting to the visual environment. Section 13.11.074 of the County Site, Architectural and Landscape Design Review Ordinance requires the following exterior lighting design measures: All exterior lighting shall be directed away from the corridor and adjacent properties, light sources shall not be visible from surrounding properties, light sources must be shielded by landscaping, fixture design or other physical means, lighted parking areas shall utilize low-rise light standards to a maximum height of 15 feet, exterior lighting shall be high-pressure sodium vapor, metal halide, fluorescent, or equivalent energy-efficient fixtures. The project will be conditioned to comply with these Design Review measures, which will help to minimize the amount of night lighting added to the environment by the proposed commercial development.

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 structures on the property are not designated as a historic resource on any federal, state or local inventory.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?	☐	☐	☒	☐

Discussion: A portion of the site is mapped as containing potential cultural resources. However, the mapped areas have been extensively disturbed in the past and the likelihood of significant impacts associated with the current development is low. Pursuant to Section 16.40.040 of the Santa Cruz County Code, if archeological resources are uncovered during construction, 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.

4. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

Discussion: No known paleontological resources or geologic features exist on the 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: The proposal does not currently include any uses, which would be expected to generate any hazardous materials, however construction activities may involve the use of hazardous materials. To ensure that paint, stains, and other materials used during construction are recycled at an appropriate facility after use, a condition of project approval will require the property owner to submit recycling receipts prior to building permit final. Additionally, an operational permit condition will require

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

any future commercial use to be reviewed and approved by the Environmental Health Service with respect to the handling, use and disposal of hazardous materials. Compliance with these conditions of approval will ensure that the proposed commercial development will not expose the public or environment to hazardous materials.

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: See the discussion in H1 above.

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: See H1. Additionally, the site is located more than one-quarter mile from the nearest school, Soquel High School to the northeast.

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 hazard to the public or the environment?	☐	☐	☒	☐

Discussion: The project site is not included on the 9/3/10 list of hazardous sites in Santa Cruz County compiled pursuant to the specified code.

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: The project is not located within an airport land use plan or within two miles of a public airport or public use airport; therefore there is no impact.

6.	For a project within the vicinity of a private airstrip, would the project result	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
in a safety hazard for people residing or working in the project area?				

Discussion: The project site is not located in the vicinity of a private airstrip; therefore there is no impact.

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

Discussion: The proposed commercial development does not conflict with the County's adopted Emergency Management Plan (April 2002). Specific countywide evacuation routes are not designated in the Emergency Management Plan; rather, feasible routes are determined based on particular events. Therefore Soquel Drive could perform as an evacuation route in an emergency event. Further, the residents that currently rely exclusively on Greenbrae Lane for access would be able to evacuate via the two driveways off of Greenbrae Lane use the proposed access road serving the commercial development as an alternative evacuation route.

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

Discussion: The proposed commercial development would not include the installation of electrical transmission lines; therefore there is no impact.

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. The closest fire station is located within a 5 minute response time and a new fire hydrant is proposed to the rear of the property. Therefore the impact of the proposed commercial development on wildland fire safety is less than significant.

	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 commercial development and access road will alter the existing circulation system in the vicinity of the project site. According to a Traffic Study performed by Higgins Associates, dated October 3, 2005 (Attachment 9), the proposal would result in 38 additional peak am and peak pm trips. An Intersection Analysis performed by Hatch Mott MacDonald, dated August 26, 2009, found that the project would not cause any nearby intersection to drop below Level of Service D. The Road Engineering Section of the Department of Public Works has accepted the results of the Intersection Analysis. The project site also includes Greenbrae Lane, an easement that provides primary access to residential and commercial parcels to the west and north of the site. No changes are proposed to this easement, however the road does not meet current County Design Standards. To ensure that future commercial traffic does not significantly impact existing user of Greenbrae Lane, the proposal includes signage to prevent commercial traffic from exiting onto Greenbrae. Existing users would be able to enter and exit to and from the Soquel Drive and 41st Avenue intersection via the proposed driveway, which provides superior egress for eastbound and southbound traffic relative to the current circulation pattern.

A bus stop exists just to the west of the Greenbrae/Soquel intersection and has presented additional conflicts for vehicular traffic entering and exiting via Greenbrae Lane. On January 13, 2009 the Board of Supervisors directed the Redevelopment Agency (RDA) to relocate the bus stop from its current location to the frontage of the RDA property located to the east of the subject property. RDA, in conjunction with the Road Engineering Section of the Department of Public Works, has been in the process of preparing preliminary plans. RDA has also received preliminary approval from the Metro Transit District for the new proposed bus stop location and the RDA Board of Directors has approved funding for this work. The relocation is anticipated to be completed in the spring of 2011.

Proposed improvements to the Soquel/41st Avenue intersection include providing a signalized pedestrian crossing at the project driveway and providing ramps at the new driveway that align with the existing crosswalk at Soquel Drive. Additionally, according Road Engineering staff, per the Plan Line for the intersection, DPW improvements

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

include dedicating an eastbound right-turn lane from Soquel onto 41st Avenue and shifting the 41st Avenue median to the east to allow for more bicycle pedestrian and vehicular traffic and to improve the circulation at the intersection.

The improvements proposed by the applicant would improve the functionality of the 41st Ave/Soquel Drive intersection and would ensure that the impact of the proposed commercial development does not significantly impact the circulation in the vicinity of the site. Further, the relocation of the bus stop and the provision of an alternative ingress and egress path through a signalized intersection will improve the circulation for the users of Greenbrae Lane and reduce traffic conflicts that have historically existed in this area.

The proposal would provide 64 parking spaces to accommodate the proposed commercial use. The parking spaces exceed the County commercial parking requirements. The County General Plan includes a provision for extending 41st Avenue northward through the project site. Although there are no plans to implement this policy, the project has been designed so that future implementation remains feasible. The portion of the site impacted by the future arterial extension is currently proposed to be used as a parking aisle with perpendicular parking spaces on both sides. Should 41st Avenue be extended, one alternative would be to replace the parking spaces with diagonal parking along Greenbrae Lane. The project traffic engineer, Hatch Mott MacDonald prepared a Parking Layout Evaluation (Attachment 7), which illustrates this option. This alternative would include a new access road for the Greenbrae Lane residents, utilizing the 41st Avenue extension.

Alternatively, in that the RDA will be required to purchase any future right-of-way to extend 41st Avenue through the project site, RDA may elect to relocate the displaced parking on the county-owned parcel immediately adjacent and to the east of the subject site.

Finally, in the event that neither of the two options for accommodating displaced parking prove feasible, the property owner will be required to modify the permitted commercial uses on the site to the extent that the resulting diminished parking spaces are sufficient pursuant to Section 13.10.552 (Schedule of off-street parking space requirements) of the County Code. Further, Section 13.10.553 of the Code provides variations to requirements that allow the commercial parking standards to be satisfied by alternative means, such as through the use of employee van pools, ridesharing or other methods.

Any of the three parking options would ensure that the commercial uses on the site would be provided with adequate parking and no impact to surrounding circulation would occur. Lastly, the proposed commercial development is subject to Chapter 15.12 of the County Code, which requires the payment of Transportation Improvement Fees in order to finance transportation and roadside improvements projects identified in the County's General Plan Circulation Element and Capital Improvement Program. The payment of these fees will further ensure that the proposal does not negatively the effective performance of the surrounding circulation system.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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: The proposed project does not impact air traffic patterns, therefore there is no impact.

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 proposed commercial development would be located where a previously approved commercial and residential use currently exist; therefore impacts of increased hazards as a result of site design features or incompatible uses are less than significant.

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

Discussion: The project's road access meets County standards and has been approved by the Central Fire Protection District. Please refer to Section H7, H9 and I1 above regarding emergency access and traffic associated with the proposed commercial development.

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

Discussion: Please refer to Section I1 above regarding parking associated with the proposed commercial development.

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. The Department of Public Works and Redevelopment Agency have stated that a required bus stop in the vicinity of the project site will be located in front of the county-owned parcel adjacent and to the east of the subject site, which will provide an increase in the performance and safety of public transportation in the vicinity of the proposal. Please refer to Section I1 above regarding additional proposed improvements regarding

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

pedestrian and public transit improvements.

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: Please refer to Section I1 for traffic and road impacts associated with the project.

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 would create an incremental increase in the existing noise environment. However, this increase would be small, and would be similar in character to noise generated by the surrounding existing uses.

2.	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☒

Discussion: No groundborne vibrations or noise levels will be created as a result of the proposed commercial uses; therefore no impact is anticipated.

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: Per County policy, average hourly noise levels shall not exceed the General Plan threshold of 50 L_{eq} during the day and 45 L_{eq} during the nighttime. Impulsive noise levels shall not exceed 65 db during the day or 60 db at night. Acoustic studies for nearby projects have shown that traffic noise along Soquel Drive can exceed these standards.

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

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

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: The project is not located within an airport land use plan. No impact is anticipated.

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: The project site is not within the vicinity of a private airstrip. No impact is anticipated.

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 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 the modest amount of 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 and grading may result in a short-term, localized decrease in air quality due to generation of dust. In order to minimize the impact of construction activities on air quality, the following mitigation measures will be imposed: Water graded/excavated areas at least twice daily, prohibit all grading activities during periods of high wind (over 15 mph), haul trucks shall maintain at least 2'-0" of

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

freeboard, cover all trucks hauling dirt, sand, or loose materials, plant vegetative ground cover in disturbed areas as soon as possible, cover inactive storage piles, install wheel washers at the entrance to construction site for all exiting trucks, and pave or apply baserock to all roads at construction site.

In addition to proposed grading activities, the project includes the demolition of twelve existing structures constructed prior to 1980, which may include contain asbestos containing materials (ACMs). In order to ensure that the demolition of existing structures does not violate any air quality standard, the following mitigation measures will be required: Prior to demolition work of buildings constructed prior to 1980, areas of the on-site structures shall be sampled as part of an asbestos survey in compliance with the National Emission Standards for Hazardous Air Pollutants (NESHAP). If asbestos is found in any building, asbestos-related work, including demolition, involving 100 square feet or more of ACMs shall be performed by a licensed asbestos consultant and asbestos shall be removed and disposed of in compliance with applicable State laws, at least 10 days prior to demolition of existing structures the MBUAPCD shall be notified and an MBUAPCD Notification of Demolition and Renovation Checklist shall be submitted to both MBUAPCD and the County.

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

Discussion: he project would not conflict with or obstruct implementation of the regional air quality plan. See K1 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 K1 above.

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

Discussion: No substantial pollutant concentrations would be emitted during or as a result of the proposed commercial development, with the exception of Co_2 emissions from construction vehicles, which would be temporary and not substantial.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
5. Create objectionable odors affecting a substantial number of people?	☐	☐	☐	☒

Discussion: No objectionable odors would be created during construction or as a result of the proposed project; therefore no impact is anticipated.

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 activities. 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 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. As a result, impacts associated with the temporary increase in greenhouse 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 L1 above. No significant 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:

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

Discussion (a through e): While the project represents an incremental contribution to the need for services, the increase would be minimal. Moreover, the project meets all of the standards and requirements identified by the Central Fire Protection District or California Department of Forestry, as applicable, and school, park, and transportation fees to be paid by the applicant would be used to offset the incremental increase in demand for school and recreational facilities and public roads.

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 would not increase the use of existing neighborhood or regional parks; therefore no impact 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 project does not include recreational facilities; therefore no impact is anticipated.

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

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: Drainage analysis of the project conducted by Roper Engineering, dated September 18, 2008 concluded that post-development runoff rates will not exceed pre-development rates. Department of Public Works Drainage staff have reviewed the drainage information and have determined that downstream storm facilities are adequate to handle the increase in drainage associated with the project (on file).

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 is currently served by an existing municipal water supply. The City of Santa Cruz Water Department has determined that adequate supplies are available to serve the project (on file). As stated in B4 above, residential water use far exceeds commercial water use. Because the three existing residential units are being replaced by commercial uses, the project is not expected to represent a significant increase in water use on the site. Therefore no new water facilities or expanded facilities would result from the proposed

Municipal sewer service is available to serve the project, as reflected in the attached letter from the Santa Cruz County Sanitation District (on file).

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 O2 above.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
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: See O2 above.

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

Discussion: The project would make a one-time contribution to the reduced capacity of regional landfills during construction and grading activities. In order to mitigate the impacts of temporary construction debris to less than significant, a condition of project approval will require the applicant to submit a plan to recycle and/or reuse excess post-construction materials, for review and approval by Planning Staff prior to building permit issuance. Implementation of this mitigation will maximize recycling and reuse of construction materials and will minimize contributions to the landfill.

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

Discussion: Solid waste accumulation is anticipated to increase slightly as a result of the new uses that would occur in conjunction with the proposed commercial shopping center. However, trash accumulation from the retail and/or office use would be modest and is not anticipated to result in a breach of federal, state or local statutes and regulations.

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 proposed project does not conflict with any regulations or policies adopted for the purpose of avoiding or mitigating an environmental effect in that

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

mitigations would be required to ensure public health and safety regarding riparian protection, air quality and parking standards. County General Plan Policy states that a 41st Avenue shall be extended through the project site at some point in the future. While implementation of this policy would result in a reduction of on site parking, three alternative have been identified (see the analysis under I1) which ensure that the reduction of parking can be accommodated. Therefore the project does not conflict with this land use policy.

2.	Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

Discussion: There are no habitat conservation plans or natural community conservation plans in effect on the site, therefore, there is no anticipated impact.

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 is designed at the density and intensity of development allowed by the General Plan and zoning designations for the parcel. Additionally, the project does not involve extensions of utilities (e.g., water, sewer, or new road systems) into areas previously not served. Consequently, it is not expected to have a significant growth-inducing effect.

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

Discussion: The proposed project displaces three existing, non-conforming residential units, which is not considered a significant impact.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
3. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☒	☐

Discussion: The proposed project would not displace a substantial number of people since in that only three non-conforming units are proposed to be removed from the site.

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: 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 or eliminate important examples of the major periods of California history or prehistory were considered in the response to each question in Section III of this Initial Study. Resources that have been evaluated as significant would be potentially impacted by the project, particularly riparian resources. However, in addition to the requirements included in the County Riparian Protection, Erosion Control, Grading and Sensitive Habitat Ordinances, which apply to all development, additional mitigation measures have been included that reduce these effects to a level below significance. This mitigation includes the restriction of exterior lighting that could impact wildlife activity within the riparian corridor. As a result of this evaluation, there is no substantial evidence that, after 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. As a result of this evaluation, there is no substantial evidence that 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: In the evaluation of environmental impacts in this Initial Study, the potential for adverse direct or indirect impacts to human beings were considered in the response to specific questions in Section III. As a result of this evaluation, there were determined to be potentially significant effects to human beings related to Hazardous Material, Landfill Capacity and Air Quality. However, mitigation has been included that clearly reduces these effects to a level below significance. This mitigation includes the requirement for the project applicant to provide a plan to recycle and/or reuse excess post-construction materials, to provide recycling receipts to indicate that construction materials have been recycled at an appropriate facility after use, to employ measures to reduce the impacts of dust generation, and to sample the existing structures for asbestos containing materials and notify the Monterey Air Pollution Control District (MBUAPCD) prior to construction. As a result of this evaluation, 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 ☒	
Arborist Report/Assessment	Yes ☒ No ☐	
Geologic Hazards Assessment (GHA)	Yes ☐ No ☒	
Geologic Report	Yes ☐ No ☒	
Geotechnical (Soils) Report	Yes ☒ No ☐	May 2005
Riparian Pre-Site	Yes ☒ No ☐	April 2005
Septic Lot Check	Yes ☐ No ☒	
Other: Traffic Report	Yes ☒ No ☐	August 2009; February 2009

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

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. *Site Plan (3 sheets),* prepared by Steven A. Elmore, Architect, last revised 7/16/10,
3. *Geotechnical Investigation (Conclusions and Recommendations)*, prepared by Dees & Associates, dated May 2005, updated June 18, 2008 and August 27, 2008
4. *Geotechnical Review Letter*, prepared by Carolyn Banti, dated September 3, 2008
5. *Letter from Project Drainage Engineer,* prepared by Roper Engineering, dated September 18, 2008
6. *Landscape Plan (3 Sheets)*, prepared by Ellen Cooper, Landscape Architect, revised 1/23/09
7. *Parking Layout Evaluation,* prepared by Hatch Mott MacDonald, dated March 12, 2009
8. *Traffic Study (Conclusions and Recommendations)*, prepared by Hatch Mott MacDonald, dated August 26, 2009. *Letter from Hatch Mott MacDonald,* dated February 2, 2009
9. *Trip Generation Report,* prepared by Higgins Associates, dated October 3, 2005

On File With The County Planning Department

1. *Architectural Plans,* prepared by Steven A. Elmore, Architect, last revised 7/16/10, *Civil Drawings (8 Sheets)* prepared by Roper Engineering, dated 4/7/05 and 8/28/09, revised 7/6/10, *Intersection Improvement Plans,* prepared by Hatch Mott MacDonald, dated 8/27/09.
2. *Memo from Department of Public Works, Sanitation,* dated October 12, 2005
3. *Letter from City of Santa Cruz Water Department*, dated August 22, 2007
4. *Discretionary Application Comments*, dated December 6, 2010q`
5. *Drainage Calculations*, prepared by Roper Engineering, dated August 26, 2008
6. *Arborists Report*, prepared by Ellen Cooper & Associates, dated January 12, 2006

Location Map

LEGEND

- APNS: 030-061-02,03,04,11,14
- Streets
- Assessors Parcels
- State Highways

N
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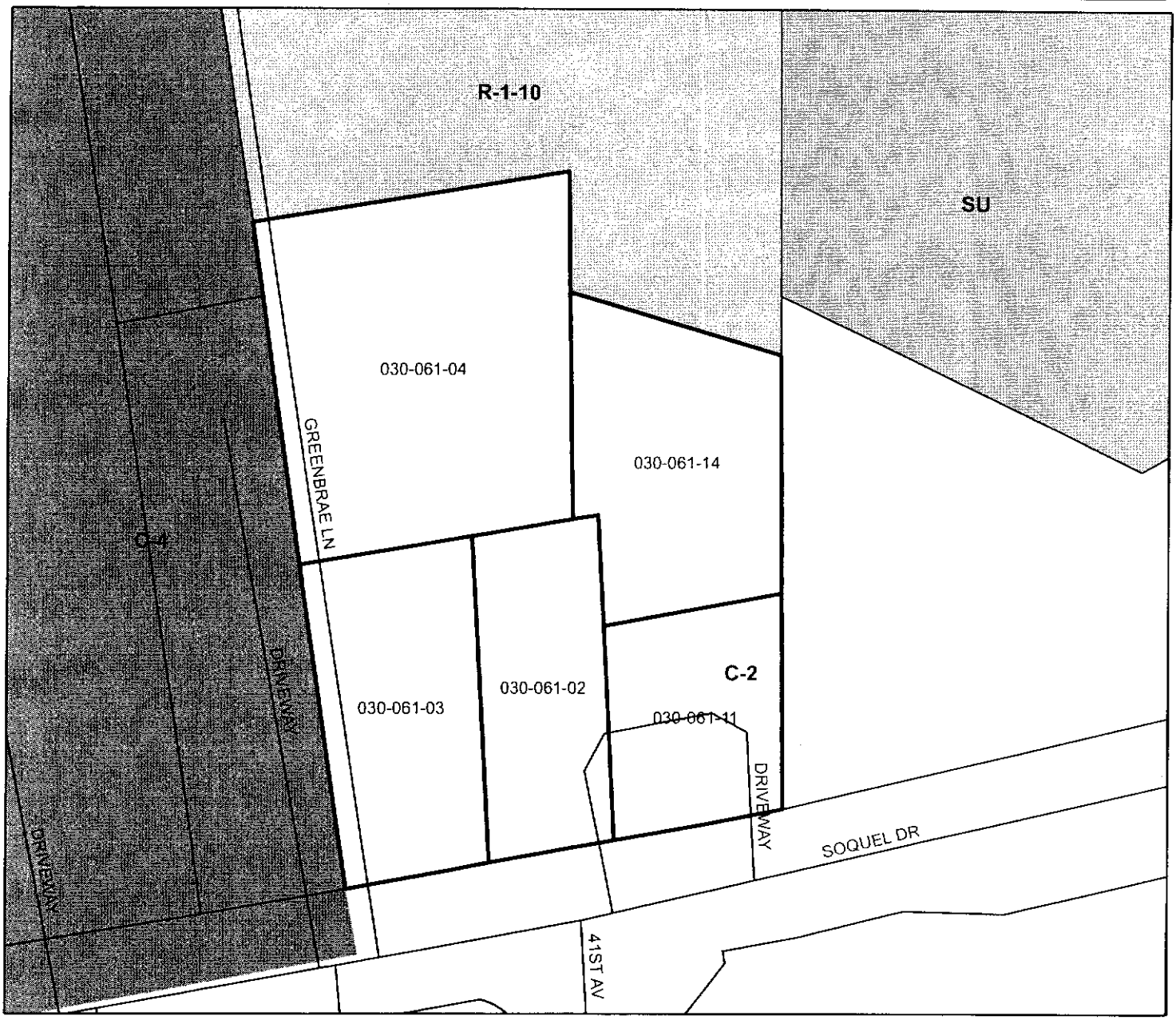
S

Map created by
County of Santa Cruz
Planning Department
August 2007

Zoning Map



LEGEND

- APNS: 030-061-02,03,04,11,14
- Streets
- Assessors Parcels
- State Highways
- COMMERCIAL-SERVICE
- COMMERCIAL-COMMUNITY
- RESIDENTIAL-SINGLE FAMILY
- SPECIAL USE

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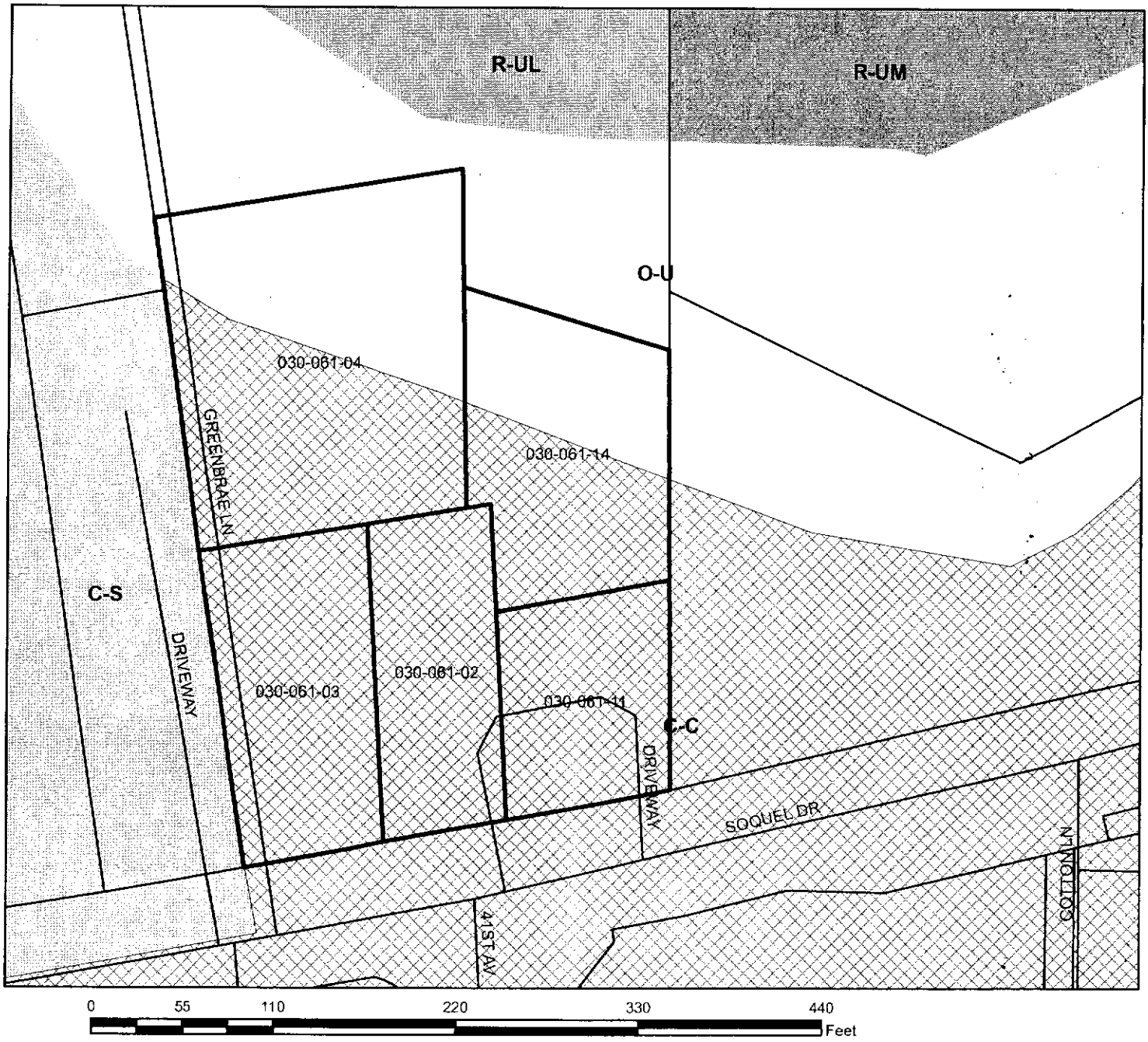
Map created by
County of Santa Cruz
Planning Department
August 2007

ATTACHMENT 1

General Plan Designation Map



LEGEND

- APNS: 030-061-02,03,04,11,14
- Streets
- Assessors Parcels
- State Highways
- Commercial-Community
- Commercial-Service
- Urban Open Space

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Map created by
County of Santa Cruz
Planning Department
August 2007

ATTACHMENT 1

FOR TAX PURPOSES ONLY

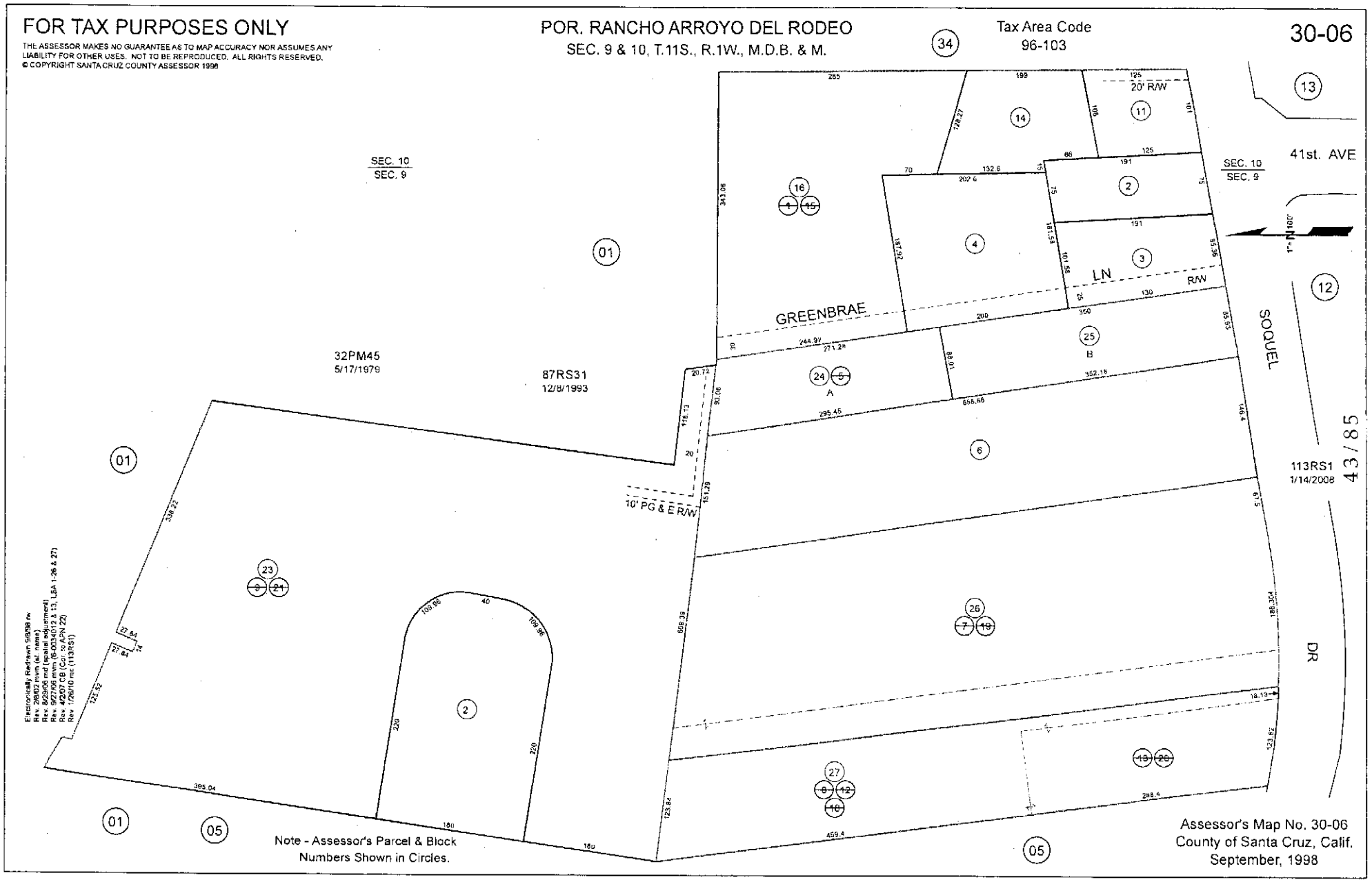
POR. RANCHO ARROYO DEL RODEO

SEC. 9 & 10, T.11S., R.1W., M.D.B. & M.

34

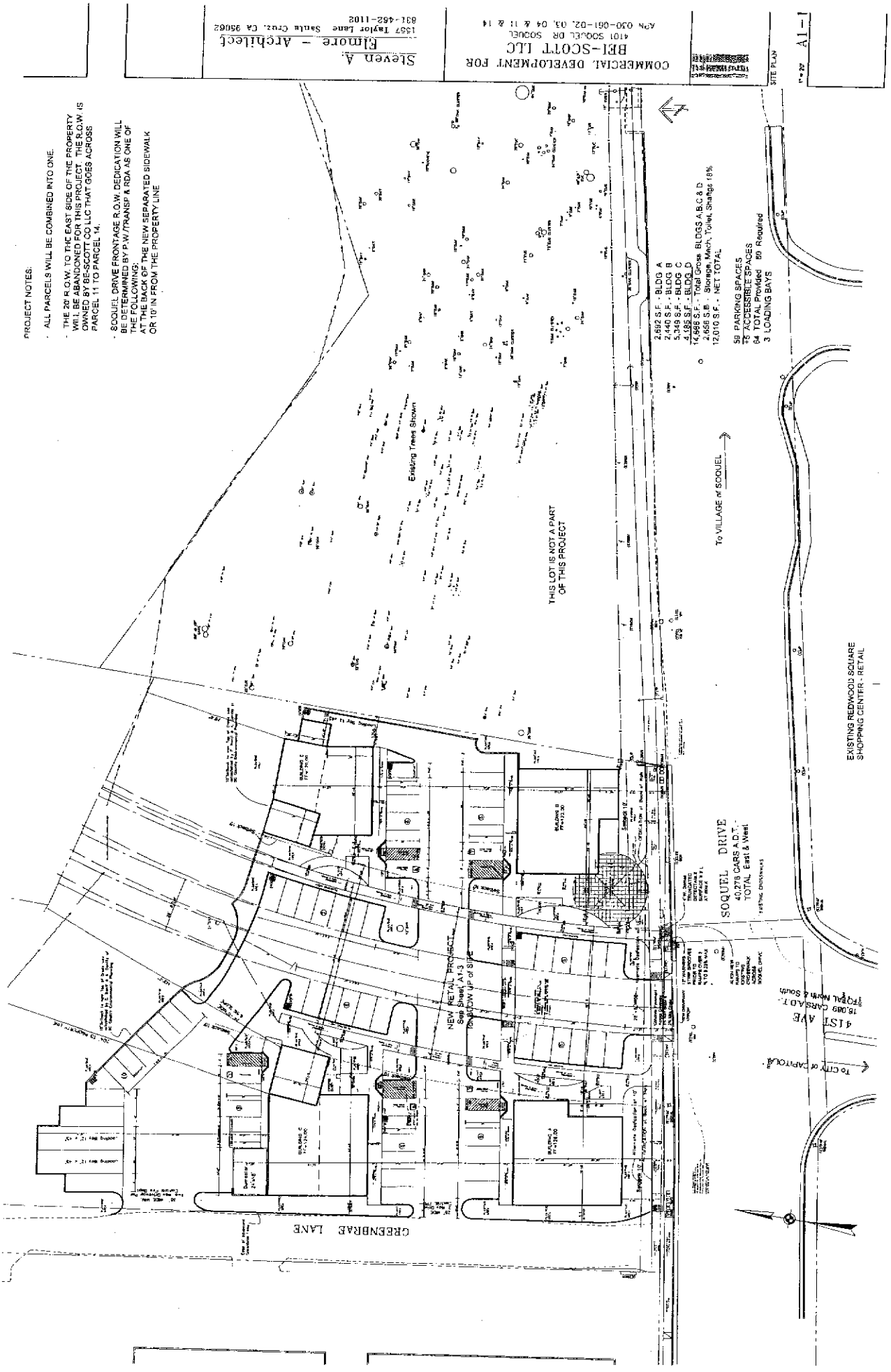
Tax Area Code
96-103

30-06



Note - Assessor's Parcel & Block Numbers Shown in Circles.

Assessor's Map No. 30-06
County of Santa Cruz, Calif.
September, 1998



ATTACHMENT 2

ATTACHMENT 2

ATTACHMENT 2

ATTACHMENT 2

GEOTECHNCIAL INVESTIGATION
For
PROPOSED RETAIL CENTER

Soquel Drive
APN'S 030-161-02, 03, 04, 11 & 14
Soquel, California

Prepared For
NORMAN BEI
Santa Cruz, California

Prepared By
DEES & ASSOCIATES
Geotechnical Engineers
Project No. SCR-0095
May 2005

ATTACHMENT 3

DISCUSSIONS & CONCLUSIONS

Based on the results of our investigation, the proposed commercial building is feasible for the site provided the recommendations presented in this report are incorporated into the design and construction of the development. Primary geotechnical concerns at the site include setting structures back from the slope at the rear of the site, providing firm uniform support for foundations and designing structures to withstand severe seismic ground shaking.

The fill slope at the back of the site is comprised of soft to stiff fine sandy silt. The surface of the slope is eroded and several small slump slides are evident on the slope face. There is a potential for landslides to occur on the slope when saturated or subjected to severe seismic shaking. Improvements should be set back behind a 3:1 (horizontal to vertical) line drawn from the toe of the slope, which is 20 feet from the top edge of the fill slope.

Structures may be supported on mat slab foundations or on conventional spread footing foundations with interior floor slabs provided the foundations are supported on compacted engineered fill. There should be at least 2 feet of compacted engineered fill below the base of mat slab foundations and at least 2 feet of compacted engineered fill below the base of conventional spread footing foundations. Engineered fill should extend at least 3 feet beyond the buildings perimeter.

The subgrade conditions below proposed pavements are variable. In order to provide a firm, uniform base for pavements, the top 8 inches of subgrade soil below pavements should be moisture conditioned to 2 to 4 percent over optimum moisture content and compacted to at least 95 percent relative compaction.

The proposed structure will most likely experience strong seismic shaking during the design lifetime. The foundation and structures should be designed utilizing current Uniform Building Code (UBC) seismic design standards. Structures designed in accordance with the most current UBC should react well to seismic shaking. The underlying soils are generally medium dense to dense and are classified as a ASoil Type $S_{D\cong}$, according to the 1997 UBC.

RECOMMENDATIONS

The following recommendations should be used as guidelines for preparing project plans and specifications:

Site Grading

1. The soil engineer should be notified **at least four (4) working days** prior to any site clearing or grading so that the work in the field can be coordinated with the grading contractor and arrangements for testing and observation can be made. The recommendations of this report are based on the assumption that the soil engineer will perform the required testing and observation during grading and construction. It is the owner's responsibility to make the necessary arrangements for these required services.

2. Where referenced in this report, Percent Relative Compaction and Optimum Moisture Content shall be based on ASTM Test Designation D1557-00

3. Areas to be graded should be cleared of obstructions and other unsuitable material. Existing depressions or voids created during site clearing should be backfilled with engineered fill.

4. Areas of the site to receive engineered fill should be scarified to a depth of 6 inches, moisture conditioned, and compacted to provide a firm, uniform base for fill placement.

5. The near surface site soils are suitable for use as engineered fill. The underlying clays should not be used for engineered fill. On-site soils used as engineered fill should be moisture conditioned to between 2 to 4 percent over optimum moisture content. Soils used for engineered fill should be free of organic material, and contain no rocks or clods greater than 6 inches in diameter, with no more than 15 percent larger than 4 inches. We estimate shrinkage factors of about 10 to 15 percent for the on-site materials when used in engineered fills.

6. Engineered fill should be placed in thin lifts not exceeding 8 inches in loose thickness; moisture conditioned, and compacted to at least 90 percent relative compaction.

7. The upper 8 inches of pavement subgrades should be compacted to 95 percent relative compaction. The aggregate base below pavements should also be compacted to at least 95 percent relative compaction.

8. Fill slopes should be inclined less than 2:1 (horizontal to vertical) and keyed and benched into firm native soil. The face of fill slopes should be groomed and protected from erosion.

9. After the earthwork operations have been completed and the soil engineer has finished his observation of the work, no further earthwork operations shall be performed except with the approval of and under the observation of the soil engineer.

Mat Slab Foundations

10. Mat slab foundations should be at least 6 inches thick and supported on at least 2 feet of compacted engineered fill. (The underlying capillary break material should not be considered part of the 2 feet of engineered fill material). Engineered fill should extend at least 3 feet beyond the edges of the proposed foundation.

11. Reinforcing should be provided in accordance with the anticipated use and loading of the slab. If the slab will be used for traffic, forklifts or to support large loads, the upper 8 inches of subgrade soil should be compacted to at least 95 percent relative compaction.

12. Mat slab foundations designed in accordance with the above may be designed for an allowable soil bearing pressure of 1,500 psf for dead plus live loads. This value may be increased by one-third to include short-term seismic and wind loads.

13. Lateral load resistance for structures supported on mat slabs may be developed in friction between the foundation bottom and the supporting subgrade. A friction coefficient of 0.35 may be assumed for compacted engineered fill.

14. Dees & Associates are not experts in the field of moisture proofing or vapor barriers. An expert, experienced in the field of vapor mitigation should be consulted to address areas where floor wetness would be undesirable or where sensitive flooring or equipment is planned on top of floor slabs. We also recommend you discuss this issue with your flooring and equipment manufacturers. At a minimum, a blanket of 4 inches of free-draining gravel should be placed beneath the floor slab to act as a capillary break. In order to minimize vapor transmission, an impermeable membrane should be placed over the gravel. The membrane should be covered with 2 inches of sand or rounded gravel to protect it during construction. The sand or gravel should be lightly moistened just prior to placing the concrete to aid in curing the concrete.

15. Thickened exterior edges, a well-prepared subgrade including premoistening prior to pouring concrete, adequately spaced expansion joints, and good workmanship will help minimize cracking and movement.

Conventional Spread Footing Foundations

16. Conventional spread footings may be used to support structures provided the base of footings are supported on at least 3 feet of compacted engineered fill.

17. Footing depths should be determined in accordance with the anticipated use and applicable design standards. The footings should be reinforced as required by the structural designer based on the actual loads transmitted to the foundation.

18. The foundation trenches should be kept moist and be thoroughly cleaned of slough or loose materials prior to pouring concrete. Footings located adjacent to other footings or utility trenches should have their bearing surfaces founded below an imaginary 1.5:1 plane projected upward from the bottom edge of the adjacent footings or utility trenches.

19. Foundations designed in accordance with the above may be designed for an allowable soil bearing pressure of 2,500 psf for dead plus live loads. This value may be increased by one-third to include short-term seismic and wind loads.

20. Total and differential settlements under the proposed light building loads are anticipated to be less than 1 inch and 2 inch respectively.

21. Lateral load resistance for structures supported on footings may be developed in friction between the foundation bottom and the supporting subgrade. A friction coefficient of 0.35 may be used for compacted engineered fill. Where footings are poured neat against compacted engineered fill a passive lateral pressure of 300 pcf, equivalent fluid weight, may be assumed below a depth of 6-inches.

22. Prior to placing concrete, foundation excavations should be thoroughly cleaned and observed by the soils engineer.

Interior Slabs-on-Grade

23. Interior floor slabs should be supported on at least 12 inches of compacted engineered fill. Reinforcing should be provided in accordance with the anticipated use and loading of the slab. If the slab will be used for traffic, forklifts or to support large loads, the upper 8 inches of subgrade soil should be compacted to at least 95 percent relative compaction.

24. Dees & Associates are not experts in the field of moisture proofing or vapor barriers. An expert, experienced in the field of vapor mitigation should be consulted to address areas where floor wetness would be undesirable or where sensitive flooring or equipment is planned on top of floor slabs. We also recommend you discuss this issue with your flooring and equipment manufacturers. At a minimum, a blanket of 4 inches of free-draining gravel should be placed beneath the floor slab to act as a capillary break. In order to minimize vapor transmission, an impermeable membrane should be placed over the gravel. The membrane should be covered with 2 inches of sand or rounded gravel to protect it during construction. The sand or gravel should be lightly moistened just prior to placing the concrete to aid in curing the concrete.

25. Thickened exterior edges, a well-prepared subgrade including premoistening prior to pouring concrete, adequately spaced expansion joints, and good workmanship will help minimize cracking and movement.

Exterior Slabs-on-Grade

26. The top 6 inches of subgrade soil below non-load bearing exterior concrete slabs-on-grade should be compacted to at least 90 percent to provide a firm base for slab support.

27. The top 8 inches of subgrade soil below load bearing exterior concrete slabs-on-grade should be compacted to at least 95 percent relative compaction.

28. Reinforcing should be provided in accordance with the anticipated use and loading of the slab. The reinforcement of exterior slabs should not be tied to the building foundations. These exterior slabs can be expected to suffer some cracking and movement. However, thickened exterior edges, a well-prepared subgrade including premoistening prior to pouring concrete, adequately spaced expansion joints, and good workmanship should minimize cracking and movement.

Pavements

29. To have the selected pavement sections perform to their greatest efficiency, it is very important that the grading recommendations provided in this report are closely followed. Subgrade preparation is very important to the life of pavement. The top eight inches (8") of subgrade below pavements should be scarified and moisture conditioned to 2 to 4 percent above laboratory optimum value and compacted to a minimum relative compaction of 95 percent prior to placing aggregate base material. The base material should also be compacted to at least 95 percent relative compaction.

30. Sufficient gradients should be provided for rapid runoff of storm water and to prevent ponding water. Slope gradients of at least 2 to 5 percent should be used to direct runoff towards suitable collection facilities.

31. Only quality materials of the type and thickness (minimum) specified should be used. Baserock (R=78 minimum) should meet CALTRANS Standard Specifications for Class 2 Untreated Aggregate Base. Subbase (R=50 minimum) should meet CALTRANS Standard Specifications for Class 2 Untreated Aggregate Subbase.

32. Place the asphaltic concrete only during periods of fair weather when the free air temperature is within prescribed limits.

33. Develop a maintenance program and perform routine maintenance.

Site Drainage

34. Controlling surface runoff is important to the performance of the slope at the back of the site. Runoff must not be allowed to sheet flow over slopes. Berms or lined V-ditches should be constructed at the top of slopes to divert water toward suitable collection facilities.

35. Surface drainage should include provisions for positive gradients so that surface runoff is not permitted to pond adjacent to foundations or other improvements. Surface drainage should be directed away from the building foundations. Minimum slope gradients of 2 to 5 percent should divert runoff away from improvements towards suitable collection facilities.

36. Full roof gutters should be placed around the eves of the structure. Discharge from the roof gutters should be conveyed away from the downspouts and discharged away from improvements in a controlled manner.

37. Permanent subdrains may be required adjacent to pavements or building foundations where potential seepage zones are encountered near the surface. The location and depth of these drains will need to be determined in the field by the soil engineer.

38. The migration of water or spread of extensive root systems below foundations, slabs, or pavements may cause undesirable differential movements and subsequent damage to these structures. Landscaping should be planned accordingly.

Plan Review, Construction Observation, and Testing

39. Dees & Associates should be provided the opportunity for a general review of the final project plans prior to construction to evaluate if our geotechnical recommendations have been properly interpreted and implemented. If our firm is not accorded the opportunity of making the recommended review, we can assume no responsibility for misinterpretation of our recommendations. We recommend that our office review the project plans prior to submittal to public agencies, to expedite project review. Dees & Associates also request the opportunity to observe and test grading operations and foundation excavations at the site. Observation of grading and foundation excavations allows anticipated soil conditions to be correlated to those actually encountered in the field during construction.

LIMITATIONS AND UNIFORMITY OF CONDITIONS

1. The recommendations of this report are based upon the assumption that the soil conditions do not deviate from those disclosed in the borings. If any variations or undesirable conditions are encountered during construction, or if the proposed construction will differ from that planned at the time, our firm should be notified so that supplemental recommendations can be given.

2. This report is issued with the understanding that it is the responsibility of the owner, or his representative, to ensure that the information and recommendations contained herein are called to the attention of the Architects and Engineers for the project and incorporated into the plans, and that the necessary steps are taken to ensure that the Contractors and Subcontractors carry out such recommendations in the field. The conclusions and recommendations contained herein are professional opinions derived in accordance with current standards of professional practice. No other warranty expressed or implied is made.

3. The findings of this report are valid as of the present date. However, changes in the conditions of a property can occur with the passage of time, whether they are due to natural processes or to the works of man, on this or adjacent properties. In addition, changes in applicable or appropriate standards occur whether they result from legislation or the broadening of knowledge. Accordingly, the findings of this report may be invalidated, wholly or partially, by changes outside our control. Therefore, this report should not be relied upon after a period of three years without being reviewed by a soil engineer.

Dees & Associates, Inc.
Geotechnical Engineers
501 Mission Street, Suite 8A, Santa Cruz, CA 95060
Phone: 831 427-1770
Fax: 831 427-1794
Email: dna@dslextreme.com

June 18, 2008

Project No. SCR-0095

MR. NORMAN BEI
410 May Avenue
Santa Cruz, California 95062

Subject: Addendum to Geotechnical Investigation, Dated May 17, 2005

Reference: Proposed Retail Center
Soquel Drive
APN'S 030-061-02, 03, 04, 11 & 14
Santa Cruz, California

Dear Mr. Bei:

We understand the project scope now includes removal of all existing fill at the site, including the fill slope at the back. After removal of the existing fill, the slope will be cut back to a 2:1 (horizontal to vertical) slope angle and compacted engineered fill will be placed at the top of the slope up to design grades. Design grades are lower than the existing grades.

Once the existing fill is removed, any remaining loose, native soil should be removed and replaced as compacted engineered fill. Engineered fill should be keyed and benched into firm, native soil and the back of keys should be drained with gravel subdrains. Refer to our typical key detail attached.

Berms should be used to prevent water from flowing over the slope and collected runoff should be discharged in a controlled manner. Due to the clayey nature of the surface soils and the presence of very dense bedrock that daylights on the slope below the site, we do not recommend using on-site retention for discharging collected runoff. Collected runoff should be collected and discharged at the base of the drainage valley at the back of the site or into established storm drains.

Our report, dated May 17, 2005, indicated the fill slope was potentially unstable and recommended setting improvements back behind an imaginary 3:1 (horizontal to vertical) line drawn upwards from the toe of the slope. Once the fill is removed, the slope is cut back to a stable 2:1 (h:v) slope angle and the drainage gets controlled, there will be a low potential for landslides to affect the proposed development. Therefore, improvements may be located up to the top edge of the re-graded slope as long as the base of all foundations are located at least 10 feet (measured horizontally) from the adjacent slope face. Foundations may be deepened to comply with the 10 foot setback.

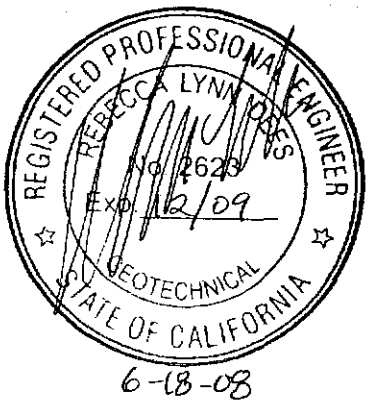
The recommendations provided in this letter supercede the recommendations of our original report. All other recommendations of our original report are still valid and may

be used for design and construction of the proposed improvements.

If you have any questions regarding this report, please call our office.

Very truly yours,

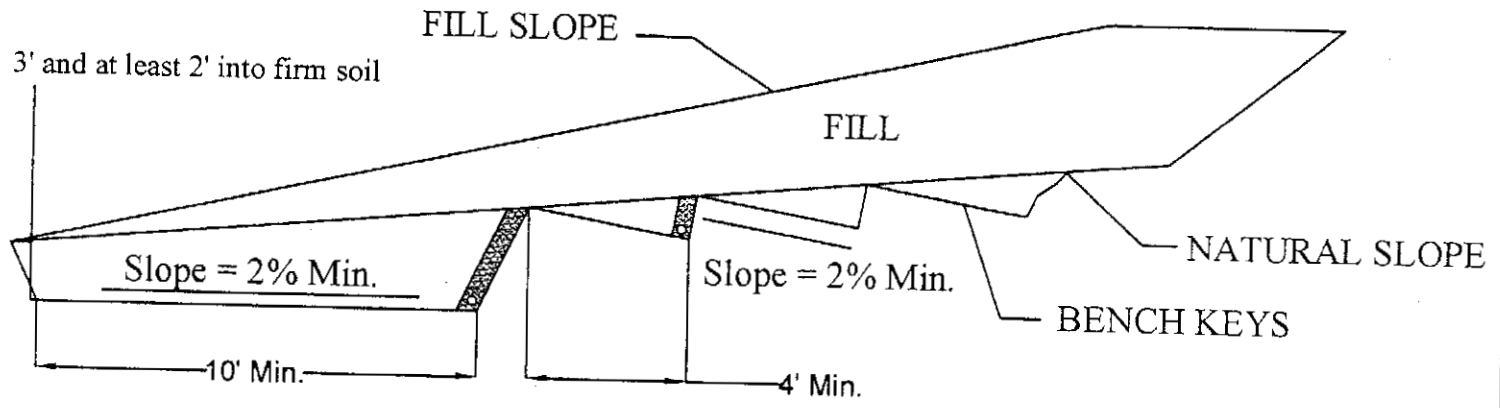
DEES & ASSOCIATES, INC.



Rebecca L. Dees
Geotechnical Engineer
G.E. 2623

Copies: 1 to Addressee
4 to Steve Elmore, Architect
1 to Jeff Roper, Roper Engineering

TYP. KEYWAY DETAIL



NOTE

Subdrains should be placed at the back of keys and benches where potential seepage zones are encountered during grading. Subdrains should consist of a 12-inch wide gravel drain with a perforated pipe located about 3-inches from the bottom. The perforated pipe should be connected to a solid pipe that is discharged to a suitable location. Gravel should consist of Caltrans Class 1, Type A permeable material or an approved equivalent. The depth and extend of subdrain should be determined by the geotechnical engineer in the field during construction.

TYP. KEYWAY DETAIL

SCALE	NTS
DRAWN BY	AT
DATE	
REVISED	
JOB NO	

DEES AND ASSOCIATES
GEOTECHNICAL ENGINEERS
501 MISSION STREET, SUITE 8A, SANTA CRUZ, CA 95060
(831) 427-1770

SHEET NO. 1 OF 1

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
TOM BURNS, PLANNING DIRECTOR

September 3, 2008

Steven Elmore
780 Voltz Ln.
Santa Cruz, CA, 95062

Subject: Review of Geotechnical Investigation by Dees & Associates, Inc.
Dated May 17, 2005; Project #: SCR-0095
Addendum to Geotechnical Investigation, Dated June 18, 2008
APN 030-061-02, 03, 04, 11, 14, Application #: 07-0406

Dear Applicant:

The purpose of this letter is to inform you that the Planning Department has accepted the subject report and the following items shall be required:

1. All construction shall comply with the recommendations of the report.

2. Final plans shall reference the report and include a statement that the project shall conform to the report's recommendations. Plans shall also provide a thorough and realistic representation of all grading necessary to complete this project

3. Prior to building permit issuance a *plan review letter* shall be submitted to Environmental Planning. The author of the report shall write the *plan review letter*. The letter shall state that the project plans conform to the report's recommendations.

4. Prior to building permit issuance, please submit an electronic copy of the soils report in .pdf format via compact disk or email. Emails may be directed to carolyn.banti@co.santa-cruz.ca.us.

After building permit issuance the soils engineer *must remain involved with the project* during construction. Please review the *Notice to Permits Holders* (attached).

Our acceptance of the report is limited to its technical content. Other project issues such as zoning, fire safety, septic or sewer approval, etc. may require resolution by other agencies.

Please submit two copies of the report at the time of building permit application.

Please call the undersigned at (831) 454-5121 if we can be of any further assistance.

Sincerely,

Carolyn Banti
Associate Civil Engineer

Cc: Cathy Graves, Project Planner
BEI-Scott Company, LLC
Dees & Associates, Inc.

ATTACHMENT 4

NOTICE TO PERMIT HOLDERS WHEN A SOILS REPORT HAS BEEN PREPARED, REVIEWED AND ACCEPTED FOR THE PROJECT

After issuance of the building permit, the County requires your soils engineer to be involved during construction. Several letters or reports are required to be submitted to the County at various times during construction. They are as follows:

1. **When a project has engineered fills and / or grading**, a letter from your soils engineer must be submitted to the Environmental Planning section of the Planning Department prior to foundations being excavated. This letter must state that the grading has been completed in conformance with the recommendations of the soils report. Compaction reports or a summary thereof must be submitted.

2. **Prior to placing concrete for foundations**, a letter from the soils engineer must be submitted to the building inspector and to Environmental Planning stating that the soils engineer has observed the foundation excavation and that it meets the recommendations of the soils report.

3. **At the completion of construction,** a *final letter* from your soils engineer is required to be submitted to Environmental Planning that summarizes the observations and the tests the soils engineer has made during construction. The final letter must also state the following: "Based upon our observations and tests, the project has been completed in conformance with our geotechnical recommendations."

   If the *final soils letter* identifies any items of work remaining to be completed or that any portions of the project were not observed by the soils engineer, you will be required to complete the remaining items of work and may be required to perform destructive testing in order for your permit to obtain a final inspection.

Roper Engineering
Civil Engineering & Land Surveying
64 Penny Lane, Suite A - Watsonville, CA 95076-6021
(831) 724-5300 phone
(831) 724-5509 fax
jeff@roperengineering.com e-mail

Jeff A. Roper
Civil Engineer & Land Surveyor
RCE 41081
PLS 5180

Alyson Tom
Santa Cruz County Public Works
Drainage Department
701 Ocean Street
Santa Cruz, CA 95060

September 18, 2008

Re: New Commercial Development at 4101 Soquel Drive
Co. App. No. 07-0406, APN 030-161-02, Our Job No. 05006

Dear Alyson,

Per your request, we have made a visual inspection of the drainage swale behind the above referenced development starting at Greenbrae Lane and ending at the 3' x 5' concrete box culvert that runs under Soquel Drive. We have attached an aerial photograph with the flow line outlined with stationing. The following are our observations:

Field Observation

1+00 Outlet existing 48" CMP culvert. Outlet clean, in fair condition, some rust but functional.

1+00 to 2+00 Flowline with rock cobbles and sand. Grade looks stable. No evidence of scouring. Lots of leaves and branches on side slopes. No evidence of side slope erosion.

2+00 to 3+00 Evidence of some side slope erosion on right caused by rope swing activity. Minor foot traffic erosion.

3+00 to 4+00 Evidence of slope failures by tree falls on right. Tree blocking the flowline causing some flow line scour. Recommend removal of tree debris and stabilize slope on right.

4+00 to 5+00 Evidence of slope failure on left. Possibly caused by tree fall.

5+00 to 8+00 Banks covered with black berry vines and poison oak. Slopes not visible. Flow line stable with cobbles and sand. Flow line width 3 to 5 feet.

ATTACHMENT 5

8+00 to 9+00 Flowline widens out to 6 to 10 feet wide. Flow line fairly clean with sand bottom and few cobbles.

9+00 to 11+00 Tree trunk in flow line causing some localized scour. Some minor slope failure on right probably due to tree fall.

11+00 to 12+00 Evidence of small slope failure on left due to tree falling into flowline.

12+00 to 14+00 Flow line widens out to 10 to 15 feet with sand bottom. Some tree debris in channel but not blocking flow.

14+00 to 16+00 Flow line with sand bottom 10 to 15 feet wide.

15+00 12" CMP culvert outlet with tee end on right. No erosion evident at outlet. Some minor slumping above outlet.

16+00 to 18+00 Terrain flattens out on side slopes. Broad swale 50 to 100 feet wide with a shallow flow line 5 to 10 feet wide.

17+00 Concrete driveway over swale with three 18" CMP culverts. Concrete driveway acts as spillway if culvert capacity exceeded in large storms. No evidence of erosion.

17+75 Old dirt driveway crosses over swale with 30" CMP culvert. Upstream end of culvert plugged with debris. Some minor erosion of dirt driveway. Driveway looks to be abandoned except for foot traffic.

18+10 Tributary fork enters from left.

18+00 to 21+00 Flow line 5 to 10 feet wide in moderate side slope channel with sand bottom. Channel fairly clean.

21+00 to 23+25 Channel parallels Soquel Drive. Some concrete riprap slope protection on right. No evidence of scour or erosion.

23+25 Inlet to 3' x 5' concrete box culvert. Entrance fairly clean but with some minor debris.

Conclusions

The slopes at the rear of our project from station 1+00 to 4+25 will be reconstructed. Trees and other debris in the swale flow line will be removed. Final slopes will be vegetated and protected against erosion.

The remainder of the swale appears to be functioning adequately. The drainage swale could use a cleaning with the removal of logs, debris and trash, but approval of land owners would be required to work on private property.

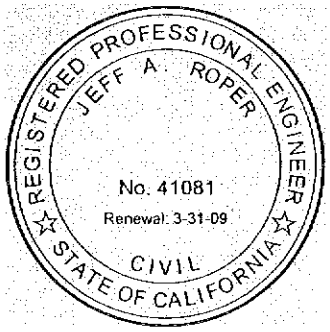
Photographs were taken during the field observation, but are difficult to interpret due to the large amount of vegetation. Copies will be provided upon request.

I hope this letter answers any concerns regarding the downstream drainage conditions. Please give me a call if you have any further questions.

Sincerely,

Jeff Roper

Jeff Roper



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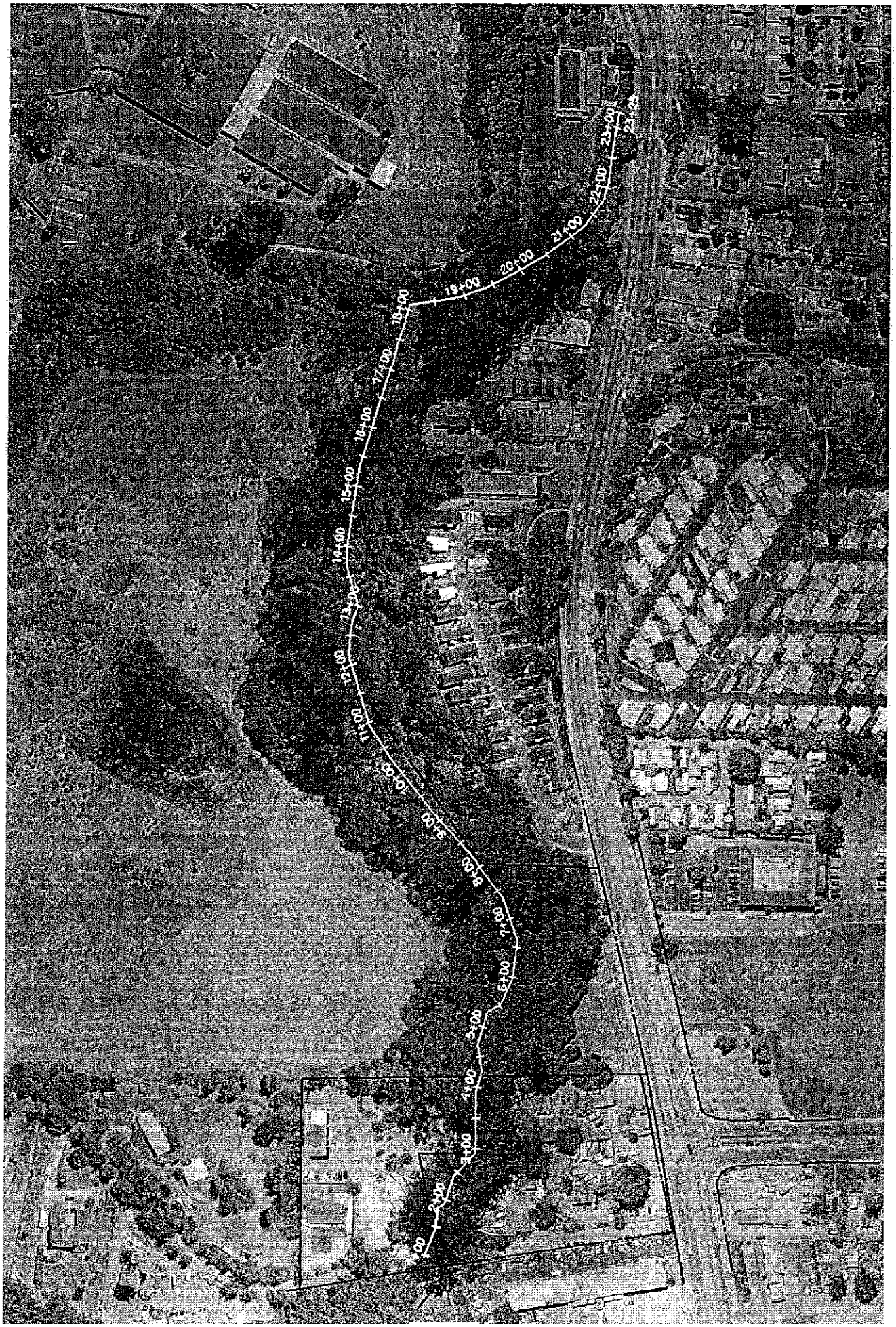
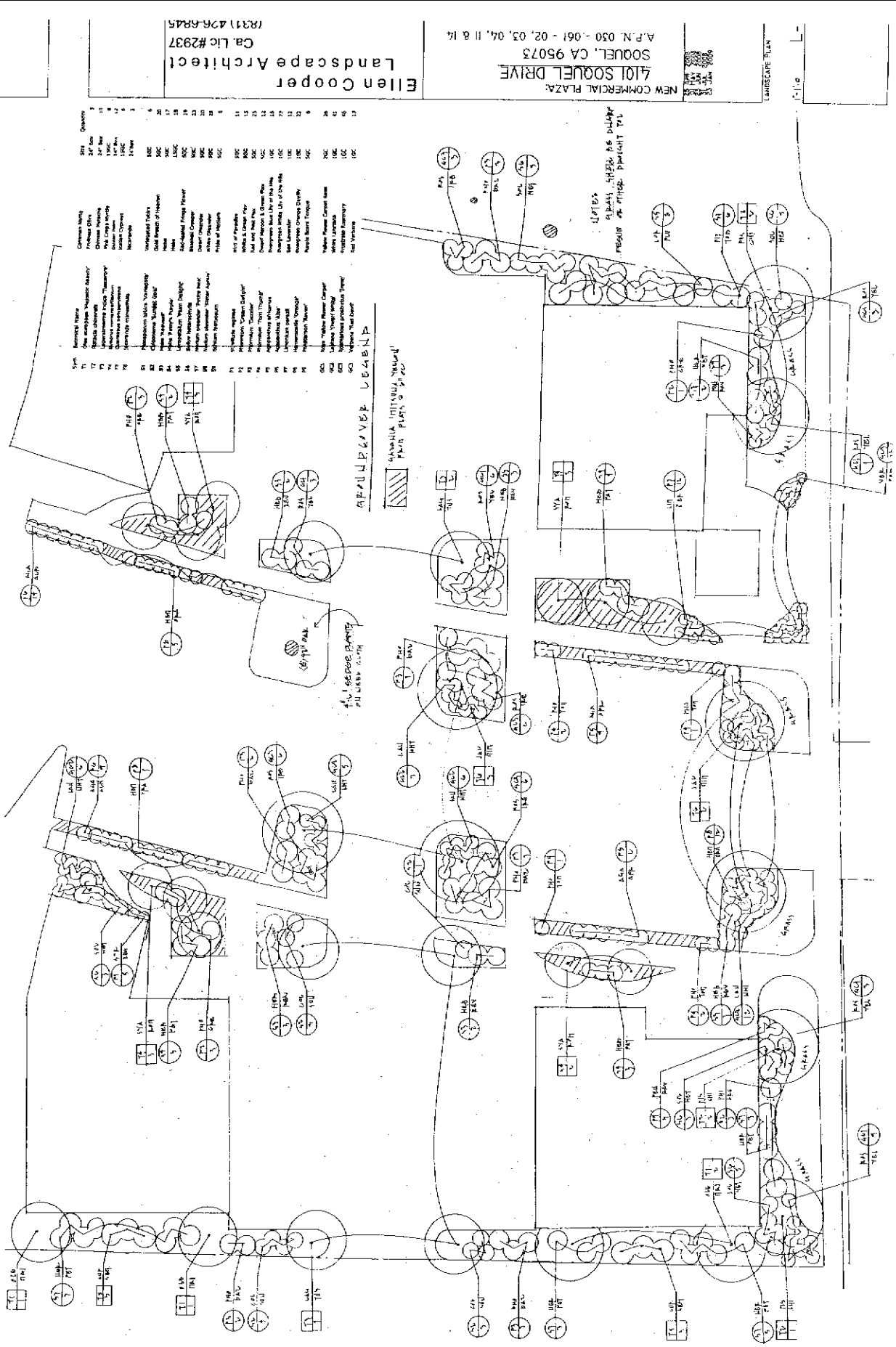


ATTACHMENT 5



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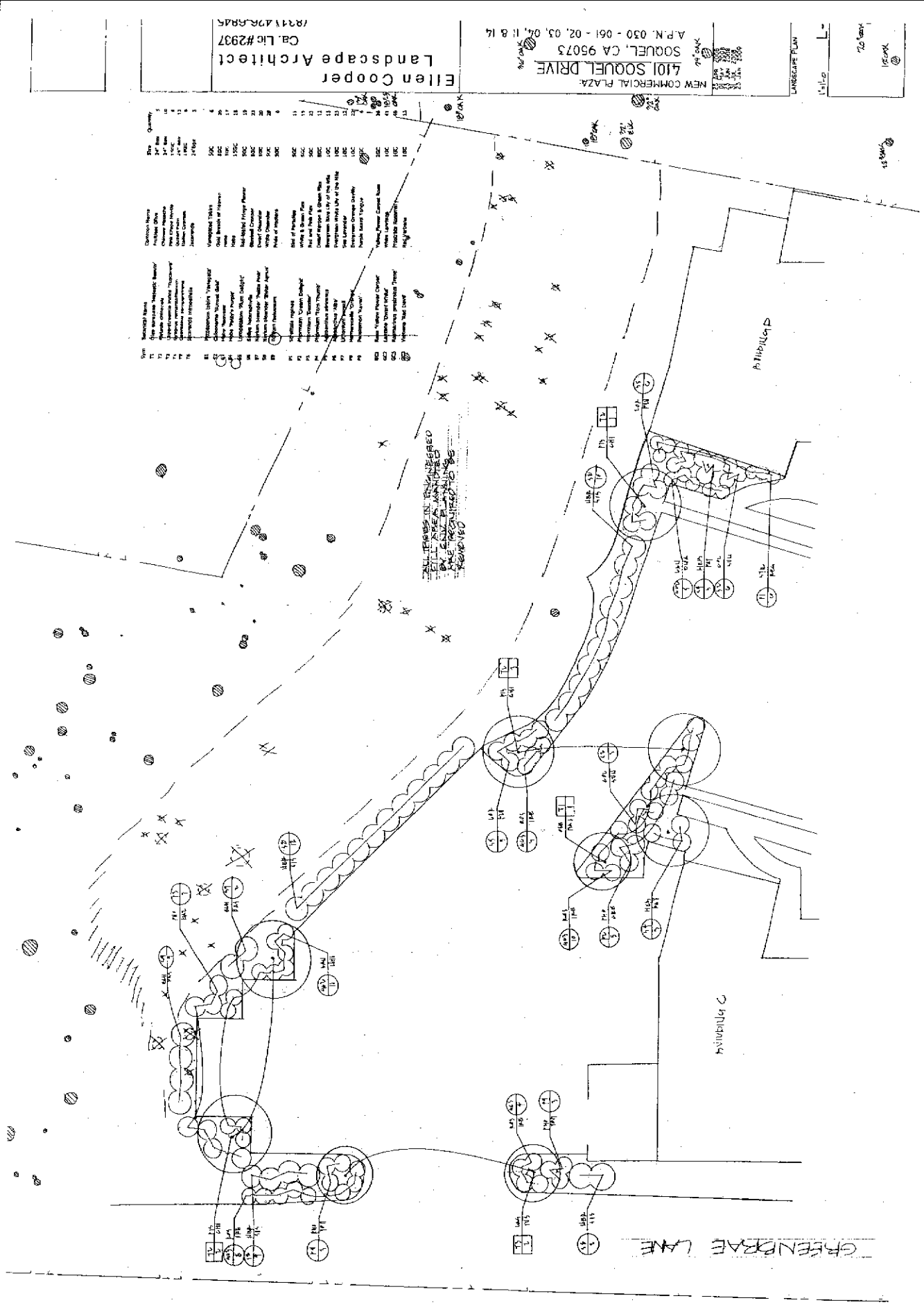

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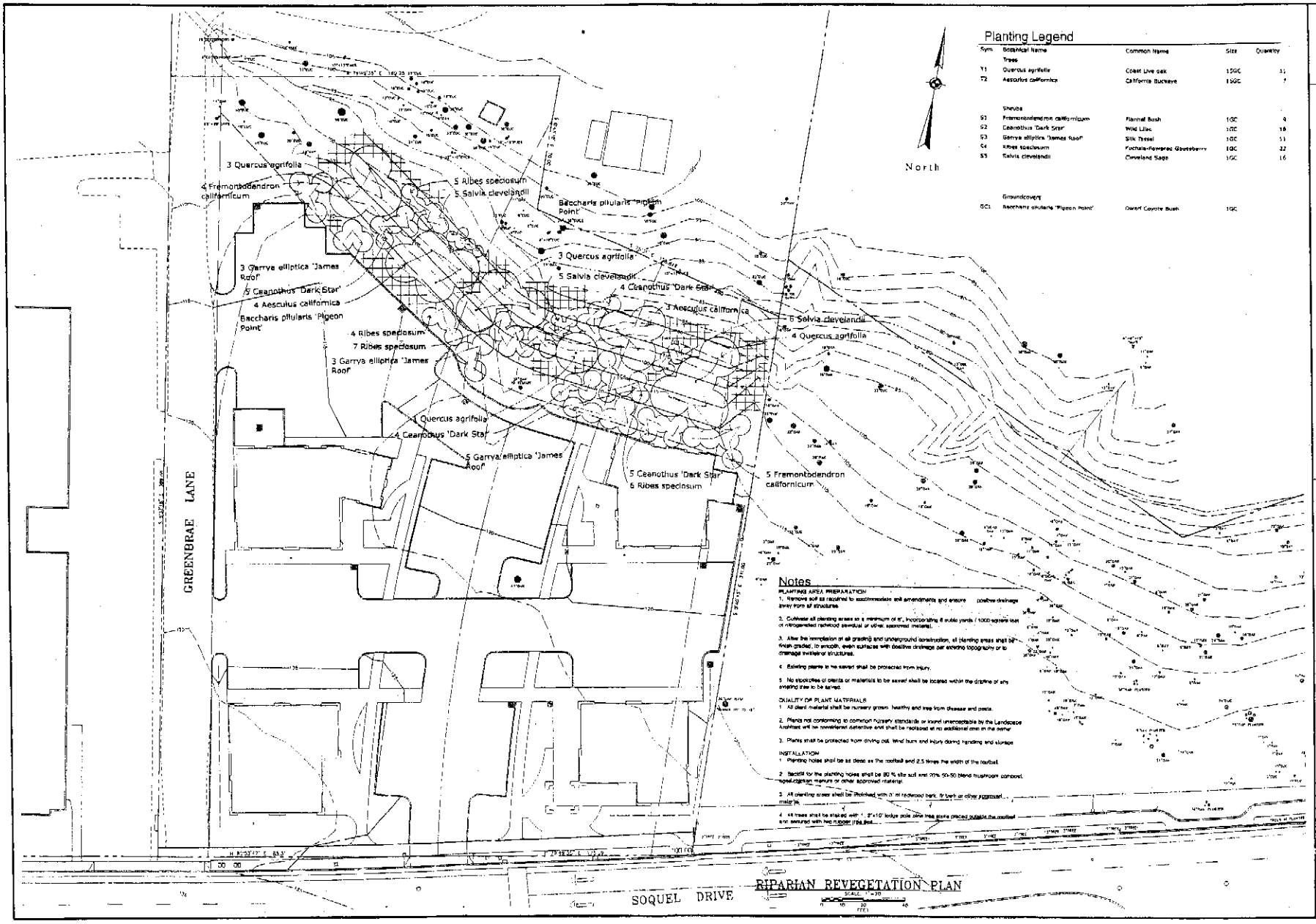


ATTACHMENT 6

Hatch Mott MacDonald
Delivering Solutions

March 12, 2009

Mr. Norm Bei
Bei-Scott, LLC
410-1 May Avenue
Santa Cruz, CA 95060

Re: 4101 Soquel Drive at 41st Avenue Commercial Building, Santa Cruz County, CA Parking Layout Evaluation

Dear Mr. Bei,

Based upon our discussion with Mr. Steve Elmore, the architect for your project, we understand that the County of Santa Cruz (County) has requested an evaluation of the parking lot layout of your project with regards to the proposed extension of 41st Avenue just north of Soquel Drive. The proposed commercial project consists of multiple land uses as mentioned in the trip generation and distribution letter prepared by Hatch Mott MacDonald, formerly known as Higgins Associates, October 3, 2005. It should be noted that any land usage that is not permitted on the project site, as listed in the trip generation and distribution letter, is deemed to be deleted by this letter (i.e. auto repair shop storage). The following paragraphs summarize the conclusions determined from our parking lot evaluation for the project site plan provided by Mr. Elmore on March 6, 2009.

The proposed project parking lot layout includes build and no-build alternatives for the future extension of 41st Avenue. The no-build parking layout option is the short-term alternative, which would be the primary access into the site. However, the second alternative, the build alternative, allows for the ultimate extension of 41st Avenue, which would travel through the middle proposed project site.

Upon review of the project site plan, included as **Attachment 1**, we believe that the project site plan can accommodate an extension of 41st Avenue extension should it occur. Currently, the intersection of Soquel Drive and 41st Avenue is a signalized T-intersection with northbound, eastbound and westbound approaches. The project driveway will form the fourth leg, the southbound approach, of the intersection. Construction of the project will require minor striping improvements and signal modification at the Soquel Drive / 41st Avenue intersection.

The project site plan allows for approximately 74' of right-of-way for the future roadway extension. This right-of-way width is estimated based on the roadway geometry shown on the site plan (2-12' southbound thru lanes, 1-12' left turn lane with a 4' median, 1-12' northbound thru lane, and 6' bike/shoulder and 5' sidewalk on both sides). Prior to the extension, the project proposes to utilize this area as a parking aisle with perpendicular parking spaces on both sides.

1300-B First Street, Gilroy, CA 95020 * Phone: 408-848-3122 * Fax: 408-848-2202 * www.hatchmott.com

ATTACHMENT 7

Should the 41st Avenue extension be constructed, the parking spaces in this location will be replaced with angled parking on Greenbrae Lane. The lane geometry shown on the site plan for the 41st Avenue extension should be able to accommodate a daily volume of approximately 22,000 vehicles, which would be more than sufficient to accommodate the future traffic demand. The allotted right-of-way width would be sufficient to accommodate the future roadway extension.

If you have any questions regarding this analysis, please do not hesitate to contact me at (408) 848-3122.

Respectfully submitted,

Keith B. Higgins, CE, TE
Vice President

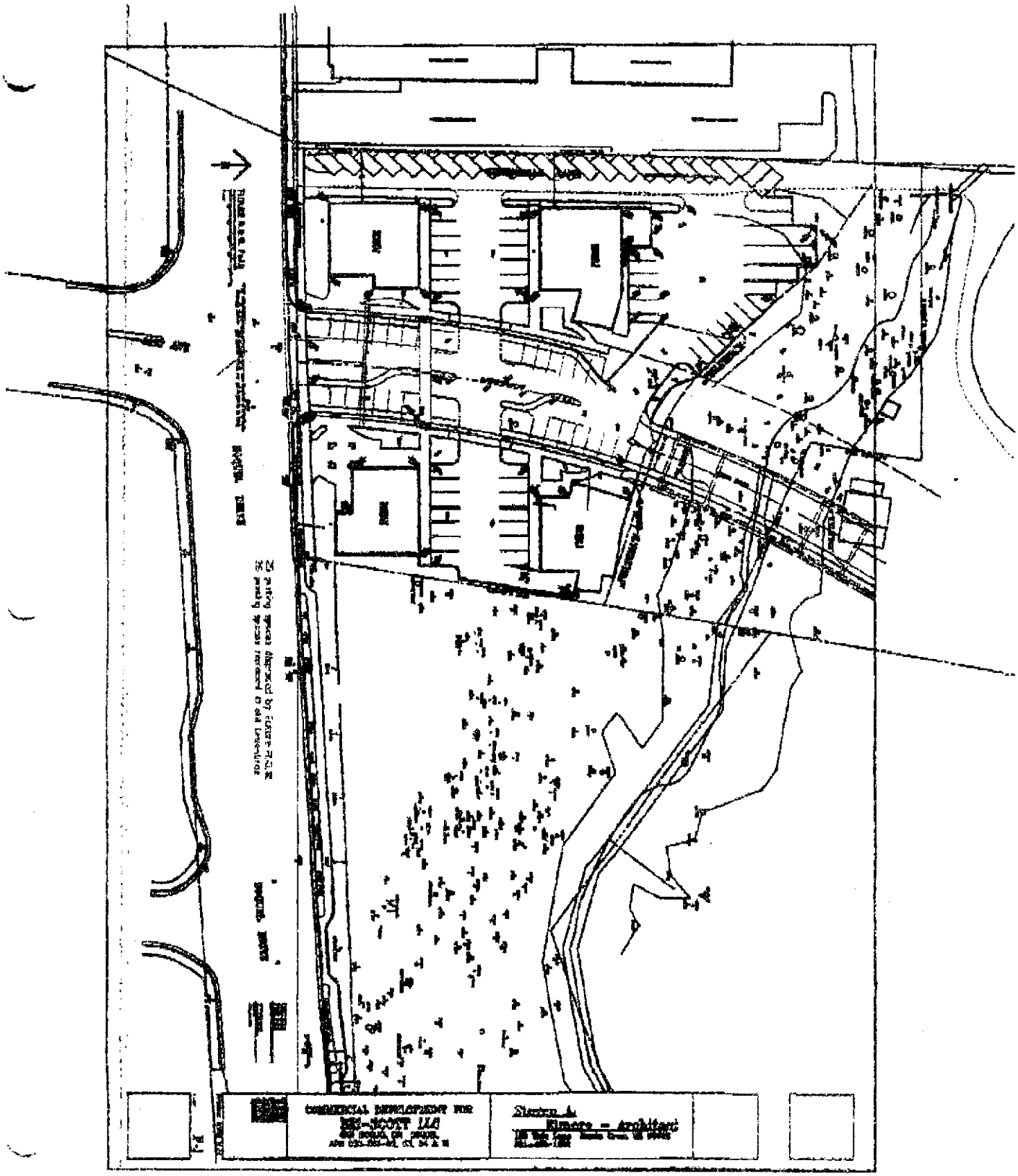
jw:el

encl.

7-089 Letter2.doc

ATTACHMENT 7

Attachment 1



ATTACHMENT 7

Hatch Mott MacDonald

1300-B First Street
Gilroy, CA 95020
T 408-848-3122 www.hatchmott.com

February 2, 2009

Mr. Norm Bei
Bei-Scott, LLC
410-1 May Avenue
Santa Cruz, CA 95060

Re: 4101 Soquel Drive Commercial Project, Soquel, California – Status of 41st Avenue Improvements

Dear Mr. Bei,

Hatch Mott MacDonald (formerly Higgins Associates) has prepared this letter regarding your proposed commercial development at 4101 Soquel Drive, at the intersection of 41st Avenue and Soquel Drive, in Soquel, Santa Cruz County, California. This letter addresses the recent implementation of a series of intersection improvements to the 41st Avenue corridor. These improvements were intended to improve operations and lessen impacts of other approved developments along the corridor.

Hatch Mott MacDonald has previously prepared multiple traffic analyses for this project, including a trip generation and traffic analysis in October 2005, and an analysis of the 41st Avenue corridor with the re-opening of the Safeway supermarket in July 2007.

Subsequent to the release of the July 2007 analysis, Santa Cruz County indicated that three improvements were proposed along the corridor. These improvements consisted of the following:

1. A new traffic signal at the main entrance to the new Safeway and Home Depot stores on 41st Avenue north of Highway 1;
2. Reconfiguration of the 41st Avenue bridge over Highway 1 to accommodate three southbound through lanes, through median narrowing and lane restriping; and
3. Coordination of the traffic signals at the 41st Avenue intersections with the Highway 1 southbound ramps and Gross Road.

All of the above improvements would improve operations along 41st Avenue and its intersections, by increasing traffic capacity and efficiency.

As of this writing, all of the aforementioned roadway improvements have been completed and opened to traffic. The traffic signal at the entry to the Home Depot/Safeway shopping center on 41st Avenue has been operational since 2008. The reconfiguration of the 41st Avenue bridge was completed within the past couple of months. Finally, the coordination of the two 41st Avenue traffic signals has been completed since 2007, in conjunction with a widening of the Gross Road approach to 41st Avenue to accommodate a second eastbound left turn lane. These roadway and intersection improvements have enhanced traffic flow along the 41st Avenue corridor.

In summary, a series of roadway and intersection improvements have been implemented to the 41st Avenue corridor. These improvements have improved traffic operations by increasing traffic capacity and efficiency, both at the corridor and intersection levels.

Hatch Mott MacDonald

If you have any questions regarding this letter, please do not hesitate to contact me or Jeff Waller at your convenience. Thank you for the opportunity to assist you with this project.

Sincerely yours,

Keith B. Higgins, CE, TE
Vice President
T 408.848.3122 F 408.848.2202
keith.higgins@hatchmott.com

kbh:jmw

Cc: Steve Elmore, Steven A. Elmore Architect

Hatch Mott MacDonald

1300-B First Street
Gilroy, CA 95020
T 408-848-3122 www.hatchmott.com

August 26, 2009

Mr. Norm Bei
Bei-Scott, LLC
410-I May Avenue
Santa Cruz, CA 95060

Re: 4101 Soquel Drive Commercial Development – Intersection Analysis and Conceptual Layout Plan, Santa Cruz County, California

Dear Mr. Bei,

Hatch Mott MacDonald has provided additional professional traffic engineering services related to your proposed commercial development at 4101 Soquel Drive in Soquel, Santa Cruz County, California. The Santa Cruz County Public Works Department recently has asked for traffic analysis of the 41st Avenue/Soquel Drive intersection, at which the study project would add a fourth leg to the intersection, in order to provide vehicular access to the project site. The objective of this work is to identify the necessary changes to the intersection, if any, associated with the opening of the study project. The following letter describes the results of this analysis and design.

A. Existing Conditions

Existing traffic volumes at the 41st Avenue/Soquel Drive intersection are depicted in **Exhibit 1**. These volumes are from two sources – 1) April 2008 AM and PM traffic counts provided by Santa Cruz County, and 2) estimated existing traffic entering and exiting the project site. These latter trips were not included within the traffic counts provided by Santa Cruz County. The source for the existing project site trips is the letter report addressed to Mr. S. Elmore, "4101 Soquel Drive Trip Generation, Santa Cruz County, California," Higgins Associates, October 3, 2005.

Exhibit 2 contains the levels of service at the study intersection. **Attachment 1** contains the level of service calculations for the study intersection. Under Existing conditions, the intersection operates at an acceptable LOS C during both the AM and PM peak hours. This is within the Santa Cruz County level of service standard of LOS C.

B. Background Conditions

Traffic volumes under Background conditions were derived based upon the projected Background traffic growth within the traffic report *Ocean Honda and Store More America Traffic Impact Analysis*, Higgins Associates, December 12, 2005. This growth was adjusted to account for the fact that two of the largest approved projects that would generate that growth – the Safeway supermarket expansion and a new Home Depot – were already open in April 2008, when the existing traffic counts were collected. The adjusted Background growth was added to the Existing traffic volumes to create Background traffic volumes.

ATTACHMENT 8

Exhibit 2 contains the levels of service at the study intersection. Under Background conditions, the intersection would continue to operate at an acceptable LOS C during both the AM and PM peak hours, and thus remain within the Santa Cruz County level of service standard of LOS C.

C. Background Plus Project Conditions

The aforementioned October 2005 letter report by Higgins Associates also documented both the project trip generation and trip distribution for the project. The trip generation for the study project is repeated here within **Exhibit 3A**, along with the aforementioned estimated existing project site traffic activity, while the project trip distribution is repeated as **Exhibit 3B**.

Note that the project site plan proposes to eliminate the existing Greenbrae Lane access to Soquel Drive. This roadway serves 14 residential units north and west of the project site, as well as serves as an exit to the parking lot of various existing automotive repair businesses bordering the project site to the west. **Exhibit 4** contains the estimated trip activity of these uses. With the closure of the Greenbrae Lane access to Soquel Drive, these trips would instead utilize the study project driveway to access Soquel Drive.

The project trip assignment and reassigned Greenbrae Lane traffic was added to the Background condition volumes, and the existing site traffic was removed from said volumes, to create the Background Plus Project traffic volumes shown within **Exhibit 1**.

Exhibit 2 contains the levels of service at the study intersection. Under Background Plus Project conditions, the intersection would continue to operate at an acceptable LOS C during both the AM and PM peak hours, and therefore remain within the Santa Cruz County level of service standard.

D. Cumulative Plus Project Conditions

Traffic volumes under Cumulative Plus Project conditions were derived based upon the projected Cumulative traffic growth within the aforementioned December 2005 Ocean Honda traffic report by Higgins Associates. This growth was adjusted to take into account that one of the larger cumulative projects – the Ocean Honda car dealership – has been approved and is open. The adjusted Cumulative growth was added to the Background Plus Project traffic volumes to create Cumulative Plus Project traffic volumes; said traffic volumes are depicted in **Exhibit 1**.

Exhibit 2 contains the levels of service at the study intersection. Under Cumulative Plus Project conditions, the intersection would continue to operate at an acceptable LOS C during both the AM and PM peak hours, again remaining within the Santa Cruz County level of service standard.

E. Intersection Conceptual Layout Plan

Currently, the project frontage along Soquel Drive is primarily bare ground, level with the street pavement. Vehicles entering and exiting the site do so over much of this frontage. The study project will be adding a more formal fourth leg to the 41st Avenue/Soquel Drive intersection, which will channelize traffic entering and exiting the project site into a single driveway.

Although this analysis found that study project would not change the intersection levels of service, the formal establishment of this fourth leg will trigger the need for various improvements at the 41st Avenue/Soquel Drive intersection. **Attachment 2** graphically depicts a conceptual layout plan of the proposed intersection upgrades, which are itemized below:

1. Restripe the eastbound Soquel Drive median to provide a 50-foot eastbound left turn lane into the project site;

2. Install two missing backplates to two existing signal heads facing the westbound left turn lane, in order to improve signal visibility;

3. Add new pedestrian signal heads for pedestrians crossing the project driveway;

4. Replace the existing three-section signal head at the northwest corner of the intersection with an upgraded three-section signal head;

5. Replace the existing signal pole, mast arm, and signal heads at the southeast corner of the intersection, in order to provide new signal heads for the eastbound left turn and all southbound traffic movements;

6. Replace existing sign pole within the median of 41st Avenue with a new signal pole and four-section signal head, facing southbound traffic. Re-install the existing signs onto the new signal pole;

7. Install new four-section signal head at the northeast corner of the intersection. This new signal head will require a new signal pole.

8. Add a new three-section signal head and signal pole, facing southbound traffic, near the new project driveway. The preferred location for this signal pole would be behind the sidewalk on the study project property, which may require an encroachment easement by Santa Cruz County onto the property;

9. Add a new three-section signal head on an existing signal pole at the southwestern corner of the intersection;

10. Add eastbound Soquel Drive protected left turn phase to the signal operations; and

11. Convert northbound and southbound 41st Avenue-Project Driveway to split signal phasing operations.

These improvements will formalize access to the project, provide the minimum required signal improvements to the intersection, improve signal visibility, and improve traffic flow through the intersection.

Note that additional improvements may be necessary at this intersection, in order to meet state and federal standards. The specific design, placement, and timing of these improvements would need to be finalized during a formal design of the intersection. These improvements include the following:

12. Although a curb return ramp does exist at the southwest corner of the intersection, its size and location may not be compliant with the American Disabilities Act (ADA). Future upgrading of this corner to ADA compliance may require acquiring additional right-of-way from the adjacent property owner;

13. Curb returns be constructed at the project driveway, with ADA-compliant ramps, versus the proposed driveway apron shown on the project site plan. Use of driveway aprons at a signalized intersection can lead to vehicles "bottoming out," or scraping the undercarriage of the vehicle on the apron, as they pass through the intersection;

14. With the introduction of the new eastbound Soquel Drive left turn lane at the intersection, it is recommended that westbound left turns into the driveway for the King's Paint and Paper business, located at the southeast corner of the intersection, be prohibited. This will keep vehicles bound for this business from blocking either the left turn lane into the site or the adjacent westbound through lane on Soquel Drive; and

15. The conceptual layout plan within **Attachment 2** does not include the establishment of a crosswalk across the western Soquel Drive leg of the intersection. Due to the lack of pedestrian activity in this area, a crosswalk at this location is not deemed necessary at this time. However, County staff has expressed a desire to add this crosswalk in the future, in conjunction with a potential northerly extension of 41st Avenue through the project site. The conceptual layout plan within **Attachment 2** does not preclude the future establishment of either said crosswalk or an associated pedestrian signal phase.

Implementation of these improvements would further improve traffic and pedestrian circulation at the intersection.

Hatch Mott MacDonald

F. Conclusion

In summary, operations of the 41st Avenue/Soquel Drive intersection currently operate within acceptable levels of service, and will remain there through Cumulative conditions. The study project will not shift intersection traffic operations into a deficient level of service. Despite this, the formalizing of the fourth leg of this intersection will trigger the need for various signal and roadway restriping improvements, including a new eastbound left turn lane and various signal pole and head upgrades. Additional curb improvements and turning restrictions are also recommended.

If you have any questions regarding this letter or need additional information, please contact me at your convenience. Thank you for the opportunity to assist you with this project.

Very truly yours,

Hatch Mott MacDonald

Keith B. Higgins, CE, TE
Vice President
T 408.848.3122 F 408.848.2202
keith.higgins@hatchmott.com

kbh:jmw
enclosures

cc: Steve Elmore, Steve Elmore Architect

265900

NO SCALE

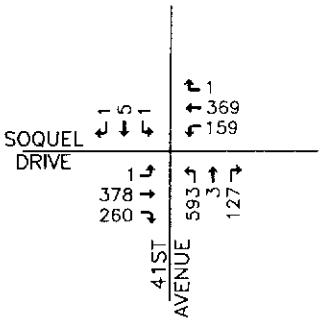
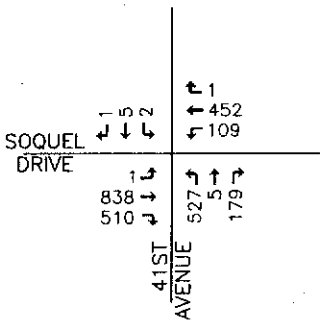
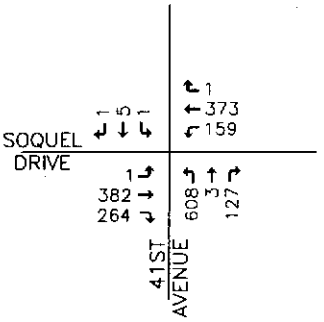
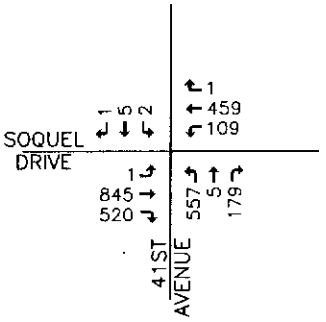
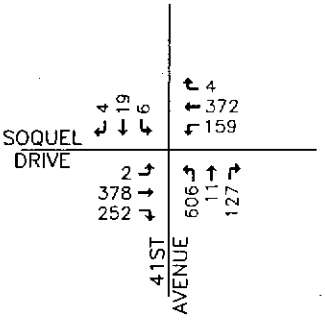
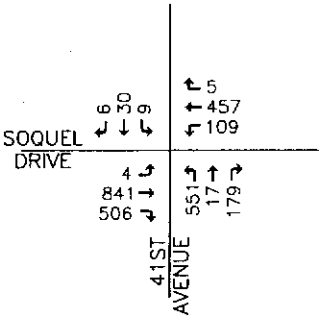
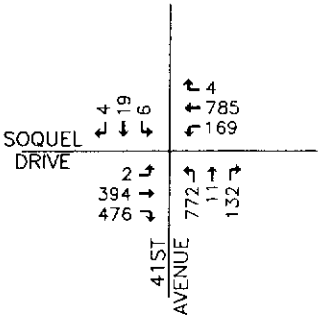
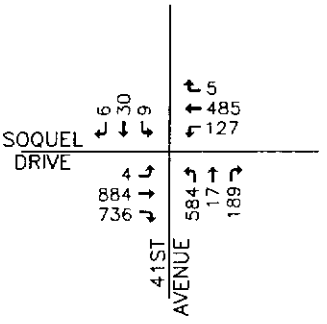
	AM PEAK HOUR	PM PEAK HOUR
EXISTING		
BACKGROUND		
BACKGROUND PLUS PROJECT		
CUMULATIVE PLUS PROJECT		

EXHIBIT 1
INTERSECTION TRAFFIC VOLUMES

Hatch Mott MacDonald

Drawing: J:\2009\265900 - 41st-Soquel\Exhibit1.dwg
Layout: Exhibit 1
Aug 24, 2009, 6:16pm

ATTACHMENT 8

Hatch Mott MacDonald

1300-B First Street
Gilroy, CA 95020
T 408-848-3122 www.hatchmott.com

February 2, 2009

Mr. Norm Bei
Bei-Scott, LLC
410-1 May Avenue
Santa Cruz, CA 95060

Re: 4101 Soquel Drive Commercial Project, Soquel, California – Status of 41st Avenue Improvements

Dear Mr. Bei,

Hatch Mott MacDonald (formerly Higgins Associates) has prepared this letter regarding your proposed commercial development at 4101 Soquel Drive, at the intersection of 41st Avenue and Soquel Drive, in Soquel, Santa Cruz County, California. This letter addresses the recent implementation of a series of intersection improvements to the 41st Avenue corridor. These improvements were intended to improve operations and lessen impacts of other approved developments along the corridor.

Hatch Mott MacDonald has previously prepared multiple traffic analyses for this project, including a trip generation and traffic analysis in October 2005, and an analysis of the 41st Avenue corridor with the re-opening of the Safeway supermarket in July 2007.

Subsequent to the release of the July 2007 analysis, Santa Cruz County indicated that three improvements were proposed along the corridor. These improvements consisted of the following:

1. A new traffic signal at the main entrance to the new Safeway and Home Depot stores on 41st Avenue north of Highway 1;
2. Reconfiguration of the 41st Avenue bridge over Highway 1 to accommodate three southbound through lanes, through median narrowing and lane restriping; and
3. Coordination of the traffic signals at the 41st Avenue intersections with the Highway 1 southbound ramps and Gross Road.

All of the above improvements would improve operations along 41st Avenue and its intersections, by increasing traffic capacity and efficiency.

As of this writing, all of the aforementioned roadway improvements have been completed and opened to traffic. The traffic signal at the entry to the Home Depot/Safeway shopping center on 41st Avenue has been operational since 2008. The reconfiguration of the 41st Avenue bridge was completed within the past couple of months. Finally, the coordination of the two 41st Avenue traffic signals has been completed since 2007, in conjunction with a widening of the Gross Road approach to 41st Avenue to accommodate a second eastbound left turn lane. These roadway and intersection improvements have enhanced traffic flow along the 41st Avenue corridor.

In summary, a series of roadway and intersection improvements have been implemented to the 41st Avenue corridor. These improvements have improved traffic operations by increasing traffic capacity and efficiency, both at the corridor and intersection levels.

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ATTACHMENT 8

Hatch Mott MacDonald

If you have any questions regarding this letter, please do not hesitate to contact me or Jeff Waller at your convenience. Thank you for the opportunity to assist you with this project.

Sincerely yours,

Keith B. Higgins, CE, TE
Vice President
T 408.848.3122 F 408.848.2207
keith.higgins@hatchmott.com

kbh:jnw

Cc: Steve Elmore, Steven A. Elmore Architect

HIGGINS ASSOCIATES
CIVIL & TRAFFIC ENGINEERS

October 3, 2005

Mr. Steve Elmore
780 Volz Lane
Santa Cruz, CA 95062

Re: 4101 Soquel Drive Trip Generation, Santa Cruz County, California

Dear Steve,

Higgins Associates has compiled the estimated trip generation and distribution for the proposed commercial development to be constructed on Soquel Drive at 41st Avenue in Santa Cruz County, California. Per the standard criteria of the Santa Cruz County Public Works Department for new development, Higgins Associates has first prepared the estimated trip generation and distribution for the project, as a precursor to the traffic analysis for the project. This letter report contains the trip generation estimate for the project, and our anticipated project trip distribution within the greater Capitola/Soquel area.

A. Trip Generation:

Trip generation for the study project, has been estimated by Higgins Associates, based in part upon the previous study trip generation estimate and our discussions. Exhibit 1 contains the trip generation estimate for the study project. The project would construct a 16,710 square foot retail/office center, with 13,080 square feet of retail, 3,630 square feet of professional office space, and a caretaker's apartment unit. The project site is made up of five existing and adjacent parcels that are currently occupied by a vacuum cleaner repair shop and associated storage sheds, two single-family homes, storage space for an auto repair shop located adjacent to the project site, a painting contractor's storage area, and a tree-trimming business yard.

The trip generation for the future use was based upon trip generation rates published in the Institute of Transportation Engineers' (ITE) *Trip Generation*, 7th Edition, 2003.

A reduction was taken to account for the trips currently generated on the project site by existing uses. Subtractions were made for trips generated by the site's current uses. The trip generation for these existing uses was estimated based upon the ITE trip rates for all but one of the uses. Trip generation for the tree-trimming business was estimated based upon the assumptions that each of the business' four employees generate 6 daily trips, and that the business hours of operation begin during the AM peak hour and end during the PM peak hour. Those traffic volumes were subtracted from the project trips to estimate the net increase in trip generation at the project site due to the proposed project.

ATTACHMENT 9

In total, the project would generate a net 498 daily trips, with a net 12 trips (9 in, 3 out) during the AM peak hour, and a net 26 trips (10 in, 16 out) during the PM peak hour.

B. Trip Distribution:

The anticipated project trip distribution is shown on Exhibit 2, and repeated below:

Direction	Percent	AM Peak Hour	PM Peak Hour
To/From the North:	5%	1	1
via Porter St/San Jose-Soquel Rd – 5%		1	1
To/From the South:	35%	4	9
via 41st Avenue – 25%		2	7
via Bay Avenue/Porter Street – 5%		1	1
via Robertson Street/Wharf Road – 5%		1	1
To/From the East:	25%	3	7
via Highway 1 – 15%		2	4
via Soquel Drive – 10%		1	3
To/From the West:	35%	4	9
via Highway 1 – 20%		2	5
via Soquel Avenue/Soquel Drive – 10%		1	3
via Thurber/Winkle/Dover Neighborhoods – 5%		1	1
TOTAL:	100%	18	39

This distribution is based upon the proposed land use, and the likely areas from which it would attract visitors. The project is a small retail/office center, with many smaller-sized shops and offices. These types of businesses, being small, would primarily attract customers from the local area, i.e. Capitola, Soquel, and, to a lesser extent, Live Oak, rather than more regionally. The trip distribution is based upon the relative size of the residential neighborhoods accessible via the arterial and state highway street network in the project vicinity.

C. Conclusion:

In summary, the study project is estimated to generate a net 498 daily trips, over and above the estimated existing site trip generation. The project trip distribution also has been derived.

Thank you for the opportunity to assist you with this analysis. If you have any questions, please contact either myself or Jeff Waller at (408) 848-3122.

Sincerely yours,

Keith B. Higgins, CE, TE

kbh:jmw

Attachments

4101 Soquel Drive
Santa Cruz County, California
Trip Generation

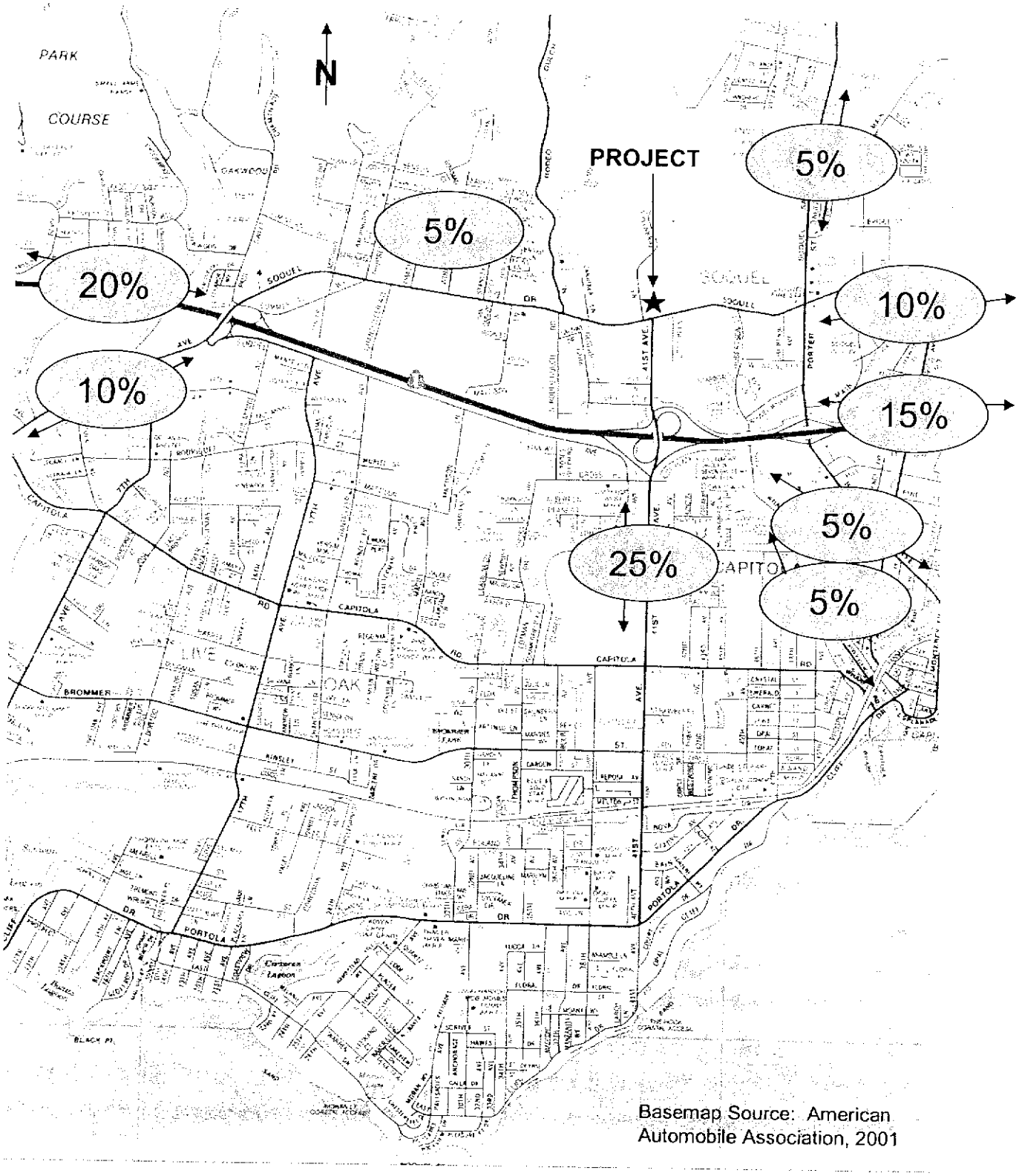
	ITE CODE	PROJECT SIZE	WEEKDAY DAILY TRIPS	WEEKDAY AM PEAK HOUR TOTAL PEAK HOUR	AM PEAK HOUR IN	AM PEAK HOUR OUT	WEEKDAY PM PEAK HOUR TOTAL PEAK HOUR	PM PEAK HOUR IN	PM PEAK HOUR OUT
TRIP GENERATION RATES[1]									
Specialty Retail Center (per 1,000 sq. ft.)[2]	814		44.32	1.33	50%	50%	2.71	44%	56%
General Office Building (per 1,000 sq. ft.)	710		11.01	1.55	88%	12%	1.49	17%	83%
Apartment (per unit)	220		6.72	0.51	20%	80%	0.62	65%	35%
Single-Family Dwelling Unit (per unit)	210		9.57	0.75	25%	75%	1.01	63%	37%
Warehouse (per 1,000 sq. ft.)	150		4.96	0.45	82%	18%	0.47	25%	75%
Light Industrial (per 1,000 sq. ft.)	110		6.97	0.92	88%	12%	0.98	12%	88%
Tree-Trimming Business (per employee)[6]	-		6.00	2.00	50%	50%	2.00	50%	50%
NEW TRIPS									
Commercial/Retail[2]		13,080 sq. ft.	580	17	9	8	35	15	20
Professional Office Space		3,630 sq. ft.	40	6	5	1	5	1	4
Caretaker's Apartment Unit		1 Unit	7	1	0	1	1	1	0
Subtotoal			**627**	**24**	**14**	**10**	**41**	**17**	**24**
EXISTING TRIPS									
Existing Vaccuum Repair Business		1,800 sq. ft	-80	-2	-1	-1	-5	-2	-3
Existing Residences		2 Units	-19	-2	0	-2	-2	-1	-1
Existing Auto Repair Shop Storage[4]		760 S.F.	-4	0	0	0	0	0	0
Existing Painting Contractor's Shed[5]		220 S.F.	-2	0	0	0	0	0	0
Existing Tree-Trimming Business Yard[6]		4 employees	-24	-8	-4	-4	-8	-4	-4
Subtotoal			**-129**	**-12**	**-5**	**-7**	**-15**	**-7**	**-8**
NET NEW TRIPS			**498**	**12**	**9**	**3**	**26**	**10**	**16**

Notes:

1. Trip generation for based upon rates published in Institute of Transportation Engineers (ITE) *Trip Generation*, 7th Edition, 2003, unless otherwise noted.
2. ITE does not provide AM peak hour trip generation rates for Specialty Retail land use. Trip generation uses rates provided in *Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region*, San Diego Association of Governments, July 1998.
3. Vaccuum Repair Business square footage includes accessory storage buildings currently used for inventory storage.
4. Trip generation for auto repair shop storage estimated as warehousing.
5. Trip generation for painting contractor's shed estimated as light industrial land use.
6. Trip generation for tree-trimming business is estimated based upon assumptions of 6 daily trips per employee, and operating hours that begin during the AM peak hour and end during the PM peak hour.

EXHIBIT 1

Project Trip Generation



HIGGINS ASSOCIATES
CIVIL & TRAFFIC ENGINEERS

EXHIBIT 2 –
PROJECT TRIP
DISTRIBUTION

ATTACHMENT 9