



Staff Report to the Planning Commission

Application Number: **03-0065**

Applicant: Thacher & Thompson

Owner: Atherton Place Development LLC

APN: 037-251-26

Agenda Date: 12/13/06

Agenda Item #: 9

Time: After 9:00 a.m.

Project Description: Proposal to construct 43 attached townhouses, a common area with parking, landscaping, and access roadways, and the creation **of** a separate open space parcel comprising the remainder of the subject property to be rezoned from the RM-3 (Multi-family Residential) zone district to the PR (Parks, Recreation & Open Space) zone district.

Location: Property located on the southeast corner of the intersection of Soquel Drive and Atherton Drive.

Supervisory District: 2nd District (District Supervisor: Ellen Pirie)

Permits Required: Subdivision, Rezoning, Residential Development Permit, Roadway/Roadside Exception, Road Abandonment, Riparian Exception

Staff Recommendation:

- Adopt the attached resolution (Exhibit E), sending a recommendation **to** the Board of Supervisors for **Approval of** Application Number **03-0065**, based on the attached findings and conditions, and recommend certification of the Mitigated Negative Declaration per the requirements of the California Environmental Quality Act.

Exhibits

- | | | | |
|----|--------------------------------------|----|---------------------------------|
| A. | Project plans | E. | Planning Commission Resolution, |
| B. | Findings | | Ordinance & Rezoning Map |
| C. | Conditions | | |
| D. | Mitigated Negative Declaration | | |
| | (CEQA Determination) with the | | |
| | following attached documents: | | |
| | (Attachment 2): Assessor's Final Map | | |
| | (Attachment 3): Zoning map | | |
| | (Attachment 4): General Plan map | | |

County of Santa Cruz Planning Department
7M Ocean Street, 4th Floor, Santa Cruz CA 95060

Parcel Information

Parcel Size: 14.36 acres
Existing Land Use - Parcel: Vacant
Existing Land Use - Surrounding: Multi-family residential, community college
Project Access: Atherton Drive (off Soquel Drive)
Planning Area: Aptos
Land Use Designation: R-UH (Urban High Density Residential)
0-U (Urban Open Space) - Riparian corridor area
Zone District: RM-3 (Multi-family residential - 3,000 square feet minimum)
Coastal Zone: Inside X Outside

Environmental Information

An Initial Study has been prepared (Exhibit D) that addresses the environmental concerns associated with this application.

Services Information

Urban/Rural Services Line: X Inside Outside
Water Supply: Soquel Creek Water District
Sewage Disposal: Santa Cruz County Sanitation District
Fire District: Central Fire Protection District
Drainage District: Zone 5 Flood Control District

History

This application was originally submitted to determine the appropriate density of development on the subject property. ~~Per~~ the requirements of County Code, the density determination was heard before the Board of Supervisors on **9/23/03** & 10/7/03. The Board determined that with the majority of the property being a riparian comdor, the area of the proposed development outside of the riparian comdor would be used to calculate the required density. The remaining undeveloped area would be rezoned to the PR (Parks, Recreation, and Open Space) zone district to recognize the riparian comdor area and remove it from the density calculation.

Project Setting

The project site is located on the **east** side of Atherton Drive at the intersection with Soquel Drive. The subject property is approximately 14.36 acres. A riparian corridor (Tannery Gulch) runs along the east side of the subject property from north to south. The majority of the subject property is not suitable for development due to the presence of the riparian resource. The area proposed for development is approximately 3.69 acres on the northwest section of the subject property.

Multi-family residential development is located to the west and south, Cabrillo College is located to the east across Tannery Gulch, and a religious institution is located to the north across Soquel Drive.

Rezoning

The area of the proposed rezoning (as indicated in Exhibit E), is the riparian corridor to the east of the project site which runs south to Cabrillo College Drive and Highway One. This area is currently zoned RM-3 (Multi-family residential – 3,000 square feet minimum) and is designated as Urban Open Space (O-U) in the General Plan due to the riparian resource (Tannery Gulch). The proposed rezoning of this area to PR (Parks, Recreation, and Open Space) is considered as appropriate due to the presence of the riparian comdor and the proposed rezoning will be consistent with policies related to riparian resource protection.

Subdivision

The proposed land division will create 43 townhouse parcels, a common area parcel for roads, utilities, and landscaping, and an open space parcel to preserve the riparian area.

The boundaries of the 43 new residential parcels will match the footprints of the proposed residential units and private yard areas. The average parcel area (including common area) will be 3,268 square feet of net developable land area per residential unit, in compliance with the minimum requirements of the RM-3 (Multi-family Residential - 3,000 square feet minimum) zone district.

The subject property is designated ~~as~~ Urban High Density Residential (R-UH) in the General Plan. The Urban High Density Residential (R-UH) General Plan designation requires new development to be within a density range of 2,500 ~~to~~ 4,000 square feet of net developable land per residential unit. The proposed land division complies with the density range required by the General Plan.

The proposal will comply with affordable housing requirements ~~through~~ the provision of ~~6~~ on-site affordable housing units. Market rate developments are required to provide **15** percent of the units as deed-restricted affordable units (in this case 6.45 units are required). ~~An~~ in-lieu fee shall be paid for the remaining fractional (.45) share of the affordable housing obligation.

Design Review

Townhouse units are proposed ~~to~~ be constructed on the new parcels. The new homes will be attached in building clusters of **3-4** townhouse units with individual garages facing the interior access roadway. The buildings will be two stories in height and units will range in size from approximately 1,100 to 1,600 square feet with 2 and **3** bedroom units proposed.

Proposed building materials include shingle, stucco, and horizontal siding, composition shingle roofs, and rock trim. The buildings include varied roof planes, with porches and some craftsman details such as tapered columns, wood gable corbels, and extended rafter tails. These features and the variety of proposed materials will break up the visual bulk and mass of the proposed structures.

The original designs for this proposal included driveway access from Soquel Drive, access alleys

with no turn around areas, and emergency access to Atherton Drive. The structures in the earlier designs were located well below the existing grade of Atherton Drive and did not address the street, appearing as rear yards when viewed from **the** public roadway. Through the review of the application, design comments were provided by staff and the proposal was modified to address these issues. Grading volumes were reduced to better match the natural topography and the vehicular entries were realigned to create a loop road off of **the** local street (Atherton Drive). The access alleys were eliminated and the structures were rotated to front on Atherton Drive with vehicular access from the rear. The street facing elevations on these units were redesigned to address the street with porches and pedestrian entries, while providing private patio areas for the residents. Patio walls and rear yard fences within street facing yards will not exceed a cumulative **6** feet in height, and these patio enclosures are considered as appropriate due to the need for private yard areas at each unit.

This proposal includes a request for the height of the structures to be measured from finished grade as opposed to the existing grade. Increased height of structures (up to 33 feet) can be allowed with design review if the site conditions warrant such an increase. In this case, the structures will **be** no higher than the typical 28 feet maximum height, **but** the heights are measured from the finished grade. **The** height of the proposed structures, when measured from the existing grade, will not exceed 33 feet in height. The request for the height to be measured from finished grade is considered as appropriate due to the slope of the project site and the need to match **street** and drainage improvements with the entries of the structures on the lower portions of the site. In order to reduce grading volumes, the structures include decks in the rear yards (where grading would adversely affect the riparian corridor) and patio slabs elsewhere in the development.

Roadside Exception

The proposed development includes a new access road (Sesnon Drive) with sidewalk on one side and perpendicular parking bays. The design of the proposed access road varies from the County Design Criteria in terms of width and improvements. **The** street will be located within the common area and is planned as a 26-foot wide road section with a 4-foot wide sidewalk on one side with ramps and crosswalks where necessary to access the units. There will also be one short segment of shared driveway serving **4** units that is 24 feet in width. A Roadway/Roadside Exception is required for the proposed circulation design in that it does not provide a 56 foot right of way with parking, sidewalks, and landscaping on both sides of the proposed access road. A Roadway/Roadside Exception is considered as appropriate due to the design and layout of the proposed multi-family development and **the** provision of an adequate amount of parking within the driveways of the proposed parcels and in the perpendicular parking bays.

Parking

Parking will **be** provided on the project site in driveways and in perpendicular parking spaces along the access roadway. All required parking has been provided on the project site, including the required guest parking. 108 parking spaces (2.5 spaces per **3** bedroom unit) would typically be required for **43** multi-family units with an additional **23** parking spaces (20% of required) for guests. This proposal exceeds the parking requirements for multi-family residential developments, **161** parking spaces on the subject property (not including parking on Atherton

Drive). Locating all of the required parking on site (and providing additional off street parking) is appropriate due to the location adjacent to a community college and across the street from another multi-family residential development, and due to the limited on street parking facilities on Atherton Drive.

Road Abandonment

This proposal includes a request **to** abandon an existing curve on the east side of Atherton Drive. This curved section of curb and paving was created to allow vehicles to circle around an *oak* tree which was located in the center of the street. The oak tree has since died and been removed and there is no longer any need to keep the curved pavement section.

Accessibility

Accessible units and site amenities are included in the project design. Multi-family residential projects which include four or more units in any one building must provide accessible units. For units with multiple stories, as in this proposal, ten percent of the units must be accessible. This proposal includes four accessible units in separate buildings. The accessible units are clustered in the northern part of the development with accessible parking and a path of travel from the units **to** the public street, transit facilities, and common open space areas.

Grading, Drainage & Utilities

The proposed road and associated improvements for the land division will require site grading and preparation. A total of approximately 4,600 cubic yards of earth will be cut from the project site and a total of approximately 3,900 cubic yards **of** earth will be placed as fill to allow for the preparation of the project site. The grading volumes are considered as reasonable and appropriate due to the nature and scale of the required improvements. Protection measures will be installed to preserve the existing trees and vegetation along the riparian corridor during construction.

Additional improvements include a complete drainage and detention system and the installation of sidewalks along Atherton Drive and Soquel Drive (to connect existing sidewalks). The drainage system will release into a rock discharge at the top of the riparian corridor, as required through the environmental review process. The original design included an overflow drain pipe which released water into the riparian corridor, and this feature has been eliminated from the revised drainage design. This proposal includes a Riparian Exception for the installation of drainage improvements within the riparian comdor and buffer area.

Riparian Corridor

The majority of the subject property is not suitable for development due to the presence of the riparian resource. The riparian conidor (Tannery Gulch) runs along the east side **of** the subject property from north to south. In order to protect the riparian resource, development will be required to maintain a setback of 30 feet from the drip line of the existing trees (a combined 20 foot riparian buffer and 10 foot construction setback). A split rail fence will be installed in order to delineate the riparian comdor boundary and prevent future disturbance of the riparian area. **A**

Riparian Exception is required **for** the installation of a drainage improvements within the riparian comdor and buffer area.

Environmental Review

Environmental review has been required for the proposed project per the requirements of the California Environmental Quality Act (CEQA). The project was reviewed by the County's Environmental Coordinator on 3/27/06 and was continued for additional information. A preliminary determination to issue a Negative Declaration with mitigations (Exhibit D) was made on 6/21/06. The mandatory public comment period ended on 7/27/06, with comments received.

The environmental review process focused on the potential impacts of the project in the areas of circulation, drainage, riparian resource protection, and noise. The environmental review process evaluated potential impacts and generated mitigation measures (including plan revisions which have been made prior to the public hearing for this item) that will reduce potential impacts from the proposed development and adequately address the above listed issues.

Conclusion

As proposed and conditioned, the project is consistent with all applicable codes and policies of the Zoning Ordinance and General Plan/LCP. Please see Exhibit "B" ("Findings") for a complete listing of findings and evidence related to the above discussion.

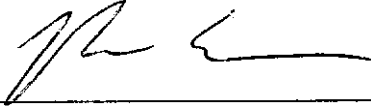
Staff Recommendation

- Adopt the attached resolution (Exhibit E), sending a recommendation to the Board of Supervisors for **Approval** of Application Number **03-0065**, based on the attached findings and conditions, and recommend certification of the Mitigated Negative Declaration per the requirements of the California Environmental Quality Act.

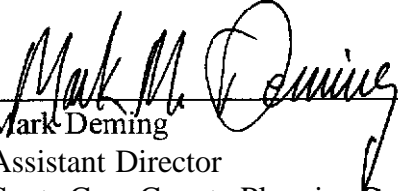
Supplementary reports and information referred to in this report are on file and available for viewing at the Santa Cruz County Planning Department, and are hereby made a part of the administrative record for the proposed project.

The County Code and General Plan, as well as hearing agendas and additional information are available online at: www.co.santa-cruz.ca.us

Report Prepared By: _____


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Santa Cruz County Planning Department
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Santa Cruz CA 95060
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E-mail: randall.adams@co.santa-cruz.ca.us

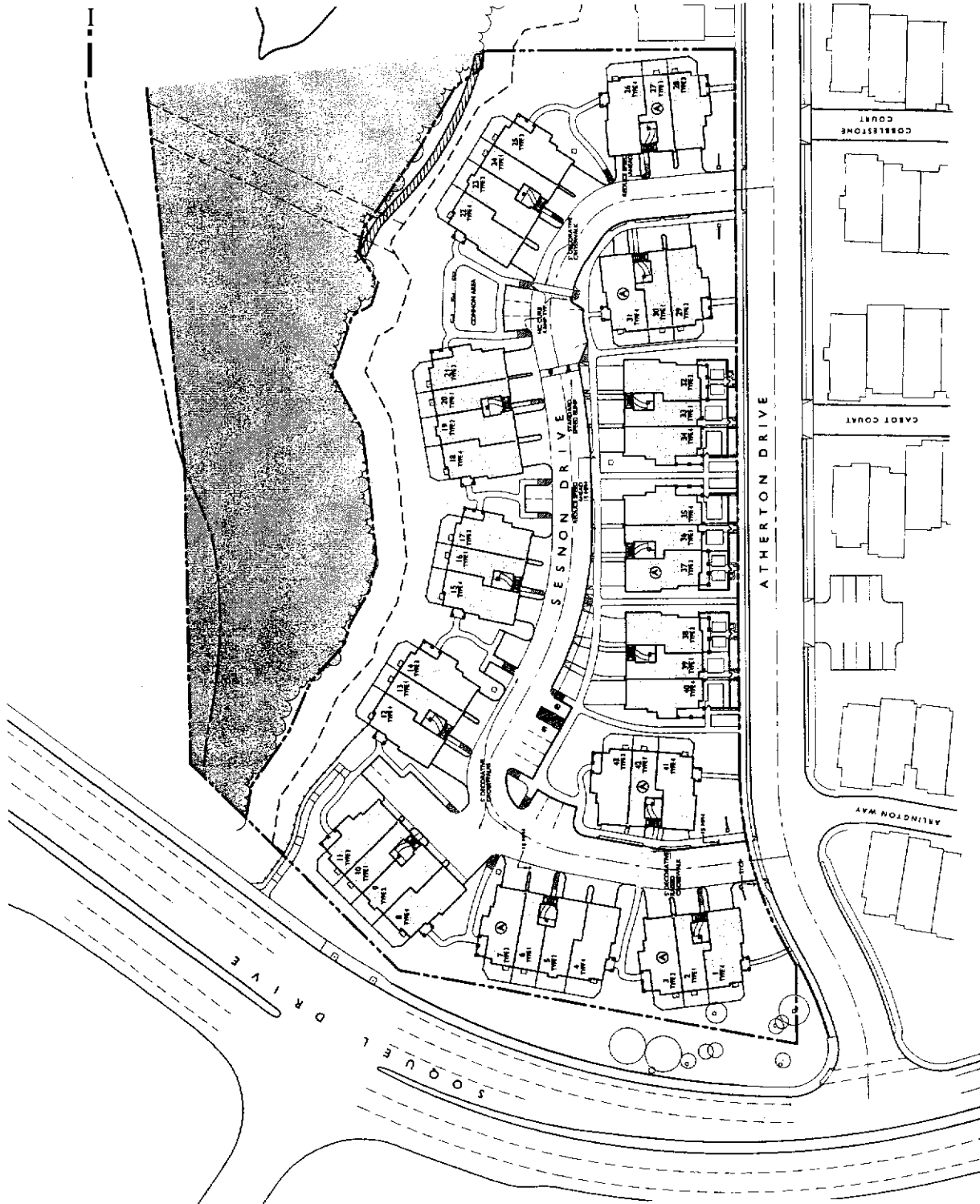
Report Reviewed By: _____


Mark Deming
Assistant Director
Santa Cruz County Planning Department

PROJECT DATA

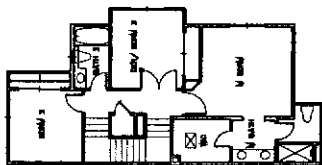
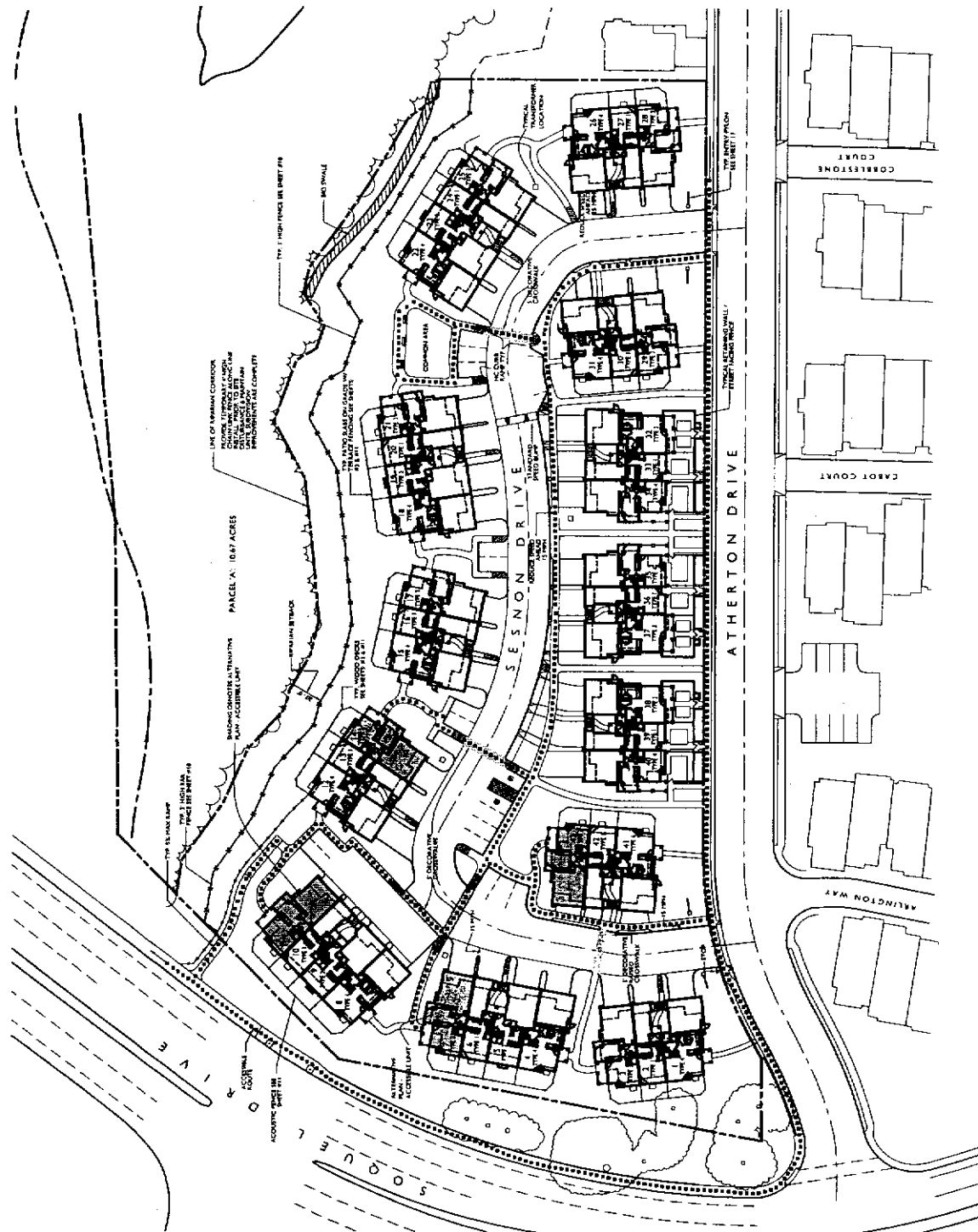
LOT AREA (PARCEL 'B')	160,740 S.F. (3.69 ACRES)
LESS SESNON DRIVE	20,310 S.F. (0.46 ACRES)
LESS E.O.W. DEDICATIONS AT DRIVEWAYS	140 S.F. (0.01 ACRES)
NET DEVELOPABLE LAND	140,290 S.F. (3.22 ACRES)
AREA OF BUILDING FOOTPRINTS	45,417 S.F.
LOT COVERAGE RATIO	32.5%
TOTAL NUMBER OF DWELLING UNITS	43
NET DEVELOPABLE LAND / D.U.	3.26

8 PLAN

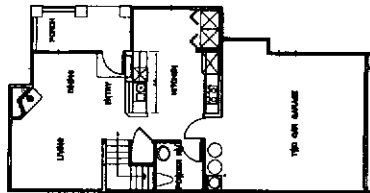


COLORIZED SITE PLAN AND PROJECT DATA
CABRILLO COMMONS

THOMAS A. THOMPSON ARCHITECTS
ALBUQUERQUE, NM
SEPTEMBER 14, 2005
NOVEMBER 14, 2005
JULY 14, 2006



1 SECOND FLOOR PLAN
SCALE: 1/8" = 1'-0"



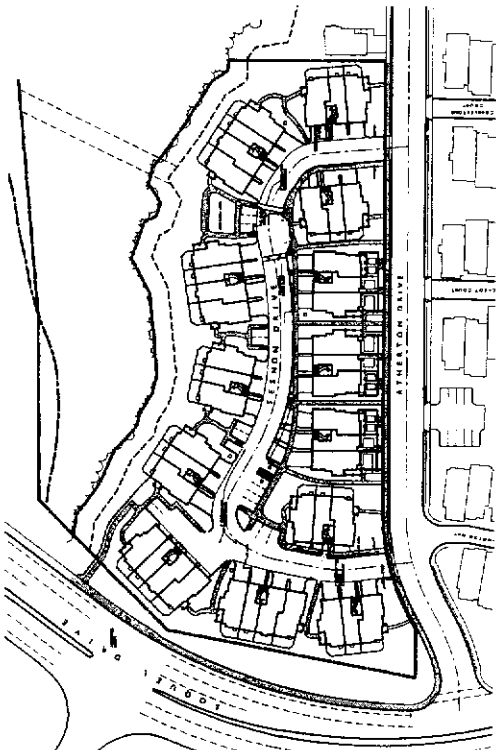
2 FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"

1. ADA ADAPTABLE ALTERNATE FLOOR PLAN (AS SHOWN ON SITE PLAN)
2. ACCESSIBLE ROUTES SHALL BE PROVIDED W/ RAMP IF SLOPES EXCEED 5%. RAMP SLOPES MUST NOT EXCEED 8%.

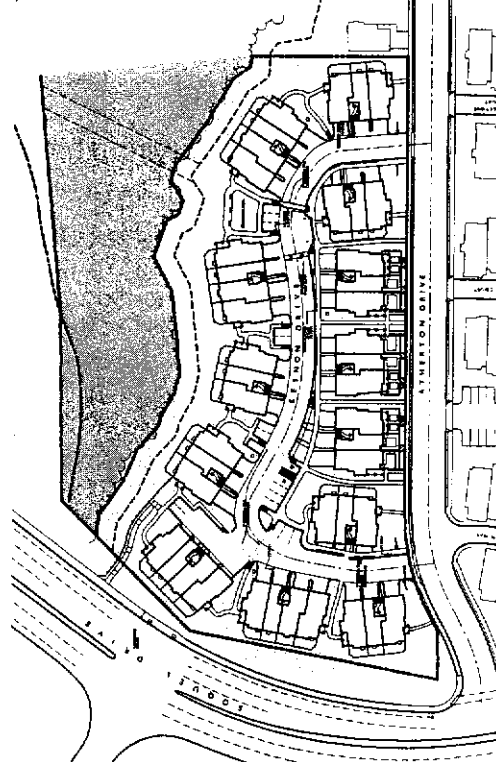
THACHER &
 THOMPSON
 ARCHITECTS
 1000 S. 10TH AVE.
 SUITE 100
 DENVER, CO 80202
 SEPTEMBER 14, 2005
 NOVEMBER 14, 2005
 JANUARY 14, 2006
 SEPTEMBER 27, 2006

SITE PLAN AND HANDICAP ACCESSIBLE ALTERNATE FLOOR PLAN
 CABRILLO COMMONS

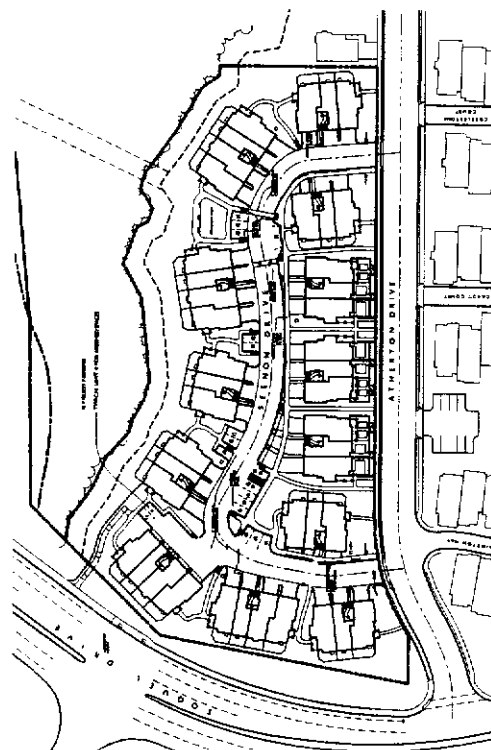
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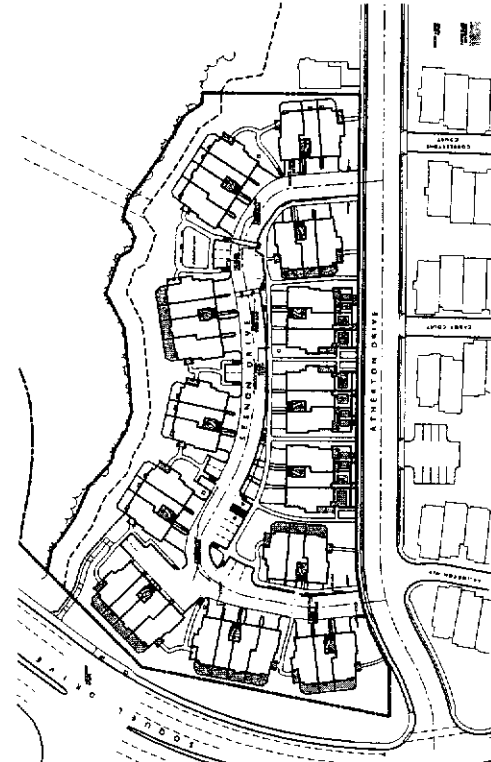
① PEDESTRIAN SPACE



② OPEN SPACE



③ VEHICLE SPACE



④ PATIO / DECK SPACE

AREA TABLES AND KEYS CABRILLO COMMONS

THACHER &
THACHER
ARCHITECTS
AUGUST 1, 2005
NOVEMBER 2005
MAY 6, 2006
SEPTEMBER 8, 2006

PRIVATE OPEN SPACE TABLE

UNIT TYPE	AREA PER D.U.	NO. OF D.U.'S	TOTAL AREA
1	146 SF	10	1,460 SF
2	196 SF	4	784 SF
3	280 SF	10	2,800 SF
4	245 SF	40	1,000 SF
TOTAL			6,044 SF

UNIT TYPE	AREA PER D.U.	NO. OF D.U.'S	TOTAL AREA
1	191 SF	3	573 SF
3	317 SF	1	317 SF
4	318 SF	3	954 SF
TOTAL			1,844 SF

TOTAL PRIVATE OPEN SPACE	7,888 SF
PRIVATE OPEN SPACE PER D.U.	227 SF

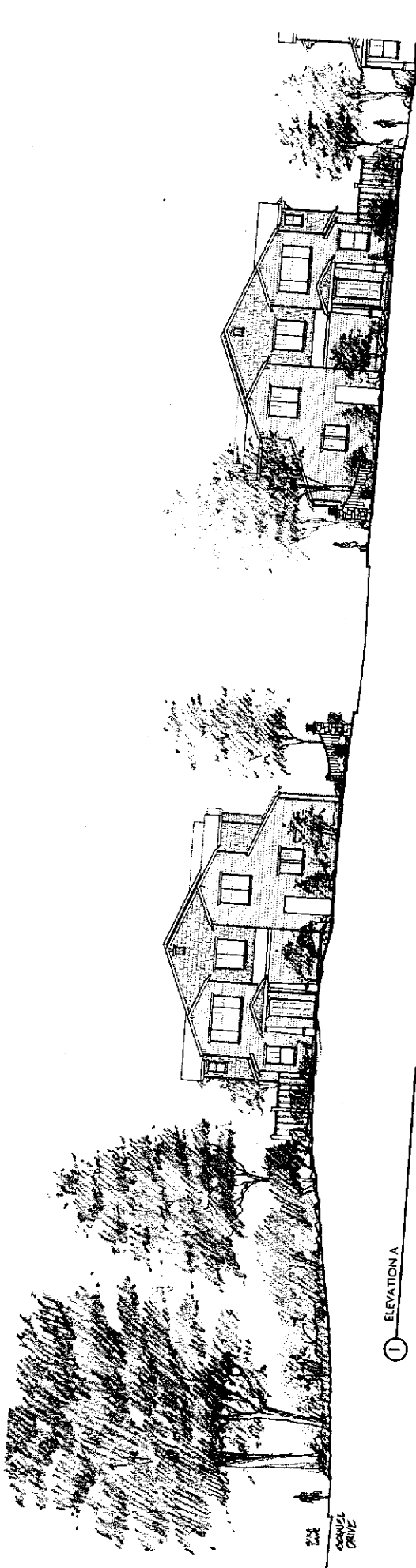
GROUP OPEN SPACE TABLE

TOTAL GROUP OPEN SPACE	54,575 SF
GROUP OPEN SPACE PER D.U.	1,318 SF

NOTE: OPEN SPACE CALCULATIONS PREPARED
AT THE ZONING ORDINANCE 11.03.11 & 11.03.12

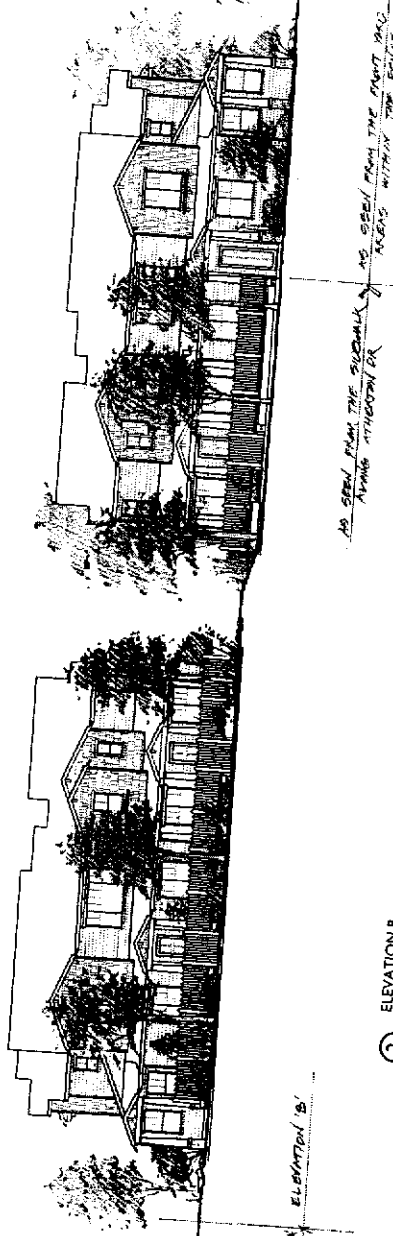
PARKING PROVIDED

PARKING REQUIRED - RESIDENTS @ 3 D.U.	30
30 % GUEST PARKING REQD.	9
TOTAL REQUIRED	39
TWO CAR GARAGE SPACE	38
TWO CAR GARAGE SPACE	4
TWO CAR GARAGE SPACE	15
TWO CAR GARAGE SPACE	11
TOTAL REQD. PARKING PROVIDED @ 3 D.U.	39
ADDITIONAL PARKING SPACES @ GARAGES	24
ADDITIONAL PARKING SPACES @ GARAGES	9
ADDITIONAL PARKING ON AVENUE DRIVE	8
TOTAL ADDITIONAL PARKING PROVIDED	56
TOTAL PARKING PROVIDED	95
(EXCEEDS PARKING REQUIREMENT BY 56%)	



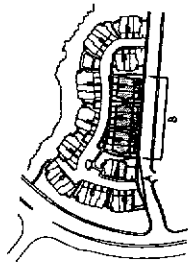
① ELEVATION A

ELEVATION A ELEVATION B



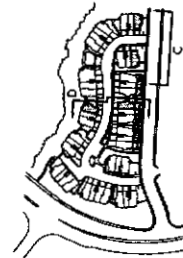
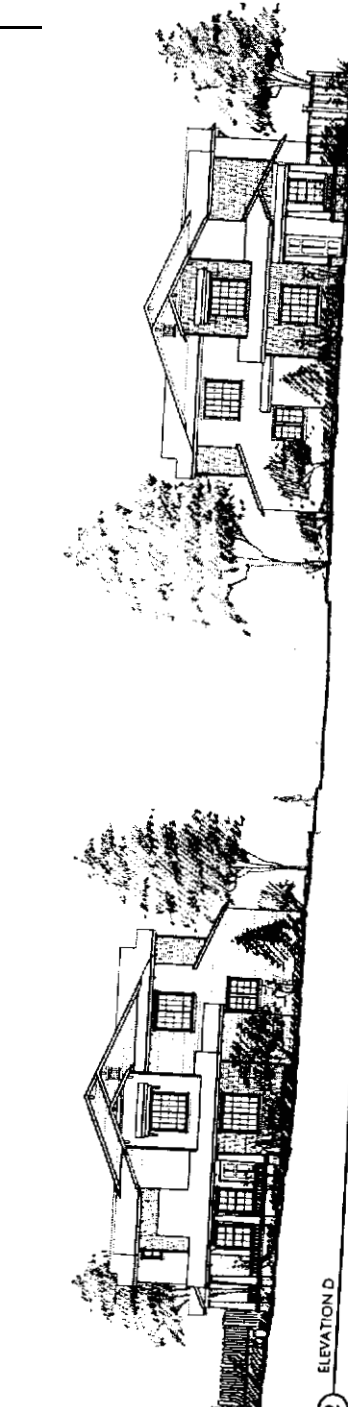
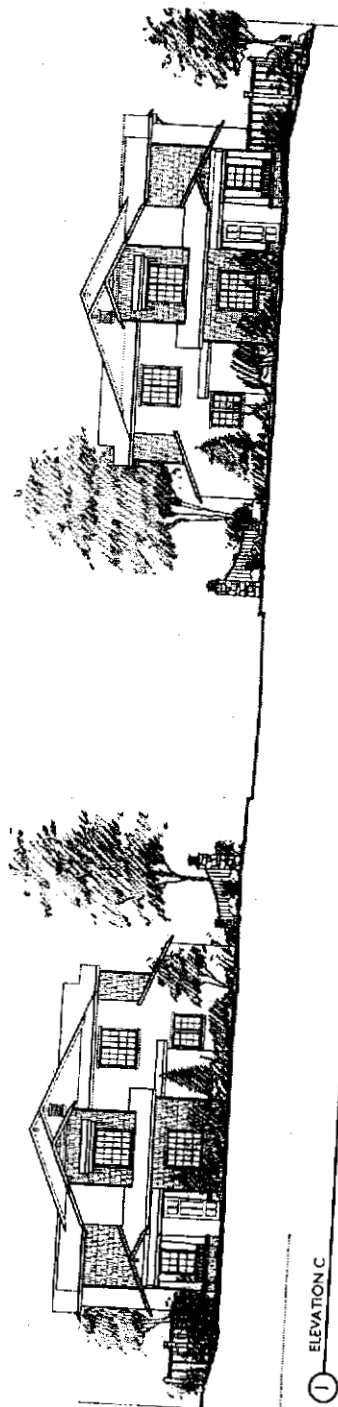
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ELEVATION B ELEVATION C



STREETSCAPE ELEVATIONS CABRILLO COMMONS

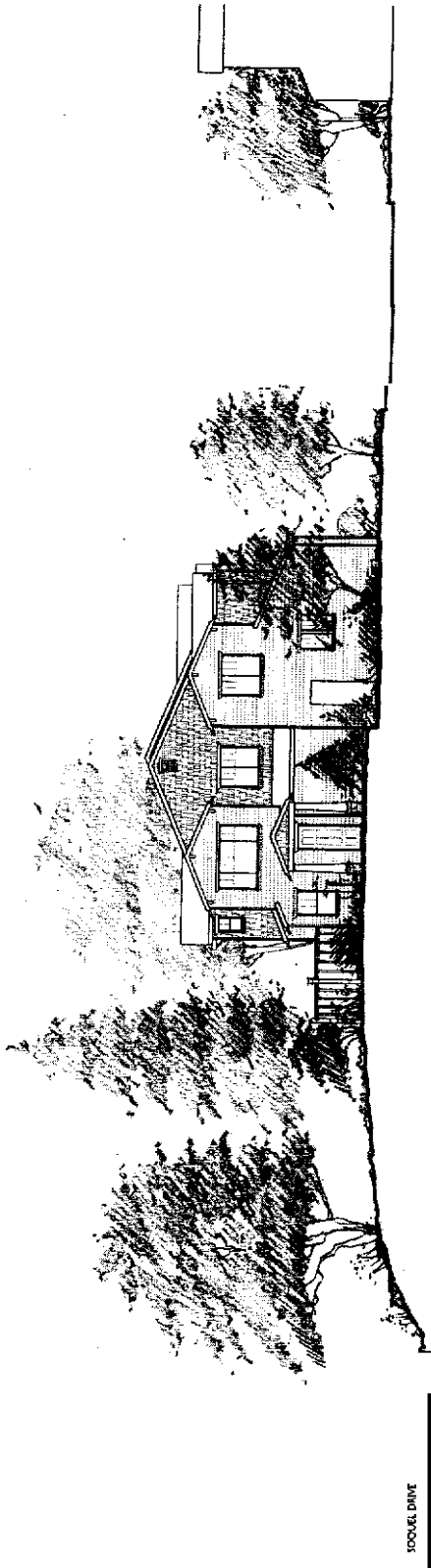
THACHER &
THOMPSON
ARCHITECTS
JULY 22, 2005



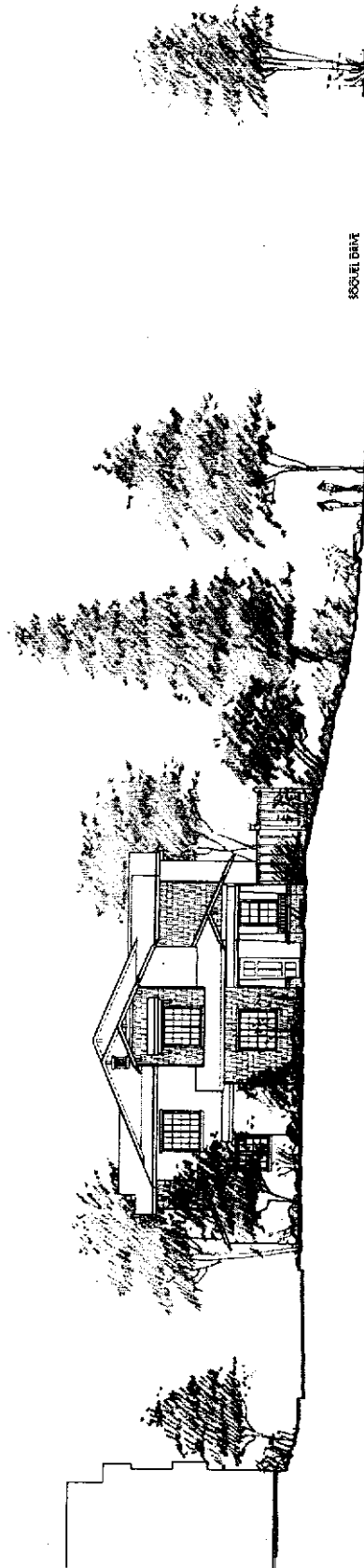
STREETSCAPE ELEVATIONS
CABRILLO COMMONS

THACHER &
THOMPSON
ARCHITECTS
AUGUST 7, 2005

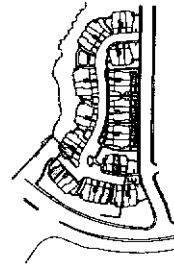
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① ELEVATION E

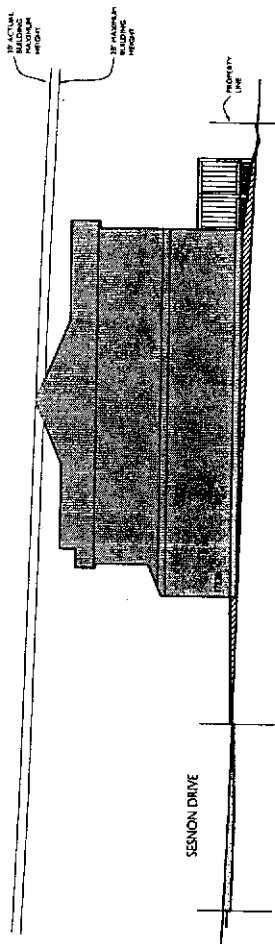


② ELEVATION F

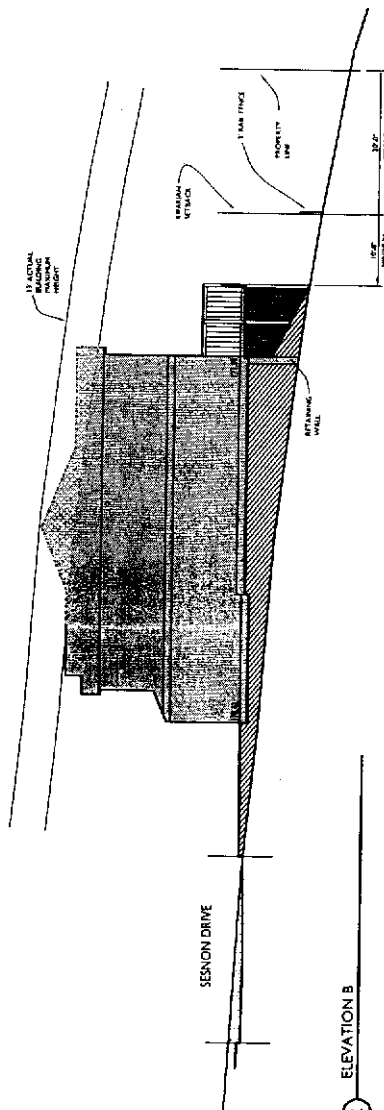


STREETSCAPE PERIMETER

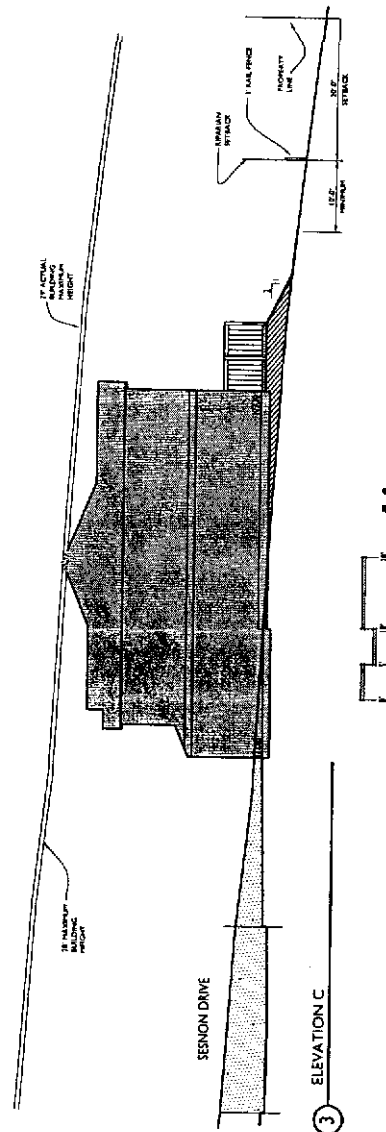
VEGETATION PLANTINGS



ELEVATION A



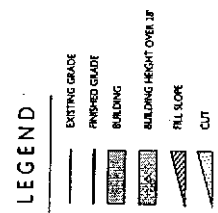
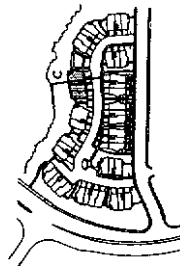
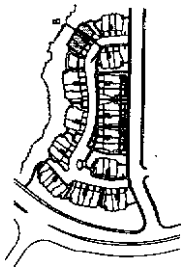
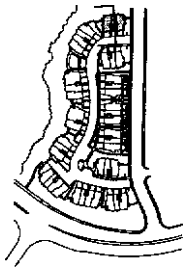
ELEVATION B



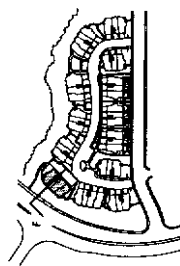
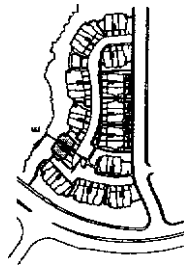
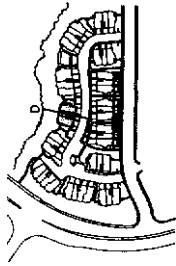
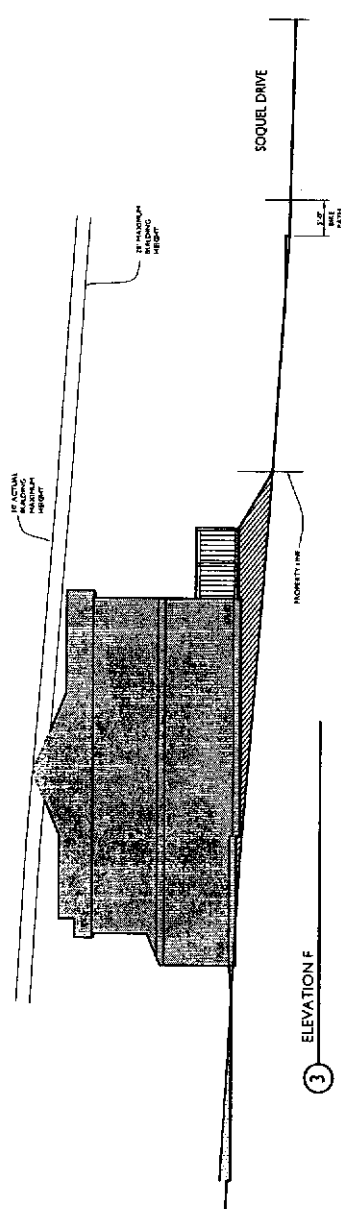
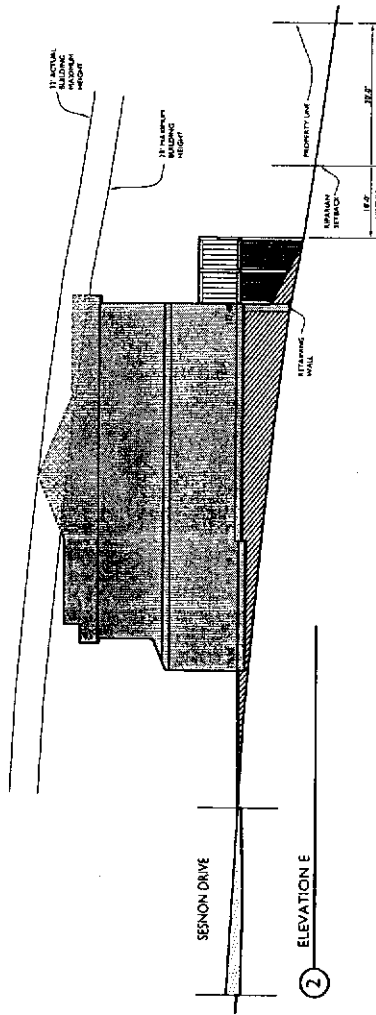
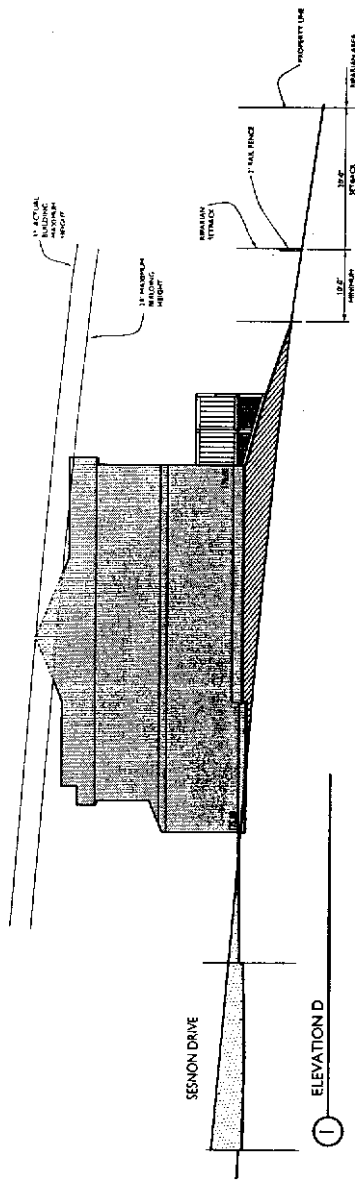
ELEVATION C

7

CABRILLO COMMONS



THACHER &
THOMPSON
ARCHITECTS
AUGUST 3, 2003
AUGUST 30, 2003
NOVEMBER 1, 2005



LEGEND

EXISTING GRADE	FINISHED GRADE	BUILDING	BUILDING HEIGHT OVER 12'	FILL SLOPE	CUT
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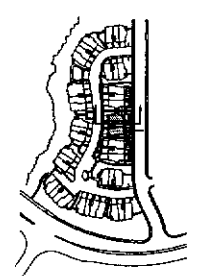
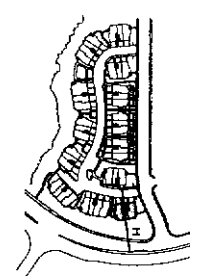
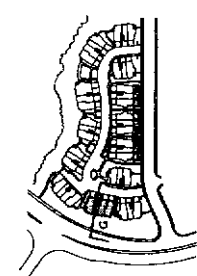
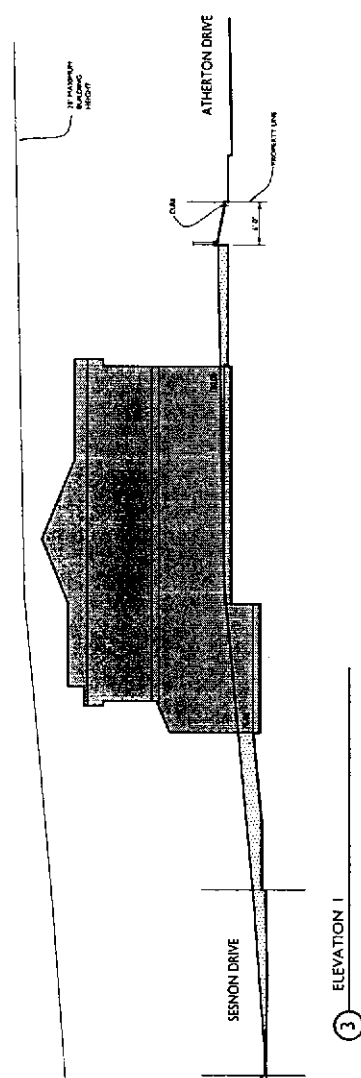
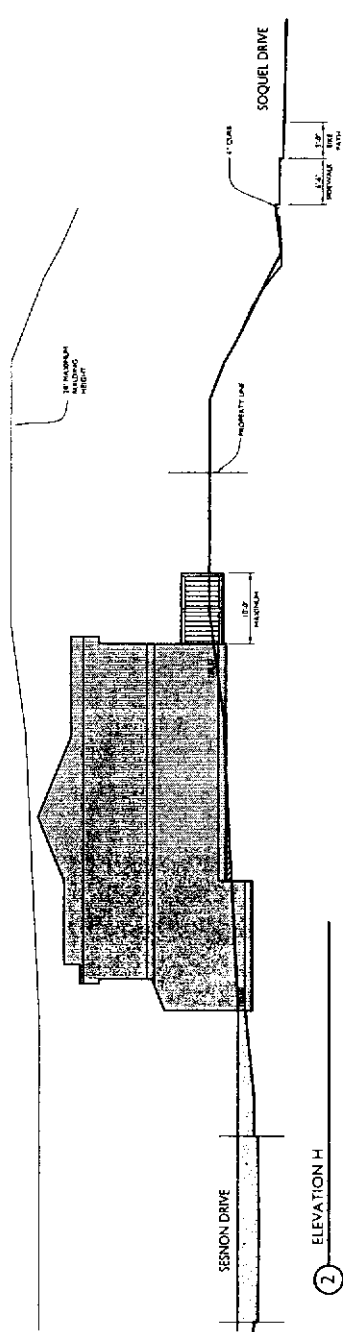
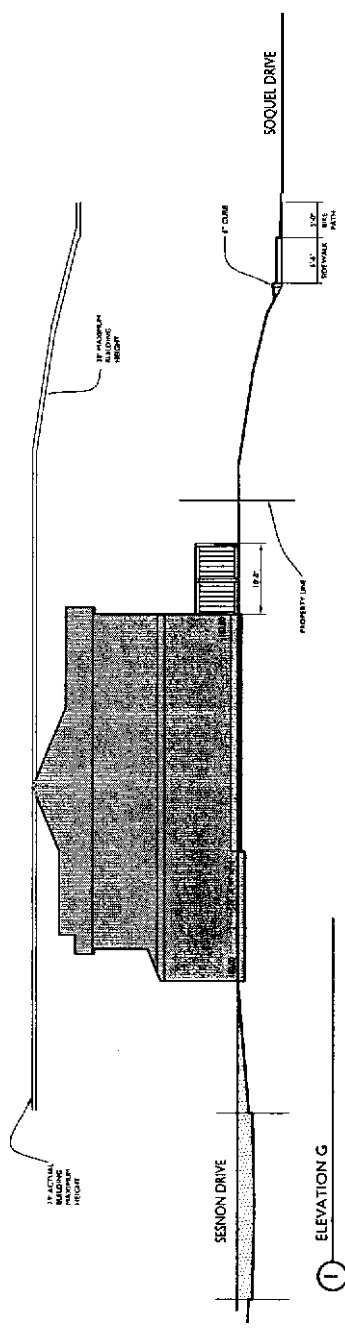
THACHER &
THOMPSON
ARCHITECTS

AUGUST 3, 2005
AUGUST 10, 2005
NOVEMBER 8, 2005

SECTIONS

CABRILLO COMMONS

8



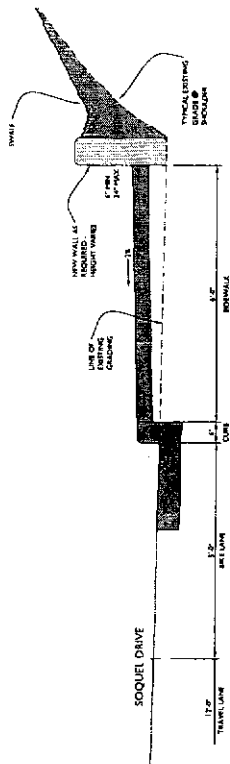
LEGEND



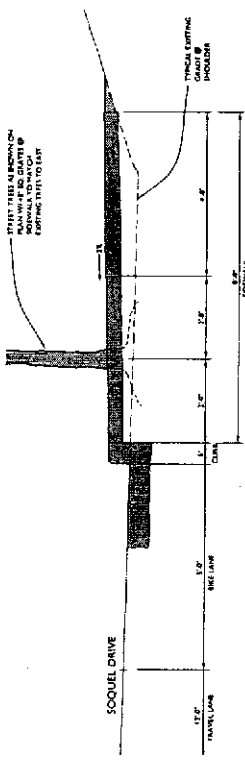
SECTIONS
CABRILLO COMMONS

9

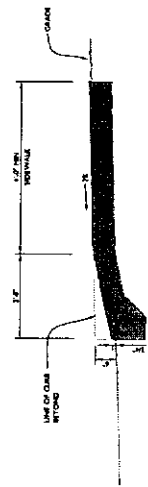
THOMPSON
ARCHITECTS
AUGUST 3, 2005
AUGUST 10, 2005



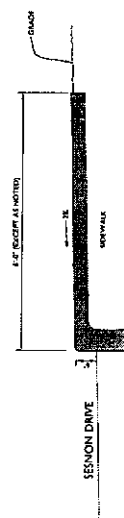
1 SOQUEL DRIVE SIDEWALK DETAIL WEST SECTION



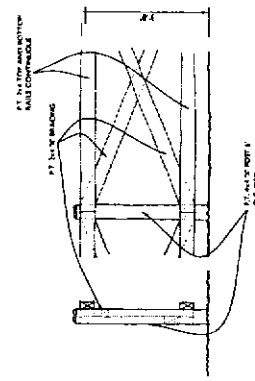
2 SOQUEL DR. SIDEWALK DETAIL EAST SECTION



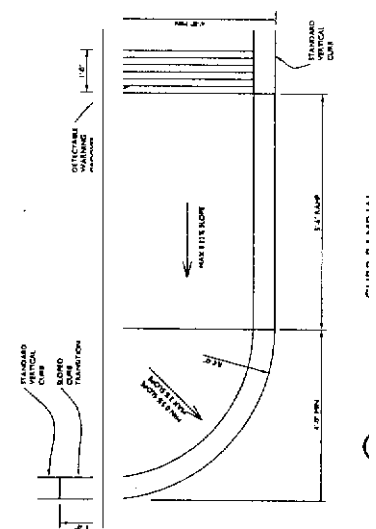
3 CURB RAMP AND SIDEWALK DETAIL @ GARAGE DRIVEWAYS



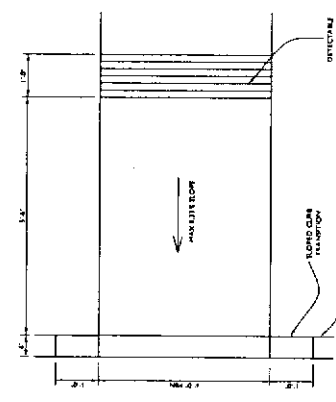
4 CURB AND SIDEWALK DETAIL



5 3' RAIL FENCE DETAIL



6 CURB RAMP AND SIDEWALK DETAIL @ GARAGE DRIVEWAYS



7 CURB RAMP 'B'

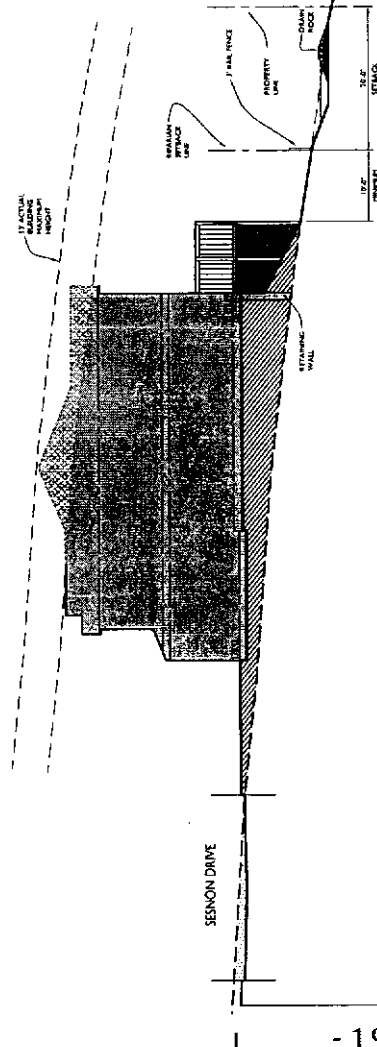
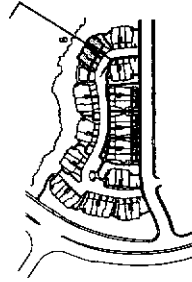


8 CURB RAMP AND SIDEWALK DETAIL @ GARAGE DRIVEWAYS

URBAN DESIGN DETAILS
CABRILLO COMMONS

THACHER &
TUCKER

JUNE 21, 2005
NOVEMBER 8, 2005



ELEVATION D

THACHER &
THOMPSON
ARCHITECTS



BIO SWAIF SECTION

LABRILLU LUMMUN

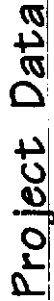
12

EXHIBIT A

Cabrillo Commons

Index of Sheets

Vicinity Map



Proposed Use _____
43 Residential "Countryside" Units

Sewage Disposal _____
Bainbridge County Sanitation District

Fire Protection _____
Central Fire Protection District

Water Supply _____
Boquet Creek Water District

Gas & Electric _____
Pacific Gas & Electric

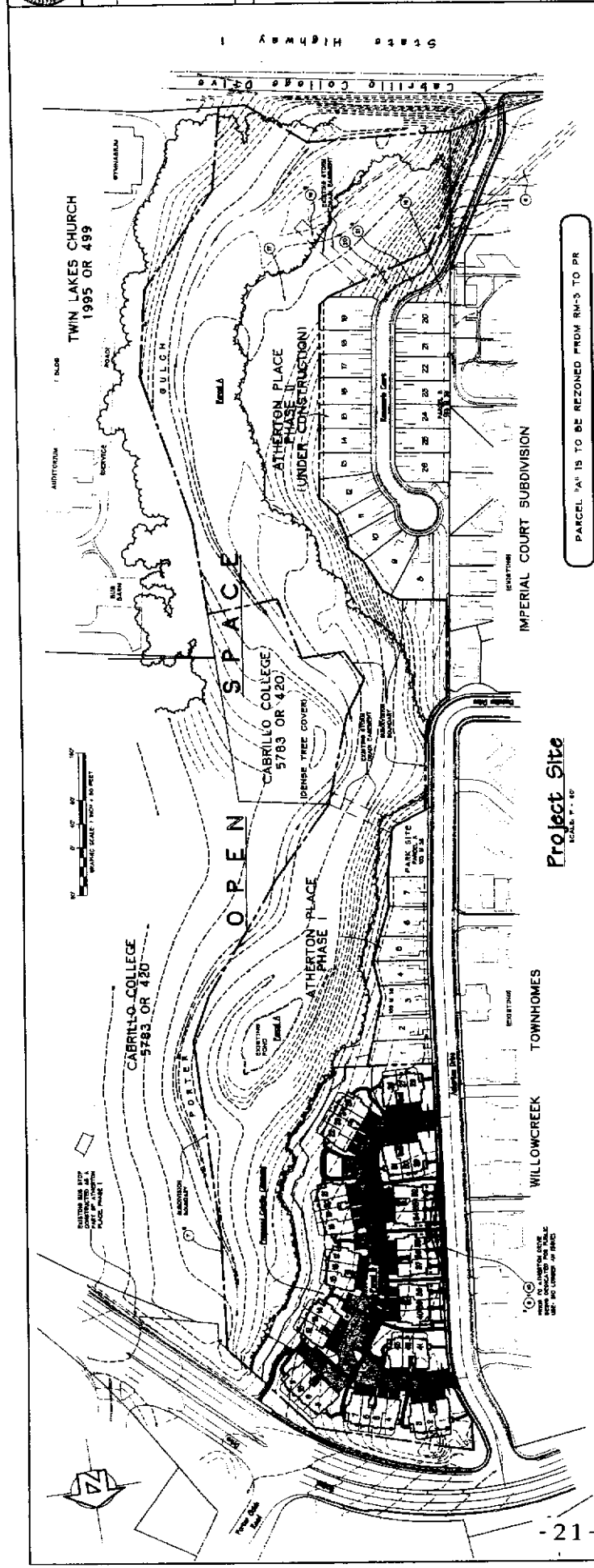
Telephone _____
Pacific Bell

Cable T.V. _____
Comcast

Land Area of Project _____
65,217 SQ. FT., 1.493 Acres

**Area Subject to
Inundation** _____
No existing levee, ditches,
or other existing flood control
(Not subject to flood hazard)

A



*Lot of Exception From County Standard Street for Private Street. (Seenon Drive)

1. RIGHT OF WAY WIDTH FROM 60 TO 165.
2. SIDEWALK ON THE SIDE ONLY
3. TYPE "C" CURBS AND GUTTER INSTEAD OF TYPE "A".
4. PAVEMENT WIDTH FROM 30' TO 36'.

*Essentials Noted in Title Report

- [illegible]

Storm Drainage Calculations

- | | |
|---|---|
| PRE-DEVELOPMENT CONDITION | Grossland, dense tree cover
No ground surface |
| RAINFALL INTENSITY | = 1960 Isothermal - 1.4 inches/hr |
| RAINFALL INTENSITY | = 1960 Isothermal - 1.4 inches/hr |
| COEFFICIENT OF RUN-OFF | = 0.30 PRE-DEV 0.50 POST DEV |
| PRE-DEVELOPMENT STORM RUN-OFF | Q10 = (10.0)(1.4)(0.30) = 4.2 cfs
Q100 = (10.0)(1.4)(0.50) = 7.0 cfs |
| POST-DEVELOPMENT STORM RUN-OFF | Q10 = 10.0 cfs
Q100 = 10.0 cfs |
| STORM DRAIN DETENTION REQUIRED PER 80-5 | = 1560 CUBIC FEET
(SEE DRAINAGE REPORT) |

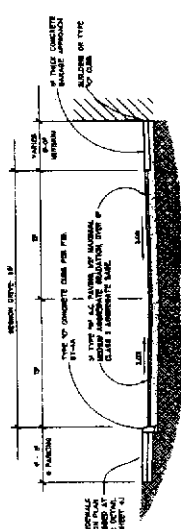
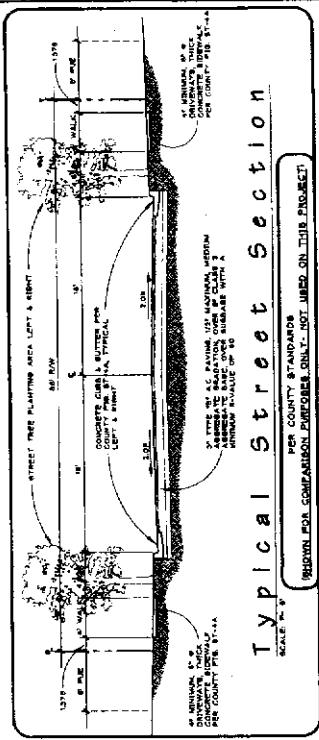
Statement of Improvements to be installed

1. Street improvements and utilities along all proposed streets.
2. Sanitary sewer main extension along the existing, or northwesterly section of Alterton Drive.
3. Sanitary sewer main extension along the westerly property line from the southeasterly section of the proposed subdivision.
4. Storm drain detention system.
5. Any damaged curb, gutter, and/or sidewalk that currently exists along the westerly side of Alterton Drive shall be repaired as a part of this project.
6. Sight distance at the northwesterly corner of Sausal Drive and Alterton Drive.
7. Curb, Gutters, Sidelwalks, and Landscaping Walls along the Sausal Drive Frontage.

RM-3 Zone District Site & Structural Dimensions (Townhouse Project)

- | | |
|--|--|
| MINIMUM DENSITY PER DWELLING | = 3,000 Sq. Ft. |
| OVERALL DENSITY FOR PROJECT
BASED UPON NET DEVELOPMENT AREA | = 3,224 Sq. Ft. per dwelling unit |
| FRONT SETBACK | = 15' feet - 120' feet of garage! |
| SIDE SETBACK | = 5' feet each side |
| REAR SETBACK | = 15' feet |
| CORNER LOTS | = Side - 5' feet (interior) / 15' feet (street side) |
| LOT COVERAGE | = 40% maximum allowed, 23.8% per plan |
| BUILDING HEIGHTS | = 18' feet - measured from finished grade |
| LOT WIDTH | = Townhouse Lots |
| LOT FRONTAGE | = Townhouse Lots |

EACH LOT/BUILDING ENVELOPE IS PART OF THE OVERALL PLANNED DEVELOPMENT.



INO ON STREET PARKING!

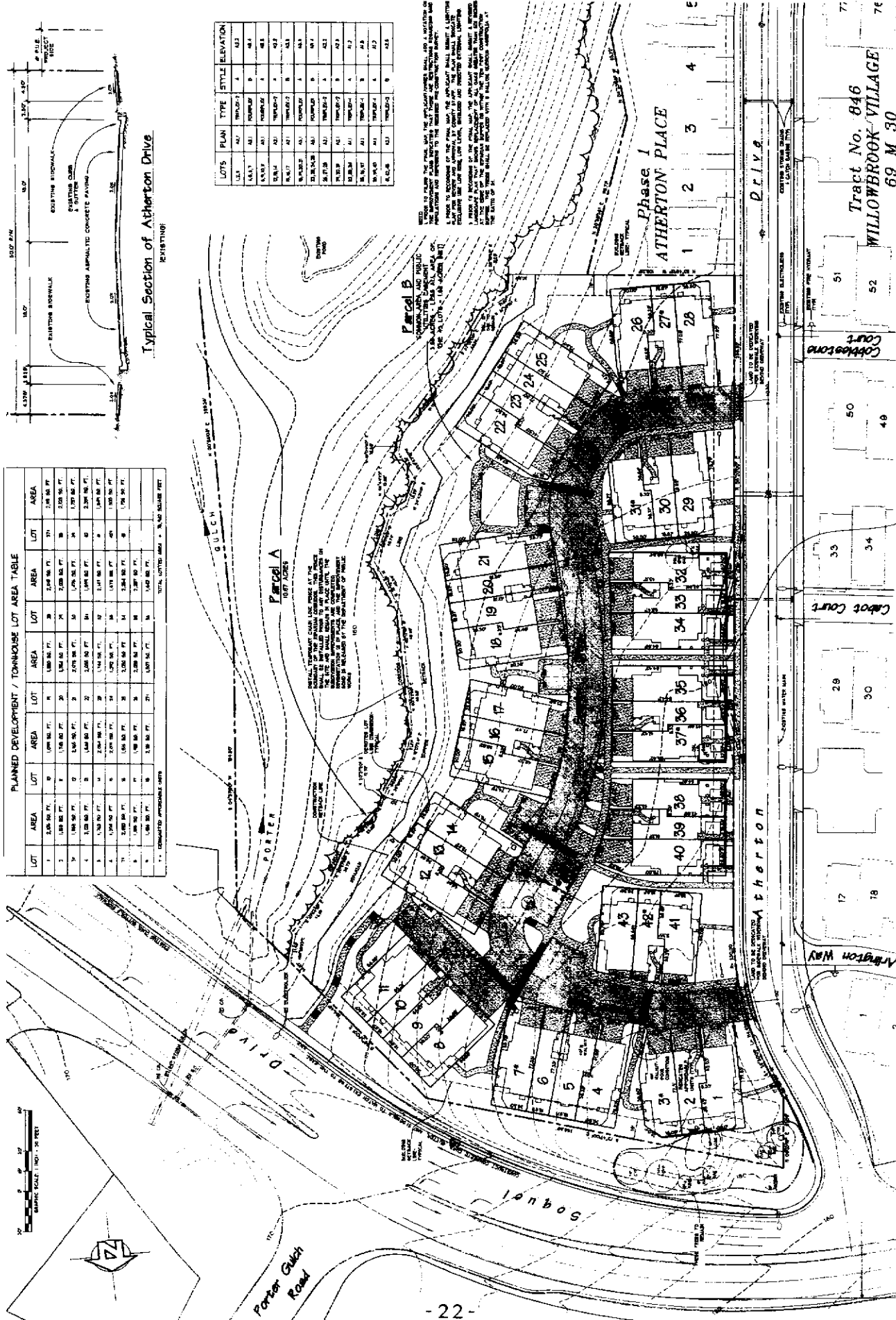
Typical Proposed Street

SCALE 1" = 6'

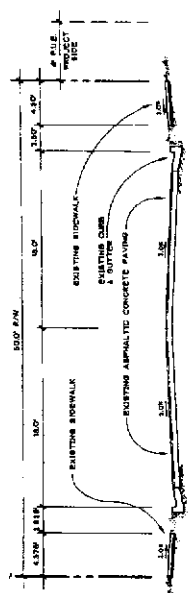
EXCEPTION TO THE STANDARD SHOWN ABOVE!

Tentative Subdivision Map

Tract No. 846
WILLOWBROOK VILLAGE
69 M 30



Typical Section of Atherton Drive



LOTS	PLAN	TYPE	STILE ELEVATION
1-13	242	THICK-24	4.43
14-17	401	THICK-40	4.44
18-21	401	THICK-40	4.45
22-25	401	THICK-40	4.46
26-29	401	THICK-40	4.47
30-33	401	THICK-40	4.48
34-37	401	THICK-40	4.49
38-41	401	THICK-40	4.50
42-43	401	THICK-40	4.51

PLANNED DEVELOPMENT / TOWNHOUSE LOT AREA TABLE									
LOT	AREA	LOT	AREA	LOT	AREA	LOT	AREA	LOT	AREA
1	2,000.00 SQ. FT.	8	1,000.00 SQ. FT.	15	1,000.00 SQ. FT.	22	1,000.00 SQ. FT.	29	1,000.00 SQ. FT.
2	1,000.00 SQ. FT.	9	1,000.00 SQ. FT.	16	1,000.00 SQ. FT.	23	1,000.00 SQ. FT.	30	1,000.00 SQ. FT.
3	1,000.00 SQ. FT.	10	1,000.00 SQ. FT.	17	1,000.00 SQ. FT.	24	1,000.00 SQ. FT.	31	1,000.00 SQ. FT.
4	1,000.00 SQ. FT.	11	1,000.00 SQ. FT.	18	1,000.00 SQ. FT.	25	1,000.00 SQ. FT.	32	1,000.00 SQ. FT.
5	1,000.00 SQ. FT.	12	1,000.00 SQ. FT.	19	1,000.00 SQ. FT.	26	1,000.00 SQ. FT.	33	1,000.00 SQ. FT.
6	1,000.00 SQ. FT.	13	1,000.00 SQ. FT.	20	1,000.00 SQ. FT.	27	1,000.00 SQ. FT.	34	1,000.00 SQ. FT.
7	1,000.00 SQ. FT.	14	1,000.00 SQ. FT.	21	1,000.00 SQ. FT.	28	1,000.00 SQ. FT.	35	1,000.00 SQ. FT.
10	1,000.00 SQ. FT.	19	1,000.00 SQ. FT.	28	1,000.00 SQ. FT.	37	1,000.00 SQ. FT.	43	1,000.00 SQ. FT.
11	1,000.00 SQ. FT.	20	1,000.00 SQ. FT.	29	1,000.00 SQ. FT.	40	1,000.00 SQ. FT.		
12	1,000.00 SQ. FT.	21	1,000.00 SQ. FT.	30	1,000.00 SQ. FT.	41	1,000.00 SQ. FT.		
13	1,000.00 SQ. FT.	22	1,000.00 SQ. FT.	31	1,000.00 SQ. FT.	42	1,000.00 SQ. FT.		
14	1,000.00 SQ. FT.	23	1,000.00 SQ. FT.	32	1,000.00 SQ. FT.	43	1,000.00 SQ. FT.		
15	1,000.00 SQ. FT.	24	1,000.00 SQ. FT.	33	1,000.00 SQ. FT.				
16	1,000.00 SQ. FT.	25	1,000.00 SQ. FT.	34	1,000.00 SQ. FT.				
17	1,000.00 SQ. FT.	26	1,000.00 SQ. FT.	35	1,000.00 SQ. FT.				
18	1,000.00 SQ. FT.	27	1,000.00 SQ. FT.	36	1,000.00 SQ. FT.				
19	1,000.00 SQ. FT.	28	1,000.00 SQ. FT.	37	1,000.00 SQ. FT.				
20	1,000.00 SQ. FT.	29	1,000.00 SQ. FT.	38	1,000.00 SQ. FT.				
21	1,000.00 SQ. FT.	30	1,000.00 SQ. FT.	39	1,000.00 SQ. FT.				
22	1,000.00 SQ. FT.	31	1,000.00 SQ. FT.	40	1,000.00 SQ. FT.				
23	1,000.00 SQ. FT.	32	1,000.00 SQ. FT.	41	1,000.00 SQ. FT.				
24	1,000.00 SQ. FT.	33	1,000.00 SQ. FT.	42	1,000.00 SQ. FT.				
25	1,000.00 SQ. FT.	34	1,000.00 SQ. FT.	43	1,000.00 SQ. FT.				
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31	1,000.00 SQ. FT.	40	1,000.00 SQ. FT.						
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33	1,000.00 SQ. FT.	42	1,000.00 SQ. FT.						
34	1,000.00 SQ. FT.	43	1,000.00 SQ. FT.						
35	1,000.00 SQ. FT.								
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40	1,000.00 SQ. FT.								
41	1,000.00 SQ. FT.								
42	1,000.00 SQ. FT.								
43	1,000.00 SQ. FT.								

1" = 100' SCALE

PORTER ROAD

SOQUEL DRIVE

ATHERTON DRIVE

WILLOWBROOK VILLAGE

69 M 30

Tract No. 846

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WILLOWBROOK VILLAGE

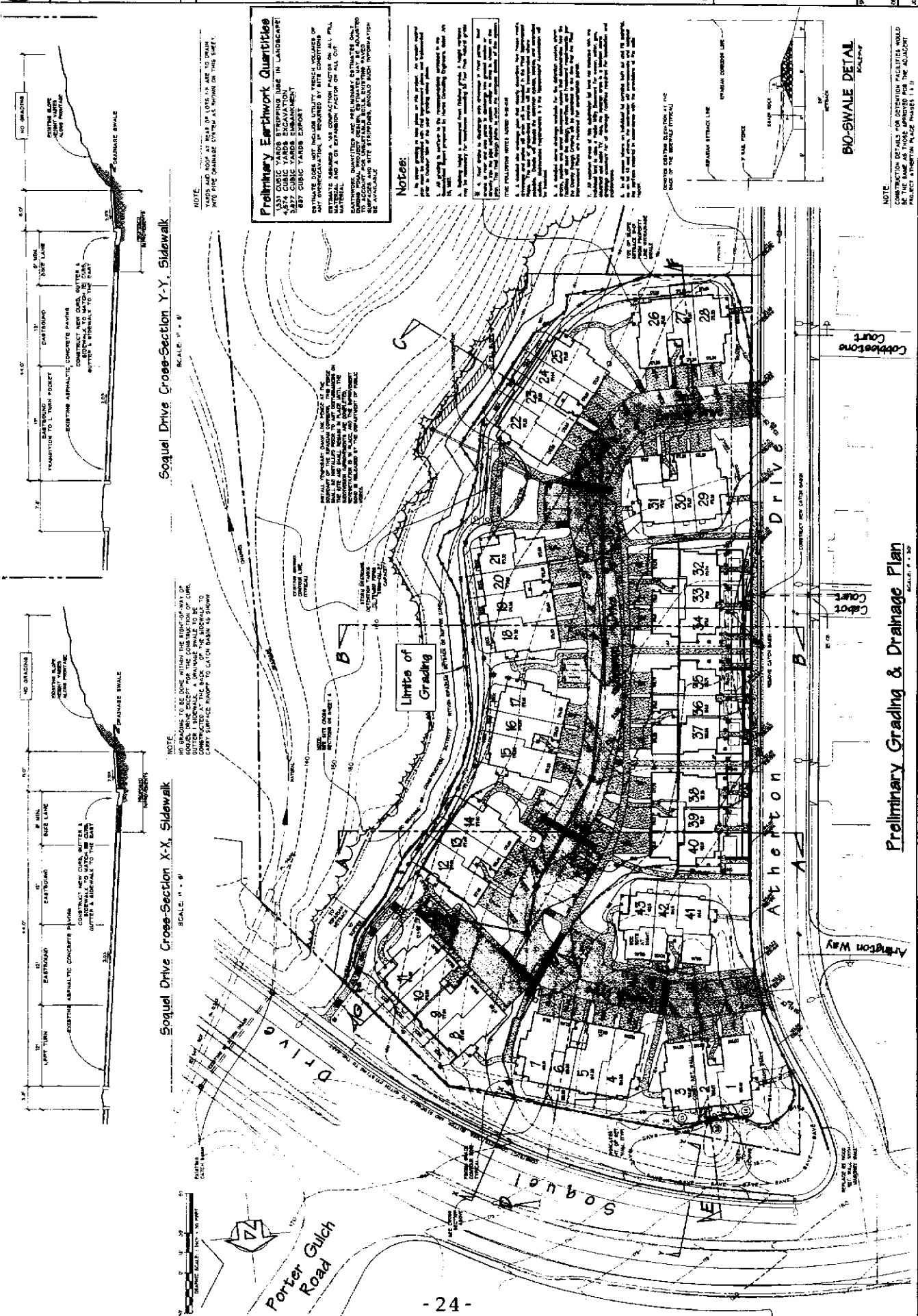
69 M 30

Tract No. 846

WILLOWBROOK VILLAGE

69 M 30





ALL GEORING WORK AND CONSTRUCTION OF IMPROVEMENTS SHALL BE DONE IN ACCORDANCE WITH RECOMMENDATIONS EMPLOYED IN THE GEOTECHNICAL REPORT PREPARED FOR THIS PROJECT BY HAZZA CONSULTING ENGINEERS. PROJECT NO. 1002-DATED 04/1991, MAY BE SUPPLEMENTED BY HAZZA CONSULTING ENGINEERS DATED JANUARY 1, 1993, JANUARY 10, 1992, JANUARY 4, 1993, AND MAY 1998 AND THE SUPPLEMENTARY RECOMMENDATIONS THEREIN SHALL BE USED TO COMPLETE THE PROJECT AND CONSTRUCTION OF IMPROVEMENTS. IN WRITING THAT THE IMPROVEMENTS HAVE BEEN CONSTRUCTED IN CONFORMANCE WITH THE GEOTECHNICAL REPORT, THE FOLLOWING NOTES APPLY: THE RECOMMENDATIONS BY THE BOLS ENGINEER, MAY NOT INCLUDE ALL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADHERENCE TO ALL RECOMMENDATIONS MADE BY THE GEOTECHNICAL ENGINEER.

3. THE CONTRACTOR SHALL ACCEPT THE SITE IN ITS PRESENT CONDITION AND SHALL REMOVE FROM THE AREA OF THE CONTAMINATED PASTURELAND ALL OBSTRUCTIONS INCLUDING ANY BURNED TREES AND GRASS AND OTHER MATERIALS NOT OBTAINED BY THE SCYTHOLOGICAL ENGINEER TO BE DELIVERED. SUCH MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE. MATERIALS RESULTING FROM THE REMOVAL OF UNDERGROUND OBSTRUCTIONS THAT EXIST BELOW PASTURELAND SHALL BE CLEANED AND BACKFILLED WITH EQUIVALENT FILL.

3.3. WHERE VEGETATION EXITS THE SITE SHALL BE DIRECTED, OR STRIPPED TO A MINIMUM DEPTH OF 2 INCHES OR TO SUCH DEPTH AS TO PREVENT THE GROWTH OF WEEDS. STRIPPED VEGETATION SHALL BE STOCKPILED FOR POSSIBLE USE IN LANDSCAPE VEGETATION AND ORGANIC LAMIN TOPSOIL.

3.4. THE CONTRACTOR SHALL MAINTAIN THE PASTURELAND AREA.

[illegible]

CLASS 3 BACKFILL COMPENSING TO THE REQUIREMENTS OF SECTION 15 OF THE CALLTARS SPECIFICATIONS, LATEST EDITION, SHOULD BE PLACED IN THIS UPPER UNIFORMITY MOTIVE CONDITIONS AND COMPACTED TO AT LEAST 95 PERCENT RELATIVE COMPACTION TO PROVIDE A SMOOTH, UNDISTURBED SURFACE.

IN GENERAL, THE EXISTING EXISTING EARTH MATERIALS ARE CONSIDERED ACCEPTABLE FOR USE AS DIMENSIONED FILL. REMOVED SIGNIFICANT VEGETATION, ROCKS AND ALL OTHER DEBRIS MATERIALS ARE REMOVED ALL FILL MATERIALS SHOULD BE SUBJECT TO EVALUATION BY THE BOSS ENGINEER PRIOR TO USE.

[illegible]

5. AFTER THE BACKFILL OPERATIONS HAVE BEEN COMPLETED AND THE GEOTECHNICAL ENGINEER HAS FINISHED HIS OBSERVATION OF THE WORK, NO FURTHER BACKFILLING OPERATIONS WILL BE ALLOWED. THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN THE STABILITY OF THE EXISTING EARTHWORKS SHALL BE THE CONTRACTOR'S RESPONSIBILITY. THE CONTRACTOR SHALL MAINTAIN THE STABILITY OF THE EXISTING EARTHWORKS DURING CONSTRUCTION AND UNTIL SUCH TIME AS PERMANENT EROSION CONTROL MEASURES HAVE BEEN INSTALLED.

THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR THE ALLOCATION OF PAYMENT OF ANY TAX INCREASE ON OR IN CONNECTION WITH THE CONTRACT. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR THE PAYMENT OF ANY TAX INCREASE ON OR IN CONNECTION WITH THE CONTRACT. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR THE PAYMENT OF ANY TAX INCREASE ON OR IN CONNECTION WITH THE CONTRACT.

Gross Section D-D
SCALE 1/4" = HORIZONTAL, 1" VERTICAL

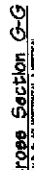
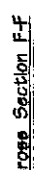
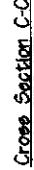
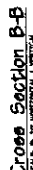
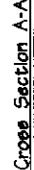
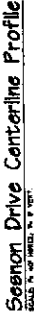
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TABLE 1. TUNING OF A STEM

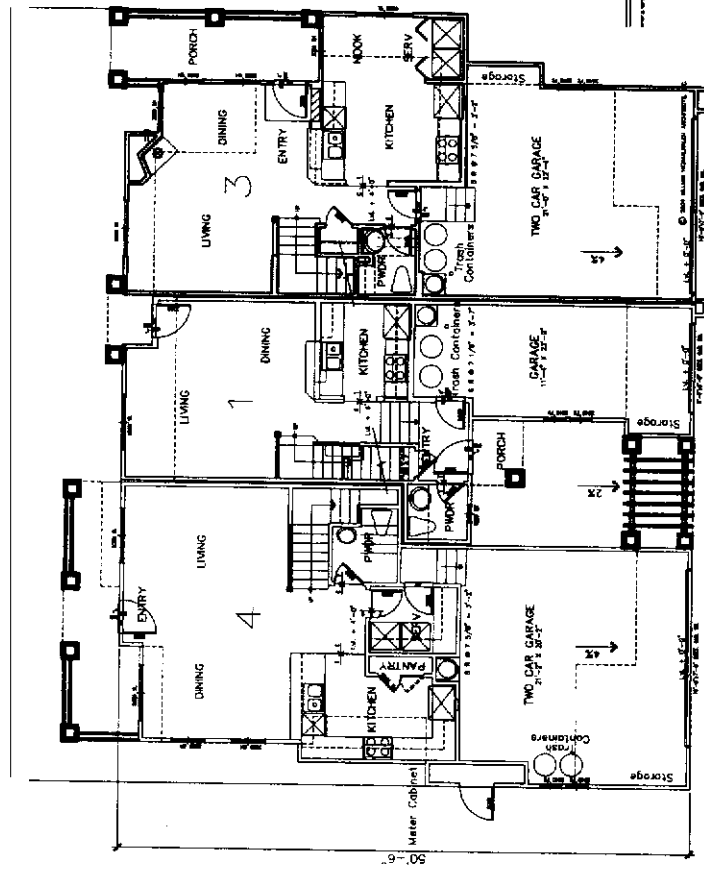
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EXHIBIT A

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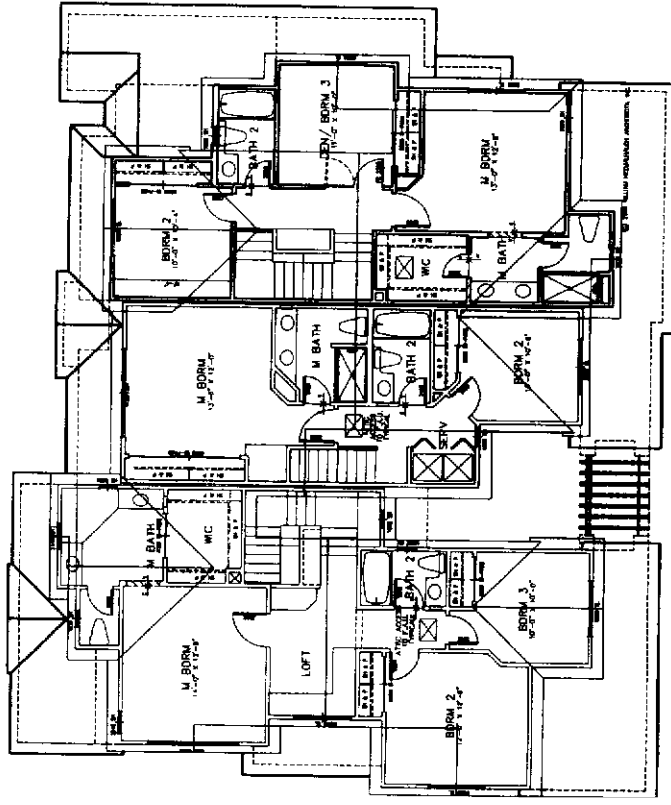


1,410 Square Feet
2 to 3 Bdrm. / 2.5 Ba. / Den
2 Car Garage

1,099 Square Feet
2 Bdrm. / 2.5 Ba.
1 Car Garage

1,602 Square Feet
3 Bdrm. / 2.5 Ba. / Loft
2 Car Garage

LOWER FLOOR



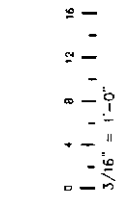
PLAN 1

PLAN 2

PLAN 3

UPPER FLOOR

THREE PLEX-BLDG. TYPE 1
FLOOR PLANS



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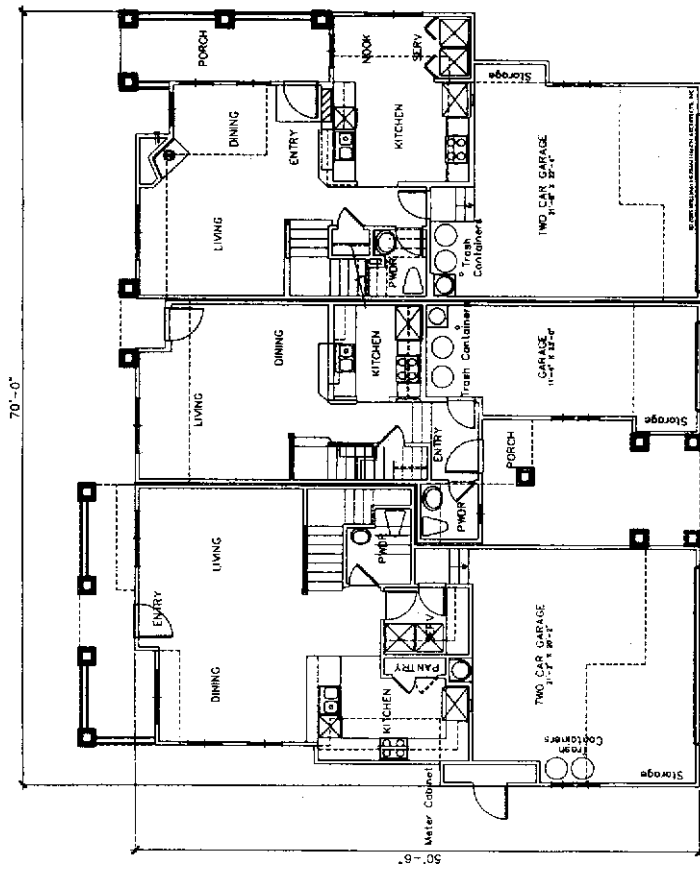
CABRILLO COMMONS

APTOS, CALIFORNIA
COUNTY OF SANTA CRUZ, CALIFORNIA
ATHERTON PLACE DEVELOPMENT, L.L.C.



WILLIAM HEZMALHALCH
ARCHITECTS, INC.
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949 258 0007 www.hezmalhalch.com Fax 949 250 1529
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925 463 1700

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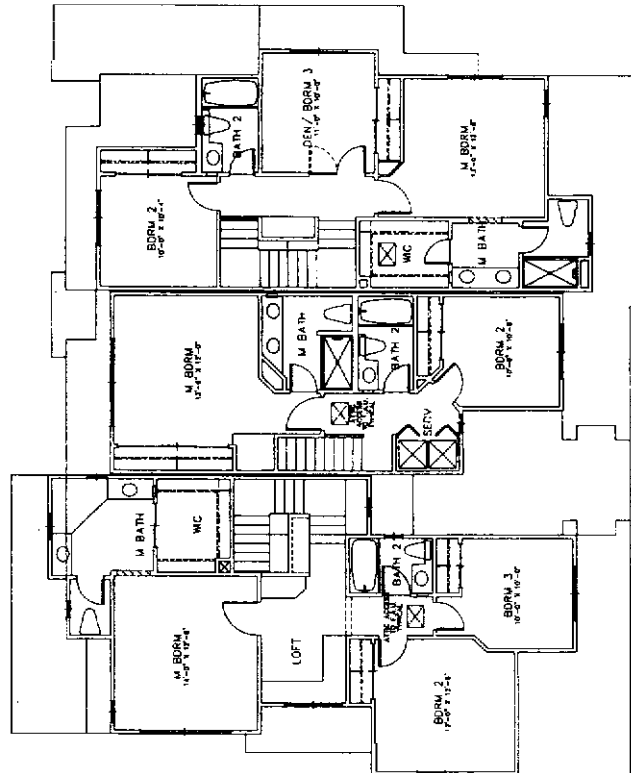


PLAN 1
1,099 S.F.
2 BDRM / 2.5 BATH
1 CAR GARAGE

PLAN 3
1,410 S.F.
2 BDRM / 2.5 BATH / DEN / BDRM 3
2 CAR GARAGE

PLAN 4
1,582 S.F.
3 BDRM / 2.5 BATH / LOFT
2 CAR GARAGE

LOWER FLOOR



PLAN 1
1,099 S.F.
2 BDRM / 2.5 BATH
1 CAR GARAGE

PLAN 3
1,410 S.F.
2 BDRM / 2.5 BATH / DEN / BDRM 3
2 CAR GARAGE

PLAN 4
1,582 S.F.
3 BDRM / 2.5 BATH / LOFT
2 CAR GARAGE

UPPER FLOOR

THREE PLEX - BUILDING TYPE 1
FLOOR PLAN

CABRILLO COMMONS

APTOS, CALIFORNIA

ATHERTON PLACE DEVELOPMENT, L.L.C.

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WWW.REZMALMALCH.COM

3/16" = 1'-0"

FEBRUARY 28, 2005
2003112.01



PLAN 3

PLAN 1

REAR ELEVATION

PLAN 4

PLAN 3

RIGHT ELEVATION

- WOOD COLUMNS
- STONE VENEER
- ASPHALT SHINGLES
- WOOD SHAKE CORBELS
- WOOD SHAKE
- WOOD FASCIA
- CEMENTITIOUS WOOD SHAKE SIDING
- CEMENTITIOUS LAP SIDING

METER CABINET



PLAN 4

LEFT ELEVATION

PLAN 4

FRONT ELEVATION

PLAN 3

CRAFTSMAN ELEVATION A

CABRILLO COMMONS APTOS, CALIFORNIA ATHERTON PLACE DEVELOPMENT, L.L.C.

3/16" = 1'-0"

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FAX: (408) 291-1101
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A1.2



PLAN 3
RIGHT ELEVATION

PLAN 4
REAR ELEVATION

WOOD COLUMNS
STONE VENER
WOOD SHAKES
WOOD GABLE CORBELS
WOOD FASCIA
CEMENTITIOUS WOOD SHAKE SIDING
STUCCO

METER CABIN



PLAN 3
FRONT ELEVATION

PLAN 4
LEFT ELEVATION

PLAN 4
CRAFTSMAN ELEVATION B

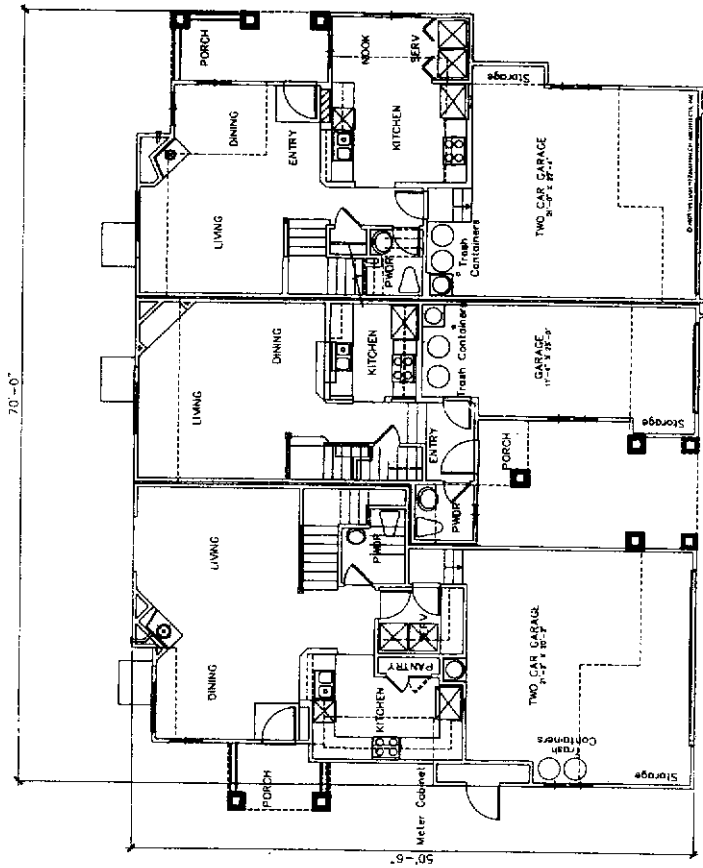
CABRILLO COMMONS APTOS, CALIFORNIA ATHERTON PLACE DEVELOPMENT, L.L.C.

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3/16" = 1'-0"

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2007.12.03	

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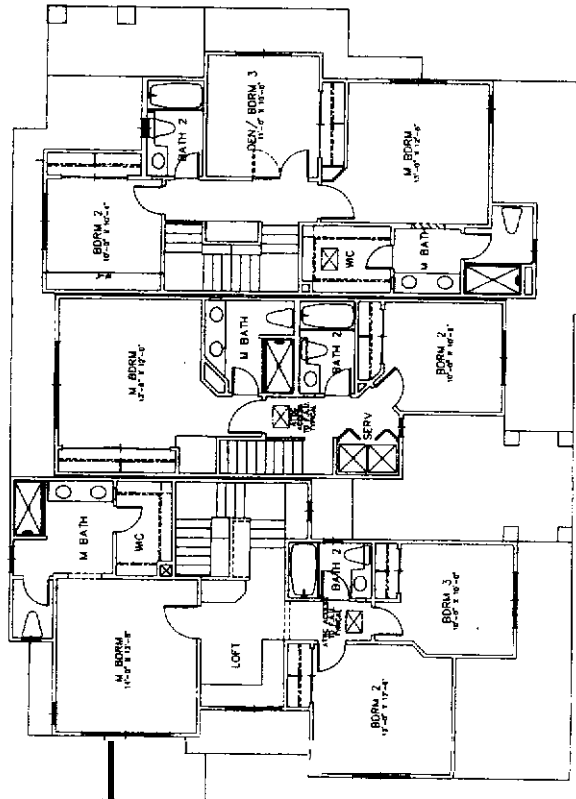


PLAN 1
1,110 S.F.
2 BDRM / 2.5 BATH
1 CAR GARAGE

PLAN 2
1,410 S.F.
2 BDRM / 2.5 BATH / DEN / BDRM 3
2 CAR GARAGE

PLAN 3
1,410 S.F.
2 BDRM / 2.5 BATH / DEN / BDRM 3
2 CAR GARAGE

LOWER FLOOR



PLAN 1
1,110 S.F.
2 BDRM / 2.5 BATH
1 CAR GARAGE

PLAN 2
1,410 S.F.
2 BDRM / 2.5 BATH / DEN / BDRM 3
2 CAR GARAGE

PLAN 3
1,410 S.F.
2 BDRM / 2.5 BATH / DEN / BDRM 3
2 CAR GARAGE

UPPER FLOOR

THREE PLEX - BUILDING TYPE 2
FLOOR PLAN

CABRILLO COMMONS APTOS, CALIFORNIA ATHERTON PLACE DEVELOPMENT, L.L.C.

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A2.1

3/16" = 1'-0"

FEBRUARY 28, 2005

2002112.03

EXHIBIT A



PLAN 3

REAR ELEVATION

PLAN 4

PLAN 3

RIGHT ELEVATION

WOOD COLUMNS
STONE VENEER
ASPHALT SHINGLES
WOOD GABLE CORNERS
WOOD FASCIA
CEMENTITIOUS WOOD SHAKE SILL G
CEMENTITIOUS LAM SIDING

METER CABINET



PLAN 4

LEFT ELEVATION

PLAN 4

FRONT ELEVATION

PLAN 3

CRAFTSMAN ELEVATION A

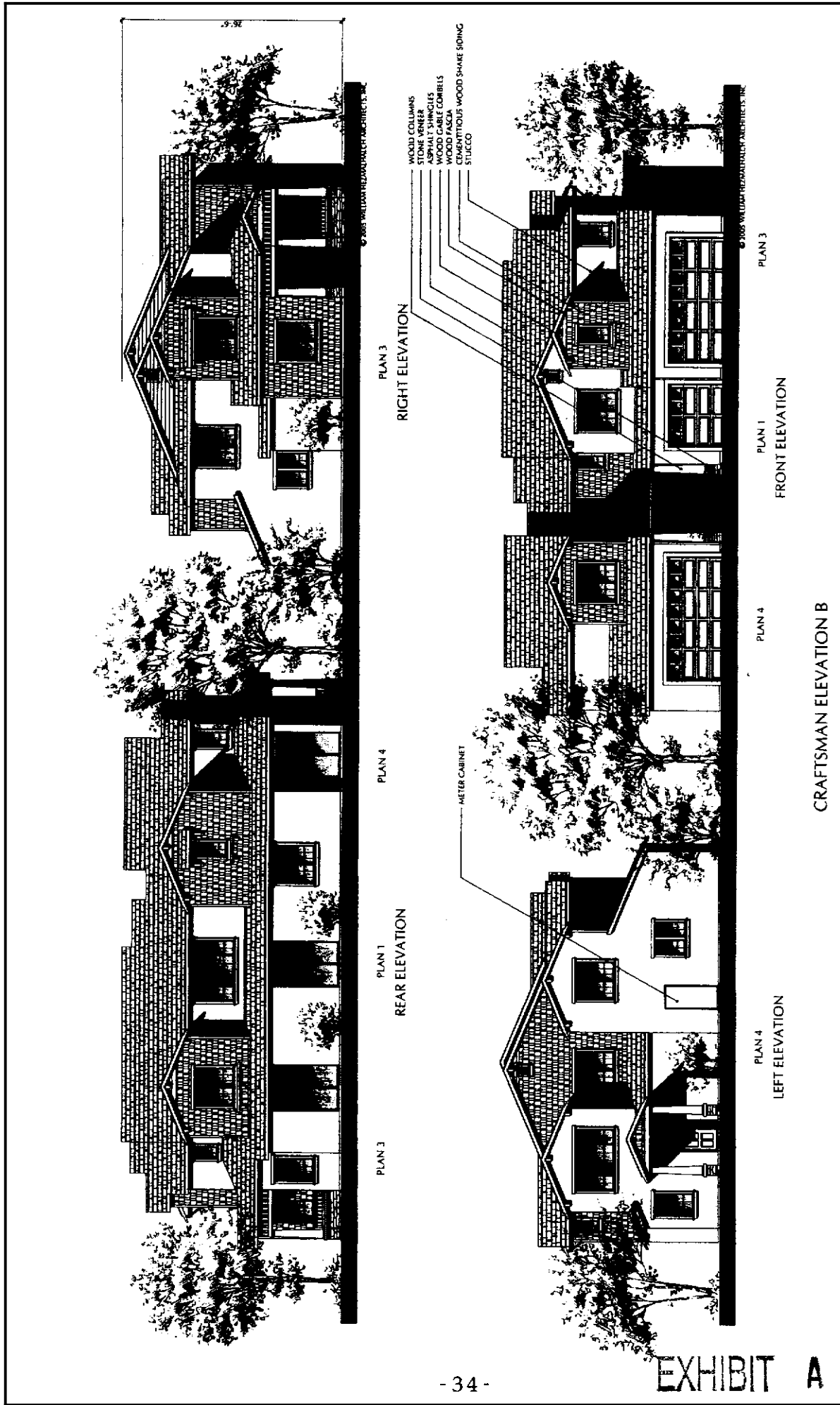
CABRILLO COMMONS APTOS, CALIFORNIA ATHERTON PLACE DEVELOPMENT, L.L.C.

FEBRUARY 28, 2005

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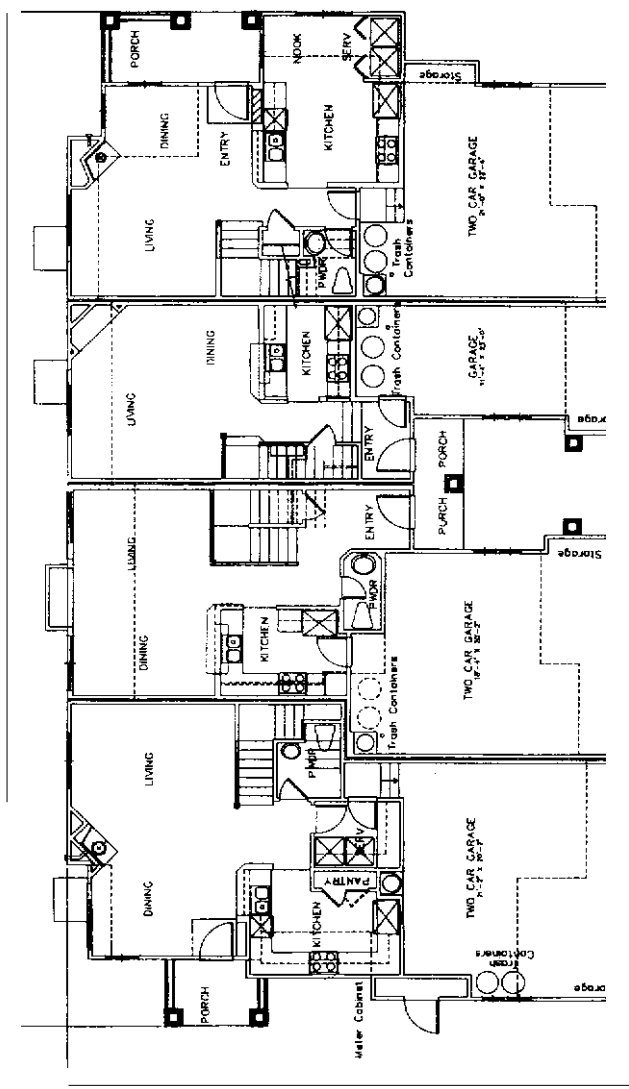
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CABRILLO COMMONS **APTOS, CALIFORNIA** **ATHERTON PLACE DEVELOPMENT, L.L.C.**

CABRILLO COMMONS
 APTOS, CALIFORNIA
 ATHERTON PLACE DEVELOPMENT, L.L.C.

3/16" = 1'-0"



- | | | | |
|---|--|--|---|
| PLAN 4
1,582 S.F.
3 BDRM / 2.5 BATH / LOFT
2 CAR GARAGE | PLAN 2
1,377 S.F.
2 BDRM / 2.5 BATH
2 CAR GARAGE | PLAN 1
1,110 S.F.
2 BDRM / 2 BATH
1 CAR GARAGE | PLAN 3
1,410 S.F.
2 BDRM / 2.5 BATH / DEN / BDRM 3
2 CAR GARAGE |
|---|--|--|---|

LOWER FLOOR

**FOUR PLEX - BUILDING TYPE 3
 FLOOR PLAN**

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CABRILLO COMMONS

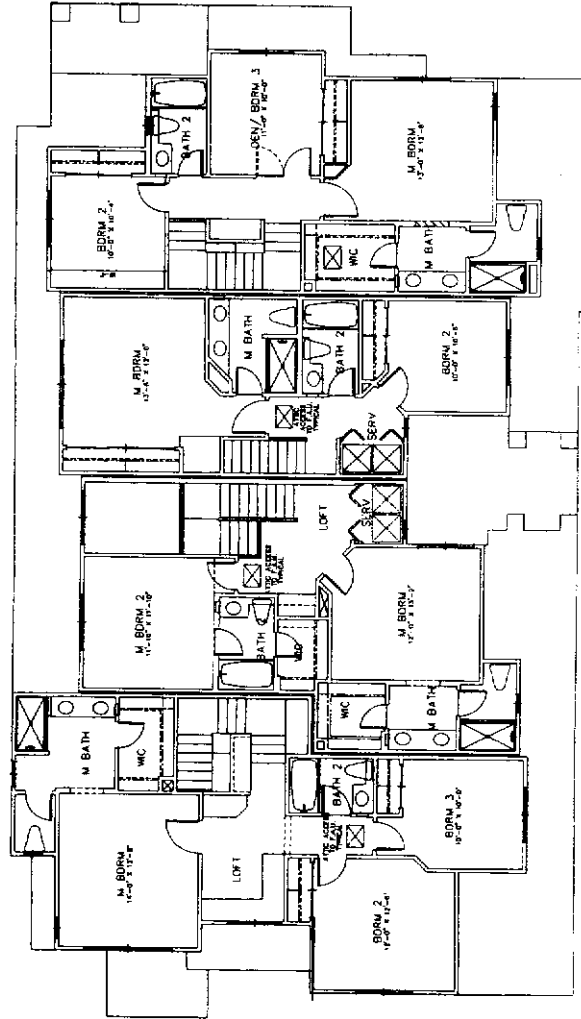
APTOS, CALIFORNIA

ATHERTON PLACE DEVELOPMENT, L.L.C.

3/16" = 1'-0"

FEBRUARY 28, 2005

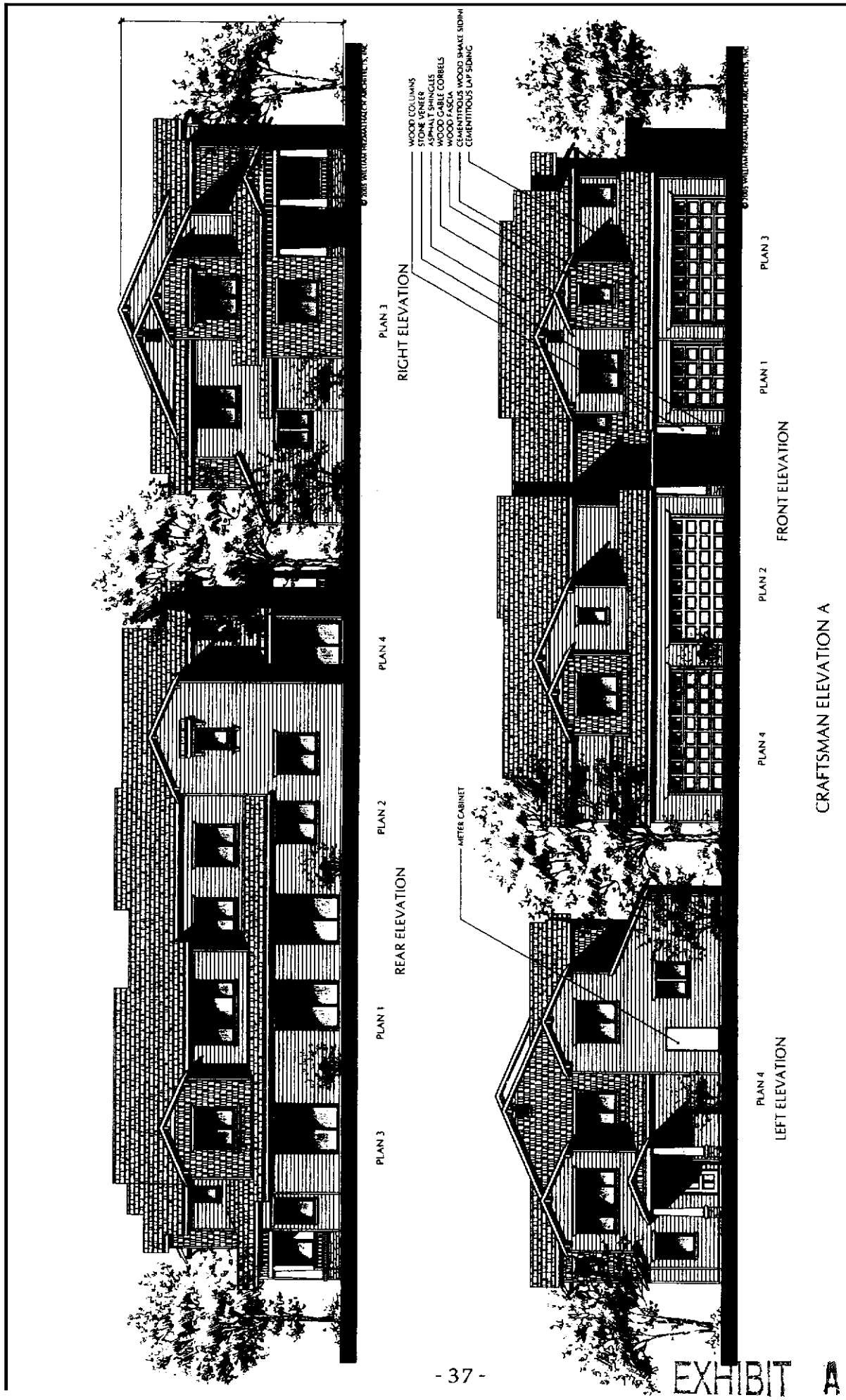
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PLAN 4	PLAN 2	PLAN 1	PLAN 3
1,582 S.F.	1,377 S.F.	1,110 S.F.	1,410 S.F.
3 BDRM / 2.5 BATH / LOFT	2 BDRM / 2.5 BATH	2 BDRM / 2 BATH	2 BDRM / 2.5 BATH / DEN / BDRM 3
2 CAR GARAGE	2 CAR GARAGE	1 CAR GARAGE	2 CAR GARAGE

UPPER FLOOR

FOUR PLEX - BUILDING TYPE 3
FLOOR PLAN



CABRILLO COMMONS **APTOS, CALIFORNIA** **ATHERTON PLACE DEVELOPMENT, L.L.C.**

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 WWW.WHARCHITECTS.COM

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3/16" = 1'-0"

Rezoning Findings

1. The proposed zone district will allow a density of development and types **of** uses which are consistent with the objectives and land-use designations of the adopted General Plan; **and,**

This finding can be made, in that the area of the subject property to be rezoned has an Urban Open Space (O-U) General Plan land use designation due **to** the presence of a riparian resource. The proposed PR (Parks, Recreation, and Open Space) zone district will preserve the riparian resource as open space, consistent with the O-U General Plan designation.

2. The proposed zone district is appropriate of the level of utilities and community service available to the land; and,

This finding can be made, in that no utilities are required to serve the open space use.

3. The character **of** development in the area where the land is located has changed or is changing to such a degree that the public interest will be better served by a different zone district.

This finding can be made, in that the portion of the subject property to be rezoned is a riparian resource area. The rezoning will allow preservation of the riparian resource area as an open space.

Subdivision Findings

1. That the proposed subdivision meets all requirements or conditions of the Subdivision Ordinance and the State Subdivision Map Act.

This finding can be made, in that the project meets all of the technical requirements of the Subdivision Ordinance and is consistent with the County General Plan and ~~the~~ Zoning Ordinance as set forth in ~~the~~ findings below.

2. That the proposed subdivision, its design, and its improvements, are consistent with the General Plan, and the area General Plan or specific plan, if any.

This finding can be made, in that the proposed division of land, its design, and its improvements, will be consistent with the General Plan. The project creates 43 multi-family residential units and is located in the Urban High Density Residential (R-UH) General Plan designation which allows a density of one unit for each 2,500 to 4,000 square feet of net developable parcel area. The proposed project is consistent with the General Plan, in that the development will average a total of 3,268 square feet of net developable parcel area per residential unit.

The project is consistent with the General Plan in that the full range of urban services is available, including public water and sewer service. **All** parcels will be accessed by an access road (Sesnon Drive) to Atherton Drive. The proposed access road (Sesnon Drive) will require an exception to the County Design Criteria due to variation in pavement width, parking configuration, and sidewalk on only one side of the street. The proposed roadway design provides adequate and safe vehicular and pedestrian access.

The subdivision, as conditioned, will be consistent with the General Plan regarding infill development, in that the proposed residential development will be consistent with the pattern of the surrounding development, and the design of the proposed structures are consistent with the character of similar developments in the surrounding neighborhood.

3. That the proposed subdivision complies with Zoning Ordinance provisions as ~~to~~ **uses** of land, lot sizes and dimensions and any other applicable regulations.

This finding can be made, in that the use ~~of~~ the property will be residential in nature, unit densities meet the minimum standards for the RM-3 (Multi-family Residential - 3,000 square feet minimum) zone district where the project is located, which allows for interior setbacks to be reduced for parcels not abutting the periphery of the project site (~~per~~ County Code section 13.10.323(d)1(i)) and all exterior setbacks will be consistent with the required site standards of the **RM-3** zone district.

4. That the site of the proposed subdivision is physically suitable for the **type** and density of development.

This finding can be made, in that no challenging topography affects the building site, technical reports prepared **for** the property conclude that the site is suitable for residential development, and the proposed units are properly configured to allow development in compliance with the

required site standards. No environmental resources would be adversely impacted by the proposed development.

5. That the design of the proposed subdivision or type of improvements will not cause substantial environmental damage nor substantially and avoidably injure fish or wildlife or their habitat.

This finding can be made, in that the riparian resource on the east side of the subject property will be adequately protected through development setbacks. No other mapped or observed sensitive habitats or threatened species will be adversely impacted through the development of the site.

6. That the proposed subdivision or type of improvements will not cause serious public health problems.

This finding can be made, in that municipal water and sewer are available to serve all proposed parcels.

7. That the design of the proposed subdivision or type of improvements will not conflict with easements, acquired by the public at large, for access through, or use of property within the proposed subdivision.

This finding can be made, in that no easements are known to affect the project site.

8. The design of the proposed subdivision provides, to the extent feasible, for future passive or natural heating or cooling opportunities.

This finding can be made, in that the resulting parcels are oriented to the fullest extent possible in a manner to take advantage of solar opportunities.

9. The proposed development project is consistent with the Design Standards and Guidelines (sections 13.11.070 through 13.11.076) and any other applicable requirements of this chapter.

This finding can be made, in that the structures are sited and designed to be visually compatible, in scale with, and integrated with the character of the surrounding neighborhood. The surrounding neighborhood contains multi-family residential development and a community college. The proposed multi-family residential development is compatible with the architecture in the neighborhood and the surrounding pattern of development.

Development Permit Findings

1. That the proposed location of the project and the conditions under which it would be operated **or** maintained will not be detrimental **to** the health, safety, **or** welfare of persons residing or working in the neighborhood or the general public, and will not result in inefficient **or** wasteful use of energy, and will not be materially injurious to properties or improvements in the vicinity.

This finding can be made, in that the project is located in an area designated for residential uses and is not encumbered by physical constraints to development. Construction will comply with prevailing building technology, the Uniform Building Code, and the County Building ordinance to insure the optimum in safety and the conservation of energy and resources.

2. That the proposed location of the project and the conditions under which it would be operated **or** maintained will be consistent with all pertinent County ordinances and the purpose of **the** zone district in which the site is located.

This finding can be made, in that the use of the property will be residential in nature, unit densities meet the minimum standards for the RM-3 (Multi-family Residential - 3,000 square feet minimum) zone district where the project is located, which allows for interior setbacks to be reduced for parcels not abutting the periphery of the project site (per County Code section 13.10.323(d)1(i)) and all **exterior** setbacks will be consistent with the required site standards of the **RM-3** zone district.

3. That the proposed use is consistent with all elements **of** the County General Plan and with any specific plan which has been adopted for the area.

This finding can be made, in that the proposed division of land, its design, and its improvements, will be consistent with the General Plan. The project creates 43 multi-family residential units and is located in the Urban High Density Residential (R-UH) General Plan designation which allows a density of one unit **for** each 2,500 to 4,000 square feet of net developable parcel area. The proposed project is consistent with the General Plan, in that the development will average a total of **3,268** square feet of net developable parcel area per residential unit.

The project is consistent with the General Plan in that the full range of urban services is available, including public water and sewer service. **All** parcels will be accessed by **an** access road (Sesnon Drive) to Atherton Drive. The proposed access road (Sesnon Drive) will require an exception to the County Design Criteria due **to** variation in pavement width, parking configuration, and sidewalk on only one side of the street. The proposed roadway design provides adequate and safe vehicular and pedestrian access.

The subdivision, **as** conditioned, will be consistent with the General Plan regarding infill development, in that the proposed residential development will be consistent with the pattern of the surrounding development, and the design of the proposed structures are consistent with the character of similar developments in the surrounding neighborhood.

A specific plan has not been adopted **for** this portion of the County.

4. That the proposed use will not overload utilities and will not generate more than the acceptable level of traffic on the streets in the vicinity.

This finding can be made, in that the expected level of additional traffic generated by the proposed project is anticipated to be 412 new trips per day (including 32 morning peak trips and 43 evening peak trips per day), the proposed increase will not adversely impact existing roads and intersections in the surrounding area.

5. That the proposed project will complement and harmonize with the existing and proposed land uses in the vicinity and will be compatible with the physical design aspects, land use intensities, and dwelling unit densities of the neighborhood.

This finding can be made, in that the project site is located in a mixed neighborhood containing a variety of architectural styles, and the proposed residential development is consistent with the land use intensity and density of the neighborhood.

6. The proposed development project is consistent with the Design Standards and Guidelines (sections 13.11.070 through 13.11.076), and any other applicable requirements of this chapter.

This finding can be made, in that the structures are sited and designed to be visually compatible, in scale with, and integrated with the character of the surrounding neighborhood. The surrounding neighborhood contains multi-family residential development. The proposed residential development is compatible with the architecture in the neighborhood and the surrounding pattern of development.

Roadway/Roadside Exception Findings

1. The improvements are not appropriate due to the character of development in the area and the lack of such improvements on surrounding developed property.

This finding can be made, in that the character of the proposed multi-family development does not require full improvements to be installed on the proposed access road (Sesnon Drive). The design of this roadway varies from the County Design Criteria in terms of width and improvements. The access road will be located within a common area and is planned as a 26-foot wide road section with perpendicular parking bays and a 4-foot wide sidewalk on one side. **A** Roadway/Roadside Exception **is** considered as appropriate due to the site design and configuration of the multi-family residential development and an adequate amount of parking is provided within the perpendicular parking bays and the proposed driveways. The access road design requires an exception to County Local Street Standards. The County standard width for local roads within the Urban Service Line is 56 feet including parking, sidewalks, and landscaping.

County Code Section 15.10.050(f)(1) allows for exceptions to roadside improvements when those improvements would not be appropriate due to the character of existing or proposed development.

Riparian Exception Findings

1. That there are special circumstances or conditions affecting the property.

This finding can be made, in that the only location for a properly functioning drainage outlet is within the riparian buffer area and comdor, down-slope from the proposed development.

2. That the exception is necessary for the proper design and function of some permitted or existing activity on the property.

This finding can be made, in that a Riparian Exception is necessary to allow a properly functioning drainage outlet on the subject property.

3. That the granting of the exception will not be detrimental to the public welfare **or** injurious to other property downstream or in the area in which the project is located.

This finding can be made, in that proper erosion control methods will prevent impacts to water quality downstream or on the project site.

4. That the granting of the exception, in the coastal zone; will not reduce or adversely impact the riparian comdor, and there is no feasible less environmentally damaging alternative.

Not applicable. The project is not located in the Coastal Zone.

5. That the granting **of** the exception is in accordance with the purpose **of** this chapter, and with the objectives of the General Plan and elements thereof, and the Local Coastal Program land use plan.

This finding can be made, in that the proposed project will provide residential housing, and will provide protection **of** the riparian habitat through site-sensitive design and erosion control techniques.

Conditions of Approval

Land Division 03-0065

Tract No. : 1471

Applicant: Thacher and Thompson

Property Owner: Atherton Place Development, LLC

Assessor's Parcel Number(s): **037-251-26**

Property Address and Location: Southeast corner of Soquel Drive and Atherton Drive

Planning **Area**: Aptos

Exhibit(s):

- A.** Conceptual site and architectural plans - prepared by Thacher & Thompson, dated **8/3/05**, with revisions through **9/26/06**; Tentative Map - prepared by Ifland Engineers, dated 9/22/06; Landscape plans - prepared by Gregory Lewis, dated 5/11/04 with revisions through **9/26/06**; Architectural and **floor** plans - prepared by William Hezmalhalch Architects, dated 2/28/05.
-

All correspondence and maps relating to this land division shall carry the land division number noted above.

- I.** Prior to exercising any rights granted by this Approval, the owner shall:
- A.** Sign, date and return one copy of the Approval to indicate acceptance and agreement with the conditions thereof.
 - B.** Pay a Negative Declaration De Minimis fee of \$25 to the Clerk of the Board of the County of Santa Cruz as required by the California Department of Fish and Game mitigation fees program.
- II.** Prior to submittal **of the** Final Map for this land division, *the* excess right of way along Atherton Drive must be acquired from the County of Santa Cruz, per the standard appraisal and sale procedures of the Department of Public Works, Real Properties section.
- III.** A Final Map for this land division must be recorded prior to the expiration date of the tentative map and prior to sale, lease or financing of any new lots. The Final Map shall be submitted to the County Surveyor (Department of Public **Works**) for review and approval prior to recordation. No improvements, including, without limitation, grading and vegetation removal, shall be done prior to recording the Final Map unless such

improvements are allowable on the parcel as a whole (prior to approval of the land division). The Final Map shall meet the following requirements:

- A. The Final Map shall be in general conformance with the approved Tentative Map and shall conform to the conditions contained herein. All other State and County laws relating to improvement of the property, or affecting public health and safety shall remain fully applicable.
- B. This land division shall result in no more than forty-three (**43**) multi-family residential units, a common area parcel for access, utilities, and landscaping, and an open space parcel for preservation of the riparian comdor.
- C. The minimum aggregate parcel area shall be **3,000** square feet of net developable land per unit.
- D. **The** following items shall be shown on the Final Map:
 - 1. Building envelopes, common area and/or building setback lines located according to the approved Tentative Map. The building envelopes for the perimeter of the project shall meet the minimum setbacks for the **RM-3** zone district of 15 for front yards, 5 feet for side yards, and **15 feet** for rear yards.
 - 2. Show the net area of each lot to nearest square foot.
 - 3. The owner's certificate shall include:
 - a. **A** dedication for sidewalk widening at the driveway entrances along Atherton Drive.
 - b. **A** dedication of the common area as a public utilities easement.
 - 4. **Wildlife Protection:** Prior to filing the tentative map, the applicant/owner shall add a notation on the improvement plans indicating that there are restrictions regarding bird populations and referring to the required pre-construction survey.
 - 5. A clearly delineated riparian comdor and buffer area must be shown on the Final Map, with notes indicating that any development within, or use **of**, the riparian comdor and/or buffer area is subject to the provisions of the County Code (section **16.30**) related to riparian resource protection.
- E. The following requirements shall he noted on the Final Map as items to be completed prior to obtaining a building permit on lots created by this land division:
 - 1. New parcel numbers for all of the parcels must be assigned by the

Assessors Office prior to application for a Building Permit on any parcel created by this land division.

2. Lots shall be connected for water service to Soquel Creek Water District. All regulations and conditions of the water district shall be met
3. Lots shall be connected for sewer service to Santa Cruz County Sanitation District. All regulations and conditions of the sanitation district shall be met.
4. All future construction on the lots shall conform to the Architectural Floor Plans and Elevations, and the Perspective Drawing as stated or depicted in the approved Exhibit "A" and shall also meet the following additional conditions:
 - a. Notwithstanding the approved preliminary architectural plans, all future development shall comply with the development standards for the RM-3 zone district. Development on each parcel shall not exceed a **40%** lot coverage, **or** a **50%** floor area ratio, or other standard as may be established for the zone district.
 - b. No fencing shall exceed three feet in height within the required street facing yard setback other than those fences shown on the approved Exhibit "A":
 1. Fences and walls enclosing private yards along Atherton Drive shall be a combined maximum of **6** feet in height.
 - ii. Noise: Fencing enclosing private yards along Soquel Drive shall be a maximum of 7 feet in height and shall be designed per the recommendations of the project acoustical engineer.
 - c. For any structure proposed to be within 2 feet of the maximum height limit for the zone district, the building plans must include a roof plan and a surveyed contour map of the ground surface, superimposed and extended to allow height measurement of all features. Spot elevations shall be provided at points on the structure that have the greatest difference between ground surface and the highest portion of the structure above. This requirement is in addition to the standard requirement of detailed elevations and cross-sections and the topography of the project site which clearly depict the total height of the proposed structure.
 1. The maximum height for the proposed structures is **33** feet above the existing grade, or 28 feet above the finished grade, as shown on the approved Exhibit "A" for this

permit

5. A final Landscape Plan for the entire site specifying the species, their size, and irrigation plans and meet the following criteria and must conform to all water conservation requirements of the local water district and the following conservation regulations:
 - a. Turf Limitation. Turf area shall not exceed 25 percent of the total landscaped area. Turf area shall be of low to moderate water-using varieties, such as tall or dwarf fescue.
 - b. Plant Selection. At least 80 percent of the plant materials selected for non-turf areas (equivalent to 60 percent of the total landscaped area) shall be well-suited to the climate of the region and require minimal water once established (drought tolerant). Native plants are encouraged. Up to 20 percent of the plant materials in non-turf areas (equivalent to 15 percent of the total landscaped area), need not be drought tolerant, provided they are grouped together and can be irrigated separately.
 - c. Soil Conditioning. In new planting areas, soil shall be tilled to a depth of 6 inches and amended with six cubic yards of organic material per 1,000 square feet to promote infiltration and water retention. After planting, a minimum of 2 inches of mulch shall be applied to all non-turf areas to retain moisture, reduce evaporation and inhibit weed growth.
 - d. Irrigation Management. All required landscaping shall be provided with an adequate, permanent and nearby source of water which shall be applied by an installed irrigation, or where feasible, a drip irrigation system. Irrigation systems shall be designed to avoid runoff, over-spray, low head drainage, or other similar conditions where water flows onto adjacent property, non-irrigated areas, walks, roadways or structures.
 - i. The irrigation plan and an irrigation schedule for the established landscape shall be submitted with the building permit applications. The irrigation plan shall show the location, size and type of components of the irrigation system, the point of connection to the public water supply and designation of hydrozones. The irrigation schedule shall designate the timing and frequency of irrigation for each station and list the amount of water, in gallons or hundred cubic feet, recommended on a monthly and annual basis.
 - ii. Appropriate irrigation equipment, including the use of a

separate landscape water meter, pressure regulators, automated controllers, low volume sprinkler heads, drip or bubbler irrigation systems, rain shutoff devices, and other equipment shall be used to maximize the efficiency of water applied to the landscape.

- iii. Plants having similar water requirements shall be grouped together in distinct hydrozones and shall be irrigated separately.
- iv. Landscape irrigation should be scheduled between 6:00 p.m. and 11:00 a.m. to reduce evaporative water loss.
- e. All planting shall conform to the landscape plan shown as part of the approved Exhibit "A".
 - i. Trees planted in the County right of way shall be approved by the Department of Public Works and shall be installed according to provisions of the County Design Criteria.
 - ii. The improvement plans shall be revised to include the sidewalk improvements and trees along Soquel Drive, as indicated on the landscape plan and conceptual site plan.
- f. Wildlife Protection: Prior to recording of the map, the applicant shall submit a revised landscape plan that shows replacement of all oaks greater than six inches at the edge of the riparian buffer or within the ten foot construction buffer. The trees shall be replaced with 5 gallon, Quercus agrifolia at the ratio of 3:1.
- 6. Wildlife Protection: Prior to recording of the map, the applicant shall submit a lighting plan for review and approval by County staff. The plan shall indicate exclusive use low rise, low level, shielded and directed external lighting.
- 7. All future development on the lots shall comply with the requirements of the geotechnical reports and update letters prepared by Jacobs, Raas & Assoc., dated 10/87, Harza Consulting Engineers, dated 7/25/97, and Fugro West Inc., dated 2/19/03.
- 8. Submit a written statement signed by an authorized representative of the school district in which the project is located confirming payment in full of all applicable developer fees and other requirements lawfully imposed by the school district in which the project is located.
- 9. Prior to any building permit issuance or ground disturbance, a detailed erosion control plan shall be reviewed and approved by the Department of

Public Works and the Planning Department. Earthwork between October 15 and April 15 requires a separate winter grading approval from Environmental Planning that may or may not be granted. The erosion control plans shall identify the type of erosion control practices to be used and shall include the following:

- a. Water Quality: Silt and grease traps shall be installed according to the approved improvement plans.
- b. **An** effective sediment barrier placed along the perimeter of the disturbance area and maintenance of the bamer.
- c. Spoils management that prevents loose material from clearing, excavation, and other activities from entering any drainage channel.

10. Any changes between the approved Tentative Map, including but not limited to the attached exhibits for architectural and landscaping plans, must be submitted for review and approval by the Planning Department. Changes may be forwarded to the decision making body to consider if they are sufficiently material to warrant consideration at a public hearing noticed in accordance with Section **18.10.223** of the County Code. Any changes that are on the final plans which do not conform to the project conditions of approval shall be specifically illustrated on a separate sheet and highlighted in yellow on any set of plans submitted to the County for review.

11. **A** note shall be added to the Final Map identifying the riparian comdor and buffer area as a no disturbance area.

IV. Prior to recordation of the Final Map, the following requirements shall be met:

- A. Submit a letter of certification from the Tax Collector's Office that there are no outstanding tax liabilities affecting the subject parcels.
- B. Meet all requirements of the Santa Cruz County Sanitation District including, without limitation, the following standard conditions:
 1. Submit and secure approval **of** an engineered sewer improvement plan providing sanitary sewer service to each parcel.
 2. Pay all necessary bonding, deposits, and connections fees, and furnish a copy of the CC&R's to the district.
- C. **A** Iomeowners Association (**HOA**) shall be formed for maintenance of all area under common ownership including sidewalks, driveways, all landscaping, drainage structures, water lines, sewer laterals, fences, silt and grease traps and

buildings. CC&R's shall be sent furnished to the Planning Department and shall include the following, which are permit conditions:

1. All landscaping within the public right of way of Soquel Drive and Atherton Drive shall be permanently maintained by the Homeowners Association.
 2. All drainage structures, including silt and grease traps and detention facilities, shall be permanently maintained by the Homeowners Association.
 3. Water Quality: Annual inspection of the silt and grease traps shall be performed and reports sent to the Drainage section of the Department of Public Works on **an** annual basis. Inspections shall be performed prior to October 15 each year. The expense for inspections and report preparation shall be the responsibility of the Homeowners Association.
 - a. A brief annual report shall be prepared by the trap inspector at the conclusion of each October inspection and submitted to the Drainage section of the Department of Public **Works** within 5 days of the inspection. This monitoring report shall specify any repairs that have been done or that are needed to allow the trap to function adequately.
 4. Riparian Corridor: Homeowner's Association (HOA) documents shall include a requirement that external light sources be shielded and directed away from the riparian conidor.
 - a. The riparian comdor and buffer area shall be identified as a no disturbance area in HOA documents.
- D. Engineered improvement plans for all water line extensions required by **Soquel** Creek Water District shall be submitted for the review and approval of the water agency.
- E. All new utilities shall be underground. **All** facility relocation, upgrades or installations required for utilities service to the project shall be noted on the construction plans. **All** preliminary engineering for such utility improvements is the responsibility of the owner/applicant. Pad-mounted transformers shall not be located in the front setback or in any area visible from public view unless they are completely screened by walls and/or landscaping (underground vaults may be located in the front setback). Utility equipment such as gas meters and electrical panels shall not be visible from public streets or building entries.
- F. All requirements **of** the Central Fire Protection District shall be met.
- G. Park dedication in-lieu fees shall be paid for forty-three (**43**) dwelling units.

These fees are currently \$600 per bedroom, but are subject to change.

- H. Child Care Development fees shall be paid for forty-three (43) dwelling units. These fees are currently \$36 per bedroom, but are subject to change.
- I. Transportation improvement fees shall be paid for forty-three (43) dwelling units. These fees are currently \$1,540 per unit, but are subject to change.
- J. Roadside improvement fees shall be paid for forty-three (43) dwelling units. These fees are currently \$1,540 per unit, but are subject to change.
- K. Enter into a Certification and Participation Agreement with the County of Santa Cruz to meet the Affordable Housing Requirements specified by Chapter 17.10 of the County Code. This agreement must include the following statements:
 - 1. The developer shall provide six (6) designated affordable unit(s) for sale to moderate income households. The sales price for these units shall be in accordance with the regulations and formulas as specified by Chapter 17.10 of the County Code and the adopted Santa Cruz County Affordable Housing Guidelines.
 - 2. The developer shall pay in-lieu fees for the fractional equivalent of .45 unit in accordance with the regulations and formulas as specified by Chapter 17.10 of the County Code and the adopted Santa Cruz County Affordable Housing Guidelines.
- L. Submit and secure approval of engineered improvement plans from the Department of Public Works and the Planning Department for all roads, curbs and gutters, storm drains, erosion control, and other improvements required by the Subdivision Ordinance, noted on the attached tentative map and/or specified in these conditions of approval. A subdivision agreement backed by financial securities (equal to 150% of engineer's estimate of the cost of improvements), per Sections 14.01.510 and 511 of the Subdivision Ordinance, shall be executed to guarantee completion of this work. Improvement plans shall meet the following requirements:
 - 1. All improvements shall be prepared by a registered civil engineer and shall meet the requirements of the County of Santa Cruz Design Criteria except as modified in these conditions of approval. Plans shall also comply with applicable provisions of the Americans With Disabilities Act and/or Title 24 of the State Building Code.
 - a. The construction of the proposed access road (Sesnon Drive) shall include a 26 foot paved road section, and a 4 foot sidewalk on one side of the roadway. A Roadside/Roadway Exception is approved to vary from County Standards with respect to the width of the right of way, the elimination of sidewalk on one side, and on-street

parking spaces.

2. Complete drainage details including existing and proposed contours, plan views and centerline profiles of all driveway improvements, complete drainage calculations and all volumes of excavated and fill soils.
3. Water Quality: Details for the installation of required silt and grease traps to filter runoff from the parking area. Submit a silt and grease trap maintenance agreement to the Department of Public Works.
4. Erosion Control: A detailed erosion control plan shall be submitted which includes the following: a clearing and grading schedule that limits grading to the period of April 15 - October 15, clearly marked disturbance envelope, revegetation specifications, silt barrier installed to protect the riparian area, temporary road surfacing and construction entry stabilization, sediment barriers around drain inlets, etc. This plan shall be integrated with the improvement plans that are approved by the Department of Public Works, and shall be submitted to Environmental Planning staff for review and approval prior to recording of the final map.
5. Riparian Corridor: In order to reduce impacts to the riparian comdor and buffer to a less than significant level:
 - a. The improvement plans shall indicate a four foot, temporary chain link fence at the boundary of the riparian corridor. This fence shall be installed prior to any disturbance on the site and shall remain in place until the subdivision improvements are completed, revegetation is in place, and the improvement bond is released by the Department of Public Works.
 - b. **The** drainage system shall be reconfigured to discharge to perforated pipes or surface spreaders located outside the riparian comdor. If, at a later date, it is demonstrated that the surface spreaders are causing erosion of the stream bank or damage to the riparian conidor, an outfall pipe could be constructed within the riparian corridor with review and approval by Environmental Planning staff.
6. Pedestrian Safety: In order to reduce pedestrian/traffic conflicts on the internal streets, the improvement plans shall include two speed bumps or raised crosswalks (designed according to published Department of Public Works design criteria) in locations shown on the preliminary improvement plans. In addition, **the** plans shall reflect posted signs for 15 MPH speed limit and signs announcing "Reduced Speed Ahead" at the curve at Unit 31.

- M. The project geotechnical engineer shall prepare a soil treatment plan that includes

a description of the technique used for the mixing and spreading operations, site map indicating soils storage areas and the boundaries of the area to be over-excavated and treated, barriers at the perimeter of the work area and soils poles adequate to contain any material that contains lime or other treatment, and a schedule indicating the number of work days required to complete the treatment phase of the project.. The plan shall be submitted for review and approval by the Planning Department.

V. Prior to any site disturbance or physical construction on the subject property the following condition(s) shall be met:

A. Wildlife Protection: In order to mitigate disturbance to wildlife, including two types of birds that are of special concern, Loggerhead shrike (*Lanius Ludovicianus*) and various species of raptor, and other wildlife that use the **riparian** area, the following shall occur:

1. Prior to the start of disturbance on the property the project biologist shall conduct pre-construction surveys to determine whether any raptor or Loggerhead shrike nests are present. The surveys shall take place on at least four separate fair weather days spaced approximately evenly throughout a three week or one month period. The last survey shall **be** completed no greater than 30 days before the start of disturbance. The biologist shall submit the survey to the Environmental Coordinator for review at least 7 days prior to site disturbance. Disturbance shall include staging of equipment on the site, stripping and clearing as well as grading and construction.
2. If nest(s) are found, the location shall be plotted on the improvement plans along with a 200 foot radius no-disturbance zone around each nest. To avoid accidental incursion into the no disturbance zone chain link fencing with "no entry" signs shall be installed on the perimeter of the zone. Prior to site disturbance, the applicant/owner shall arrange for field inspection by Environmental Planning staff to verify proper installment of the fencing.
3. The no-disturbance zone signs and fencing shall remain in place until the Environmental Coordinator approves written documentation from the project biologist that certifies that the young in the nest(s) have fledged and the nest(s) are no longer active.

B. Pre-Construction Meeting: In order to ensure that the mitigation measures are communicated to the various parties responsible for constructing the project, prior to any disturbance on the property the applicant shall convene a pre-construction meeting on the site. The following parties shall attend: applicant, grading contractor supervisor, Department of Public Works construction inspector, and Santa Cruz County Resource Planning staff. The temporary construction fencing (four foot high, chain link) demarcating **the** riparian area and silt fencing will be

inspected at that time. Approval of the results of pre construction biotic surveys (which will have been previously submitted) will be reaffirmed at that time. The receiving site for the exported fill will also be identified and permits presented.

VI. All future construction within the property shall meet the following conditions:

- A. All work adjacent to **or** within a County road shall **be** subject to the provisions of Chapter 9.70 of the County Code, including obtaining an encroachment permit where required. Where feasible, all improvements adjacent to **or** affecting a County road shall be coordinated with any planned County-sponsored construction on that road. Obtain an Encroachment Permit from the Department of Public Works **for** any work performed in the public right of way. All work shall be consistent with **the** Department of Public Works Design Criteria unless otherwise specifically excepted by these conditions of approval.
- B. No land clearing, grading or excavating shall take place between October **15** and April **15** unless the Planning Director approves a separate winter erosion-control plan that may or may not be granted.
- C. Riparian Corridor: Ground disturbance for the installation **of** drainage pipes and dissipaters within the riparian corridor and/or buffer area shall not occur after October 1st. Erosion control and replanting shall be in place prior to October 15th.
- D. No land disturbance shall take place prior to issuance of building permits (except the minimum required to install required improvements, provide access for County required tests or to carry out work required by another of these conditions).
- E. Pursuant to Sections 16.40.040 and 16.42.100 of the County Code, if at any time during site preparation, excavation, or other ground disturbance associated with this development, any artifact or other evidence of an historic archaeological resource **or** a Native American cultural site is discovered, the responsible persons shall immediately cease and desist from all further site excavation and notify the Sheriff-Coroner if the discovery contains human remains, **or** the Planning Director if the discovery contains no human remains. The procedures established in Sections 16.40.040 and 16.42.100, shall be observed.
- F. To minimize noise, dust and nuisance impacts of surrounding properties to insignificant levels during construction, the owner/applicant shall or shall have the project contractor, comply with the following measures during all construction work:
 - 1. Limit all construction to the time between 8:00 **am** and 5:00 pm weekdays unless a temporary exception to this time restriction is approved in advance by County Planning to address and emergency situation; and
 - 2. Each day it does not rain, wet all exposed soil frequently enough to

prevent significant amounts of dust from leaving the site.

3. The applicant shall designate a disturbance coordinator and a 24-hour contact number shall be conspicuously posted on the job site. The disturbance coordinator shall record the name, phone number, and nature of all complaints received regarding the construction site. The disturbance coordinator shall investigate complaints and take remedial action, if necessary, within 24 hours of receipt of the complaint or inquiry.

G. Construction of improvements shall comply with the requirements of the geotechnical reports and update letters prepared by Jacobs, Raas & Assoc., dated 10/87, Harza Consulting Engineers, dated 7/25/97, and Fugro West Inc., dated 2/19/03. The project geotechnical engineer shall inspect the completed project and certify in writing that the improvements have been constructed in conformance with the geotechnical report(s).

H. All required land division improvements shall be installed and inspected prior to final inspection clearance for any new structure on the new lots.

VII. In the event that future County inspections of the subject property disclose non-compliance with any Conditions of this Approval or any violation of the County Code, the owner shall pay to the County the full cost of such County inspections, including any follow-up inspections and/or necessary enforcement actions, up to and including Approval revocation.

VIII. As a condition of this development approval, the holder of this development approval ("Development Approval Holder"), is required to defend, indemnify, and hold harmless the COUNTY, its officers, employees, and agents, from and against any claim (including attorneys' fees), against the COUNTY, its officers, employees, and agents to attack, set aside, void, or ~~annul~~ this development approval of the COUNTY or any subsequent amendment of this development approval which is requested by the Development Approval Holder.

A. COUNTY shall promptly notify the Development Approval Holder of any claim, action, or proceeding against which the COUNTY seeks to be defended, indemnified, or held harmless. COUNTY shall cooperate fully in such defense. If COUNTY fails to notify the Development Approval Holder within ~~sixty~~ (60) days of any such claim, action, ~~or~~ proceeding, or fails to cooperate fully in the defense thereof, the Development Approval Holder shall not thereafter be responsible to defend, indemnify, or hold harmless the COUNTY if such failure to notify or cooperate was significantly prejudicial to the Development Approval Holder.

B. Nothing contained herein shall prohibit the COUNTY from participating in the defense of any claim, action, or proceeding if both of the following occur:

1. COUNTY bears its own attorney's fees and costs; and

2. COUNTY defends the action in good faith.

- C. Settlement. The Development Approval Holder shall not be required to pay or perform any settlement unless such Development Approval Holder has approved the settlement. When representing the County, the Development Approval Holder shall not enter into any stipulation or settlement modifying or affecting the interpretation or validity of any of the terms or conditions of the development approval without the prior written consent of the County.
- D. Successors Bound. "Development Approval Holder" shall include the applicant and the successor(s) in interest, transferee(s), and assign(s) of the applicant.
- E. Within **30** days of the issuance of this development approval, the Development Approval Holder shall record in the office of the Santa **Cruz** County Recorder an agreement, which incorporates the provisions of this condition, or this development approval shall become null and void.

IX. Mitigation Monitoring Program

The mitigation measures listed under this heading have been incorporated in the conditions of approval for this project in order to mitigate or avoid significant effects on the environment. As required by Section 21081.6 of the California Public Resources Code, a monitoring and reporting program for the above mitigation is hereby adopted as a condition of approval for this project. This program is specifically described following each mitigation measure listed below. The purpose **of** this monitoring is to ensure compliance with the environmental mitigations during project implementation and operation. Failure to comply with the conditions of approval, including the terms of the adopted monitoring program, may result in permit revocation pursuant to section 18.10.462 of the Santa Cruz County Code.

A. Mitigation Measure: Pre-Construction Meeting (Condition V.B)

- 1. Monitoring Program: In order to ensure that the mitigation measures B - G (below) are communicated to the various parties responsible for constructing the project, prior to any disturbance on the property the applicant shall convene a pre-construction meeting on the site. The following parties shall attend: applicant, grading contractor supervisor, Department of Public **Works** construction inspector, and Santa Cruz County Resource Planning staff. The temporary construction fencing (four foot high, chain link) demarcating the riparian area and silt fencing will be inspected at that time. Approval of the results of pre construction biotic surveys (which will have been previously submitted) will be reaffirmed at that time. The receiving site for the exported fill will also be identified and permits presented.

B. Mitigation Measure: Water Quality (Conditions III.E.9, IV.C.3, N.L.3)

1. Monitoring Program: To prevent drainage discharges from carrying silt, grease, and other contaminants from paved surfaces into Sesnon Pond and Porter Gulch, the applicant/owner shall maintain the silt and grease traps in the storm drain system according to the following monitoring and maintenance procedures:
 - a. **The** traps shall be inspected to determine if they need cleaning or repair prior to October **15** each year, at a minimum interval of once per year.
 - b. A brief annual report shall be prepared by the trap inspector at the conclusion of each October inspection and submitted to the Drainage section of the Department of Public Works within 5 days of the inspection. This monitoring report shall specify any repairs that have been done or that **are** needed to allow the trap to function adequately.

C. Mitigation Measure: Wildlife Protection (Conditions II.E.5.f, III.D.4, III.E.6, V.A)

1. Monitoring Program: In order to mitigate disturbance to wildlife, including two types of birds that are of special concern, Loggerhead **shrike** {LaniusLudovicianus) and various species of raptor, and other wildlife that **use** the riparian area, the following shall occur:
 - a. Prior to the start of disturbance on the property the project biologist shall conduct pre-construction surveys to determine whether any raptor or Loggerhead shrike nests are present. The surveys shall take place on at least four separate fair weather days spaced approximately evenly throughout a three week or one month period. The last survey shall be completed no greater than 30 days before the start of disturbance. **The** biologist shall submit **the** survey to the Environmental Coordinator for review at least 7 days prior to site disturbance. Disturbance shall include staging of equipment on the site, stripping and clearing as well as grading and construction.

If nest(s) are found, the location shall be plotted on the improvement plans along with a 200 foot radius no-disturbance zone around each nest. To avoid accidental incursion into the no disturbance zone chain link fencing with "no entry" signs shall be installed on the perimeter of the zone. Prior to site disturbance, the applicant/owner shall arrange for field inspection by Environmental Planning staff to verify proper installment of the fencing.

The no-disturbance zone signs and fencing shall remain in place until the Environmental Coordinator approves written

documentation from the project biologist that certifies that the young in the nest(s) have fledged and the nest(s) are no longer active.

- b. Prior to filing the tentative map, the applicant/owner shall add a notation on the improvement plans indicating that there are restrictions regarding bird populations and referring to the required pre-construction survey.
- c. Prior to recording of the map, the applicant shall submit a lighting plan for review and approval by County staff. The plan shall indicate exclusive use low rise, low level, shielded and directed external lighting.
- d. Prior to recording of the map, the applicant shall submit a revised landscape plan that shows replacement of all oaks greater than six inches at the edge of the riparian buffer or within the ten foot construction buffer. The trees shall be replaced with 5 gallon, *Quercus agrifolia* at the ratio of 3:1.

D. Mitigation Measure: Riparian Comdor (Conditions IV.C.4, IV.L.5, VI.C)

- 1. Monitoring Program: In order to reduce impacts to the riparian comdor and buffer to a less than significant level:
 - a. Prior to public hearing the applicant shall modify the improvement plans to indicate a four foot, temporary chain link fence at the boundary of the riparian conidor. This fence shall be installed prior to any disturbance on the site and shall remain in place until the subdivision improvements are completed, revegetation is in place, and the improvement bond is released by the Department of Public Works;
 - b. Prior to public hearing, the applicant shall reconfigure the drainage system to discharge to perforated pipes or surface spreaders located outside the riparian comdor;
 - c. Ground disturbance for the installation of drainage pipes and dissipaters shall not occur after October 1st. Erosion control and replanting shall be in place prior to October 15th;
 - d. Homeowner's Association (HOA) documents shall include a requirement that external light sources be shielded and directed away from the riparian corridor.

E. Mitigation Measure: Erosion Control (Conditions N.L.4)

1. Monitoring Program: In order to prevent erosion, off site sedimentation, and pollution of creeks:
 - a. A detailed erosion control plan shall be submitted which includes the following: a clearing and grading schedule that limits grading to the period of April 15 - October 15, clearly marked disturbance envelope, revegetation specifications, silt barrier installed to protect the riparian area, **temporary** road surfacing and construction entry stabilization, sediment barriers around drain inlets, etc. This plan shall be integrated with the improvement plans that **are** approved by the Department of Public **Works**, and shall be submitted to Environmental Planning staff **for** review and approval prior to recording of the final map.
 - b. If grading has not been initiated prior to August 15 it shall be delayed until April 15 of the following year.
 - c. Prior to the pre-construction site meeting the applicant shall designate the proposed location **for** the exported fill. Fill shall go to the Buena Vista municipal landfill or grading permits for an alternative site shall be presented at the meeting.

F. Mitigation Measure: Pedestrian Safety (Condition IV.L.6)

1. Monitoring Program: In order **to** reduce pedestrian/traffic conflicts on the internal streets, prior to public hearing the applicant shall revise the plans such that the two proposed raised crosswalks link up with sidewalk on the north and east sides of the street, respectively. Alternatively, the raised crosswalks can be redesigned as speed bumps according to published Department of Public **Works** design criteria. In addition, the plans shall reflect posted signs for 15 MPH speed limit and signs announcing "Reduced Speed Ahead" at the curve at Unit 31.

G. Mitigation Measure: Noise (Condition III.E.4.b.ii)

1. Monitoring Program: In order to reduce impacts to the riparian comdor and buffer to **a** less than significant level:
 - a. In order to reduce impacts from noise along Soquel Avenue, prior to public hearing the applicant shall modify the plans to incorporate one of the two sound attenuation recommendations (seven foot sound barrier or enclosed rear patios) given by the project acoustical engineer.

**AMENDMENTS TO THIS LAND DIVISION APPROVAL SHALL BE
PROCESSED IN ACCORDANCE WITH CHAPTER 18.10 OF THE COUNTY CODE.**

This Tentative Map is approved subject **to** the above conditions and the attached map, and expires **24** months after the 14-day appeal period. The Final Map for this division, including improvement plans if required, should be submitted to the County Surveyor for checking at least 90 days prior to the expiration date and in no event later than **3** weeks prior to the expiration date.

cc: County Surveyor

Approval Date: _____

Effective Date: _____

Expiration Date: _____

Mark Deming
Assistant Director

Randall Adams
Project Planner

Appeals: Any properly owner, or other person aggrieved, or any other person whose interests are adversely affected by any act or determination of the Planning Commission, may appeal the act or determination to the Board of Supervisors in accordance with chapter 18.10 of the Santa Cruz County Code.

APPLICATION NO. 03-0065

STAFF REPORT TO THE PLANNING COMMISSION

EXHIBIT D



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

NEGATIVE DECLARATION AND NOTICE OF DETERMINATION

Application Number: **03-0065** Thacher & Thompson, for Atherton Place Development LLC
Proposal to construct **43** attached townhouses, a common area with parking, landscaping, and access roadways, and the creation of a separate open space parcel comprising the remainder of the subject property to be rezoned from the RM-3 (Multi-family Residential) Zone district to the PR (Parks, Recreation & Open Space) zone district. Requires a Subdivision, a Rezoning, a Residential Development Permit for varying building heights and setbacks, Design Review to allow building height to be **28** feet from finished grade (to a maximum of 33 feet from existing grade), a Roadway/Roadside exception, a Road Abandonment of a curved area of Atherton Drive, a Riparian Exception for the drainage system release into the riparian corridor, a Preliminary Grading Approval, a Soils Report Review, and a Biotic Report Review. The project is located on the southeast corner of the intersection of Soquel Drive and Atherton Drive in Aptos, California.

APN: **037-251-26**

Randall Adams, **Staff Planner**

Zone District: **RM-3** (Multi-family Residential)

ACTION: Negative Declaration with Mitigations

REVIEW PERIOD ENDS: July **27, 2006**

This project will be considered **at** a public hearing by the Planning Commission. The time, date and location have not been set. When scheduling does occur, these items will be included in all public hearing notices for the project.

Findings:

This project, if conditioned to comply with required mitigation measures or conditions shown below, will not have significant effect on the environment. The expected environmental impacts of the project are documented in the Initial Study on this project attached to the original of this notice on file with the Planning Department, County of Santa Cruz, 701 Ocean Street, Santa Cruz, California.

Required Mitigation Measures or Conditions:

☐ None
☒ **XX** Are Attached

Review Period Ends July 27, 2006

Date Approved By Environmental Coordinator August 10, 2006

KEN HART

Environmental Coordinator
(831) 454-3127

If this project is approved, complete and file this notice with the Clerk of the Board:

NOTICE OF DETERMINATION

The Final Approval of This Project was Granted by _____

on _____. No EIR was prepared under CEQA.

THE PROJECT WAS DETERMINED TO NOT HAVE SIGNIFICANT EFFECT ON THE ENVIRONMENT.

Date completed notice filed with Clerk of the Board: - _____

CALIFORNIA DEPARTMENT OF FISH AND GAME

CERTIFICATE OF FEE EXEMPTION

De minimis Impact Finding

Project Title/Location (Santa Cruz County):

Application Number: **03-0065** Thacher & Thompson, for Atherton Place Development LLC Proposal to construct 43 attached townhouses, a common area with parking, landscaping, and access roadways, and the creation of a separate open space parcel comprising the remainder of the subject property to be rezoned from the RM-3 (Multi-family Residential) Zone district to the PR (Parks, Recreation & Open Space) zone district. Requires a Subdivision, a Rezoning, a Residential Development Permit for varying building heights and setbacks, Design Review to allow building height to be 28 feet from finished grade (to a maximum of 33 feet from existing grade), a Roadway/Roadside exception, a Road Abandonment of a curved area of Atherton Drive, a Riparian Exception for the drainage system release into the riparian corridor, a Preliminary Grading Approval, a Soils Report Review, and a Biotic Report Review. The project is located on the southeast corner of the intersection of Soquel Drive and Atherton Drive in Aptos, California.

APN: 037-251-26

Randall Adams, **Staff** Planner

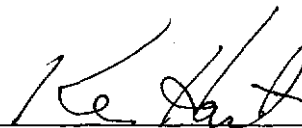
Zone **District: RM-3** (Multi-family **Residential**)

Findings of Exemption (attach as necessary):

An Initial Study has been prepared for this project by the County Planning Department according to the provisions of CEQA. This analysis shows that the project will not create any potential for adverse environmental effects on wildlife resources.

Certification:

I hereby certify that the public agency has made the above finding and that the project will not individually or cumulatively have an adverse effect on wildlife resources, as defined in Section 711.2 of the Fish and Game Code.



KEN HART

Environmental Coordinator for
Tom Burns, Planning Director
County of Santa Cruz

Date: 8/10/06

NAME: Atherton Place Development LLC
APPLICATION: 03-0065
A.P.N: 037-251-26

NEGATIVE DECLARATION MITIGATIONS

- A. In order to ensure that the mitigation measures B - G (below) are communicated to the various parties responsible for constructing the project, prior to any disturbance on the property the applicant shall convene a pre-construction meeting on the site. The following parties shall attend: applicant, grading contractor supervisor, Department of Public Works construction inspector, and Santa Cruz County Resource Planning staff. The temporary construction fencing (four foot high, chain link) demarcating the riparian area and silt fencing will be inspected at that time. Approval of the results of pre construction biotic surveys (which will have been previously submitted) will be reaffirmed at that time. The receiving site for the exported fill will also be identified and permits presented.
- B. To prevent drainage discharges from carrying silt, grease, and other contaminants from paved surfaces into Sesnon Pond and Porter Gulch, the applicant/owner shall maintain the silt and grease traps in the storm drain system according to the following monitoring and maintenance procedures:
1. The traps shall be inspected to determine if they need cleaning or repair prior to October 15 each year at a minimum;
 2. A brief annual report shall be prepared by the trap inspector at the conclusion of each October inspection and submitted to the Drainage Section of the Department of Public Works within 5 days of inspection. This monitoring report shall specify any repairs that have been done or that are needed to allow the trap to function adequately.
- C. In order to mitigate disturbance to wildlife, including two types of birds that are of special concern, Loggerheadshrike (*Lanius Ludovicianus*) and various species of raptor, and other wildlife that use the riparian area, the following shall occur:
1. Prior to the start of disturbance on the property the project biologist shall conduct pre-construction surveys to determine whether any raptor or Loggerhead shrike nests are present. The surveys shall take place on at least four separate fair weather days spaced approximately evenly throughout a three week or one month period. The last survey shall be completed no greater than 30 days before the start of disturbance. The biologist shall submit the survey to the Environmental Coordinator for review at least 7 days prior to site disturbance. Disturbance shall include staging of equipment on the site, stripping and clearing as well as grading and construction.
If nest(s) are found, the location shall be plotted on the improvement plans along with a 200 foot radius no-disturbance zone around each nest. To avoid accidental incursion into the no disturbance zone chain link fencing with "no entry" signs shall be installed on the perimeter of the zone. Prior to site disturbance, the applicant/owner shall arrange for field inspection by Environmental Planning staff to verify proper installment of the fencing.

The no-disturbance zone signs and fencing shall remain in place until the Environmental Coordinator approves written documentation from the project biologist that certifies that the young in the nest(s) have fledged and the nest(s) are no longer active.

2. Prior to filing the tentative map, the applicant/owner shall add a notation on the improvement plans indicating that there are restrictions regarding bird populations and referring to the required pre-construction survey.
3. Prior to recording of the map, the applicant shall submit a lighting plan for review and approval by County staff. The plan shall indicate exclusive use low rise, low level, shielded and directed external lighting.
4. Prior to recording of the map, the applicant shall submit a revised landscape plan that shows replacement of all oaks greater than six inches at the edge of the riparian buffer or within the ten foot construction buffer. The trees shall be replaced with 5 gallon, *Quercus agrifolia* at the ratio of 3:1.

D. In order to reduce impacts to the riparian corridor and buffer to a less than significant level:

1. Prior to public hearing the applicant shall modify the improvement plans to indicate a four foot, temporary chain link fence at the boundary of the riparian corridor. This fence shall be installed prior to any disturbance on the site and shall remain in place until the subdivision improvements are completed, revegetation is in place, and the improvement bond is released by the Department of Public Works;
2. Prior to public hearing, the applicant shall reconfigure the drainage system to discharge to perforated pipes or surface spreaders located outside the riparian corridor;
3. Ground disturbance for the installation of drainage pipes and dissipaters shall not occur after October 1st. Erosion control and replanting shall be in place prior to October 15th;
4. Homeowner's Association (HOA) documents shall include a requirement that external light sources be shielded and directed away from the riparian corridor.

E. In order to prevent erosion, off site sedimentation, and pollution of creeks:

1. A detailed erosion control plan shall be submitted which includes the following: a clearing and grading schedule that limits grading to the period of April 15 - October 15, clearly marked disturbance envelope, revegetation specifications, silt barrier installed to protect the riparian area, temporary road surfacing and construction entry stabilization, sediment barriers around drain inlets, etc. This plan shall be integrated with the improvement plans that are approved by the Department of Public Works, and shall be submitted to Environmental Planning staff for review and approval prior to recording of the final map.

2. If grading has not been initiated prior to August 15 it shall be delayed until April 15 of the following year.
 3. Prior to the pre-construction site meeting the applicant shall designate the proposed location for the exported fill. Fill shall go to the Buena Vista municipal landfill or grading permits for an alternative site shall be presented at the meeting.
- F. In order to reduce pedestrian/traffic conflicts on the internal streets, prior to public hearing the applicant shall revise the plans such that the two proposed raised crosswalks link up with sidewalk on the north and east sides of the street, respectively. Alternatively, the raised crosswalks can be redesigned as speed bumps according to published Department of Public Works design criteria. In addition, the plans shall reflect posted signs for 15 MPH speed limit and signs announcing "Reduced Speed Ahead" at the curve at Unit 31.
- G. In order to reduce impacts from noise along Soquel Avenue, prior to public hearing the applicant shall modify the plans to incorporate one of the two sound attenuation recommendations (seven foot sound barrier or enclosed rear patios) given by the project acoustical engineer.



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

NOTICE OF ENVIRONMENTAL REVIEW PERIOD

SANTA CRUZ COUNTY

APPLICANT: Thacher & Thompson. for Atherton Place Development LLC

APPLICATION NO.: 03-0065

APN: 037-251-26

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 Paia Levine, Environmental Coordinator at (831) 454-3178, 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: **July 27, 2006**

Randall Adams
Staff Planner

Phone: 454-3218

Date: June 21, 2006



Environmental Review Initial Study

Application Number: **03-0065**

Date: June 19, 2006

Revised August 8, 2006

Staff Planner: Randall Adams

I. OVERVIEW AND ENVIRONMENTAL DETERMINATION

APPLICANT: Thatcher 8 Thompson

APN: 037-251-26

OWNER: Atherton Place Development LLC

SUPERVISORAL DISTRICT: 2

LOCATION: Property located on the southeast corner of the intersection of Soquel Drive and Atherton Drive in Aptos.

SUMMARY PROJECT DESCRIPTION:

Proposal to construct 43 attached townhouses, a common area with parking, landscaping, and access roadways, and the creation of a separate open space parcel comprising the remainder of the subject property to be rezoned from the RM-3 (Multi-family Residential) zone district to the PR (Parks, Recreation 8 Open Space) zone district.

Requires a Subdivision, a Rezoning, a Residential Development Permit for varying building heights and setbacks, Design Review to allow building height to be 28 feet from finished grade (to a maximum of 33 feet from existing grade), a Roadway/Roadside exception, a Road Abandonment of a curved area of Atherton Drive, a Riparian Exception for the drainage system release into the riparian corridor, a Preliminary Grading Approval, a Soils Report Review, and a Biotic Report Review.

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	_____ Noise
X Hydrology/Water Supply/Water Quality	_____ Air Quality
X Biological Resources	Public Services & Utilities
Energy 8 Natural Resources	Land Use, Population 8 Housing
Visual Resources 8 Aesthetics	_____ Cumulative Impacts
_____ Cultural Resources	_____ Growth Inducement
Hazards & Hazardous Materials	Mandatory Findings of Significance
X Transportation/Traffic	

County of Santa Cruz Planning Department
701 Ocean Street, 4th Floor, Santa Cruz CA 95060

DISCRETIONARY APPROVAL(S) BEING CONSIDERED

General Plan Amendment	X	Grading Permit
<u>X</u> Land Division	X	Riparian Exception
<u>X</u> Rezoning	_____	Other:
<u>X</u> Development Permit	_____	
_____ Coastal Development Permit	_____	

NON-LOCAL APPROVALS

Other agencies that must issue permits or authorizations:

ENVIRONMENTAL REVIEW ACTION

On the basis of this Initial Study and supporting documents:

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

X 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 the attached mitigation measures have been added to the project. 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.


Paia Levine


Date

For: Ken Hart
Environmental Coordinator

II. BACKGROUND INFORMATION

EXISTING SITE CONDITIONS

Parcel Size: 14.36 acres (Parcel A: 10.67 acres, Parcel B (Project Site): 3.69 acres)

Existing Land Use: Vacant

Vegetation: Grasses, oaks, riparian vegetation

Slope in area **affected** by project: X 0 - 30% 31 - 100%

Nearby Watercourse: Tannery Guich

Distance To: On property (100 feet from structures to stream centerline, at closest point)

ENVIRONMENTAL RESOURCES AND CONSTRAINTS

Groundwater Supply: N/A

Water Supply Watershed: Not Mapped

Groundwater Recharge: Mapped resource -
Development not proposed in resource area

Timber or Mineral: Not Mapped

Agricultural Resource: Not Mapped

Biologically Sensitive Habitat: Riparian Woodland
- development proposed outside mapped riparian corridor

Fire Hazard: Not Mapped

Floodplain: Not Mapped

Erosion: Not Mapped

Landslide: Not Mapped

Liquefaction: Low potential

Fault Zone: Not Mapped

Scenic Corridor: Highway One -
development proposed outside scenic
corridor

Historic: N/A

Archaeology: Not Mapped

Noise Constraint: Not Mapped

Electric Power Lines: N/A

Solar Access: Adequate

Solar Orientation: Level

Hazardous Materials: N/A

SERVICES

Fire Protection: Central FPD

School District: Soquel Elementary

Sewage Disposal: Santa Cruz County

Sanitation District

Drainage District: Zone 5

Project Access: Atherton Drive

Water Supply: Soquel Creek Water Dist.

PLANNING POLICIES

Zone District: RM-3 (Multi-family Residential) Special Designation: None

General Plan: R-UH (Urban High Density Residential), O-U (Urban Open Space)

Urban Services Line: X Inside Outside

Coastal Zone: Inside X Outside

PROJECT SETTING AND BACKGROUND:

The subject property is approximately 14.36 acres located on the south east corner of Soquel Drive and Atherton Drive, with the majority of the available frontage on Atherton Drive. A riparian corridor (Tannery Gulch) runs north to south through the eastern half of the property. The project site is comprised of approximately 3.69 acres located on the northwest portion of the subject property. The remaining area (approximately 10.67 acres) is comprised of riparian vegetation and is not suitable for development.

This application (Cabrillo Commons) follows a prior development (Atherton Place) which occurred to the south of the proposed project site and was in common ownership with the subject property at that time. The remainder parcel from the prior development (Atherton Place), including the riparian corridor area, is the subject property for this application (Cabrillo Commons).

DETAILED PROJECT DESCRIPTION:

This application is a proposal to construct 43 townhouses on an approximately 3.69 acre portion of a 14.36 acre property. The remaining area, which includes a riparian resource, is not considered as developable and is proposed to be rezoned to the PR (Parks, Recreation & Open Space) zone district from the current RM-3 (Multi-family Residential) zone district.

The proposed development will be accessed *off* of Atherton Drive at two locations and the individual townhouse units will have vehicular access from the interior loop road (Sesnon Drive). Pedestrian circulation is proposed throughout the site with many units being oriented towards the sidewalk or interior pedestrian pathways. Interior roadways will require an exception to the County Design Criteria, with reduced widths, sidewalks, and landscaping strips. Atherton Drive will also require an exception for a reduced width landscape strip to match existing development on Atherton Drive. A small curved portion of Atherton Drive (created to protect a tree which no longer exists) is proposed to be abandoned so a straight curb and sidewalk can be constructed.

Although the site is gently sloped, grading will be required to prepare the site for development and to ensure that the site is properly drained. Grading volumes will be approximately 4,574 cubic yards (cut), 3,877 cubic yards (fill), and 1,331 cubic yards (strippings - to be used in landscape), with the remaining 697 cubic yards to be exported *off* site. The project layout has been adjusted to reduce grading volumes and decks have been included in some rear yards to further reduce grading totals.

The proposed grading and improvements are located outside of the riparian corridor (Tannery Gulch) with the exception of a drainage outlet. This drainage improvement is necessary to properly discharge the storm water runoff from the proposed development without creating accelerated erosion or other adverse impacts to the riparian resource.

III. ENVIRONMENTAL REVIEW CHECKLIST

A. Geology and Soils

Does the project have the potential to:

1. Expose people or structures to potential adverse effects, including the risk of material 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 as identified by other substantial evidence?

X

- B. Seismic ground shaking?

X

- C. Seismic-related ground failure, including liquefaction?

X

- D. Landslides?

X

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. Geotechnical investigations for the proposed project were performed by Jacobs, Raas & Associates, dated 10/87 and Harza Consulting Engineers, dated 7/25/97; with an update letter from Fugro West, Inc., dated 2/19/03 (Attachment 7). The report concluded that seismic shaking can be managed through proper foundation design, that landslides are not a potential hazard, and that the potential for liquefaction is low.

2. Subject people or improvements to damage from soil instability as a result of on- or off-site landslide, lateral spreading, to subsidence, liquefaction, or structural collapse?

X

The geotechnical report cited above did not identify a significant potential for damage caused by any of these hazards.

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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3. Develop land with a slope exceeding 30%?

X

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

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

X

The potential for erosion exists during the construction phase of the project. This potential is lessened because the slopes on the project site are gentle outside of the riparian corridor, however there is creek and pond at the base of the slopes. Standard erosion controls are a required condition of the project. Prior to approval of a grading or building permit, the project must have an approved Erosion Control Plan, which will specify detailed erosion and sedimentation control measures with a focus on protecting the riparian area. The plan will include provisions for a barrier between the work area and the riparian corridor and for disturbed areas to be planted with ground cover and to be maintained to minimize surface erosion.

5. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code(1994), creating substantial risks to property?

X

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?

X

No septic systems are proposed. The project will connect to the Santa Cruz County Sanitation District, and the applicant will 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?

X

B. Hydrology, Water Supply and Water Quality

Does the project have the potential to:

1. Place development within a 100-year

X

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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flood hazard area?

According to the Federal Emergency Management Agency (FEMA) National Flood Insurance Rate Map, dated April 15, 1986, no portion of the project site lies within a 100-year flood hazard area.

2. Place development within the floodway resulting in impedance or redirection of flood flows?

X

According to the Federal Emergency Management Agency (FEMA) National Flood Insurance Rate Map, dated April 15, 1986, no portion of the project site lies within a 100-year flood hazard area.

3. Be inundated by a seiche or tsunami?

X

4. Deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit, or a significant contribution to an existing net deficit in available supply, or a significant lowering of the local groundwater table?

X

The project will obtain water from Soquel Creek Water District and will not rely on private well water. Although the project will incrementally increase water demand, Soquel Creek Water District has indicated that adequate supplies are available to serve the project as the project *is* required to participate in the District's offset program (Attachment 14). All development is proposed outside the mapped groundwater recharge area on the subject property.

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

X

Runoff from this project may contain small amounts of chemicals and other household contaminants. No commercial or industrial activities are proposed that would contribute a significant amount of contaminants to a public or private water supply. Potential siltation from the proposed project will be mitigated through implementation of erosion control measures. A silt and grease trap, and a plan for maintenance, will be required to reduce this impact to a less than significant level.

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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6. Degrade septic system functioning? _____ X

7. Alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner which could result in flooding, erosion, or siltation on or off-site? _____ X

The proposed project will not alter the existing overall drainage pattern of the site. Storm water runoff will be captured, treated, and discharged into Tannery Gulch via an outlet with a gabion mattress energy dissipater to prevent these potential impacts. Department of Public Works Drainage Section staff has reviewed and approved the proposed drainage plan.

8. Create or contribute runoff which would exceed the capacity of existing or planned storm water drainage systems, or create additional source(s) of polluted runoff? _____ X

Drainage Calculations prepared by Ifland Engineers, Inc., dated **11/05** (Attachment **8**), have been reviewed for potential drainage impacts and accepted by the Department of Public Works (DPW) Drainage Section staff. The calculations show that the net increase in runoff will be 2.86 cubic feet per second for a ten year storm event before considering the detention systems. The runoff rate from the property will be controlled by on-site detention to a rate that does not exceed the pre-development rate. DPW staff have determined that existing storm water facilities are adequate to handle the increase in drainage associated with the project. The culvert under Highway 1, downstream, was evaluated for adequate capacity in **1998**, for an earlier phase of the development. **The** project engineer determined that there is **excess capacity** above that required to pass the **100** year storm (Attachment **19**, letter of **Glen Ifland**, 3-1998). This excess capacity will be verified by an updated analysis, to be submitted and approved by the Department of Public Works drainage staff prior to public hearing for the project.

Refer to response B-5 for discussion of urban Contaminants and/or other polluting runoff

9. Contribute to flood levels or erosion in natural water courses by discharges of newly collected runoff? _____ X

See response **B-8** above.

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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10. Otherwise substantially degrade water supply or quality?

X

A silt and grease trap, and a plan for maintenance, will be required to minimize the effects of urban pollutants.

C. Biological Resources

Does the project have the potential to:

1. Have an adverse effect 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?

X

A Biotic Report was prepared for this project by Biotic Resources Group, dated 1/29/03 (Attachment 10). The report identified riparian resources along the eastern side of the subject property and the possibility of Loggerhead shrikes and/or raptor nesting habitat. Reproduction of nesting birds could be interrupted by construction noise. The development will impact the riparian area in that the drainage outlet will be in the riparian corridor. This report has been reviewed and accepted by the Planning Department Environmental Planning section (Attachment 9). The biotic report review and acceptance letter cited above includes recommended mitigations which will adequately protect these biotic resources.

2. Have an adverse effect on a sensitive biotic community (riparian corridor), wetland, native grassland, special forests, intertidal zone, etc.)?

X

See response C-1 above. In addition, seven oak trees of greater than 6 inches in diameter will be removed. These trees are not able to be avoided. Because they are not contiguous with the oak woodland, and because the project will be conditioned to replace these trees with native oaks at 3:1 ratio, this loss is considered to be a less than significant impact.

3. Interfere 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

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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or migratory wildlife nursery sites?

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.

4. Produce nighttime lighting that will illuminate animal habitats?

X

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. It is recommended that project lighting be low rise, shielded and directed away from the riparian corridor to reduce this potential impact to a less than significant level.

5. Make a significant contribution to the reduction of the number of species of plants or animals?

X

See response C-1 above

6. Conflict with any local policies or ordinances protecting biological resources (such as the Significant Tree Protection Ordinance, Sensitive Habitat Ordinance, provisions of the Design Review ordinance protecting trees with trunk sizes of 6 inch diameters or greater)?

The project will not conflict with any local policies or ordinances. Exceptions to the Riparian Corridor Protection Ordinance and County Design Criteria are included in the project proposal. Although the project has been designed to preserve as many existing trees as possible, the removal of 7 trees in excess of 6 inches in diameter is proposed. These trees will be replaced by native species within the riparian corridor or buffer area to compensate for the proposed tree removals.

7. Conflict with the provisions of an adopted Habitat Conservation Plan, Biotic Conservation Easement, or other approved local, regional, or state habitat conservation plan?

X

D. Energy and Natural Resources

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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Does the project have the potential to:

- | | | | | |
|----|--|-------|-------|-------------|
| 1. | Affect or be affected by land designated as "Timber Resources" by the General Plan? | _____ | _____ | _____X_____ |
| 2. | Affect or be affected by lands currently utilized for agriculture, or designated in the General Plan for agricultural use? | _____ | _____ | _____X_____ |

The project site is not currently being used for agriculture and no agricultural uses are proposed for the site or surrounding vicinity

- | | | | | |
|----|--|-------|-------|-------------|
| 3. | Encourage activities that result in the use of large amounts of fuel, water, or energy, or use of these in a wasteful manner? | _____ | _____ | _____X_____ |
| 4. | Have a substantial effect on the potential use, extraction, or depletion of a natural resource (i.e., minerals or energy resources)? | _____ | _____ | _____X_____ |

E. Visual Resources and Aesthetics

Does the project have the potential to:

- | | | | | |
|----|---|-------|-------|-------------|
| 1. | Have an adverse effect on a scenic resource, including visual obstruction of that resource? | _____ | _____ | _____X_____ |
|----|---|-------|-------|-------------|

The southern portion of the subject property is located within the viewshed of the Highway One scenic corridor. All development is proposed outside of the viewshed of Highway One on the northern side of the subject property. The project will 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? | _____ | _____ | _____X_____ |
|----|--|-------|-------|-------------|

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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See response E-I above.

3. 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 ridge line?

_____ X _____

The existing visual setting is of open meadows surrounded by oak woodland. The proposed project is designed and landscaped so as to fit into this setting.

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

_____ X _____

The project will create an incremental increase in night lighting. However, this increase will be small, and will be similar in character to the lighting associated with the surrounding existing uses. See response C-4 above regarding project lighting adjacent to the riparian corridor.

5. Destroy, cover, or modify any unique geologic or physical feature?

_____ X _____

There are no unique geological or physical features on or adjacent to the site that would be destroyed, covered, or modified by the project.

F. Cultural Resources

Does the project have the potential to:

1. Cause an adverse change in the significance of a historical resource as defined in CEQA Guidelines 15064.5?

_____ X _____

The property is not designated as a historic resource on any federal, State or local inventory.

2. Cause an adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines 15064.5?

_____ X _____

No archeological resources have been identified in the project area. Pursuant to

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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County Code Section 16.40.040, if at any time in the preparation for or process of excavating or otherwise disturbing the ground, any human remains of any age, or any artifact or other evidence of a Native American cultural site which reasonably appears to exceed 100 years of age are discovered, the responsible persons shall immediately cease and desist from all further site excavation and comply with the notification procedures given in County Code Chapter 16.40.040.

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

X

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?

X

G. Hazards and Hazardous Materials

Does the project have the potential to:

1. Create a significant hazard to the public or the environment as a result of the routine transport, storage, use, or disposal of hazardous materials, not including gasoline or other motor fuels?

X

2. 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?

The project site is not included on the 7/12/05 list of hazardous sites in Santa Cruz

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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County compiled pursuant to the specified code.

3.	Create a safety hazard for people residing or working in the project area as a result of dangers from aircraft using a public or private airport located within two miles of the project site?	_____	_____X
----	--	-------	--------

4.	Expose people to electro-magnetic fields associated with electrical transmission lines?	_____	_____X
----	---	-------	--------

5.	Create a potential fire hazard?	_____	_____X
----	---------------------------------	-------	--------

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

6.	Release bio-engineered organisms or chemicals into the air outside of project buildings?	_____	_____X
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H. Transportation/Traffic

Does the project have the potential to:

1.	Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	_____	_____X
----	--	-------	--------

A traffic study for the proposed development has been prepared by Marquez Transportation Engineering, dated 2/04 (Attachment 11). According to the traffic study, the project will create an incremental increase in traffic on nearby roads, intersections, and at the ramps of Highway 1 at the Park Avenue exit (412 new trips, including 56 morning peak trips and 77 evening peak trips). The study concludes that this additional traffic (including cumulative conditions for growth within the area) will not result in significant traffic impacts to the surrounding area and no Level of Service will drop to D or below. The project will add considerably less than 1% of the existing traffic to the Highway 1 segments, which already operate at E or F during peak hours. The additional traffic, therefore, does not reach the thresholds given in the General Plan

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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that define when impacts are considered to be significant.

The traffic study identified lengthy delays for the turning movement from Willowbrook Lane onto Soquel Drive. The study indicates that these delays can be mitigated with re-stripping and modification to the intersection that would add a right turn lane on Willowbrook. A new lane would allow cars turning right onto Soquel Drive to move out of the other lanes so that the left turning movement would be improved. A new lane would, however, cause the removal of parking spaces on one or both sides of Willowbrook, which are in short supply in this neighborhood and which cannot be lost at this time.

The Department of Public Works, Road Engineering section has reviewed and accepted the traffic study. See also Attachment 16, memo of Department of Public Works Traffic Engineering staff.

2. Cause an increase in parking demand which cannot be accommodated by existing parking facilities?

X

The project meets the code requirements for the required number of parking spaces and traffic study cited above conclude that sufficient parking will be provide on site,

3. Increase hazards to motorists, bicyclists, or pedestrians?

X

The proposed project will include exceptions to the County Design criteria for the interior roadways.. The County standard for new roadways is a 56 foot wide right of way with parking, sidewalks, and landscape strips on both sides. The project design includes an exception to reduce the interior roadway to a 26 foot wide paved surface with no parking along the roadway outside of marked stalls. Landscaping and a pedestrian walkway is proposed on one side of the roadway and the separation of the sidewalk and roadway will vary throughout the project site. Landscaping will be located through out the project. But no landscape strips are proposed immediately adjacent to the interior roadway. A small parking court with a pavement width of 24 feet is proposed to access four units at the northeast corner of the project site. On street parking has been limited to marked spaces and adequate pedestrian circulation has been provided throughout the site which will prevent potential hazards to motorists, bicyclists, andlor pedestrians.

The plans show two "decorative, raised crosswalks" placed to slow traffic down in two locations where site distance is not optimal because of short driveway aprons and road curves, and signs announcing a 15 MPH speed limit. 10 MPH is the limit that will be safe in the vicinity of the curve at Unit 31, according to the project traffic engineer. The crosswalks will be required to be slightly relocated to join up with existing sidewalks, or else redesigned as standard speed bumps according to published design criteria. Once modified the crosswalks, along with "Reduced Speed Ahead" traffic signs, will be adequate to slow traffic to 10 MPH at the subject curve and reduce vehicle/pedestrian

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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conflicts.

Additionally, the new sidewalk on the south side of Soquel Drive will be installed adjacent to the curb, consistent with recent County installed improvements in the immediate area and the landscape strip on Atherton Drive will be reduced to be consistent with adjacent development on Atherton Drive.

4. Exceed, either individually (the project alone) or cumulatively (the project combined with other development), a level of service standard established by the county congestion management agency for designated intersections, roads or highways?

X

See response H-1 above.

I. Noise

Does the project have the potential to:

1. Generate a permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

X

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

2. Expose people to noise levels in excess of standards established in the General Plan, or applicable standards of other agencies?

X

Per County policy, average hourly noise levels shall not exceed the General Plan threshold of 50 Leq during the day and 45 Leq 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.

An acoustical consultant has provided recommendations that will bring the noise down to meet these thresholds (Environmental Consulting Services, dated 4/13/06, Attachment 17. The recommendations consist of a) standard high quality doors and windows to reduce interior noise, and b) either an air tight wood sound wall along the Soquel property line to reduce exterior noise at the rear of units that back up to Soquel Drive, or glass patio enclosures for those units. These recommendations will be

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant OR No Impact	Not Applicable
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required as a condition of the development permit.

3. Generate a temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

_____ X _____

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

J. Air Quality

Does the project have the potential to:
(Where available, the significance criteria established by the MBUAPCD may be relied upon to make the following determinations).

1. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

_____ X _____

The North Central Coast Air Basin does not meet State standards for ozone and particulate matter (PM10). Therefore, the regional pollutants of concern that would be emitted by the project are ozone precursors (Volatile Organic Compounds [VOCs] and nitrogen oxides [NOx]), and dust. There is no indication that new emissions of VOCs or NOx will exceed Monterey Bay Unified Air Pollution Control District (MBUAPCD) thresholds for these pollutants and therefore there will not be a significant contribution to an existing air quality violation.

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

2. Conflict with or obstruct implementation of an adopted air quality plan?

_____ X _____

The project will not conflict with or obstruct implementation of the regional air quality plan. See response J-1 above.

3. Expose sensitive receptors to substantial pollutant concentrations?

_____ X _____

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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4. Create objectionable odors affecting a substantial number of people?

_____	_____	_____	X
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K. Public Services and Utilities

Does the project have the potential to:

1. Result in the need for new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

- a. Fire protection?

_____	X
-------	---

- b. Police protection?

_____	X
-------	---

- c. Schools?

_____	X
-------	---

- d. Parks or other recreational activities?

_____	X
-------	---

- e. Other public facilities; including the maintenance of roads?

_____	X
-------	---

While the project represents an incremental contribution to the need for services, the increase will be minimal. Moreover, the project meets all of the standards and requirements identified by the local fire agency or California Department of Forestry, as applicable, and school, park, and transportation fees to be paid by the applicant will be used to **offset** the incremental increase in demand for school and recreational facilities and public roads.

2. Result in the need for construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

_____	X
-------	---

See response B-8 above.

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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3. Result in the need for construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

X

The project will obtain water from Soquel Creek Water District and will not rely on private well water. Although the project will incrementally increase water demand, Soquel Creek Water District has indicated that adequate supplies are available to serve the project as the project is required to participate in the District's offset program (Attachment 14). All development is proposed outside the mapped groundwater recharge area on the subject property.

Municipal sewer service is available to serve the project, as reflected in the attached letter from the Santa Cruz County Sanitation District (Attachment 15).

4. Cause a violation of wastewater treatment standards of the Regional Water Quality Control Board?

X

The project's wastewater flows will not violate any wastewater treatment standards.

5. Create a situation in which water supplies are inadequate to serve the project or provide fire protection?

X

The water mains serving the project site provide adequate flows and pressure for fire suppression. Additionally, the local fire agency has reviewed and approved the project plans, assuring conformity with fire protection standards that include minimum requirements for water supply for fire protection.

6. Result in inadequate access for fire protection?

X

The project's road access has been approved by the local fire agency assuring conformity with fire protection standards that include minimum requirements for emergency vehicle access.

7. Make a significant contribution to a cumulative reduction of landfill capacity or ability to properly dispose of refuse?

X

The project will make an incremental contribution to the reduced capacity of regional

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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landfills. However, this contribution will be relatively small and will be of similar magnitude to that created by existing land uses around the project.

8. Result in a breach of federal, state, and local statutes and regulations related to solid waste management?

X

L. Land Use, Population, and Housing

Does the project have the potential to:

1. Conflict with any policy of the County adopted for the purpose of avoiding or mitigating an environmental effect?

X

The proposed project does not conflict with any policies adopted for the purpose of avoiding or mitigating an environmental effect.

2. Conflict with any County Code regulation adopted for the purpose of avoiding or mitigating an environmental effect?

X

The proposed project does not conflict with any regulations adopted for the purpose of avoiding or mitigating an environmental effect.

3. Physically divide an established community?

X

The project will not include any element that will physically divide an established community.

4. Have a potentially significant growth inducing effect, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

X

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.

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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5. Displace substantial numbers of people, or amount of existing housing, necessitating the construction of replacement housing elsewhere?

_____	_____	<u> X </u>	_____
-------	-------	--------------	-------

The proposed project will entail a net gain in housing units

M. Non-Local Approvals

Does the project require approval of federal, state, or regional agencies?

Yes x No

The project may require a Stream Alteration Agreement from the California Department of Fish and Game and approval from the Regional Water Quality Control Board.

N. Mandatory Findings of Significance

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, substantially reduce the number or restrict the range of a rare or endangered plant, animal, or natural community, or eliminate important examples of the major periods of California history or prehistory?

Yes

2. Does the project have the potential to achieve short term, to the disadvantage of long term environmental goals? (A short term impact on the environment is one which occurs in a relatively brief, definitive period of time while long term impacts endure well into the future)

Yes No X

3. 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, and the effects of reasonably foreseeable future projects which have entered the Environmental Review stage)?

Yes No. X

4. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Yes No X

TECHNICAL REVIEW CHECKLIST

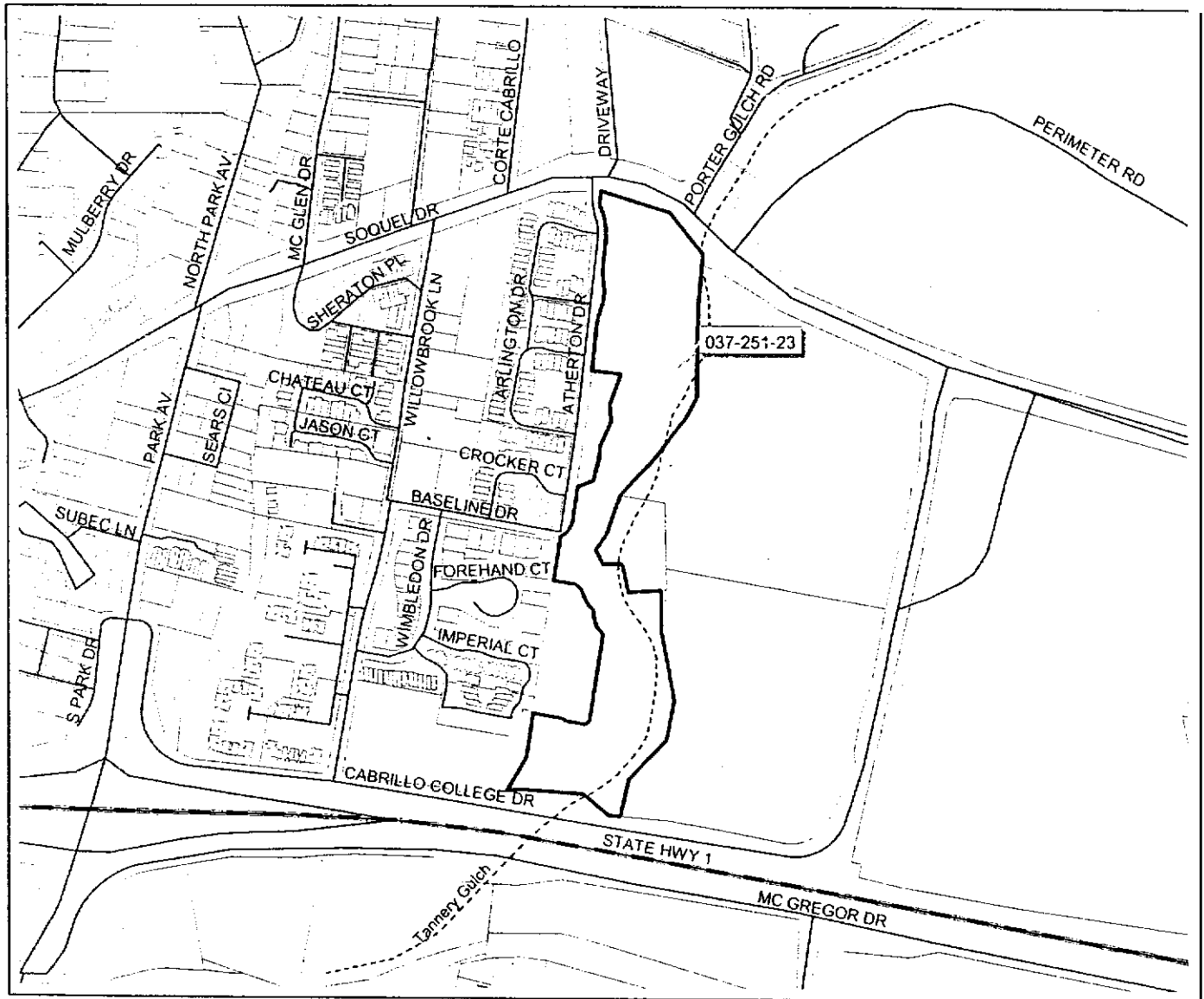
	<u>REQUIRED</u>	<u>COMPLETED</u>	<u>N/A</u>
Agricultural Policy Advisory Commission (APAC) Review	_____		<u>X</u>
Archaeological Review	_____		<u>X</u>
Biotic Report/Assessment		XXX	_____
Geologic Hazards Assessment (GHA)	_____		<u>X</u>
Geologic Report	_____		<u>X</u>
Geotechnical (Soils) Report		XXX	_____
Riparian Pre-Site	_____		<u>X</u>
Septic Lot Check	_____		<u>X</u>
Other:	_____		

Attachments:

1. Vicinity Map
2. Map of Zoning Districts
3. Map of General Plan Designations
4. Assessors Parcel Map
5. Architectural Site Plans & Details prepared by Thacher & Thompson Architects, dated 11/8/05; Tentative Map & Preliminary Improvement Plans prepared by Ifland Engineers Inc., dated 11/4/05; Landscape Plan prepared by Gregory Lewis Landscape Architect, dated 6/24/05.
6. Geotechnical Review Letter prepared by Kent Edler, dated 3/3/03.
7. Geotechnical Investigations (Conclusions and Recommendations) prepared by Jacobs, Raas & Associates, dated 10/87 and Harza Consulting Engineers, dated 7/25/97; with an update letter from Fugro West, Inc., dated 2/19/03.
8. Drainage calculations prepared by Ifland Engineers, Inc., dated 11/05.
9. Biotic Report Review Letter prepared by Paia Levine, dated 7/26/04.
10. Biotic Report prepared by Biotic Resources Group, dated 1/29/03.
11. Traffic Study (Conclusions and Recommendations) prepared by Marquez Transportation Engineering, dated 2/04.
12. Discretionary Application Comments, dated 12/19/05.
13. Letter from Central Fire District, dated 3/29/05.
14. Letter from Soquel Creek Water District, dated 11/3/04.
15. Memo from Department of Public Works, Sanitation, dated 11/30/04.
16. Memo of Jack Sohriakoff regarding improvement to Willowbrook Drive.
17. Letter of Environmental Consulting Services regarding noise mitigations, dated April, 2006.
18. Comment letters received during the public review period.
19. Letter of Glen Ifland regarding Highway One culvert, 3-1998.

Other reports considered in preparation of this Initial Study:
Noise Study (for 98-0148) prepared by Environmental Consulting Services, dated 7/10/0

Location Map



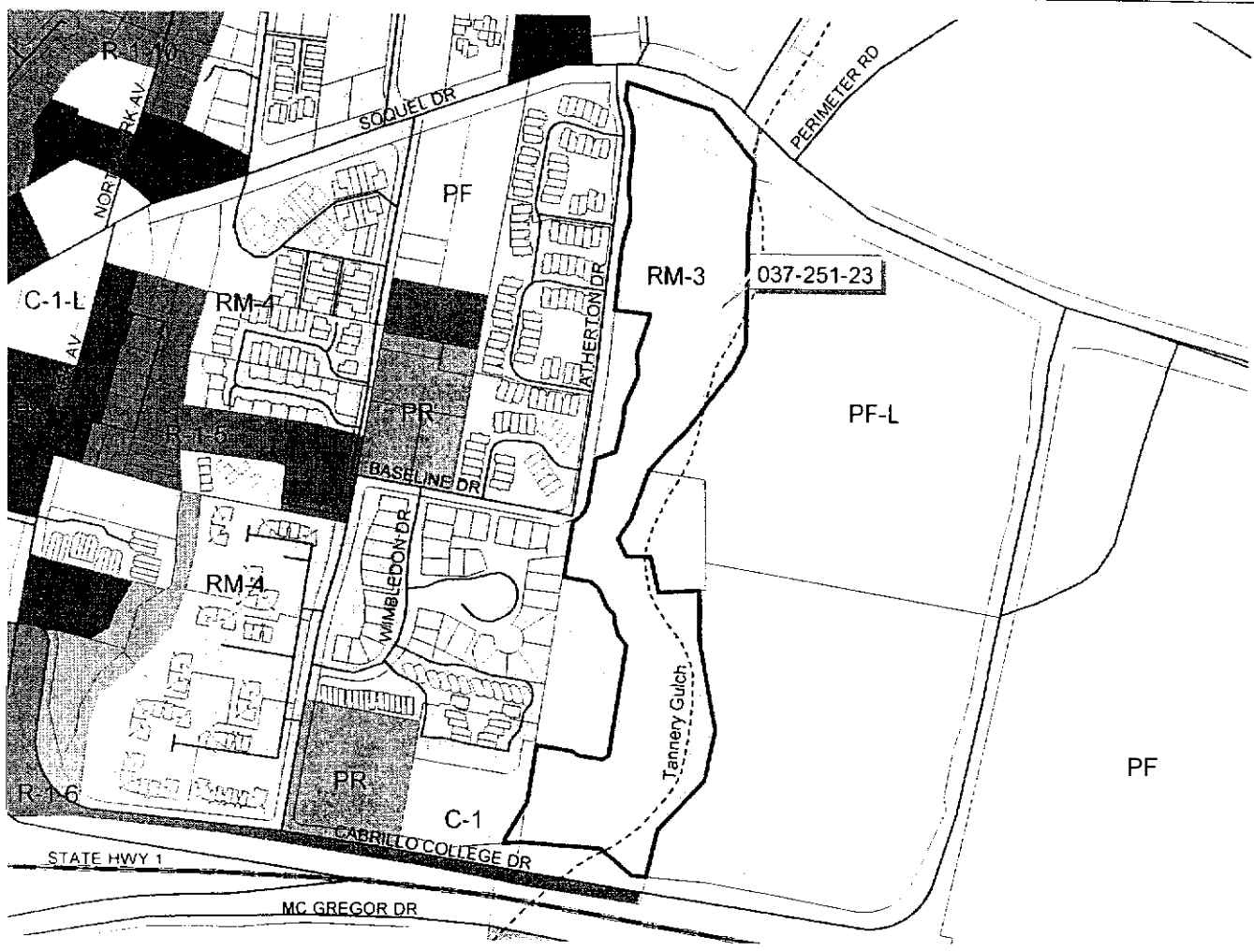
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Environmental Review Initial S
ATTACHMENT I
APPLICATION 03-006

Map created by Santa Cruz County
Planning Department:
June 2003



Zoning Map



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0

1000 Feet

Environmental Review Initial Study

ATTACHMENT 2
APPLICATION 03-0068

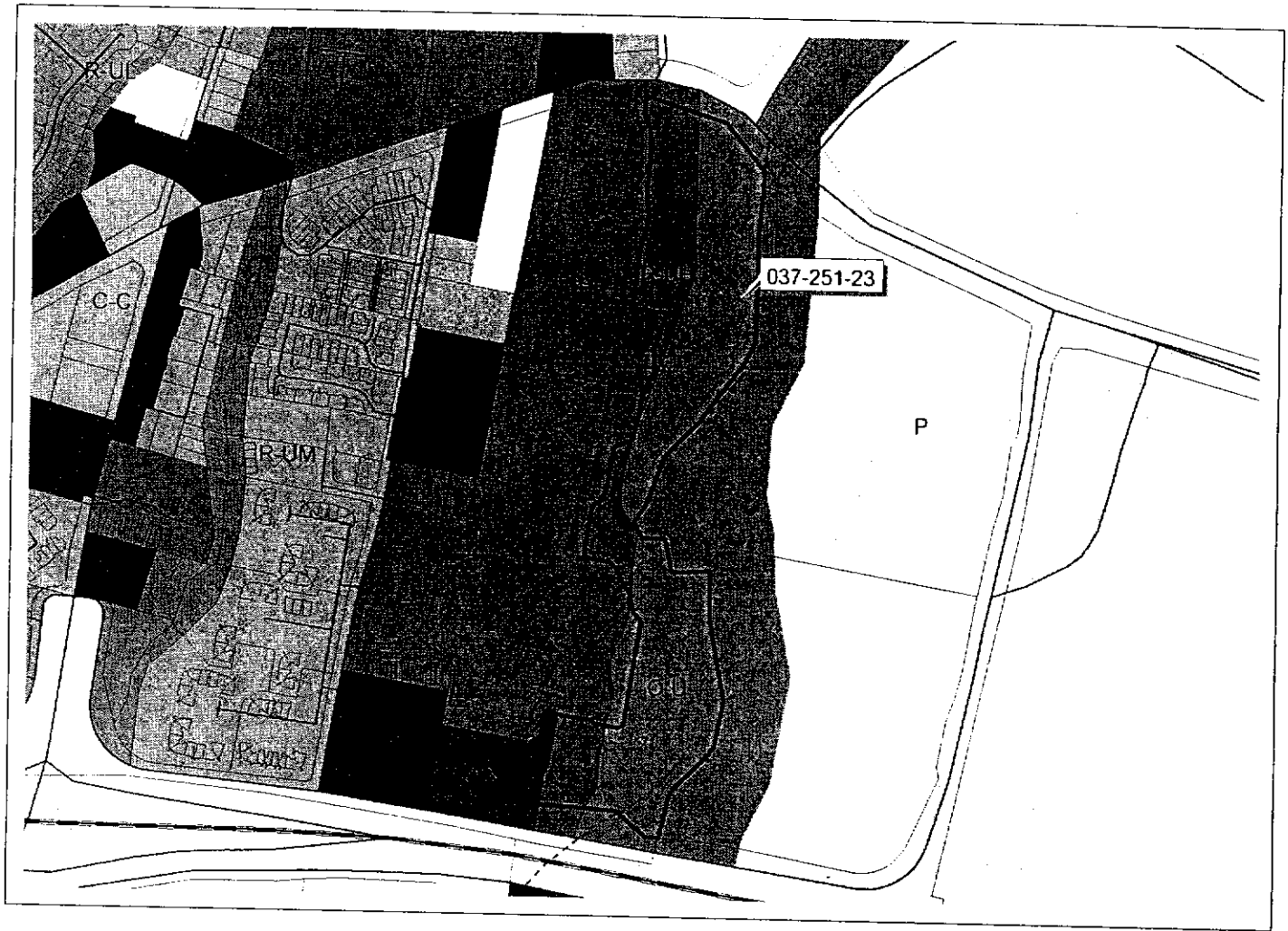
Legend

- APN 037-251-23
- Parcel boundaries
- State highways
- Streets
- Intermittent Stream
- PA
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- C-1



Map created by Santa Cruz County
Planning Department:
September 2003

General Plan Map



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Legend

- APN 037-251-23
- Parcel boundaries
- State highways
- Streets
- Intermittent Stream
- Community Commercial
- Neighborhood Commercial
- Parks and Recreation
- Urban Open Space
- Public Facilities
- Residential - Urban High Density
- Residential - Urban Low Density
- Residential - Urban Medium Density

Environmental Review Initial Study
ATTACHMENT 3
 APPLICATION 03-0065



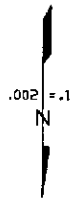
Map created by Santa Cruz County
 Planning Department:
 September 2003

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POR. SOQUEL RANCHO
 SEC. 11 & 12, T.11S., R.1W., M.D.B. & M.

Tax Area Code
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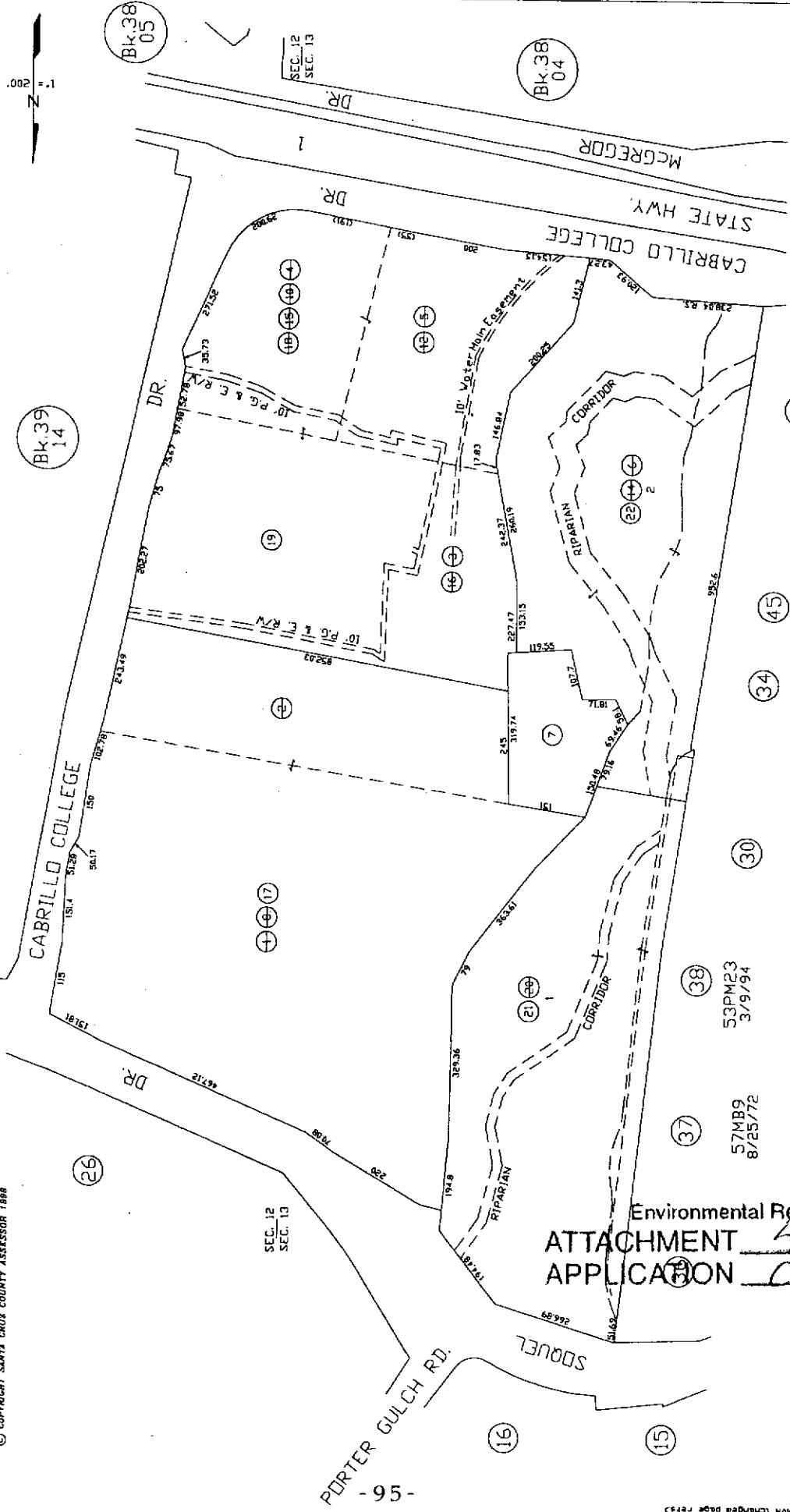


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SEC. 12
 SEC. 13



SEC. 12
 SEC. 13

PORTER GULCH RD.
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Environmental Review Initial Study
 ATTACHMENT 4
 APPLICATION 03-0265

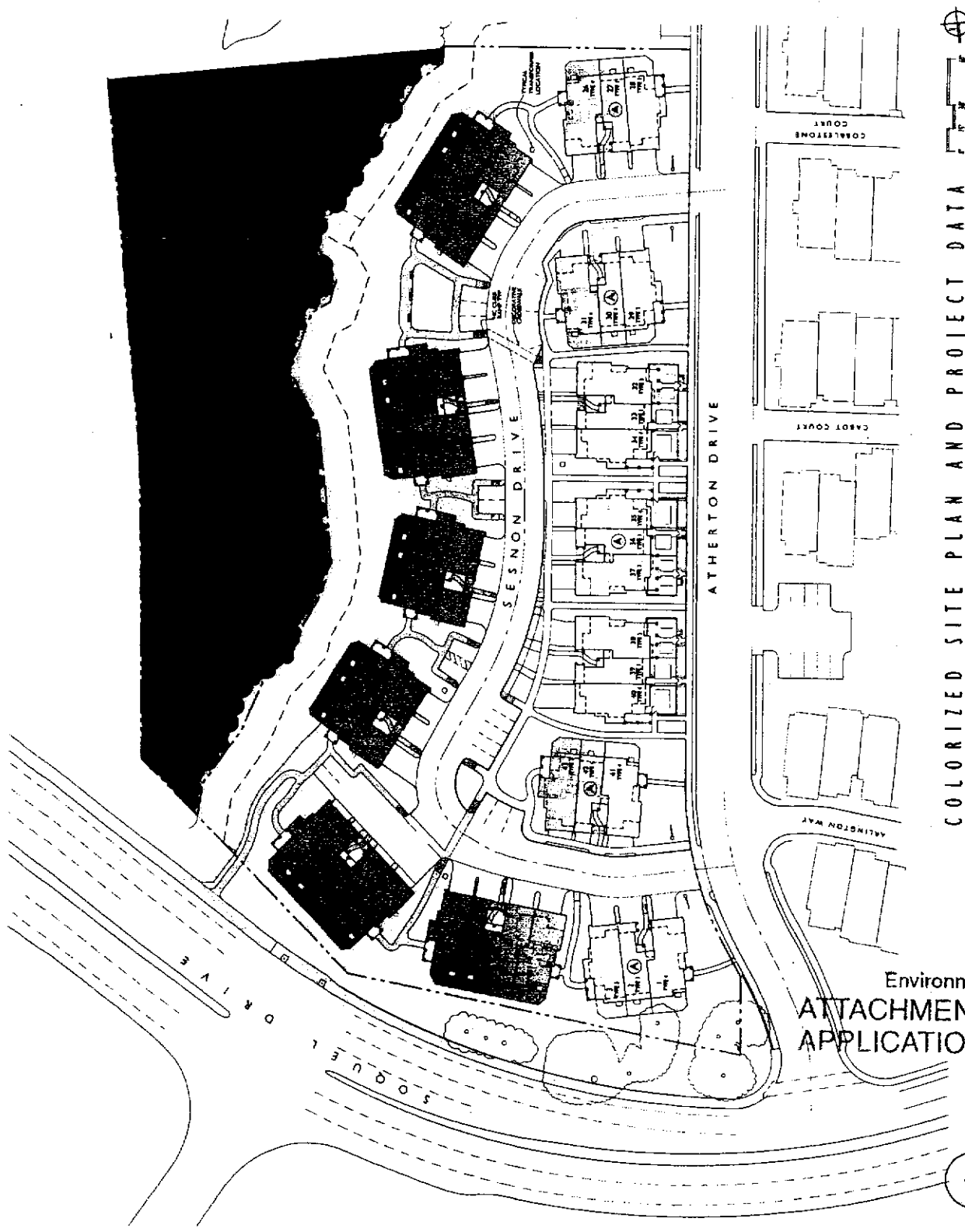
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53PM23
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Note - Assessor's Parcel & Block
 Numbers Shown in Circles.

Assessor's Map No. 37-25
 County of Santa Cruz, Calif.
 May, 1998

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SITE PLAN LEGEND

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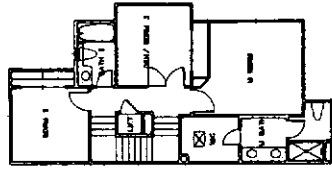
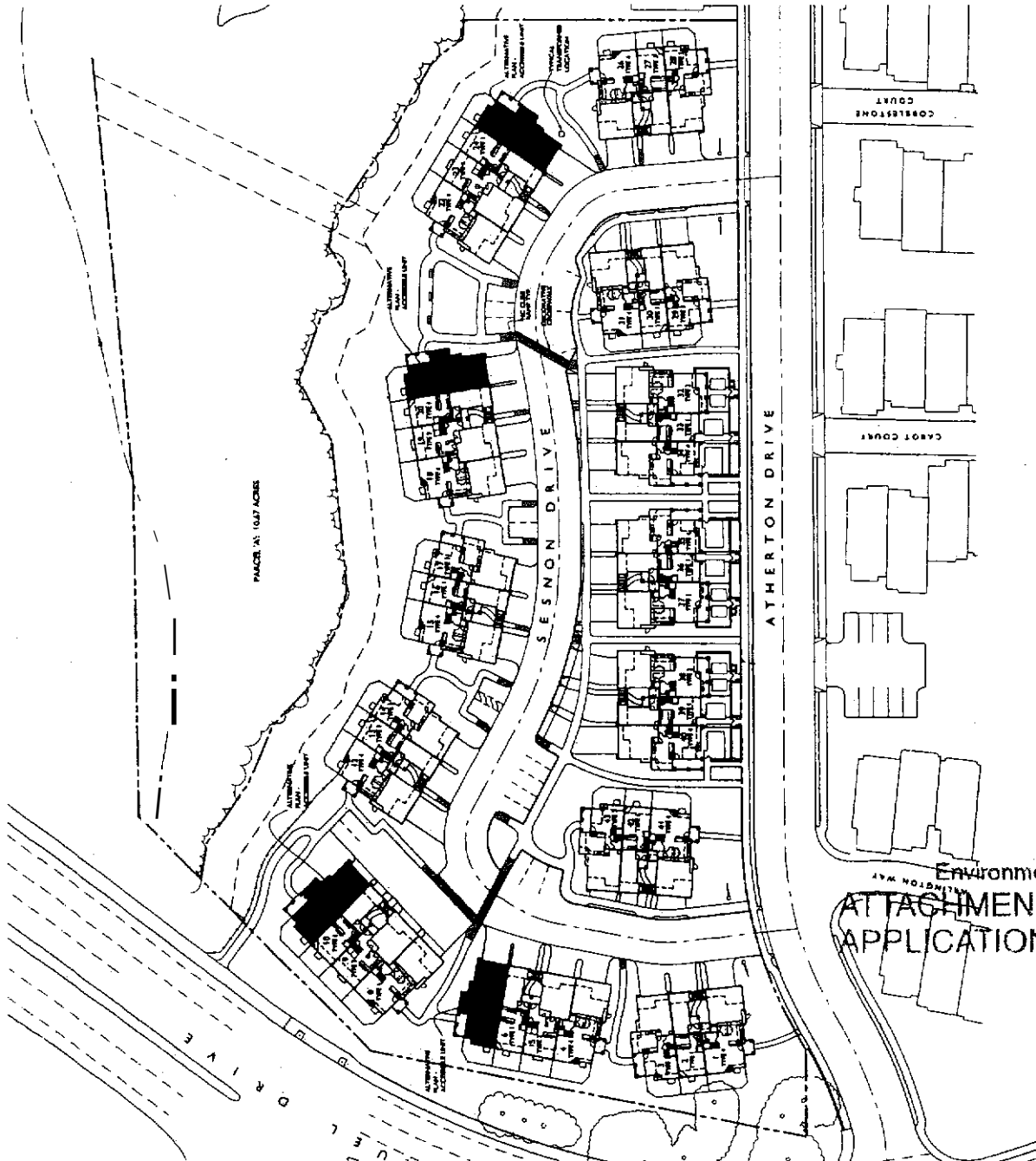
COLORIZED SITE PLAN AND PROJECT DATA

CABRILLO COMMONS

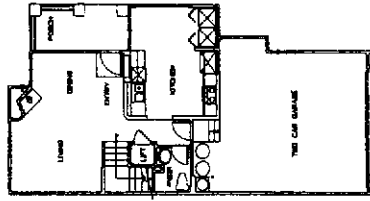
THACHER & THOMPSON ARCHITECTS

AUGUST 1, 2005
 SEPTEMBER 14, 2005
 NOVEMBER 8, 2005

Environmental Review Initial Study
 ATTACHMENT 5, 10 of 19
 APPLICATION 03-0065



① SECOND FLOOR PLAN
SCALE 1/8" = 1'-0"



② FIRST FLOOR PLAN
SCALE 1/8" = 1'-0"

HANDICAP ACCESSIBLE ALTERNATE
FLOOR PLAN (UNITS ARE NOTED ON
CORRESPONDING SITE PLAN)

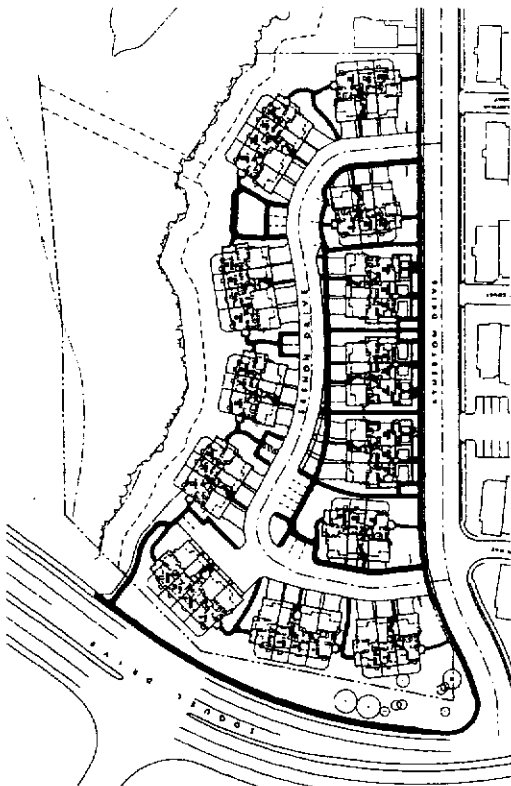


SITE PLAN AND HANDICAP ACCESSIBLE ALTERNATE FLOOR PLAN
CABRILLO COMMONS

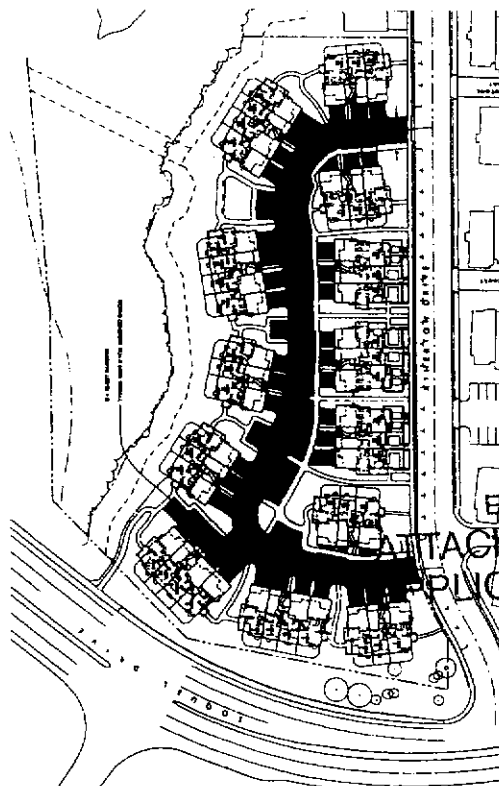
THOMAS &
THOMPSON
ARCHITECTS
AUGUST 3, 2005
SEPTEMBER 14, 2005
NOVEMBER 7, 2005

Environmental Review Initial Study
ATTACHMENT 5 of 19
APPLICATION 03-0065

2



1 PEDESTRIAN SPACE



3 VEHICLE SPACE

4 PATIO / DECK SPACE



AREA TABLES AND KEYS

CABRILLO COMMONS

THOMAS &
THOMPSON
ARCHITECTS

AUGUST 3, 2005
NOVEMBER 8, 2005

TOTAL AREA	1,400 S.F.
704 S.F.	
2,000 S.F.	
1,100 S.F.	
4,004 S.F.	
TOTAL AREA	923 S.F.
951 S.F.	
479 S.F.	
2,881 S.F.	
9,756 S.F.	
137 S.F.	

54,075 S.F.	
1,314 S.F.	
PREPARED	3.4.05

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FULL

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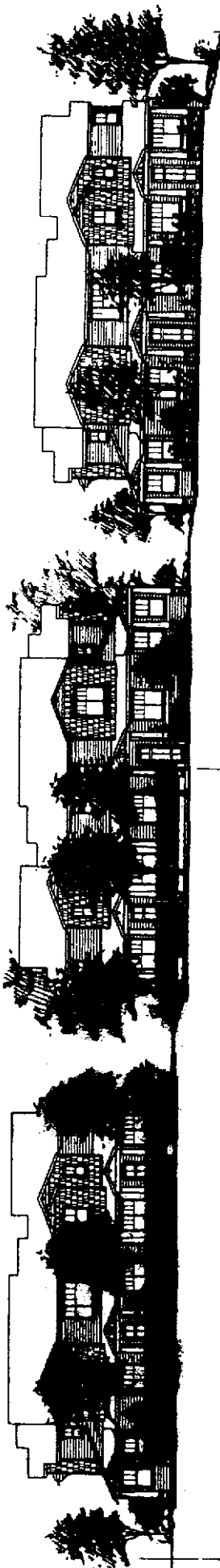
Environmental Review
ATTACHMENT 5
APPLICATION 03

Final Study
3 of 19
0065



① ELEVATION A

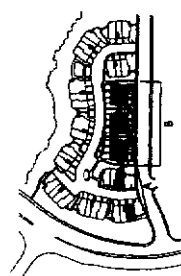
ELEVATION A



② ELEVATION B

AS SHOWN FROM THE STREET AND
FROM THE STREET

ELEVATION B



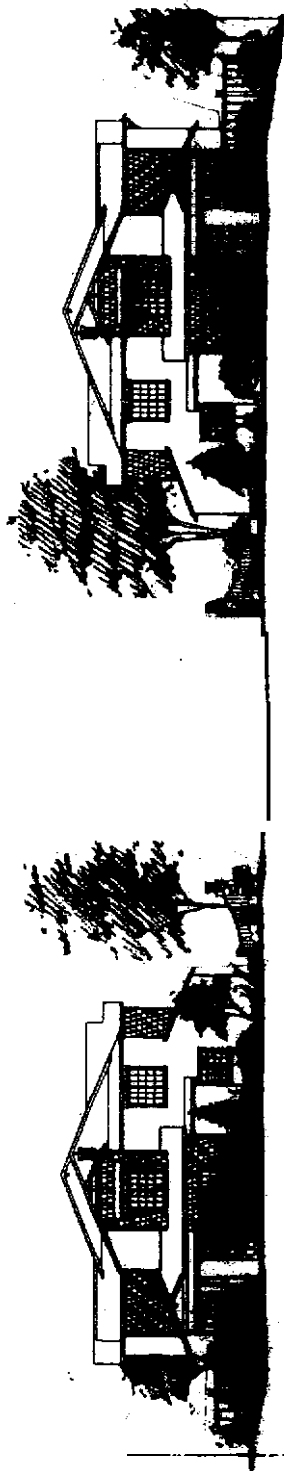
STREETSCAPE ELEVATIONS

THACHER &
TUCKERSON

UNIVERSITY AVENUE

Environmental
ATTACHMENT
APPLICATION

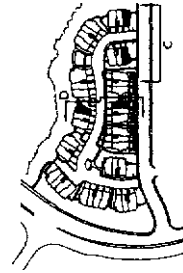
Review Initial Study
5/4/19
23-0065



① ELEVATION C



② ELEVATION D



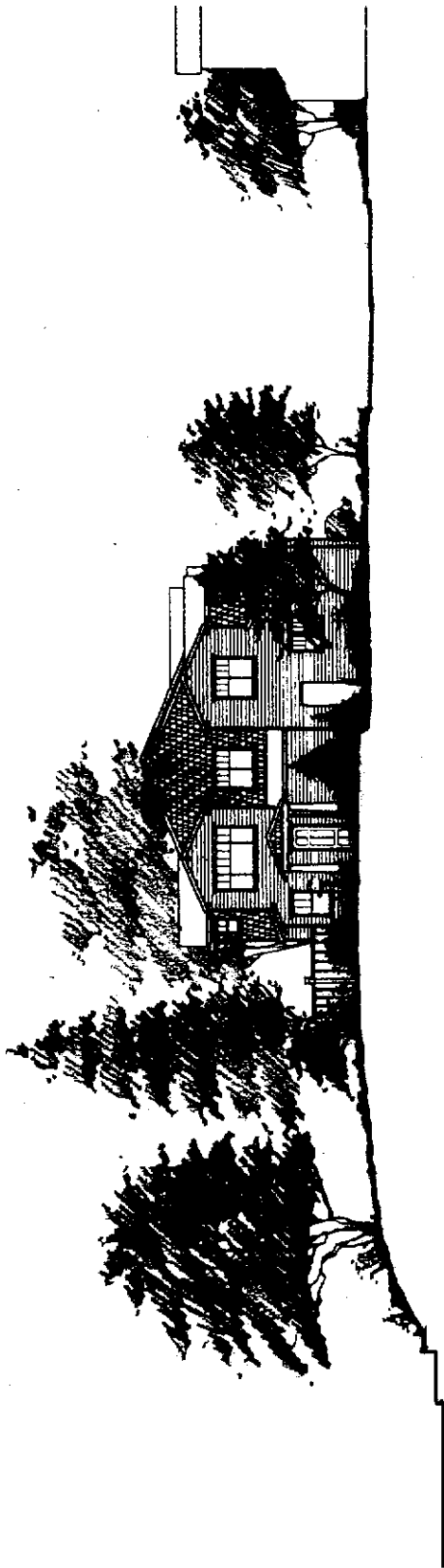
THACHER &
THOMPSON
ARCHITECTS

STREETSCAPE ELEVATIONS

L A B R I L L U C O M M U N I T Y

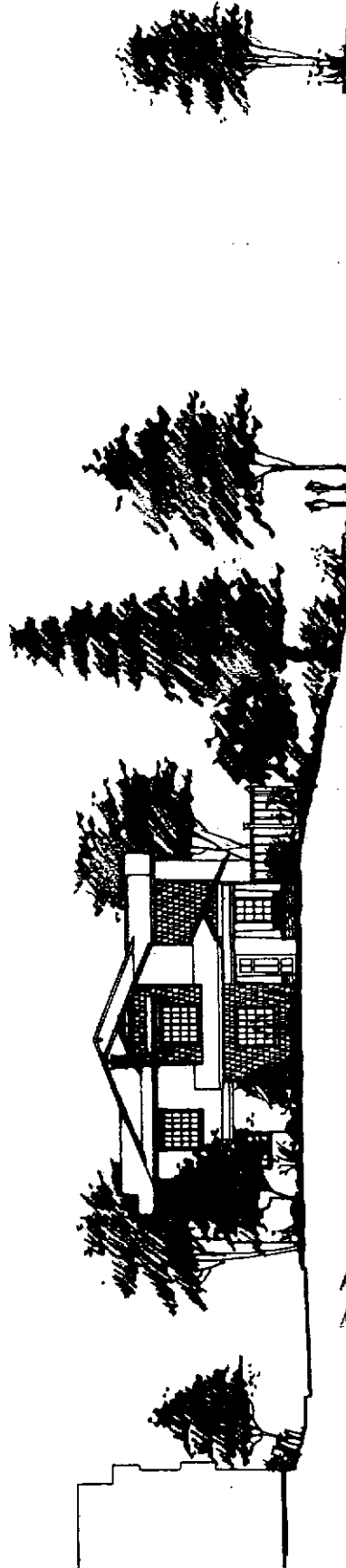
Environmental Review Initial Study
ATTACHMENT
APPLICATION

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03-0065



ELEVATION 1

1



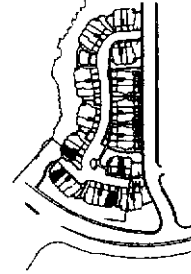
ELEVATION 2

2

Environmental
ATTACHMENT
APPLICATION

STREETSCAPE ELEVATIONS

(AERIAL VIEW)

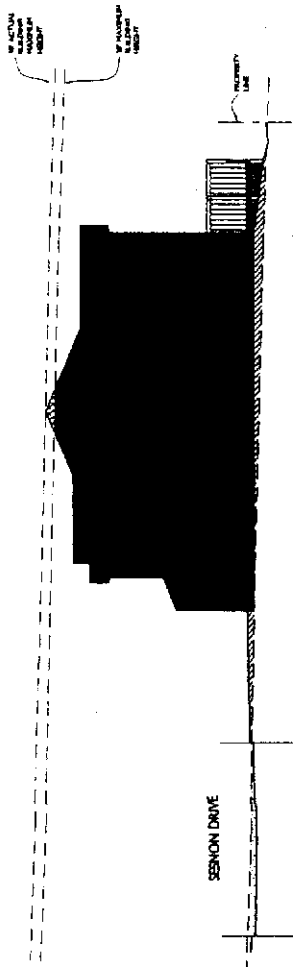


6.1
PROJ

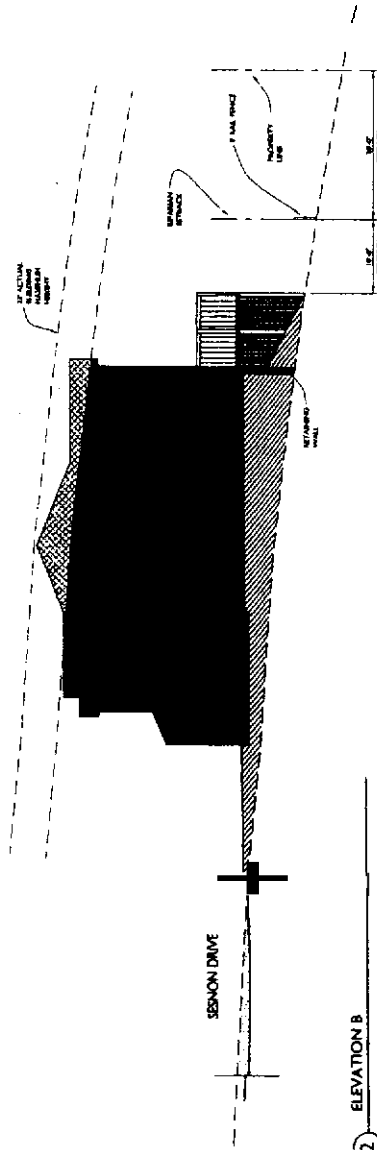
Initial Review Initial Study

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030065

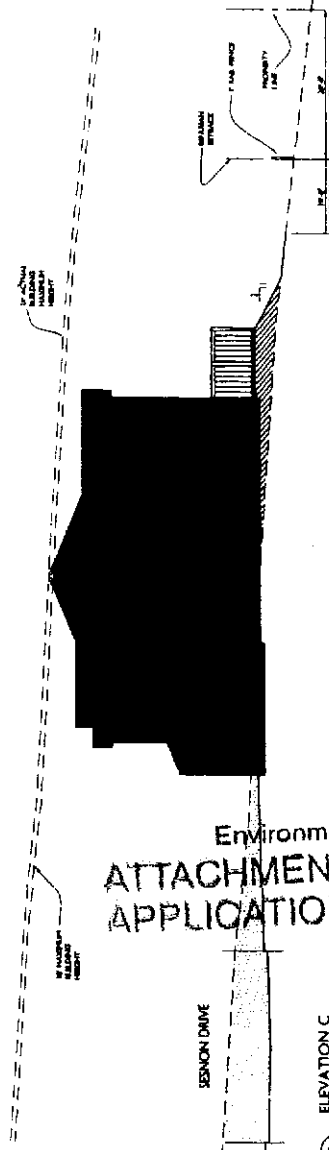
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① ELEVATION A



② ELEVATION B

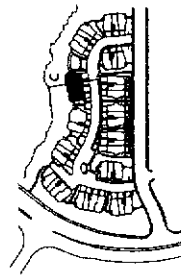
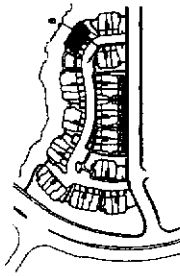
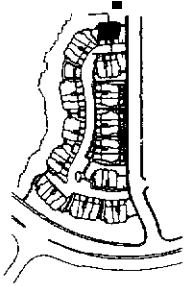


③ ELEVATION C

7

Environmental Review
ATTACHMENT 5
APPLICATION 037

al Study
R19
265



LEGEND

- EXISTING GRADE
- FINISHED GRADE
- BUILDING
- BUILDING HEIGHT OVER 30'
- FL SLOPE
- CUT

THACHER &
THOMPSON
ARCHITECTS
AUGUST 1, 2005
AUGUST 24, 2005
NOVEMBER 8, 2005

SECTIONS

CABRILLO COMMONS

THACHER &
THOMPSON
ARCHITECTS
AUGUST 1, 2004
AUGUST 14, 2004
AUGUST 14, 2004
NOVEMBER 6, 2005

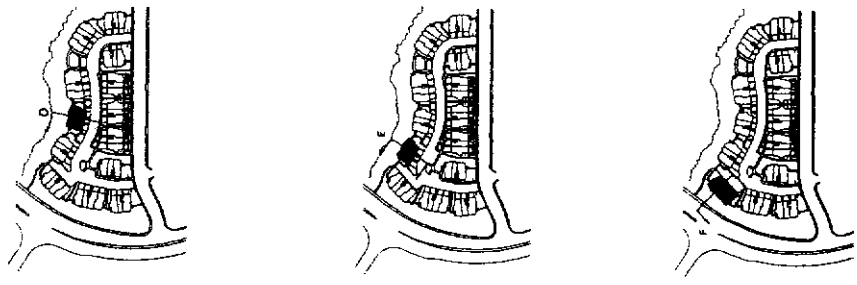
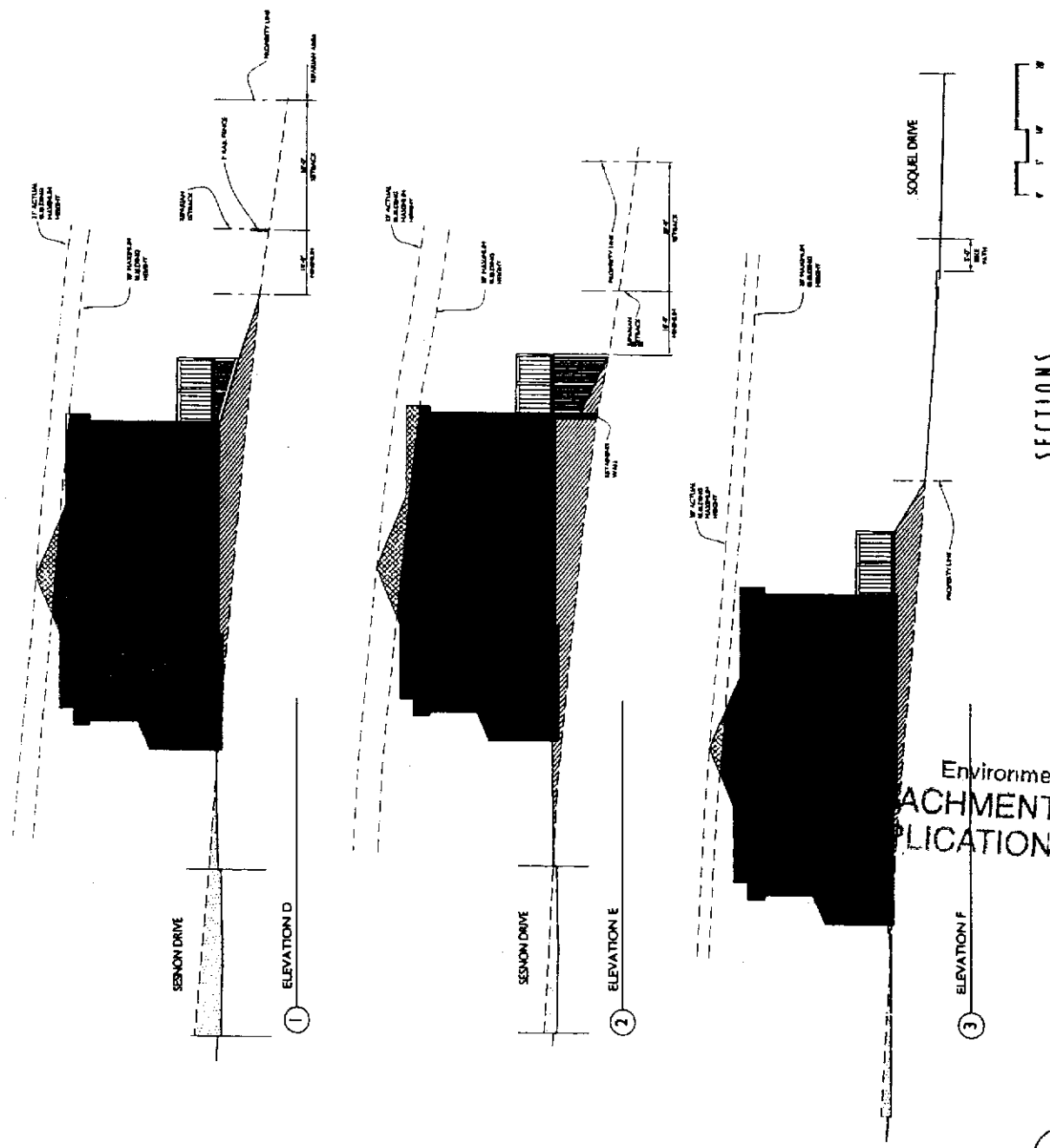
LEGEND

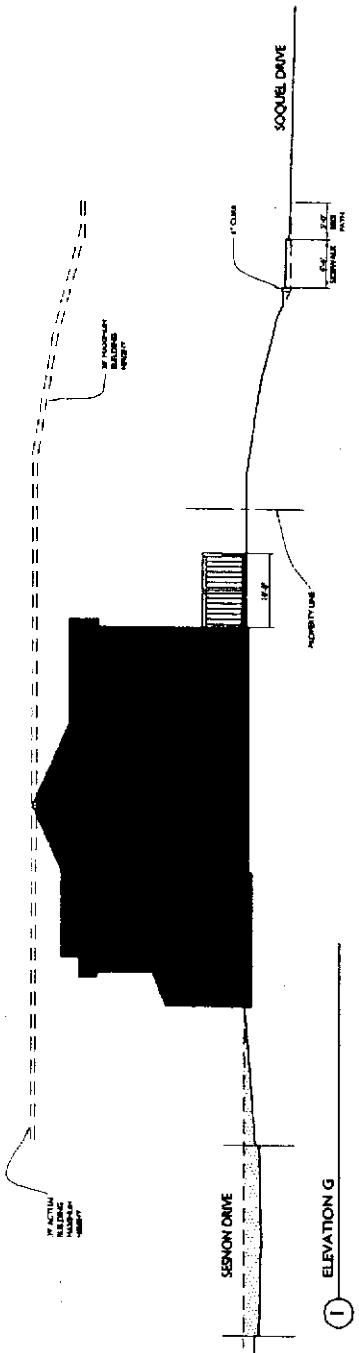
- EXISTING GRADE
- FINISHED GRADE
- BUILDING
- BUILDING HEIGHT OVER 30'
- FILL SLOPE
- CUT

SECTIONS

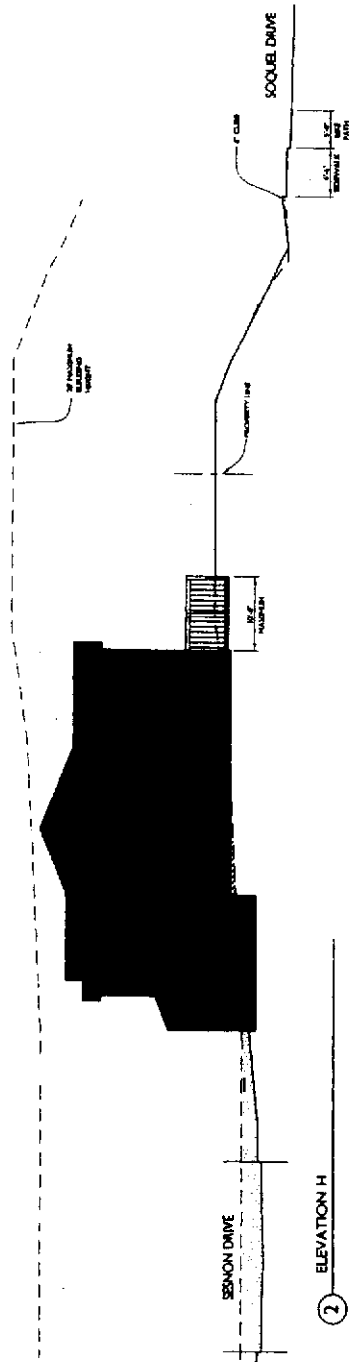
CABRILLO COMMONS

Environmental Review Initial Study
 ATTACHMENT 5
 APPLICATION 03-0065
 5.8.2.19

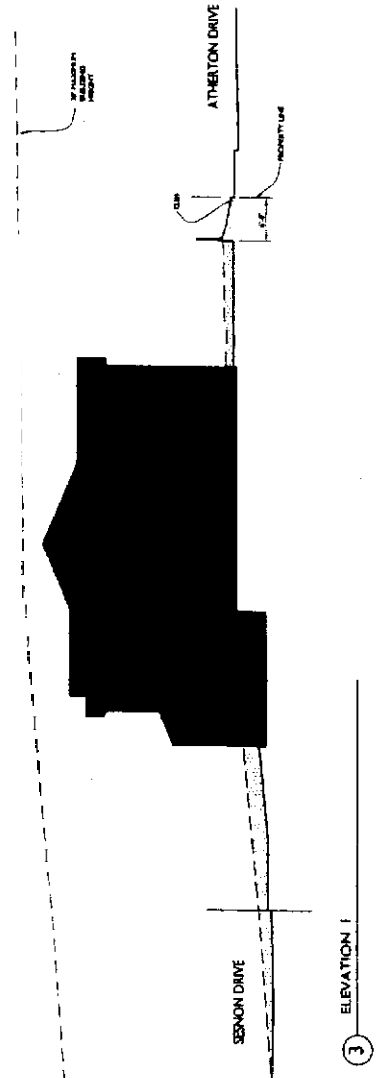




① ELEVATION G



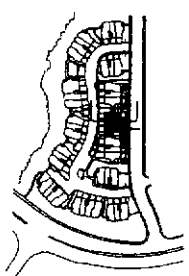
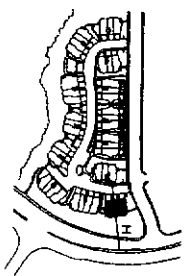
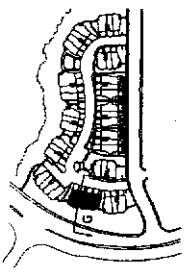
② ELEVATION H



③ ELEVATION I

SECTIONS

CABRILLO COMMONS

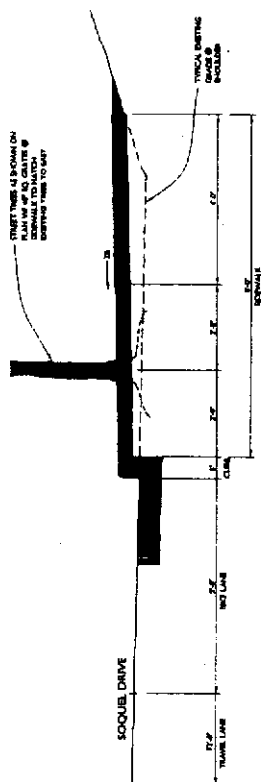


LEGEND

- EXISTING GRADE
- FINISHED GRADE
- BUILDING
- ▨ BUILDING HEIGHT OVER 30'
- ▧ RAIL SLOPE
- ▩ CUT

THACHER &
THOMPSON
ARCHITECTS
AUGUST 3, 1965
AUGUST 24, 1965

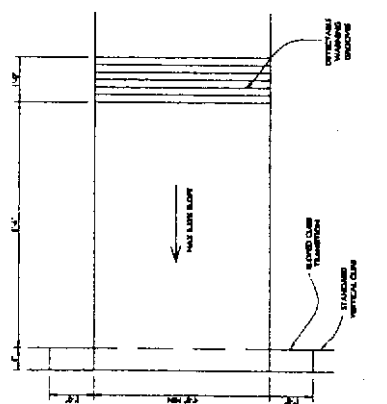
Environmental Review Initial Study
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APPLICATION 03-0065



2 SOQUEL DR. SIDEWALK DETAIL EAST SECTION



4 CURB AND SIDEWALK DETAIL



CURB RAMP 'A'

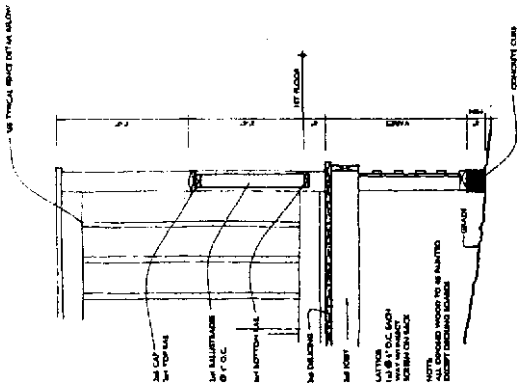
THACHER &
THOMPSON
LABORATORY

500R 11 258WPAACON

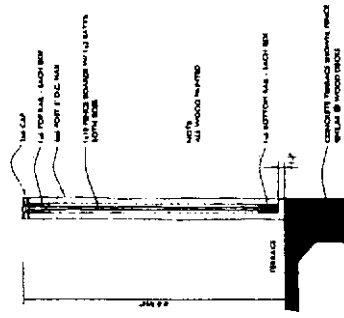
L A B R I L L U L U P P U N S

10

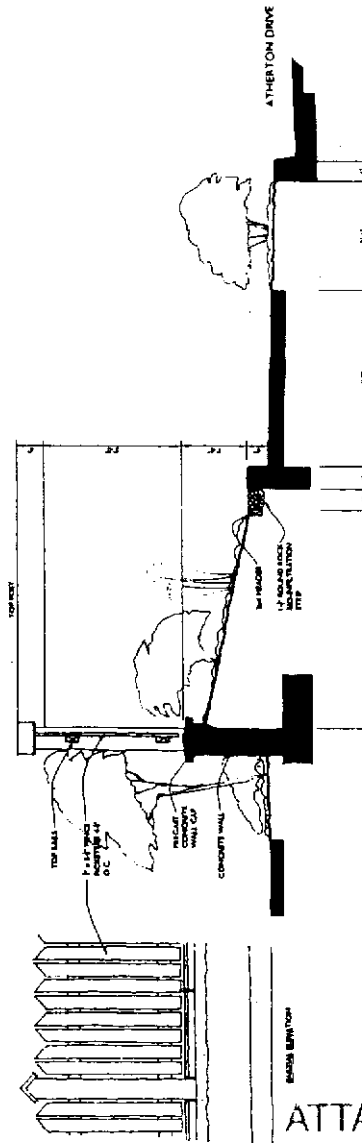
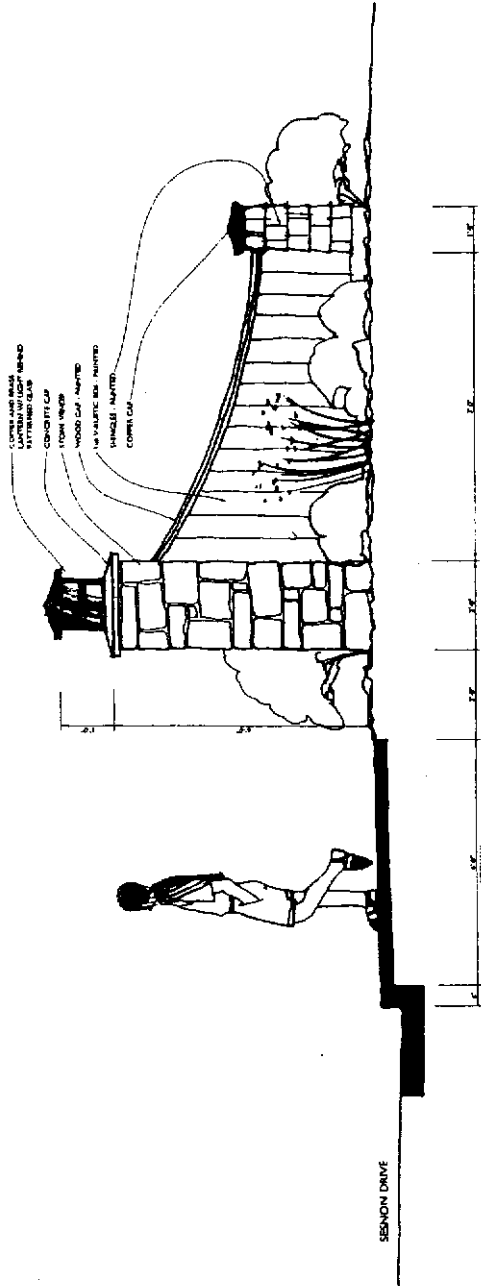
Environ mental Review Initial Study
ATTACHMENT 5, 10 & 14
APPLICATIVE 103-0065



2 TYPICAL WOOD DECK DETAIL



4 TYPICAL TERRACE FENCE DETAIL



3 RETAINING WALL / STREET FACING FENCE DETAIL

URBAN DESIGN DETAILS

CABRILLO COMMONS

THACHER &
THOMPSON
ARCHITECTS

Environmental Review

Initial Study

ATTACHMENT
APPLICATION

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10/19
0065

Tentative Map Tract No. 1471

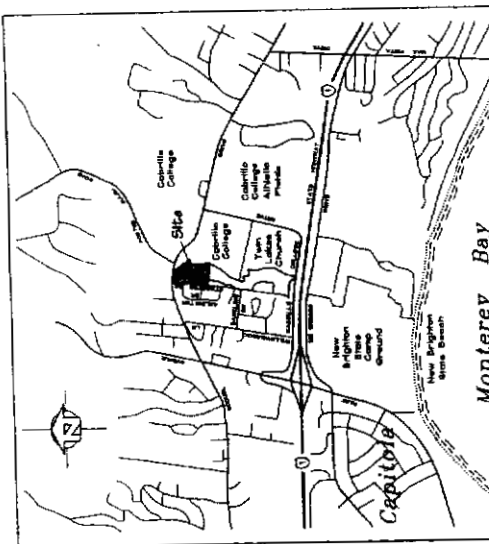
Cabril Commons

A Townhouse Planned Development
Santa Cruz County, California

Index of Sheets

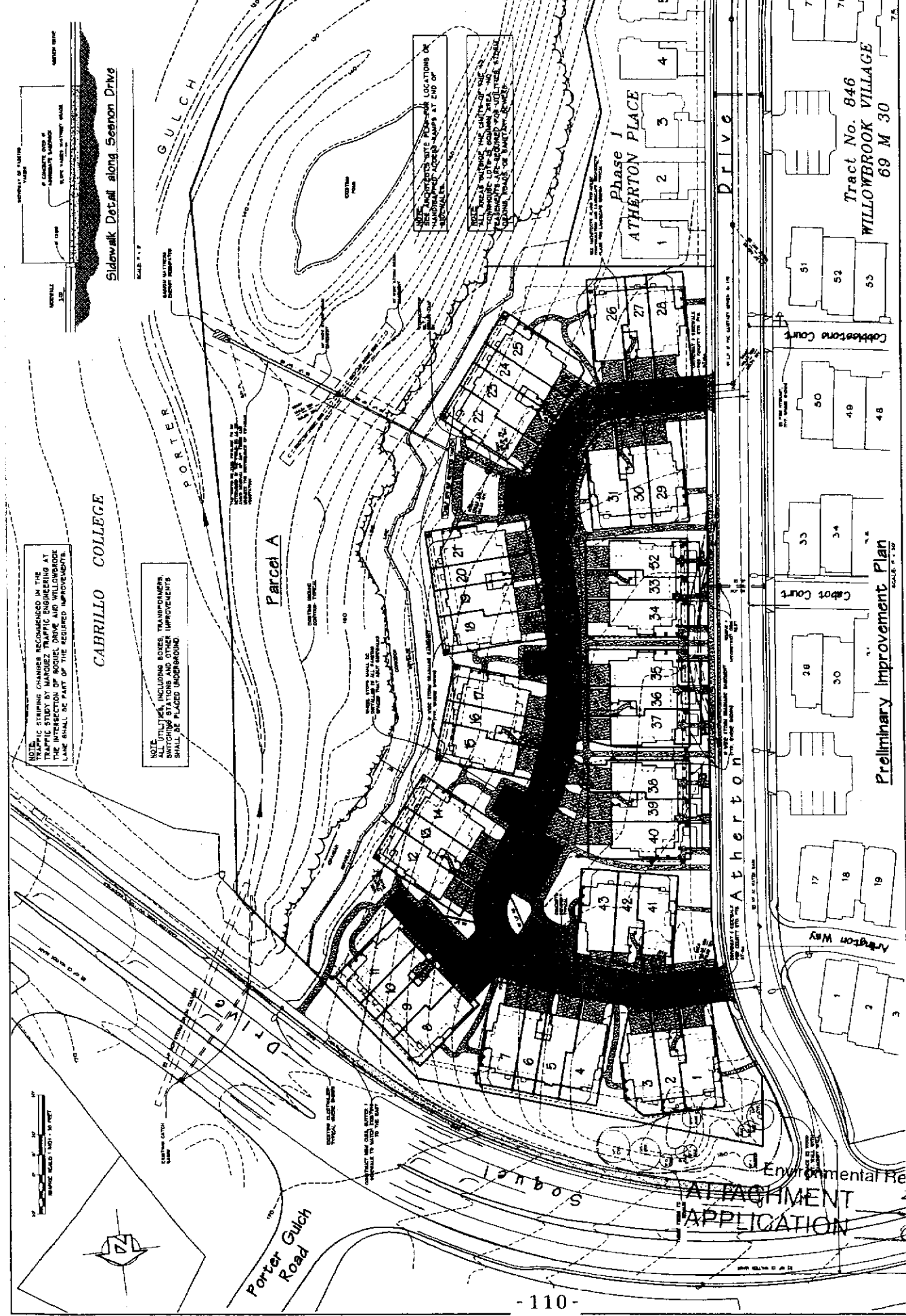
SHEET NO.	DESCRIPTION
1.	COVER SHEET - PROJECT DATA
2.	PROJECT SITE - TYPICAL STREET SECTIONS
3.	TENTATIVE SUBDIVISION MAP
	MAP IMPROVEMENT PLAN
5.	PRELIMINARY SHADING & DRAINAGE PLAN
6.	PROFILES, CRUISS SECTIONS AND NOTES
7.	PROPOSED CON"ROL PLAN AND DETAILS

Vicinity Map



Project Data

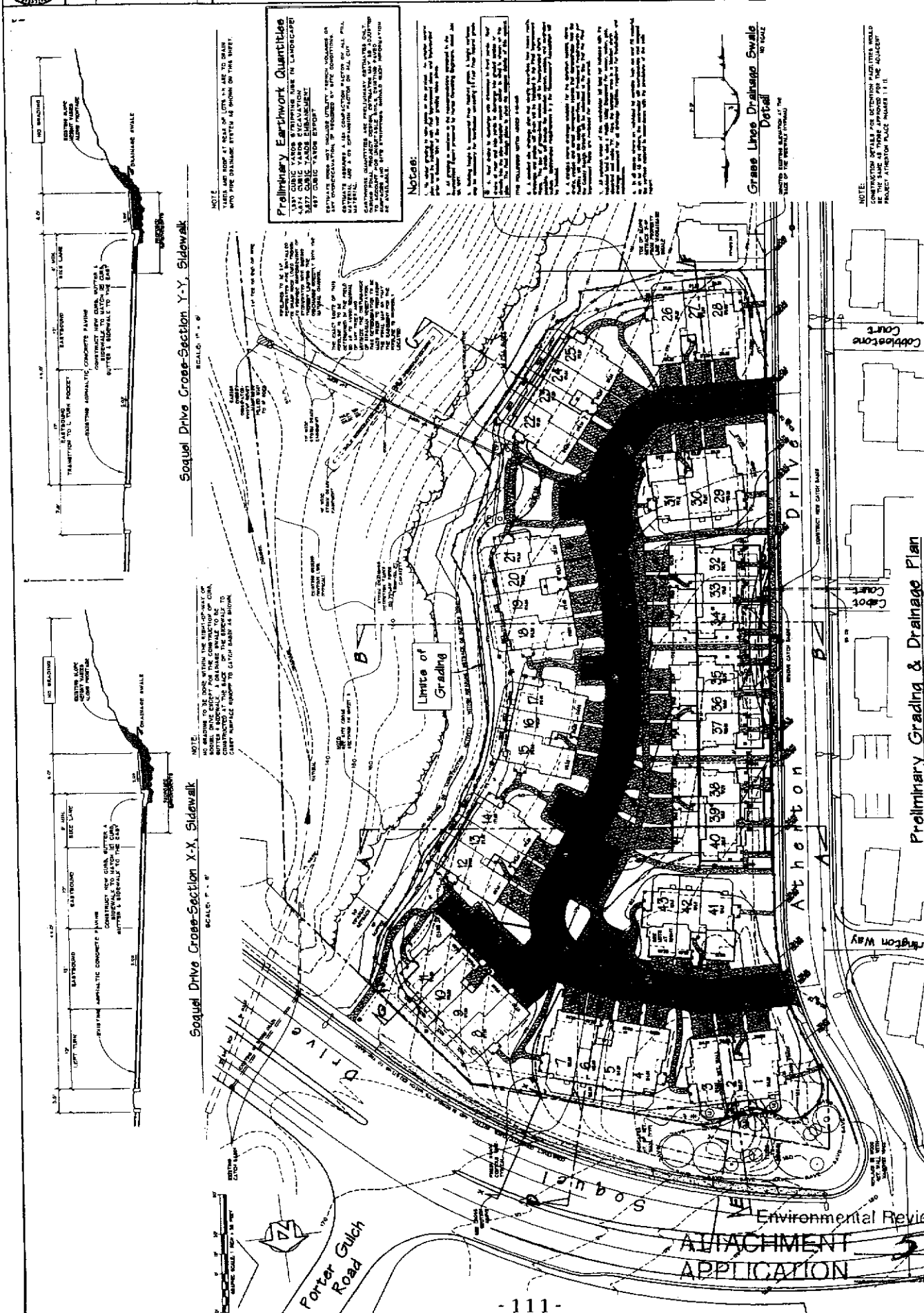
Owner & Subdivider Cabrillo Commons, LLC 274 University Avenue, Suite 210 Los Angeles, California 90030 TEL 408-388-8100 FAX 408-388-8101	Proposed Use 43 Residential Townhouse Units
Project Land Use Planner Richard Spada, Land Use Planning, Inc. 100 Davis Street, Suite 2 Santa Cruz, California 95060 TEL 438-8888 FAX 438-1888	Sewage Disposal Santa Cruz County Sanitation District
Project Architect Thacher and Thompson, Architects 200 Washington Street Santa Cruz, California 95060 TEL 438-3333 FAX 438-7808	Fire Protection Santa Cruz County Fire Protection District
Existing Zoning R-1.5 - Multi-Residential 15,000 sq ft/acre	Water Supply San Jose Water District
General Plan Residential - Urban High Density Range - 1,600 to 4,000 sq ft per lot diversity of housing types for dwelling unit and Urban Open Space	Gas & Electric Pacific Gas & Electric
Existing Use Vacant	Telephone Pacific Bell
	Cable T.V. Comcast
	Land Area of Project 83,317 sq. ft., 1.91 acres
	Area Subject to Easement Area along Santa Cruz River



Tract No. 846
 WILLOWBROOK VILLAGE
 69 M 30

Preliminary Improvement Plan
 SCALE: 1" = 30'

Environmental Review Initial Study
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Soquel Drive Cross-Section Y-Y, Sidewalk
SCALE: 1" = 4'

Soquel Drive Cross-Section X-X, Sidewalk
SCALE: 1" = 4'

Preliminary Earthwork Quantities
 1.441 CUBIC YARDS EXCAVATION
 3.877 CUBIC YARDS EMBANKMENT
 887 CUBIC YARDS EMBANKMENT
 1.441 CUBIC YARDS EXCAVATION
 3.877 CUBIC YARDS EMBANKMENT
 887 CUBIC YARDS EMBANKMENT
 1.441 CUBIC YARDS EXCAVATION
 3.877 CUBIC YARDS EMBANKMENT
 887 CUBIC YARDS EMBANKMENT

Notes:
 1. ALL GRADING SHALL BE TO THE FINISHED GRADE SHOWN ON THIS PLAN.
 2. ALL EXCAVATION SHALL BE TO THE FINISHED GRADE SHOWN ON THIS PLAN.
 3. ALL EMBANKMENT SHALL BE TO THE FINISHED GRADE SHOWN ON THIS PLAN.
 4. ALL GRADING SHALL BE TO THE FINISHED GRADE SHOWN ON THIS PLAN.
 5. ALL EXCAVATION SHALL BE TO THE FINISHED GRADE SHOWN ON THIS PLAN.
 6. ALL EMBANKMENT SHALL BE TO THE FINISHED GRADE SHOWN ON THIS PLAN.
 7. ALL GRADING SHALL BE TO THE FINISHED GRADE SHOWN ON THIS PLAN.
 8. ALL EXCAVATION SHALL BE TO THE FINISHED GRADE SHOWN ON THIS PLAN.
 9. ALL EMBANKMENT SHALL BE TO THE FINISHED GRADE SHOWN ON THIS PLAN.
 10. ALL GRADING SHALL BE TO THE FINISHED GRADE SHOWN ON THIS PLAN.

Grass Line Drainage Swale Detail
 SEE SHEET 6 FOR DETAILS

NOTE:
 CONSULTING OFFICE FOR DETERMINING QUANTITIES WOULD
 BE RESPONSIBLE FOR THE ACCURACY OF THE QUANTITIES
 PRESENTED IN THIS PLAN.

Preliminary Grading & Drainage Plan
 SCALE: 1" = 40'

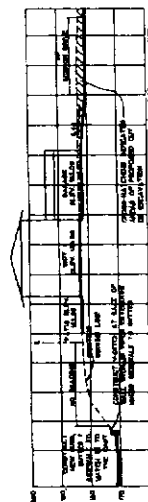
Grading and Geotechnical Notes

[illegible]

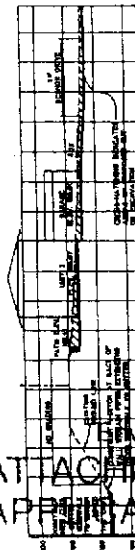
AT LEAST 3 PERCENT ABOVE THE OFFICIAL MOISTURE CONTENT.

ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED
DATE 08-22-2011 BY 60322 UCBAW/SJS/STP

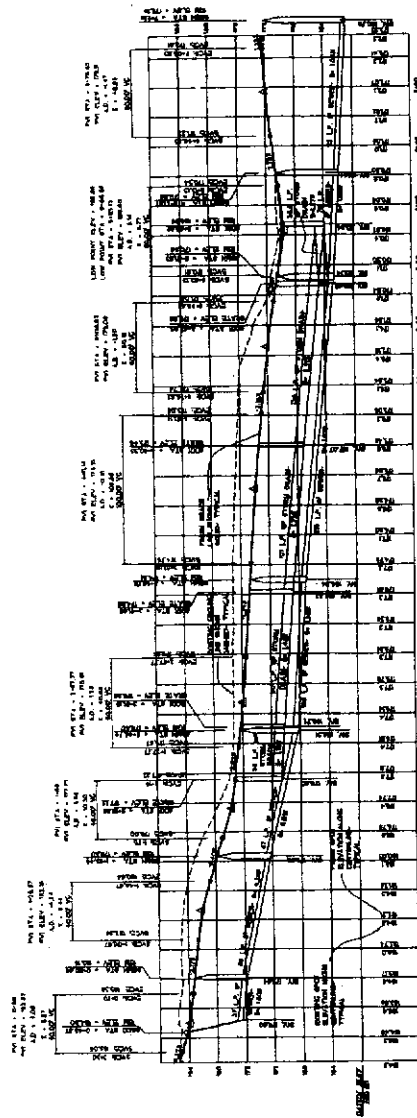
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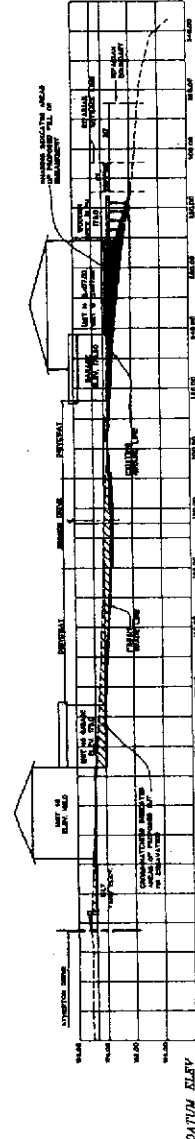
Cross Section D-D



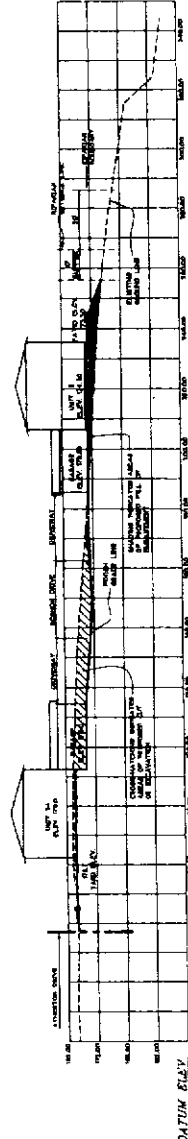
Cross Section E-E



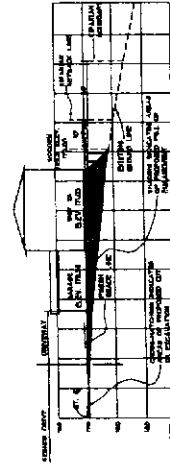
Seanon Drive Centerline Profile



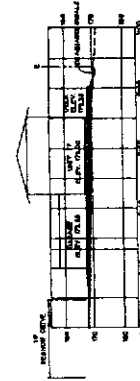
Cross Section A-A
Scale = 10 Horizontal, 1 Vertical



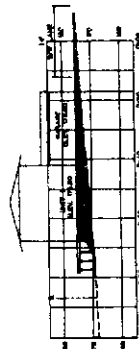
Cross Section B-B



Cross Section C-C



Cross Section F-F



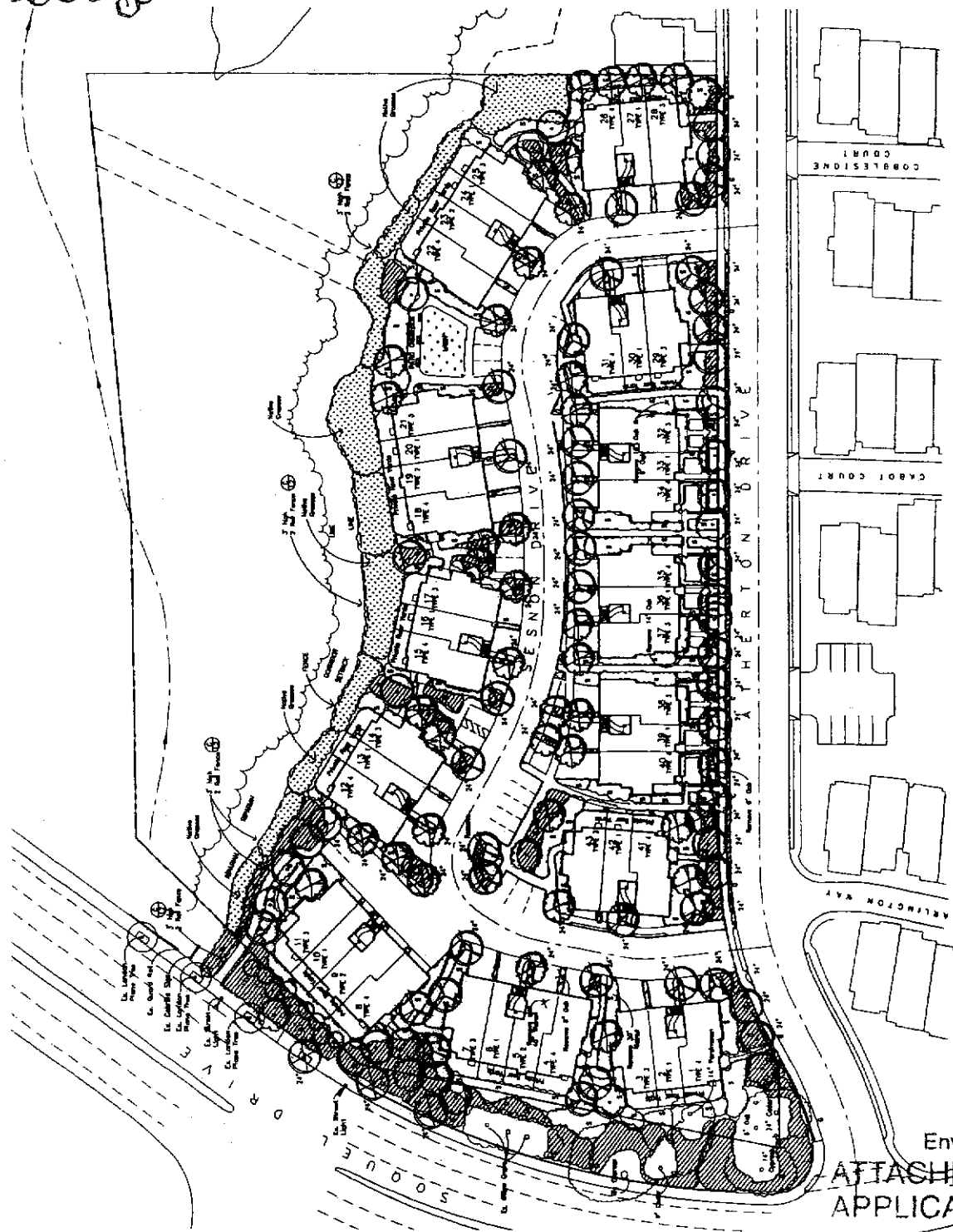
Cross Section G-G

Profiles, Cross Sections and Notes

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ENT	SIZE	STITCHES	NAME	CHROME	NAME	WAVE	HEIGHT
1	10	10	10	10	10	10	10
2	10	10	10	10	10	10	10
3	10	10	10	10	10	10	10
4	10	10	10	10	10	10	10
5	10	10	10	10	10	10	10
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14	10	10	10	10	10	10	10
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57	10	10	10	10	10	10	10


Plant Notes

[illegible]

Planting Plan

1"=30'-0"

0' 30' 60'



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ATTACHMENT 5
APPLICATION 0

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+0065



County of Santa Cruz

PLANNING DEPARTMENT

701 OCEAN STREET, 4TH FLOOR, SANTA CRUZ, CA 95060-4000
(831) 454-2580 FAX (831) 454-2131 TOD (831) 454-2123
ALVIN D. JAMES, DIRECTOR

March 3, 2003

Richard Beale
100 Doyle Street, Suite E
Santa Cruz, CA, 95062

SUBJECT: Review of Geotechnical Investigation by Harza Engineering
Dated **July 25, 1997**, Report No.: **L879-G**
Updated by Fugro West, Inc. on February **19, 2003**
Atherton Place Development
APN: **037-251-21**; Application No.: **03-0065**

Dear Mr. Beale:

Thank you for submitting the soil report for the parcel referenced above. The report was reviewed for conformance with County Guidelines for Soils/Geotechnical Reports and also for completeness regarding site-specific hazards and accompanying technical reports (e.g. geologic, hydrologic, etc.). The purpose of this letter is to inform you that the Planning Department has accepted the report and the following recommendations become permit conditions:

1. All report recommendations must be followed
2. An engineered foundation plan is required. This plan must incorporate the design recommendations of the soils engineering report including measures to mitigate differential settlement where building pads are constructed on cut/fill lines.
3. Final plans shall follow drainage recommendations as detailed in the soils engineering report.
4. Final plans shall reference the approved soils engineering report and state that all development shall conform to the report recommendations.
5. Prior to building permit issuance, the soil engineer must submit a brief building, grading and drainage plan review letter to Environmental Planning stating that the plans and foundation design are in general compliance with the report recommendations. If, upon plan review, the engineer requires revisions or additions, the applicant shall submit to Environmental Planning two copies of revised plans and a final plan review letter stating that the plans, as revised, conform to the report recommendations.
6. The soil engineer must inspect all foundation excavations and a letter of inspection must be submitted to Environmental Planning and your building inspector prior to placement of concrete.

Environmental Review Initial Study

ATTACHMENT 6, 1 of 3
APPLICATION 03-0065

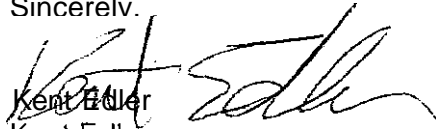
7. For all projects, the soil engineer must submit a final letter report to Environmental Planning and your building inspector regarding compliance with all technical recommendations of the soil report prior to final inspection. For all projects with engineered fills, the soil engineer must submit a final grading report (reference August 1997 County Guidelines for Soils/Geotechnical Reports) to Environmental Planning and your building inspector regarding the compliance with all technical recommendations of the soil report prior to final inspection.

The soil report acceptance is only limited to the technical adequacy of the report. Other issues, like planning, building, septic or sewer approval, etc., may still require resolution.

The Planning Department will check final development plans to verify project consistency with report recommendations and permit conditions prior to building permit issuance. If not already done, please submit two copies of the approved soil report at the time of building permit application for attachment to your building plans.

Please call 454-3168 if we can be of any assistance

Sincerely,


Kent Miller

Associate Civil Engineer

Cc: Randy Adams, Project Planner
Atherton Place Development, LLC

Environmental Review Initial Study
ATTACHMENT 6, 2 of 3
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FINAL SOILS -GRADING REPORTS

Prior to final inspection clearance a final soils report must be prepared and submitted for review for all projects with engineered fills. These reports, at a minimum, must include:

1. Climate Conditions

Indicate the climate conditions during the grading processes and indicate any weather related delays to the operations.

2. Variations of Soil Conditions and/or Recommendations

Indicate the accomplished ground preparation including removal of inappropriate soils or organic materials, blending of unsuitable materials with suitable soils, and keying and benching of the site in preparation for the fills.

3. Ground Preparation

The extent of ground preparation and the removal of inappropriate materials, blending of soils, and keying and benching of fills.

4. Optimum Moisture/Maximum Density Curves

Indicate in a table the optimum moisture maximum density curves. Append the actual curves at the end of the report.

5. Compaction Test Data

The compaction test locations must be shown on same topographic map as the grading plan and the test values must be tabulated with indications of depth of test from the surface of final grade, moisture content of test, relative compaction, failure of tests (i.e. those **less** than 90% of relative compaction), and re-testing of failed tests.

6. Adequacy of the Site for the Intended Use

The soils engineer must re-confirm her/his determination that the site is safe for the intended use.

Environmental Review Initial Study
ATTACHMENT 6, 3 of 3
APPLICATION 03-0065

FUGRO WEST, INC.



1000 Broadway, Suite 200
Oakland, California 94607
Tel: (510) 268-0461
Fax (510) 268-0137

February 19, 2003
Project No. 03.143

Atherton Place Development Corporation, LLC
2516 Samaritan Drive, Suite K
San Jose, CA 95124

Attention: Mr. Brad Bowman

Re: Geotechnical Engineer of Record and Plan Review
Cabrillo Commons, Tract 1471, Santa Cruz County, California

Dear Mr. Bowman:

In accordance with the request of Mr. Ron Powers of Richard Beale Land Use Planning, Inc, Fugro West, Inc. (Fugro) has reviewed the Tentative map for the proposed Cabrillo Commons townhouse development, Tract 1471, located southeast of the intersection of Atherton and Soquel Drives in Santa Cruz County, California. The development will consist of 43 attached townhome units, in clusters of 2 to 4 units, with associated interior streets.

GEOTECHNICAL ENGINEER OF RECORD

Harza Engineering Company (Harza) had previously performed a geotechnical investigation for the project, the results of which were presented in their report titled, "Geotechnical Investigation, Twin Lakes Residential Development, Aptos, California," dated July 25, 1997. Following a corporate merger in 2001, Harza Engineering Company was renamed Montgomery Watson Harza (MWH). Subsequent to that merger, in March 2002, Fugro West, Inc. (Fugro) purchased the Oakland, Hayward, and Salinas offices of Montgomery Watson Harza (MWH) Energy & Infrastructure.

Fugro has recently observed the current site conditions and reviewed the contents of the Harza geotechnical report for the subject site. Based on our review, we conclude that the Harza report is consistent with current geotechnical engineering standards as well as with existing site conditions, and therefore, Fugro West agrees to be the geotechnical engineer of record for the proposed Cabrillo Commons site development.

TENTATIVE MAP

In addition, Fugro reviewed the preliminary layout for the townhomes and interior streets as shown on Sheets 1 through 4 of the Tentative Map for the Cabrillo Commons development. These plans were prepared by Ifland Engineers, Inc. dated January 10, 2003. We understand

Environmental Review Initial Study
ATTACHMENT 7, 1 of 42
APPLICATION 03-0065



that our firm will be provided the opportunity to review the progress and final versions of the grading and improvement plans for the project to confirm that these plans were prepared in accordance with the geotechnical recommendations as presented in Harza's July 1997 report and any supplemental recommendations as provided by Fugro.

If you have any questions, please feel free to contact us.

Sincerely,

FUGRO WEST, INC.

Dawn Y. Kruckenberg
Dawn Y. Kruckenberg, P.E., G.E.
Associate Engineer



DYK:am

Copies Submitted:

Addressee (1)

Mr. Ron Powers - Richard Beale Land Use Planning, Inc. (3)

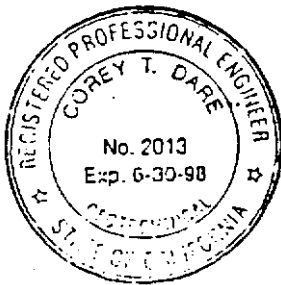
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ATTACHMENT 7.2 A 42
APPLICATION 103-0065

Geotechnical Investigation
Twin Lakes Residential Development
Aptos, California

July 25, 1997

Prepared For:

Kaufman and Broad, Monterey Bay, Inc.
1604 North Main Street
Salinas, CA 93906

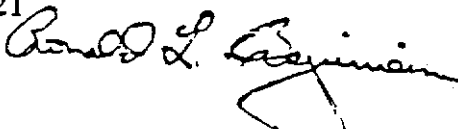


Prepared By:

Harza Consulting Engineers and Scientists
425 Roland Way
Oakland, CA 94621

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Corey T. Dare, P.E., G.E.
Project Manager


Ronald L. Bajuniemi, P.E., G.E.
Chief Geotechnical Engineer

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July 25, 1997

Mr. Augie Dent
Kaufman and Broad, Monurey Bay, Inc.
1604 North Main Street
Salinas, CA 93906

Re: Geotechnical Investigation
Twin Lakes Residential Development, Aptos, California
Project No.: L879-G

Dear Mr. Dent:

As requested, Harza has performed a geotechnical investigation for the proposed Twin Lakes residential development project. The accompanying report presents the results of our field investigation, laboratory tests, and engineering analysis. The soil and foundation conditions are discussed and recommendations for the soil and foundation engineering aspects of the project are presented. Conclusions and recommendations contained herein are based upon applicable standards of our profession at the time this report has been prepared. Copies of this report are furnished only to provide the factual data which were gathered and summarized.

Submittal of this report completes our current scope of work on the project. Plan review, representation at public meetings, consultation, performance of any further studies required by review agencies, and subsequent earthwork observation and testing services are beyond our current scope of work and would require separate contracts.

Should you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,

Harza Consulting Engineers and Scientists



Patrick Stevens, P.E., G.E.
Vice President

CTD/PS:machlenc1.

Copies: Addressee (3)

Mr. Norman Schwartz (Bolton Hill Company - 1)

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Geotechnical Investigation
Twin Lakes Residential Development
Aptos, California

1.0 INTRODUCTION

This report presents the results of our geotechnical investigation for the proposed Twin Lakes Residential Development project. The proposed project will be located on two irregularly-shaped, adjoining parcels bounded by Soquel Drive to the north, Atherton Drive and private property to the west, Cabrillo College Drive to the south, and the Tannery Gulch creek channel to the east. According to a parcel and topographic map provided to us, the total area of the two parcels is 18.2 acres, of which approximately 9.2 acres has been classified as developable.

Eased on our conversations with Mr. Barry Freeland of Kaufman and Broad, and Mr. Norman Schwartz of the Bolton Hill Company, it is our understanding that the project will consist of the construction of a yet-to-be-determined number of wood-frame, single-family residential structures on the portion of the parcels classified as developable. The site slopes moderately to the east toward the creek bed, and therefore will require a moderate degree of site grading, depending on the proposed configuration of the development. We understand that construction of cut and fill slopes will be required to create level building pads at the site. Based on the existing topography of the site, recommendations are presented for construction of cut and fill slopes 20 feet in height or less.

2.0 SCOPE OF WORK

The scope of work of this investigation included a review of a previous geotechnical investigation for the property by others; site reconnaissance, subsurface exploration, laboratory testing, engineering analysis of the field and laboratory data and preparation of this report. The data obtained and the analyses performed were for the purpose of providing design and construction criteria for site earthwork, building foundations, slab-on-grade floors, retaining walls and pavements.

This report has been prepared in accordance with generally accepted geotechnical engineering practices, and with our agreement with Kaufman and Broad, Monterey Bay, Inc. for the exclusive use of Kaufman and Broad, Monterey Bay, Inc. and their consultants for specific application to

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the proposed Twin Lakes Residential Development project as described herein. In the event that there are any changes in the ownership, nature, design or location of the proposed Twin Lakes project or if any future additions are planned, the conclusions and recommendations contained in this report shall not be considered valid unless 1) the project changes are reviewed by Harza and 2) conclusions and recommendations presented in this report are modified or verified in writing. Reliance on this report by another must be at their risk unless of course, we are consulted on the use or limitations. We cannot be responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services without our further consultation. We can neither vouch for the accuracy of information supplied by others, nor accept consequences for unconsulted use of segregated portions of this report.

3.0 SITE INVESTIGATION

Subsurface exploration was performed using a truck-mounted, 8-inch diameter, continuous flight hollow stem auger. Six exploratory borings were drilled on June 30 through July 1, 1997, to a maximum depth of about 42 feet. These borings were intended to supplement the subsurface information available from 6 borings drilled on site in 1987 by a previous investigator. The approximate locations of both present and previous borings are shown on the Site Plan, Figure 1. Logs of the borings and details regarding the field investigation are included in Appendix A. A summary table of materials encountered in borings drilled previously on-site is also included in Appendix A. The results of our laboratory tests are discussed in Appendix B.

3.1 Surface

The site property is irregular in shape, and consists of two parcels bounded on the east by the meandering Tamery Gulch creek channel. Parcel 1, comprising the northern portion of the site; is bounded on the west by Atherton Drive, and is virtually separated from Parcel 2 to the south by the creek channel, which intersects Atherton Drive at Baseline Drive. Parcel 2 is located south of Baseline Drive, is bounded on the west by private developed property. The site property has a total plan area of 18.2 acres, of which approximately 9.2 acres has been classified as developable. The site slopes moderately downward to the east toward the creek channel, ranging from about 5H:1V (horizontal to vertical) on the western side of the property to on the order of 3H:1V east toward the creek channel.

At the time of our field investigation, the site was predominantly covered with native trees and grassy vegetation, becoming thickly wooded within the creek channel. The remnants of old concrete foundations, a wood shack, and pavement were noted on the northwest corner of Parcel Number No. 1. The remainder of the site, including Parcel 2, was observed to be vacant and undeveloped.

3.2 Subsurface

The surface soils encountered in our exploratory borings generally consisted of a surficial layer of stiff silty clay underlain by interbedded, medium dense to dense, silty to clayey sands which extended to the maximum depth explored of about 42 feet. The surficial clays were encountered to depths of 1 to 3½ feet, and appeared to be moderately weak and compressible. Detailed descriptions of the soils encountered in each of the exploratory borings are presented on the boring logs in Appendix A.

The attached boring logs and related information depict location-specific subsurface conditions, encountered during our field investigation. The approximate locations of the borings were determined by pacing and should be considered accurate only to the degree implied by the method used. The passage of time could result in changes in the subsurface conditions due to environmental changes.

3.3 Ground Water

Free ground water was encountered in Borings EB-3 and EB-5 at depths of about 13 to 37 feet at the time of drilling. Borings EB-3 and EB-5 were left open for a period of approximately 1 to 2 hours at which time ground water was measured at depths of 10% and 36 feet, respectively. All other borings were backfilled immediately after drilling. It should be noted that the borings may not have been left open for a sufficient period of time to establish equilibrium ground water conditions. In addition, fluctuations in the ground water level could occur due to change in seasons, variations in rainfall, and other factors.

3.4 Geology and Seismicity

The subdivision is located in Aptos, California which is bounded by the Gabilan Range to the north and northeast and the Pacific Ocean to the south. According to available geologic maps, portions of the site not bordering the Tannery Gulch creek channel to the east are underlain by Pleistocene emergent coastal terrace deposits consisting of semiconsolidated, generally well-sorted

sand with a few thin, relatively continuous layers of gravel. Portions of the site bordering the **Tannery** Gulch creek channel are underlain by very thick bedded yellowish-grey tufaceous and diatomaceous siltstone containing thick interbeds of bluish-gray, semifriable, fine-grained andesitic sandstone.

Earthquake intensities will vary throughout the Monterey Bay Area, depending upon the magnitude of **earthquake**, the distance of the site from the causative fault, and the type of materials underlying the site. The site will probably be subjected to at least one moderate to severe earthquake that **will** cause strong ground shaking. The **site** is located approximately 8 miles southwest, 5 miles northeast, and 10 miles northeast, respectively, of the Zayante, Monterey Fault Complex and San Gregorio fault zones. In addition, the site is also located about 11, 24 and 27 miles southwest of the active San Andreas, Calaveras and Hayward fault zones, respectively. Other faults in the site vicinity which are not considered active include the Ben Lomond fault variably located 2 to 5 miles to the north of the site. It should be noted that ground surface accelerations on the order of 0.47g to 0.54g were recorded in the City of Santa Cruz during the 1989 Loma Prieta Earthquake.

3.5 Liquefaction

Soil liquefaction is a phenomenon primarily associated with saturated cohesionless soil layers located close to the ground surface. These soils lose strength during cyclic loading, such as imposed by earthquakes. During the loss of strength, the soil acquires a "mobility" sufficient to permit both horizontal and vertical movements. Soils that are most susceptible to liquefaction are clean, loose, uniformly graded, saturated, fine-grained sands that lie close to the ground surface, a depth usually considered to be 50 feet.

Based on the present and previous borings, the near-surface soils are primarily medium dense to very dense and contain significant amounts of silt and clay. Therefore, the liquefaction potential on-site is considered to be low.

4.0 CONCLUSIONS AND RECOMMENDATIONS

It is our opinion that the site is suitable for the proposed residential development from a geotechnical engineering standpoint. The conclusions and recommendations presented in this report should be incorporated in the design and construction of the project to avoid any possible soil and/or foundation related problems. The moderately weak and compressible clayey surface soils encountered on-site, and the potential existence of cut/fill transitions and differential fill

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thicknesses below building pads are the primary considerations for foundation design. To minimize potential damage to the proposed residences due to future settlements, we recommend in areas where the surficial clays are not moved by mass grading, the upper one foot of exposed subgrades following clearing be reworked and recompactd. To minimize the potential for differential settlements across building pads situated on cut/fill transitions, we recommend building pads across such transitions be underlain by a minimum three-foot thickness of fill, or by a thickness equivalent to the maximum thickness of the fill layer below the fill portion of the pad, whichever is less. In addition, the proposed grading should be designed so that no more than 5 feet of differential fill thickness exists below any residential foundation. Detailed earthwork and foundation recommendations for use in design and construction of the project are presented below.

We recommend that our firm review the final design and specifications to check that the earthwork and foundation recommendations presented in this report have been properly interpreted and implemented in the design and project specifications. We can assume no responsibility for misinterpretation of our recommendations if we do not review the plans and specifications.

4.1 Earthwork

4.1.1 Clearing and Site Preparation

The site should be cleared of all obstructions including any buried tanks and foundations, abandoned utilities, pavements, concrete slabs, trees, roots, septic tanks and leach lines, and debris. Holes resulting from the removal of underground obstructions extending below the proposed finish grade should be cleared and backfilled with suitable material compacted to the requirements given below under Item 4.1.5, "Compaction". We recommend backfilling operations for any excavations to remove deleterious material be carried out under the observation of the geotechnical engineer.

At least two weeks prior to grading, the site should be disced to remove standing surface vegetation. However, portions of the site containing heavy surface vegetation should be stripped to an appropriate depth to remove these materials. At the time of our field investigation, we estimate that a stripping depth of approximately 2 inches would be required. The amount of actual stripping should be determined in the field by the geotechnical engineer at the time of construction. Stripped materials should be removed from the site or stockpiled for later use in landscaping, if desired.

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4.1.2 Cut and Fill Pads

The proposed grading should be designed so that no more than 5 feet of differential fill thickness exists below ~~any~~ residential foundation. If any portion of a foundation is bearing on cut and other portions of the foundation are bearing on compacted fill, we recommend that the portion of the foundation bearing on cut be overexcavated at least 3 feet or the maximum thickness of the fill portion of the pad, whichever is less, such that the entire foundation is bearing on an equivalent thickness of fill or on at least 3 feet of compacted fill, whichever is less. No foundation slab should be allowed to be supported directly on both fill and cut. Figure 2 provides an illustration of recommended grading at cut/fill transition lots and differential fill thickness lots.

4.1.3 Subgrade Preparation

After the completion of clearing and stripping, soil exposed in areas to receive structural fill, slabs-on-grade or pavements should be scarified to a depth of 12 inches, moisture conditioned to slightly above optimum water content and compacted to the requirements for structural fill.

4.1.4 Fill Material

On-site soil below the stripped layer and having an organic content of less than 3 percent by volume can be used as fill except where non-expansive import is required beneath the slabs. All fill placed at the site including on-site soils should not contain rocks or lumps larger than 6 inches in greatest dimension with not more than 15 percent larger than 2.5 inches. In addition, imported fill should be predominantly granular with a plasticity index of 12 or less.

4.1.5 Compaction

All structural fill, including the upper 12 inches of subgrade soils beneath pavements, should be compacted to at least 95 percent relative compaction as determined by ASTM Designation D1557- (latest edition). Fill material should be spread and compacted in lifts not exceeding 8 inches in uncompacted thickness.

Based on results of our field and laboratory investigation, on-site soil that is removed and recompacted to an average relative compaction of 97 percent, as determined by ASTM Test Designation D 1557, will shrink in volume. We estimate that the surficial native soils will likely experience a volume shrinkage of about 15 percent when reused as compacted fill.

4.1.6 Cut and ~~Fill~~ Slopes

Fill placed on slopes should be constructed in accordance with the recommendations shown on Figure 3, Typical ~~Fill~~ Placement on Slopes. Engineered fill slopes using on-site or import soils, and cut slopes should have a maximum inclination of 2H:1V.

Where ~~fills~~ are placed on slopes steeper than 6H:1V, the fills should be keyed a minimum of 5 feet into competent, undisturbed native soil. Keyways should be a minimum of 15 feet wide, and in general, a ~~subdrain~~ should be placed at the bottom and to the rear of each keyway. Keyways should be sloped at least 2 percent back into the hillside toward the subdrain.

Subdrains should consist of rigid, perforated pipe, surrounded by at least 18-inches of ¾-inch uniformly graded, crushed drain rock and Mirafi 140N filter fabric or equivalent. As an alternative to using ¾-inch drain rock and filter fabric, Caltrans Class 2 Permeable Material may surround the drain pipe. The pipe should consist of 4-inch diameter SDR35 perforated pipe. Subdrains should be connected to solid collector pipe that channel the water to suitable discharge facilities. Subdrain clean-outs should be provided as appropriate. Subdrain systems may be omitted where the maximum thickness of fill is less than four feet, or where approved by the Geotechnical Engineer during fill construction.

For cut or fill slopes 20 feet or greater in height, Harza should be consulted for further design recommendations.

4.1.7 Setbacks

Residential structures should be set back at least 15 feet from the top of slopes less than 20 feet in height, as measured laterally from the edge of the foundation to the slope face. Residential structures should also be set back at least 10 feet from the bottom of slopes that are less than 20 feet in height.

Residential structures may be located closer to slope edges provided the foundations are engineered to accommodate potential slope ravelling, sloughing, creep, or erosion. Harza can provide additional recommendations if requested for structures located closer to the edges of slopes than the setback distances previously presented.

4.1.8 Trench Backfill

Pipeline ~~trenches~~ should be backfilled with fill placed in lifts of approximately 8 inches in uncompacted thickness. However, thicker lifts can be used provided the method of compaction is approved by the geotechnical engineer, and the required *minimum* degree of compaction is achieved.

If on-site soil is used as trench backfill it should be compacted to at least 90 percent relative compaction by mechanical means only (no jetting ~~will be~~ allowed). Imported sand can be used for trench backfill if it is compacted to at least 95 percent relative compaction and sufficient water is added during backfilling operations to prevent the soil from "bulking" during compaction.

The upper 3 feet of trench backfill in slab and pavement areas should be compacted to at least 95 percent relative compaction.

4.1.9 Surface Drainage

The surface grades adjacent to tops of slopes should be graded at least 2 percent away from the top of slope to minimize ponding of water. No surface drainage should be allowed to flow over the top of slopes. Concrete-lined, steel-bar reinforced Vditches should be provided at the top of all cut and fill slopes for the project. Concrete Vditches should be installed with the lip of the gutter cut at least 2-inches below adjacent surface grade. Forming and backfilling around V-ditches should not be allowed.

Positive surface gradients of at least 2 percent should be provided adjacent to the residential structures to direct surface water away from foundations and slabs toward suitable discharge facilities. Roof downspout water should be collected in closed pipes and directed away from the residences to suitable discharge facilities. Ponding of surface water should not be allowed adjacent to the residences, on pavement, nor at toes or tops of slopes. Also, collected water should not be allowed to flow onto slopes. Area drains should be provided at all landscape and lawn areas around individual residences.

All Vditches should discharge to suitable discharge facilities. Provisions should be made for the long-term maintenance of the site drainage system. Any damage to the drainage system should be repaired in an expedient manner to eliminate the possibility of concentrating surface flow and causing erosion.

4.1.10 Erosion Control

Long-term erosion control is critical for the stability of cut and fill slopes at the site. We recommend all exposed cut and fill slopes be planted with appropriately designed erosion-resistant vegetation, including ground cover and trees. In addition, appropriate erosion control should be designed by the Civil Engineer at the intake and outlet works of my culverts.

4.1.11 Construction During Wet Weather Conditions

If construction proceeds during or shortly after wet weather conditions, the moisture content of the on-site soils could be appreciably above optimum. Consequently, subgrade preparation, placement and/or reworking of on-site soil as structural fill might not be possible. Alternative wet weather construction recommendations can be provided by the geotechnical engineer in the field at the time of construction, if appropriate.

4.1.12 Guide Specifications

All earthwork should be performed in accordance with the Guide Specifications - Site Earthwork presented in Appendix C. These specifications are general in nature and the final specifications should incorporate all recommendations presented in this report.

4.2 Foundation Support

4.2.1 Spread Footings

We recommend that the buildings be supported on conventional continuous and isolated spread footings bearing on either undisturbed native soils or compacted fills. The exterior walls should be underlain by a continuous spread footing providing total enclosure of the perimeter of the building. Footings should be at least 12 inches wide and should be founded at least 18 inches below lowest adjacent finished grade. Footings located adjacent to other footings or utility trenches should bear below an imaginary 1.5:1 (horizontal to vertical) plane projected upward from the bottom edge of the adjacent footings or utility trench.

At the above depths, the footings should be designed for an allowable bearing pressure of 1,500 pounds per square foot due to dead loads. 2,000 pounds per square foot due to dead plus live loads and 3,000 pounds per square foot for all loads, including wind or seismic. These allowable bearing pressures are net values; therefore, the weight of the footing can be neglected for design purposes.

Continuous footings should be designed with adequate steel reinforcement, both top and bottom, to provide structural continuity and permit spanning of local irregularities.

Any visible cracks in the bottoms of the footing excavations should be closed by wetting prior to construction of the foundations. We recommend that we observe the footing excavations prior to placing reinforcing steel or concrete, to check that footings are founded on appropriate material.

Settlement of spread footing foundations under the proposed building loads is anticipated to be within tolerable limits for the proposed residential structures.

4.2.2 Structural Slab Foundations and Interior Slabs-on-Grade

As an alternative to footing foundations, the residential structures may be supported on structural slab foundations bearing on properly compacted structural fill. The following structural slab design recommendations are provided for use in accordance with the parameters presented in the 1994 edition of the Uniform Building Code, Volume 2, Section 1815. The subgrade materials beneath the slabs should be considered to have an unconfined compressive strength of 1,500 pounds per square foot, and a Weighted Plasticity Index of 20 percent. The supporting subgrade should be considered capable of supporting a dead plus live load of 2,000 pounds per square foot. The slabs should be at least 8 inches thick and be appropriately reinforced so that they are capable of cantilevering a minimum distance of 3 feet and free spanning a minimum diameter of 8 feet.

Settlement of the structural slab foundations supported on the engineered fill is estimated to be within tolerable limits for the proposed residential structures.

Where structural slabs are located adjacent to utility trenches, the slab bearing surfaces should bear below an imaginary 1.5 horizontal to 1 vertical plane extending upward from the bottom edge of the adjacent utility trench. Alternatively, the slab reinforcing could be increased to span the area defined above assuming no soil support is provided.

Slab foundation and slab-on-grade subgrade surfaces should be proof-rolled to provide a smooth, unyielding surface for slab support.

Migration of moisture through slab foundations and slabs-on-grade should be minimized by providing a moisture barrier between the subgrade soils and the bottom of the slabs. We recommend the moisture barrier consist of 4 inches of uniformly graded, free draining gravel overlain by an impermeable membrane at least 10 mil thick. The impermeable membrane should be overlain by 2 inches of sand that is moistened just prior to placing of the concrete.

A minimum 12-inch wide concrete barrier or "thickened edge" that is supported directly on the subgrade materials should be provided at the perimeter of the slab to provide a water cutoff for the moisture barrier. In addition, interior areas of the slab which support point or line loads should also be thickened a minimum of 12 inches and supported directly on the subgrade.

Concrete slabs retain moisture and often take many months to dry. We recommend that carpeters that allow air to pass through them be used over concrete floor slabs. Additionally, if vinyl floor tiles are used, the concrete floor slab should be given sufficient time to air dry before the tiles are applied. Alternatively, a floor sealant could be applied over the concrete to minimize moisture from accumulating under the floor tiles.

4.2.3 Drilled, Cast-in-Place Piers

As an alternative to footing foundations, sound or retaining walls may be supported on drilled, cast-in-place friction piers. The pier foundations should have a minimum diameter of 12 inches and a minimum center-to-center spacing of three times the pier diameter. The piers should be designed using an allowable dead plus live load skin friction of 500 pounds per square foot with a one-third increase for all loads, including wind and seismic.

4.2.4 Retaining Walls

Retaining walls must be designed to resist both lateral earth pressures and any additional lateral loads caused by surcharging.

We recommend that unrestrained walls be designed to resist an equivalent fluid pressure of 35 pounds per cubic foot. This assumes a level backfill. Restrained walls should be designed to resist an equivalent fluid pressure of 35 pounds per cubic foot plus an additional uniform lateral pressure of $7H$ pounds per square foot where H = height of backfill above the top of the wall.

footing in feet. In addition, walls with inclined backfill should be designed for an additional equivalent fluid pressure of 1 pound per cubic foot for every 2 degrees of slope inclination.

Wall subjected to surcharge loads should be designed for an additional uniform lateral pressure equal to one-third or one-half the anticipated surcharge load for unrestrained or restrained walls, respectively.

The recommended lateral pressures assume walls are fully-backdrained to prevent the build-up of hydrostatic pressures. Adequate drainage could be provided by means of either weep holes with permeable material installed behind the walls or by means of a system of subdrains. For the subdrain system, the top of the perforated pipe should be below the bottom of the adjacent floor slab.

Retaining wall backfill less than 5 feet deep should be compacted to at least 90 percent relative compaction using light compaction equipment. Backfill greater than 5 feet deep should be entirely compacted to at least 95 percent relative compaction. If heavy compaction equipment is used, the walls should be appropriately designed to withstand loads exerted by the heavy equipment and/or temporarily braced.

Retaining walls should be supported on spread footing foundations designed in accordance with the recommendations presented previously under Item 4.2.1, "Spread Footings", or on drilled pier foundations designed in accordance with the recommendations presented previously under Item 4.2.3, "Drilled, Cast-in-Place Piers." Lateral load resistance for the walls can be developed in accordance with the recommendations presented below under Item 4.2.5, "Lateral Load Resistance."

4.2.5 Lateral Load Resistance

Lateral load resistance for the proposed building and retaining walls can be developed by friction between the foundation bottom and the supporting subgrade. A friction coefficient of 0.35 is considered applicable. As an alternative, a passive resistance equal to an equivalent fluid weighing 350 pounds per cubic foot acting against the vertical face of the foundations could be used. If foundations are poured neat against the soil, the friction and passive resistance can be used in combination.

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4.3 Pavements

One "R" (resistance) value test was performed on a bulk sample of the near-surface clayey materials on-site. The results of this test are presented in Appendix B and indicate an "R" value of 5. However, due to anticipated mass grading necessary to develop the site, a large proportion of future pavements may be expected to be founded on sandy subgrade soils currently underlying the site. We developed the following alternative preliminary pavement sections using Topic 608 of the State of California Department of Transportation Highway Design Manual, an assumed "R" value of 20, and assumed traffic indices. Pavement design for pavement lives of 1 to 5 years, 6 to 10 years, and 11 to 20 years are presented below.

Location	Anticipated Pavement Life (years)	Pavement Components		Total Thickness (inches)
		Asphaltic Concrete (inches)	Aggregate Base Class 2 (inches)	
Minor Residential Streets and Cul-de-Sacs (T.I. = 5.0 for 20-year life)	11-20	2.5	9.0	11.5
	6-10	2.5	7.0	9.5
	1-5	2.5	6.0	8.5
Collector Streets (T.I. = 6.5 for 20-year life)	11-20	3.5	12.0	15.5
	6-10	3.5	10.0	13.5
	1-5	3.5	8.0	11.5

'I'

The traffic indices used in our design were established assuming a typical mix of automobile and "delivery or garbage" truck type of use in the proposed residential development once construction has been completed. Selection of the design traffic parameters, however, was based on engineering judgment, and not on an equivalent wheel load analysis developed from a traffic study or furnished to us. If the pavements are planned to be placed prior to or during construction, however, the traffic indices and pavement sections may not be adequate for support for what is typically more frequent and heavier construction traffic. Therefore, if the pavement sections will be used for construction access, our firm should be consulted to provide recommendations for alternative pavement sections capable of supporting the heavier use. In addition, we could provide recommendations for a phased placement of the asphalt concrete to minimize the potential for mechanical scars caused by construction traffic in the finished grade.

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Since grading has not yet **been** designed for the site, we recommend that "R" value **tests** be performed on representative samples of actual pavement subgrades to confirm **the** preliminary pavement designs.

Asphaltic concrete, aggregate base and preparation **of** the pavement subgrade should conform to **and** be placed in **accordance** with the Guide Specifications - Asphalt Paving presented in Appendix D.

In areas where the **pavements** will abut planted **areas**, the pavement baserock layer should be protected against **saturation from** irrigation. Planned concrete curbs should extend to the bottom of the baserock layer, forming a cut-off wall between the planter and **the** pavement section.

4.4 Construction Observation

The analysis, designs, **opinions**, and recommendations submitted in this report **are** based in part upon the data **obtained** from the six soil borings, and upon **the** conditions existing when services **were** performed. **Variations** of subsurface conditions **from** those analyzed or characterized in the report **are** possible **as** may become evident during construction. In that event it **may** be advisable to revisit **certain analyses** or assumptions.

We recommend **that** our firm **be retained** to provide geotechnical services during site **grading** and foundation installation. to observe compliance **with** the design concepts, specifications and recommendations presented in this report. **Our** presence will also allow us to modify design if unanticipated subsurface conditions **are** encountered.

GEOTECHNICAL INVESTIGATION
FOR
TWIN LAKES CHRISTIAN COMMUNITY
APTOS, CALIFORNIA

FOR
TWIN LAKES CHRISTIAN COMMUNITY
C/O IFLAND ENGINEERS
SANTA CRUZ, CALIFORNIA

BY
JACOBS, RAAS & ASSOCIATES
CONSULTING GEOTECHNICAL ENGINEERS
4189-SZ61-G61
OCTOBER 1987

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Jacobs, Raas & Associates
CONSULTING GEOTECHNICAL ENGINEERS

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October 8, 1987

Twin Lakes Christian Community
c/o Ifland Engineers
1100 Water Street
Santa Cruz, CA 95060

Attention: Mr. Glenn Ifland

Subject: Geotechnical Investigation
Twin Lakes Christian Community
Arherton Drive
Aptos, California

Dear Mr. Ifland,

In accordance with your authorization, we have performed a geotechnical investigation at the site of the proposed development located in Aptos, California.

The accompanying report presents our conclusions and recommendations as well as the results of the geotechnical investigation on which they are based. If you have any questions concerning the data, conclusions or recommendations presented in this report, please call our **office**.

Very truly yours,

JACOBS, RAAS & ASSOCIATES

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SOIL INVESTIGATION

PURPOSE AND SCOPE

This report describes the geotechnical investigation and presents results, including recommendations, for the proposed development. The purpose of this study was to determine the subsurface soil conditions and then to recommend the type of foundations and allowable bearing pressures to be used in their design. Recommendations for general improvements are also given.

LOCATION AND DESCRIPTION

The project site is located adjacent to and west of Atherton Drive, east of Soquel Drive and is within the unincorporated portions of the County referred to as kptos. It is designated as APN 096-047-20. Most of the adjacent parcels have been developed for residential use. At the time of our field investigation, there was a frame residence, barn, and a wood corral on the site. The **area** is covered with grasses and occasional brush. Groves of Eucalyptus and Oak trees vegetate the upper swale slopes. The area of proposed development that is adjacent and parallel to Atherton Drive is gently sloping downward to the east. At the eastern edge of the to be developed area the slope gradient increases to a moderately steep slope that leads down into the swale.

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Subsurface gasoline storage tanks might exist in the corral area. Metal pipes rising above the ground surface with locking caps were observed.

It is anticipated that the development will consist of three story frame multiple unit structures and a single story central facility with basement located near the center of the residential complex. South of the multiple units is a recreational area.

These details are based on a site inspection by the Geotechnical Engineer, the plans you provided this office, and our discussion.

FIELD INVESTIGATION

The field investigation was conducted on September 14, 1987, with the drilling of six test borings at the approximate locations shown on Figure No's. 1 and 2, "Site Plan Showing Test Borings".

The test borings were drilled to depths of up to 25 feet below the existing ground surface and were advanced by using a truck mounted drill rig with power driven 6 inch diameter continuous flight augers. The soils encountered were logged continuously in the field during the drilling operations.

Soil samples were taken using a 3 inch or 2 1/2 inch O.D. modified split barrel sampler with internal liners or a standard Terzaghi sampler. The sampler was dynamically driven by means of a 140 pound hammer falling freely through a vertical height of 30 inches. The number of blows required to drive the sampler a distance of 12 inches is known as the field penetration value. The field penetration values assist in determining the strength characteristic of the soils and are shown on the logs opposite the sample obtained. The penetration values shown on the boring logs have been normalized to Standard Penetration Test (SPT) N values. Figure No's. 3 through 8, "Logs of Test Borings", show a graphic presentation of the soil profiles as exposed in the test borings and the locations and depths at which the soil samples were obtained. The stratification lines represent the approximate boundaries between material types as the actual transitions may be gradual.

LABORATORY INVESTIGATION

The laboratory testing program was directed towards a determination of the physical and engineering properties of the soils underlying the site.

Moisture content and dry density tests were performed on representative soil samples to determine the density of the

soil and the moisture variations.

The strength parameters of the foundation soils were determined from unconfined compression and pecetrometer tests performed on representative soil samples as well as the field penetration values.

The results of the laboratory testing are shown on the Log of Test Borings.

SOIL CONDITIONS

The soils encountered in the test borings to the depths penetrated are fairly consistent across the site; however, there are variations in density, moisture content, stratum thickness, and color. The upper materials are light brown silty very fine sands. These upper soils were dry and loose. The soils then blend to brown clayey very fine sands that were damp and varied from medium dense to dense, becoming denser with depth. No free ground water was encountered.

FAULTS AND SEISMICITY

Santa Cruz County is a seismically active region and has several active faults running through it. The nearest **known** active land fault is the San Andreas Fault, a major crustal break, which has been traced from the Gulf of California

north to Point Arena. The San Andreas Rift Zone includes many small subparallel faults along which varying amounts of predominately horizontal movements have been distributed over millions of years. Movement along the San Andreas Fault was responsible for the large earthquake which occurred on April 18, 1906. This earthquake measured 8.3 on the Richter Scale and caused some damage to man made structures in Santa Cruz County. Hall, et. al (1974), states that the San Andreas Fault has a high potential for surface rupture with a recurrence interval of 50 to 1000 years. It has been estimated that the maximum likely earthquake in a 50 year period along the Santa Cruz-San Benito section of the San Andreas Fault will have a magnitude of 7.0 to 8.0 (Richter). Figure No. 9, "Fault Map", shows the active and potentially active faults in the general area.

Another fault in the general area is the Zayante Fault located 4 1/2 miles from the site. This fault is designated as potentially active. The San Gregorio Fault and the Monterey Bay Fault Complex are located off shore.

Seismic hazards to man made structures include rupture, ground shaking, landsliding, liquefaction, lurch cracking, and differential compaction. Ground shaking is considered the only seismic hazard which may affect the structures built

on the site

Surface rupture usually occurs along lines of previous faulting. Since there is no evidence of active faulting in the immediate vicinity of the site and the nearest known potentially active fault is located about 4 1/2 miles from the the site, the chances for surface rupture across the site are remote.

Ground shaking caused by earthquakes is a complex phenomenon. Structural damage can result from the transmission of earthquake vibrations from the ground into the structure. The intensity of shaking depends on, amongst other items, the proximity of the site to the focal poinr of the earthquake. Structures built on unconsolidated material generally experience movements of higher amplitude and lover acceleration. In the event of an earthquake, frame and semi-rigid structures with proper seismic parameters incorporated into their design and construction should display only minimal damage. The structures should be designed in accordance with the applicable seismic designation of the Uniform Building Code.

Landsliding is common during large magnitude earthquakes. We have not evaluated any of the sloped regions at the site

for slope stability under static or seismic loading conditions. No significant surface manifestations were observed during our field work indicating slope instability and the slopes are relatively gentle. Providing that the recommendations of this report are incorporated into the design and construction of the development, the potential for slope instability which will damage the proposed structures is low.

Liquefaction, lurch cracking, and differential compaction tend to occur in loose, unconsolidated soils. The results of our geotechnical investigation, based on the soil consistency, the location of the ground water table, the general nature of the subsurface soils and the proposed foundation preparation, indicate that the potential for liquefaction to occur within the limits of this site and to cause damage to the structures is insignificant.

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DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

GENERAL

1. The results of our investigation indicate that from a geotechnical engineering standpoint the property may **be** developed as proposed provided these recommendations are included in the design and construction.

2. Our laboratory testing indicates that the near surface **soils** possess moderately low expansive properties.

3. The available plans and **our** discussions indicate that grading will be required and that the use of imported fill will be avoided to as great a degree as possible.

4. Grading and foundation plans should be reviewed by the Geotechnical Engineer during their preparation and prior to contract bidding.

5. The Geotechnical Engineer should be notified at least four (4) working days prior to any site clearing and grading operations on the property in order to observe the stripping and disposal of contaminated materials, and to coordinate this work with the grading contractor. During this period, a pre-construction conference should be held on the site, with

at least the architect, the grading contractor, an owner's representative and one of our engineers present. At this time, the project specifications and the testing and inspection responsibilities will be outlined and discussed.

6. Field observation and testing must be provided by a representative of Jacobs, Raas & Associates to enable them to form an opinion regarding the adequacy of the site preparation, the acceptability of fill materials, and the extent to which the earthwork construction and the degree of compaction comply with the specification requirements. Any work related to grading performed without the full knowledge of, and not under the direct observation of Jacobs, Raas & Associates, the Geotechnical Engineer, will render the recommendations of this report invalid.

7. Earthwork construction should be performed in accordance with the "Recommended Grading Specifications", Appendix B. These specifications set forth the minimum standards necessary to satisfy the other requirements of this report and without compliance with these standards, the design criteria in this report will not be valid.

SITE PREPARATION

8. The initial preparation of the site will consist of the

removal of the residence, barn, corral and trees as required and the debris. Septic tanks and leaching lines, if found, must be completely removed. The extent of this soil removal will be designated by the Geotechnical Engineer in the field. This material must be removed from the site.

9. If a gasoline storage tank is discovered on the property, there are specific county mandated measures which must be followed for its removal. Jacobs, Raas & Associates should be contacted for recommendations if this situation occurs.

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

11. Any voids created by tree removal, subsurface storage tank, or septic tank and leach line removal must be backfilled with properly compacted native soils that are free of organics and other deleterious materials or with approved import fill.

12. Surface vegetation and organically contaminated topsoil should then be removed from the area to be graded. These soils may be stockpiled for future landscaping. The required

depth of stripping will vary with the time of year and must be based upon visual observations of the Geotechnical Engineer. It is anticipated that the depth of stripping may be 2 to 4 inches.

13. Following the stripping, the area should be excavated to the design grades. Any loose soils in the building and paving areas should be scarified, moisture conditioned and compacted as an engineered fill except for any contaminated material noted by the Geotechnical Engineer in the field. The moisture conditioning procedure will depend on the time of year that the work is done, but it should result in the soils being 1 to 3 percent over their optimum moisture content at the time of compaction.

Note: If this work is done during or soon after the rainy season, the on-site soils may be too wet to be used as engineered fill.

14. With the exception of the upper 8 inches of subgrade in paved areas and driveways, the soil on the project should be compacted to a minimum relative dry density of 90%. The upper 8 inches of subgrade in the pavement areas and all aggregate subbase and aggregate base should be compacted to a minimum relative dry density of 95%.

15. The relative dry density will be based on the maximum dry density obtained from a laboratory compaction curve run in accordance with ASTH Procedure #D1557-78. This test will also establish the optimum moisture content of the material.

16. Should the use of imported fill be necessary on this project, the fill material should be:

- a. free of organics, debris 2nd other deleterious materials
- b. granular in nature, well graded, and contain sufficient binder to allow utility trenches to stand open
- c. free of rocks in excess of 2 inches in size
- d. have a Plasticity Index between 4 2nd 12
- e. have a minimum Sand Equivalent of 20, and
- f. have a minimum Resistance "R" Value of 30 and be non-expansive

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

CUT AND FILL SLOPES

18. All fill slopes should be constructed with engineered fill meeting the minimum density requirements of this report and have a gradient no steeper than 2:1 (horizontal to verrical). Fill slopes should not exceed 15 feet in vertical height unless specifically reviewed by the Geotechnical Engineer. Where the vertical height exceeds 15 feet,

intermediate benches must be provided. These benches should be at least 6 feet wide and sloped to control surface drainage. A lined ditch should be used on the bench.

19. Fill slopes shall be keyed into the native slopes by providing a 10 foot wide base keyway sloped negatively at least 2% into the bank. The depth of the keyways will vary, depending on the materials encountered. It is anticipated that the depth of the keyways may be 2 to 4 feet, but at all locations shall be at least 2 feet into firm material.

Subsequent **keys** may be required as the fill section progress upslope. Keys will be designated in the field by the Geotechnical Engineer. See Figure No. 10 for general details.

20. Cut slopes shall not exceed 2:1 (horizontal to vertical) gradient and a 15 foot vertical height unless specifically reviewed by the Geotechnical Engineer. Where the vertical height exceeds 15 feet, intermediate benches must be provided. These benches should be at least 6 feet wide and sloped to control surface drainage. A lined ditch should be used on the bench.

21. The above slope gradients are based on the strength

characteristics of the materials under conditions of normal moisture content that would result from rainfall falling directly on the slope, and do not take into account the additional activating forces applied by seepage from spring areas. Therefore, in order to maintain stable slopes at the recommended gradients, it is important that any seepage forces and accompanying hydrostatic pressure encountered be relieved by adequate drainage. Drainage facilities may include subdrains, gravel blankets, rockfill surface trenches or horizontally drilled drains. Configurations and type of drainage will be determined by the Geotechnical Engineer during the grading operations.

22. The surfaces of all cut and fill slopes should be prepared and maintained to reduce erosion. This work, as a minimum, should include track rolling of the slope and effective planting. The protection of the slopes should be installed as soon as practicable so that a sufficient growth will be established prior to inclement weather conditions. It is vital that no slope be left standing through a winter season without the erosion control measures having been provided.

23. The above recommended gradients do not preclude periodic maintenance of the slopes, as minor sloughing and erosion may

take place.

24. If a fill slope is to be placed above a cut slope, the toe of the fill slope should be set back at least 8 feet horizonrally from the top of the cut slope. A lateral surface drain should be placed in the area between the cut and fill slopes.

SLOPE EROSION CONTROL

25. The surface soils are classified as moderately to highly erodable. Therefore, the finished ground surface should be planted with ground cover and continually maintained to minimize surface erosion.

FOUNDATIONS

26. At the time we prepared this report, the grading plans had not been completed and the structure location and foundation details had not been finalized. We request an opportunity to review these items during the design stages to determine if supplemental recommendations will be required.

27. Based on the soil characteristics, we believe that an appropriate foundation system to support the proposed structures will consist of conventional footings bedded into firm native soil or engineered fills of the on-site soils.

This system could consist of continuous exterior footings, in conjunction with interior isolated spread footings or additional continuous footings or concrete slabs.

28. Footing widths should be based on the allowable bearing value but not less than 12 inches for 1 story and 18 inches for 2 and 3 story structures. Footings should be trenched not less than 12 inches for 1 story structures, 18 inches for 2 story structures, and 24 inches for 3 story structures. Should local building codes require deeper embedment of the footings or wider footings, the local codes must apply. Footing excavations must be checked by the Geotechnical Engineer before steel is placed and concrete is poured to insure bedding into proper material.

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

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

In computing the pressures transmitted to the soil by the footings, the embedded weight of the footing may be neglected.

30. No footing should be placed closer than 8 feet to the top of a fill slope nor 6 feet from the base of a cut slope.

31. The footings should contain steel reinforcement as determined by the Project Structural Engineer in accordance with applicable UBC or ACI Standards.

SLAB-ON-GRADE CONSTRUCTION

32. Concrete slab-on-grade floors may be used for ground level construction on native soil or engineered fill.

33. Slabs may be structurally integrated with the footings. If the slabs are constructed as "free floating" slabs, they should be provided with a minimum 15 pound felt separation between the slab and footing. The slabs should be separated into approximately 15' x 15' square sections with dummy joints or similar type crack control devices.

34. All concrete slabs-on-grade should be underlain by a minimum 4 inch thick capillary break of 3/4" clean crushed rock. It is recommended that neither Class II baserock nor sand be employed as the capillary break material.

35. Where floor coverings are anticipated or vapor transmission may be a problem, a 10 mil waterproof membrane should be placed between the granular layer and the floor slab in order to reduce moisture condensation under the floor coverings. A 2 inch layer of moist sand on top of the

membrane will help protect the membrane and will assist in equalizing the curing rate of the concrete.

36. Requirements for pre-vetting of the subgrade soils prior to the pouring of the slabs will depend on the specific soils and seasonal moisture conditions and will be determined by the Geotechnical Engineer at the time of construction. It is important that the subgrade soils be thoroughly saturated at the time the concrete is poured.

37. Slab thickness, reinforcement, and dowelling should be determined by the Project Structural Engineer, based on the design live and dead loads, including vehicles.

UTILITY TRENCHES

38. Utility trenches that are parallel to the sides of the building should be placed so that they do not extend below a line sloping down and away at a 2 horizontal to 1 vertical slope from the bottom outside edge of all footings.

39. Trenches may be backfilled with the native materials or approved imported granular material with the soil compacted in thin lifts to a minimum relative dry density of **95%** in street areas and 90% in other areas.

40. Jetting of the trench backfill should be carefully considered as it may result in an unsatisfactory degree of compaction.

41. Trenches must be shored as required by the local agency 2nd the State of California Division of Industrial Safety construction safety orders.

LATERAL PRESSURE

42. Retaining walls with a horizontal backfill and fully drained should be designed using the following criteria:

- a. When walls are free to yield an amount sufficient to develop the active earth pressure condition (about $1/22$ of height), design for an active earth pressure of 35 psf/ft of depth.
- b. When walls are restrained at the top from moving, refer to Figure No. 11.
- c. For resisting passive earth pressure use 300 psf/ft of depth.
- d. A "coefficient of friction" between base of foundation and soil of 0.35.
- e. Any live or dead loads which will transmit a force to the wall. Refer to Figure No. 12.

Should the slope behind the retaining walls be other than horizontal, supplemental design criteria will be provided for the active earth or at rest pressures for the particular slope angle.

43. The above criteria are based on fully drained conditions. Therefore, we recommend that permeable material meeting the State of California Standard Specification Section 68-1.025, Class I, Type A, be placed behind the wall, with a minimum width of 12 inches and extending for the full height of the wall to within 1 foot of the ground surface. The rock should be covered with Mirafi 140 filter fabric or equivalent and then compacted native soil placed to the ground surface. A 4 inch diameter perforated polystyrene drain pipe should be installed within 3 inches of the bottom of the granular backfill and be discharged to a suitable, approved location.

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

DRAINAGE - SURFACE

45. Surface water must not be allowed to pond or be trapped adjacent to the building foundations nor on the building pad nor in the parking areas.

44. All roof eaves should be guttered, with the outlets from the downspouts provided with adequate capacity to carry the storm water from the structures to reduce the possibility of

soil saturation and erosion. The connection could be in a closed conduit which discharges at an approved location away from the structures and the graded area.

47. Final grades should be provided with positive gradient away from all foundations in order to provide rapid removal of the surface water from the foundations to an adequate discharge point. Concentrations of surface water runoff should be handled by providing necessary structures, such as paved ditches, catch basins, etc.

48. Cut and fill slopes shall be constructed so that surface water will not be allowed to drain over the top of the slope face. This may require berms along the top of fill slopes and surface drainage ditches above cut slopes.

49. Irrigation activities at the site should not be done in an uncontrolled or unreasonable manner.

50. The building and surface drainage facilities **must** not be altered nor any filling or excavation work performed in the area without first consulting the Geotechnical Engineer.

PAVEMENT DESIGN

51. The design of the pavement section was beyond our scope

of services for this project. To have the selected pavement sections perform to their greatest efficiency, it is very important that the following items be considered:

- a. Properly moisture condition the subgrade and compact it to a minimum relative dry density of 95%, at a moisture content 1-3% over the optimum moisture content.
- b. Provide sufficient gradient to prevent ponding of water.
- c. Use only quality materials of the type and thickness (minimum) specified. All baserock must meet Cal-Trans Standard Specifications for Class II Aggregate Base, and be angular in shape.
- d. Compact the base and subbase uniformly to a minimum relative dry density of 95%.
- e. Place the asphaltic concrete only during periods of fair weather when the free air temperature is within prescribed limits.
- f. Maintenance should be undertaken on a routine basis.

PLAN REVIEW

52. We respectfully request an opportunity to review the plans during preparation and before bidding to insure that the recommendations of this report have been included and to provide additional recommendations, if needed

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PRELIMINARY STORM DRAINAGE REPORT

CABRILLO COMMONS
Tract No. 1471

SANTA CRUZ COUNTY

Environmental Review Initial Study
ATTACHMENT 8, 1 of 4
APPLICATION 03-0065

November 2005

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JOB 02130 Cabrillo Commons
 CALCULATED BY GHI
 SHEET 1 of 2
 DATE 12/01/03 REV. 11/07/05 REV. 12/08/05

STORM DRAINAGE REPORT

Site area being developed = 3.40 Acres. No offsite drainage enters the area proposed for development (Balance of site to remain "as is" with no increase in runoff.)

Rainfall Intensity – 2.10 in/hr. – 10 year Storm
 Existing Coefficient of Runoff = 0.30
 Post – Dev. Coefficient of Runoff = 0.70

Most runoff is collected into street gutters and picked up in a series of catch basins. At the rear of the lots along the gulch, a drainage swale collects the runoff. The pipes collecting the street runoff are oversized for the amount of runoff volume. This is done so as to avoid clogging or ponding in the streets.

Pre-Development Runoff

$$Q_{10} = (0.30)(2.10)(3.40) \\ = 2.14 \text{ cubic feet per second (c.f.s.)}$$

$$Q_{100} = (2.14)(1.49) = 3.19 \text{ c.f.s.}$$

Post-Development Runoff

$$Q_{10} = (0.70)(2.10)(3.40) \\ = 5.00 \text{ c.f.s.}$$

$$Q_{100} = (5.00)(1.49) = 7.44 \text{ c.f.s.}$$

$$\text{Net Increase in runoff: } Q_{10} = 2.86 \text{ c.f.s.}$$

Environmental Review Initial Study
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 APPLICATION 03-0065

The 10 year storm increase in runoff due to the development of 2.86 c.f.s. is to be detained on site by means of underground holding tanks. (See following pages) Also, the outfall pipes are perforated and installed in drain rock lined trench to provide for infiltration. Two calculations are shown. Using the county design criteria, the detention volume is 3,400 cubic feet which is proposed for this project.

Storm runoff from this site enters Porter (Tannery) Gulch and continues to a 6' x 6' concrete box culvert under State Highway 1. From there it passes along a natural drainage channel to Monterey Bay. The culvert under the Highway has a slope of 0.80% and the calculated flow capacity is 584 c.f.s. (See attachment)

The upstream area from the highway culvert is approximately 615 acres and is sparsely developed. The length of the natural watershed is 11,500 feet (2.17 miles) with an elevation difference of 470 feet from the highway culvert to the top of the watershed (Slope average – 0.04%). See attached Fig. SD-8. The time of concentration is 35 minutes. The soil type and land coverage varies over the basin but is mostly wooded with

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SHEET 2 of 2
DATE 12/01/03 REV. 11/07/05 REV. 12/08/05

some roads except for the lower portion that lies within 3000 feet of the highway culvert. A conservative "C" factor would be 0.35.

Using the Soil Conservation Service Method the calculated runoff is 346 c.f.s for a 10 year storm and 542 for a 100 year storm.

The existing culvert was installed at part of the highway construction and designed by CalTrans for a 100-year storm event. The culvert maximum flow capacity is 584 c.f.s. without any head pressure. Although the culvert is downstream from very dense riparian vegetation. making access almost impossible to check the culvert condition, there has not been any noticeable backup upstream to indicate a restricted flow through the culvert.

Since the project provides for on-site detention. no increase in runoff is anticipated.

The culvert is more than adequate to handle the existing conditions and any additional runoff from the proposed development even under extreme conditions when flows exceed the detention holding capacity

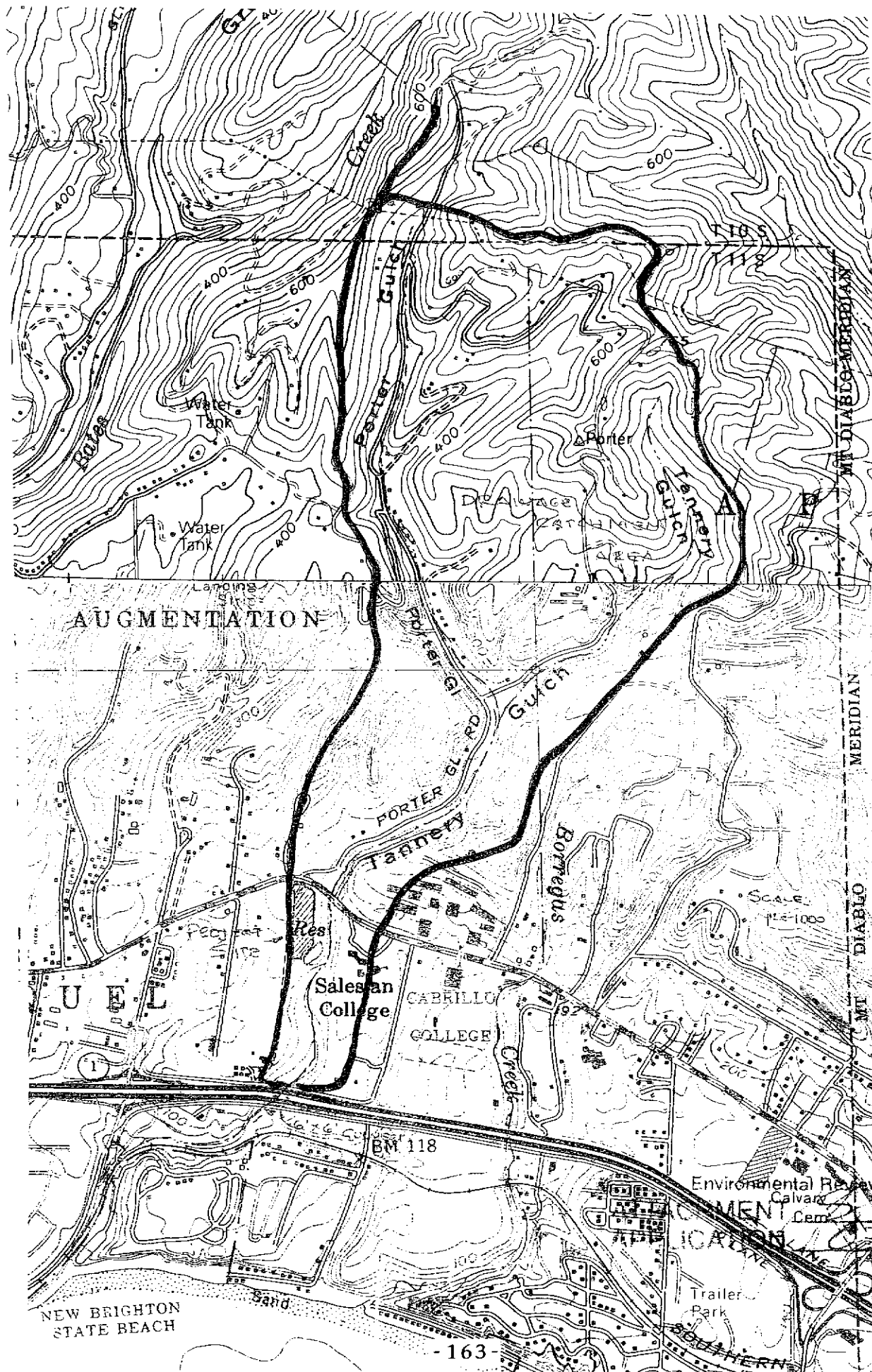
All runoff from the streets and parking area is collected into a "Stormceptor" (See attached data), before being released into the detention system and the outlet into the gulch. No runoff from the developing site will enter the existing man-made pond on the property

Street Drainage

The private street through the project (Sesnon Drive) is to serve as a drainage collection channel with a series of catch basins along the centerline to pick up the flow. The largest area of runoff is 0.50 acres with a volume of 0.74 c.f.s. during a 10 year event. At this location, the street slopes at 2.52%. The flow-spread over the center of the street would be 8.26 feet wide and 0.08 feet (1") deep. This type of street drainage is common on private streets that slope to the center (See attached calculations).

The final design of the storm drainage system will be incorporated into the subdivision improvement plans as based upon the Tentative Map "Conditions of Approval" that are recommended by the Planning Commission and approved by the Board of Supervisors. Since the Tentative Map is still in process of approval, along with the 'Conditions', the preliminary designs are subject to change.

Environmental Review Initial Study
ATTACHMENT 8, 3 of 4
APPLICATION 03-0065



Environmental Review Initial Study

Calvary

Cem.

7-4-4
23-0065



COUNTY OF SANTA CRUZ

PLANNING DEPARTMENT

701 OCEAN STREET, ROOM 400, SANTA CRUZ, CA 95060
(831) 454-2580 FAX: (831) 454-2131 TDD: (831) 454-2123

TOM BURNS, DIRECTOR

July 26, 2004

Atherton Place Development Corporation, LLC
216 Samaritan Drive, Suite K
San Jose, CA 95124

App #: 03-0065

Dear Mr. Bowman:

Introduction:

The review of your biotic report ("Cabrillo Commons Biotic Report", Biotic Resources Group, January 29, 2003) has been completed. The report identifies potential impacts to two types of bird species and to the riparian area, a protected habitat. The purpose of this letter is to inform you that we have accepted the report and that the mitigation measures recommended by your consultant will become project conditions.

Conditions Regarding Biotic Resources:

In order to comply with the Sensitive Habit Ordinance (Chapter 16.32) and the Santa Cruz County General Plan, the following requirements and project conditions will be attached to the proposed development.

1. In order to avoid disturbing the nesting of protected raptors and Loggerhead shrikes implement Mitigation Measures 1.1 through 2.2. Grading and construction shall either not occur during February 1 through July 31 or pre construction surveys shall be conducted by a qualified biologist according to the given schedule. The results of the surveys shall be submitted for review and approval of Environmental Planning staff at least one week prior to the start of disturbance. In order to avoid inadvertent intrusions into the riparian buffer, prior to any disturbance on the property a minimum four foot high *chain link* fence shall be installed at the buffer and at the permitted limits of disturbance around the drainage improvements that are in the **riparian** area. Prior to public hearing the plans shall be revised to indicate the fence.
2. Prior to public hearing, a replanting and restoration plan for the drainage improvements that intrude into the riparian comdor or buffer shall be submitted for staff review and approval. The plan shall quantify the area to be disturbed, shall identify the replanting areas and shall provide vegetation restoration and management according to Mitigation Measure 4.1 of the biotic report.

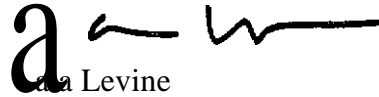
Environmental Review Initial Study
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3. **Prior** to the issuance of any discretionary or building permits, a Declaration of Restriction, including an exhibit showing the protected riparian area, shall be recorded on the property deed.

Conclusion:

Please call me if you have any questions about this letter. A copy will also be sent to the project planner so that the conditions can be properly incorporated into the permit.

Sincerely,



Dana Levine
Resource Planner

FOR: Ken Hart
Principal Planner
Environmental Planning

CC: Randall Adams, Project Planner
Robin Bolster, Resource Planner
Richard Beale

Environmental Review Initial Study
ATTACHMENT 9, 2 of 2
APPLICATION C3-2065

Biotic Resources Group

Biotic Assessments ♦ Resource Management ♦ Permitting

Cabrillo Commons Project
Santa Cruz County, California

Biotic Report

Prepared for

Mr. Brad Bowman
Atherton Plate Development corporation, LLC
2516 Samaritan Drive, Suite K
San Jose, CA 95124

Prepared by

Biotic Resources Group
Kathleen Lyons, Plant Ecologist

With

Dana Bland & Associates
Dana Bland, Wildlife Biologist

January 29, 2003

Environmental Review Initial Study
ATTACHMENT 10, 1 & 14
APPLICATION 03-0065

INTRODUCTION

The proposed Cabrillo Commons Project property is located in the Aptos area of Santa Cruz County. The site is located north of Highway 1 and south of Soquel Drive (Figure 1). The property encompasses approximately 14.9 acres. Approximately 3.5 acres are proposed for multi-family residential development (i.e., 43 town homes); the remaining approximately 11.4 acres will be retained as open space (i.e., riparian woodland).

The Biotic Resources Group, with the assistance of Dana Bland & Associates, conducted an assessment of the biotic resources on the proposed project area during a biological assessment for the Atherton Place Project properly in spring/summer 1998 and spring 1999 (Atherton Place Development Biological Assessment, Biotic Resources Group, June 1999). At that time, the Atherton Place Project included the proposed 14.9-acre project site. The current Cabrillo Commons project area was revisited in January 2002 to determine if site conditions had changed since the 1999 biotic report. The focus of the assessment was to identify sensitive biological resources within the proposed development areas (i.e., building sites) as depicted on the Cabrillo Commons Tentative Map (Ifland Engineers, dated January 2003) and present the findings in this biotic report. Kathleen Lyons (plant ecologist) and Dana Bland (wildlife biologist) assessed the biotic resources of the project area.

Specific tasks conducted for this study include:

- Characterize the major plant communities within the project area;
- Identify sensitive biotic resources, including plant and wildlife species of concern and native trees, within the project area; and
- Evaluate the potential effects of the proposed residential development on sensitive biotic resources and recommend measures to avoid or reduce such impacts to a level of less-than-significant.

Intended Use of this Report

The findings presented in this botanical report are intended for the sole use of First Federal Development, LLC, its representatives and the County of Santa Cruz in evaluating the proposed development for the subject parcel. The findings presented by the Biotic Resources Group in this report are for information purposes only; they are not intended to represent the interpretation of any State, Federal or County laws or ordinances pertaining to permitting actions within sensitive habitat or endangered species. The interpretation of such laws and/or ordinances is the responsibility of the applicable governing body.

Environmental Review Initial Study
ATTACHMENT 12, 2 of 14
APPLICATION 63-0065

EXISTING BIOTIC RESOURCES

METHODOLOGY

The biotic resources of the Cabrillo Commons project area were assessed through reconnaissance-level field observations during spring and fall 1998 and spring 1999 (as part of the earlier Atherton Place development project) and field observations in January 2003. The major plant communities on the site, based on the classification system developed in Preliminary Descriptions of the Terrestrial Natural Communities of California (Holland 1986), were identified during the field reconnaissance visits and mapped onto the project base maps. A site reconnaissance survey to document the habitat types for wildlife was conducted on March 4, 1999 and January 21, 2003. The proposed development area was walked, binoculars were used to aid in wildlife identification, and all species observed were recorded in a field notebook.

To assess the potential occurrence of special status biotic resources, two electronic databases were accessed to determine recorded occurrences of sensitive plant communities and sensitive species. Information was obtained from the California Native Plant Society's (CNPS) inventory (CNPS, 2002) and California Department of Fish & Game's (CDFG) RareFind 2 database (CDFG, 2002) for the region. Data from focused species surveys conducted for the Atherton Place development project were also used in the analysis. These studies include a California red-legged frog survey (Dana Bland & Associates, 1999).

This assessment report summarizes the findings of the reconnaissance-level biotic assessment. The potential impacts of the proposed residential development on sensitive biotic resources are discussed below. Measures to reduce significant impacts to a level of insignificance are recommended, as applicable.

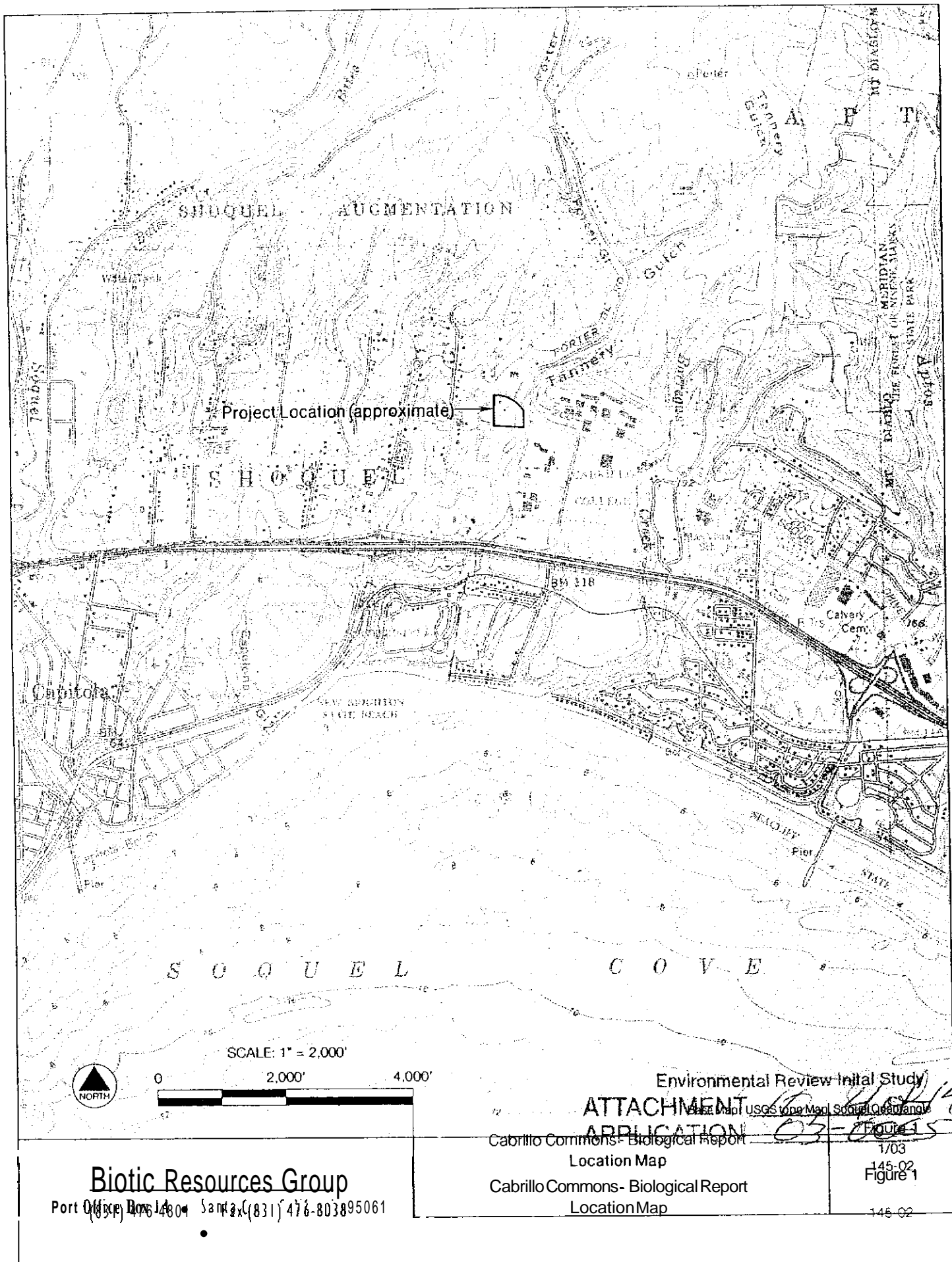
EXISTING BIOTIC RESOURCES

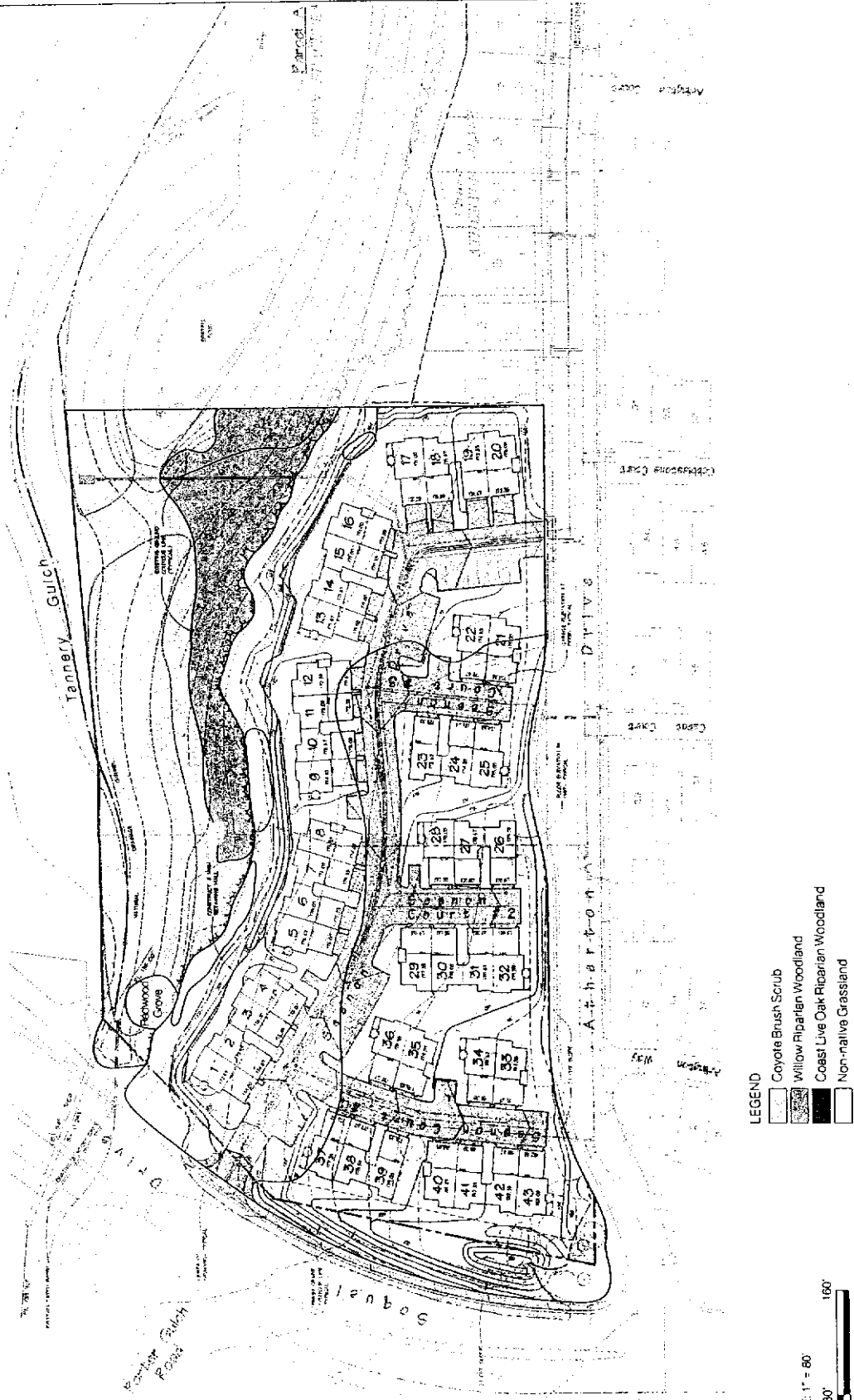
Coyote brush scrub, grassland and riparian woodland dominate the Cabrillo Commons project site; a small grove of coast redwood is also present on the site. Tannery Gulch, a perennial drainage, enters the northern portion of the parcel near Soquel Drive and traverses the eastern property line. The drainage supports a dense band of willow and coast live oak riparian woodland. An in-channel pond (locally known as Sesnon Pond) occurs downstream of the subject parcel (Figure 2). Tannery Gulch continues south of the subject parcel and enters an underground culvert at Cabrillo College Drive and travels under Highway 1 towards New Brighton State Beach. The distribution of plant communities on the 5-acre project site is depicted in Figure 2

Non-Native Grassland

The central portion of the property is comprised of non-native grassland. The grassland is periodically mowed, as evidenced by field observations in spring and fall 1998 and 1999 and January 2003. The dominant plant species are non-native species: such as wild oat (*Avena fatua*), soft chess (*Bromus hordeaceus*) and Italian ryegrass (*Lolium multiflorum*). Associated species include wild radish (*Raphanus sativa*), ripgut brome (*Bromus diandrus*), rattlesnake grass (*Briza minor*), dandelion (*Taraxacum officinale*), redstem filaree (*Erodium cicutarium*) and California poppy (*Eschscholtzia californica*). Scattered throughout the grassland are young shrubs of coyote brush

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- LEGEND**
- Coyote Brush Scrub
 - Willow Riparian Woodland
 - Coast Live Oak Riparian Woodland
 - Non-native Grassland

SCALE: 1" = 80'
80' 160'

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Figure 2
 1/03
 145-02

Cabrillo Commons - Biological Report
 Plant Communities

Biotic Resources Group
 Post Office Box 14 • Santa Cruz, California 95063
 (831) 474-6802 • FAX (831) 474-8018

(*Baccharis pilularis*) and spreading rush (*Juncus patens*). Other plant species observed within the grassland include milk thistle (*Silybum marianum*), dock (*Rumex acetosella*), bur clover (*Medicago polymorpha*), English plantain (*Plantago lanceolata*), scarlet pimpernel (*Anagallis arvensis*), shamrock clover (*Trifolium dubium*), catchfly (*Silene gallica*) and rattail fescue (*Vulpia myuros*).

Grasslands provide an important foraging resource for a wide variety of wildlife species. The grasses and forbs produce an abundance of seeds and attract numerous insects, providing food for granivorous and insectivorous wildlife. Sparrows, rabbits and rodents are commonly found in this habitat. Consequently, grasslands are valuable foraging sites for raptors such as hawks and owls, and other predators including coyote, fox, skunk and snakes. Aerial foraging species that occur over grasslands include bats and swallows. Wildlife species observed in the grassland during the reconnaissance survey included American crow (*Corvus brachyrhynchos*), American goldfinch (*Carduelis tristis*), European starling (*Sturnus vulgaris*), and mounds of Botta's pocket gopher (*Thomomys bottae*). Other common wildlife species that utilize grassland habitat on the central California coast include western fence lizard (*Sceloporus occidentalis*), gopher snake (*Pituophis melanoleucus*), house finch (*Carpodacus mexicanus*), western meadowlark (*Sturnella neglecta*), cliff swallow (*Hirundo pyrrhonota*), red-tailed hawk (*Buteo jamaicensis*), and California ground squirrel (*Spermophilus beecheyi*).

Coyote Brush Scrub

A dense thicket of coyote brush scrub occurs in the northern portion of the property, abutting Soquel Drive and extending south past Cabot Drive (Figure 2). Coyote brush is the dominant shrub, however, non-native plant species of Himalaya berry (*Rubus procerus*), canary grass (*Phalaris* sp.), pampas grass (*Cortaderia jubata*) and remnant fruit trees are also present. An old barn also occurs in this area. The project site also supports small patches of coyote brush within the non-native grassland.

The scrub enhances the value of the adjacent grassland areas for some types of wildlife by providing temporary cover during movements; nesting habitat for some birds, and perch sites for hunting. Wildlife observed in the coyote brush scrub during the reconnaissance site visit included California towhee (*Pipilo crissalis*) and northern mockingbird (*Mimus polyglottos*). Other common wildlife species expected to utilize the scrub habitat include western fence lizard (*Sceloporus occidentalis*), white-crowned sparrow (*Zonotrichia leucophrys*), brush rabbit (*Sylvilagus bachmani*), and coyote (*Canis latrans*). Special status wildlife species that may nest in the scrub habitat include loggerhead shrike (*Lanius ludovicianus*).

Willow Riparian Woodland

The project site supports dense riparian woodland along the Tannery Gulch drainage. The drainage is lower slopes of the drainage is dominated by arroyo willow (*Salix lasiolepis*). The drainage also includes scattered black cottonwoods (*Populus balsamifera* ssp. *trichocarpa*) and red alder (*Ainus rubra*) (Figure 2). Associated species include California blackberry and rushes (*Juncus* sp.).

The riparian habitat is one of the highest value habitats for wildlife species diversity and abundance in California. Factors that contribute to the high wildlife value include the presence of surface water, the variety of niches provided by the high structural complexity of the habitat, and the abundance of plant growth. Riparian habitat along the project site may be used by a diversity of wildlife species for food, water, escape cover: nesting, migration and dispersal corridors, and

thermal cover. The value of riparian areas to wildlife is underscored by the limited amount of remaining habitat that has not been disturbed or substantially altered by flood control projects, agriculture, and urbanization. Wildlife observed during the reconnaissance survey included Anna's hummingbird (*Calypte anna*), ruby-crowned kinglet (*Regulus calendula*), and chestnut-backed chickadee (*Parus rufescens*). Other common wildlife species that are expected to inhabit the riparian habitat include Pacific treefrog, bullfrog (*Rana catesbeiana*), western aquatic garter snake, Wilson's warbler (*Wilsonia pusilla*), Bewick's wren (*Thryomanes bewickii*), several swallows, raccoon, opossum, and California myotis (*Myotis californicus*).

Special status wildlife species that may inhabit the riparian area along the project site include yellow warbler (*Dendroica petechia brewsteri*), pallid bat (*Antrozous pallidus pacificus*), and San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*). Numerous neotropical migrant birds (protected under the Migratory Bird Act) also may use this riparian habitat during spring and fall migrations.

Coast Live Oak Riparian Woodland

The site supports a dense band of coast live oak riparian woodland between the willow-dominated riparian woodland at the stream edge and the grassland at the upland edge. Trees of coast live oak (*Quercus agrifolia*) with an understory of California blackberry (*Rubus ursinus*), coyote brush, and French broom (*Genista monspessulana*) dominate the woodland.

The wildlife value of oak woodland varies with the degree of canopy cover and the density and diversity of understory plants. This dense band of live oaks provides an important wildlife resource in cover and forage. Acorns from oaks provide an important food resource for many wildlife species, and natural cavities in the oaks provide nesting opportunities for some birds and mammals. Snags are an important component of oak woodlands to some wildlife such as woodpeckers, which excavate nests in snags and holes for storing acorns. Downed decaying logs and limbs add to the structural complexity of the habitat, and are important cover, nesting, roosting, and foraging substrate for species such as newts which are attracted to the moist microclimate and invertebrate food supply. The denser oak woodlands also provide escape cover during the day for species such as deer.

Wildlife observed during the reconnaissance survey included scrubjay (*Aphelocoma coerulescens*) and Steller's jay (*Cyanocitta stelleri*). Other common wildlife species expected to occur in oak woodlands on the property include California slender salamander (*Batrachoseps attenuatus*), western fence lizard, California quail (*Callipepla californica*), red-tailed hawk, several species of bats, western gray squirrel (*Sciurus griseus*), and deer (*Odocoileus hemionus*). Special status wildlife species that may inhabit the oak woodland include San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*).

SENSITIVE BIOTIC RESOURCES

Sensitive Habitats

Sensitive habitats are defined by local, State, or Federal agencies as those habitats that support special status species, provide important habitat values for wildlife, represent areas of unusual or regionally restricted habitat types, and/or provide high biological diversity. The only habitats

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meeting these criteria in the Cabrillo Commons project area are the willow riparian woodland and the coast live oak riparian woodland.

Special Status Plant Species

Plant species of concern include those listed by either the Federal or State resource agencies as well as those identified as rare by CNPS. The search of the CNPS and CNDDDB inventories for the area resulted in eight special status plant species of concern with potential to occur in grasslands or wetlands in the project area (Table 1). Of the eight special status plant species believed to have the potential to occur in the vicinity of the Cabrillo Commons project area, none have been recorded as per CNDDDB records, nor were any observed during focused surveys conducted in 1998 and 1999. *Adrian*

Special Status Wildlife Species

Special status wildlife species include those listed by either the Federal or State resource agencies as well as those identified as Federal and/or State species of special concern. In addition, all raptor nests are protected by Fish and Game Code, and all migratory birds are protected by the Federal Migratory Bird Act. Special status wildlife species were evaluated for their potential presence in the project area; and those expected to inhabit the project site are listed in Table 2.

Focused surveys for California red-legged frogs were conducted in May 1999, but no red-legged frogs were observed on the property (Dana Bland & Associates, 1999). The closest known occurrence of red-legged frogs is several miles away in the Soquel Demonstration Forest (CNDDDB 2002). It is unlikely that red-legged frogs occur at the Cabrillo Commons project site based on the previous focused surveys where they were absent, the distance to known population, and the urbanization surrounding this site. Pond turtles are also unlikely to inhabit this site. The Sesnon Pond and Tannery Gulch are both seasonal waters. This feature, combined with the urbanization of surrounding areas between this site and other perennial streams and ponds (e.g., Soquel Creek and Aplos Creek), makes the site unsuitable habitat for pond turtles. Other special status species that were evaluated for their potential to occur at this site, but found to be unlikely inhabitants included white-tailed kite and Cooper's hawk, because the habitat is too isolated and fragmented to support sufficient foraging opportunities for these species (especially during nesting season), although Cooper's hawk may occur as transients during fall and spring migration seasons. Monarch butterflies were also evaluated for their potential to occur in the eucalyptus grove to the south of the Cabrillo Commons site; however, to-date, there are no documented occurrences of this butterfly on the site. A January 2000 survey for butterflies found them absent at this grove (Dana Bland & Assoc. 2000) and the project site is >100 feet from the grove. It is not expected that this project will affect any monarch butterflies.

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Table 1. List Of Special Status Plant Species with Potential to Occur In The Vicinity Of the Cabrillo Commons Project Area, Santa Cruz County, California

Species	CNPS	Status	Federal Status	Known Occurrence on Site
	List 1B	None	None	No
Robust spineflower (<i>Chorizanthe robusta</i> var. <i>robusta</i>)	List 1B	None	Endangered	No
San Francisco wallflower (<i>Erysimum franciscanum</i>)	List 4	None	Species of Special Concern	No
San Francisco popcorn flower (<i>Plagiobothrys diffusus</i>)	List 1B	Endangered	Species of Special Concern	No
Santa Cruz Clover (<i>Trifolium buckwestiorum</i>)	List 1B	None	None	No
Santa Cruz tarplant	List 1B	Endangered	Proposed for Threatened Status	No
Kellogg's horkelia (<i>Horkelia cuneata</i> ssp. <i>sericea</i>)	List 1B	None	Species of Special Concern	No
(<i>Lomatium parviflorum</i>)	List 4	None	None	No
Santa Cruz microseris	List 4	None	Species of Special Concern	No
Gairdner's yampah (<i>Perideridia gairdneri</i> ssp. <i>gairdneri</i>)	List 4	None	Species of Special Concern	No
	List 1B	None	Species of Special Concern	No
Maple-leaved checkerbloom (<i>Sidalcea malachroides</i>)	List 1B	None	None	No
San Francisco campion (<i>Silene verecunda</i> ssp. <i>verecunda</i>)	List 1B	None	Species of Special Concern	No

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Table 2. Special status wildlife species and their predicted occurrence on the Cabrillo Commons Project Site, Santa **Cruz** County, CA, January 2003.

Species	Status ¹	Habitat	Potential Occurrence On Site
Loggerhead shrike <i>Lanius ludovicianus</i>	CSC	Open habitats with scattered shrubs, tree, lookout posts	Possible. Suitable foraging and nesting habitat in the coyote hush scrub/grassland.
Yellow warbler <i>Dendroica petechia brewsteri</i>	CSC	Riparian forests.	Possible. Marginal breeding habitat in willow riparian along Tannery Gulch.
San Francisco dusky-footed woodrat <i>Neotoma fuscipes annectens</i>	CSC	Riparian and oak woodlands	Possible. Suitable habitat in oak and willow rioarian habitats.
Pallid bat <i>Antrozous pallidus pacificus</i>	CSC	Wide variety of habitats; roosts in caves, crevices; mines, hollow trees. buildings	Possible. Marginal roosting habitat in tree hollows in the oak riparian.

¹ Key to status:

CSC = California species of special concern

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IMPACTS AND MITIGATION DISCUSSION

IMPACT CRITERIA

The thresholds of significance presented in California Environmental Quality Act (CEQA) were used to evaluate project impacts and to determine if the proposed development of the project poses significant impacts to biological resources. For this analysis, significant impacts are those that substantially affect either:

- A species (or its habitat) listed or proposed for listing by State or Federal governments as rare or endangered (i.e., none identified to utilize the project);
- Breeding/nesting habitat for a State species of special concern (i.e., loggerhead shrike);
- A plant considered rare (i.e., List 1B) by CNPS (none identified to utilize the project area);
- A habitat regulated by State or Federal law (i.e., riparian habitat, seasonal wetlands), or
- A habitat or resource recognized as sensitive by CDFG and/or the County of Santa Cruz (i.e., riparian habitat, seasonal wetlands, coast live oak woodland).

POTENTIAL IMPACTS AND MITIGATION MEASURES

Impacts were not considered significant to vegetation communities or habitats that are not protected, are generally common, and do not support special status species. Within the Cabrillo Commons project area, removal of non-native grassland and coyote brush scrub are not considered significant impacts to botanical resources.

Potential impacts to wildlife of the proposed Cabrillo Commons development includes the possible destruction of loggerhead shrike nests if they are present in the coyote brush scrub habitat at the time of grading. Measures to avoid impacts to nesting loggerhead shrike are recommended below.

Because the proposed development will not remove any trees in the willow riparian woodland or oak riparian woodland, no direct impacts of habitat removal to nesting birds, roosting bats or woodrat nests are expected to occur. No significant indirect impacts to roosting bats or woodrats, if they are present, are expected to occur from this project because no habitat will be removed for these species, and because these species are primarily nocturnal and not active during the daytime construction schedule.

Noise from construction equipment can disrupt nesting by birds if it occurs at a critical time during the nesting (e.g., before eggs have hatched and parents are actively feeding the young chicks) or if it significantly exceeds the ambient noise in the vicinity of the nest. The proposed Cabrillo Commons development will extend to within 20 feet of the oak/willow riparian corridor. As per a noise analysis of the project site (Environmental Consulting Services 1999), the construction noise (estimated at 75-80 dB at 50 feet) is likely to exceed current ambient noise levels at the site (measured at 60 to 66 dB at Soquel Drive, and calculated to be 5-10 dB less towards the center of the gulch). Measures to avoid impacts to nesting raptors and migratory birds are described below.

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The **loss** of the grasslands and scrub habitats for wildlife foraging is not expected to be significant in a regional context.

Impact 1. Potential destruction of logger-head shrike nests in the coyote brush scrub habitat. Grading and removal of the coyote brush scrub habitat on the project site has the potential to destroy loggerhead shrike nests if they are present at the time of construction.

Mitigation Measure 1.1: Schedule construction to occur after the nesting season for loggerhead shrike. August 1 to April 1 is outside the nesting season for this bird.

Mitigation Measure 1.2: If construction is scheduled to occur during the nesting season of the loggerhead shrike (April to late July), pre-construction surveys should be conducted by a qualified biologist within 30 days prior to beginning of construction to determine if loggerhead shrikes are nesting on the project site. If active nests are found, construction should be delayed until all young have fledged. If it is not practical to reschedule all construction, then the qualified biologist shall determine a buffer zone of appropriate width around the loggerhead shrike nest that will protect it until all young have fledged (e.g., 200-300 feet wide). No construction shall begin in the buffer zone until the qualified biologist confirms that all young have fledged.

Impact 2. Construction Noise Impacts to Nesting Raptors and Special Status Bird Species in the Oak and Willow Riparian Habitat. Construction activities on the property and grading for some residential lots (including construction of the 4-foot high retaining wall) will occur within 20 feet of the oak/willow riparian habitat, and may result in failure of nesting common raptors (e.g., red-shouldered hawk) and nesting species of special concern (e.g., yellow warbler) if they are present during construction.

Mitigation Measure 2.1: Schedule construction to occur after the nesting season for raptors and other migrant riparian nesting birds. August 1 to February 1 is outside the nesting season for common raptors and migratory birds in this part of the state.

Mitigation Measure 2.2: If construction is scheduled to occur during the nesting season of the raptors and migratory birds (February to late July), pre-construction surveys should be conducted by a qualified biologist within 30 days prior to beginning of construction to determine if any of these species are nesting on or adjacent to the project site. If active nests are found, construction should be delayed until all young have fledged. If it is not practical to reschedule all construction, then the qualified biologist shall determine a buffer zone of appropriate width around the active nests that will protect them until all young have fledged (e.g., 200-300 feet wide). No construction shall begin in the buffer zone until the qualified biologist confirms that all young have fledged.

Impact 3. Indirect Impacts to Wetland and Riparian Resources. Construction activities on the property and grading for some residential lots (including construction of the 4-foot high retaining wall) may result in indirect impact to adjacent riparian woodland. This may occur if construction operations unintentionally enter the riparian woodland or the perennial drainage. Due to the importance of these habitats for wildlife, impacts to these habitats are considered significant impacts.

Mitigation 3.1. The existing riparian woodland shall be protected from construction disturbance. Four-foot tall plastic mesh fencing shall be temporarily placed at the outside

edge of the riparian woodland. This fencing shall remain in-place until construction is complete. Construction equipment and debris shall not enter these areas.

Impact 4. If a storm drain, with an outlet to Tannery Gulch is required, the drain line and outfall may permanently affect riparian woodland by the placement of the pipe and rock riprap at the drain outfall. Due to the value of the riparian woodland along Tannery Gulch for wildlife and the habitats sensitive status with regulatory agencies, the removal of riparian woodland is considered a significant impact. Successful implementation of the following mitigation measures will reduce these impacts to a less than significant level.

Mitigation Measure 4.1. As compensation for removal of riparian woodland for placement of storm drains into Tannery Gulch, these impacts, the developer shall implement a riparian revegetation plan that specifies a 3:1 riparian replacement ratio (i.e., 3 square feet of habitat created for each square foot impacted). All riparian revegetation shall be installed on the project site. Suitable revegetation areas occur amid and adjacent to the existing riparian woodland. These areas shall be refined, and additional areas added if necessary, during preparation of the final construction documents. Pursuant to requirements of CDFG, the developer shall obtain a 1603 Streambed Alteration Agreement (SAA) with CDFG. As part of the developers application for the SAA, the developer shall submit a riparian revegetation plan to CDFG. The plan shall specify the location of all plantings, the use of locally obtained native riparian plant species (i.e., plant propagules collected from the Soquel/Aptos region) and specify a 5-year maintenance and monitoring program. The plan shall specify that the developer shall monitor the revegetation areas a minimum of once a year. During each year of the 5-year monitoring period; plantings shall achieve a minimum 80% survival rate for the revegetation to be deemed successful. The developer shall prepare yearly monitoring reports and submit these reports to CDFG and the County at the end of each monitoring year. The reports shall identify the plant survival rate, maintenance actions at the site and include photographs documenting the status of the revegetation. The developer shall implement remedial measures should the success criteria not be achieved in any of the five monitoring years. Remedial measures may include replacement plantings, an increase in maintenance or changes to the irrigation system.

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ATTACHMENT 10, 14, 14
APPLICATION 03-0065

CABRILLO COMMONS TRAFFIC STUDY

February 2004

Prepared for First Federal Development

Marquez
Transportation
Engineering

Environmental Review Initial Study
ATTACHMENT 11, 1st 9
APPLICATION 03-0065

May 4, 2004

Brad Bowman
First Federal Development
2516 Samaritan Drive, Suite K
San Jose, CA 95124

RE: Traffic Study for Cabrillo Commons

Dear Mr. Bowman:

Attached is a draft traffic study for the Cabrillo Commons project on Alherton Drive in Aptos, California. This study updates the previous studies done for this site with the new traffic counts done in November of this year and responds to the comments of the County Public Works Department on the draft prepared in December 2003.

Your proposed project does not result in significant traffic impacts to the surrounding area. Your project can be accommodated at all intersections studied including a cumulative development scenario to the year 2010. The state offramp intersections at Route 1 and Park Avenue have been evaluated in a 2020 scenario also with no significant impact identified.

The only identified problem area exists at the intersection of Soquel Drive and Willowbrook Lane. At this intersection the left turn movement from the minor street experiences long delays. This can be mitigated with minor restriping and modification to the intersection.

The cumulative impacts of your project are addressed through your payment of the Aptos Area Traffic Improvement Fee.

No parking impacts are anticipated with your project as proposed. Each unit is expected to have parking for three vehicles. This is consistent with the County requirement and your project does not have an extraordinary parking demand.

Let me know if you have questions

Sincerely,



Ronald Marquez P.E.

cc: Richard Beale

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Cabrillo Commons Traffic Study

Introduction

The purpose of this report is to update the traffic analysis for the proposed development of 43 residential townhouses on Atherton Drive in Soquel in the unincorporated area of Santa Cruz County. Three previous traffic studies have been prepared for **this** site with a variety of different development proposals. All counts at the ten study intersections were updated in November **2003**. This report will review the effects of the proposed project on the existing traffic conditions and on cumulative development conditions. The counts made **are** presented in the appendix to this report.

Project

The proposed project is a 43 unit townhouse residential development on Atherton Drive. The site is located at the southeast quadrant of the intersection of Soquel Drive and Atherton Drive. Access to the development is proposed from Atherton Drive. The project traffic is analyzed with the addition of two developments which are under construction adjacent to the project site. These two projects are similar residential developments. Atherton Place Phase 1 includes 7 units of residential units. Atherton Place Phase 2 is a project of 19 residential units. The latter project is accessed via Cabrillo College Drive.

Cumulative Conditions

Cumulative conditions have been identified by expanding traffic for all intersections by a growth factor to estimate traffic volumes in 2010. Because of the proximity to Cabrillo College the traffic volumes in the area will correlate to the expected growth of the Campus. The Campus is expected to grow at a rate of **1.3%** per year. Since this growth rate is greater than the County's growth rate it can be conservatively used to estimate future traffic growth in the area.

Analysis

The intersection level of service analysis was prepared using Synchro 5, traffic engineering software developed by Trafficware. Trip generation for the project is consistent with the previous traffic studies. Trip generation rates from "Trip Generation" prepared by the Institute of Transportation Engineer were used to estimate the trip generation for the project. The following table describes the trip generation for the proposed project and for the adjacent projects under construction. The project will generate **412** new trips per day to the area with 32 during the morning peak hour and **43** during the evening peak hour. All three projects will add 660 new trips per day with 51 in the morning peak and 70 in the evening **peak**

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Cabrillo Commons
Trip Generation Estimate
Dec-03

Use	D.U	Trip rate/ day	Total Daily Trips	Trip rate/ am	Am Peak Trips	Trip rate/ pm	PM Peak Trips
Proposed Project							
Cabrillo Commons	43	9.57	412	0.74	32	1.01	43
Under Construction							
Atherton Phase 1	7	9.57	67	0.74	5	1.01	7
Atherton Phase 2	19	9.57	182	0.74	14	1.01	19
		Total daily	660	AM Peak Trips	51	PM Peak Trips	70

Note: Project trip generation will include Cabrillo Commons, Atherton Phase 1 & Atherton Phase 2 traffic.

Existing Conditions

All intersections studied are operating at acceptable levels of service. The level of service standard of acceptance is D. All signalized intersections are operating at C or better during the morning and evening peak hours. All unsignalized intersections studied also operate within acceptable standards with the exception of the Willowbrook Lane and Soquel drive intersection which has a northbound approach level of service of E. The intersection capacity utilization level of service for that intersection is A. This intersection would improve to acceptable levels for all approaches with the addition of a right hand turn lane. The table on the following page presents the level of service calculated for the ten study intersections.

Volumes on Soquel Drive were also counted for a 24 hour period. An average 24 hour volume for the 2 days of counts is 21,500 vehicles per day. The peak hour was observed between 7:30 and 8:30 am and beginning at 5:00 pm for the evening peak. The morning peak hour volume was 1800 vehicles and the evening peak hour volume was 2050 vehicles. These volumes are well within acceptable levels of service as they represent about 57% of the capacity of the roadway segment.

Highway 1 in the vicinity of the project experiences considerable congestion. This highway south of Park Avenue operates at level of service E northbound in the morning peak hour and level of service E in the southbound direction during the evening peak hour. North of Park Avenue Highway 1 level of service degrades to F for the same time periods mentioned above. Annual average daily traffic on these road segments is 89,000 vehicles per day south of Park Avenue and 107,000 vehicles per day north of it.

Environmental Review Initial Study

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Table 2

	LOS / Delay	LOS / Delay	LOS / Delay
Morning Peak Hour			
Park Ave and Cabrillo College Dr	B/10.2	-----	-----
Park Ave and Soquel Drive	C/24.6	C/24.6	C/26.6
Soquel Drive and West Perimeter Rd	B/14.6	B/14.6	B/16.0
Soquel Drive and Cabrillo College Dr	B/11.8	B/11.9	B/13.3
Soquel Drive and Willowbrook Lane	D/27.0	D/27.1	D/30.8
Soquel Drive and Atherton Dr	A/0	B/12.2	B/12.7
Willowbrook Lane and Baseline Dr.	A/9.1	A/9.2	A/9.3
Willowbrook Lane and Cabrillo College Dr.	A/9.7	A/9.9	B/10.1
Route 1 Northbound and Park Avenue	B/14.7	B/14.7	B/15.6
Route 1 Southbound And Park Avenue	C/25.3	C/25.3	C/26.3
Evening Peak Hour			
Park Ave and Cabrillo College Dr	A/8.4	A/8.4	A/9.7
Park Ave and Soquel Drive	C/26.4	C/26.4	C/29.2
Soquel Drive and West Perimeter Rd	A/9.2	A/9.2	A/10.0
Soquel Drive and Cabrillo College Dr	B/12.4	B/13.4	B/13.9
Soquel Drive and Willowbrook Lane	E/35.5	E/39.0	F/51.4
Soquel Drive and Atherton Dr	A/0	B/13.9	B/14.8
Willowbrook Lane and Baseline Dr.	A/9.5	A/9.5	A/9.6
Willowbrook Lane and Cabrillo College Dr.	A/9.6	A/9.7	A/9.8
Route 1 Northbound and Park Avenue	B/18.5	B/18.5	C/20.1
Route 1 Southbound And Park Avenue	C/21.9	C/22.1	C/23.5

Project Trip Distribution

Project trip generation was identified on the basis of existing circulation patterns. Project trips were distributed as follows 40% on Park Avenue (south), 30% on Soquel Drive (west), and 30% on Soquel Drive (east). The estimated trip generation from the project is distributed according to the above distribution pattern. The project trip assignment for AM peak and PM peak is demonstrated in the appendix.

Existing plus Project Conditions

The level of service analysis of the intersections indicates that all intersections currently operating at acceptable levels will continue to do so. The only intersection operating below level of service C is the Soquel Drive and Willowbrook Lane intersection. The northbound approach delay for the intersection is long primarily due to the delay in making a left turn at the intersection from the minor street. The median and storage lane do improve the effectiveness of the operation. Adding an additional lane northbound through revising the striping will reduce the congestion. The two Caltrans signals will continue to operate at acceptable levels as well.

The proposed development will contribute to the Soquel Traffic Improvement program as a means of mitigating the impacts of its traffic and that of cumulative development.

Cumulative Conditions with Project

To analyze cumulative conditions traffic in the surrounding area was forecast to grow at 1.3% per year. The study horizon is the year 2010. As previously mentioned the trip generation to Cahrillo College will drive traffic volumes in the area. The project traffic was added to the cumulative background growth to arrive at a 2010 build out scenario. As with the previous scenario the only intersection operating at unacceptable levels will be the Soquel Drive and Willowbrook Lane intersection. Restriping this intersection to allow an additional northbound lane and redesigning the left turn receiving lane to accommodate more vehicles will improve the level of service over the existing level and still provide for future traffic.

Impacts on State Highway System

The project effects on the intersection Route 1 and Park Avenue were evaluated using the same methods used for County road system. In addition the effects of the project were evaluated in a 2020 scenario. Background traffic was estimated using the growth rate of 1.3% for 16 years. Both the northbound and southbound offramps will operate at acceptable levels. The following table presents the level of service calculated for the State Highway intersections as estimated for the year 2020.

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Table 3
State Highway Intersection Level of Service

Route 1 Northbound	B111.2	C/23.9
Route 1 Southbound And Park Avenue	C130.1	C/26.8

The addition of project related traffic to Route 1 will increase the congestion already experienced on this facility. This increase in traffic on the State highway is expected to be less than 0.5% of existing volumes. Inasmuch as a Regional project to widen Route 1 is underway (an environmental impact report is being prepared for the project) at this time no additional mitigation measure is considered.

A project study report has been prepared for the highway widening which would address the impacts described. The County of Santa Cruz is participating in a regional effort to implement this project. Funding for this project is proposed using a dedicated sales tax for transportation scheduled for voter consideration in November 2004.

In addition the County imposes a traffic impact fee on all development in the area. This fee is intended to address the impacts associated with traffic growth

Project Parking

The proposed project includes the provision of three parking spaces for every unit. This will meet the County Parking Requirement. No parking impacts are anticipated with the project.

Interior Circulation

Access through the site is proposed from a 26 foot wide circular street which connects to Atherton Drive at two locations. Several parking bays are included along the street to provide for guests and those units that do not have full driveway aprons. A sidewalk is proposed along one side of this interior street. Additional pedestrian circulation options are provided to ease connection to Soquel Drive and Atherton Drive.

Sixteen of the units are accessed by shared driveways. These units have no driveway apron. Parking for these units will be either in the garage or in the parking bays. There is room for 31 vehicles in the parking bays. These driveways, Sessnon Court 1 and 2 and the driveway serving units 8-11, are 22 and 23 feet wide. This will be sufficient for most vehicles to make a **turn** around. If these driveways are maintained obstacle free they provide sufficient room for a **turn** around

The interior circulation system does not meet County Design standards. The Institute of Transportation Engineers identifies typical design standards for local streets to range from **22** feet to **36** feet in width. These standards vary depending on density and anticipated traffic volumes. The developers are asking for variation from the County standards through the planned development process.

Study Appendix

As supporting documentation for the findings in this report a number of attachments **are** incorporated. Attached is a tentative subdivision map of the project. The Cabrillo Enrollment 10 Year Projection is also included. The next attachment presents the turning movements counts made in November 2003. Estimates of the project trip generation and distribution for both **am** and pm time periods are shown in next attachments. The final attachments are the worksheets for the level of service calculations for all ten study intersections and three study scenarios.

Environmental Review Initial Study
ATTACHMENT 11, 8049
APPLICATION 03-0065

May 15, 2006

MEMORANDUM

TO: Jack Sohriakoff
CC: Man Farrar, Mathew Thompson
FROM: Sasi Karavadi
SUBJECT: Atherton Place Driveway Evaluation

This memorandum provides the evaluation of Atherton Place Driveway at units that were of concern.

For 41, 42, and 43 Units

- A decorative raised crosswalk will be placed to help traffic calming in the residential neighborhood.
- This decorative raised crosswalk will be placed between the driveways of 41 and 42 units.

For 29, 30, and 31 Units

- These units have a 40' radius curve following into a 190' radius curve. The safe negotiating curve speed would be 10 mpb.
- Motorists approaching the curve from north and south would **be** warned with "REDUCE SPEED *AHEAD*" regulatory sign. Furthermore, motorists approaching the curve from the north **will** slow down due to a decorative raised crosswalk that would be placed 90 degrees to the internal access road.

The site plan is attached as a PDF format along with this mal. Please call me **or** Keith Higgins if you have any questions regarding this information.

Thanks.

Environmental Review Initial Study
ATTACHMENT 11-9-07-9
APPLICATION 03-0065

C O U N T Y O F S A N T A R U Z
D I S C R E T I O N A R Y A P P L I C A T I O N C O M M E N T S

Project Planner: Randal Adams
Application No.: 03-0065
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Environmental Planning Completeness Comments

===== UPDATED ON MARCH 3, 2003 BY KENT M EDLER ===== 1. Include an erosion control plan prepared by a Certified Professional in Erosion and Sediment Control (CPESC). 2. Plans need to reference the accepted soils report. 3. Show callouts to curb grades and flowlines (TC/FL). 4. Show stationing on plan view for Sesnor Drive. 5. Show a x-section of the wall that runs along the east side of the project. 6. Per the soils report, fills placed on slopes greater than 6:1 should be keyed. It appears that the fill of lots 2,3,4,5, & 7 needs to be keyed. Provide details and a x-section. Ref. section 4.1.6 of the soils report. 7. Lot 20 is less than 15' from the top of slope. Please have the geotechnical engineer address that the foundation is engineered to accomodate potential ravelling, sloughing, creep or erosion. Show the 15' set back to the top of slopes for all lots. Reference soils report section 4.1.7. 8. Show cut/fill lines on the project & designate which lots will need over-excavation to mitigate differential settlement. 9. Show drainage patterns behind lots 17-20 showing that surface water will not flow over the top of slope. 10. How is drainage collected at the retaining wall on the eastside of the project? Is there a swale that runs the length of the wall or does surface water flow over the top of the wall or ??? 11. What are the drainage patterns in the open space between units 23-25 and units 26-28? Also between units 29-32 and 33-36? How will runoff be handled in these areas? Show details. 12. Show a detail for the gabion mattress energy dissipator. 13. Show a typical x-section for Sesnor Court No.1, No.2 & No.3. Is there also a concrete swale on these courts? 14. I recommend adding inlets where Sesnor Courts No.1, No.2 & No.3 intersect w/ Sesnor Drive and adding additional storm drain lines. Currently all of the surface water from the streets drain into only one inlet. If this inlet clogs or backs up, there is a potential to flood lots 15, 16 and 17. 15. There is grading off of the property line along Soquel Drive. Check with Public Works to see if an encroachment permit is required for this work. If not, provide evidence of a legal easement allowing grading off of the property. 16. Locate the dissipator off of the pond fill

===== UPDATED ON MARCH 13, 2003 BY ROBIN M BOLSTER =====
In addition to the previous comments, the site must be staked in the field in order to verify the Riparian Corridor and Buffer.

===== UPDATED ON JANUARY 8, 2004 BY KENT M EDLER =====

My previous comment shave been addressed and the new plans are acceptable as submitted. Check misc. comments for updated rnisc. comments.

===== UPDATED ON JANUARY 9, 2004 BY ROBIN M BOLSTER =====
NO COMMENT

===== UPDATED ON JUNE 14, 2004 BY ROBIN M BOLSTER =====
NO COMMENT

===== UPDATED ON JUNE 14, 2004 BY ROBIN M BOLSTER =====

===== UPDATED ON OCTOBER 4, 2004 BY KENT M EDLER ===== Review of revised plans dated 09/03/04 by Ifland Engineers:

1) Show how drainage will be handled west of lot 28 - it appears that grading is designed so that drainage will flow towards the structure. Same situation at lot 1

2) Include a x-section that runs from Sesnon Drive thru lot 23 and out towards the

Environmental Review Final Study

ATTACHMENT 12, 10413
APPLICATION 03-0065

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pond

3) There are several locations where fill slopes are steeper than 2:1 and need to be revised. These locations are behind lots 9-11, SE of lot 11, behind lots 12-14 (behind the wall), and behind lot 15. It appears that if the grades are not corrected that the riparian setback will not be maintained behind lots 12-15.

4) The toe of the fill slopes need to be setback 3' from the property lines (lots 25-28). Reference Code section 16.20.160

===== UPDATED ON MARCH 29, 2005 BY KENT M EDLER ===== Comments below based upon revised plans 5,6 & 7 of 7 dated 03/01/05.

1. A fill slope is shown in plan view along the east side of the development (behind units 12-25), but x-sections A, B & C shown on sheet 6 do not reflect a fill slope. If the foundations are stepped as the x-sections indicate, then the fill slope should not be needed. Revise plans so that the x-sections and plan view match.

2. Provide a x-section thru unit 27 that runs from Sesnon Dr. to the property line. Also the grades between units 26-28 and the property line do not make sense. Revise the plans to show accurate grading. Note: the toe of fill slopes must be set back 3' from the property line.

3. Indicate wall heights on plan view for all walls

4. X-section E shows a wall behind unit 2, but this wall is not shown on plan view. The grades behind units 1, 2 & 3 also do not make sense. It also appears that the wall, deck and/or grading will conflict with the trees to be saved. Please revise plans accordingly.

5. East of unit 43, there is a fill slope that is not set back from the top of a cut slope (~180-182 proposed contours). Per section 16.20.150(b), "the top of a fill shall be no closer than 12' horizontally to the top of a planned cut slope." Revise plans accordingly

6. Provide a x-section thru unit 11

7. The proposed 176 contour NW of unit 8 does not make sense

8. Revise erosion control note #5 on sheet 7 to remove the "SCS approved erosion control mix." This mix contains invasive species and will not be allowed at this site.

===== UPDATED ON MARCH 29, 2005 BY KENT M EDLER =====

===== UPDATED ON OCTOBER 5, 2005 BY KENT M EDLER =====

In general the architectural plans and the civil plans do not coincide in many instances and must be rectified. Following is only a sampling of the discrepancies. Please note that the Thatcher and Thompson plans and Island plans must match - and the civil plans are what the improvements will be built from - not the architectural plans.

Example 1) Thatcher and Thompson (T&T) sheet 8, section 2 shows -19' from the edge

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of the building to the riparian setback and 39' to the property line. Iflands sheet 5 shows 23' and 43' respectively.

Example 2) T&T sheet 7, section 1 shows grading up to the property line (which actually must be setback 3' from the property line. Iflands plans show the toe of the fill setback from the property line as well as a swale.

Example 3) T&T sheet 7, section 3 shows a 3:1 slope behind the building, but Iflands plans show a 2:1 slope. The distances from the building to the riparian setback as well as the property line are also different. The elevations of the grading (fills) are also different

Example 4) T&T sheet 9, section 2 shows an 18" wall behind the building. Iflands plans show a 3.6' wall.

Again these are just examples of the types of problems with the plans that must be corrected.

Additionally, on the last submittal, Iflands plans dated 3/1/05 showed stepped foundations without fill slopes for x-sections A-A, B-B & C-C which is preferable from a minimizing grading standpoint. The latest plans have changed and do not reflect this and should be changed back.

Also there are not any road elevations shown for Atherton Drive on sheet 5. This information should be shown on the plans (in plan view) for verification that the elevations of units 32-40 are at the same level as Atherton Drive (this is a requirement per conversation with the project planner).

Once the discrepancies in the plans are resolved, the plans will be reviewed in more detail for conformance with County Code

===== UPDATED ON NOVEMBER 23, 2005 BY KENT M EDLER =====

Previous comments have been addressed. The grading plans are "complete" for EP review.

Environmental Planning Miscellaneous Comments

See completeness comments

===== UPDATED ON MARCH 13, 2003 BY ROBIN M BOLSTER =====

Conditions of Approval must incorporate mitigation measures outlined in the Biotic Report prepared by Biotic Resources Group, dated January 29, 2003, as well as the Conditions of Approval for the Riparian Exception.

===== UPDATED ON JANUARY 8, 2004 BY KENT M EDLER =====

1. Show a detail of the gabion energy dissipator.

2. Provide plan review letter from the soils engineer. The plan review letter must approve the location of the gabion energy dissipator and state that it is located off the pond fill.

===== UPDATED ON JUNE 14, 2004 BY ROBIN M BOLSTER =====

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 APPLICATION 03-0065

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NO COMMENT

Long Range Planning Completeness Comments

LATEST COMMENTS HAVE **NOT YET** BEEN SENT TO PLANNER FOR THIS AGENCY

===== REVIEW ON MARCH 17, 2003 BY MARK M DEMING ===== Application should be deemed incomplete pending review by the ORG and BOS at a public hearing to determine GP consistency per CC Section 18.10.140(b)

Project is. on the face of it, inconsistent with the GP designation of Urban high density residential (3000-4000 sf/du) as it proposes a density of 5277 sf/du. Site standards need significant REVIEW

===== UPDATED ON MARCH 17, 2003 BY MARK M DEMING ===== Housing comments: project must designate which units will be affordable units and declare which method they will use to satisfy CC Chap 17.10... 15% of the units are required to be affordable or 6.45 units: 6 units to be built and 0.45 paid through in lieu fees...more later

Long Range Planning Miscellaneous Comments

LATEST COMMENTS HAVE **NOT YET** BEEN SENT TO PLANNER FOR THIS AGENCY

===== REVIEW ON MARCH 17, 2003 BY MARK M DEMING =====
 NO COMMENT

Dpw Drainage Completeness Comments

LATEST COMMENTS HAVE **NOT YET** BEEN SENT TO PLANNER FOR THIS AGENCY

===== REVIEW ON MARCH 7, 2003 BY ALYSON B TOM ===== The application with civil plans dated 1/20/03 is not complete with regards to drainage for the discretionary stage.

- 1) Include water quality treatment for all driveway, parking, and road area runoff.
- 2) Please consult with the new project geotechnical engineer to determine if retention of runoff from this portion of the development is feasible.
- 3) How will runoff from the North end of Sesnon Drive and lots 33-43 be treated and detained?
- 4) Please use a more realistic runoff coefficient for the developed areas of this project. This is a multi-residential development.
- 5) Provide design details for the proposed detention system(s)
- 6) Provide a detailed drainage plan that clearly describes how roof and driveway runoff will be routed. Consider using grass lined swales or other method to route roof runoff to allow for some attenuation of the proposed increase in runoff due to this development.

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 ATTACHMENT 13-4/13
 APPLICATION 03-0065

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7) Please provide a detail describing how the proposed interior gutter will tie into the facilities along Soquel Drive.

8) Provide a drainage analysis for the proposed storm drain and street conveyance systems. Evaluation should demonstrate how the proposed facilities will meet design, overflow, and freeboard requirements as described in the County Design Criteria. Include inlet capacity and overflow evaluation for the proposed inlet. At least one additional inlet should be proposed in case of blockage.

9) This project is required to obtain a Construction site NPDES Permit from the State Water Resources Control Board. Please provide proof of this permit. For more information see: <http://www.swrcb.ca.gov/stormwater/constfaq.html>

===== UPDATED ON JANUARY 7, 2004 BY ALYSON B TOM ===== Application with plans dated 12/11/03 and drainage calculations dated 12/1/03 has been received. Not all of the previous completeness comments have been addressed. The following comments are numbered relative to the comments made on 3/7/03.

1) The updated plans include a stormceptor for water quality treatment. In the technical specs provided in the last submittal it states that use of a stormceptor in new residential developments is applicable when used as part of a treatment train. Please describe the other proposed aspects of the treatment train will be provided as part of this project. It is suggested that the designer consider retention and/or spreading and infiltration of the runoff by moving the outlet further away from the downstream channel and providing an alternative outlet as aspects of a treatment train.

2) Please consult with the new project geotechnical engineer to determine if retention of runoff from this portion of the development is feasible. (repeat of old comment)

3) Describe how the cut slope above the proposed sidewalk on Soquel Drive will drain. Will runoff from above (including rear patio areas) be directed over the slope and the sidewalk? Will this cause any safety or erosion/maintenance issues in the County right-of-way?

4) In the analysis dated 12/1/03 the rational method was used to evaluate the upstream 515 acre watershed. Per the design criteria the rational method is applicable only in watersheds up to 200 acres. Please provide an analysis using the unit hydrograph, SCS or other relevant (and approved) method. Please also provide an evaluation and documentation of the condition of the downstream culvert.

5) Figure SD-5 was used to evaluate detention requirements. This figure is for specified runoff coefficients and times of concentration. Demonstrate that the proposed project meets these conditions, or that the conditions are a conservative relative to the project, or utilize the modified rational method to determine detention requirements under based on the project conditions. The calculations under the detention volume required on sheet 2 of 7 does not appear consistent from the first to the second line. Please clarify.

6) Provide a detailed drainage plan that clearly describes how roof, driveway, and patio runoff will be routed. Consider using grass lines swales or other method to

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route roof and patio runoff to allow for some attenuation of the proposed increase in runoff due to this project. Include details for the proposed detention system, swales, and outlet. Include surfacing and maintenance requirements for the swales, detention, and treatment systems.

7) Not applicable

8) Provide a drainage analysis for the proposed detention, storm drain, swale, outlet and street conveyance system. Evaluation should demonstrate how the proposed facilities will meet design, overflow, and freeboard requirements as described in the County Design Criteria. Include inlet capacity and overflow evaluation for proposed inlets, gutter flow analysis for the proposed interior gutters (gutter spread relative to safe travel lanes), and analysis of the proposed swales and outlet structure. Prior to building permit issuance the project geotechnical engineer will need to approve of the outlet location and design.

NOTE: At the project planner's discretion comments 6 and 8 can be left until the building permit stage, but please note that the results of the detailed design and analysis may result in significant changes to the project design (including but not limited to: street, storm drain, and grading design)

Please see miscellaneous comments. All submittals related to this project should be made through the planning department.

===== UPDATED ON JUNE 1, 2004 BY ALYSON B TOM ===== Application with civil plans dated 5/5/04 has been recieved. None of the previous completeness comments made on 1/7/04 have been addressed. Please address these comments in addition to the following:

1) Drainage easements should be provided for all proposed common drainage improvements including the swales behind the retaining walls at the rear of lots 11 through 25.

2) The note that states that the exact location of the proposed storm drain and out fall will be determined in the field has been noted. The final location of the facilities must be inside the described drainage easement.

===== UPDATED ON OCTOBER 4, 2004 BY DAVID W SIMS =====
 4th Routing - Reviewed by DWS Prior reviews by ABT

Application with civil plans dated 9/3/04 has been received, and is not approved. The application is substantially incomplete due to the lack of not addressing review comments and completeness requirements made in prior reviews. Please refer to prior comments, particularly those made 1/7/04. ===== UPDATED ON APRIL 4, 2005 BY ALYSON B TOM ===== Application with civil plans dated 3/1/05 has been recieved. None of the previous comments have been fully addressed. Please address completeness comments from 1/7/04 and 6/1/04 as well as the following.

Comment No. 6 from 1/7/04 has been partially addressed. The new plan calls for hard piping almost all of the roof and patio runoff. This results in the following comments:

1) Easements are required for all common drainage lines.

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 APPLICATION 03-0065

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2) This project is required to minimize impervious surfacing. Describe how this will be accomplished

===== UPDATED ON SEPTEMBER 27, 2005 BY ALYSON B TOM ===== Application with civil plans dated 8/19/05 has been recieved. Please address the following:

Address comments No. 2, 3, 4, 5, and 8 from January 7, 2004 and comments No. 1 and 2 from April 4, 2005.

===== UPDATED ON DECEMBER 5, 2005 BY ALYSON B TOM ===== Application with civil plans dated 11/4/05 and drainage report revised on 11/7/05 by Ifland Engineers has been received. Please address the following comments:

1) The revised drainage report continues to use the rational method to evaluate the upstream 615 acre watershed. Please address comment No. 4 from January 7, 2004.

2) The detention analysis in the drainage report dated 11/7/05 does not meet county criteria. While page 2 of the report insinuates that the detention system is designed to mitigate for the difference between the post development 100 year storm and the pre development 10 year storm the analysis on page 7 indicates design for the difference between post and pre development 10 year storm. As specified in the County Design Criteria the allowable release rate should be based on the pre development 10 year, 15 minute time of concentration (or longer if appropriate for the site) runoff rate, rather than the 10 minute time of concentration used in the current report. Per the design criteria, the required detention volume should take into account the area above the rising limb of the allowable release rate, the current report ignores this area. The current report also appears to have subtraction errors in the detention volume calculations. Based on a comparison to design criteria standards the required detention volume is almost double the result in the current report. Please update the report to follow county design criteriastandards.

The applicant has chosen to provide a full analysis and design of the proposed drainage system prior to final map recordation. The applicant is cautioned that proposals found to be non-feasible after approvals and that then require substantial revision to correct, are required to be returned to the Planning Commission/Board of Supervisors for reconsideration.

===== UPDATED ON DECEMBER 16, 2005 BY ALYSON B TOM ===== Application with revised drainage analysis dated 12/8/05 has been received and is complete with regards to drainage for the discretionary stage. Please see previous statement cautioning the applicant about leaving the detailed drainage analysis to the next stage. Please also see miscellaneous comments for issues to be addressed prior to final map recordation.

Dpw Drainage Miscellaneous Comments

LATEST COMMENTS HAVE **NOT YET** BEEN SENT TO PLANNER FOR THIS AGENCY

===== REVIEW ON MARCH 7, 2003 BY ALYSON B TOM ===== Prior to building/grading permit issuance the following comments must be addressed

1) Submit a geotechnical review letter referring to dated plans and accepting the plan stating that it will not cause erosion or stability problems on this site or downstream of the site.

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 ATTACHMENT 12 7 of 13
 APPLICATION 03-0065

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2) Submit recorded maintenance agreements for the treatment and detention facilities. All proposed improvements will be privately owned and maintained

Additional comments may be required at the building application stage

For questions regarding this review Public Works stormwater management staff is available from 8:00-12:00 Monday through Friday.

===== UPDATED ON JANUARY 7, 2004 BY ALYSON B TOM ===== Please address the following comments in addition to the previous miscellaneous comments prior to building/grading/final map approval

3) This project is required to obtain a construction site NPDES permit from the State Water Resources Control Board. Please provide proof of permit application. For more information see: <http://www.swrcb.ca.gov/stormwater/constfaq.html>

4) Zone 5 fees will be assessed on the net increase in impervious area due to this project.

===== UPDATED ON OCTOBER 4, 2004 BY DAVID W SIMS =====

NO COMMENT

===== UPDATED ON SEPTEMBER 27, 2005 BY ALYSON B TOM ===== Address the following in addition to previous miscellaneous comments prior to final map recordation.

1) Include details for the proposed detention system, swales, and outlet. Include surfacing and maintenance requirements for the swales, detention system and treatment systems.

===== UPDATED ON DECEMBER 16, 2005 BY ALYSON B TOM ===== Please address the following in addition to previous miscellaneous comments:

1) Provide detailed analysis of the proposed drainage system demonstrating the system meets County Design Criteria requirements

2) Consider an alternative storm drain system discharge design so that discharge is all to perforated pipes or surface spreading on shallower sloped areas further away from the existing drainage channel. A reconfigured discharge without disturbance all the way to the channel is preferred.

Dpw Driveway/Encroachment Completeness Comments

----- REVIEW ON FEBRUARY 27, 2003 BY RUTH L ZADESKY -----

No comment, project involves a subdivision or MLD.

Dpw Driveway/Encroachment Miscellaneous Comments

===== REVIEW ON FEBRUARY 27, 2003 BY RUTH L ZADESKY =====

No comment.

Dpw Road Engineering Completeness Comments

===== REVIEW ON MARCH 18, 2003 BY GREG J MARTIN ===== Please see memo from DPW.

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DOCUMENT

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-----= UPDATED ON JANUARY 13, 2004 BY GREG J MARTIN =====

The Engineering Review Group has reviewed the second submittal for Application No. 03-0065 for a subdivision on Atherton Drive and has the comments below. Some of the comments below are repeated from our March 19, 2003 letter that was in response to the first submittal

(Comments 1-13 removed due to space by ISD-Diane Thorsen 3/29/05) If you have any questions please contact Greg Martin at 831-454-2811. -----= UPDATED ON JUNE 10, 2004 BY GREG J MARTIN =====

The Engineering Review Group has reviewed the third submittal for Appl. No. 03-0065 for a subdivision on Atherton Drive and has the comments below. Some of the comments below are repeated from the January 13, 2004 comments on the second submittal and a March 19, 2003 letter that was in response to the first submittal

(Comments 1-11 removed due to space by ISD-Diane Thorsen 3/29/05) If you have any questions please contact Greg Martin at 831-454-2811. -----= UPDATED ON OCTOBER 4, 2004 BY GREG J MARTIN =====

The Engineering Review Group has reviewed the fourth submittal for Appl. No. 03-0065 for a subdivision on Atherton Drive and has the comments below. Many of the comments below are repeated from the June 10, 2004 comments on the third submittal

1. Proposed subdivisions are required to meet County Standards for all internal roads including pedestrian access. The project developer is requesting an exception to the urban local street standard. and instead requests a 26 foot wide private road with a sidewalk on one side to serve as the main access for 43 units. The Department of Public Works does not support any exceptions as currently proposed. If exceptions are ultimately granted for the development. the roads are recommended to be maintained by a homeowner-s association. 2. The plan view on Sheet 3 shows an at-grade sidewalk along Sesnon Drive. The internal road is proposed with walkways at the same height as the road (no curb). allowing and encouraging vehicles to drive on the walkway. The DPW does not recommend this proposal due to potential pedestrian/vehicular conflicts. It is recommended the walkways be constructed with standard curbs thereby eliminating. or significantly reducing, the pedestrian/vehicular conflict risk. If standard curbs are not provided, the project improvement will require an exception to the County Design Criteria. 3. The County urban local street standard section shown on Sheet 2 should be crossed out in order to clearly inform staff and the approving body what is proposed. Typical sections are recommended to be provided for each of the different street configurations shown on the plan view. The typical proposed street section shown on Sheet 2 does not appear to be consistent with any of the street configurations shown on the plan view. 4. Two cross sections indicating existing and proposed conditions must be provided along east bound Soquel Drive, one through the two-lane section and one through the three-lane section (left turn pocket). 5. Traffic calming measures should be considered on Sesnon Drive such as standard road bumps and bulb outs should be considered. ADA access to the interior sidewalk should be provided. ADA accessible ramps should be located as near as possible to the the most direct path to Atherton Drive. Separated sidewalk should be used where possible. 6. We recommend that the proposed loop road Sesnon Drive meet County standards and be directly aligned across from Arlington Way and Cobblestone Court. 7. The existing site plan should show both sides of Soquel Drive and Atherton Dr for at least 100 ft from the property line of the development. 8. The parking requirements shown on the plans should specify

Environmental Review Initial Study

ATTACHMENT

APPLICATION

Project Planner: Randal1 Adams
 Application No.: 03-0065
 APN: 037-251-26

Date: December 19, 2005
 Time: 14:53:01
 Page: 10

residential and visitor parking requirements. Each space should be identified and numbered. 9. Public Works supports the right-of-way abandonment of Atherton Drive provided the new sidewalk on Atherton Drive meets current standards and has separated sidewalk. 10. There does not appear to be sufficient space to allow room for vehicles from Unit 11 to back out and other vehicles to turnaround. 11. The Statement of Improvements to be Installed on Sheet 2 states -Full street improvements-. This is misleading and should be removed as the street proposed does not meet County Standards. 12. The draft traffic study dated February 2004 by Marquez Transportation Engineering is acceptable. The mitigation measures identified should be shown on the plans. 13. The development is subject to Soquel Transportation Improvement (TIA) fees at a rate of \$4,000 per new residential lot created. The project plans propose 43 new residential lots. Therefore, the total preliminary fees are calculated to be \$172,000 (43 lots x \$4,000/lot = \$172,000). The total TIA fee of \$172,000 is to be split evenly between transportation improvement fees roadside improvement fees. Off-site capital improvements constructed by the project may be eligible for TIA fee credit if listed in the current County Capital Improvement Program.

If you have any questions please contact Greg Martin at 831-454-2811. ===== UP-DATED ON MARCH 29, 2005 BY GREG J MARTIN =====

The Engineering Review Group has reviewed the fifth submittal for Application No. 03-0065 for a subdivision on Atherton Drive and has the comments below. Most of the comments below are repeated from the comments on the fourth submittal

1. The plan view on Sheet 3 shows an at-grade sidewalk for approximately half of Sesnon Drive. The internal road is proposed with walkways at the same height as the road (no curb). allowing and encouraging vehicles to drive on the walkway. The DPW does not recommend this proposal due to potential pedestrian/vehicular conflicts. It is recommended the walkways be constructed with standard curbs thereby eliminating, or significantly reducing, the pedestrian/vehicular conflict risk. If standard curbs are not provided, the project improvement will require an exception to the County Design Criteria.
2. The garage for unit 31 is on a corner which shall make backing out difficult and potentially unsafe. We do not recommend this parking layout.
3. In order to ensure that sight distance at the entrances onto Atherton Drive is adequate. we recommend landscaping at the driveway entrance of Sesnon Drive and Atherton Drive comply with the County-s minimum landscape clearances for a typical street intersection.
4. The draft traffic study dated February 2004 by Marquez Transportation Engineering is acceptable. The traffic study identified striping changes at the intersection of Soquel Drive and Willowbrook Lane intersection. These improvements are recommended be shown on the plans
5. Two cross sections indicating existing and proposed conditions must be provided along east bound Soquel Drive, one through the two-lane section and one through the three-lane section (left turn pocket)
6. Public Works supports the right-of-way abandonment of Atherton Drive provided the

Environmental Review Initial Study

ATTACHMENT
 APPLICATION

03-0065

Project Planner: Randall Adams
 Application No.: 03-0065
 APN: 037-251-26

Date: December 19, 2005
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new sidewalk on Atherton Drive meets current standards with a landscape strip and separated sidewalk. The proposed project has non-separated sidewalk

7. Traffic calming measures should be considered on Sesnon Drive such as standard road bumps and bulb outs should be considered. ADA access to the interior sidewalk should be provided. ADA accessible ramps should be located as near as possible to the most direct path to Atherton Drive. Separated sidewalk should be used where possible.

8. We recommend that the proposed loop road Sesnon Drive meet County standards and be directly aligned across from Arlington Way and Cobblestone Court.

9. Proposed subdivisions are required to meet County Standards for all internal roads including pedestrian access. The project developer is requesting an exception to the urban local street standard, and instead requests a 26 foot wide private road with a sidewalk on one side to serve as the main access for 43 units. The Department of Public Works does not support any exceptions as currently proposed. If exceptions are ultimately granted for the development, the roads are recommended to be maintained by a homeowners association.

10. The development is subject to Soquel Transportation Improvement (TIA) fees at a rate of \$4,000 per new residential lot created. The project plans propose 43 new residential lots. Therefore, the total preliminary fees are calculated to be \$172,000 (43 lots x \$4,000/lot = \$172,000). The total TIA fee of \$172,000 is to be split evenly between transportation improvement fees and roadside improvement fees. Off-site capital improvements constructed by the project may be eligible for TIA fee credit if listed in the current County Capital Improvement Program.

If you have any questions please contact Greg Martin at 831-454-2811. ===== UP-DATED ON OCTOBER 14, 2005 BY GREG J MARTIN =====

The Engineering Review Group has reviewed the sixth submittal for Application No. 03-0065 for a subdivision on Atherton Drive and has the comments below. Most of the comments below are repeated from the comments on the fifth submittal

1. The garage for unit 31 is on a corner which shall make backing out difficult and potentially unsafe. We do not recommend this parking layout.

2. The draft traffic study dated February 2004 by Marquez Transportation Engineering is acceptable. The traffic study identified striping changes at the intersection of Soquel Drive and Willowbrook Lane intersection. These improvements are recommended be shown on the plans

3. Public Works supports the right-of-way abandonment of Atherton Drive provided the new sidewalk on Atherton Drive meets current standards with a landscape strip and separated sidewalk. The proposed project has non-separated sidewalk.

4. ADA access to the interior sidewalk should be provided. ADA accessible ramps should be located as near as possible to the most direct path to Atherton Drive. Separated sidewalk should be used where possible

Environmental Review Initial Study

ATTACHMENT 12/19/05
 APPLICATION 03-0065

Project Planner: Randall Adams
 Application No.: 03-0065
 APN: 037-251-26

Date: December 19, 2005
 Time: 14:53:01
 Page: 12

5. We recommend that the proposed loop road Sesnon Drive meet County standards and be directly aligned across from Arlington Way and Cobblestone Court
 6. Proposed subdivisions are required to meet County Standards for all internal roads including pedestrian access. The project developer is requesting an exception to the urban local street standard, and instead requests a 26 foot wide private road with a sidewalk on one side to serve as the main access for 43 units. The Department of Public Works does not support any exceptions as currently proposed. If exceptions are ultimately granted for the development, the roads are recommended to be maintained by a homeowners association.
 7. The development is subject to Soquel Transportation Improvement (TIA) fees at a rate of 84.000 per new residential lot created. The project plans propose 43 new residential lots. Therefore, the total preliminary fees are calculated to be 8172.000 (43 lots x \$4,000/lot = \$172,000). The total TIA fee of 8172.000 is to be split evenly between transportation improvement fees and roadside improvement fees. Off-site capital improvements constructed by the project may be eligible for TIA fee credit if listed in the current County Capital Improvement Program.
 8. The driveway ramps off of Atherton Drive and many of the interior driveway ramps do not meet standard. Each ramp should be 4 feet in width to provide a slope of 12.5 percent. In addition, many of the ramps are not uniform width which is unacceptable.
 9. The sidewalk should be either contiguous or separated in a standard configuration. The configuration shown in front of lots 38-40 is not standard and is therefore not recommended.
 10. Handicapped accessible ramps are required at the corners where the sidewalk ends
- If you have any questions please contact Greg Martin at 831-454-2811. ===== UP-DATED ON DECEMBER 1, 2005 BY GREG J MARTIN =====
 Previous comments from the last review are still applicable

Dpw Road Engineering Miscellaneous Comments

===== UPDATED ON MARCH 29, 2005 BY GREG J MARTIN =====
 ===== UPDATED ON OCTOBER 14, 2005 BY GREG J MARTIN =====
 ===== UPDATED ON DECEMBER 1, 2005 BY GREG J MARTIN =====

Environmental Health Completeness Comments

LATEST COMMENTS HAVE **NOT YET** BEEN SENT TO PLANNER FOR THIS AGENCY

===== REVIEW ON MARCH 14, 2003 BY JIM G SAFRANEK =====
 NO COMMENT

Environmental Health Miscellaneous Comments

LATEST COMMENTS HAVE **NOT YET** BEEN SENT TO PLANNER FOR THIS AGENCY

Environmental Review Initial Study
 ATTACHMENT 12, 12 & 13
 APPLICATION 03-0065

Project Planner: Randall Adams
Application No.: 03-0065
APN: 037-251-26

Date: December 19, 2005
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===== REVIEW ON MARCH 14, 2003 BY JIM G SAFRANEK =====
NO COMMENT

Environmental Review Initial Study
ATTACHMENT 12, 13, 13
APPLICATION 03-0065



**CENTRAL
FIRE PROTECTION DISTRICT**
of Santa Cruz County
Fire Prevention Division

930 17th Avenue, Santa Cruz, CA 95062
phone (831) 479-6843 fax (831) 479-6847

Date: March 29, 2005
To: Richard Beale
Applicant: Richard Beale
From: Tom Wiley
subject: 03-0065
Address: Cabrillo Commons
APN: 037-251-23
OCC: 3725123
Permit: 20050086

We have reviewed plans for the above subject project

The following NOTES must be added to notes on velums by the designer/architect in order to satisfy District requirements when submitting for Application for Building Permit:

NOTE on the plans that these plans are in compliance with California Building and Fire Codes (2001) and District Amendment.

NOTE on the plans the OCCUPANCY CLASSIFICATION, BUILDING CONSTRUCTION TYPE-FIRE RATING and either SPRINKLERED or NON-SPRINKLERED as determined by the building official and outlined in Chapters 3 through 6 of the 2001 California Building Code (e.g., R-3, Type V-N, Sprinklered).

The FIRE FLOW requirement for the subject property is 1000 gallons per minute for 120 minutes. NOTE on the plans the REQUIRED and AVAILABLE FIRE FLOW. The AVAILABLE FIRE FLOW information can be obtained from the water company.

SHOW on the plans a public fire hydrant, meeting the minimum required fire flow for the building, within 250 feet of any portion of the building.

NOTE ON PLANS: New/upgraded hydrants, water storage tanks, and/or upgraded roadways shall be installed PRIOR to and during time of construction (CFC 901.3).

SHOW on the plans DETAILS of compliance with the District Access Requirements outlined on the enclosed handout.

NOTE on the plans that the building shall be protected by an approved automatic sprinkler system complying with the edition of NFPA 13D currently adopted in Chapter 35 of the California Building Code. Each Townhome is to have its' own riser for the fire sprinkler system. with a horn strobe located at the front door and bell located outside the master bedroom window of each unit connected to the flow switch on the fire sprinkler riser for that Townhome.

NOTE that the designer/installer shall submit three (3) sets of plans and calculations for the underground and overhead Residential Automatic Sprinkler System to this agency for approval. Installation shall follow our guide sheet.

Environmental Review Initial Study

ATTACHMENT 13, 1 of 2
APPLICATION 03-0065

Serving the communities of Capitola, Live Oak, and Soquel

Show on the plans where smoke detectors are to be installed according to the following locations and approved by this agency as a minimum requirement:

- One detector adjacent to each sleeping area (hall, foyer, balcony, or etc).
- One detector in each sleeping room.
- One at the top of each stairway of 24" rise or greater and in an accessible location by a ladder.
- There must be at least one smoke detector on each floor level regardless of area usage.
- There must be a minimum of one smoke detector in every basement area.

NOTE on the plans where address numbers will be posted and maintained. Note on plans that address numbers shall be a minimum of FOUR (4) inches in height and of a color contrasting to their background

NOTE on the plans the installation of an approved spark arrestor on the top of the chimney. Wire mesh not to exceed ½ inch.

NOTE on the plans that the roof coverings to be no less than Class "B" rated roof.

NOTE on the plans that a 30-foot clearance will be maintained with non-combustible vegetation around all structures.

Submit a check in the amount of \$100.00 for this particular plan check, made payable to Central Fire Protection District. A \$35.00 **Late Fee** may be added to your plan check fees if payment is not received within 30 days of the date of this Discretionary Letter. INVOICE MAILED TO APPLICANT. Please contact the Fire Prevention Secretary at (831) 479-6843 for total fees due for your project.

If you should have any questions or comments, please call me at (831) 722-2393, or email me at TomW@centralfpd.com.

CC: File & County

As a condition of submittal of these plans, the submitter, designer and installer certify that these plans and details comply with applicable Specifications, Standards, Codes and Ordinances, agree that they are solely responsible for compliance with applicable Specifications, Standards, Codes and Ordinances, and further agree to correct any deficiencies noted by this review, subsequent review, inspection or other source. Further, the submitter, designer, and installer agrees to hold harmless from any and all alleged claims to have arisen from any compliance deficiencies, without prejudice, the reviewer and the Central FPD of Santa Cruz County.

Any order of the Fire Chief shall be appealable to the Fire Code Board of Appeals as established by any party beneficially interested, except for order affecting acts or conditions which, in the opinion of the Fire Chief, pose an immediate threat to life, property, or the environment as a result of panic, fire, explosion or release.

Any beneficially interested party has the right to appeal the order served by the Fire Chief by filing a written "NOTICE OF APPEAL" with the office of the Fire Chief within ten days after service of such written order. The notice shall state the order appealed from, the identity and mailing address of the appellant, and the specific grounds upon which the appeal is taken.

3725123-032905

Environmental Review Initial Study
ATTACHMENT 13.2.02
APPLICATION 03-0065

November 3, 2004

Mr. Richard Beale
Land Use Planning, Inc.
100 Doyle Street, Suite E
Santa Cruz, CA 95062

SUBJECT: Water Service Application for Cabrillo Commons, 43-Unit Subdivision,
APN 037-251-21 (The original application was submitted under the
name of Atherton Place and approved on November 26, 2002)

Dear Mr. Beale:

In response to the subject application, the Board of Directors of the Soquel Creek Water District at their regular meeting of November 2, 2004 voted to renew the project's Will Serve Letter for a 43-unit subdivision to be located near Soquel Drive and Atherton Drive in Aptos, subject to such conditions and reservations as may be imposed at the time of entering into a final contract for service. Neither a final contract for service nor a service installation order will be issued until such time as all approvals from the appropriate land-use agency and any other required permits from regulatory agencies have been granted and all conditions for water service have been met to the satisfaction of the District.

This present indication to serve is valid for a two-year period from the date of this letter; however, it should not be taken as a guarantee that service will be available to the project in the future or that additional conditions, not otherwise listed in this letter, will not be imposed by the District prior to granting water service. Instead, this present indication to serve is intended to acknowledge that, under existing conditions, water service would be available on condition that the developer agrees to provide the following items without cost to the District:

- 1) Destroys any wells on the property in accordance with State Bulletin No. 74;
- 2) Satisfies all conditions imposed by the District to assure necessary water pressure, flow and quality;
- 3) Satisfies all conditions of Resolution No. 03-31 Establishing a Water Demand Offset Policy for New Development, which states that all applicants for new water service shall be required to offset expected water use of their respective development by a 1.2 to 1 ratio by retrofitting existing developed property within the Soquel Creek Water District service area so that any new development has a "zero impact" on the District's groundwater supply. Applicants for new service shall bear those costs associated with the retrofit as deemed appropriate by the District up to a maximum set by the District and pay any associated fees set by the District to reimburse administrative

and inspection costs in accordance with District procedures for implementing this program.

Water Demand Offset factors have been applied as we understand your lot and your project, and will be adjusted if your **final** project differs from what is proposed.

- 4) Satisfies all conditions for water conservation required by the District at the time ~~of~~ application for service, including the following:
 - a) Plans for ~~a~~ water efficient landscape and irrigation system shall be submitted to District Conservation Staff for approval. Current Water Use Efficiency Requirements are enclosed with this letter, and are subject to change;
 - b) **All** interior plumbing fixtures shall be low-flow and all Applicant.. installed water-using appliances (e.g. dishwashers, clothes washers, etc.) shall have the EPA Energy Star label;
 - c) District Staff shall inspect the completed project for compliance with all conservation requirements prior to commencing domestic water service;
- 5) Completes LAFCO annexation requirements, if applicable;
- 6) **All** units shall be individually metered with a minimum size of 5/8-inch by %-inch standard domestic water meters;
- 7) A memorandum of the terms of this letter shall be recorded with the County Recorder of the County of Santa Cruz to insure that any future property owners are notified of the conditions set forth herein.

Future conditions ~~which~~ negatively affect the District's ability to serve the proposed development. include, but are not Limited to, a determination by the District that existing arid anticipated water supplies are insufficient to continue adequate and reliable service to existing customers while extending new service to your development. In that case, service may be denied.

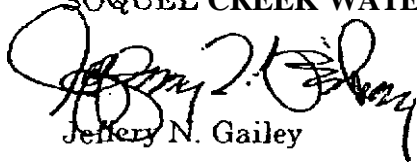
You are hereby put on notice that the Board of Directors of the Soquel Creek Water District is considering adopting additional policies to mitigate the impact of new development on the local groundwater basins, which are currently the District's only source of supply. Such actions are being considered because of concerns about existing conditions that threaten the groundwater basins and the lack of a supplemental supply source that would restore and maintain healthy aquifers. The Board may adopt additional mandatory mitigation measures to further address the impact of development on existing water supplies, such as the impact of impervious construction on groundwater recharge. Possible new conditions of service that may **be** considered include designing and installing facilities or fixtures on-site or ~~at~~ a specified location as prescribed and approved **by** the District which would restore groundwater recharge potential as determined by the District. The proposed project

Environmental Review Initial Study
ATTACHMENT 14-2-23
APPLICATION 03-0065

would be subject to this and any other conditions of service that the District may adopt prior to granting water service. As policies are developed, the information will be made available.

Sincerely,

SOQUEL CREEK WATER DISTRICT



Jeffery N. Gailey

Engineering Manager/Chief Engineer

Enclosure: Water Use Efficiency Requirements

Environmental Review Initial Study
ATTACHMENT 14-307-3
APPLICATION 03-006-1

SANTA CRUZ COUNTY SANITATION DISTRICT
INTER-OFFICE CORRESPONDENCE

DATE: **September 30, 2004**

TO: Planning Department, ATTENTION: RANDALL ADAMS

FROM: Santa **Cruz** County Sanitation District

SUBJECT: SEWER AVAILABILITY AND DISTRICT'S CONDITIONS OF SERVICE FOR THE
FOLLOWING PROPOSED DEVELOPMENT.

APN: 037-251-21 APPLICATION NO.: 03-0065

PARCEL ADDRESS: N/A

PROJECT DESCRIPTION: TRACT 1471

Sewer service is available for the subject development upon completion **of** the following conditions. This notice is effective for one year from the issuance date to **allow** the applicant time to receive tentative map, development or other discretionary **permit** approval. **If after this time frame** this project has not received approval from **the Planning Department**, a new sewer service availability letter must be obtained by the applicant. Once a tentative map is approved **this** letter shall apply until the tentative map approval expires.

Proposed location of on-site sewer lateral(s), clean-out(s), and connection(s) to existing public sewer must **be shown on** the plot plan **of** the building permit application.

Department of Public Works **and** District approval shall be obtained for an engineered sewer improvement plan, **showing** on-site and off-site sewers needed **to** provide service to each lot or unit proposed, **before** sewer connection permits can be issued. The improvement plan shall conform to the County's "Design Criteria" and **shall** also show any roads **and** easements. Existing **and** proposed easements shall be shown on **any** required Final Map. **If a Final Map is not required, proof of** recordation of existing or **proposed** easement **is** required.

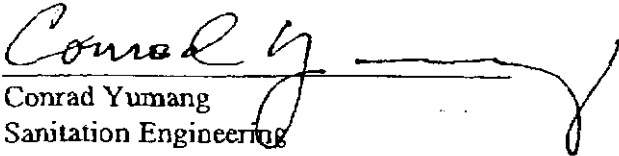
The plan shall show all existing and **proposed plumbing fixtures on floor plans of building application**. Completely describe all **plumbing fixtures** according to table 7-3 of the **uniform plumbing code**.

Other: Include the attached General Notes into your engineering plans.

Number **the Sanitary** Sewer Manholes.

Environmental Review Initial Study
ATTACHMENT 15, Lot 4
APPLICATION 03-0065

Sanitary sewer crossings with ~~other~~ utilities (including laterals) must have 1' clearance with other pipes, a minimum 2% slope, and 3' of cover at the property line. Show the sanitary sewer laterals for all units. For units 13, 14, 15, 32, 33, 34 and 35, show the invert elevations of said sanitary sewer laterals at the pipe crossings with water and storm drainage utilities.


Conrad Yumang
Sanitation Engineering

CAY:abc/139

(Rev. 3-96)

Environmental Review Initial Study
ATTACHMENT 15-204
APPLICATION 03-0065

SANTA CRUZ COUNTY SANITATION DISTRICT

INTER-OFFICE CORRESPONDENCE

DATE: May 16,2006

TO: Planning Department, ATTENTION: RANDALL ADAMS

FROM: Santa Cruz County Sanitation District

SUBJECT: SEWER AVAILABILITY AND DISTRICT'S CONDITIONS OF SERVICE FOR THE
FOLLOWING PROPOSED DEVELOPMENT:
RE-ISSUE MAY 5,2006

APN: 037-251-21

APPLICATION NO.: 03-0065

PARCEL ADDRESS: NA

PROJECT DESCRIPTION: CABRILLO COMMONS - 43 UNITS

Sewer service is available for the subject development upon completion of the following conditions. This notice is effective for one year from the issuance date to allow the applicant the time to receive tentative map, development or other discretionary permit approval. If after this time frame this project has not received approval from the Planning Department, a new sewer service availability letter must be obtained by the applicant. Once a tentative map is approved this letter shall apply until the tentative map approval expires.

Proposed location of on-site sewer lateral(s), clean-out(s), and connection(s) to existing public sewer must be shown on the plot plan of the building permit application.

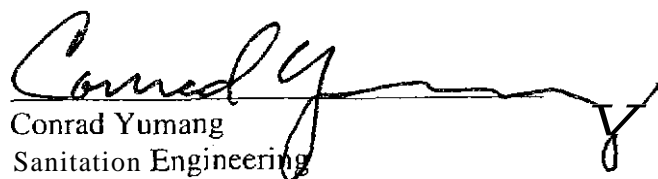
Existing lateral(s) must be properly abandoned (including inspection by District) prior to issuance of demolition permit or relocation or disconnection of structure. An abandonment permit for disconnection work must be obtained from the District.

Department of Public Works and District approval shall be obtained for an engineered sewer improvement plan, showing on-site and off-site sewers needed to provide service to each lot or unit proposed, before sewer connection permits can be issued. The improvement plan shall conform to the County's "Design Criteria" and shall also show any roads and easements. Existing and proposed easements shall be shown on any required Final Map. If a Final Map is not required, proof of recordation of existing or proposed easement is required.

The applicant must form a homeowners' association with ownership and maintenance responsibilities for all on-site sewers for this project; reference to homeowner's association shall be included on the Final Map and in the Association's recorded CC&R's which shall be recorded. Applicant shall provide a copy of said CC&R's to the District prior to the filing of the final map.

Environmental Review Initial Study
ATTACHMENT 15, 3 of 4
APPLICATION 03-0065

The plan shall show all existing and proposed plumbing fixtures on floor plans of building application. Completely describe all plumbing fixtures according to table 7-3 of the uniform plumbing code.


Conrad Yumang
Sanitation Engineering

CAY:mh/101.wpd

c: Applicant: Atherton Place Development

Property Owner: Richard Beale
100 Doyle Street, Suite E
Santa Cruz, CA 95062

(Rev. 3-96)

Environmental Review Initial Study
ATTACHMENT 15-4044
APPLICATION 03-0065

Paia Levine

From: Jack Sohriakoff
Sent: Wednesday, April 05, 2006 10:10 AM
To: Paia Levine; Randall Adams
Subject: Cabrillo Commons, Willowbrook at Soquel Drive striping

We reviewed the possibility of removing parking on Willowbrook at Soquel Drive to accommodate a separate right turn lane northbound as suggested in the traffic study. The current road width is 40 feet. There would be approximately three vehicle spaces eliminated between Soquel Drive south to the driveway entrance to the health club. A possible interim measure would be to just eliminate the parking with red curb and not stripe a separate lane to provide room for right turning vehicles to get past the left turning vehicles. The ultimate solution to include a right turn lane would be to eliminate parking on both sides of the street, move the yellow centerline over and have the two separate northbound lanes.

Although this intersection is in the CIP for a future traffic signal, work has not yet begun on the design phase. Please let me know if you have any questions.

Jack Sohriakoff
Senior Civil Engineer

Environmental Review Initial Study
ATTACHMENT 16
APPLICATION 03-0065

Environmental Consulting Services **18488** Prospect Road – Suite 1, Saratoga, CA **95070**
Phone: (408) 257-1045 stanshell99@toast.net FAX: (408) 257-7235

April 13, 2006

Mr. Matthew Thompson
Thacher & Thompson Architects
200 Washington Street, Suite 201
Santa Cruz, CA 95060

Re: Evaluation of Potential Noise Impact and Mitigation,
Cabrillo Commons (Atherton Place) Residential Development, Soquel,
Santa Cruz County

Dear Matthew,

This memo responds to your request for an evaluation of the latest design for the Cabrillo Commons residential development at Soquel Avenue and Atherton Drive in Soquel. The design is very similar, from an acoustic design point of view, to the original project proposal that ECS evaluated in a report in June 1999. The key elements affecting traffic noise are the distance from the roadway and the vertical design, and the latest design appears to be very similar to the original design in those aspects. The following evaluations and recommendations relative to mitigation of traffic noise are based on the latest design drawings (May and August 2005) and two ECS reports on the original 1999 project design, dated June 8, 1999, and January 5, 2000.

Meeting Noise Element **45** dBA Interior Noise Level Standard

The highest outdoor noise levels on site are in the 65 dBA Ldn range, so good quality windows and doors, with minimum 21-22 dB STC ratings are required to meet the interior noise standards.

Outdoor Traffic Noise Mitigation for High Noise Areas

Even with highest outdoor noise levels in the 65 dBA Ldn range along Soquel Avenue, there are some choices and tradeoffs available for meeting the outdoor protected area guideline of 60 dBA Ldn.

The largest amount of protected outdoor area can be provided with solid 6'-7' property line masonry or wood walls along Soquel Drive. If wood is used the wall must be constructed so that there are no cracks or holes even after aging and weathering, including wrapping the walls around at least a third of the way along the side yards of both end properties on Soquel. This type of wall would allow the backyards closest to Soquel Avenue to achieve a noise level in the 60 dBA Ldn range. Yards in other parts of the project would also be in the 60 dBA range due to greater distances and structural shielding.

If property-line walls are not desired along Soquel Avenue, a much smaller protected area for each residence along Soquel could be provided with rear deck enclosures to a height of 7' above the deck. These enclosures can be constructed completely of 1/2" Plexiglas or 1/4" safety glass, or built with transparent material at least 4' above a solid wood 3' lower wall section. In this case the rear decks would be in the 60 dBA noise range, but of course the back yards would remain in the 65 dBA noise exposure range.

Environmental Review Initial Study
ATTACHMENT 17, 18, 19, 20, 21, 22, 23
APPLICATION 03-0065

Environmental Consulting Services

Saratoga

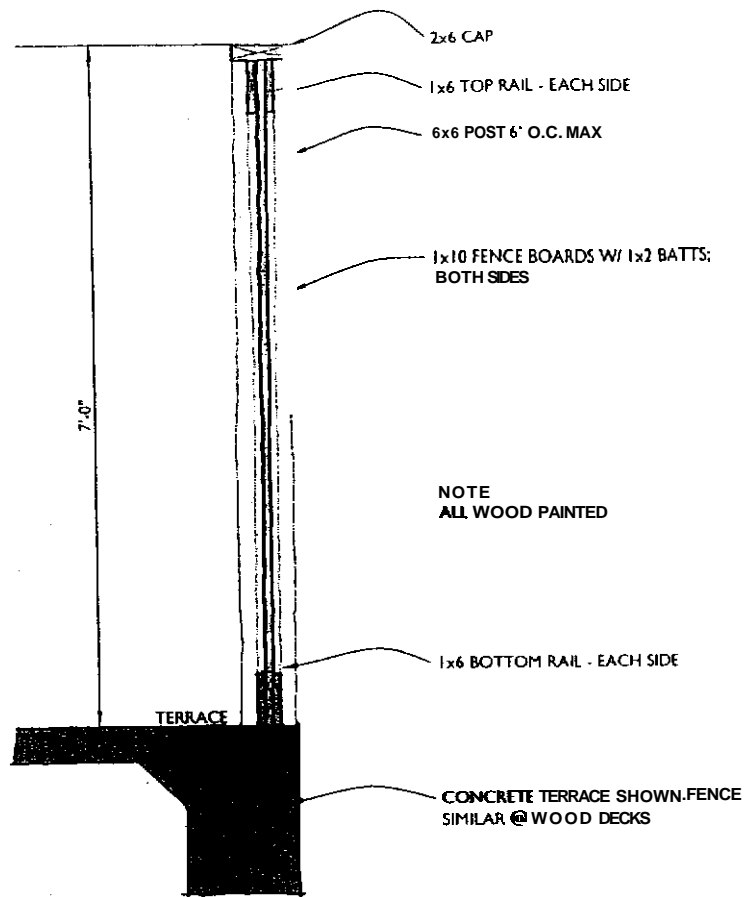
If I may be of further assistance on this project, please do not hesitate to contact me

Respectfully submitted,

Stan Shelly

H. Stanton Shelly
Acoustical Consultant
Board Certified Member (1982),
Institute of Noise Control Engineering

Environmental Review Initial Study
ATTACHMENT 17, 2 & 3
APPLICATION 03-C065



1

TYPICAL TERRACE FENCE DETAIL (LOTS 1-11)

SCALE: 1/2" = 1'

Environmental Review Initial Study
ATTACHMENT 17.3043
APPLICATION 03-0065

A

URBAN DESIGN DETAILS
CABRILLO COMMONS

THACHER &
THOMPSON
ARCHITECTS
APRIL 28, 2006



MONTEREY BAY

Unified Air Pollution Control District
serving Monterey, San Benito, and Santa Cruz counties

AIR POLLUTION CONTROL OFFICER
Douglas Quetin

24580 Silver Cloud Court • Monterey, California 93940 • 831/647-9411 • FAX 831/647-8501

DISTRICT BOARD MEMBERS

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Jerry Smith
Monterey County

July 25, 2006

Mr. Randall Adams, Staff Planner
County of Santa Cruz Planning Department
701 Ocean Street, 4th Floor
Santa Cruz, CA 95060

SUBJECT: CABRILLO COMMONS

Dear Mr. Adams:

The following comments are submitted for your consideration:

Air Quality - Particulate Matter. Page 5 of the Initial Study.

The Monterey Bay Unified Air Pollution Control District Board approved the "2005 Report on Attainment of the California Particulate Matter Standards in the Monterey Bay Region" in December 2005. It is the most current plan for attaining the fine particulate standard. It can be found on the District's website www.mbuapcd.org under "Air Quality Plan".

Initial Study - Transportation/Traffic, and Cabrillo Commons Traffic Study (Marquez Transportation Engineering, May 2004).

The Initial Study and Transportation/Traffic Study specify that the project's impact on Highway 1 traffic is estimated to be less than 0.5% of existing volumes, which already operate at LOS E or F during peak hours. The Traffic Study also discusses a regional project to widen Highway 1 and concludes that no additional mitigation was being considered. Since the report was prepared, the voters rejected a sales tax measure that was essential to the widening project. As a result, it appears that the Cabrillo Commons project will have significant and adverse impacts on traffic conditions along Highway 1 that are not mitigated. With the defeat of the sales tax measure, will the Project Applicant's payment of the Aptos Area Traffic Improvement Fee fully mitigate the cumulative impacts of the project on Highway 1 traffic?

Transit Service

There is no mention of transit service as a mitigation of the impacts of this project. Can you explain why this Transportation Demand Management mitigation was not included?

Consistency Determination from AMBAG

Please request a consistency determination from AMBAG for the 43 townhouses being proposed by the project,

Environmental Review Initial Study
ATTACHMENT 18, 1 of 7
APPLICATION 03-0065

Thank you for **the opportunity** to comment **on** the project

Yours truly,



Jean Getchell
Supervising Planner
Planning and Air Monitoring Division

cc: Todd Muck, AMBAG

Environmental Review Initial Study
ATTACHMENT 18, 2 of 7
APPLICATION 03-am



Linda Adams
Secretary for
Environmental
Protection

California Regional Water Quality Control Board

Central Coast Region



Arnold Schwarzenegger
Governor

Internet Address <http://www.swrcb.ca.gov/rwqcb3>
895 Aerovista Place, Suite 101, San Luis Obispo, California 93401
Phone (805) 549-3147 • FAX (805) 543-0397

July 19.2006

Paia Levine
701 Ocean Street
Santa Cruz, CA 95060

Dear Paia Levine,

RE: Negative Declaration, Cabrillo Court Development, Santa Cruz County
SCH#2006062124

Thank you for the opportunity to review the above-referenced document. The Central Coast Regional Water Quality Control Board (Water Board) is a responsible agency under the California Environmental Quality Act (CEQA). Water Board staff understands that the project includes the construction of 43 attached townhouses. We recommend you consider Low Impact Development (LID) design techniques for your proposed project. LID or equivalent methods are necessary to mitigate stormwater runoff pollution and stream erosion and sedimentation impacts that result from significantly increased downstream flows due to introduced impermeable surfaces.

LID is an alternative site design strategy that uses natural and engineered infiltration and storage techniques to control stormwater runoff where it is generated. LID combines conservation practices with distributed stormwater source controls and pollution prevention to maintain or restore watershed functions. The objective is to disperse LID devices uniformly across a site to minimize runoff (Anne Guillette, Whole Building Design Guide).

LID serves to preserve the hydrologic and environmental functions altered by conventional stormwater management. LID helps to maintain the water balance on a site and reduces the detrimental effects that traditional end-of-pipe systems have on waterways and the groundwater supply. LID devices provide temporary retention areas; increase infiltration; allow for pollutant removal; and control the release of stormwater into adjacent waterways (Anne Guillette, Whole Building Design Guide). For further reference please see:

<http://www.epa.gov/owow/nps/lid/> Environmental Review Initial Study

ATTACHMENT 18, 3 of 7
APPLICATION 03-0065

Ten Common LID Practices Include:

1. Site Design Layout to Reduce and Disconnect Impervious Surfaces
2. Rain Gardens and Bioretention
3. Rooftop Gardens
4. Tree Boxes to Capture and Infiltrate Street Runoff

California Environmental Protection Agency



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5. Vegetated Swales, Buffers, and Strips; Native Vegetation Preservation
6. Roof Leader Flows Directed to Rain Gardens
7. Rain Barrels and Cisterns
8. Permeable Pavers
9. Soil Amendements
10. Pollution Prevention and Good Housekeeping

Water Board staff considers a project that meets the following description to be a "Low Impact Development" project.

A. Runoff Volume Control. The pre-development stormwater runoff volume is maintained by a combination of minimizing the site disturbance, and then providing distributed retention BMPs. Retention BMPs are structures that retain the excess (above pre-development project volumes) runoff resulting from the development for the design storm event (2-, 10-, and 25-year, 24-hour duration storm). Note that "retention" is required, as opposed to "detention"; retention may be achieved using infiltration methods, and capture-for-use methods. A "customized" or detailed runoff curve number (CN) evaluation is required to determine the required runoff volume. The storage required to maintain the pre-development volume may also be sufficient to maintain the pre-development peak rate.

B. Peak Runoff Rate Control. Low-impact development is designed to maintain the pre-development peak runoff discharge rate for the selected design storm events. This is done by maintaining the pre-development time of concentration and then using retention and/or detention BMPs (e.g., rain gardens, open drainage systems, etc.) that are distributed throughout the site. The goal is to use retention practices to control runoff volume and, if these retention practices are not sufficient to control the peak runoff rate, to use additional detention practices to control the peak runoff rate.

C. Flow Frequency Duration Control. Since low-impact development is designed to emulate the pre-development hydrologic regime through both volume and peak runoff rate controls, the flow frequency and duration for the post-development conditions must be identical (to the greatest degree possible) to those for the pre-development conditions. The impacts on the sediment and erosion and stream habitat potential at downstream reaches will then be minimized.

Your project may be subject to the NPDES Phase 2 Municipal Stormwater Permit (Permit). Attachment 4 of the Permit is very specific about particular site plan development principles that must be incorporated to meet Maximum Extent Practicable (MEP) standards in addressing urban runoff. MEP standards are not met by conventional site layouts, construction methods, and storm water conveyance systems with "end of pipe" basins and treatment systems that do not address the changes in volume and rates of storm water runoff and urban pollutants (including thermal pollution). LID does meet the MEP standard and is more effective at reducing pollutants in storm water runoff at a practicable cost.

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APPLICATION 03-0065

California Environmental Protection Agency



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Please consider these comments in the **CEQA** approval process for this project. If you have questions, please contact Donette Dunaway at (805) 549-3698.

Sincerely,

Chris Levine

for

Roger W. Briggs
Executive Officer

S:\CEQA\Comment Letters\Santa Cruz County\Cabrillo Court Development.doc

Environmental Review Initial Study
ATTACHMENT 18 of 7
APPLICATION 03-0065

California Environmental Protection Agency



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DEPARTMENT OF TRANSPORTATION

50 HIGUERA STREET
 SAN LUIS OBISPO, CA 93401-5415
 PHONE (805) 549-3101
 FAX (805) 549-3329
 TDD (805) 549-3259
<http://www.dot.ca.gov/dist05/>



*Flex your power!
 Be energy efficient!*

July 24, 2006

SCH # 2006062124

PM SCr-1-12.09

Paia Levine
 Environmental Coordinator
 County of Santa Cruz
 Planning Department
 701 Ocean Street, 4th Floor
 Santa Cruz, CA 95060

Dear Ms. Levine:

**COMMENTS ON THE NEGATIVE DECLARATION FOR THE CABRILLO COURT
 DEVELOPMENT (AKA THE ATHERTON PLACE DEVELOPMENT)**

The California Department of Transportation (Department), District 5, Development Review, has reviewed the above referenced project and has the following comments.

1. The Department supports local development that is consistent with State planning priorities intended to promote equity, strengthen the economy, protect the environment, and promote public health and safety. We accomplish this by working with local jurisdictions to achieve a shared vision of how the transportation system should and can accommodate interregional and local travel and development.
2. The traffic study should include information on existing traffic volumes within the study area, including the State transportation system, and should be based on recent traffic volumes less than two years old. The traffic study was completed in February of 2004. Counts older than two years cannot be used.
3. To ensure the traffic study includes the information needed by the Department to analyze the impacts (both cumulative and project-specific) of this project, it is recommended that the analysis be prepared in accordance with the Department's *"Guide for the Preparation of Traffic Impact Studies."*
4. Because the Department is responsible for the safety, operations, and maintenance of the State transportation system, our Level of Service (LOS) standards should be used to determine the significance of the project's impact. We endeavor to maintain a target LOS at the transition between LOS C and LOS D on all State transportation facilities. In cases where a State facility is already operating at an unacceptable LOS, any

Environmental Review Initial Study
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 APPLICATION 03-0065

additional **trips** added should be considered a significant cumulative traffic impact, and should be mitigated accordingly.

5. The Iffland Engineers Storm Drainage Report states that the difference between the Post-Development Runoff and Pre-Development Runoff for a 10-year storm will be detained on site. This is good, but we are concerned about passing the 100-year storm through our culvert. It is understood that the proposed development of 3.4 acres is small in comparison to the stated culvert drainage area of 615 acres, but multiple small developments may result in overwhelming our culvert system. We prefer to see the difference in runoff between Post and re-Development for a 100-year storm also be detained.
6. The Iffland Engineers Storm Drainage Report states that the SCS Method was used to calculate the flow from the Drainage Basin upstream of Highway 1, but no calculations were presented. Has the County of Santa Cruz received adequate calculations supporting the stated flows?
7. The Iffland Engineers Storm Drainage Report states that an attachment was included for the calculation of the 6' x 6' concrete box culvert's flow capacity. The copy received did not include any attachments to the report. Were they included with the submittal to Santa Cruz County? Were they adequate?

Thank you for your consideration and action upon these issues. If you have any questions or concerns, or need further clarification on the items discussed above, please do not hesitate to call me at (805) 549-3099 or e-mail jennifer.calate@dot.ca.gov.

Sincerely,



JENNIFER CALATÉ
Associate Transportation Planner
District 5 Development Review Coordinator

c: Lyn Wickman
D. Murray
J. McKrell
File copy

Environmental Review Initial Study
ATTACHMENT 18, 7 of 7
APPLICATION 03-0065

**STORM DRAINAGE CALCULATIONS**

The site consists of 18 acres lying westerly of Porter (Tannery) Gulch between Soquel Drive on the north and Cabrillo Drive on the south. The upstream tributary area collecting into the gulch is approximately 580 acres. This area drains to an existing culvert under Soquel Drive that discharges into Me gulch along the easterly boundary of the subject site. The culvert size is a 54" diameter reinforced concrete pipe sloping at 0.30%. The culvert's capacity is 116 cubic feet per second. (See attachment.)

The drainage basin area runoff is:

$$\begin{aligned} Q_{10} &= (C)(I)(A) \\ &= (0.25)(2.1)(580) \\ &= 304.50 \text{ c.f.s.} \end{aligned}$$

The existing upstream culvert is not adequate; however there is no history of flooding across Soquel Drive at this location.

The area collecting into Porter Gulch between Soquel Drive and State Highway One is 35 acres. This area includes a portion of the Cabrillo College campus, a portion of the Twin Lakes Church campus and the subject project. The anticipated storm runoff is:

$$\begin{aligned} Q_{10} &= (C)(I)(A) \\ &= (0.40)(2.2)(35) \\ &= 30.80 \text{ c.f.s.} \end{aligned}$$

Total storm runoff collecting at the existing downstream box culvert at Highway One is 335.30 c.f.s. The box culvert is 72" x 72" constructed of concrete and it slopes at 0.80%. The culvert capacity is 584 c.f.s. The downstream culvert is more than adequate for a 10-year storm.

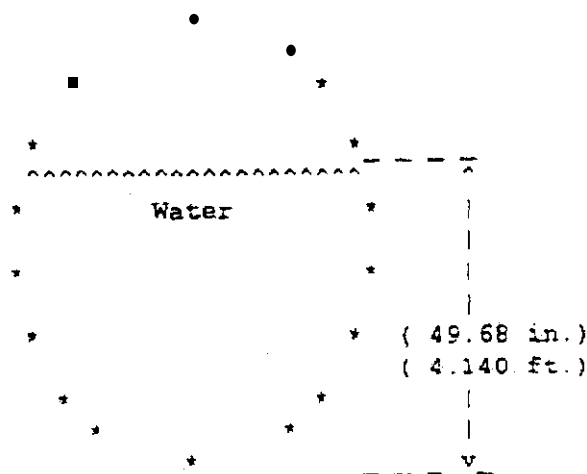
The runoff for a 100-year storm would increase to $(1.49 \times 335.30) 499.60$ c.f.s. The existing culvert designed and constructed by Caltrans is adequate for a 100-year storm. There is no history of flooding upstream from this culvert.

Environmental Review Initial Study
ATTACHMENT 19, 1 of 3
APPLICATION 03-0065

IFLAND ENGINEERS, INC.
 Civil and Structural Design
 1100 Water Street
 Santa Cruz, California 95062
 Telephone (408) 426-5313

EXISTING CULVERT UNDER SOQUEL DRIVE AT PORTER GULCH
 (TANNERY GULCH)

Inside Diameter
 (54.00 in.)



Circular Channel Section

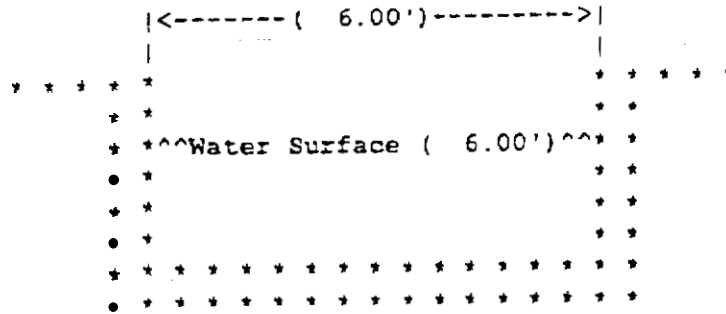
Flowrate	115.602	CFS
Velocity	1.552	fps
Diameter of Pipe	54.000	inches
Depth of Flow	49.680	inches
Depth of Flow	4.140	feet
Critical Depth	3.167	feet
Depth/Diameter (D/d)	0.920	
slope of Pipe	0.300	%
X-Sectional Area	15.308	sq. ft.
Wetted Perimeter	11.556	feet
AR^(2/3)	18.464	
Mannings 'n'	0.013	
Min. Fric. Slope, 54 inch		
Pipe Flowing Full	0.346	%

Environmental Review Initial Study

ATTACHMENT 19, 20 & 3
 APPLICATION 03-0065

IFLAND ENGINEERS, INC.
 Civil and Structural Design
 1100 Water Street
 Santa Cruz, California 95062
 Telephone (408) 626-5313

EXISTING BOX CULVERT UNDER HIGHWAY ONE AT PORTER GULCH
 (TANNERY GULCH)



Rectangular Open Channel

Flowrate	584.265	CFS
Velocity	16.230	fps
Depth of Flow	6.000	feet
Critical Depth	6.653	feet
Total Depth	6.000	feet
Base Width	6.000	feet
Slope of Channel	0.800	%
X-Sectional Area	36.000	sq.ft.
Wetted Perimeter	18.000	feet
$AR^{(2/3)}$	57.146	
Mannings 'n'	0.013	

Environmental Review Initial Study
 ATTACHMENT 19, 3 of 3
 APPLICATION 03-0065

BEFORE THE PLANNING COMMISSION
OF THE COUNTY OF SANTA CRUZ, STATE OF CALIFORNIA

RESOLUTION NO. _____

On the motion of Commissioner
duly seconded by Commissioner
the following Resolution is adopted

PLANNING COMMISSION RESOLUTION
SENDING RECOMMENDATION TO THE BOARD OF SUPERVISORS
ON PROPOSED AMENDMENT TO THE ZONING ORDINANCE

WHEREAS, the Planning Commission has held a public hearing on Application No. 03-0065, involving property located at the southeast corner of the intersection of Soquel Drive and Atherton Drive (vacant parcel), and the Planning Commission has considered the proposed rezoning, all testimony and evidence received at ~~the~~ public hearing, and the attached staff report.

NOW, THEREFORE, BE IT RESOLVED, that the Planning Commission recommends that the Board of Supervisors adopt the attached ordinance amending the Zoning Ordinance by changing property from the "RM-3" Multi Family Residential - 3,000 square foot minimum zone district to the "PR" Parks, Recreation, and Open Space zone district.

BE IT FURTHER RESOLVED, that the Planning Commission makes findings on the proposed rezoning as contained in the Report to the **Planning** Commission.

PASSED AND ADOPTED by the Planning Commission of the County of Santa Cruz, State of California; this _____ day of _____, 2006, by the following vote:

AYES: COMMISSIONERS

NOES: COMMISSIONERS

ABSENT: COMMISSIONERS

ABSTAIN: COMMISSIONERS

Denise Holbert, Chairperson

ATTEST: _____
Mark Deming, Secretary

APPROVED AS TO FORM:



COUNTY COUNSEL

ORDINANCE NO. _____

**ORDINANCE AMENDING CHAPTER 13
OF THE SANTA CRUZ COUNTY CODE
CHANGING FROM ONE ZONE DISTRICT TO ANOTHER**

The Board of Supervisors of the County of Santa Cruz ordains as follows:

SECTION 1

The Board of Supervisors finds that the public convenience, necessity and general welfare require the amendment of the County Zoning Regulations to implement the policies of the County General Plan and Local Coastal Program Land Use Plan regarding the property located on the southwest corner of the intersection of Soquel Drive and Atherton Drive (vacant parcel); finds that the zoning established herein is consistent with all elements of the Santa Cruz County General Plan; and finds and certifies that all environmental regulations specified in the California Environmental Quality Act, the State and County Environmental Guidelines, and Chapter 16 of the County Code have been complied with by the preparation and approval of a Mitigated Negative Declaration for the project.

SECTION II

The Board of Supervisors hereby adopts the recommendations of the Planning Commission for the Zoning Plan Amendment as described in Section III, and adopts their findings in support thereof without modification as set forth below:

1. The proposed zone district will allow a density of development and types of uses which are consistent with the objectives and land use designations of the adopted General Plan; and
2. The proposed zone district is appropriate for the level of utilities and community services available to the land; and
3. The character of development in the area where the land is located has changed or is changing to such a degree that the public interest will be better served by a different zone district.

SECTION III

Chapter 13.10, Zoning Regulations of the Santa Cruz County Code is hereby amended by amending the County Zoning Plan to change the following properties from the existing zone district to the new zone district as follows:

<u>Assessor's Parcel Number</u>	<u>Existing Zone District</u>	<u>New Zone District</u>
037-251-26 (part)	RM-3	PR

SECTION IV

This ordinance shall take effect on the 31st day after the date of final passage

PASSED AND ADOPTED THIS _____ day of _____ 2007, by the Board of Supervisors of the County of Santa Cruz by the following vote:

AYES: SUPERVISORS
NOES: SUPERVISORS
ABSENT: SUPERVISORS
ABSTAIN: SUPERVISORS

Jan Beautz
Chairperson of **the** Board of Supervisors

ATTEST: _____
Clerk of the Board

APPROVED AS TO FORM:

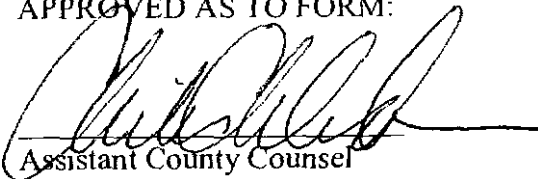
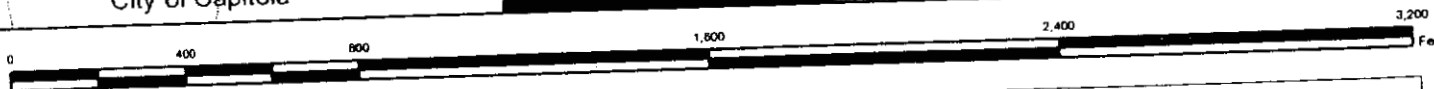
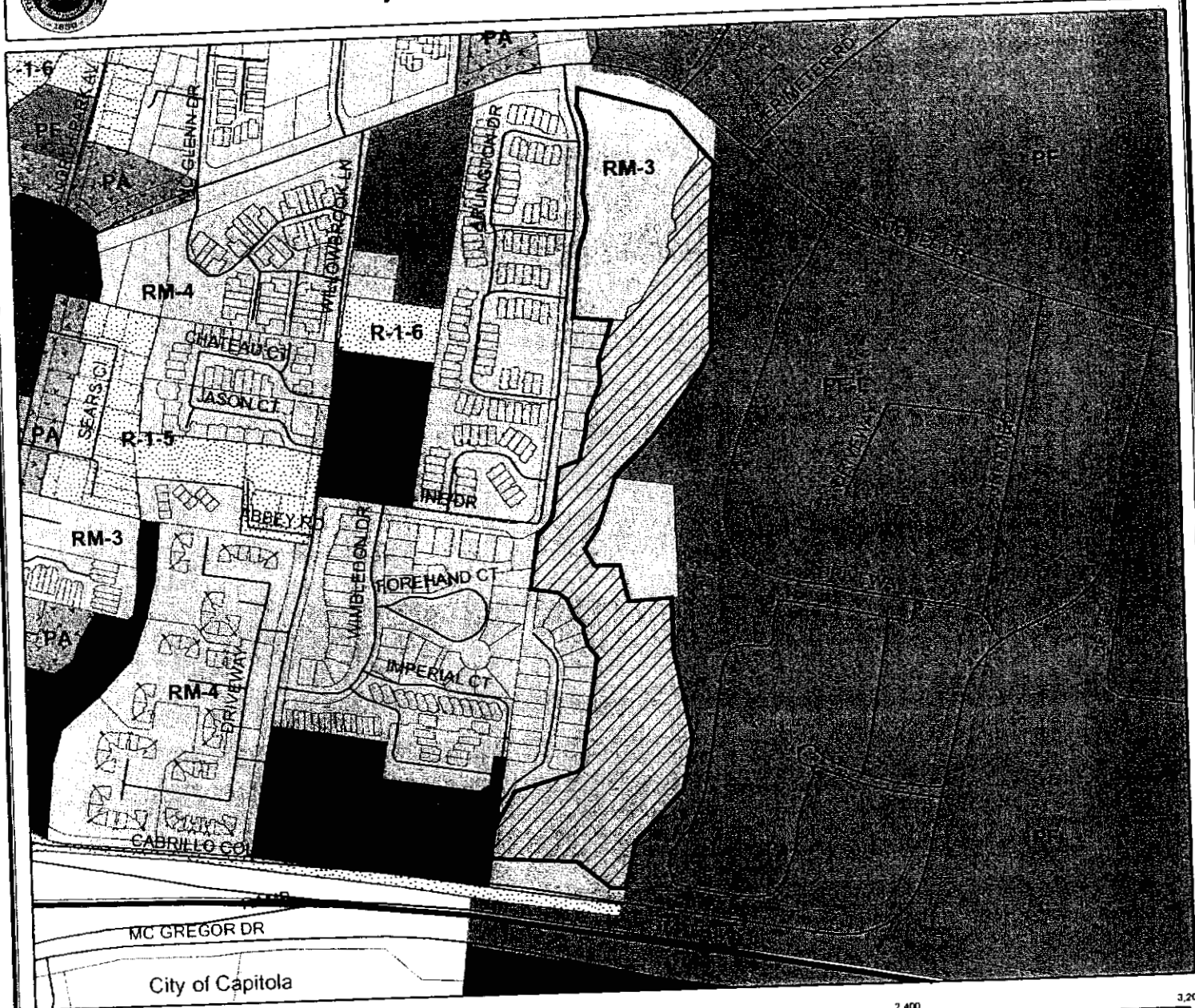

Assistant County Counsel

Exhibit: Rezoning Map

DISTRIBUTION: **County** Counsel
Planning-Mark Deming
Assessor
County GIS

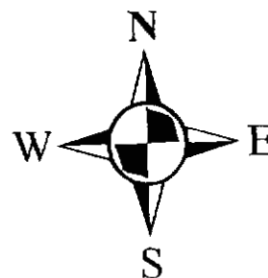


Proposed Rezoning Map



Legend

- Area to be Rezoned to PR
- APN 037-251-26
- Assessors Parcels
- Streets
- State Highways
- RESIDENTIAL-MULTI FAMILY (RM)
- PUBLIC FACILITY (PF)
- COMMERCIAL-NEIGHBORHOOD (C-1)
- PARK (PR)
- COMMERCIAL-PROF OFFICE (PA)
- RESIDENTIAL-SINGLE FAMILY (R-1)
- CITY PROPERTY



Map Created by
County of Santa Cruz
Planning Department
October 2006

EXHIBIT E

ADDITIONS TO THE STAFF REPORT FOR THE PLANNING COMMISSION

ITEM 9: 03-0065

CORRESPONDENCE

--- Original Message-----

From: frank katsuda (mailto:frankkatsuda@yahoo.com)

Sent: Friday, December 01, 2006 7:19 PM

TO: Randall Adams

Subject: AnthertonPlace Development LLC proposal to construct 43
attached townhouses

My name is Frank Katsuda and I live on 236 Rosemarie Court, Aptos, CA 95003. My home is part of the Atherton Place project. I am writing to you in regards to Antherton Place Development's request for a "Riparian Exception for the drainage system release into the riparian corridor". It is my understanding that all the homes in Antherton Place were required to have elaborate drainage systems to protect their home. hillside and the Riparian Corridor. I strongly oppose any exception to releasing drainage to the riparian corridor.

Frank & Jan Katsuda
236 Rosemarie Court
Aptos, CA 95003
Phone 831-419-0428