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## Staff Report to the Planning Commission

Application Number: **06-0651**

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Applicant: Powers Land Planning  
Owner: BK Properties  
APN: 039-062-06

Agenda Date: 11/14/07  
Agenda Item #: **7**  
Time: After 9:00 a.m.

Project Description: Proposal to divide a **1.55** acre parcel into 10 residential lots and common area.

Requires a Subdivision, General Plan Amendment from R-UVL to R-UM (and O-U for the riparian area), Rezoning from R-1-1AC to **RM-4**, Residential Development Permit, Riparian Exception, Roadway/Roadside Exception, Soils Report Review, and Preliminary Grading Review.

Location: Property located on the northeast corner of Soquel Drive and Haas Drive.  
(6851 Soquel Drive, Aptos)

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

Permits Required: General Plan Amendment, Rezoning, Subdivision, Residential Development Permit, Riparian Exception, Roadway/Roadside Exception, Soils Report Review, Preliminary Grading Review.

Staff Recommendation:

- Adopt the attached resolution (Exhibit E), sending a recommendation to the Board of Supervisors for Approval of Application Number **06-0651**, 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, Ordinance, Rezoning & General Plan Amendment maps |
| B. | Findings  | F. | Comments & Correspondence   |
| C. | Conditions  |    |   |
| D. | Mitigated Negative Declaration (CEQA Determination) with the following attached documents:<br>(Attachment 1): Assessor's parcel map, Zoning map, General Plan map |    |   |

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County of Santa Cruz Planning Department  
701 Ocean Street, **4<sup>th</sup> Floor**, Santa Cruz CA 95060

### Parcel Information

Parcel Size: 1.55 acres  
Existing Land Use - Parcel: Single family dwelling (former office use)  
Existing Land Use - Surrounding: Single & multi-family residential neighborhood  
Project Access: Soquel Drive & Haas Drive  
Planning Area: Aptos  
Land Use Designation: R-UVL (Urban Very Low Density Residential)  
Zone District: R-1-1AC (Single family residential - 1 acre 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: Aptos/La Selva Fire Protection District  
Drainage District: Zone 6 Flood Control District

### Project Setting

The subject property is approximately 1.55 acres located on the northeast corner of the intersection of Soquel Drive and Haas Drive, in Aptos. An existing single family dwelling (formerly used as an office building) is located at the center of the usable area of the property with a detached garage, outbuildings, and two existing driveway approaches at Soquel Drive. The remaining area of the subject property is partially improved with landscaping and miscellaneous improvements, with a riparian corridor along the eastern side of the project site. The property is wooded with a mixture of oaks, pines, cypress, and acacia trees. Single family residential development exists to the north, with detached townhouses to the east across Vienna Drive. Residences, commercial uses, a fire station, and public school are located to the west and south across Soquel Drive.

### Rezoning

The proposed rezoning and General Plan amendment (as indicated in Exhibit E) is for the entire subject property. The parcel is currently zoned R-1-1AC (Single family residential - 1 acre minimum) and is designated as Urban Very Low Density Residential (R-UVL) in the General Plan. The current zone district and General Plan land use designation are from a time when sanitary sewer service was not available to the area and should have been updated when this service became available. The proposed General Plan amendment to Urban Medium Density Residential (R-UM) and rezoning to the **RM-4** (Multi-family Residential - 4,000 square feet

minimum) zone district is considered as appropriate due to the surrounding pattern of development, the availability of sanitary sewer service, and the location adjacent to a major arterial roadway. The General Plan land use designation for the riparian area is proposed to be amended to Urban Open Space (O-U), consistent with General Plan policies for riparian resource protection.

#### Subdivision

The proposed land division will create 10 townhouse parcels, a common area for roads, utilities, and landscaping.

The boundaries of the 10 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 4,879 square feet of net developable land area per residential unit, in compliance with the minimum requirements of the **RM-4** (Multi-family Residential - 4,000 square feet minimum) zone district.

The General Plan land use designation property will be amended to Urban Medium Density Residential (R-UM) in the General Plan. The Urban Medium Density Residential (R-UM) General Plan designation requires new development to be within a density range of 4,000 to 6,000 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 2 on-site affordable housing units. Market rate developments are required to provide 15 percent of the units as deed-restricted affordable units and an in-lieu fee for any fractional units. This proposal exceeds the 15 percent requirement and provides 2 affordable housing units on the project site.

#### Design Review

Townhouse units are proposed to be constructed on the new parcels. The new homes will be a mixture of attached and detached units with individual garages. Seven of the units will be accessed off of a shared driveway from Soquel Drive and three of the units will be accessed off of Haas Drive. The buildings will be two stories in height, with 3 bedrooms, and will range from approximately 1,900 to 2,300 square feet in size.

Proposed building materials include horizontal, vertical, and shingle siding, composition shingle roofs, and rock trim. The buildings include varied roof planes, with porches and tapered columns. These features and the variety of proposed materials will break up the visual bulk and mass of the proposed structures.

In the preliminary stages this proposal was reviewed through the Development Review Group (DRG) process, followed by a project consultation to further develop the site and structure designs. In the initial submittals, the proposals included 10 and 11 unit configurations which encroached on steeply sloped areas and were closer to the riparian corridor than the final design. The preliminary proposal would have required the removal of additional **trees** and a significant amount of grading to allow improvements within steeply sloped areas. The site plan and

structure designs have evolved through the project consultation and the application review process. The resulting project design rearranged the structure locations to reduce the number of tree removals and protects the riparian open space area; the grading plan works with existing grades to minimize grading volumes; the drainage plan provides on site detention of storm water runoff; the architectural plans include revised structure designs and exterior materials to improve the visual quality of the proposed development.

This proposal includes the development of a portion of the former Haas Drive right of way. This unused area, adjacent to **the** subject property, has already been acquired by the property owner for the installation of landscaping. The development of this area with common landscaping for the adjacent development has been supported by the Planning Department through the review process. A fence and trellis is proposed at the entrance of the private driveway (Oak Leaf Court) from Soquel Drive. The trellis will be less than 6 feet in height and is situated in a manner to allow adequate sight distance for vehicles entering and exiting the development.

### **Riparian Exception**

A riparian comdor is located on the east side of the subject property. The area adjacent to the riparian corridor is currently disturbed. Buildings, parking areas, and patios for the existing residence are located in the designated riparian buffer area. Due to the existing pattern of disturbance, the proposed development is located partially within the riparian buffer area. No new encroachment is proposed, and existing improvements will be removed and portions of the riparian buffer area will be restored as a component of this proposal. The development of structures within previously disturbed areas would typically not require a riparian exception. However, a riparian exception has been added to the review to ensure that adequate findings are made for development within the riparian buffer area. The riparian buffer area is measured as 20 feet from the top of the bank of the riparian area with an additional 10 feet construction setback for structures. The proposed development will locate structures no closer than 10 **feet** from the top of the bank in areas which have been previously disturbed.

### **Roadside Exception**

The proposed development includes a new access road (*Oak Leaf Court*) with two travel lanes and separated parking bays. The design of the proposed access road varies from the County Design Criteria in terms of width and improvements. The access road will be located within the common area and is planned as a 24-foot wide road section. 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 and garages of the proposed parcels and in the separated parking bays.

### **Parking**

Parking will be provided on the project site in garages, driveways, and in parking spaces along the access roadway. **All** required parking has been provided on the project site, including the required guest parking. 25 parking spaces (2.5 spaces per 3 bedroom unit) would typically be

required for 10 multi-family units with an additional 5 parking spaces (20% of required) for guests. This proposal exceeds the parking requirements for multi-family residential developments, with 31 parking spaces provided on the subject property. Locating all of the required resident and guest parking on site is appropriate due to the limited on street parking facilities on Soquel Drive and Haas Drive.

### Grading, Drainage & Utilities

The proposed land division and associated improvements will require site grading and preparation. A total of approximately 550 cubic yards of earth will be cut and a total of approximately 220 cubic yards of earth will be placed as fill to allow for the preparation of the project site. Retaining walls will be installed where necessary due to existing grades adjacent to areas proposed for development. 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 existing trees that will not be removed during construction.

Additional improvements include a complete drainage and detention system, the installation of a curb and gutter along Vienna Drive. The drainage system will utilize subsurface detention features to reduce storm water flows and improve water quality.

### 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 8/27/07 and was continued for additional information. A preliminary determination to issue a Negative Declaration with mitigations (Exhibit D) was made on 8/29/07. The mandatory public comment period ended on 9/24/07. Comments received have been incorporated into the recommended conditions, with no changes to the project mitigations.

The environmental review process focused on the potential impacts of the project in the areas of circulation, tree removals, and noise. The environmental review process evaluated potential impacts and generated mitigation measures 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.

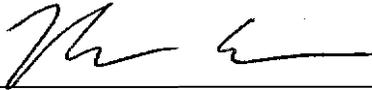
### Staff Recommendation

- Adopt the attached resolution (Exhibit E), sending a recommendation to the Board of Supervisors for Approval of Application Number **06-0651**, 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](http://www.co.santa-cruz.ca.us)

Report Prepared By: \_\_\_\_\_



Randall Adams  
Santa Cruz County Planning Department  
701 Ocean Street; 4th Floor  
Santa Cruz CA 95060  
Phone Number: (831) 454-3218  
E-mail: [randall.adams@co.santa-cruz.ca.us](mailto:randall.adams@co.santa-cruz.ca.us)

Report Reviewed By: \_\_\_\_\_



Mark Deming  
Assistant Director  
Santa Cruz County Planning Department













1100 WATER STREET  
SANTA CRUZ, CA 95062  
TEL: (408) 426-3313  
FAX: (408) 426-1763

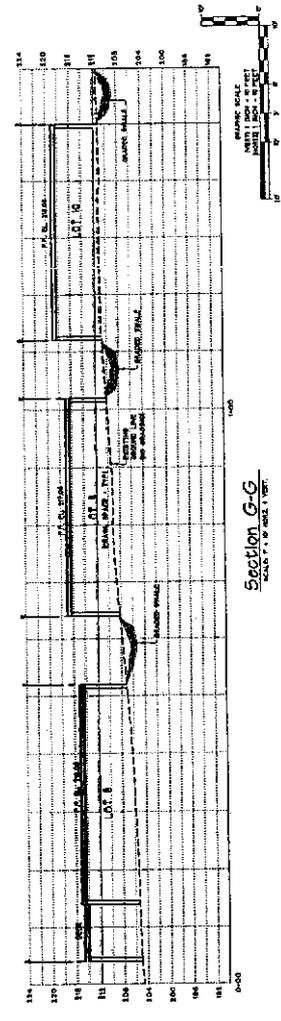
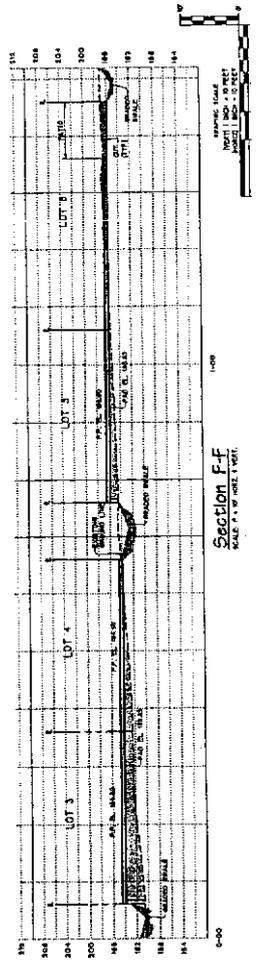
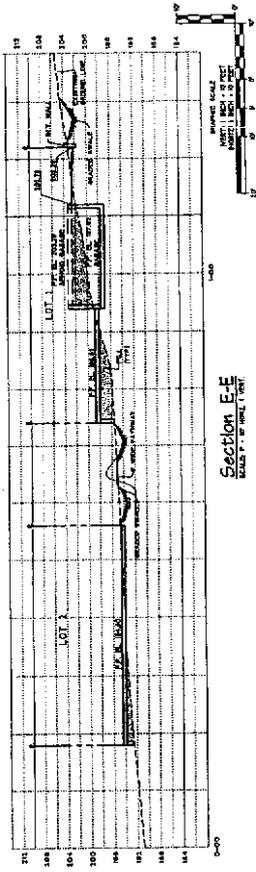
**Hidden**  
ENGINEERS, INC.  
CIVIL ENGINEERING • LAND SURVEYING • STRUCTURAL DESIGN



Preliminary Grading & Drainage Plan  
Hidden Oaks  
Santa Cruz County, Ca

Application No. 06-051  
ASSESSOR'S Parcel Number: 03B-062-05  
DATE: 3/13/07  
SHEET: 7

TM4-01  
DATE: 7-2003  
JOB NO. 050124



Preliminary Grading Cross-Sections





DATE: \_\_\_\_\_  
 SHEET NO. 14 OF 14  
 APPROVED: \_\_\_\_\_  
 DRAWN: \_\_\_\_\_

1100 WAVER STREET  
 SANTA CRUZ, CA 95062  
 TEL: (831) 428-5212  
 FAX: (831) 428-1783  
 HIDDEN OAKS ENGINEERS, INC.  
 CIVIL ENGINEERING • LAND SURVEYING • STRUCTURAL DESIGN

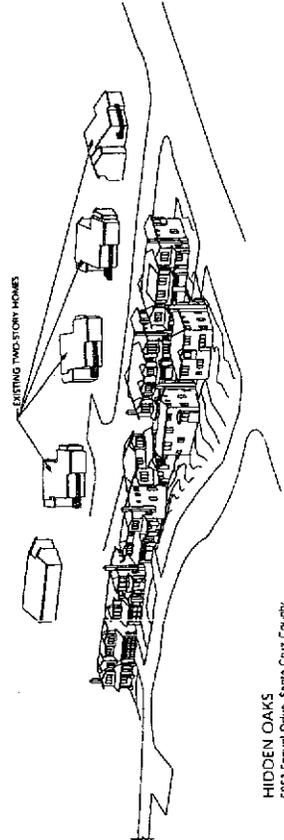
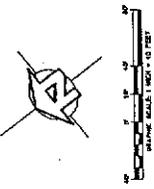
Application No. 08-097  
 Address: Parcel Number 039-062-05  
 DATE: 3/13/07  
 DRAWN: [Signature]  
 SHEET: 7  
 TM6  
 05114

Neighborhood Aerial Photo  
 Hidden Oaks  
 Santa Cruz County, Ca.



NOTE:  
 SOME FEATURES ON THIS  
 PHOTO ARE NOT SHOWN  
 SINCE THIS PHOTO WAS TAKEN

Neighborhood Aerial Photo  
 SCALE: 1" = 40'

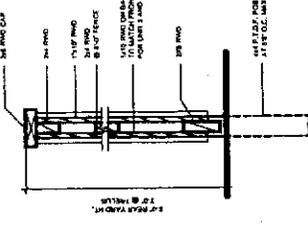
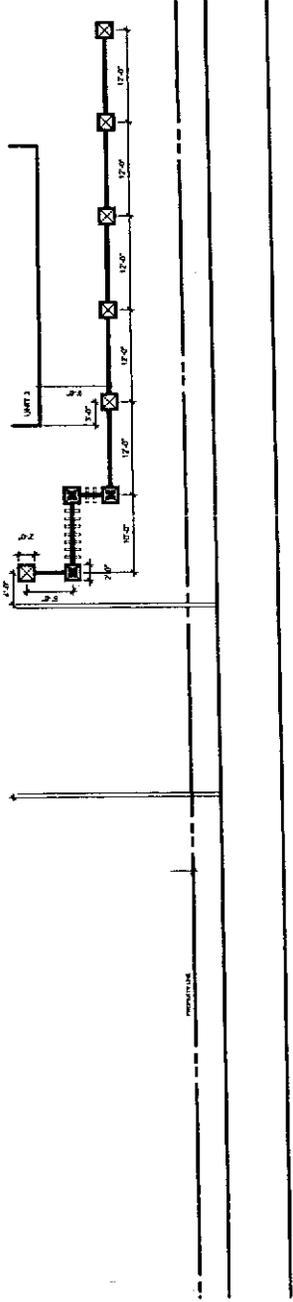


HIDDEN OAKS  
 6851 Dogwood Drive, Santa Cruz County  
 Owner: BK Properties, LP  
 Lead Use Consultant: Power Land Planning  
 Axonometric: ArchiGraphics  
 January 28, 2007

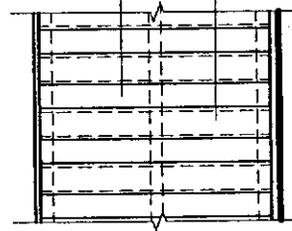
Axonometric View By ArchiGraphics  
 SCALE: N/A



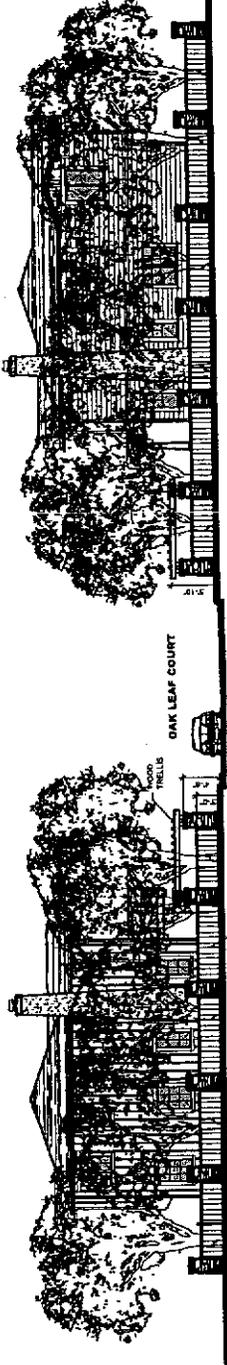




**3** REAR YARD FENCE  
 SECTION, UNITS 2 & 3  
 SCALE: 1/8\"/>



**4** REAR YARD FENCE  
 ELEVATION  
 SCALE: 3/8\"/>



**2** SOQUEL DR. ELEVATION  
 SCALE: 1/8\"/>



James P. Allen  
& Associates

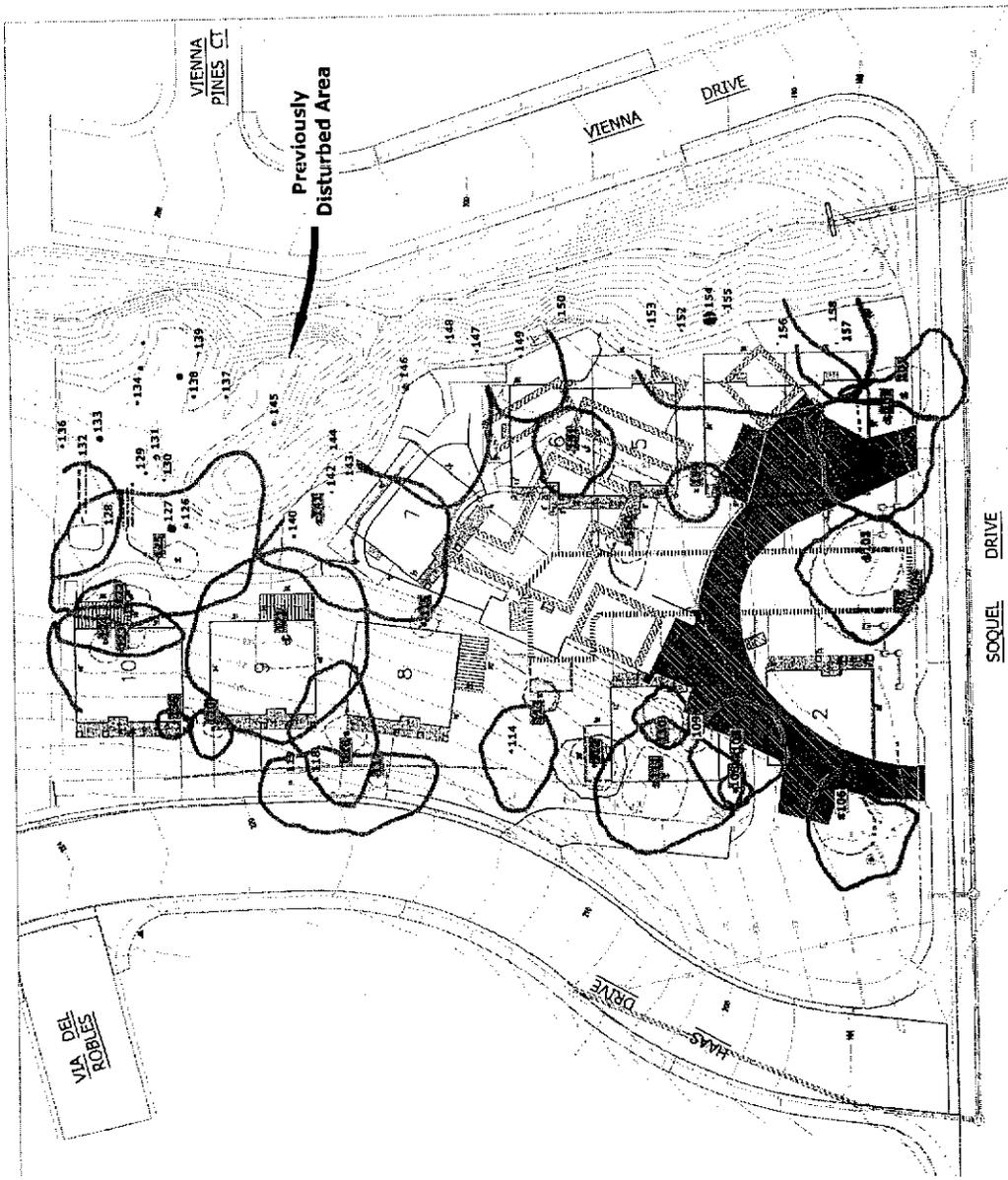
Consulting Arborists  
10000 Wilshire Blvd., Suite 1000  
Beverly Hills, CA 90210  
Tel: 310.274.1111  
Fax: 310.274.1112

HIDDEN OAKS SUBDIVISION TRACT: 1529  
CONSTRUCTION IMPACT ASSESSMENT  
S.K. PROPERTIES, L.P.  
5651 SOQUEL DRIVE  
SANTA CRUZ COUNTY, CA  
039-052-05

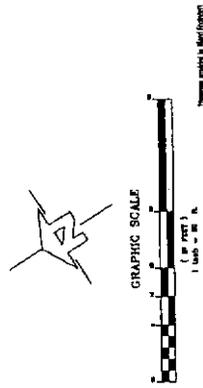
DATE	038-062-05
PREPARED BY	J.P.A.
PROJECT NO.	038-062-05
DRAWN BY	J.P.A.
CHECKED BY	J.P.A.
SCALE	1" = 50'
BY	J.P.A.

SHEET NAME:  
TREE LOCATION &  
REMOVAL MAP  
SHEET NO.:

AB01  
FILE NAME: 038-062-05



- Surveyed tree location
  - Field located tree
  - 2 Assigned tree number
  - Recommended Removal due to Severe Impacts
  - ▨ Remove due to Construction Impacts
  - Remove due to Tree Condition
  - Approximate canopy spread
- Previously disturbed area





### Tree Preservation Specifications 6851 Soquel Drive, APN 039-062-05

Contractors and sub contractors should be aware of tree protection guidelines and restrictions. Contracts should incorporate tree protection language that includes "damage to trees will be repaired using the Guide to Plant Appraisal 9th Edition and monetary fines assessed".

**Meetings with the Project Arborist**  
A meeting with the Project Arborist, Project Manager and all Contractors involved with the project shall take place prior to the onset of grading. Tree preservation specifications will be reviewed and discussed.

**Establishment of a tree preservation zone (TPZ)**  
Chain lines shall not be less than 72 inches in height with metal stakes embedded in the ground, and shall be installed in areas designated on the attached map. Bales of hay shall be placed around the perimeter of the fencing, toward the construction activity. Bales may be stabilized by driving metal stakes or sections of #5 rebar through the bales 12 to 18 inches into the soil surface. Fencing will be installed prior to the onset of grading, under the supervision of the Project Arborist and shall not be removed.

**Restrictions within the Tree Preservation Zone (TPZ)**  
No storage of construction materials, tanks, or excess soil will be allowed within the TPZ. Parking of vehicles or construction equipment in the area is prohibited. Solvents or fluids of any type should be disposed of properly, never within this protected area.

**Field observations**  
The Project Arborist, Soil Engineer and Grading Contractor will determine the most effective construction methods to maintain tree health.

**Alteration of grades**  
Maintain the natural grade around trees. If trees roots are unearthed during the construction process the remaining arborist will be notified immediately. Exposed roots will be covered with moistened burlap until the Project Arborist makes a determination.

**Trenching requirements**  
Any areas of proposed trenching will be evaluated with the Project Arborist and the contractor prior to construction.

**Tree canopy alterations**  
Unauthorized pruning of any tree on this site will not be allowed. Tree canopy alterations will be performed to the specifications established by the Project Arborist.

**Supplemental irrigation**  
Shall be provided using "soaker" hoses or similar method of delivery. Supplemental irrigation requirements shall be determined by the Project Arborist and will be required prior to and after completion of the grading.

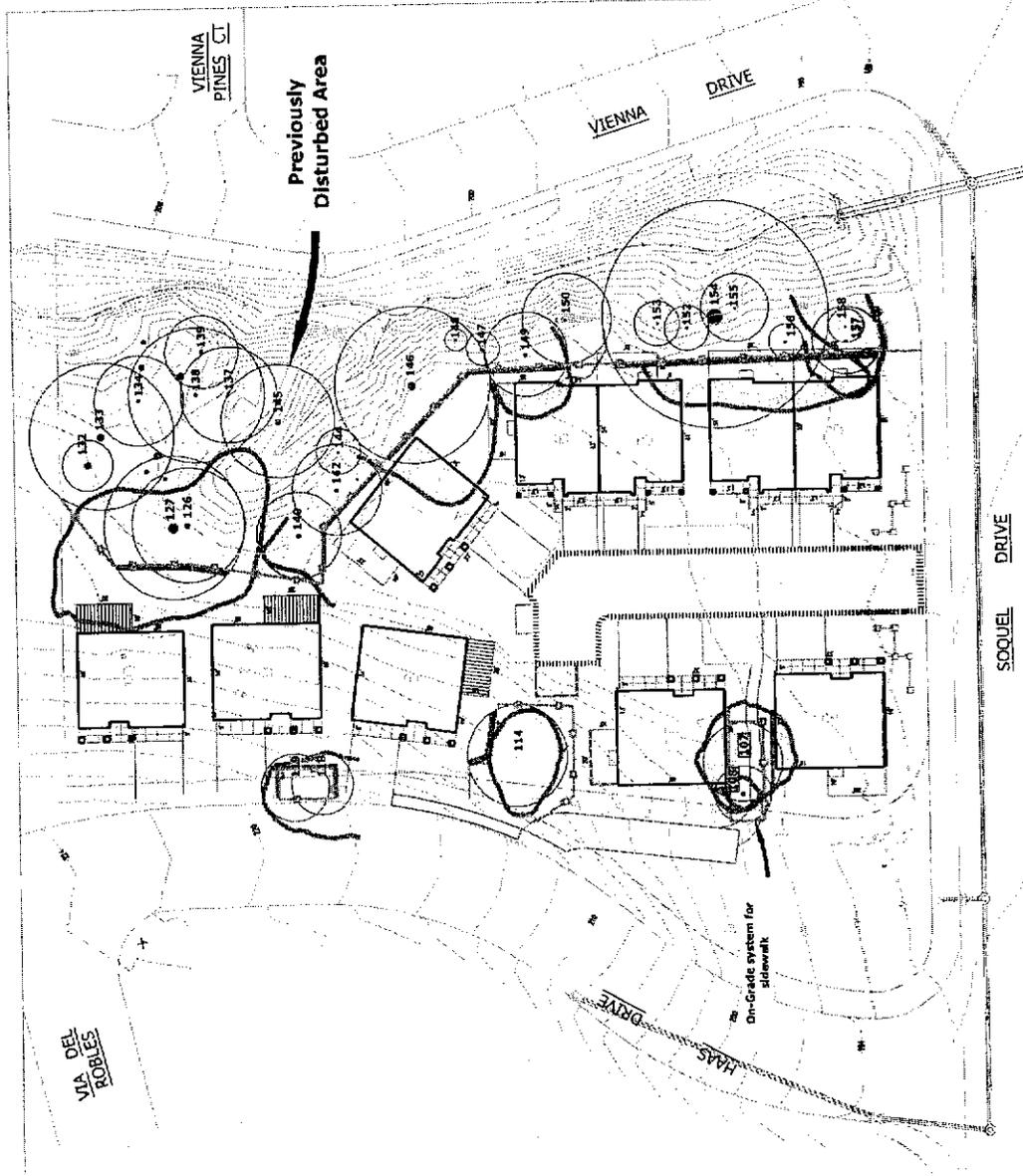
**Mulch Layer**  
A 4-6 inch layer of shredded tree chip mulch shall be applied within the Tree Preservation Zones. Tree chips should be amended with 7 pounds Bloodmeal, 13-0-0, per cubic yard of chips.

Copyright 1995, James P. Allen & Associates

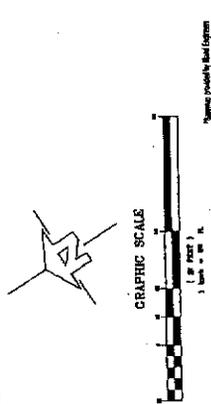
HIDDEN OAKS SUBDIVISION TRACT: 1529  
CONSTRUCTION IMPACT ASSESSMENT  
039-062-05

APN: 039-062-05  
PREPARED DATE: 03/19/97  
PROJECT DATE: 03/19/97  
DRAWN BY: ESK  
CHECKED BY: ESK  
SCALE: 1" = 20'  
SHEET NUMBER: 11 of 11

TREE LOCATION & PRESERVATION MAP  
SHEET NO.: AB02  
FILE NAME: 11-1-96



- Legend**
- Critical Root Zone
  - Surveyed tree location
  - Tree Preservation Zone
  - Field located tree
  - Preservation fencing
  - Assigned tree number
  - Preconstruction Root Pruning
  - "On Grade" system
  - Recommended Removal due to Severe Impacts
  - Previously disturbed area
  - Approximate canopy spread
  - Canopy clearance pruning





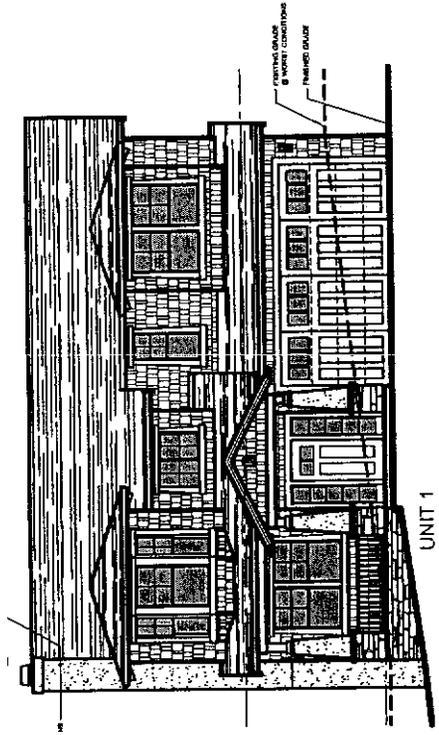
**WR&D**  
**WAD SWANNE & COOT**  
**ARCHITECTS LLP**  
 2345 GARDEN ROAD SUITE 100  
 MONTEREY, CA 94034 PH: 831.375.1100  
 FAX: 831.375.3300  
 WWW.WR&DARCHITECTS.COM

PRELIMINARY NOT FOR  
 CONSTRUCTION 1/3/17  
 APR. 030-02305

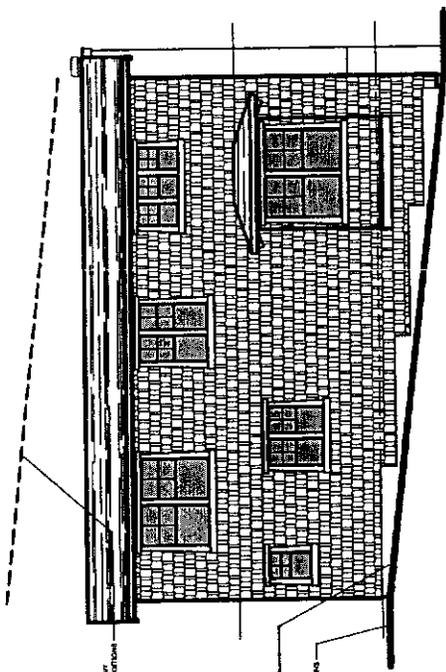
**HIDDEN OAKS**  
 B.K. PROPERTIES, L.P.  
 6661 SOOBE DRIVE  
 SANTA CRUZ COUNTY, CA

JOB NO.	08141
ISSUE DATE:	3/16/17
DATE:	3/16/17
DESIGNED BY:	
CHECKED BY:	
DATE:	11/13/16
SCALE:	
PROJECT NO.:	
UNIT No. 1	
ELEVATIONS	

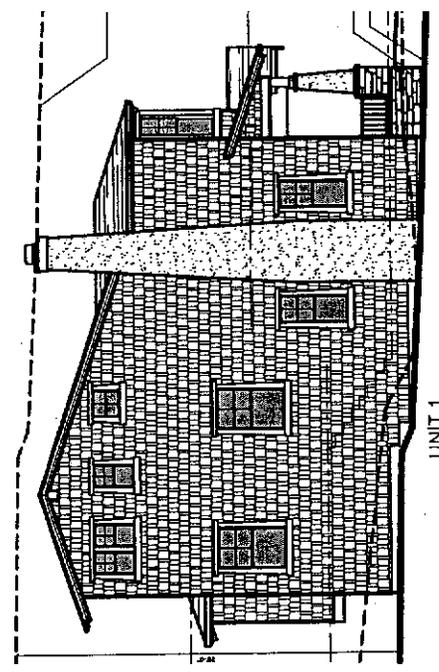
**A011**  
 SHEET NO.



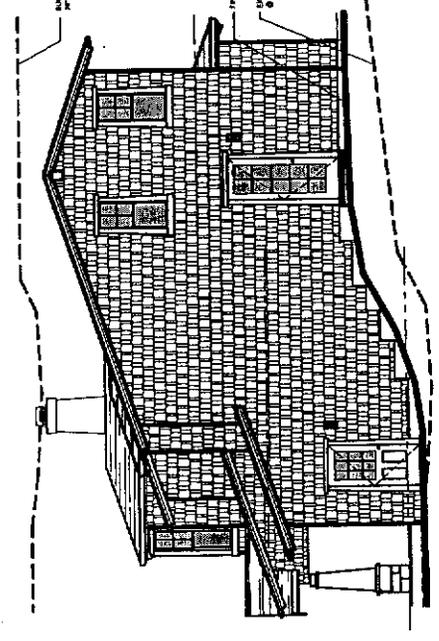
UNIT 1  
 EAST ELEVATION



UNIT 1  
 WEST ELEVATION



UNIT 1  
 SOUTH ELEVATION



UNIT 1  
 NORTH ELEVATION

**LEGEND**

[Symbol]	Headingle stepped edge parapet
[Symbol]	Hard vertical siding stone 2
[Symbol]	Hard dark landscaping select caststone
[Symbol]	Random Stone Block Veneer rough-hewn ledge
[Symbol]	Electric stone Trim Shadow rock
[Symbol]	Asphalt shingle roof finished inside pattern
[Symbol]	Camel Plaster finish
[Symbol]	Board and Batten at 1" on center over Hardboard siding

UNIT No. 1 - PROPOSED ELEVATIONS  
 SCALE: 1/4"=1'-0"



**WALD REPURSE & DOST**  
 2000 CALIFORNIA DRIVE, SUITE 100  
 SAN FRANCISCO, CALIFORNIA 94102  
 (415) 774-1111  
 WWW.WR&D.COM

**FLOOR AREA CALCULATIONS**  
 BY TYPE OF SPACE

1. FINISHED FLOOR AREA  
 A. FINISHED FLOOR AREA  
 B. FINISHED FLOOR AREA  
 C. FINISHED FLOOR AREA  
 D. FINISHED FLOOR AREA  
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 X. FINISHED FLOOR AREA  
 Y. FINISHED FLOOR AREA  
 Z. FINISHED FLOOR AREA

2. UNFINISHED FLOOR AREA  
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 X. UNFINISHED FLOOR AREA  
 Y. UNFINISHED FLOOR AREA  
 Z. UNFINISHED FLOOR AREA

3. TOTAL FLOOR AREA  
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 Z. TOTAL FLOOR AREA

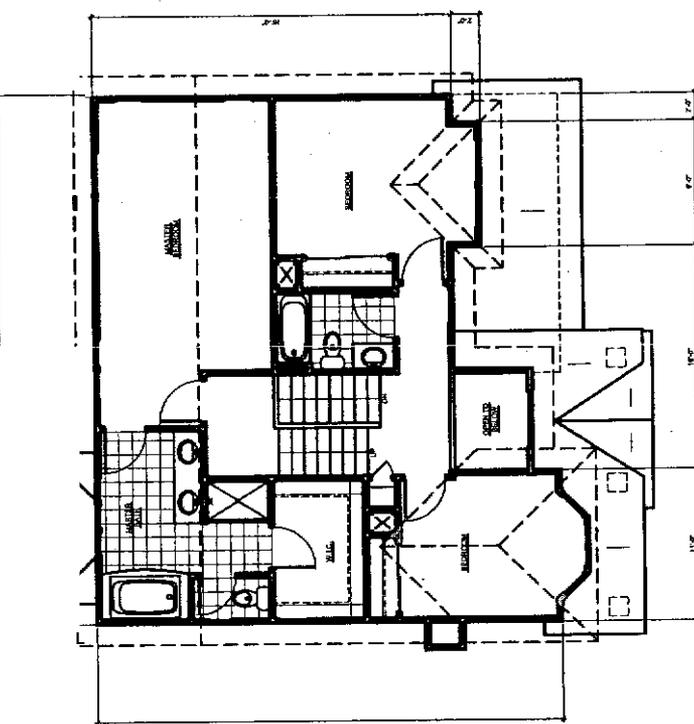
4. PERMITTED FLOOR AREA  
 A. PERMITTED FLOOR AREA  
 B. PERMITTED FLOOR AREA  
 C. PERMITTED FLOOR AREA  
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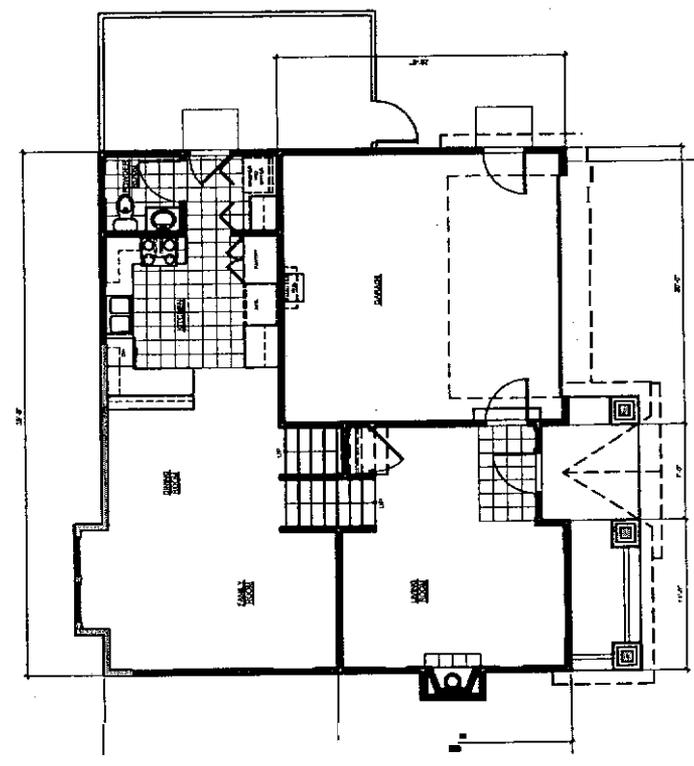
6. GARAGE  
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7. TOTAL GARAGE AREA  
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8. TOTAL GARAGE AREA OF THE BUILDING  
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UNIT 1  
 SECOND FLOOR PLAN



UNIT 1  
 FIRST FLOOR PLAN

UNIT No. 1 - PROPOSED FLOOR PLANS  
 SCALE: 1/8"=1'-0"

HIDDEN OAKS  
 6651 SQUEL DRIVE  
 SANTA CRUZ COUNTY, CA  
 A.P.N. 99-092-05

PRELIMINARY NOT FOR CONSTRUCTION 12/19/21

06141  
 SHEET NO. 10007  
 SHEET DATE: 11/19/21  
 SHEET TOTAL: 11/19/21

UNIT No. 1  
 FLOOR PLANS  
 A012



**WR&D**  
**WARD, RYAN & DOST**  
**ARCHITECTS P.C.**  
 2340 GARDEN ROAD, SUITE 100  
 ANAHEIM, CA 92805  
 PHONE: 651-644-1447  
 FAX: 651-644-1447  
 WWW.WR&D.COM

**PRELIMINARY NOT FOR CONSTRUCTION 1/31/07**  
 A.P.N. 09-042-05  
 B.K. PROPERTIES, LP  
 6551 SOUTHERN DRIVE, CA  
 SANTA CRUZ COUNTY, CA

**HIDDEN OAKS**

DATE: 06/14/07  
 SHEET NO.: 02/02  
 PLAN DATE:  
 DRAWN BY:  
 CHECKED BY:  
 SET NUMBER: 11/1/06

**UNIT No. 2 FLOOR PLANS**

**A022**

**PLANS**

**UNIT No. 2**  
 SCALE: 1/8"=1'-0"

**1. OVERALL DIMENSIONS BY TYPE OF WALL**

**2. FINISH FLOOR**

**3. FINISH FLOOR AREA**

**4. AREA OF PATIO**

**5. AREA OF BALCONY**

**6. AREA OF TERRACE**

**7. AREA OF PORCH**

**8. AREA OF GARAGE**

**9. TOTAL FLOOR AREA**

**10. TOTAL AREA**

**11. TOTAL AREA OF THE BALCONY**

**12. TOTAL AREA OF THE PATIO**

**13. TOTAL AREA OF THE TERRACE**

**14. TOTAL AREA OF THE PORCH**

**15. TOTAL AREA OF THE GARAGE**

**16. TOTAL AREA OF THE BALCONY AND PATIO**

**17. TOTAL AREA OF THE TERRACE AND PORCH**

**18. TOTAL AREA OF THE GARAGE AND BALCONY**

**19. TOTAL AREA OF THE BALCONY, PATIO, TERRACE AND PORCH**

**20. TOTAL AREA OF THE GARAGE, BALCONY, TERRACE AND PORCH**

**21. TOTAL AREA OF THE BALCONY, PATIO, TERRACE, PORCH AND GARAGE**

**22. TOTAL AREA OF THE BALCONY, PATIO, TERRACE, PORCH, GARAGE AND TERRACE**

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**91. TOTAL AREA OF THE BALCONY, PATIO, TERRACE, PORCH, GARAGE AND TERRACE**

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**93. TOTAL AREA OF THE BALCONY, PATIO, TERRACE, PORCH, GARAGE AND TERRACE**

**94. TOTAL AREA OF THE BALCONY, PATIO, TERRACE, PORCH, GARAGE AND TERRACE**

**95. TOTAL AREA OF THE BALCONY, PATIO, TERRACE, PORCH, GARAGE AND TERRACE**

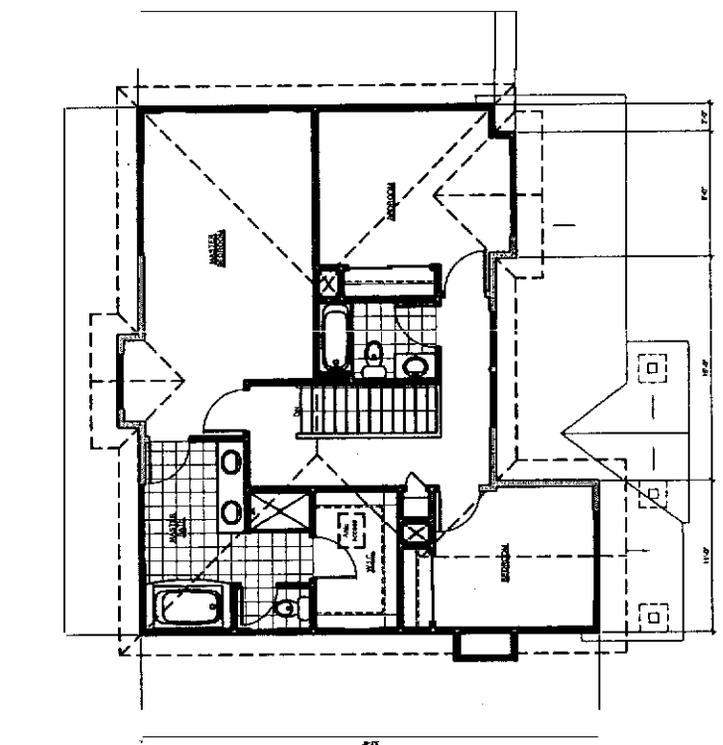
**96. TOTAL AREA OF THE BALCONY, PATIO, TERRACE, PORCH, GARAGE AND TERRACE**

**97. TOTAL AREA OF THE BALCONY, PATIO, TERRACE, PORCH, GARAGE AND TERRACE**

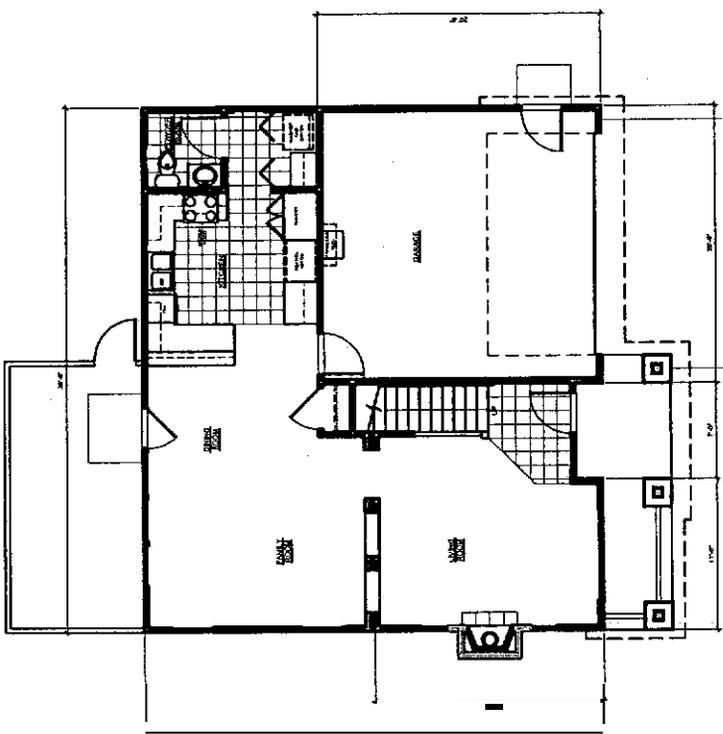
**98. TOTAL AREA OF THE BALCONY, PATIO, TERRACE, PORCH, GARAGE AND TERRACE**

**99. TOTAL AREA OF THE BALCONY, PATIO, TERRACE, PORCH, GARAGE AND TERRACE**

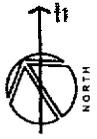
**100. TOTAL AREA OF THE BALCONY, PATIO, TERRACE, PORCH, GARAGE AND TERRACE**



UNIT 2  
 SECOND FLOOR PLAN



UNIT 2  
 FIRST FLOOR PLAN



**PLANS**

**UNIT No. 2**  
 SCALE: 1/8"=1'-0"

















**WR&D ARCHITECTS & INTERIORS**  
 1500 W. 10TH STREET, SUITE 100  
 ANAHEIM, CALIFORNIA 92801  
 PHONE: (714) 771-1111  
 FAX: (714) 771-1112  
 WWW.WR&DARCH.COM

**PRELIMINARY NOT FOR CONSTRUCTION 1/17/17**  
 HIDDEN OAKS  
 B.K. PROPERTIES, L.P.  
 8551 SOUTHERN DRIVE  
 SANTA CRUZ COUNTY, CA  
 A.P.N. 039-02-05

**FLOOR AREA CALCULATIONS**

1. **BASEMENT/UNDERGROUND**

2. **FIRST FLOOR**

3. **SECOND FLOOR**

4. **THIRD FLOOR**

5. **ROOF AREA**

6. **LANDSCAPE**

7. **TOTAL**

1. **BASEMENT/UNDERGROUND**

2. **FIRST FLOOR**

3. **SECOND FLOOR**

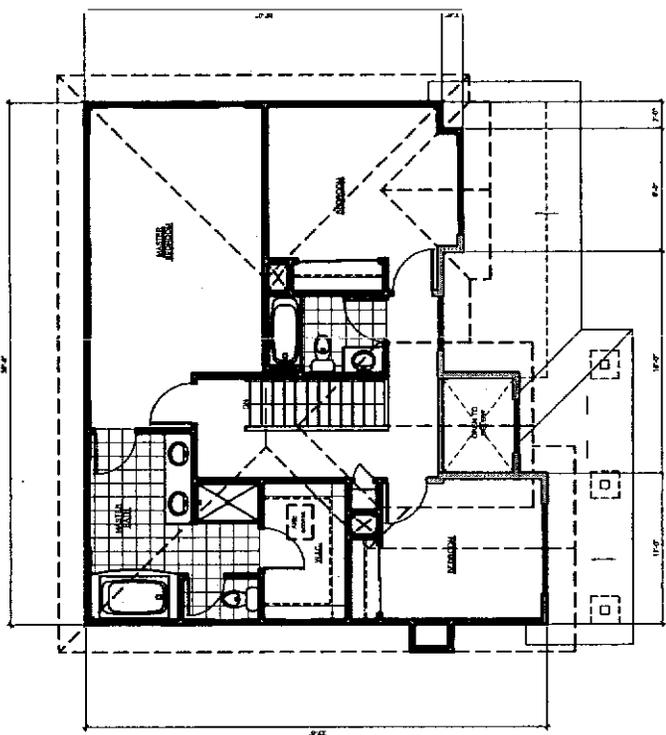
4. **THIRD FLOOR**

5. **ROOF AREA**

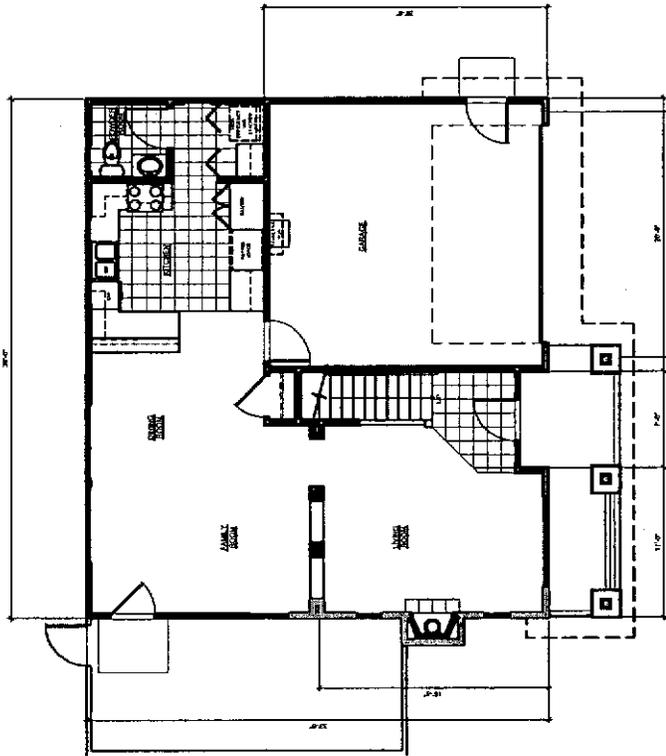
6. **LANDSCAPE**

7. **TOTAL**

PROJECT NO: 08141  
 SHEET NO: 08141  
 DATE: 08/14/17  
 CHECKED BY: [Signature]  
 DRAWN BY: [Signature]  
 UNIT No. 7  
 FLOOR PLANS  
 A072



UNIT 7  
SECOND FLOOR PLAN



UNIT 7  
FIRST FLOOR PLAN

UNIT No. 7 - PROPOSED FLOOR PLANS  
 SCALE: 1/8"=1'-0"



PRELIMINARY NOT FOR CONSTRUCTION 1/31/17  
A.P.N. 039-082-05

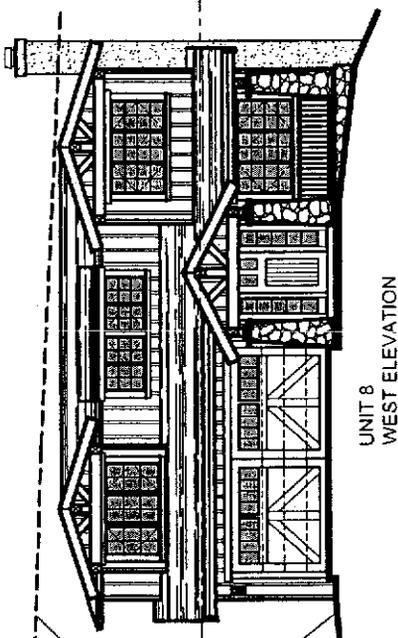
HIDDEN OAKS  
B.K. PROGRESS, L.P.  
8651 SODALE DRIVE  
SANTA CRUZ COUNTY, CA

JOB NO.	08141
REPORT DATE	12/20/16
PROJECT NAME	HIDDEN OAKS
DRAWN BY	
CHECKED BY	
REV. NUMBER	1/1/2017

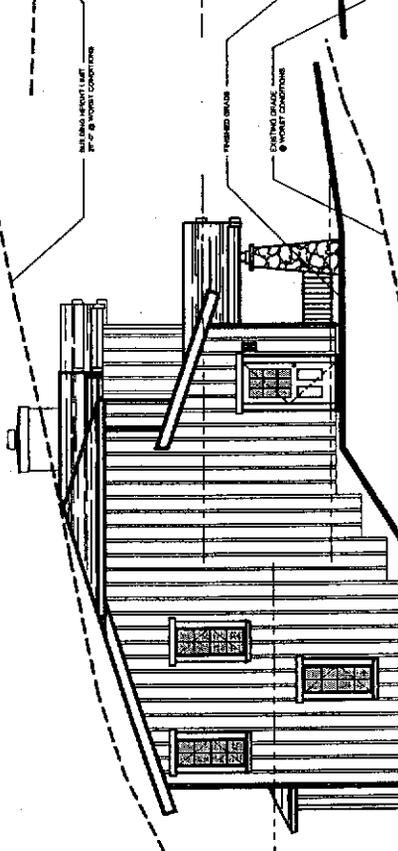
UNIT No. 8  
ELEVATIONS  
SHEET NO.

A081  
FILE NAME: \_\_\_\_\_

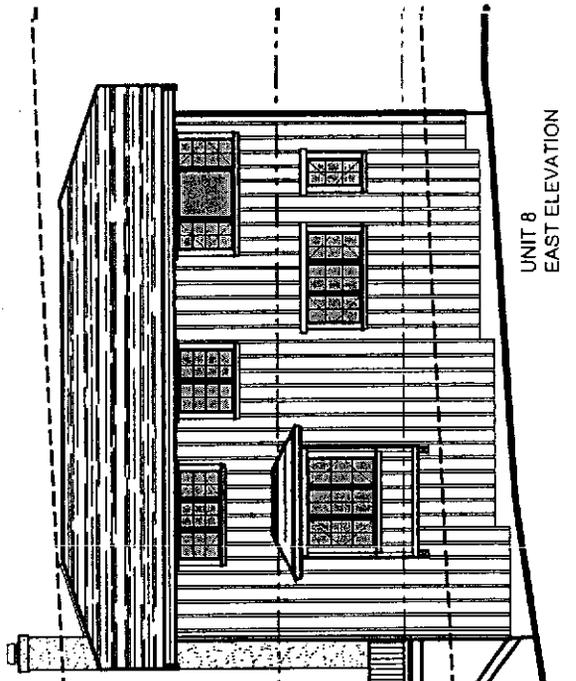
- LEGEND**
- Hardiplank staggered edge panel
  - Hardi vertical siding
  - Hardi plank lap siding
  - Shoups stone finish
  - Elongated stone finish
  - Applied shingle coat
  - Cement Plaster finish
  - Board and Batten at 12" on center over Hardiplank siding



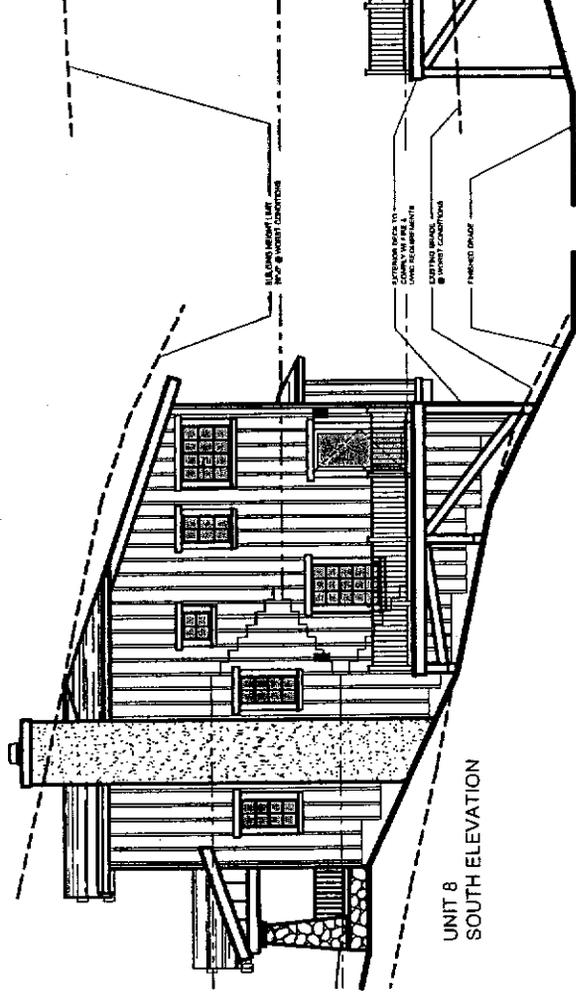
UNIT 8 WEST ELEVATION



UNIT 8 NORTH ELEVATION



UNIT 8 EAST ELEVATION



UNIT 8 SOUTH ELEVATION

UNIT No. 8 - PROPOSED ELEVATIONS  
SCALE: 1/8" = 1'-0"







PRELIMINARY NOT FOR CONSTRUCTION 1/3/10  
 HIDDEN OAKS  
 B.K. PROPERTIES, L.P.  
 8951 SOUTHER DRIVE  
 SANTA CRUZ COUNTY, CA  
 A.P.N. 039-082-05

JOB NO. 06141  
 SHEET NO. 9092  
 SHEET DATE 1/3/10  
 CHECKED BY: [Signature]  
 DATE 1/3/10  
 UNIT No. 9  
 FLOOR PLANS  
 SHEET NO. A092

FLOOR AREA CALCULATIONS BY TYPE OF SPACE	
1. FINISH FLOOR AREA	1,111.11 S.F.
2. STAIRS	1,111.11 S.F.
3. BALCONY	1,111.11 S.F.
4. TERRACE	1,111.11 S.F.
5. TOTAL FINISH FLOOR AREA (1+2+3+4)	4,444.44 S.F.
6. MECHANICAL ROOM	1,111.11 S.F.
7. AREA OF CEILING 1' IN HEIGHT	1,111.11 S.F.
8. AREA OF CEILING 8' IN HEIGHT	1,111.11 S.F.
9. AREA OF CEILING 10' IN HEIGHT	1,111.11 S.F.
10. TOTAL CEILING AREA (7+8+9)	3,333.33 S.F.
11. TOTAL FLOOR AREA (5+10)	7,777.77 S.F.
12. TOTAL AREA (11+6)	8,888.88 S.F.
13. TOTAL AREA (12+7)	9,999.99 S.F.
14. TOTAL AREA (13+8)	11,111.10 S.F.
15. TOTAL AREA (14+9)	12,222.21 S.F.
16. TOTAL AREA (15+10)	13,333.32 S.F.
17. TOTAL AREA (16+11)	14,444.43 S.F.
18. TOTAL AREA (17+12)	15,555.54 S.F.
19. TOTAL AREA (18+13)	16,666.65 S.F.
20. TOTAL AREA (19+14)	17,777.76 S.F.
21. TOTAL AREA (20+15)	18,888.87 S.F.
22. TOTAL AREA (21+16)	19,999.98 S.F.
23. TOTAL AREA (22+17)	21,111.09 S.F.
24. TOTAL AREA (23+18)	22,222.20 S.F.
25. TOTAL AREA (24+19)	23,333.31 S.F.
26. TOTAL AREA (25+20)	24,444.42 S.F.
27. TOTAL AREA (26+21)	25,555.53 S.F.
28. TOTAL AREA (27+22)	26,666.64 S.F.
29. TOTAL AREA (28+23)	27,777.75 S.F.
30. TOTAL AREA (29+24)	28,888.86 S.F.
31. TOTAL AREA (30+25)	29,999.97 S.F.
32. TOTAL AREA (31+26)	31,111.08 S.F.
33. TOTAL AREA (32+27)	32,222.19 S.F.
34. TOTAL AREA (33+28)	33,333.30 S.F.
35. TOTAL AREA (34+29)	34,444.41 S.F.
36. TOTAL AREA (35+30)	35,555.52 S.F.
37. TOTAL AREA (36+31)	36,666.63 S.F.
38. TOTAL AREA (37+32)	37,777.74 S.F.
39. TOTAL AREA (38+33)	38,888.85 S.F.
40. TOTAL AREA (39+34)	39,999.96 S.F.
41. TOTAL AREA (40+35)	41,111.07 S.F.
42. TOTAL AREA (41+36)	42,222.18 S.F.
43. TOTAL AREA (42+37)	43,333.29 S.F.
44. TOTAL AREA (43+38)	44,444.40 S.F.
45. TOTAL AREA (44+39)	45,555.51 S.F.
46. TOTAL AREA (45+40)	46,666.62 S.F.
47. TOTAL AREA (46+41)	47,777.73 S.F.
48. TOTAL AREA (47+42)	48,888.84 S.F.
49. TOTAL AREA (48+43)	49,999.95 S.F.
50. TOTAL AREA (49+44)	51,111.06 S.F.
51. TOTAL AREA (50+45)	52,222.17 S.F.
52. TOTAL AREA (51+46)	53,333.28 S.F.
53. TOTAL AREA (52+47)	54,444.39 S.F.
54. TOTAL AREA (53+48)	55,555.50 S.F.
55. TOTAL AREA (54+49)	56,666.61 S.F.
56. TOTAL AREA (55+50)	57,777.72 S.F.
57. TOTAL AREA (56+51)	58,888.83 S.F.
58. TOTAL AREA (57+52)	59,999.94 S.F.
59. TOTAL AREA (58+53)	61,111.05 S.F.
60. TOTAL AREA (59+54)	62,222.16 S.F.
61. TOTAL AREA (60+55)	63,333.27 S.F.
62. TOTAL AREA (61+56)	64,444.38 S.F.
63. TOTAL AREA (62+57)	65,555.49 S.F.
64. TOTAL AREA (63+58)	66,666.60 S.F.
65. TOTAL AREA (64+59)	67,777.71 S.F.
66. TOTAL AREA (65+60)	68,888.82 S.F.
67. TOTAL AREA (66+61)	69,999.93 S.F.
68. TOTAL AREA (67+62)	71,111.04 S.F.
69. TOTAL AREA (68+63)	72,222.15 S.F.
70. TOTAL AREA (69+64)	73,333.26 S.F.
71. TOTAL AREA (70+65)	74,444.37 S.F.
72. TOTAL AREA (71+66)	75,555.48 S.F.
73. TOTAL AREA (72+67)	76,666.59 S.F.
74. TOTAL AREA (73+68)	77,777.70 S.F.
75. TOTAL AREA (74+69)	78,888.81 S.F.
76. TOTAL AREA (75+70)	79,999.92 S.F.
77. TOTAL AREA (76+71)	81,111.03 S.F.
78. TOTAL AREA (77+72)	82,222.14 S.F.
79. TOTAL AREA (78+73)	83,333.25 S.F.
80. TOTAL AREA (79+74)	84,444.36 S.F.
81. TOTAL AREA (80+75)	85,555.47 S.F.
82. TOTAL AREA (81+76)	86,666.58 S.F.
83. TOTAL AREA (82+77)	87,777.69 S.F.
84. TOTAL AREA (83+78)	88,888.80 S.F.
85. TOTAL AREA (84+79)	89,999.91 S.F.
86. TOTAL AREA (85+80)	91,111.02 S.F.
87. TOTAL AREA (86+81)	92,222.13 S.F.
88. TOTAL AREA (87+82)	93,333.24 S.F.
89. TOTAL AREA (88+83)	94,444.35 S.F.
90. TOTAL AREA (89+84)	95,555.46 S.F.
91. TOTAL AREA (90+85)	96,666.57 S.F.
92. TOTAL AREA (91+86)	97,777.68 S.F.
93. TOTAL AREA (92+87)	98,888.79 S.F.
94. TOTAL AREA (93+88)	99,999.90 S.F.
95. TOTAL AREA (94+89)	101,111.01 S.F.
96. TOTAL AREA (95+90)	102,222.12 S.F.
97. TOTAL AREA (96+91)	103,333.23 S.F.
98. TOTAL AREA (97+92)	104,444.34 S.F.
99. TOTAL AREA (98+93)	105,555.45 S.F.
100. TOTAL AREA (99+94)	106,666.56 S.F.
101. TOTAL AREA (100+95)	107,777.67 S.F.
102. TOTAL AREA (101+96)	108,888.78 S.F.
103. TOTAL AREA (102+97)	109,999.89 S.F.
104. TOTAL AREA (103+98)	111,111.00 S.F.
105. TOTAL AREA (104+99)	112,222.11 S.F.
106. TOTAL AREA (105+100)	113,333.22 S.F.
107. TOTAL AREA (106+101)	114,444.33 S.F.
108. TOTAL AREA (107+102)	115,555.44 S.F.
109. TOTAL AREA (108+103)	116,666.55 S.F.
110. TOTAL AREA (109+104)	117,777.66 S.F.
111. TOTAL AREA (110+105)	118,888.77 S.F.
112. TOTAL AREA (111+106)	119,999.88 S.F.
113. TOTAL AREA (112+107)	121,111.00 S.F.
114. TOTAL AREA (113+108)	122,222.11 S.F.
115. TOTAL AREA (114+109)	123,333.22 S.F.
116. TOTAL AREA (115+110)	124,444.33 S.F.
117. TOTAL AREA (116+111)	125,555.44 S.F.
118. TOTAL AREA (117+112)	126,666.55 S.F.
119. TOTAL AREA (118+113)	127,777.66 S.F.
120. TOTAL AREA (119+114)	128,888.77 S.F.
121. TOTAL AREA (120+115)	129,999.88 S.F.
122. TOTAL AREA (121+116)	131,111.00 S.F.
123. TOTAL AREA (122+117)	132,222.11 S.F.
124. TOTAL AREA (123+118)	133,333.22 S.F.
125. TOTAL AREA (124+119)	134,444.33 S.F.
126. TOTAL AREA (125+120)	135,555.44 S.F.
127. TOTAL AREA (126+121)	136,666.55 S.F.
128. TOTAL AREA (127+122)	137,777.66 S.F.
129. TOTAL AREA (128+123)	138,888.77 S.F.
130. TOTAL AREA (129+124)	139,999.88 S.F.
131. TOTAL AREA (130+125)	141,111.00 S.F.
132. TOTAL AREA (131+126)	142,222.11 S.F.
133. TOTAL AREA (132+127)	143,333.22 S.F.
134. TOTAL AREA (133+128)	144,444.33 S.F.
135. TOTAL AREA (134+129)	145,555.44 S.F.
136. TOTAL AREA (135+130)	146,666.55 S.F.
137. TOTAL AREA (136+131)	147,777.66 S.F.
138. TOTAL AREA (137+132)	148,888.77 S.F.
139. TOTAL AREA (138+133)	149,999.88 S.F.
140. TOTAL AREA (139+134)	151,111.00 S.F.
141. TOTAL AREA (140+135)	152,222.11 S.F.
142. TOTAL AREA (141+136)	153,333.22 S.F.
143. TOTAL AREA (142+137)	154,444.33 S.F.
144. TOTAL AREA (143+138)	155,555.44 S.F.
145. TOTAL AREA (144+139)	156,666.55 S.F.
146. TOTAL AREA (145+140)	157,777.66 S.F.
147. TOTAL AREA (146+141)	158,888.77 S.F.
148. TOTAL AREA (147+142)	159,999.88 S.F.
149. TOTAL AREA (148+143)	161,111.00 S.F.
150. TOTAL AREA (149+144)	162,222.11 S.F.
151. TOTAL AREA (150+145)	163,333.22 S.F.
152. TOTAL AREA (151+146)	164,444.33 S.F.
153. TOTAL AREA (152+147)	165,555.44 S.F.
154. TOTAL AREA (153+148)	166,666.55 S.F.
155. TOTAL AREA (154+149)	167,777.66 S.F.
156. TOTAL AREA (155+150)	168,888.77 S.F.
157. TOTAL AREA (156+151)	169,999.88 S.F.
158. TOTAL AREA (157+152)	171,111.00 S.F.
159. TOTAL AREA (158+153)	172,222.11 S.F.
160. TOTAL AREA (159+154)	173,333.22 S.F.
161. TOTAL AREA (160+155)	174,444.33 S.F.
162. TOTAL AREA (161+156)	175,555.44 S.F.
163. TOTAL AREA (162+157)	176,666.55 S.F.
164. TOTAL AREA (163+158)	177,777.66 S.F.
165. TOTAL AREA (164+159)	178,888.77 S.F.
166. TOTAL AREA (165+160)	179,999.88 S.F.
167. TOTAL AREA (166+161)	181,111.00 S.F.
168. TOTAL AREA (167+162)	182,222.11 S.F.
169. TOTAL AREA (168+163)	183,333.22 S.F.
170. TOTAL AREA (169+164)	184,444.33 S.F.
171. TOTAL AREA (170+165)	185,555.44 S.F.
172. TOTAL AREA (171+166)	186,666.55 S.F.
173. TOTAL AREA (172+167)	187,777.66 S.F.
174. TOTAL AREA (173+168)	188,888.77 S.F.
175. TOTAL AREA (174+169)	189,999.88 S.F.
176. TOTAL AREA (175+170)	191,111.00 S.F.
177. TOTAL AREA (176+171)	192,222.11 S.F.
178. TOTAL AREA (177+172)	193,333.22 S.F.
179. TOTAL AREA (178+173)	194,444.33 S.F.
180. TOTAL AREA (179+174)	195,555.44 S.F.
181. TOTAL AREA (180+175)	196,666.55 S.F.
182. TOTAL AREA (181+176)	197,777.66 S.F.
183. TOTAL AREA (182+177)	198,888.77 S.F.
184. TOTAL AREA (183+178)	199,999.88 S.F.
185. TOTAL AREA (184+179)	201,111.00 S.F.
186. TOTAL AREA (185+180)	202,222.11 S.F.
187. TOTAL AREA (186+181)	203,333.22 S.F.
188. TOTAL AREA (187+182)	204,444.33 S.F.
189. TOTAL AREA (188+183)	205,555.44 S.F.
190. TOTAL AREA (189+184)	206,666.55 S.F.
191. TOTAL AREA (190+185)	207,777.66 S.F.
192. TOTAL AREA (191+186)	208,888.77 S.F.
193. TOTAL AREA (192+187)	209,999.88 S.F.
194. TOTAL AREA (193+188)	211,111.00 S.F.
195. TOTAL AREA (194+189)	212,222.11 S.F.
196. TOTAL AREA (195+190)	213,333.22 S.F.
197. TOTAL AREA (196+191)	214,444.33 S.F.
198. TOTAL AREA (197+192)	215,555.44 S.F.
199. TOTAL AREA (198+193)	216,666.55 S.F.
200. TOTAL AREA (199+194)	217,777.66 S.F.
201. TOTAL AREA (200+195)	218,888.77 S.F.
202. TOTAL AREA (201+196)	219,999.88 S.F.
203. TOTAL AREA (202+197)	221,111.00 S.F.
204. TOTAL AREA (203+198)	222,222.11 S.F.
205. TOTAL AREA (204+199)	223,333.22 S.F.
206. TOTAL AREA (205+200)	224,444.33 S.F.
207. TOTAL AREA (206+201)	225,555.44 S.F.
208. TOTAL AREA (207+202)	226,666.55 S.F.
209. TOTAL AREA (208+203)	227,777.66 S.F.
210. TOTAL AREA (209+204)	228,888.77 S.F.
211. TOTAL AREA (210+205)	229,999.88 S.F.
212. TOTAL AREA (211+206)	231,111.00 S.F.
213. TOTAL AREA (212+207)	232,222.11 S.F.
214. TOTAL AREA (213+208)	233,333.22 S.F.
215. TOTAL AREA (214+209)	234,444.33 S.F.
216. TOTAL AREA (215+210)	235,555.44 S.F.
217. TOTAL AREA (216+211)	236,666.55 S.F.
218. TOTAL AREA (217+212)	237,777.66 S.F.
219. TOTAL AREA (218+213)	238,888.77 S.F.
220. TOTAL AREA (219+214)	239,999.88 S.F.
221. TOTAL AREA (220+215)	241,111.00 S.F.
222. TOTAL AREA (221+216)	242,222.11 S.F.
223. TOTAL AREA (222+217)	243,333.22 S.F.
224. TOTAL AREA (223+218)	244,444.33 S.F.
225. TOTAL AREA (224+219)	245,555.44 S.F.
226. TOTAL AREA (225+220)	246,666.55 S.F.
227. TOTAL AREA (226+221)	247,777.66 S.F.
228. TOTAL AREA (227+222)	248,888.77 S.F.
229. TOTAL AREA (228+223)	249,999.88 S.F.
230. TOTAL AREA (229+224)	251,111.00 S.F.
231. TOTAL AREA (230+225)	252,222.11 S.F.
232. TOTAL AREA (231+226)	253,333.22 S.F.
233. TOTAL AREA (232+227)	254,444.33 S.F.
234. TOTAL AREA (233+228)	255,555.44 S.F.
235. TOTAL AREA (234+229)	256,666.55 S.F.
236. TOTAL AREA (235+230)	257,777.66 S.F.
237. TOTAL AREA (236+231)	258,888.77 S.F.
238. TOTAL AREA (237+232)	259,999.88 S.F.
239. TOTAL AREA (238+233)	261,111.00 S.F.
240. TOTAL AREA (239+234)	262,222.11 S.F.
241. TOTAL AREA (240+235)	263,333.22 S.F.
242. TOTAL AREA (241+236)	264,444.33 S.F.
243. TOTAL AREA (242+237)	265,555.44 S.F.
244. TOTAL AREA (243+238)	266,666.55 S.F.
245. TOTAL AREA (244+239)	267,777.66 S.F.
246. TOTAL AREA (245+240)	268,888.77 S.F.
247. TOTAL AREA (246+241)	269,999.88 S.F.
248. TOTAL AREA (247+242)	271,111.00 S.F.
249. TOTAL AREA (248+243)	272,222.11 S.F.
250. TOTAL AREA (249+244)	273,333.22 S.F.
251. TOTAL AREA (250+245)	274,444.33 S.F.
252. TOTAL AREA (251+246)	275,555.44 S.F.
253. TOTAL AREA (252+247)	276,666.55 S.F.
254. TOTAL AREA (253+248)	277,777.66 S.F.
255. TOTAL AREA (254+249)	278,888.77 S.F.
256. TOTAL AREA (255+250)	279,999.88 S.F.
257. TOTAL AREA (256+251)	281,111.00 S.F.
258. TOTAL AREA (257+252)	282,222.11 S.F.
259. TOTAL AREA (258+253)	283,333.22 S.F.
260. TOTAL AREA (259+254)	284,444.33 S.F.
261. TOTAL AREA (260+255)	285,555.44 S.F.
262. TOTAL AREA (261+256)	286,666.55 S.F.
263. TOTAL AREA (262+257)	287,777.66 S.F.
264. TOTAL AREA (263+258)	288,888.77 S.F.
265. TOTAL AREA (264+259)	289,999.88 S.F.
266. TOTAL AREA (265+260)	291,111.00 S.F.
267. TOTAL AREA (266+261)	292,222.11 S.F.
268. TOTAL AREA (267+262)	293,333.22 S.F.
269. TOTAL AREA (268+263)	294,444.33 S.F.
270. TOTAL AREA (269+264)	295,555.44 S.F.
271. TOTAL AREA (270+265)	296,666.55 S.F.
272. TOTAL AREA (271+266)	297,777.66 S.F.
273. TOTAL AREA (272+267)	298,888.77 S.F.
274. TOTAL AREA (273+268)	299,999.88 S.F.
275. TOTAL AREA (274+269)	301,111.00 S.F.

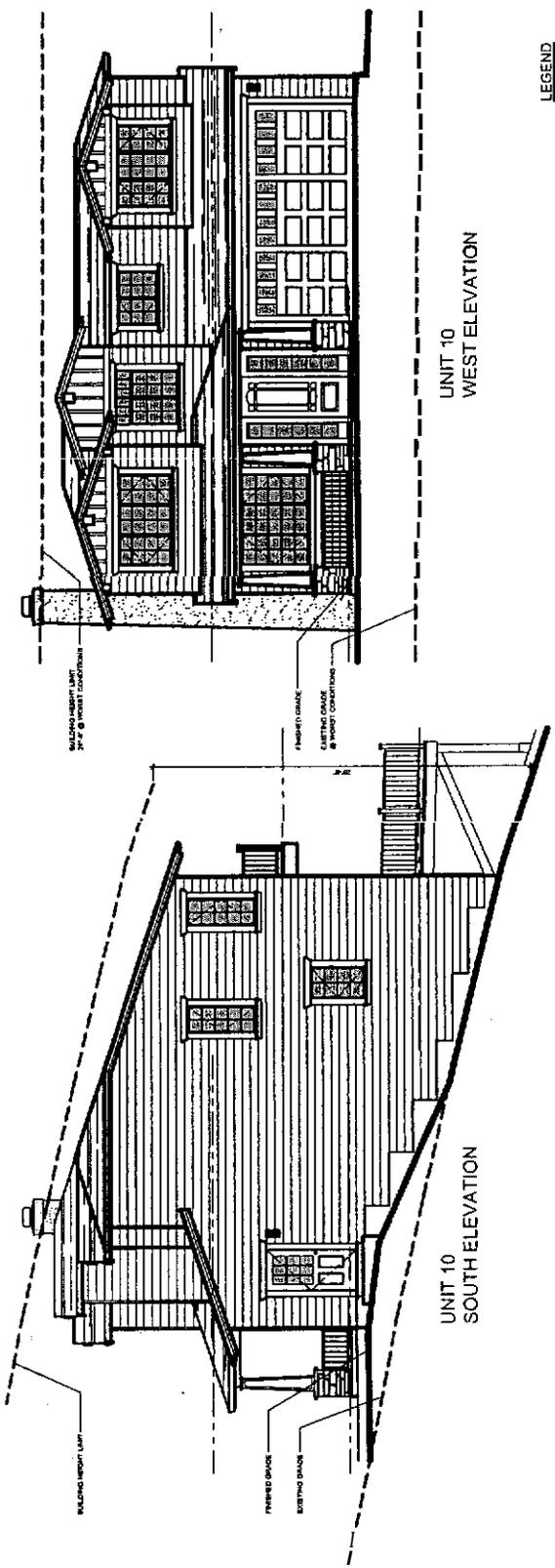
**WR&D**  
**WALD REPINE & ROOT**  
**ARCHITECTS LLP**  
 215 GARDEN ROAD, SUITE 100  
 ANIMITY, CA 94008  
 PHONE: 415.948.4444  
 FAX: 415.948.3330  
 WWW: WRAND.COM

PRELIMINARY NOT FOR  
 CONSTRUCTION 1/9/17  
 A.P.N. 03282325

HIDDEN OAKS  
 B.K. PROPERTIES, L.P.  
 6851 BOONVILLE DRIVE  
 SANTA CRUZ COUNTY, CA

JOB NO. 06141  
 PLOT DATE 02/07  
 PLOT DATE 02/07  
 DRAWN BY  
 CHECKED BY  
 DATE 11/13/16

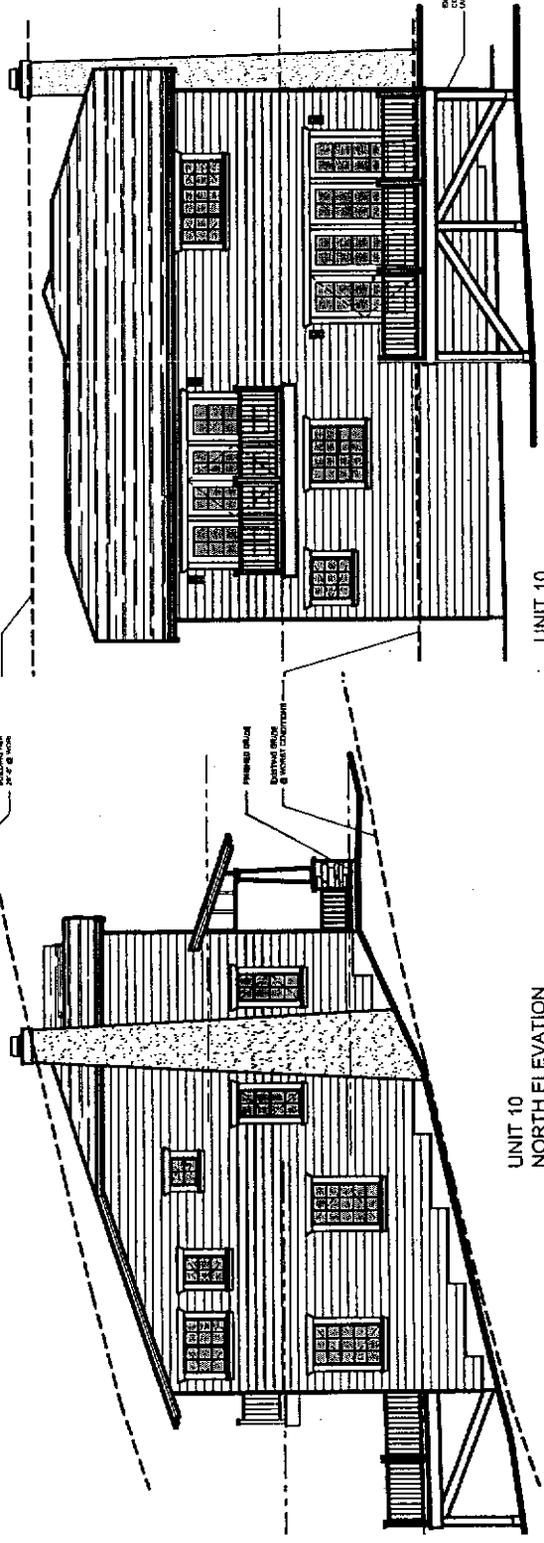
UNIT No. 10  
 ELEVATIONS  
 SHEET NO. A101



UNIT 10  
 WEST ELEVATION

UNIT 10  
 SOUTH ELEVATION

- LEGEND**
- Handshingle staggered  
over panel
  - Hard vertical siding  
over panel
  - Hard brick bonding  
select color/mix
  - Electric Stone Mesa  
Metl. mountain lodge
  - Electric Stone Mesa  
Shedding roof
  - Asphalt shingle roof  
textured shale pattern
  - Cement Plaster Arch
  - Board and Batten 12" on center  
over Handshingle siding



UNIT 10  
 NORTH ELEVATION

UNIT 10  
 EAST ELEVATION

UNIT No. 10 - PROPOSED ELEVATIONS  
 SCALE: 1/8"=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 subject property is located within the Urban Services Line with all public services available and is adjacent to a major arterial roadway. The area to is currently zoned R-I-IAC (Single family residential - 1 acre minimum) and will be rezoned to the **RM-4** (Multi-family Residential - 4, 000 square feet minimum) zone district. The General Plan land use designation is proposed to be amended from R - W L (Urban Very Low Density Residential) to the R-UM (Urban Medium Density Residential) land use designation and 0 - U (Urban Open Space) for the riparian area.

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

This finding can be made, in that all utilities and community services are available to the serve the property.

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 current zone district and General Plan land use designation are from a time when sanitary sewer service was not available. **All** urban services are available at this time and surrounding residential density is much greater than one unit per acre. The rezoning will allow residential development at a density within a range that is compatible with the surrounding pattern of development.

## 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 10 multi-family residential units and is located in the Urban Medium Density Residential (R-UM) General Plan designation which allows a density of one unit for each 4,000 to 6,000 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 4,879 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 the interior access road (*Oak Leaf Court*) or Haas Drive. The proposed access road (*Oak Leaf Court*) will require an exception to the County Design Criteria due to variation in pavement width, parking configuration, and associated improvements. 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 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-4 (Multi-family Residential - 4,000 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)(A)) and all exterior setbacks will be consistent with the required site standards of the RM-4 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 no 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 services 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 such 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 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-4 (Multi-family Residential - 4,000 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)(A)) and all exterior setbacks will be consistent with the required site standards of the RM-4 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 10 multi-family residential units and is located in the Urban Medium Density Residential (R-UM) General Plan designation which allows a density of one unit for each 4,000 to 6,000 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 4,879 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 the interior access road (*Oak Leaf Court*) or Haas Drive. The proposed access road (*Oak Leaf Court*) will require an exception to the County Design Criteria due to variation in pavement width, parking configuration, and associated improvements. 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 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 10 new peak vehicle trips per day (1 peak trip per dwelling unit), 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 (*Oak Leaf Court*) which will function as a shared driveway within the proposed development. The design of the 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 24-foot wide road section with separated parking bays. 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 separated parking bays and the proposed garages and 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 roadway and/or 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 portion of the subject property that is most suitable for development is located between the riparian corridor to the east and steeper slopes to the west. Additionally, the riparian buffer and construction setback areas are currently disturbed.

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 the existing development on the subject property is located within the riparian buffer and construction setback area. A Riparian Exception is necessary to allow an properly designed multi-family residential development 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 corridor, 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 06-0651

Tract No. : 1529

Applicant: Powers Land Planning, Inc.

Property Owner: Bk Properties LP

Assessor's Parcel Number(s): 039-062-06

Property Address and Location: Northeast corner of Soquel Drive and Haas Drive.

Planning Area: Aptos

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Exhibit(s):

- A. Tentative Map - prepared by Ifland Engineers, dated 3/23/07; Landscape plans - prepared by Gregory Lewis Landscape Architect, revised 3/29/07; Architectural and floor plans - prepared by ~~wata~~, Runkhe & Dost Architects, revised 3/23/07.

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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 the required fee to the Clerk of the Board of the County of Santa Cruz for posting the Negative Declaration as required by the California Department of Fish and Game mitigation fees program.
- II. 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 ten (10) multi-family residential units, and common area for access, utilities, and landscaping.
  - C. The minimum aggregate parcel area shall be 4,000 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-4 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 road improvements along Vienna Drive.
  - b. A dedication of the common area as a public utilities easement.

E. The following requirements shall be 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-4 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. Noise: In order to reduce impacts from noise along Soquel Drive, fencing enclosing private yards along Soquel Drive shall be a maximum of 8 feet in height and shall be designed ~~per~~ the recommendations of the project acoustical engineer.
    - ii. The wood fence, posts, and trellis, located along the Soquel Drive frontage shall not exceed **6** feet in height, as depicted on the approved Exhibit "A".
  - 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.
5. **All** future development on the lots shall comply with the requirements of the geotechnical report(s) prepared by Haro, Kasunich & Associates, dated 11/06 & 1/31/07.
6. 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.
7. Erosion Control: 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. 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 barrier.
  - c. Spoils management that prevents loose material from clearing, excavation, and other activities from entering any drainage

channel.

8. Any changes from the approved Exhibit "A", including but not limited to the Tentative Map, Preliminary Improvement Plans, or 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.

III. 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 Homeowners Association (HOA) shall be formed for maintenance of all areas under common ownership including, sidewalks, roadways, 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, Haas Drive, and Vienna 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.
- 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. Backflow prevention devices must be located in the least visually obtrusive location.
- F. All requirements of the Central Fire Protection District shall be met.
- G. Park dedication in-lieu fees shall be paid for ten (10) dwelling units. These fees are currently \$750 per bedroom, but are subject to change. A fee credit will be granted for bedrooms in the existing dwelling to be demolished.
- H. Child Care Development fees shall be paid for ten (10) dwelling units. These fees are currently **\$36** per bedroom, but are subject to change. A fee credit will be granted for bedrooms in the existing dwelling to be demolished.
- I. Transportation improvement fees shall be paid for ten (10) dwelling units. These fees *are* currently **\$1,650** per unit, but are subject to change. A fee credit will be granted for the existing dwelling to be demolished.
- J. Roadside improvement fees shall be paid for ten (10) dwelling units. **These** fees are currently \$1,650 per unit, but are subject to change. **A** fee credit will be granted for the existing dwelling to be demolished.
- 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 two (2) designated affordable unit(s) for sale to low and 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.

- 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 State Building Code regarding accessibility.
    - a. The construction of the proposed access road (*Oak Leaf Court*) shall include a **24** foot road section. A Roadside/Roadway Exception is approved to vary from **County** standards with respect to the width of the right of way, the elimination of sidewalks and on-street parking spaces.
  2. Details for the required bus stop improvements **on** Soquel Drive shall be provided and shall comply with Santa Cruz METRO transit district standards. The installation of the required bus **stop** improvements is eligible for a Transportation Improvement Area (TIA) fee credit per the Department of Public Works fee schedule.
  3. The improvement plans shall be revised to indicate that the roadway (Haas Drive) will be repaved (or slurry-sealed at a minimum) across the entire roadway width, per Department of Public Works Road Engineering standards. This work shall be performed after utilities and all other roadway improvements have been installed. Paint striping and traffic markings shall be replaced after repaving, if applicable.
  4. 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.
  5. 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.
  6. 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 locations, 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.

7. Air Quality: In order to ensure that the one hour air quality threshold for the pollutant acrolein is not exceeded during demolition and paving, prior to the issuance of the grading permit, the applicant shall modify the grading plans to include notes incorporating the construction conditions given by the Monterey Bay Unified Air Pollution Control District (MBUAPCD) as follows:
1. All pre-1994 diesel equipment shall be retrofitted with EPA certified diesel oxidation catalysts *or* all such equipment shall be fueled with B99 diesel fuel;
  - ii. Applicant shall retain receipts for purchases of catalysts or b99 diesel fuel until completion of the project;
  - iii. Applicant shall allow MBUAPCD to inspect receipts and equipment throughout the project.

Alternatively, the applicant may submit a health risk assessment to the MBUAPCD for review and approval. Any recommendations and requirements of the MBUAPCD will become conditions of constructing the project.

- M. Submit a final Landscape Plan for the entire site for review and approval by the Planning Department. The landscape plan shall specify plant species, size and location, and shall include irrigation plans, which meet the following criteria and must conform to all water conservation requirements of the local water district and the following conservation regulations:
1. 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.
  2. 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.

3. 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.
  4. 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.
    - a. 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.
    - b. 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.
    - c. Plants having similar water requirements shall be grouped together in distinct hydrozones and shall be irrigated separately.
    - d. Landscape irrigation should be scheduled between 6:00 p.m. and 11:00 a.m. to reduce evaporative water **loss**.
  5. All planting shall conform to the landscape plan shown as part of the approved Exhibit "A".
- IV. Prior to any site disturbance or physical construction on the subject property the following condition(s) shall be met:
- A. Riparian Protection: To prevent any incursion or **disturbance** in the riparian comdor, prior to land clearing and the pre-construction meeting, temporary orange fencing demarking the edge of disturbance between the project site and the riparian comdor must be in place. This fencing must remain in place until the permanent fencing is installed. This fencing must be **shown** on the improvement plans.

- B. Wildlife Protection: In order to prevent impacts to nesting raptors, if the project is underway outside of the time period of August 1 to October 15, the project biologist shall perform surveys within two weeks of the expected start date. If protected raptors are nesting within the project area, either disturbance will be avoided until young have fledged, or a radius of “no disturbance” shall be implemented after consultation with California Department of Fish and Game staff.
- C. Tree Protection: In order to prevent impacts to mature trees that are to be retained, the applicant shall submit a letter from the project arborist verifying that the plans reflect the recommendations cited in the arborist report by James P. Allen & Associates, dated October 5, 2006 and January 31, 2007. The project arborist shall be included in the pre-construction meeting to verify that all **tree** protection measures have been installed prior to clearing or grading activities. Prior to final inspection on the building permit, the project arborist shall provide the County with a letter indicating the recommendations of the arborist report have been implemented.
1. Tree protection fencing shall be installed to protect existing trees, as indicated on the approved Exhibit “A”.
  2. In order to mitigate for the removal of all mature trees, trees shall be replaced at a one to one ratio. If feasible, trees may be relocated. Relocated trees shall not be counted as having been removed. Prior to the issuance of final permits the applicant shall submit for approval by County Environmental Planning a five-year monitoring and maintenance program (MMP) to ensure the success of the replacement trees. The applicant shall include proof of funding set aside for the *MMP*.
- D. 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: **the** applicant, grading contractor supervisor, the project arborist, and Santa **Cruz** County Environmental Planning staff. The temporary construction fencing demarcating the disturbance envelope, **tree** protection fencing, and silt fencing will be inspected at that time. If disturbance is to occur before August 1st, results of pre-construction bird surveys will also be reviewed at that time.
- V. 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. 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).
- D. 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.
- E. 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 an emergency situation; and
  - 2. Air Quality: 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.
- F. Construction of improvements shall comply with the requirements of the geotechnical report(s) prepared by Haro, Kasunich & Associates, dated 11/06 & 1/31/07. 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).
- G. All required land division improvements shall be installed and inspected prior to

final inspection clearance for any new structure on the new lots

- VI. 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.
- VII. 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.

## VIII. 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 IV.D)

1. Monitoring Program: The Department of Public Works construction inspector, and a Santa Cruz County Environmental Planning staff shall attend the pre-construction meeting. At the pre-construction meeting Environmental Planning staff shall:
  - a. Inspect the temporary construction fencing demarcating the disturbance envelope, tree protection fencing, and silt fencing.
  - b. Review the results of the pre-construction bird surveys, if within the applicable time period.
  - c. Review the receiving site for any exported fill and the permits for that site, if applicable.

### B. Mitigation Measure: Erosion Control (Conditions II.E.7 & III.L.6)

1. Monitoring Program: The erosion control plan shall be reviewed and approved by Environmental Planning staff prior to recordation of the Final Map.

### C. Mitigation Measure: Riparian Protection (Condition IV.A)

1. Monitoring Program: The applicant/owner shall install riparian protection fencing according to the following procedures:
  - a. The location of riparian protection fencing shall be indicated on the final improvement plans.
  - b. Temporary orange fencing shall be installed demarking the edge of disturbance between the project site and the riparian corridor prior to the pre-construction meeting or any site disturbance.

- c. Permanent riparian construction fencing shall be installed after site improvements have been completed. This permanent fencing shall be maintained in perpetuity by the Homeowners Association (HOA).

D. Mitigation Measure: Water Quality (Conditions III.C.3 & III.L.5)

1. Monitoring Program: 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;
  - 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 inspection. This monitoring report shall specify any repairs that have been done or that are needed to allow the trap to function adequately.

E. Mitigation Measure: Wildlife Protection (Condition IV.B)

1. Monitoring Program: At the pre-construction meeting, Environmental Planning staff shall review the results of the pre-construction bird surveys, if applicable, and shall determine if adequate measures have been taken to protect the indicated species prior to allowing site disturbance to occur.

F. Mitigation Measure: Air Quality (Conditions III.L.7 & V.E.2)

1. Monitoring Program: Monterey Bay Unified **Air** Pollution Control District (MBUAPCD) staff shall monitor the construction activities, fuel receipts, and grading equipment throughout grading operations and the construction of the project.

G. Mitigation Measure: Noise (Condition II.E.4.b.i)

1. Monitoring Program: The applicant shall submit a letter from the acoustical engineer verifying that the fencing plans reflect the recommendations cited in the Noise Study Report by Environmental Consulting Services, dated October 16, 2006.

H. Mitigation Measure: Tree Protection (Condition IV.C)

1. Monitoring Program: The applicant shall submit a letter from the project arborist verifying that the plans reflect the recommendations cited in the arborist report by James P. Allen & Associates, dated October 5, 2006 and

Application #: 06-0651  
APN: 039-062-06  
Owner: BK Propetties

January 31, 2007. The project arborist shall be included in the pre-construction meeting to verify that all tree protection measures have been installed prior to clearing or grading activities. Prior to final inspection on the building permit, the project arborist shall provide the County with a letter indicating the recommendations of the arborist report have been implemented.

2. Monitoring Program: In order to mitigate for the removal of all mature trees, trees shall be replaced at a one to one ratio. If feasible, trees may be relocated. Relocated trees shall not be counted as having been removed. Prior to the issuance of final permits the applicant shall submit for approval by County Environmental Planning a five-year monitoring and maintenance program (MMP) *to* ensure the success of the replacement trees. The applicant shall include proof of funding set aside for the MMP.
  - a. Environmental Planning staff shall review the monitoring and maintenance program to ensure **the** success of the replacement trees.

**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: \_\_\_\_\_

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Mark Deming  
Assistant Director

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Randall Adams  
Project Planner

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Appeals: Any property 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.

# **Exhibit D**

## **Mitigated Negative Declaration**

**Application Number 06-0651  
Planning Commission Hearing  
11/14/07**



# COUNTY OF SANTA CRUZ

## PLANNING DEPARTMENT

701 OCEAN STREET, 4<sup>TH</sup> 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: 06-0651**

**Powers Land Planning, for BK Properties**

Proposal to divide a 1.55 acre parcel into 10 residential lots and common area. Requires a Subdivision, General Plan Amendment from R-UVL to R-UM (and 0-U for the riparian area), Rezoning from R-1-1AC to RM-4, Residential Development Permit, Riparian Exception, Roadway/Roadside Exception, Soils Report Review, and Preliminary Grading Review. The project is located on the northeast corner of Soquel Drive and Haas Drive. The exact address is 6851 Soquel Drive, Aptos, California.

APN: 039-062-05 (Retired; New APN: 039-062-06)

**Randall Adams, Staff Planner**

Zone District: R-1-1AC

**ACTION: Negative Declaration with Mitigations**

**REVIEW PERIOD ENDS: 9-24-07**

**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:

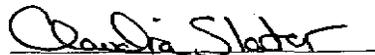
This project, if conditioned to comply with required mitigation measures or conditions shown below, will not have significant effect on the environment. The expected environmental impacts of the project are documented in the Initial Study on this project attached to the original of this notice on file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

Required Mitigation Measures or Conditions:

None  
 Are Attached

Review Period Ends September 24, 2007

Date Approved By Environmental Coordinator September 25, 2007

  
CLAUDIA SLATER  
Environmental Coordinator  
(831) 454-5175

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: \_\_\_\_\_

NAME: Haas Drive, BK Properties  
APPLICATION: 06-0651  
A.P.N: 039-062-05

#### NEGATIVE DECLARATION MITIGATIONS

- A. In order to ensure that the mitigation measures B - I (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: the applicant, grading contractor supervisor, the project arborist, and Santa Cruz County Environmental Planning staff. The temporary construction fencing demarcating the disturbance envelope, tree protection fencing, and silt fencing will be inspected at that time. If disturbance is to occur before August 1<sup>st</sup>, results of pre-construction bird surveys will also be reviewed at that time.
- B. In order to prevent erosion, off site sedimentation, and pollution of creeks, prior to start of site work the applicant shall submit a detailed erosion control plan for review and approval by Environmental Planning staff. The plan shall include a clearing and grading schedule, clearly marked disturbance envelope, revegetation specifications, temporary road surfacing and construction entry stabilization and details of temporary drainage control.
- C. To prevent any incursion or disturbance in the riparian corridor, prior to land clearing and the pre-construction meeting, temporary orange fencing demarking **the** edge of disturbance between **the** project site and the riparian comdor must be in place. This fencing must remain in place until the permanent fencing is installed. This fencing must be shown on the improvement plans.
- D. To prevent drainage discharges from carrying silt, grease, and other contaminants from paved surfaces into nearby waterways, 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;
  - 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 inspection. This monitoring report shall specify any repairs **that** have been done or that are needed to allow the trap to function adequately.
- E. In order *to* prevent impacts to nesting raptors, if the project is underway outside of the time period of **August 1** to October 15, **the** project biologist shall perform surveys within two weeks of the expected start date. **If** protected

raptors are nesting within the project area, either disturbance will be avoided until young have fledged, or a radius of "no disturbance" shall be implemented after consultation with California Department of Fish and Game staff.

- F. In order to minimize impacts to air quality, standard dust control Best Management Practices shall be implemented during all grading and demolition work.
- G. In order to prevent impacts from noise generated by vehicular traffic on Soquel Drive, the applicant shall submit a letter from the acoustical engineer verifying that the plans reflect the recommendations cited in the Noise Study Report by Environmental Consulting Services, dated October 16, 2006.
- H. In order to prevent impacts to mature trees that are to be retained, the applicant shall submit a letter from the project arborist verifying that the plans reflect the recommendations cited in the arborist report, by James P. Allen & Associates, dated October 5, 2006 and January 31, 2007. The project arborist shall be included in the preconstruction meeting to verify that all tree protection measures have been installed prior to clearing or grading activities. Prior to final inspection on the building permit, the project arborist shall provide the County Environmental Planning Staff with a letter indicating the recommendations of the arborist report have been implemented.
- I. In order to mitigate for the removal of all mature trees, trees shall be replaced at a one to one ratio. If feasible, trees may be relocated. Relocated trees shall not be counted as having been removed. Prior to the issuance of final permits the applicant shall submit for approval by County Environmental Planning a five-year monitoring and maintenance program (MMP) to ensure the success of the replacement trees. The applicant shall include proof of funding set aside for the MMP.



# COUNTY OF SANTA CRUZ

## PLANNING DEPARTMENT

701 OCEAN STREET, 4<sup>TH</sup> 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: Powers Land Planning, for BK Properties

APPLICATION NO.: 06-0651

APN: 039-062-05

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

XX Negative Declaration

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

XX Mitigations will be attached to the Negative Declaration.

\_\_\_\_\_ No mitigations will be attached

\_\_\_\_\_ Environmental Impact Report

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

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

Review Period Ends: September 24, 2007

Randall Adams  
Staff Planner

Phone: 454-3218

Date: August 29, 2007



# Environmental Review Initial Study

Application Number: **06-0651**

**Date:** 8/27/07 (Revised 9/28/07)

**Staff Planner:** Randall Adams

## **I. OVERVIEW AND ENVIRONMENTAL DETERMINATION**

**APPLICANT:** Powers Land Planning

**APN:** 039-062-05 (Attachment 1)

**OWNER:** BK Properties

**SUPERVISORAL DISTRICT:** 2

**LOCATION:** Property located on the northeast corner of Soquel Drive and Haas Drive. (6851 Soquel Drive, Aptos) (Attachment ij)

**SUMMARY PROJECT DESCRIPTION:** Proposal to divide a 1.55 acre parcel into 10 residential lots and common area.

Requires a Subdivision, General Plan Amendment from R-UVL to R-UM (and O-U for the riparian area), Rezoning from R-1-IAC to RM-4. Residential Development Permit, Riparian Exception, Roadway/Roadside Exception, Soils Report Review, and Preliminary Grading 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.**

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Geology/Soils             | <input checked="" type="checkbox"/> Noise                   |
| <input type="checkbox"/> Hydrology/Water Supply/Water Quality | <input type="checkbox"/> Air Quality                        |
| <input checked="" type="checkbox"/> Biological Resources      | <input type="checkbox"/> Public Services & Utilities        |
| <input type="checkbox"/> Energy & Natural Resources           | <input type="checkbox"/> Land Use, Population & Housing     |
| <input type="checkbox"/> Visual Resources & Aesthetics        | <input type="checkbox"/> Cumulative Impacts                 |
| <input type="checkbox"/> Cultural Resources                   | <input type="checkbox"/> Growth Inducement                  |
| <input type="checkbox"/> Hazards & Hazardous Materials        | <input type="checkbox"/> Mandatory Findings of Significance |
| <input checked="" type="checkbox"/> Transportation/Traffic    |   |

County of Santa Cruz Planning Department  
701 Ocean Street, 4<sup>th</sup> Floor, Santa Cruz CA 95060

**DISCRETIONARY APPROVAL(S) BEING CONSIDERED**

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> General Plan Amendment | <input checked="" type="checkbox"/> Grading Permit     |
| <input checked="" type="checkbox"/> Land Division          | <input checked="" type="checkbox"/> Riparian Exception |
| <input checked="" type="checkbox"/> Rezoning               | _____ Other:   |
| <input checked="" type="checkbox"/> Development Permit     | _____  |
| _____ Coastal Development Permit                           | _____  |

**NON-LOCAL APPROVALS**

Other agencies that must issue permits or authorizations:

**ENVIRONMENTAL REVIEW ACTION**

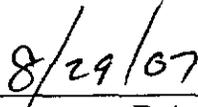
On the basis of this Initial Study and supporting documents:

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

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.

  
\_\_\_\_\_  
Matt Johnston

  
\_\_\_\_\_  
Date

For: Claudia Slater  
Environmental Coordinator

## II. BACKGROUND INFORMATION

### EXISTING SITE CONDITIONS

Parcel Size: 1.55 acres

Existing Land Use: Single family residence (formerly used as office building)

Vegetation: Mixed woodland and riparian

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

Nearby Watercourse: Unnamed tributary to Borregas Creek

Distance To: Adjacent to development (on subject property)

### ENVIRONMENTAL RESOURCES AND CONSTRAINTS

Groundwater Supply: N/A

Water Supply Watershed: Not mapped

Groundwater Recharge: Not mapped

Timber or Mineral: Not mapped

Agricultural Resource: Not mapped

Biologically Sensitive Habitat: Mapped riparian  
woodland

Fire Hazard: Not mapped

Floodplain: Not mapped

Erosion: Not mapped

Landslide: Not mapped

Liquefaction: Low potential

Fault Zone: Not mapped

Scenic Corridor: Mapped scenic  
resource

Historic: Not mapped

Archaeology: Not mapped

Noise Constraint: Soquel Drive

Electric Power Lines: N/A

Solar Access: Limited (trees)

Solar Orientation: South

Hazardous Materials: N/A

### SERVICES

Fire Protection: Aptos/La Selva Fire  
Protection District

School District: Soquel Elementary  
School District

Sewage Disposal: Santa Cruz County  
Sanitation District

Drainage District: Zone 6 Flood Control  
District

Project Access: Soquel Drive  
& Haas Drive

Water Supply: Soquel Creek Water  
District

### PLANNING POLICIES

Zone District: R-1-1AC

General Plan: R-UVL

Urban Services Line:

Coastal Zone:

X Inside

     Inside

Special Designation: None

     Outside

X Outside

## **PROJECT SETTING AND BACKGROUND:**

The subject property is approximately 1.55 acres located on the northeast corner of the intersection of Soquel Drive and Haas Drive, in Aptos. An existing single family dwelling, formerly used as an office building, is located at the center of the usable area of the property with a detached garage, outbuildings, and two existing driveway approaches at Soquel Drive. The remaining area of the subject property is partially improved with landscaping and miscellaneous improvements, with a riparian corridor along the eastern side of the project site. The property is wooded with a mixture of oaks, pines, cypress, and acacia trees. Single family residential development exists to the north and east, with detached townhouses to the southeast. Residences, commercial uses, a fire station and public school are located to the west and southwest across Soquel Drive.

## **DETAILED PROJECT DESCRIPTION:**

This application is a proposal to construct 10 townhouses on an approximately 1.55 acre property. (Attachment 2) The existing single family dwelling and detached outbuildings will be demolished as a component of this proposal. The site will be rezoned from the R-1-1AC (Single family residential - 1 acre minimum) zone district to the RM-4 (Multi-family Residential - 4,000 square feet minimum) zone district. The General Plan land use designation will be amended from R-UVL (Urban Very Low Density Residential) to R-UM (Urban Medium Density Residential) for this area. The R-1-1AC zone district remains from when this area was not served by sanitary sewer facilities. The parcel is now connected to the public sewer and a higher density zone district and General Plan designation are appropriate.

The proposed residential development will be accessed from Soquel Drive and Haas Drive. Seven townhouse units will be accessed from an interior driveway off Soquel Drive and the remaining three units will have vehicular access directly from Haas Drive. The interior roadway will require an exception to the County Design Criteria, with a reduced width, and no sidewalks or landscape strips. Haas Drive will require an exception due to a sidewalk on one side of the street (across Haas Drive from the proposed development).

Grading will be required to prepare the site for development and to ensure that the site is properly drained. Grading volumes will be approximately 550 cubic yards (cut) and 220 cubic yards (fill), with the remaining 330 cubic yards to be exported off site. Units 8, 9 & 10 will be constructed with a stepped foundation design due to the slope down from Haas Drive, with rear yard decks to avoid excessive grading. Retaining walls will be constructed behind the trash enclosure and the private yard area for Unit 1. Many of the trees will be removed due to age, condition, and site disturbance due to construction. Replacement trees will be installed in the common areas where space allows.

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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11. 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?

\_\_\_\_\_ \_\_\_\_\_

All of Santa Cruz County is subject to some hazard from earthquakes. However, the project site is not located within or adjacent to a county or **State** mapped fault zone. A geotechnical investigation for the proposed project was performed by Haro, Kasunich & Associates, dated **11/06** (Attachment 3). The report concluded that seismic shaking and potential creek slope failure can be managed through proper structure location and foundation design, and that the potential for liquefaction is **low**. The report has been reviewed and accepted by Environmental Planning staff (Attachment 4).

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 \_\_\_\_\_

See response A-I, 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. Develop land with a slope exceeding 30%?

X

---

There are slopes that exceed 30% within the riparian corridor on the subject property. All structures will be set back a minimum of 10 feet from the break in slope above the riparian corridor.

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

X

---

Some potential for erosion exists during the construction phase of the project, however, this potential is minimal because the structures are proposed to be located back from the edge of the slope above the riparian corridor, with drainage to be directed away from the slope to prevent erosion of the stream bank, and standard erosion controls are a required condition of the project. Prior to approval of a grading or building permit, the project is required to have an approved erosion control plan, which will specify detailed erosion and sedimentation control measures. The plan will include provisions for disturbed areas to be planted with ground cover and to be maintained to minimize surface erosion.

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

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Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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**B. Hydrology, Water Supply and Water Quality**

Does the project have the potential to:

- |    |  |   |  |
|----|--|---|--|
| 1. | Place development within a 100-year flood hazard area? | X |  |
|----|--|---|--|

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

- |    |   |   |  |
|----|---|---|--|
| 2. | Place 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 March 2, 2006, 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 5). The project is not located in a mapped groundwater recharge area.

- |    |  |   |  |
|----|--|---|--|
| 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.

<i>Significant Or Potentially Significant Impact</i>	<i>Less than Significant with Mitigation Incorporation</i>	<i>Less than Significant Or No Impact</i>	<i>Not Applicable</i>
--	--	---	---------------------------

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.

6. Degrade septic system functioning? X

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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. Buildings are proposed to be located back from the edge of the slope above the riparian corridor and drainage will be directed away from the slope to prevent erosion of the stream bank. Storm water runoff will be captured, treated, and discharged into existing storm drainage facilities in Soquel Drive to prevent potential impacts.

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, revised 1/07 (Attachment 6), have been reviewed for potential drainage impacts by the Department of Public Works (DPW) Drainage Section staff. The calculations show that the net increase in runoff will be 0.33 cubic feet per second for a ten year storm event before considering the detention systems. The runoff rate from the property is proposed to be controlled by on-site detention through a pervious trench drain to a rate that does not exceed the pre-development rate. DPW staff have determined that existing off-site storm water facilities are adequate to handle the increase in drainage associated with the project (Attachment 7). 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

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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

According to the California Natural Diversity Data Base (CNDDDB), maintained by the California Department of Fish and Game, there are no known special status plant or animal species in the site vicinity, and there were no special **status** species observed in the project area. However, due to the proposed tree removals, it will be necessary to determine the presence of special status bird species in the trees that are proposed to be removed and to adjust the timing of tree removals to avoid nesting periods for these species.

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

X

The subject property is mapped as a Riparian Woodland, and contains a riparian corridor on the eastern side of the property. The area adjacent to the top of the bank of the riparian corridor is currently disturbed, with some improvements located at the edge of the bank above the stream. A Riparian Pre-Site (04-0047) was performed by Environmental Planning staff for a different project (Attachment 8). The pre-site determined that the buffer from the riparian corridor will be measured 20 feet from the top of the stream bank with an additional construction setback of 10 feet. A Riparian Exception is required for this proposed development and Environmental Planning staff have indicated that the findings for such an exception can be met (Attachment 7). In order to protect riparian resources, structures are proposed to be located back from the edge of the slope above the riparian corridor and drainage will be directed away from the slope to prevent erosion of the stream bank. Temporary fencing will be installed to prevent impacts to the riparian area during construction. Permanent fencing of the riparian area is proposed to prevent further activity or improvements that may adversely affect riparian resources.

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

The proposed improvements are located away from the riparian corridor and the proposed project will not 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. The following conditions will be added to the project, such that any potential impact will be reduced to a less than significant level: **all** lighting in the project will be required to be shielded to prevent fugitive light and directed away from the riparian corridor.

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

Refer to C-1 and C-2 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)? \_\_\_\_\_ X \_\_\_\_\_

Although the project has been designed to preserve as many existing trees as possible, the removal of 31 trees in excess of 6 inches in diameter is proposed. An arborist's report and plan review letter, prepared by James P. Allen & Assoc., dated 10/5/06 & 1/31/07 (Attachment 9) were submitted to evaluate **the** health of the trees and to identify trees that were suitable for preservation. Per the arborist, many of the trees are in fair to poor health and/or structure. The arborist **has** identified tree protection measures to protect the trees suitable for preservation that have been incorporated into the project design. Adherence to the tree protection measures and

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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the planting of 28 replacement trees throughout the development (and relocation of 5 trees recently planted along Haas Drive to a more appropriate location) will mitigate 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**

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 |
|----|--|---|

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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**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 project is located within a mapped scenic resource area, **as** designated in the County's General Plan (1994). However, no public scenic resources can be identified on the project site or within the project area. The only views **that** will be affected by the project are those from private property and from roadways that are not designated as scenic roads in the County General Plan. County visual resource protection regulations only apply to public viewsheds.

- |   |       |               |
|---|-------|---------------|
| 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 _____ |
|---|-------|---------------|

See response E-I above. The project site is not located along a County designated scenic road.

- |   |       |               |
|---|-------|---------------|
| 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 a residential neighborhood with some commercial and public facilities uses. 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 _____ |
|---|-------|---------------|

See response C-4 above.

- |   |       |               |
|---|-------|---------------|
| 5. Destroy, cover, or modify any unique geological 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.

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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**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<br>_____ | _____ |
|--|-------|-------|------------|-------|

The existing structure(s) on 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<br>_____ | _____ |
|---|-------|-------|------------|-------|

No archeological resources have been identified in the project area. Pursuant to County Code Section 16.40.040, if at any time in the preparation for or process of excavating or otherwise disturbing the ground, any human remains of any age, or any artifact or other evidence of a Native American cultural site which reasonably appears to exceed 100 years of age are discovered, the responsible persons shall immediately cease and desist from all further site excavation and comply with the notification procedures given in County Code Chapter 16.40.040.

- |  |       |       |            |       |
|--|-------|-------|------------|-------|
| 3. Disturb any human remains, including those interred outside of formal cemeteries? | _____ | _____ | X<br>_____ | _____ |
|--|-------|-------|------------|-------|

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<br>_____ |
|--|-------|-------|-------|------------|

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

**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? \_\_\_\_\_ X

The project site is not included on the 4/16/07 list of hazardous sites in Santa Cruz 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

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

**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 _____ |
|---|---------------|

The project will create a small incremental increase in traffic on nearby roads and intersections. However, given the small number of new trips created by the project, this increase is less than significant. Further, the increase will not cause the Level of Service at any nearby intersection to drop below Level of Service D.

- |   |               |
|---|---------------|
| 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 therefore new parking demand will be accommodated on site.

- |   |               |
|---|---------------|
| 3. Increase hazards to motorists, bicyclists, or pedestrians? | _____ X _____ |
|---|---------------|

A traffic study to evaluate the vehicular sight stopping distance on Haas Drive has been prepared by Higgins Associates, dated 12/22/06 (Attachment 10). According to the traffic engineer, the three townhouses accessed off of Haas Drive will have adequate time and vehicular sight stopping distance to turn into and back out of the proposed driveways. The Department of Public Works, Road Engineering section has reviewed and accepted the traffic study.

The proposed project will include exceptions to the County Design criteria for the interior roadway and Haas Drive. 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 20 foot wide paved surface with 2 foot wide trench drain grates on either side (for a total width of 24 feet) and no parking along the roadway outside of marked stalls. The sidewalk on Haas Drive is located on the opposite side of the roadway from the proposed development and is adjacent to the curb with no landscape strip. On street parking has been limited to marked spaces and driveways, and adequate pedestrian circulation has been provided throughout the site which will prevent potential hazards to motorists, bicyclists, and/or pedestrians. Landscaping is provided throughout the project site.

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

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. An acoustic study has been submitted (Attachment 11) which states that traffic noise in portions of the project site adjacent to Soquel Drive can exceed these standards. **The** project acoustic engineer has recommended construction techniques for the residential buildings and fencing that will attenuate the traffic noise in order achieve compliance with General Plan noise standards.

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.

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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**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? | <hr style="width: 100%;"/> 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.

Given the modest amount of new traffic that will be generated by the project 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 and particulate matter (PM10). Standard dust control best management practices, such as periodic watering, will be implemented during construction to reduce impacts to a less than significant level. Additional measures shall be required to reduce the production of emissions (acrolein) from diesel equipment during the construction phase of the project.

- |   |                              |
|---|------------------------------|
| 2. Conflict with or obstruct implementation of an adopted air quality plan? | <hr style="width: 100%;"/> X |
|---|------------------------------|

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

- |  |                              |
|--|------------------------------|
| 3. Expose sensitive receptors to substantial pollutant concentrations? | <hr style="width: 100%;"/> X |
|--|------------------------------|

- |   |                              |
|---|------------------------------|
| 4. Create objectionable odors affecting a substantial number of people? | <hr style="width: 100%;"/> X |
|---|------------------------------|

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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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, 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
---	---	---	-------------------

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 5).

Sanitary sewer service is available to serve the project, as reflected in the comments from the Santa Cruz County Sanitation District (Attachment 7).

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 landfills. However, this contribution will be relatively small and will be of similar

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

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? | <table border="0"> <tr> <td style="width: 100px;">_____</td> <td style="width: 100px;">_____</td> <td style="width: 100px; text-align: center;">X</td> <td style="width: 100px;">_____</td> </tr> </table> | _____ | _____ | X | _____ |
| _____  | _____  | 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? | <table border="0"> <tr> <td style="width: 100px;">_____</td> <td style="width: 100px;">_____</td> <td style="width: 100px; text-align: center;">X</td> <td style="width: 100px;">_____</td> </tr> </table> | _____ | _____ | X | _____ |
| _____  | _____  | 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? | <table border="0"> <tr> <td style="width: 100px;">_____</td> <td style="width: 100px;">_____</td> <td style="width: 100px; text-align: center;">X</td> <td style="width: 100px;">_____</td> </tr> </table> | _____ | _____ | X | _____ |
| _____  | _____  | 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? | <table border="0"> <tr> <td style="width: 100px;">_____</td> <td style="width: 100px;">_____</td> <td style="width: 100px; text-align: center;">X</td> <td style="width: 100px;">_____</td> </tr> </table> | _____ | _____ | X | _____ |
| _____  | _____  | 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)? | <table border="0"> <tr> <td style="width: 100px;">_____</td> <td style="width: 100px;">_____</td> <td style="width: 100px; text-align: center;">X</td> <td style="width: 100px;">_____</td> </tr> </table> | _____ | _____ | X | _____ |
| _____   | _____  | X     | _____ |   |       |

A General Plan Amendment and Rezoning is included with this application to rezone the project site to multi-family residential General Plan and zoning designations as is more appropriate given the location of the project site and the availability of all urban services. The proposed project is designed at the density and intensity of development allowed by the resulting 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

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

to have a significant growth-inducing effect.

5. Displace substantial numbers of people, or amount of existing housing, necessitating the construction of replacement housing elsewhere?

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

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       

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                      No   X  

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**

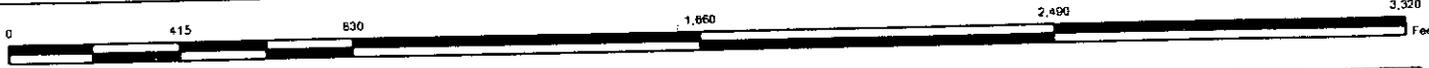
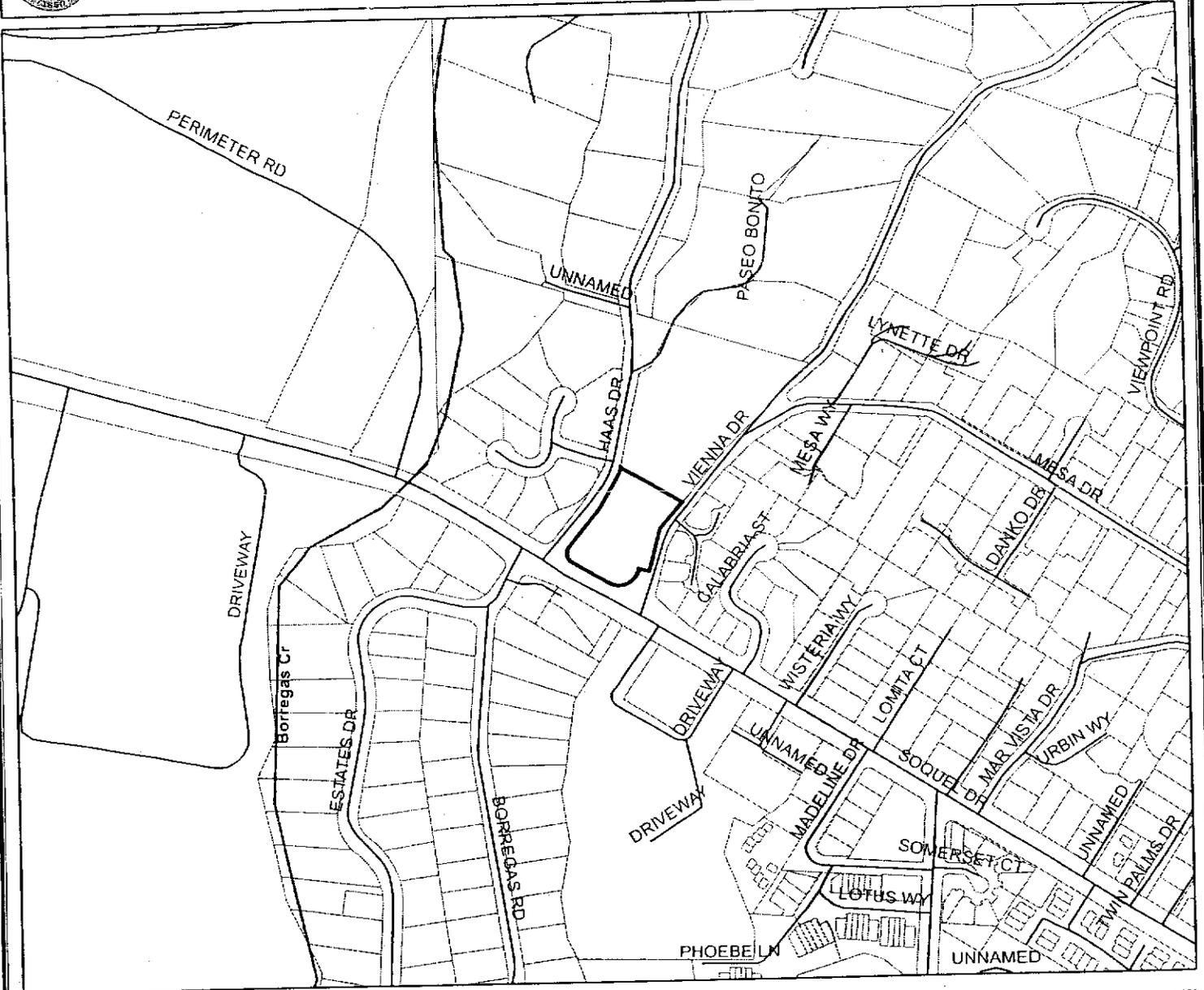
	<u>REQUIRED</u>	<u>COMPLETED*</u>	<u>N/A</u>
Agricultural Policy Advisory Commission (APAC) Review	_____	_____	_____
Archaeological Review	_____	_____	_____
Biotic Report/Assessment	_____	_____	_____
Geologic Hazards Assessment (GHA)	_____	_____	_____
Geologic Report	_____	_____	_____
Geotechnical (Soils)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

**Attachments:**

1. Vicinity Map, Map of Zoning Districts, Map of General Plan Designations, Assessors Parcel Map
2. Tentative Map & Preliminary Improvement Plans prepared by Ifland Engineers, dated 3/23/07; Landscape Plan prepared by Gregory Lewis, revised 3/29/07.
3. Geotechnical Investigation (Conclusions and Recommendations) prepared by Haro, Kasunich & Associates, dated 11/06 & 1/31/07.
4. Geotechnical Review Letter prepared by Kent Edler - Civil Engineer, dated 11/27/06.
5. Letter from Soquel Creek Water District, dated 2/8/06.
6. Drainage calculations (Summary) prepared by Bowman & Williams, revised 1/07.
7. Discretionary Application Comments, dated 5/1/07.
8. Riparian Pre-Site 04-0047, prepared by Robin Bolster, Resource Planner, dated 2/26/04.
9. Arborists Report (Summary and Recommendations) prepared by James P. Allen & Assoc., dated 10/5/06 & 1/31/07.
10. Traffic Study (Conclusions and Recommendations) prepared by Higgins Assoc., dated 12/22/06.
11. Noise Study, prepared by Environmental Consulting Services, dated 10/16/06.
12. Comments and Responses.

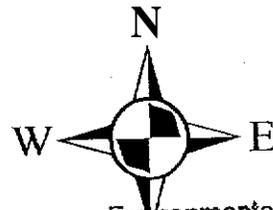


# Location Map



## Legend

-  APN 039-062-05
-  Assessors Parcels
-  Streets
-  INTERMITTENT STREAM

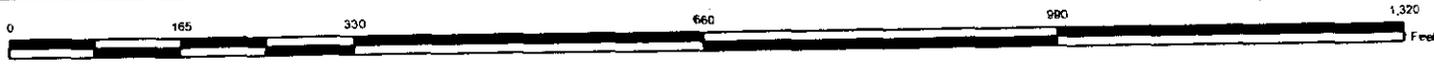
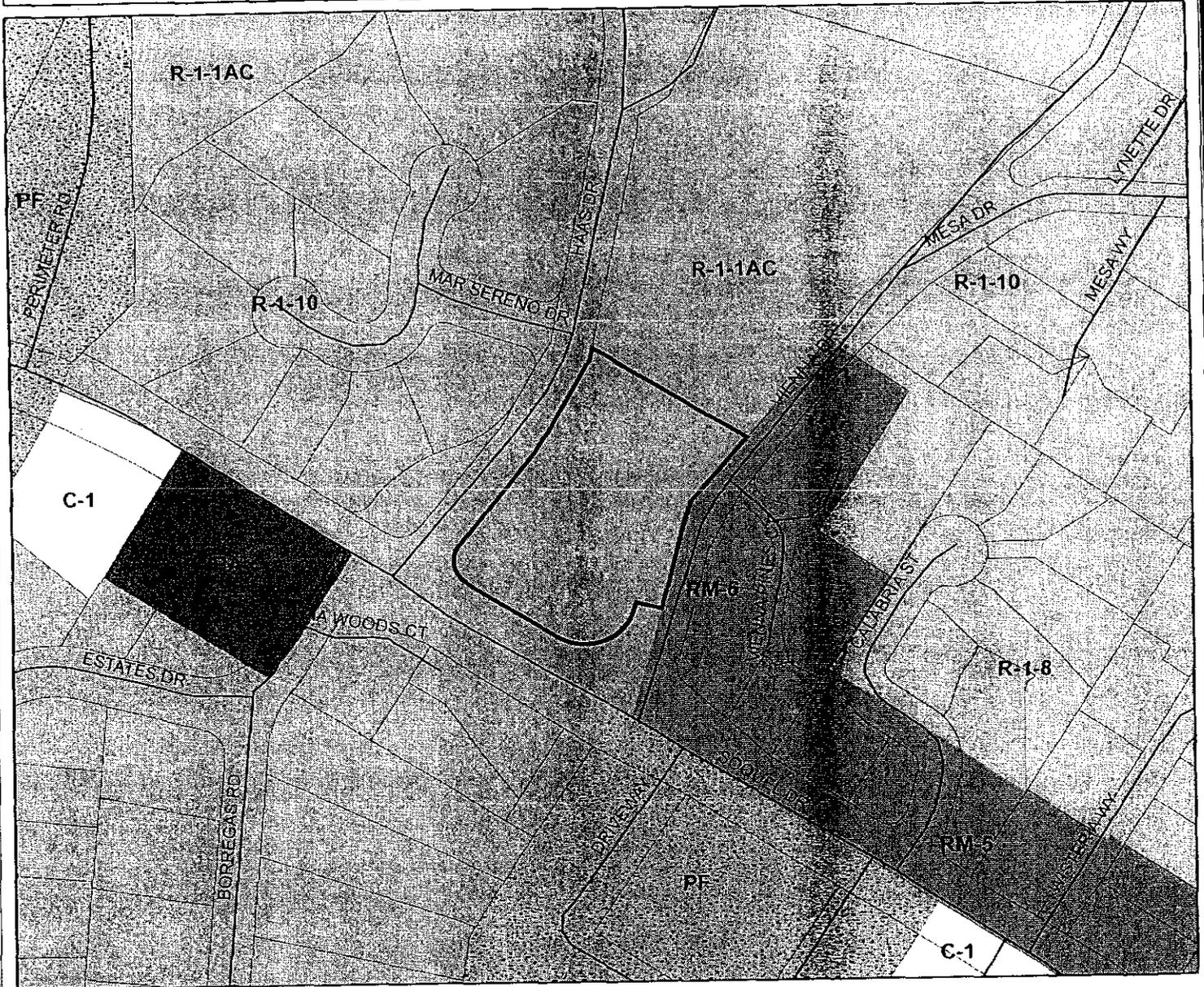


Environmental Review Initial Study  
**ATTACHMENT 1, 1 of 4**  
**APPLICATION 06-0651**

Map Created by  
 County of Santa Cruz  
 Planning Department  
 December 2006



# Zoning Map



## Legend

-  APN 039-062-05
-  Assessors Parcels
-  Streets
-  RESIDENTIAL-SINGLE FAMILY (R-1)
-  RESIDENTIAL-MULTI FAMILY (RM)
-  COMMERCIAL-PROF OFFICE (PA)
-  PUBLIC FACILITY (PF)
-  COMMERCIAL-NEIGHBORHOOD (C-1)



Environmental Review Initial Study  
 ATTACHMENT 1.2 of 4  
 APPLICATION 06-0651

Map Created by  
 County of Santa Cruz  
 Planning Department  
 December 2006

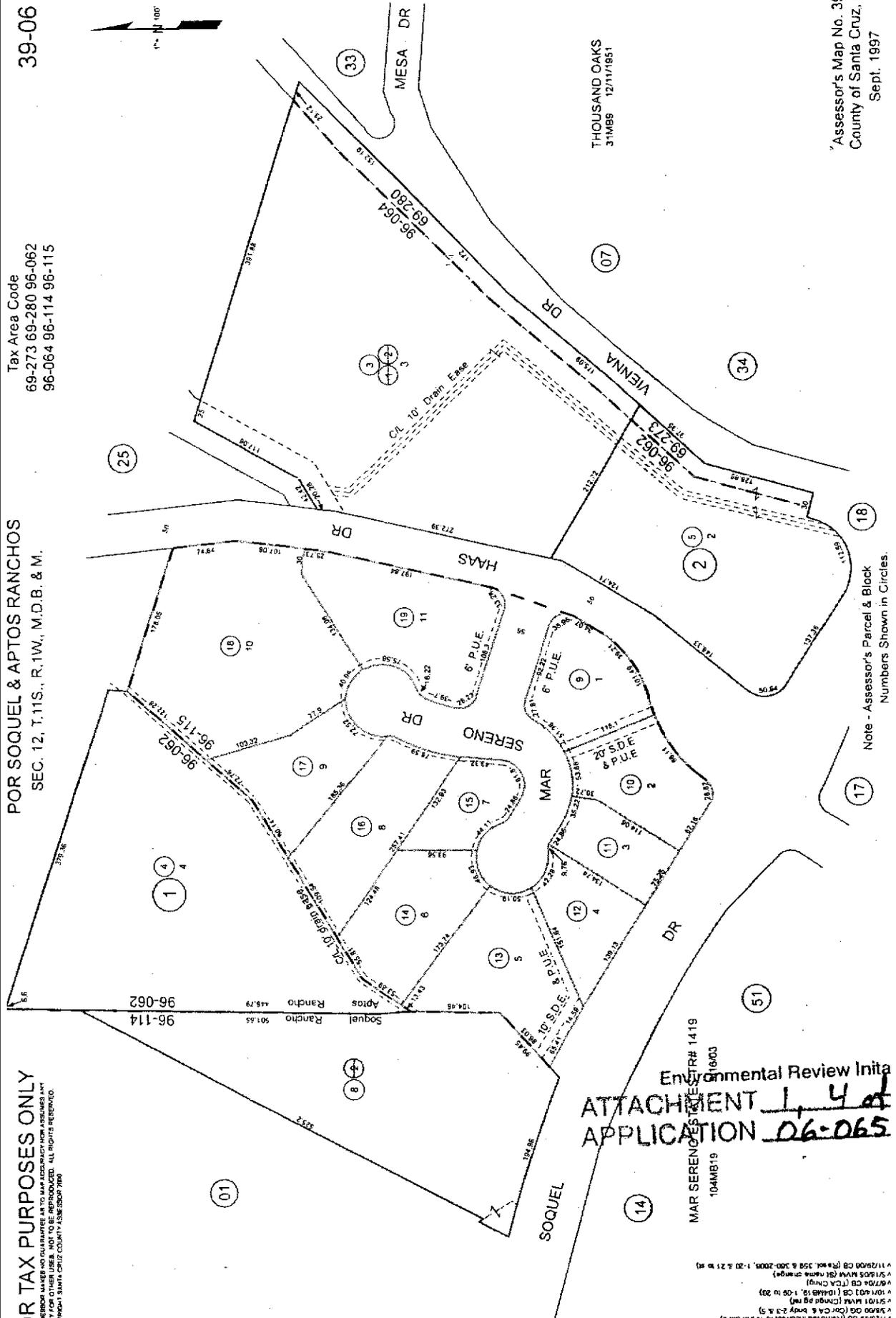
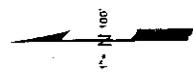


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THE ASSessor HAS NO GUARANTEE AS TO MAP ACCURACY OR INFORMATION ASSIGNED ANY  
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POR SOQUEL & APTOS RANCHOS  
SEC. 12, T. 11S., R. 1W., M.D.B. & M.

Tax Area Code  
69-273 69-280 96-062  
96-064 96-114 96-115

39-06



Assessor's Map No. 39-06  
County of Santa Cruz, Calif.  
Sept. 1997

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

Environmental Review Initial  
ATTACHMENT 1, 4 of  
APPLICATION 06-065

MAR SERENO SUBDIVISION  
104MB19  
16003  
ENVIRONMENTAL REVIEW # 1419

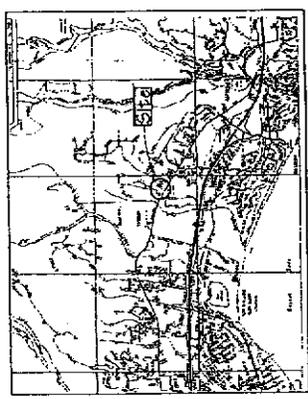
CONTRACT # 06-065 (12/27/97 WFLP)  
7/12/99 KSA (CA)  
7/12/99 CA (Removed incorrect APTS in BK 2)  
7/12/99 CA (Removed CA & Bldg 2-3 & 5)  
5/10/11 A/E (Change 59 (M))  
1/27/11 CA (104MB19, 1-09 to 20)  
4/27/11 CA (TCA Change)  
4/12/11 M/M (SI name change)  
5/12/11 CA (1-20 & 21 to 91)  
1/12/2011 CA (Final 59 & 200-2005, 1-20 & 21 to 91)

Tentative Map - Tract No. 1529

# Hidden Oaks

Santa Cruz County, California

(MunichLand)  
A.P.N. 08-0651-0  
Tract No. 1529  
J.M.?



### Project Data

Subdividers, Owner & Applicant  
S.K. Prosenka, L.P.  
P.O. Box 1067  
P.O. Box 1067  
P.O. Box 1067  
E-mail: skprosenka@comcast.com

Existing Zoning  
RM-1.5 ACZE

Proposed Zoning  
RM-1.5

Existing General Plan  
RM-1.5

Proposed General Plan  
Union Residential - Medium Density

Existing Use  
Former Hospital Facility

Proposed Use  
10 Lot Residential Subdivision

Sanitary Sewer  
Santa Cruz County Sanitation District

Storm Drain  
Santa Cruz County Public Works

Water Service  
Santa Cruz County Public Works

Gas & Electric  
Soquel Creek Water District

Cable TV  
Comcast Cable

Fire Protection  
Albion Fire District

Telephone  
AT&T

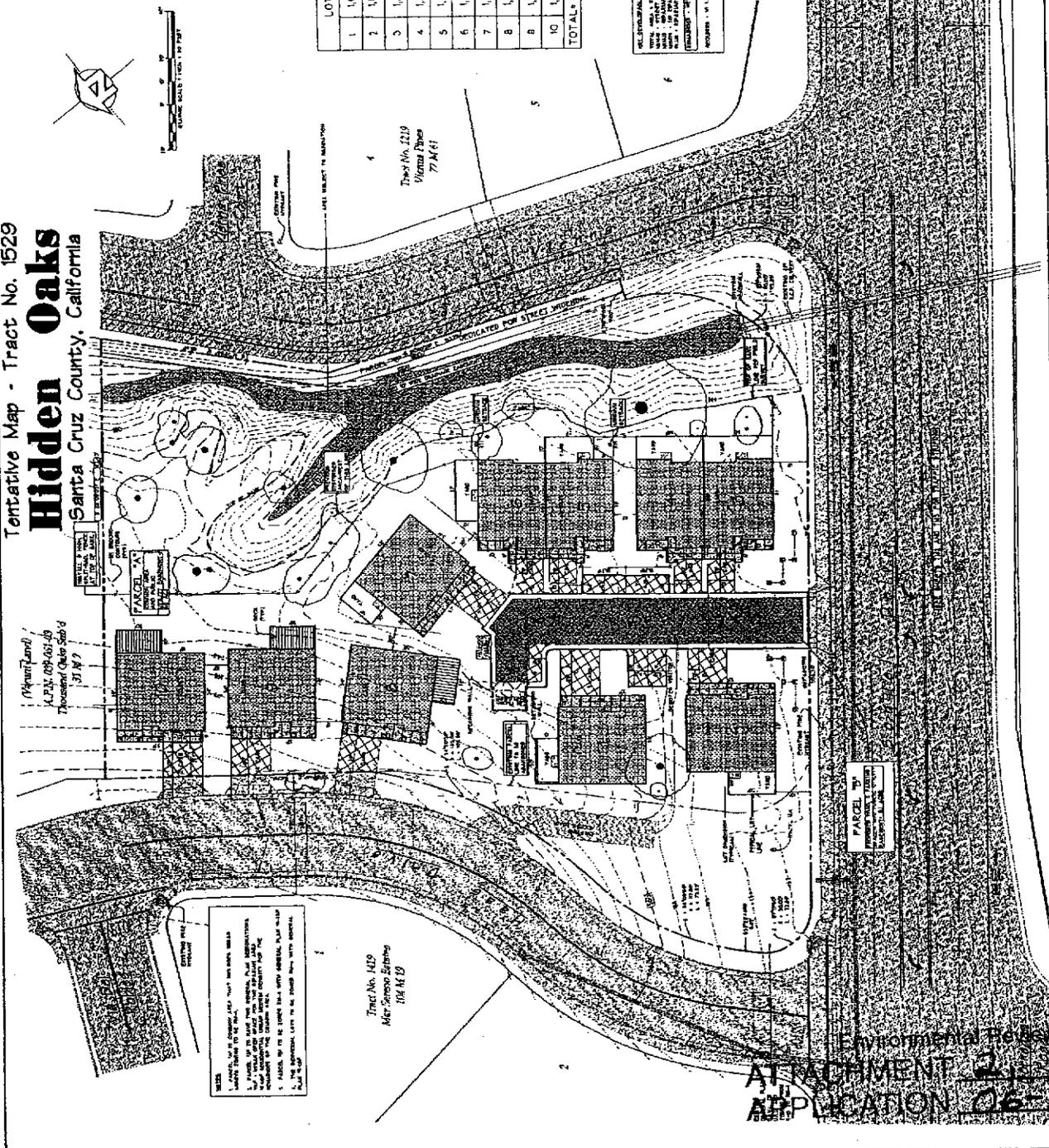
Site Area  
67,257 S.F. or 1.54 Acres

### Index to Sheets

1. TENTATIVE MAP LOTTING
2. EXISTING CONDITIONS/DEMOLITION
3. PRELIMINARY IMPROVEMENT PLAN
4. PRELIMINARY SITE GRADING PLAN
5. PRELIMINARY GRADING CROSS-SECTIONS
6. PRELIMINARY EROSION CONTROL PLAN
7. T&E
8. NEIGHBORHOOD AERIAL, PHOTO

LOT AREAS	AREA (S.F.)
1	1,655 S.F.
2	1,655 S.F.
3	1,666 S.F.
4	1,666 S.F.
5	1,470 S.F.
6	1,510 S.F.
7	1,636 S.F.
8	1,655 S.F.
9	1,655 S.F.
10	1,655 S.F.
TOTAL	16,021 S.F.

ALL LOTS SHALL BE 1/4 ACRES OR MORE IN AREA. THE TOTAL AREA OF THE TRACT SHALL BE 1.54 ACRES. THE TOTAL AREA OF THE TRACT SHALL BE 1.54 ACRES. THE TOTAL AREA OF THE TRACT SHALL BE 1.54 ACRES.



NOTES:  
1. ALL LOTS SHALL BE 1/4 ACRES OR MORE IN AREA. THE TOTAL AREA OF THE TRACT SHALL BE 1.54 ACRES. THE TOTAL AREA OF THE TRACT SHALL BE 1.54 ACRES.  
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Environmental Review Initial Study  
Attachment 2  
Application 06-0651  
Lot 13









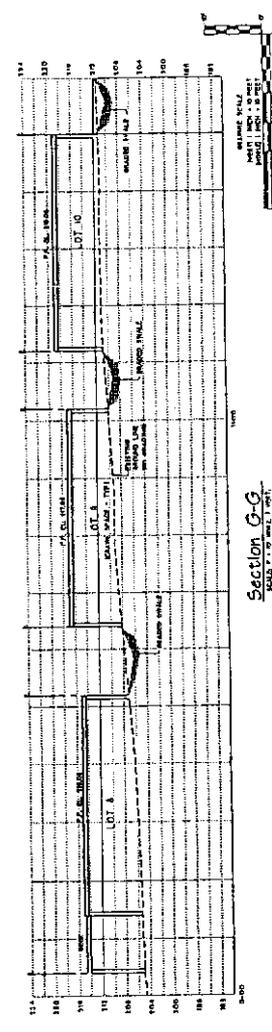
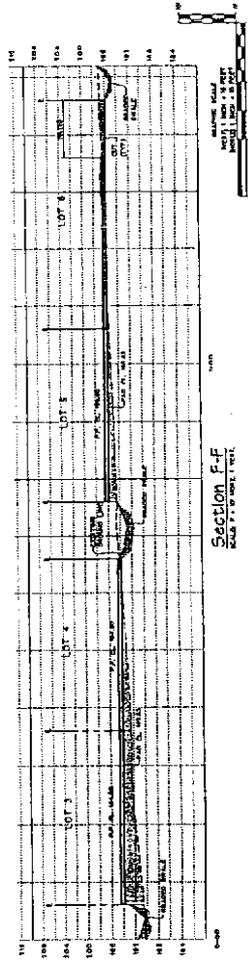
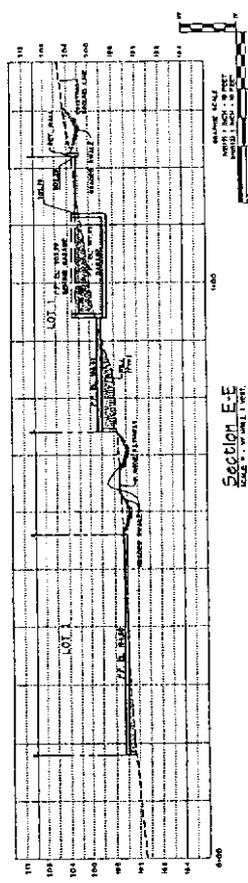
1100 WATER STREET  
SANTA CRUZ, CA 95062  
TEL (831) 428-3333  
FAX (831) 428-1733  
M. J. ...  
REGISTERED PROFESSIONAL ENGINEER  
CIVIL ENGINEERING

CON. SURVEYING • CAD SERVICES • STRENGTH DESIGN  
**M.J. ... ENGINEERS, INC.**

Preliminary Grading & Drainage Plan  
**Hidden Oaks**  
Santa Cruz County, Ca.

Application No. 04-034  
Assessor's Parcel Number: 039-061-05  
DATE: 12/2/07  
SCALE: 1" = 10'

TM4.0  
SHEET 7 OF 10



Preliminary Grading Cross-Sections

Environmental Review Initial Study  
ATTACHMENT 2, 5 of 13  
APPLICATION 06-0651





FOR THE TITLE  
 PROJECT NO.  
 SHEET NO.

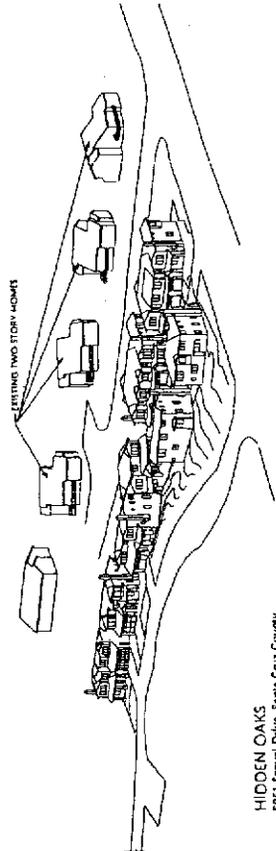
LAND ENGINEERS • LAND SURVEYING • STRUCTURAL DESIGN  
**Land ENGINEERS, INC.**  
 1100 WALTON STREET  
 SANTA CRUZ, CA 95062  
 TEL (415) 428-5315  
 FAX (415) 428-1783

Neighborhood Aerial Photo  
**Hidden Oaks**  
 Santa Cruz County, Ca.

APPLICANT: Parcel Number  
 039-062-05  
 DATE: 2/21/07  
 SCALE: 1" = 40'

TM6  
 P. 7. 00001

Application No. 06-0851



**HIDDEN OAKS**  
 8851 Sequoia Drive, Santa Cruz County  
 Owner: BK Properties, LP  
 Land Use Consultant: Powers Land Planning  
 Axonometric: ArchiGraphics  
 January 28, 2007

Axonometric View By ArchiGraphics  
 SCALE: 1" = 40'



EXISTING FEATURES WITHIN  
 FOOT OF SUBDIVISION BOUNDARY

NOTE:  
 SOME FEATURES IN THIS  
 PHOTO ARE NOT SHOWN  
 SINCE THIS PHOTO WAS TAKEN

Neighborhood Aerial Photo  
 SCALE: 1" = 40'

Environmental Review  
 COMMENT 2  
 REVISION 04

Initial Stu  
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PRELIMINARY NOT FOR CONSTRUCTION VISITOR  
 HIDDEN OAKS  
 9.6. PROPERTIES L.P.  
 8651 SMOKE DRIVE  
 SANTA CRUZ COUNTY, CA  
 06/14/11  
 SHEET NO. 11 OF 11

SITE PLAN  
 SHEET NO. 11  
 A002  
 DATE: 06/14/11

**KEY NOTES**

1. SEE SHEET 10 FOR THE REMAINING PORTION OF THE SITE PLAN TO THE WEST OF THIS SHEET AND SHEET 11 FOR THE REMAINING PORTION OF THE SITE PLAN TO THE EAST OF THIS SHEET.
2. ALL DIMENSIONS ARE IN FEET AND INCHES UNLESS OTHERWISE NOTED.
3. ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE NOTED.
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50. ALL DIMENSIONS ARE TO THE OUTSIDE UNLESS OTHERWISE NOTED.

**LOT COVERAGE CALCULATIONS**

1. TOTAL LOT AREA	100,000.00
2. TOTAL COVERED AREA	10,000.00
3. PERCENTAGE OF LOT COVERED	10.00%

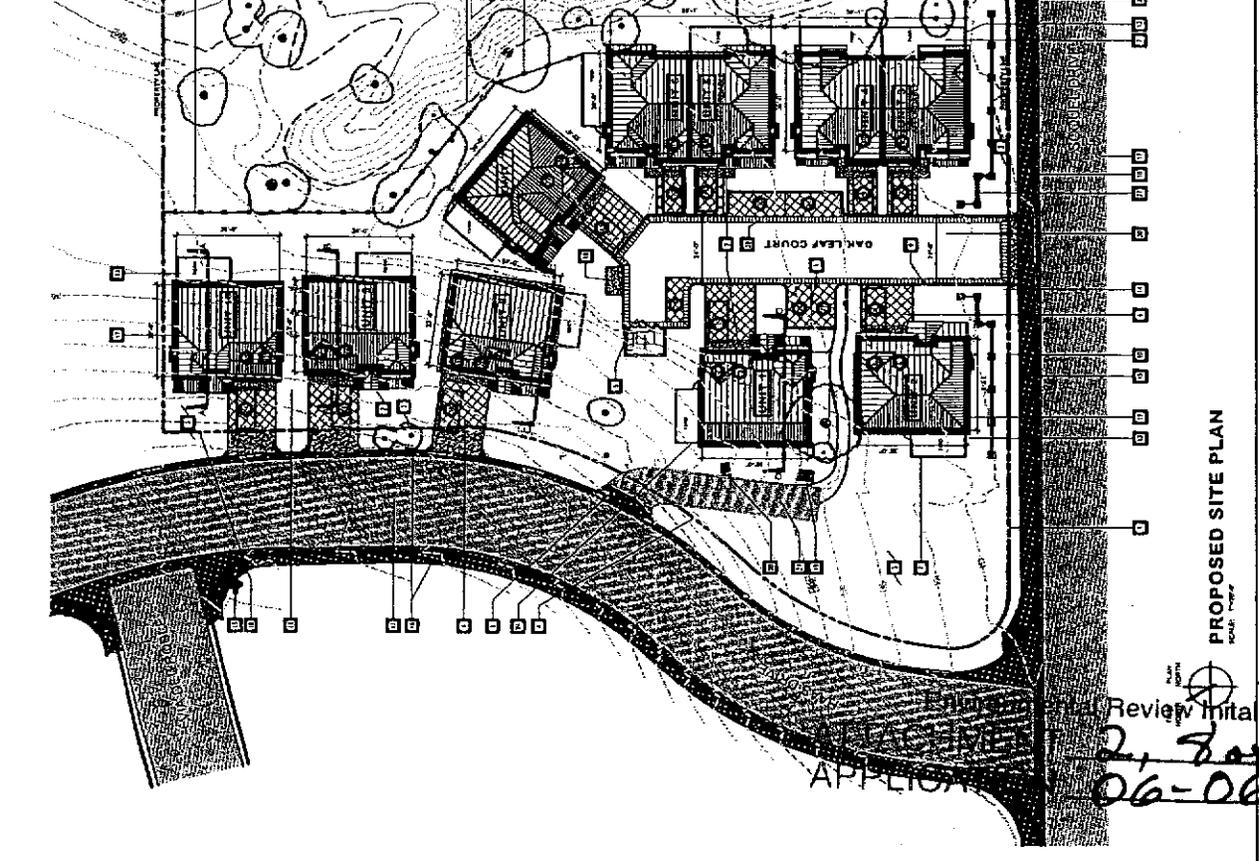
**TOTAL FLOOR AREA CALCULATIONS**

1. TOTAL FLOOR AREA	10,000.00
2. TOTAL COVERED AREA	10,000.00
3. PERCENTAGE OF FLOOR AREA COVERED	100.00%

**PARKING CALCULATIONS**

UNIT NO.	SPACES REQUIRED	SPACES PROVIDED
1	10	10
2	20	20
3	30	30
4	40	40
5	50	50
6	60	60
7	70	70
8	80	80
9	90	90
10	100	100
<b>TOTAL</b>	<b>1,000</b>	<b>1,000</b>

UNIT NO.	UNIT 1	UNIT 2	UNIT 3	UNIT 4	UNIT 5	UNIT 6	UNIT 7	UNIT 8	UNIT 9	UNIT 10
1	100	100	100	100	100	100	100	100	100	100
2	200	200	200	200	200	200	200	200	200	200
3	300	300	300	300	300	300	300	300	300	300
4	400	400	400	400	400	400	400	400	400	400
5	500	500	500	500	500	500	500	500	500	500
6	600	600	600	600	600	600	600	600	600	600
7	700	700	700	700	700	700	700	700	700	700
8	800	800	800	800	800	800	800	800	800	800
9	900	900	900	900	900	900	900	900	900	900
10	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000



PROPOSED SITE PLAN  
 SCALE: 1/8" = 1'-0"

Review Initial Study  
 2, 8 of 13  
 06-0651



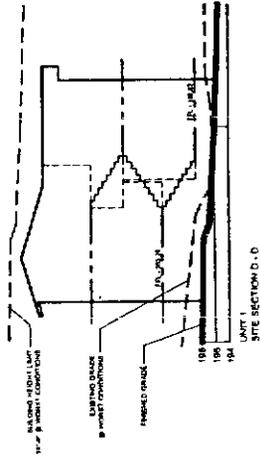
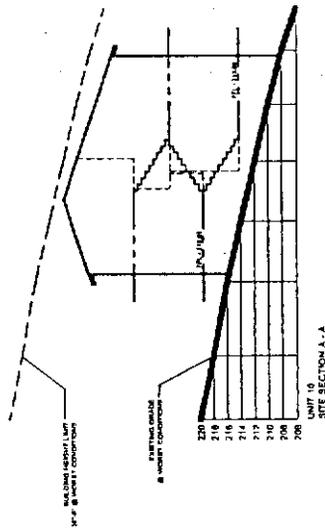
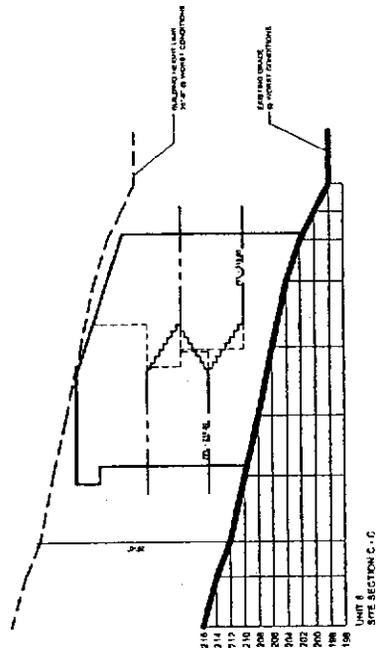
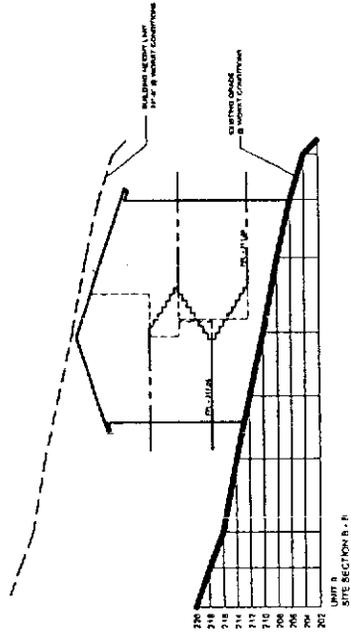
PRELIMINARY NOT FOR CONSTRUCTION 12/10/17  
 A.P.N. 029-02-205

HIDDEN OAKS  
 91 K. PROPERTIES, L.P.  
 9221 KICKLE DRIVE  
 SANTA CRUZ COUNTY, CA

DATE: 06/14/17  
 DRAWN BY: [blank]  
 CHECKED BY: [blank]  
 SCALE: 1" = 10'

SITE SECTIONS  
 SHEET NO.:

A003  
 SCALE: 1" = 10'



1 SITE SECTIONS  
 SCALE: 1" = 10'

Environmental Review Initial Study  
 ATTACHMENT 2, 9 of 13  
 APPLICATION 06-0651





James P. Allen  
& Associates

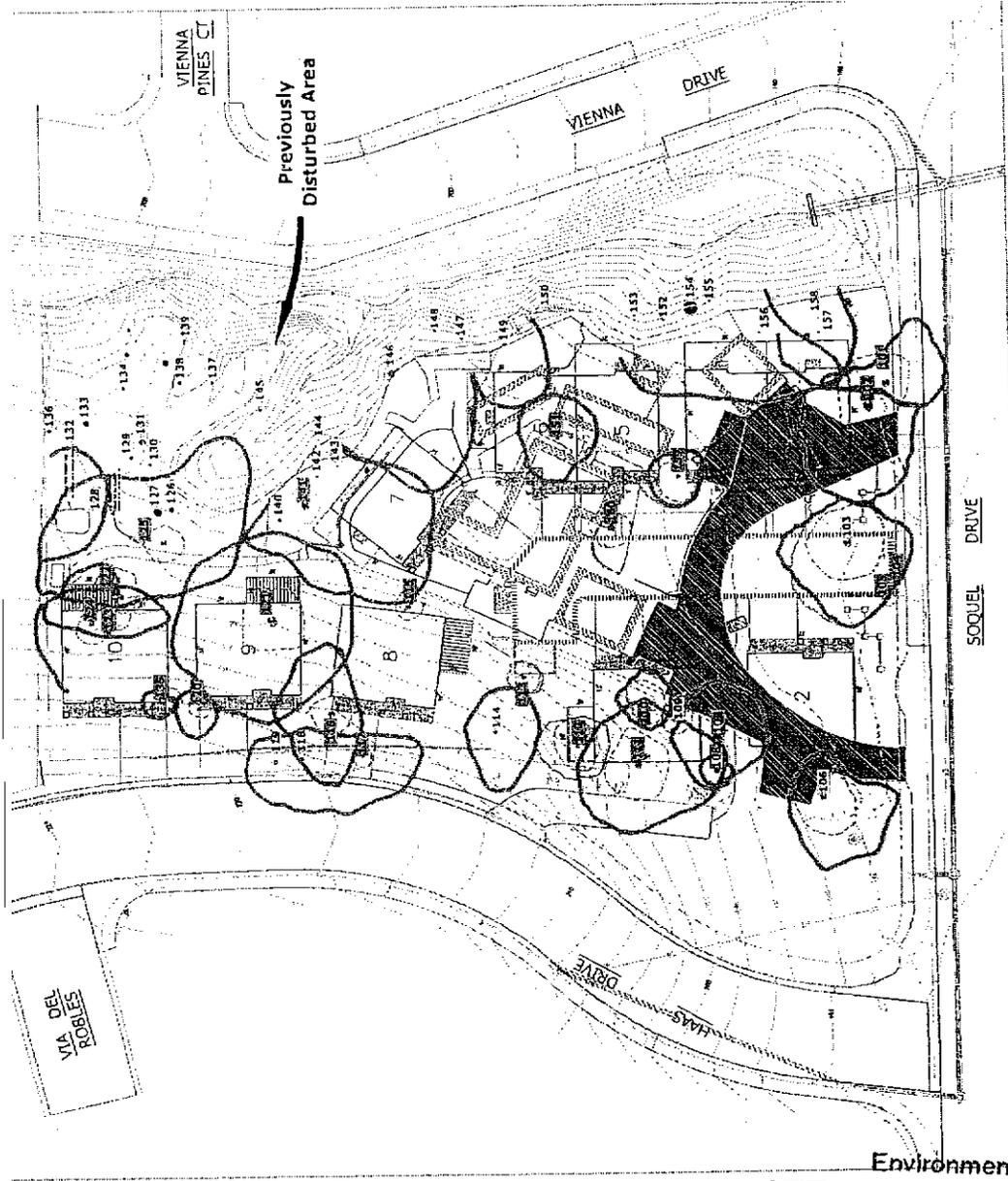
Consulting Arborists  
11111 Wilshire Blvd., Suite 200  
Los Angeles, CA 90025  
Tel: (310) 204-1111  
Fax: (310) 204-1112

HIDDEN OAKS SUBDIVISION TRACT: 1529  
CONSTRUCTION IMPACT ASSESSMENT  
039-062-05  
B.K. PROPERTIES, L.P.  
6651 SOQUEL DRIVE  
SAN JUAN CRUZ COUNTY, CA

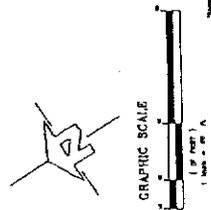
PROJECT NO.	039-062-05
DATE	03/10/06
BY	J.P.A.
CHECKED BY	J.P.A.
SCALE	1" = 20'
BY	J.P.A.

TREE LOCATION & REMOVAL MAP  
SHEET NO. 1

AB01

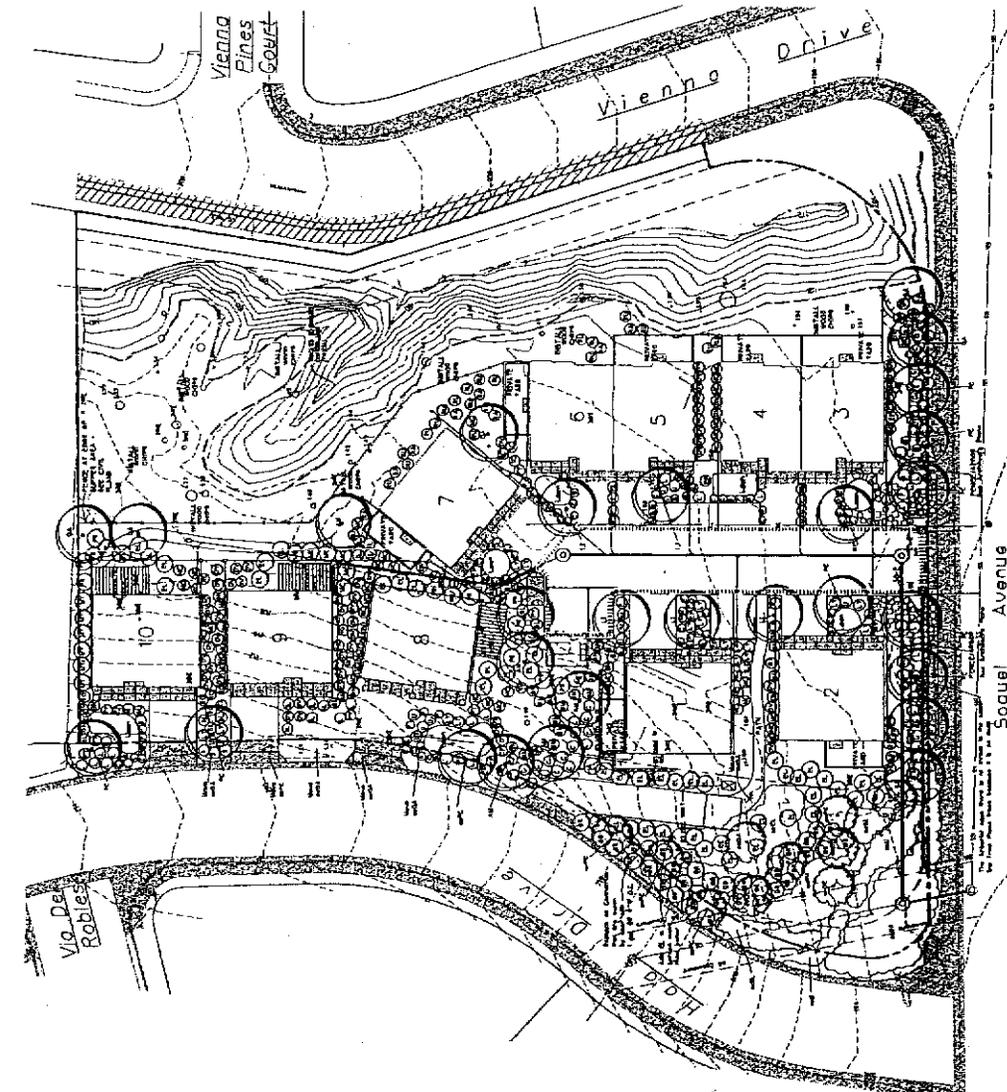


- Legend**
- Surveyed tree location
  - Field located tree
  - 2 Assigned tree number
  - ▨ Recommended Removal due to Severe Impacts
  - ▩ Remove due to Construction Impacts
  - Remove due to Tree Condition
  - Approximate canopy spread
  - ▬ Previously disturbed area



Environmental Review Initial Study  
ATTACHMENT 2, 11 of 13  
APPLICATION 06-0651





**Plant Legend**

KEY	SIZE	NOTATIONAL NAME	COMMON NAME
PC	1/2" tree	Plum tree	Cherry plum
PL	3/4" tree	Plum tree	Plum tree
AL	1" tree	Plum tree	Plum tree
LA	1 1/2" tree	Plum tree	Plum tree
CA	2" tree	Plum tree	Plum tree
CL	3" tree	Plum tree	Plum tree
CS	4" tree	Plum tree	Plum tree
CT	5" tree	Plum tree	Plum tree
CC	6" tree	Plum tree	Plum tree
CD	7" tree	Plum tree	Plum tree
CE	8" tree	Plum tree	Plum tree
CF	9" tree	Plum tree	Plum tree
CG	10" tree	Plum tree	Plum tree
CH	11" tree	Plum tree	Plum tree
CI	12" tree	Plum tree	Plum tree
CJ	13" tree	Plum tree	Plum tree
CK	14" tree	Plum tree	Plum tree
CL	15" tree	Plum tree	Plum tree
CM	16" tree	Plum tree	Plum tree
CN	17" tree	Plum tree	Plum tree
CO	18" tree	Plum tree	Plum tree
CP	19" tree	Plum tree	Plum tree
CQ	20" tree	Plum tree	Plum tree
CR	21" tree	Plum tree	Plum tree
CS	22" tree	Plum tree	Plum tree
CT	23" tree	Plum tree	Plum tree
CU	24" tree	Plum tree	Plum tree
CV	25" tree	Plum tree	Plum tree
CW	26" tree	Plum tree	Plum tree
CX	27" tree	Plum tree	Plum tree
CY	28" tree	Plum tree	Plum tree
CZ	29" tree	Plum tree	Plum tree
CA	30" tree	Plum tree	Plum tree
CB	31" tree	Plum tree	Plum tree
CC	32" tree	Plum tree	Plum tree
CD	33" tree	Plum tree	Plum tree
CE	34" tree	Plum tree	Plum tree
CF	35" tree	Plum tree	Plum tree
CG	36" tree	Plum tree	Plum tree
CH	37" tree	Plum tree	Plum tree
CI	38" tree	Plum tree	Plum tree
CJ	39" tree	Plum tree	Plum tree
CK	40" tree	Plum tree	Plum tree
CL	41" tree	Plum tree	Plum tree
CM	42" tree	Plum tree	Plum tree
CN	43" tree	Plum tree	Plum tree
CO	44" tree	Plum tree	Plum tree
CP	45" tree	Plum tree	Plum tree
CQ	46" tree	Plum tree	Plum tree
CR	47" tree	Plum tree	Plum tree
CS	48" tree	Plum tree	Plum tree
CT	49" tree	Plum tree	Plum tree
CU	50" tree	Plum tree	Plum tree
CV	51" tree	Plum tree	Plum tree
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CZ	55" tree	Plum tree	Plum tree
CA	56" tree	Plum tree	Plum tree
CB	57" tree	Plum tree	Plum tree
CC	58" tree	Plum tree	Plum tree
CD	59" tree	Plum tree	Plum tree
CE	60" tree	Plum tree	Plum tree
CF	61" tree	Plum tree	Plum tree
CG	62" tree	Plum tree	Plum tree
CH	63" tree	Plum tree	Plum tree
CI	64" tree	Plum tree	Plum tree
CJ	65" tree	Plum tree	Plum tree
CK	66" tree	Plum tree	Plum tree
CL	67" tree	Plum tree	Plum tree
CM	68" tree	Plum tree	Plum tree
CN	69" tree	Plum tree	Plum tree
CO	70" tree	Plum tree	Plum tree
CP	71" tree	Plum tree	Plum tree
CQ	72" tree	Plum tree	Plum tree
CR	73" tree	Plum tree	Plum tree
CS	74" tree	Plum tree	Plum tree
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CX	79" tree	Plum tree	Plum tree
CY	80" tree	Plum tree	Plum tree
CZ	81" tree	Plum tree	Plum tree
CA	82" tree	Plum tree	Plum tree
CB	83" tree	Plum tree	Plum tree
CC	84" tree	Plum tree	Plum tree
CD	85" tree	Plum tree	Plum tree
CE	86" tree	Plum tree	Plum tree
CF	87" tree	Plum tree	Plum tree
CG	88" tree	Plum tree	Plum tree
CH	89" tree	Plum tree	Plum tree
CI	90" tree	Plum tree	Plum tree
CJ	91" tree	Plum tree	Plum tree
CK	92" tree	Plum tree	Plum tree
CL	93" tree	Plum tree	Plum tree
CM	94" tree	Plum tree	Plum tree
CN	95" tree	Plum tree	Plum tree
CO	96" tree	Plum tree	Plum tree
CP	97" tree	Plum tree	Plum tree
CQ	98" tree	Plum tree	Plum tree
CR	99" tree	Plum tree	Plum tree
CS	100" tree	Plum tree	Plum tree

- Shrub Planting**
- 1. 1/2" tree
  - 2. 3/4" tree
  - 3. 1" tree
  - 4. 1 1/2" tree
  - 5. 2" tree
  - 6. 3" tree
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  - 97. 94" tree
  - 98. 95" tree
  - 99. 96" tree
  - 100. 97" tree

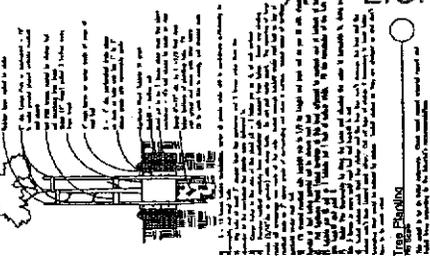
**Landscape Notes**

1. The site is located in the Santa Cruz Mountains, a biologically rich area with diverse plant and animal life. The site is situated on a steep slope, and the existing vegetation is primarily oak woodlands and chaparral. The proposed development is designed to be sensitive to the natural environment and to preserve the site's ecological resources.

2. The site is located in a fire-prone area, and the proposed development is designed to be fire-resistant. The site is situated on a steep slope, and the existing vegetation is primarily oak woodlands and chaparral. The proposed development is designed to be sensitive to the natural environment and to preserve the site's ecological resources.

3. The site is located in a fire-prone area, and the proposed development is designed to be fire-resistant. The site is situated on a steep slope, and the existing vegetation is primarily oak woodlands and chaparral. The proposed development is designed to be sensitive to the natural environment and to preserve the site's ecological resources.

Environmental Review Initial Study  
**ATTACHMENT 2, 13**  
**APPLICATION 06-C**



**GEOTECHNICAL INVESTIGATION**  
**for**  
**10 Unit Condominium Project**  
**APN 039-062-05**  
**6851 Soquel Drive**  
**Aptos, California**

**Prepared for**  
**BK PROPERTIES**  
**Scotts Valley, California**

Environmental Review Initial Study  
ATTACHMENT 3, 104, 32  
APPLICATION 06-0651

**Prepared By**  
**HARO, KASUNICH & ASSOCIATES, INC.**  
**Geotechnical & Coastal Engineers**  
**Project No. SC9309**  
**November 2006**

Project No. SC9309  
1 November 2006

MR. KEITH BAXTER AND  
MR. RANDY KANAWYER.  
c/o BK Properties  
561 Hacienda Drive  
Scotts Valley, California 95076

Subject: Geotechnical Investigation

Reference: 10 Unit Condominium Project  
APN 039-062-05  
6851 Soquel Drive  
Aptos, California

Dear Mr. Baxter and Mr. Kanawyer:

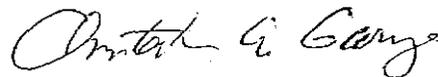
In accordance with your authorization, we have performed a Geotechnical Investigation for a proposed 10 unit condominium project located in Aptos, California.

The accompanying report presents our conclusions and recommendations and the results of the geotechnical investigation on which they are based.

If you have any questions concerning this report, please contact *our* office

Very truly yours,

**HARO, KASUNICH & ASSOCIATES, INC.**



Christopher A. George  
C.E. 50871

CAG/dk

Copies: 4 to Addressee

Environmental Review Initial Study  
ATTACHMENT 3, 2 of 32  
APPLICATION 06-0651

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Environmental Review Initial Study  
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APPLICATION 06-065

## GEOTECHNICAL INVESTIGATION

### Introduction

This report presents the results of our Geotechnical Investigation for a proposed 10 unit condominium project located at 6851 Soquel Drive in Aptos. California. The project will consist of the construction of 10 new detached and attached two-story units on the ½ acre (±) parcel and paved access driveways. An existing residence, detached garage and outbuildings on the parcel will be removed prior to construction of the subdivision.

A Site Plan showing site topography and the proposed building layout for the project was provided by Mr. Baxter. Our Boring Site Plan (see Figure 2) is based on this plan.

### Purpose and Scope

The purpose of our investigation was to explore and evaluate soil conditions at the site and develop geotechnical criteria and recommendations for design and construction of the new dwellings and improvements. The specific scope of our services was as follows:

1. Site reconnaissance and review of available data in our files regarding the site and vicinity.

Emwonmental Review Initial Study  
ATTACHMENT 3, 4 of 32  
APPLICATION 06-0651

2. A field exploration program consisting of logging and interval sampling of soil encountered in nine (9) continuous flight-augered borings to depths of 11½ to 26% feet deep. The soil samples obtained were sealed and returned to the laboratory for testing.
3. Laboratory testing of select soil samples to determine the pertinent engineering properties of the foundation zone soils.
4. Engineering analysis and evaluation of the resulting field and laboratory data to develop geotechnical design criteria and recommendations site grading, building foundations, slabs-on-grade, retaining walls, site drainage and erosion control.
5. Submittal of this report presenting the results of our investigation.

### Site Location and Conditions

The referenced parcel is located at 6851 Soquel Drive in Aptos, California (see Site Vicinity Map, Figure 1 in Appendix A). The parcel is bound to the **east** by Vienna Drive, to the north by a residential lot, and to the west by Haas Drive. Topography on the parcel varies somewhat. The west side of the parcel slopes to the east at a gradient of about 25 percent to the present home site. a level to very gentle south sloping area, 50 to 150 feet wide and 200 feet long. On the east portion of the parcel, a steep slope (average 70 percent

gradient) descends toward a north-south trending drainage channel. The centerline of the channel is about 18 feet below the proposed building area.

Current development on the parcel consists of a one story single family dwelling, a detached garage, sheds, a paved driveway and parking area, and landscaped areas around the dwelling. The property also has several large oak trees and numerous other trees and brush around the property. All existing structures are planned to be demolished.

#### Project Description

The proposed 10 unit project will include the construction of 6 detached *two* story dwellings and 2 attached 2-unit dwellings and paved access driveways. Units 1,2,8,9 and 10, on the west side of the property will be excavated into the hillside. **Units 3,4,5,6 and 7**, on the level east side of the property will be setback a minimum of **10** feet from the top edge of the creek bank. The size of the units has not yet been finalized but the building footprints are about 1000 square feet. Seven of the units will be accessed by a driveway off Soquel Drive and three units will be accessed by Haas Drive.

#### Field Exploration

Subsurface conditions were investigated on 25 August 2006 **by** drilling nine (9) exploratory borings to depths ranging from 11% to 26% feet. The approximate locations of the test borings are indicated on the Boring Site Plan (see Figure 2 in Appendix A). The borings

were advanced with 8-inch diameter Hollow stem continuous flight auger equipment, mounted on a truck. The soil encountered was continuously logged in the field, and described in accordance with the Unified Soil Classification System (ASTM D2488, Visual-Manual Procedure)). The Logs of Test Borings are included in the Appendix of this report.

Representative soil samples were obtained from the exploratory borings at selected depths. These samples were recovered using the 3.0 inch outside diameter (O.D.) Modified California Sampler (L) or the 2.0 inch O.D. Standard Terzaghi Sampler (T).

The penetration resistance blow counts noted on the boring logs were obtained as the sampler was dynamically driven into the in situ soil. The process was performed by dropping a 140-pound hammer 30 vertical inches, driving the sampler 6 to 18 inches, and recording the number of blows for each 6-inch penetration interval. The blows recorded on the boring logs represent the accumulated number of blows required to drive the last 12 inches.

The boring logs denote subsurface conditions at the locations and time observed. and it is not warranted that they are representative of subsurface conditions at other locations or times

Laboratory Testing

The laboratory testing program was directed toward a quantitative and qualitative evaluation of the physical and engineering properties of the underlying soil at the site influenced by the anticipated foundation construction and project development.

The natural moisture contents and dry densities were determined on selected samples and are recorded on the boring logs at the appropriate depths. Since water has a significant influence on soil, the natural moisture content provides a rough indicator of the soil's compressibility, strength, and potential expansion characteristics. Atterberg Limits tests were performed on foundation zone soil samples for the purpose of evaluating soil plasticity and expansion potential and aid in soil classification. Grain Size Analysis Tests were performed on selected samples to aid in soil classification.

The strength parameters of the underlying earth materials were determined from test values derived from Standard Penetration Testing (SPT) performed during our field investigation and direct shear tests performed in our laboratory. Direct shear test samples were saturated 24 hours prior to testing.

The results of field and laboratory testing appear on the Logs of Test Boring opposite the sample tested

Subsurface Conditions

Based on our subsurface investigation, the soil conditions at the site vary, depending on the location of the borings. In our borings on the west side of the parcel (Borings 3, 4, 5, and 9), we encountered 1 to 2 feet of loose silty sand, underlain by medium dense silty and clayey sand (terrace deposits) from the surface to depths of 5 to 7 feet. The medium dense soil was underlain by dense silty sand (Purisima Formation sand) to the depths explored (11.5 feet). In our borings on the level portion of the property (Borings 1, 2, 6, and 7), we encountered loose to medium dense silty and clayey sand from the surface to depths of 18 to 25 feet, underlain by dense sand to the depths explored (21.5 to 26.5 feet). In Boring 8, drilled adjacent to the garage, we encountered medium dense to dense silty sand from the surface to a depth of 20 feet, underlain by dense sand to the depth explored (21.5 feet).

Groundwater was encountered at depths of 20.5 feet, 18 feet, and 21 feet in Borings 1, 6, and 7, respectively. Water appeared to be perching on the Purisima Formation sand underlying the site. It should be noted that groundwater levels may fluctuate due to variations in rainfall or other factors not evident during our investigation. Groundwater levels at the site may rise during winter and spring months.

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**Site Geology**

Based on a review of the Preliminary Geologic Map of Santa Cruz Cour (Brabb, 1989), the site vicinity is mapped as Tp: Purisima Formation (Pliocene and Upper Miocene) and Qcu: Coastal terrace deposits, undifferentiated (Pleistocene).

The Qcu unit consists of semi-consolidated, moderately well sorted marine sand with thin, discontinuous gravel-rich layers. The terrace deposits may be overlain by poorly sorted fluvial and colluvial silt, sand and gravel. The unit thickness is variable, generally less than 20 feet thick. The deposits may be relatively well indurated in upper part of weathered zone (Brabb, 1989).

The Tp unit consists of very thick bedded yellowish-gray tuffaceous and diatomaceous siltstone containing thick interbeds of bluish-gray, semi-friable, fine-grain andesitic sandstone (Brabb, 1989).

The near surface soil and underlying dense sand encountered in our borings appears to be consistent with the geologic description of the coastal terrace deposits (Qcu) and Purisima Formation (Tp).

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Stope Stability

The creek bank slope on the east side of the property is steep (average 70 percent gradient) as it descends about 18 feet to the adjacent creek. There is potential for shallow landsliding of the bank when saturated and/or during strong seismic shaking. Treefalls may also result in loss of the creek bank. However, the proposed dwellings will be setback a minimum of 10 feet from the top of the bank. This will set the dwellings beyond a 2:1 (horizontal to vertical) line from the toe of the bank (based on Topographic Map by Ifland Engineers, dated 8 February 2005). In addition, the buildings on the east side of the site will have pier and grade beam foundations. Provided the buildings are setback a minimum of 10 feet from the top edge of the bank and have pier and grade beam foundations, the potential for landsliding to negatively impact the dwellings will be low. However, there is potential for slope instability to negatively impact the yard area. Any improvements between the dwellings and the top edge of the slope may be undermined and repairs necessary in the future.

There is also potential for creek scour to undermine the toe of the bank and increase the potential for instability of the creek bank. It is important to monitor and maintain the creek channel. If storm debris or treefalls in the creek divert runoff toward the creek bank adjacent to the dwellings, rapid erosion and instability of the creekbank can occur.

Seismicity

The following is a general discussion of seismic considerations affecting the project area. Detailed study of seismicity and geologic hazards is beyond the scope of this report.

A review of the Active Fault Near-Source Zones published by the California Department of Conservation Division of Mines and Geology indicates earthquake faults in the vicinity of the proposed project include the active San Andreas Fault (Type A) and the potentially active Zayante Fault (Type B), located 11.4 km, and 5.7km from the project site, respectively.

The San Andreas Fault is major fault zone of active displacement extends from the Gulf of California to the vicinity of Point Arena, where the fault leaves the California coastline. Between these points, the fault is about 700 miles long. The fault zone is a break or series of breaks along the earth's crust, where shearing movement has occurred. This fault movement is primarily horizontal.

Historically, the San Andreas Fault has been the site of large earthquakes and consequently, large earthquakes can be expected in the future. The largest of the historic quakes in northern California occurred on 18 April 1906 (mag. 8.3+). The major Loma Prieta earthquake on 17 October 1989 (mag 6.9) was the second largest earthquake in Northern California in the twentieth century. Both of these earthquakes are considered to

have been caused by movement on the San Andreas Fault and caused significant damage in the San Francisco Bay area and Santa Cruz County. The San Andreas Fault has a high potential for surface rupture, with a recurrence interval of 50 to 1,000 years (Hall and Others, 1974). The Working Group on California Earthquakes, 1990, estimates there is a 67 percent chance a large magnitude earthquake (7.0 or greater) will be experienced in the Bay area within the next 30 years.

Seismic hazards include landsliding, liquefaction, ground rupture and strong seismic shaking.

There is potential for landsliding of the oversteep stream channel bank during strong seismic shaking. However, we recommend the buildings on the edge of the creek bank have pier and grade beam foundations and a minimum foundation setback of 10 feet from the edge of the channel. This setback will put the buildings beyond a 2:1 line from the toe of the channel and the potential for landsliding to negatively impact the buildings will be low.

Documented conditions for soil that has liquefied indicate that from a general standpoint, soil susceptible to liquefaction is sand of low to medium relative density, relatively free of silt and clay, and fully saturated. The predominance of silty and clayey sand in the top 20 feet of our borings and low groundwater level indicates the conditions for liquefaction at the

site are relatively low. The likelihood of surface rupture of the site appears remote, as no known faults cross the site.

During a major earthquake in the vicinity of the site, ground shaking would probably be severe. Experience following the 17 October 1989 Loma Prieta earthquake indicates that the quality of construction is a primary factor affecting the amount of earthquake damage sustained by wood framed residential structures during strong ground shaking. Most of the structural damage from the Lorna Prieta earthquake was sustained where foundations were not adequately embedded into firm materials; where the wood frame was not well braced for lateral shear; and/or where the wood frame was not securely tied to the building foundations. Conversely, where wood frame structures were supported on foundations embedded into firm material, well braced for lateral shear and securely tied to the foundation, structural damage was generally minor even in areas quite close to the epicenter where very strong to severe ground shaking occurred. Based on these considerations, the risk of substantial structural damage from earthquakes appears relatively low for well built homes which incorporate lateral shear bracing and modern building code requirements into their design and construction

## DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

Based on the results of our investigation, the proposed development appears compatible with the site, provided the geotechnical criteria and recommendations presented in this report are incorporated into the design and construction of the project.

Geotechnical considerations at the site include providing firm uniform support for the new dwellings, the proximity of the steep drainage channel bank on the east side of the property, site drainage, and the potential for strong seismic shaking.

Units 1, 2, 8, 9, and 10, located on the west portion of the property, may be founded on conventional spread footing foundations embedded in the medium dense to dense near surface soil. Units 3, 4, 5, 6, and 7, located on the level east portion of the property, are underlain by loose to medium dense soil. Because of the loose condition of near surface soil and proximity of the adjacent creek bank, we recommend a minimum setback of 10 feet from the top of the creek bank and founding the dwellings on reinforced concrete pier and grade beam foundations.

There is potential for shallow landsliding of the bank when saturated and/or during strong seismic shaking. Treefalls may also result in loss of the creek bank. Trees at the site

should be evaluated by an arborist periodically to determine the health of the trees and determine if trimming is necessary. The proposed dwellings will be setback a minimum of 10 feet from the top of the bank. This will set the dwellings beyond a 2:1 (horizontal to vertical) line from the toe of the bank. In addition, the buildings on the east side of the site will have pier and grade beam foundations. Provided the buildings are setback a minimum of 10 feet from the top edge of the bank and have pier and grade beam foundations, the potential for deep seated landslides to negatively impact **the** dwellings will be low. However, there is potential for slope instability to negatively impact the yard area. If improvements between the dwellings and the top edge of the slope such as patio slabs or fences are constructed, they may be undermined if shallow slides occur.

There is also potential for creek scour to undermine the toe of **the** bank and increase the potential for instability of the creek bank. It is important to monitor and maintain the creek channel. If storm debris or treefalls in the creek divert runoff toward the creek bank adjacent to the dwellings, rapid erosion and instability of the creekbank can occur, resulting in loss of the creekbank.

Site drainage will be important at *the* site to maintain longterm stability of the creek banks. Concentrated runoff should not be allowed *to* flow over the slopes. Surface runoff should be directed away from the slopes and conveyed to a storm drain system.

The site will most likely experience strong seismic shaking during the design lifetime of the proposed structures. The foundation and structure should be designed utilizing current Uniform Building Code (UBC) seismic design standards.

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

#### Site Grading

1. The geotechnical engineer should be notified at least **four (4)** working days **prior** to any site clearing **or** grading so that the work in the field can be coordinated with the grading contractor, and arrangements for testing and observation services can **be** made. The recommendations of this report are based on the assumption that the Haro, Kasunich and Associates will perform the required testing and observation services during grading and construction. It is the owner's responsibility to make the necessary arrangements for these required services.
2. Where referenced in this report, Percent Relative Compaction and Optimum Moisture Content shall be based on ASTM Test Designation D1557-01.
3. Areas to be graded should be cleared of all obstructions including loose fill, foundations, septic tanks, trees not designated to remain, and other unsuitable material.

Existing depressions or voids created during site clearing should be backfilled with engineered fill.

4. Cleared areas should then be stripped of organic-laden topsoil. Stripping depth is typically from 2 to 6 inches. Actual depth of stripping should be determined in the field by the geotechnical engineer. Strippings should be wasted off-site or stockpiled for use in landscaped areas if desired.

5. All areas to receive engineered fill should be scarified to a depth of 6 inches, moisture conditioned, and compacted to a minimum of 90 percent relative compaction. Portions of the site may need to be moisture conditioned to achieve a suitable moisture content for compaction. These areas may then be brought to design grade with engineered fill.

6. Engineered fill should be placed in thin lifts not to exceed 8 inches in loose thickness, moisture conditioned, and compacted to a minimum of 90 percent relative compaction. In areas where flexible or rigid pavement will be constructed, the top 8 inches of subgrade soil and all aggregate base should be compacted to a minimum of 95 percent relative compaction.

7. The on-site soil is acceptable for use as engineered fill provided the material is free of organics or other deleterious material. Soil used for engineered fill which must be imported

should consist of a predominantly granular soil conforming to the quality and gradation requirements as follows: The soil should be relatively free of organic material and contain no rocks or clods greater than 4 inches in diameter, with no more than 15 percent larger than 2% inches. The material should be predominantly granular with a plasticity index less than 15, a liquid limit less than 35, and not more than 20 percent passing the #200 sieve.

8. We estimate shrinkage factors of 15 to 25 percent for the on-site materials when used as engineered fill.

9. Following grading, exposed soil should be planted as soon as possible with erosion-resistant vegetation.

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

#### Foundations - Conventional Spread Footings

11. Units 1, 2, 8, 9, and 10, located on the west portion of the property, may be supported on conventional continuous spread footings under load bearing walls and isolated spread footings and slabs under floors bearing on undisturbed natural soil. One-story footings

should be a minimum of 12 inches deep and 12 inches wide. Two-story footings should be a minimum of 18 inches deep and a minimum of 15 inches wide. Actual footing widths and depths should be determined in accordance with anticipated use and applicable design standards. The footings should be reinforced as required by the structural designer based on the actual loads transmitted to the foundation.

12. Footings designed in accordance with the above may be designed for an allowable soil bearing pressure of 2,000 psf for dead plus live loads. This value may be increased by one third to include short-term wind and seismic loads.

13. Lateral load resistance for structures supported on footings may be developed in friction between the foundation bottom and the supporting subgrade. A friction coefficient of 0.35 is considered applicable.

14. Total and differential settlements under the proposed light building loads are anticipated to be less than 1 inch and ½ inch, respectively.

15. The foundation trenches should be kept moist and be thoroughly cleaned of all slough or loose materials prior to pouring concrete. In addition, all footings located adjacent to other footings or utility trenches should have their bearing surfaces founded

below an imaginary 1½ :1 plane projected upward from the bottom edge of the adjacent footings or utility trenches.

Pier and Grade Beam Foundation

16. Units 3, 4, 5, 6, and 7, located on the level east portion of the property, should be supported on reinforced concrete pier and grade beam foundations. The dwellings should be located a minimum of 10 feet from the edge of the slope. Piers should penetrate the upper loose topsoil (top 4 feet of soil) and be embedded a minimum of 6 feet into the undisturbed loose to medium dense silty sand.

17. Piers designed in accordance with the above may be designed for an allowable skin friction of 300 psf plus a 1/3 increase for short term wind and seismic loads. All loose fill and topsoil should be neglected when computing skin friction (a minimum of 4 feet of soil should be neglected in pier design).

18. Piers should be designed for an active pressure equivalent to a fluid weight (EFW) of 50 pcf acting in the top 4 feet of the piers within 10 to 20 feet of the top edge of the creek bank. The active pressure should be assumed to act against 1% pier diameters.

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19. For passive lateral resistance, an equivalent fluid weight (EFW) of 250 pcf may be used in the silty sand below a depth of 4 feet. The top 4 feet of soil (measured from the ground surface) should be neglected in passive design. Passive pressures should be assumed to act against  $1\frac{1}{2}$  pier diameters.

20. As a minimum, the piers should be vertically reinforced the full length with at least four Number 4 bars. The vertical reinforcement should be tied to the upper grade beam reinforcement. Actual reinforcement requirements should be determined by the structural designer.

21. The geotechnical engineer should observe the excavations during pier drilling to confirm anticipated subsurface conditions, verify pier depths, and present supplemental recommendations, if necessary.

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

### Seismic Design

23. The 1997 UBC provides updated guidelines for seismic design of structures. Based on these guidelines, a review of our boring logs indicates the average of soil properties in the top 100 feet of soil at the site is typified by soil type  $S_D$ . We provide the following near

source factors ( $N_a$  and  $N_v$ ), and seismic coefficients ( $C_a$  and  $C_v$ ) assuming the site is underlain by soil type  $S_D$  and selecting the San Andreas Fault and Zayante/Vergeles Fault as the seismic source faults closest to the site:

**Soil Type= $S_D$**

Seismic Zone Factor =  $Z = 0.40$

FAULT NAME	DISTANCE TO SITE	R.I. (yr)	Mmax	SLIP RATE (mm/yr)	UBC FAULT TYPE	$N_a$	$N_v$	$C_a$	$C_v$
San Andreas	11.4 km 7.1 miles	210	7.9	24.0	A	1.0	1.1	0.44	0.70
Zayante-Vergeles*	5.7 km 3.6 mi	8821	7.0	0.1	B	1.0	1.2	0.44	0.77

\* critical fault

24. Total and differential settlement resulting under the proposed lightweight building loads is anticipated to be less than 1 inch and 1/2 -inch respectively.

**Retaining Walls**

25. Retaining walls should be designed to resist both lateral setback earth pressures and any additional surcharge loads. Spread footing foundations are recommended for retaining walls provided the foundations are a minimum of 10 feet from adjacent slopes. For design

of retaining walls up to 10 feet high and fully drained, the following design criteria may be used:

- A. Active earth pressure for walls allowed to yield is that exerted by an equivalent fluid weighing 40 pcf for a level backslope gradient; and 55 pcf for a 2:1 (horizontal to vertical) backslope gradient. **This assumes a fully drained condition.**
- B. Where walls are restrained from moving at the top (as is the case for basement walls), design for a uniform rectangular distribution equivalent to 28H psf per foot for a level backslope, and **38H** psf per foot for a 2:1 backslope. where H is the height of the wall.
- C. For seismic design of retaining walls a dynamic surcharge load equal to 10H psf, where H is the height of the wall, should be added to the above active lateral earth pressures.
- D. A coefficient of friction between base of foundation and native soil of 0.30 may be used, Alternatively, where retaining wall footings are poured neat against dense native soil, a passive resistance **of** 250 pcf (EFW) may be used. Neglect the upper 12 inches of footing depth when computing passive resistance.
- E. In addition, the walls should be designed for any adjacent live or dead loads which will exert a force on the wall (garage **and/or** auto traffic).

- F. Retaining walls that act as interior house walls should be thoroughly waterproofed.
- G. The above lateral pressure values assume that the walls are fully drained to prevent hydrostatic pressure behind the walls. Drainage materials behind the wall should consist of Class 1, Type A permeable material complying with Section 68 of Caltrans Standard Specifications, latest edition.
- H. The drainage material should be at least 12 inches thick. The drains should extend from the base of the walls to within 12 inches of the top of the backfill. A perforated pipe should be placed (holes down) about 4 inches above the bottom of the wall and be tied to a suitable drain outlet. Wall backdrains should be capped at the surface with clayey material to prevent infiltration of surface runoff into the backdrains. A layer of filter fabric (Mirafi 140N or equivalent) should separate the subdrain material from the overlying soil cap.

### Concrete Slabs-on-Grade

- 26. Building floor slabs and exterior slabs should be constructed on properly water conditioned and compacted soil subgrade. Soil subgrades should be prepared and compacted as recommended in the section entitled " Site Grading".
- 27. The project design professional should determine the appropriate slab reinforcing and thickness, in accordance with the anticipated use and loading of the slab. However,

we recommend that consideration be given to a minimum slab thickness of 5 inches and steel reinforcement necessary to address temperature and shrinkage considerations. It is recommended that rebar in lieu of wire mesh be used for slab reinforcement. The steel reinforcement should be held firmly in the vertical center of the slab during placement and finishing of the concrete with pre-cast concrete dobies.

28. Where floor dampness must be minimized or where floor coverings will be installed, concrete slabs-on-grade should be constructed on a capillary break layer at least 4 inches thick (exclusive of a 2 inch sand layer) and covered with a membrane vapor retarder. Capillary break material should be free-draining, clean gravel or rock, such as 3/4-inch gravel. The gravel should be washed to remove fines and dust prior to placement on the slab subgrade. The vapor retarder should be a high quality membrane; at least 10 mil in thickness; and puncture resistant (MoistStop or equivalent). A layer of sand about 2 inches thick should be placed between the vapor retarder and the floor slab to protect the membrane and aid in curing concrete. The sand should be lightly moistened prior to placing concrete.

29. It should be clearly understood concrete slabs are not waterproof, nor are they vapor-proof. The aforementioned moisture retardant system will help to minimize water and water vapor transmission through the slab. However, moisture sensitive floor coverings require additional protective measures. Floor coverings must be installed

according to the manufacturer's specifications, including appropriate waterproofing applications and/or any recommended slab and/or subgrade preparation. Consideration should also be given to recommending a topical waterproofing application over the slab

30. Exterior concrete slabs-on-grade should be founded on firm, well-compacted ground as delineated above. Reinforcing should be provided in accordance with the anticipated use and loading of the slab. The reinforcement should not be tied to the building foundations. These exterior slabs can be expected to suffer some cracking and movement. However, thickened exterior edges, a well-prepared subgrade including pre-moistening prior to pouring concrete, adequately spaced expansion joints, and good workmanship should minimize cracking and movement.

#### Flexible Pavement

31. Pavement design was beyond the scope of our services. We understand pavement design will be provided by the project civil engineers prior to submittal of Improvement Plans. For selected pavement sections to perform to their greatest efficiency, it is important that the following items be considered:

- A. Properly moisture condition the subgrade and compact it to a minimum relative compaction of 95 percent at a moisture content at least 3 percent over the optimum moisture content. If clay soil is exposed in the subgrade, the clay should

be moisture conditioned to 5 percent over optimum moisture and compacted to a minimum relative compaction of 85 to 90 percent.

- B. Provide sufficient gradient to prevent ponding of water.
- C. Use only quality materials of the type and thickness (minimum) specified. All base rock, unless otherwise noted, must meet Cal-Trans Standard Specifications for Class 2 Aggregate Base, and be angular in shape.
- D. Compact the base rock uniformly to a minimum relative dry density of 95 percent.
- E. Place the asphaltic concrete only during periods of fair weather when the free air temperature is within a proscribed limit
- F. Provide a routine maintenance program.

### **Utility Trenches**

32. Underground utility trenches should be backfilled with approved granular import fill. Trench backfill should be placed in lifts not exceeding 6 inches in uncompacted thickness and should be compacted by mechanical means only. The top 5 feet of backfill beneath pavements should be compacted to a minimum of 95 percent relative compaction. Below a depth of 5 feet and in areas not below pavement, backfill should be compacted to a minimum of 90 percent relative compaction.

33. Bedding material should be placed below the planned invert elevation to the depth required, but not less than four inches thick, to provide a stable uniform bearing surface

The bedding material should extend upwards at least 6 inches above the top of the pipe(s) to provide side support and protection to the pipes during subsequent backfilling and compaction operations. Pipe bedding material should have a sand equivalent of 30 and be graded such that 100 percent passes the ¾-inch sieve and less than ten percent passes the #200 sieve

#### Site Drainage

34. Control of runoff is essential to the performance of the project. Roof, driveway and street surface runoff should be collected and directed to a storm drain system.

35. Surface drainage should include provisions for positive slope gradients so that surface runoff is not permitted to pond adjacent to foundations and pavements. Runoff should be diverted from the top of the creekbank on the east side of the property. A minimum slope gradient of 2 percent should be provided near foundations, slabs, or pavements.

36. Rain gutters should be placed around roof eaves. Discharge from the rain gutters should be conveyed away from the downspouts via buried closed plastic pipe to suitable collection facilities which convey runoff to the storm drain system.

37. We do not recommend on site retention of storm water at the site. Saturation of the soil in the adjacent creek bank will increase the potential for slope instability. We recommend site runoff be directed to the street and existing facilities

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

#### Plan Review, Construction Observation, and Testing

39. Haro, Kasunich and Associates must be provided the opportunity for a general review of the final project plans prior to construction to evaluate if our geotechnical recommendations have been properly interpreted and implemented. Haro, Kasunich and Associates should also provide earthwork observation and testing services during the construction phase of the project. Observation and testing of earthwork allows us the opportunity to confirm anticipated soil conditions and evaluate the contractors conformance with project plans and specifications and our geotechnical recommendations. If we are not accorded the opportunity of making the recommended plan review or do not provide earthwork observation and testing services during construction, we assume no responsibility for misinterpretation of our recommendations

Project No. SC9309

31 January 2007

MR. KEITH BAXTER AND  
MR. RANDY KANAWYER  
c/o BK Properties  
561 Hacienda Drive  
Scotts Valley, California 95066

Subject: Geotechnical Plan Review

Reference: 10 Unit Condominium Project  
APN 039-062-05  
6851 Soquel Drive  
Aptos, California

Dear Mr. Baxter and Mr. Kanawyer:

As requested, we have reviewed Preliminary Grading and Drainage Plans for the Hidden Oaks subdivision, located at 6851 Soquel Drive in Aptos, California. The plans, dated 31 January 2007, were prepared by Ifland Engineers. The reviewed sheets include the Preliminary Grading and Drainage Plan (Sheet TM4) and Preliminary Grading Cross Sections (Sheet TM4.01) for the proposed new dwelling units on APN 039-062-05. Our Geotechnical Investigation for the project is dated October 2006.

The plans indicate 10 units will be constructed on the property. Three units will have driveways off Haas Drive and the remaining 7 units will be accessed by a new driveway off Soquel Drive. Minor cut and fill grading will be necessary to complete the project. Surface and roof runoff will be directed to 8 foot deep rock filled drainage trenches installed around the new driveway. The trenches will have reinforced concrete sides from the surface to a depth of 2 feet.

The east side of the property slopes steeply toward the flow line of the drainage channel, about 20 feet below the building area. In our report, we recommended runoff from the subdivision be directed to area storm drain facilities which convey storm water to the drainage channel. This would reduce the potential for instability of the channel slopes. We understand the Santa Cruz County Public Works Department has required storm runoff from the project be retained on site so the drainage trenches were planned. Since the drains will be located 65 to 100 feet away from the top of the channel, storm water will percolate down as well as horizontally in the silty sand underlying the drain area. Locating the trenches away from, rather than adjacent to, the channel slopes will reduce the potential for instability of the channel slopes.

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Mr. Keith Baxter and  
Mr. Randy Kanawyer  
Project No. SC9309  
6851 Soquel Drive  
31 January 2007  
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Based on our review, the referenced plans are in conformance with our geotechnical recommendations.

If you have any questions concerning this letter, please contact our office

Very truly yours,

**HARO, KASUNICH AND ASSOCIATES, INC.**



Christopher A. George

C.E. 50871

CAG/sq

Copies: 3 to Addressee  
1 to Ifland Engineers

Environmental Review Initial Study  
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# COUNTY OF SANTA CRUZ

## PLANNING DEPARTMENT

701 OCEAN STREET, 4<sup>TH</sup> FLOOR, SANTA CRUZ, CA 95060  
(831) 454-2580 FAX: (831) 454-2131 TDD: (831) 454-2123

**TOM BURNS, PLANNING DIRECTOR**

November 27, 2006

Powers Land Planning  
1607 Ocean Street, Suite 8  
Santa Cruz, CA, 95060

**Subject: Review of Geotechnical Investigation by Haro, Kasunich & Associates, Inc.  
Dated November 1, 2006; Project #: SC9309  
APN 039-062-05, Application #: 06-0651**

Dear Applicant:

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

1. All construction shall comply with the recommendations of the report.
2. Final plans shall reference the report and include a statement that the project shall conform to the report's recommendations.
3. Prior to building permit issuance a plan review letter **shall** be submitted to Environmental Planning. The author of the report shall write the plan review **letter**. The letter shall state that the project plans conform to the report's recommendations.

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

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

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

Please call the undersigned at (831) 454-3168 if we can be of any further assistance

Sincerely,

  
Kent Edler  
Civil Engineer

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Cc: Andrea Koch, Environmental Planning  
Haro, Kasunich & Associates, Inc.  
BK Properties, Owner  
Randall Adams. Project Planner

(over)

February 8, 2006

Mr. Keith G. Baxter  
 550 Hudson Lane  
 Aptos, CA 95003

**SUBJECT: Conditional Water Service Application - 6851 Soquel Drive,  
 Aptos, APN 039-062-05**

Dear Mr. Baxter:

In response to the subject application, the Board of Directors of the Soquel Creek Water District at their regular meeting of February 7, 2006, voted to grant you a conditional Will Serve Letter for your project so that you may proceed through the appropriate planning entity. ~~An Unconditional Will Serve Letter cannot~~ be granted until such time as you are granted a Final Discretionary Permit on your project. At that time, an Unconditional Will Serve Letter will be granted subject to your meeting the requirements of the District's Water Demand Offset Program and any additional conservation requirements of the District prior to obtaining the actual connection to the District facilities subject to the provisions set forth below.

Possible Infrastructure Check List	yes	no
1. LAFCO Annexation required		X
2. Water Main Extension required off-site		X
3. On-site water system required		X
4. New water storage tank required		X
5. Booster Pump Station required		X
6. Adequate pressure	X	
7. Adequate flow	X	
8. Frontage on a water main	X	
9. Other requirements that may be added as a result of policy changes. <i>Not at this time.</i>		X

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:

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- 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;
- 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 plus new clothes washers also shall have a water use factor of 7.5 or less;
  - 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 3/4 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.

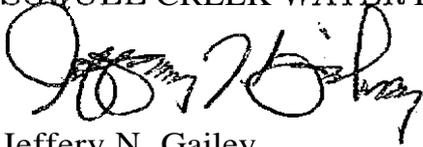
Future conditions which negatively affect the District’s ability to serve the proposed development include, but are not limited to, a determination by the District that existing and anticipated water supplies are insufficient to continue adequate and reliable service to existing customers while extending 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 adapting additional policies to mitigate the impact of new

Environmental Review Initial Study  
ATTACHMENT 5, 2 of 3  
APPLICATION 06-0651

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 2nd approved by the District which would restore groundwater recharge potential as determined by the District. The proposed project 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 at the District Office.

Sincerely,  
SOQUEL CREEK WATER DISTRICT



Jeffery N. Gailey  
Engineering Manager/Chief Engineer

*Enclosures: Water Use Efficiency Requirements & Sample  
Unconditional Water Service Application*

Environmental Review Initial Study  
ATTACHMENT 5, 3 of 3  
APPLICATION 06-0651

# DRAINAGE STUDY

FOR

## HIDDEN OAKS SUBDIVISION

Tract No. 1529

(Revised January 2007)

October 2006

Job No 05124

Environmental Review Initial Study

ATTACHMENT 6, Lot 16

**IFLAND ENGINEERS, INC.**

1100 Water Street, Suite 2

Santa Cruz, CA 95062

(831) 426-5313 FAX (831) 426-1763

www.iflandengineers.com

APPLICATION 06-0651

**STORM DRAINAGE CALCULATIONS**

Site Area -67,467 Sq. Ft. (1.55 Acres)

**Existing Conditions**

Buildings	4,779	Sq. Ft.
Sidewalks/Patios	2,091	
Driveway	4,779	
Parking (Base rock 50%)	2,300	
Haas Drive Pavement	3,000	
<b>TOTAL</b>	<b>46,125</b>	<b>Sq. Ft. (0.32Ac)</b>

**Impervious Surfaces**

**Proposed Conditions**

Houses / Garages	12,160	Sq. Ft.
Sidewalks/Patios	2,152	
Driveways	3,842	
Parking	1,080	
Road	3,264	
<b>TOTAL</b>	<b>22,498</b>	<b>Sq. Ft. (0.52 Ac)</b>

**Impervious Surfaces**

**Rainfall Intensity**

2.10 at 10 min. T.C

**Coefficient of Runoff**

$$\text{Pre-Development} = \frac{(0.90)(0.37) + (0.25)(1.18)}{1.55}$$

$$= 0.40 \text{ (composite)}$$

$$Q_{10} = (0.40)(2.10)(1.55)$$

$$= \underline{\underline{1.30 \text{ c.f.s}}}$$

**Post-Development Runoff**

$$\text{Coefficient} = \frac{(0.90)(0.52) + (0.30)(1.03)}{1.55}$$

$$= 0.50 \text{ (composite)}$$

$$Q_{10} = (0.50)(2.10)(1.55)$$

$$= \underline{\underline{1.63 \text{ c.f.s.}}}$$

Net Increase:  $1.63 - 1.30 = \underline{\underline{0.33 \text{ c.f.s}}}$  (At 10 Min. T.C.)

$0.74 - 0.59 = 0.15 \text{ c.f.s}$  (At 1 Hour) = 540 Cubic Feet

Environmental Review Initial Study  
 ATTACHMENT 6, 2 of 16  
 APPLICATION 06-0651

As proposed on the preliminary grading and drainage plans, runoff from the roofs, driveways and private street would collect into the trench drains on both sides of the street, which would be about 0.98 c.f.s. The balance of the site is to be left natural and will drain off to the gulch. The drain-rock-filled trench is to be 1.5' wide x 6.0 deep and a total of 290 feet long. At 40% voids, there would be 977 cubic feet of detention/retention.

This site drains off into an unnamed gulch alongside Vienna Drive. This tributary area of the drainage basin north of Soquel Drive is 90 acres and has a length of 3,500 feet and time of concentration of 17 minutes. The total runoff of the basin is 160 c.f.s., including the increased runoff from the subject site and full build-out of the tributary area. (See below). According to the current zoning and general plan County Planning does not anticipate any density increase.

At Soquel Drive there is a 42" R.C.P. culvert with a flow capacity of 181 c.f.s. and further downstream at Highway 1 there is a 48" x 36" long box culvert with a capacity of 237 c.f.s. These culverts are adequate to handle a 100-year storm event. Both culverts are in deep natural drainage channels under the roadways. The top of the pipe under Soquel Drive is 16' below the pavement and the top of the box culvert under Highway 1 is 37' below the pavement. Flooding of these roads is not possible at the culvert crossing.

The slight increase in runoff flow from the project site of 0.33 c.f.s. is only 0.02% of the flow capacity at Soquel Drive and 0.01% of the flow capacity at Highway 1.

**DRAINAGE RUNOFF**

**UNNAMED GULCH AT SOQUEL DRIVE**

Q = C <sub>i</sub> C <sub>i</sub> A	P <sub>60</sub> = 1.4
= (4.25)(.3)(3.129)(27)	i <sub>10</sub> = 2.1 in/hr
+ (1.25)(.52)(3.129)(63)	i <sub>100</sub> = (1.49)(2.1) = 3.129 in/hr
= <b><u>160 c.f.s. - 100-yr. storm</u></b>	

**UNNAMED GULCH AT HIGHWAY ONE**

Q = C <sub>i</sub> C <sub>i</sub> A	P <sub>60</sub> = 1.4
= (1.25)(.3)(2.38)(27)	i <sub>10</sub> = 2.1 in/hr
+ (1.25)(.52)(2.38)(63)	i <sub>100</sub> = (1.49)(2.1) = 3.129 in/hr
+ (1.25)(.60)(3.427)(26)	i <sub>10</sub> = 1.6 in/hr @ 17 min
= <b><u>227 c.f.s. - 100-yr. storm</u></b>	i <sub>100</sub> = (1.49)(1.6) = 2.38 in/hr

Environmental Review Initial Study  
 ATTACHMENT 6, 30<sup>th</sup> 16  
 APPLICATION 06-0651

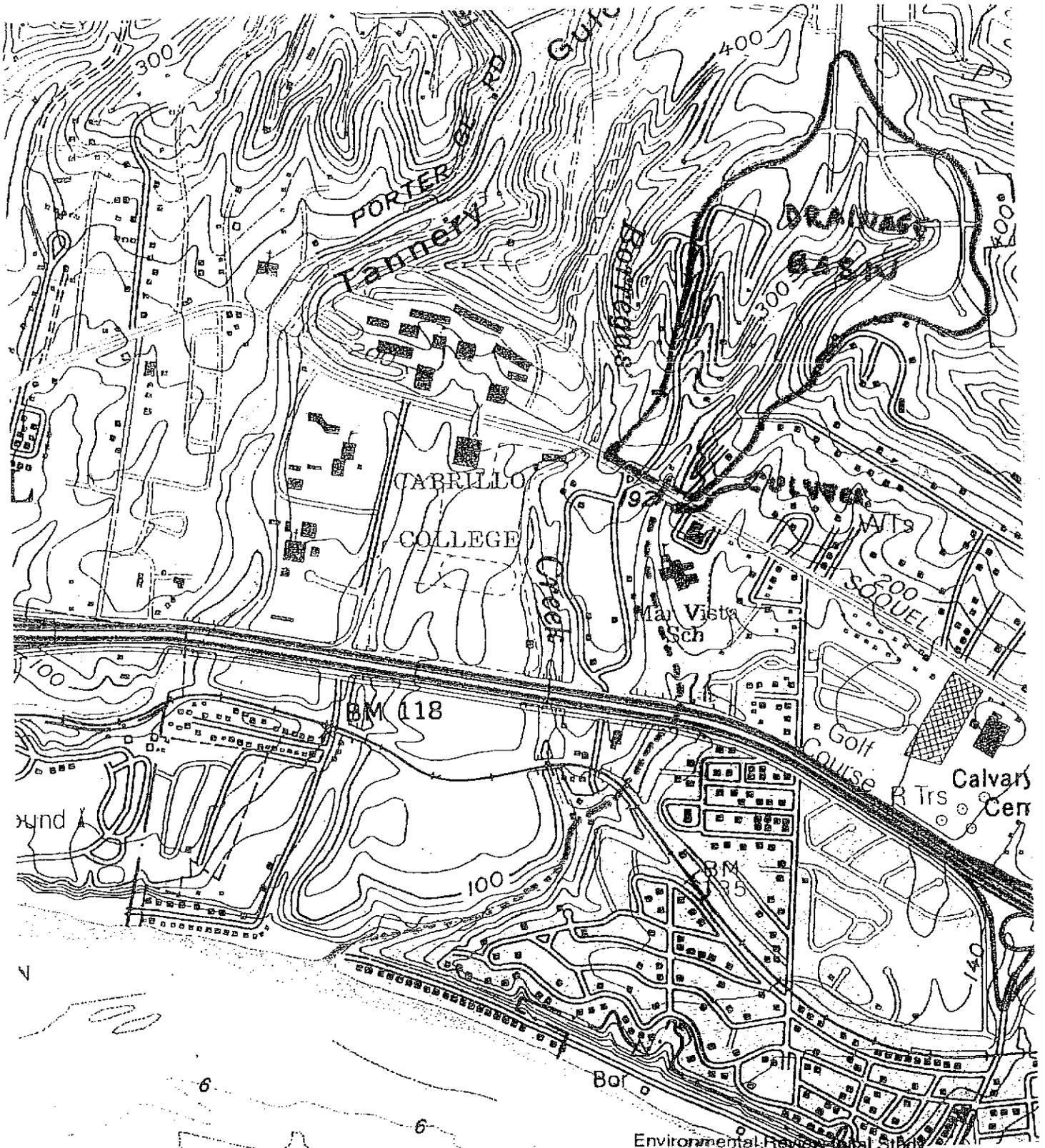
**IFLAND ENGINEERS, INC**

1100 Water Street  
Santa Cruz, CA 95062  
(831) 426-5313 FAX (831) 426-1763  
www iflandengineers.com

JOB 05124 Hidden Oaks

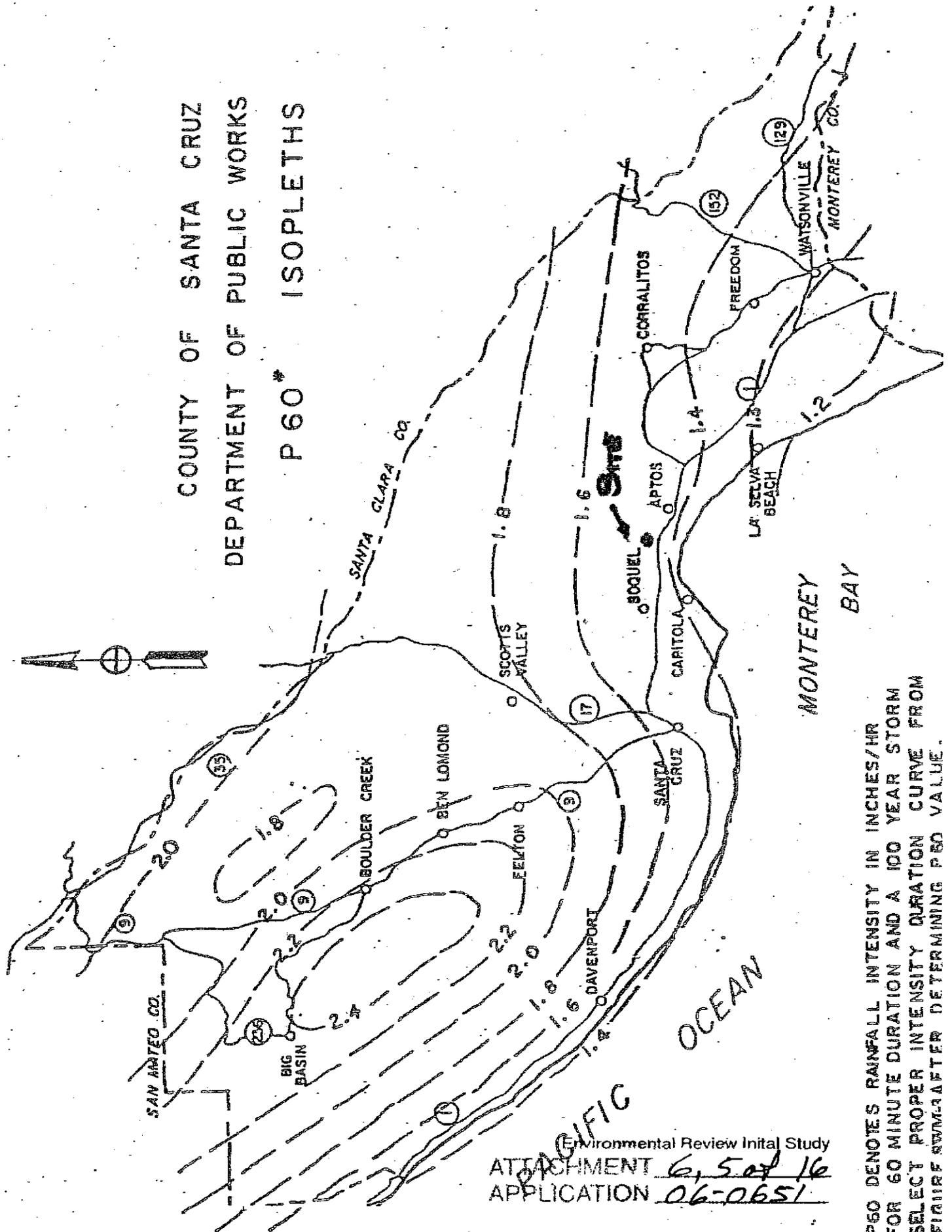
CALCULATED BY GHI

SHEET 3 of 15  
DATE 10/12/06 REVISED



Environmental Review Final Study  
ATTACHMENT 6, 4 of 16  
APPLICATION 06-0651

COUNTY OF SANTA CRUZ  
 DEPARTMENT OF PUBLIC WORKS  
 P 60\* ISOPLETHS



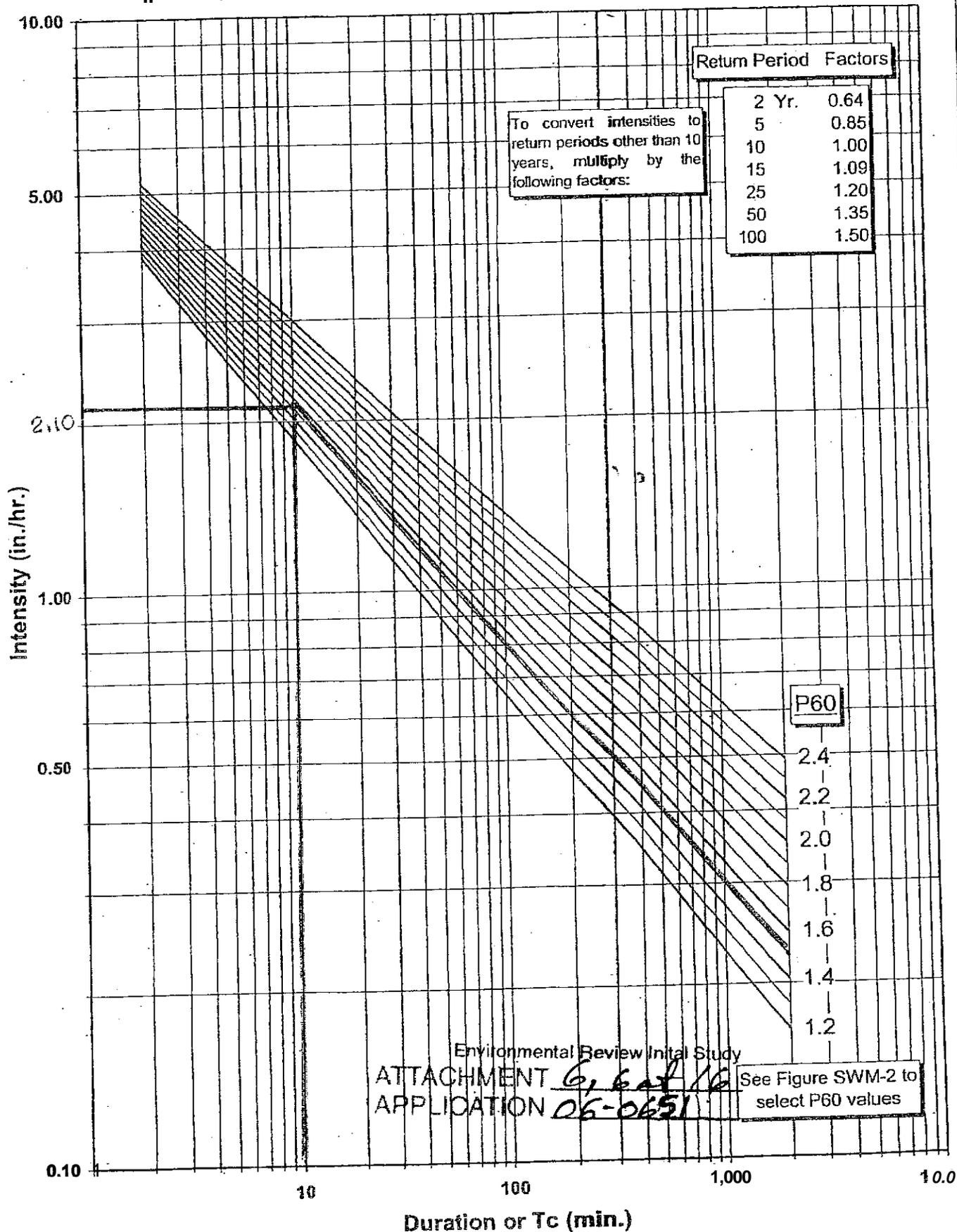
Environmental Review Initial Study  
 ATTACHMENT 6, 5 of 16  
 APPLICATION 06-0651

\*P60 DENOTES RAINFALL INTENSITY IN INCHES/HR FOR 60 MINUTE DURATION AND A 100 YEAR STORM. SELECT PROPER INTENSITY DURATION CURVE FROM FIGURE 8-1 AFTER DETERMINING P60 VALUE.

# Rainfall Intensity - Duration Curves

## 10 Yr. Return Period

$$((4.29112)^*(1.1952)^{P60\_VALUE})/(DURATION^{((0.60924)^*(0.78522)^{P60\_VALUE})})$$



Environmental Review Initial Study  
 ATTACHMENT 6, 6/21/16  
 APPLICATION 06-0651  
 See Figure SWM-2 to select P60 values

<u>TYPE OF AREA</u>	<u>10- YEAR RUNOFF COEFFICIENTS</u>
<u>Rural, park, forested, agricultural</u>	0.10 <span style="border: 1px solid black; padding: 2px;">0.30</span>
<u>Low residential (Single family dwellings)</u>	0.45 - 0.64
High residential (Multiple family dwellings)	0.65 - 0.75
Business and commercial	0.80
Industrial	0.70
Impervious	0.90

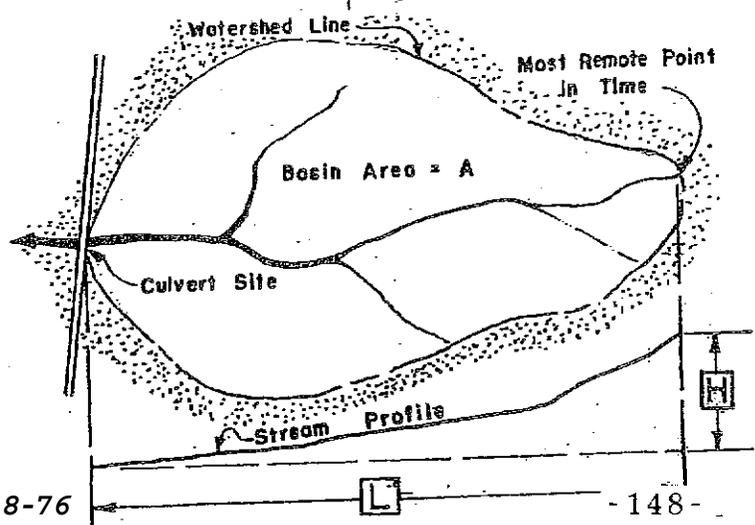
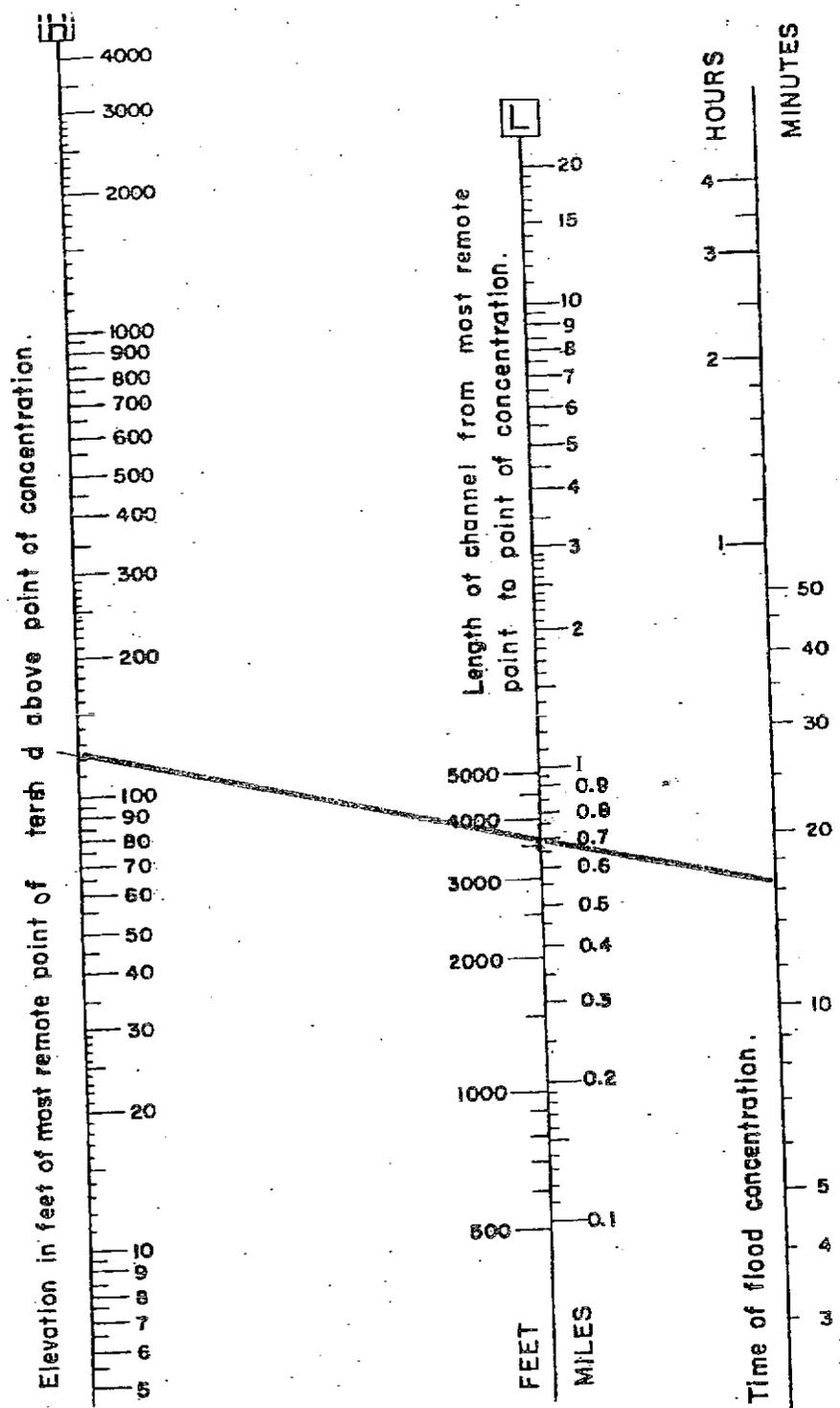
**REQUIRED ANTECEDENT MOISTURE FACTORS  
(Ca) FOR THE RATIONAL METHOD\***

Recurrence Interval (Years)	Ca
2 to 10	1.0
25	1.1
50	1.2
100	1.25

Note: Application of antecedent moisture factors (Ca) should not result in an adjusted runoff coefficient (C) exceeding a value of 1.00

Environmental Review Initial Study  
**ATTACHMENT 6**  
**APPLICATION 06-0651**

\*APWA Publication "Practices in Detention of Stormwater Runoff"



Environmental Review Initial Study  
 ATTACHMENT 6, Set 16  
 APPLICATION 06-0651

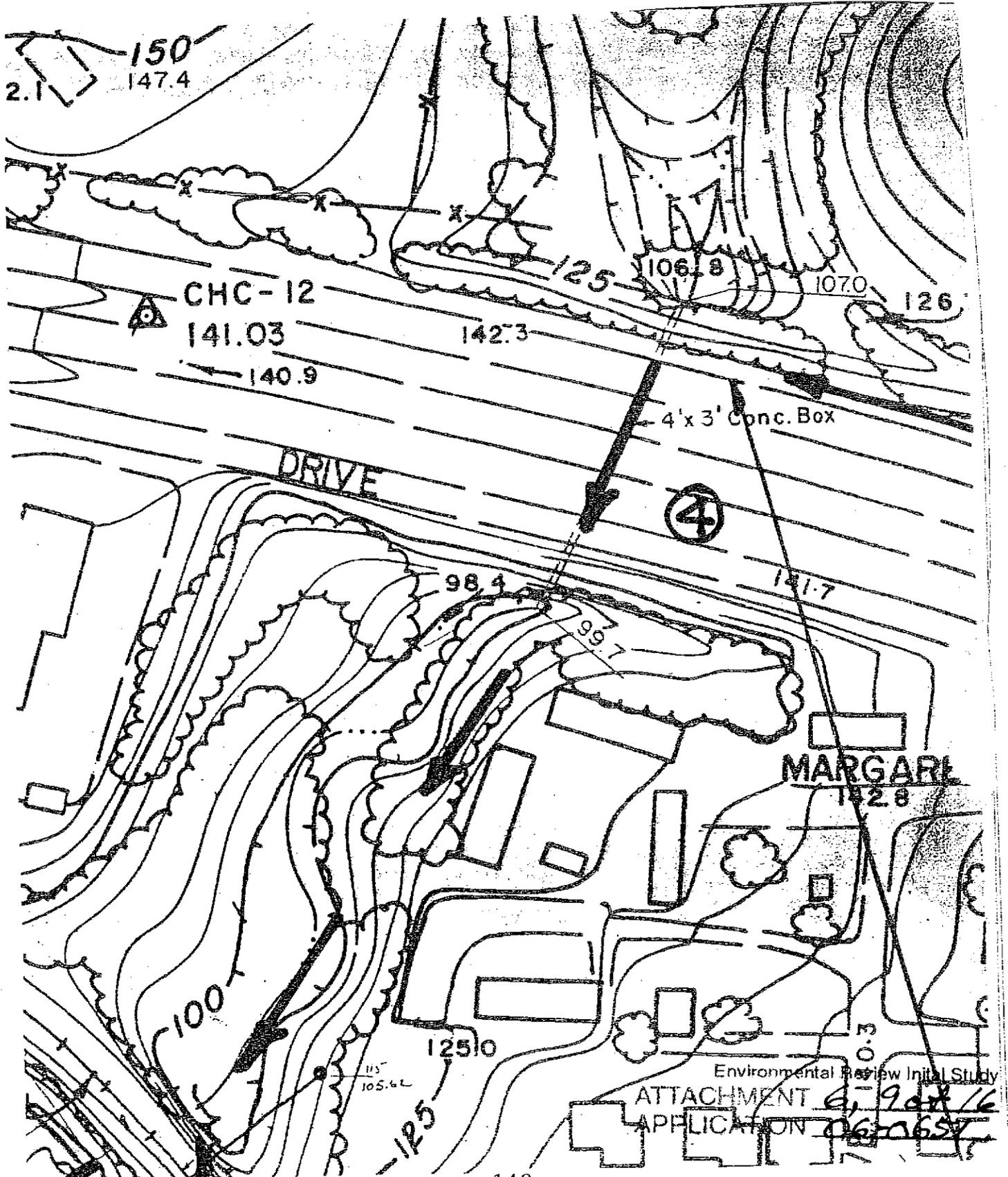
FIGURE  
**TIME of CONCENTRATION  
 NOMOGRAPH for  
 NATURAL WATERSHEDS  
 (pear shaped basins)**

FIG. SWI

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Santa Cruz, CA 95062  
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SHEET 9 of 15  
DATE 9/15/06 REVISED

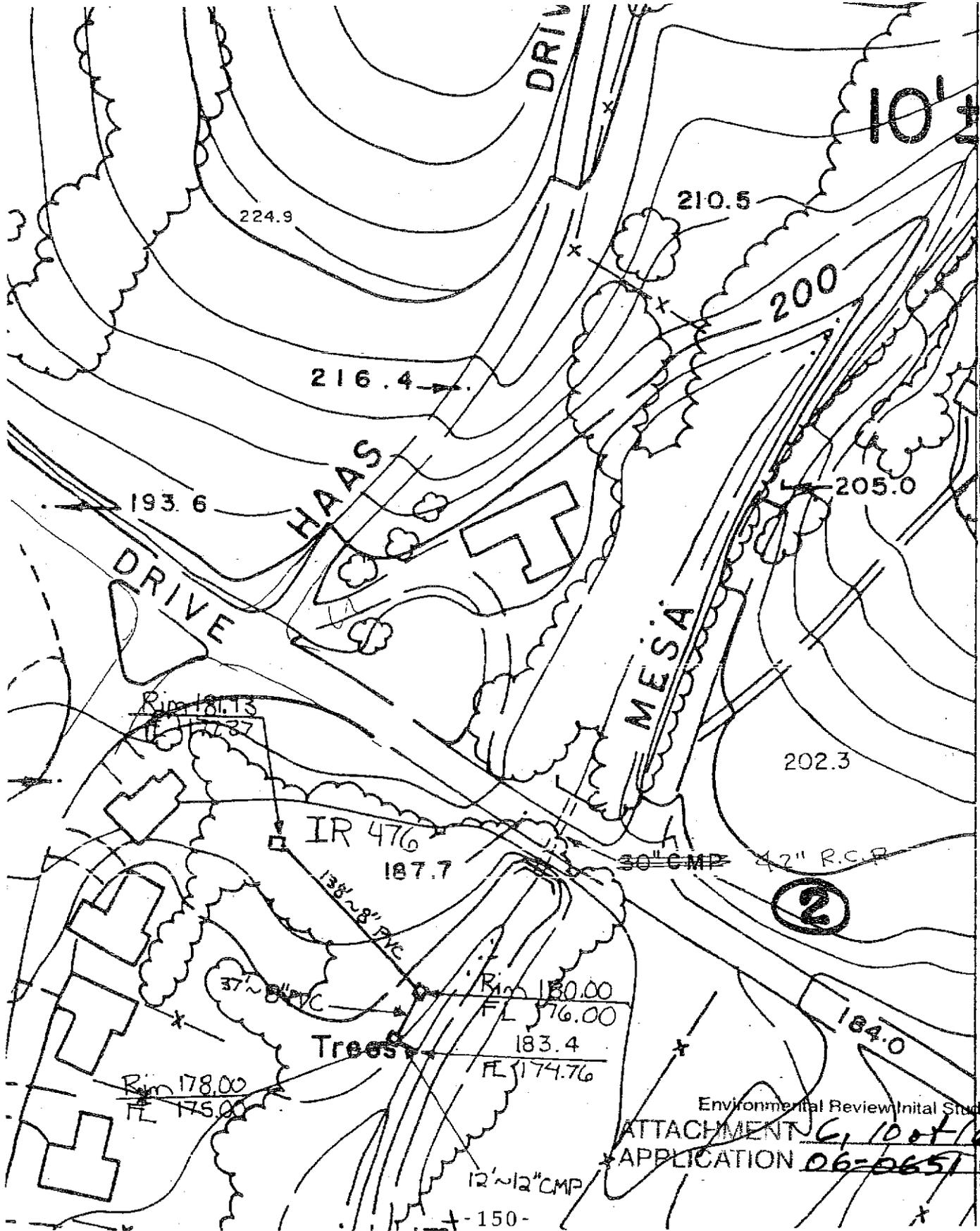
Culvert Under Highway One



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 Santa Cruz, CA 95062  
 (831)426-5313 FAX (831) 426-1763  
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JOB 05124 Hidden Oaks  
 CALCULATED BY GHI  
 SHEET 10 of 15  
 DATE 1/12/07 REVISED

Culvert Under Soquel Drive



Environmental Review Initial Study  
 ATTACHMENT C, 10 of 16  
 APPLICATION 06-0651

## Manning Pipe Calculator

### Unnamed Gulch at Soquel Drive

Given Input Data:

Shape.....	Circular
Solving for.....	Flowrate
Diameter.....	42.0000 in
Depth .....	40.500 in
Slope .....	0.0375 ft/ft
Manning's n .....	0.015

Computed Results:

<b>Flowrate</b> .....	<b>181.2258cfs</b>
Area .....	9.6211 ft2
Wetted Area .....	9.2605 ft2
Wetted Perimeter .....	107.8593 in
Perimeter .....	131.9469 in
Velocity .....	19.5697 fps
Hydraulic Radius .....	12.3635 in
Percent Full .....	92.0000%
Full Flow Flowrate .....	168.8526 cfs
Full Flow Velocity .....	17.5502 fps

### Unnamed Gulch at HWY1

Given Input Data:

Shape.....	Circular
Solving for.....	Flowrate
Height.....	48.0000 in
Width.....	36.0000 in
Depth .....	47.0000 in
Slope .....	0.0281 ft/ft
Manning's n .....	0.0130

Computed Results:

<b>Flowrate</b> .....	<b>237.6751 cfs</b>
Area .....	12.0000 ft2
Wetted Area .....	11.7500 ft2
Wetted Perimeter .....	130.0000 in
Perimeter .....	168.0000 in
Velocity .....	20.2277 fps
Hydraulic Radius .....	13.0154 in
Percent Full .....	97.9167%
Full Flow Flowrate .....	207.4812 cfs
Full Flow Velocity .....	17.2901 fps

Environmental Review Initial Study

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JOB 05124 Hidden Oaks  
 CALCULATED BY GHI  
 SHEET 11 or 15  
 DATE 1112107 REVISED \_\_\_\_\_

**Drainage along west side of Vienna Drive**

The area collecting at the catch basin at the northwest corner of Soquel Drive and Vienna Drive from the gutter flow on the west side of Vienna Drive extends 270 feet north of Soquel Drive. The gutter flow above that point is diverted into the gulch along side the street. The pavement width of Vienna Drive is 32 feet and is crowned at the centerline. The drainage area is 16' wide by 270 long or 0.10 acre. A 10-year storm event would produce:

$$Q_{10} = (0.90)(2.10)(0.10)$$

$$= \underline{0.19 \text{ cubic foot per second}}$$

The gutter slope on Vienna Drive at just above the catch basin is 3.0%. The Row capacity of the 2' wide gutter only (0.17' flow depth) is 0.70 c.f.s. At 0.19 c.f.s. the flow depth would be only 0.08 ±'. No runoff from the project site enters Vienna Drive.

**Drainage along east side of Haas Drive**

The area collecting at the catch basin at the northeast corner of Soquel Drive and Haas Drive from the gutter flow on the east side of Haas drive extends 350 feet north of Soquel Drive. There is no gutter on the east side of the street above this point and the pavement above this point is sloping to the west side of the street. The pavement on Haas Drive is 36 wide and is crowned at the centerline. The drainage area is 18' wide x 350 long or 0.14 acre. A 10-year storm event would produce:

$$Q_{10} = (0.90)(2.10)(0.14)$$

$$= \underline{0.26 \text{ cubic foot per second}}$$

The gutter slope on Haas Drive curb return just before the ramp is 4.5%. The flow capacity on the 2 wide gutter with only 0.17 flow depth is 0.85 c.f.s. At 0.26 c.f.s. the flow depth would be only 0.12 ±'. No runoff from the project site enters Haas Drive.

(See Maps on following pages.)

Environmental Review Initial Study  
 ATTACHMENT 6.12.16  
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Drive

CONSTRUCT ACCESSIBLE RAMP PER FIG. ST-8B (TYP. 3 PLACES)

REFER TO C5 FOR STORM DRAIN INFORMATION IN SOQUEL DRIVE

HOT TAP CONNECTION PER S.C.W.D. FIG. S-3

(E) STREET LIGHT TO BE RELOCATED PER ELECTRICAL PLANS (BY OTHERS)

CONSTRUCT CROSS GUTTER PER FIG. ST-5 (TYP. 2 PLACES)

CONSTRUCT ACCESSIBLE RAMP PER FIG. ST-8B (MODIFIED AS SHOWN - THIS LOCATION ONLY)

(E) SSMH

ABANDON (E) 6" C.I. WATER MAIN

Soquel

FACE OF CURB DATA  
R=30.00'  
L=43.30'  
A=82°42'10"

INSTALL 76' L.F. 6" PVC WATER

CONSTRUCT CURB, GUTTER AND SIDEWALK PER FIG. ST-4A

Haas Drive (exist.)

(TO BE REMOVED)

FACE OF CURB DATA  
R=30.00'  
L=51.16'  
A=97°42'43"

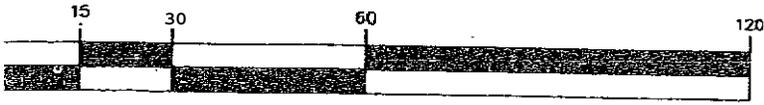
CONSTRUCT 2" A.C. OVER 6" AGG. BASE ACCESS ROAD TO (E) ELECTRICAL FACILITIES

CONST. SSMH #6  
STA. 1+73.71  
O/S: 6.00' L

STA. 2+27.14  
CL OF 18' DWY  
APPROACH PER  
FIG. ST-6C

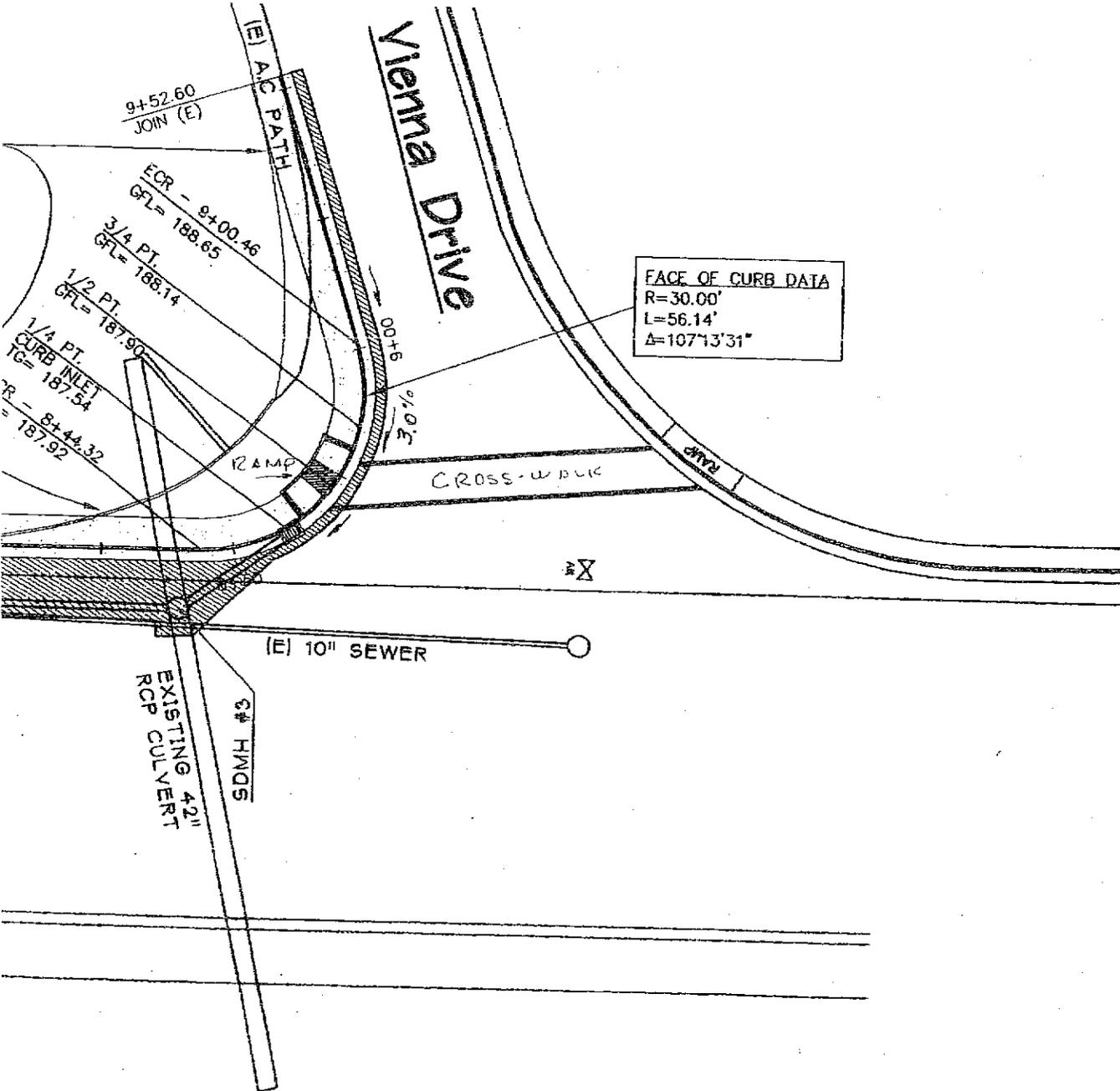
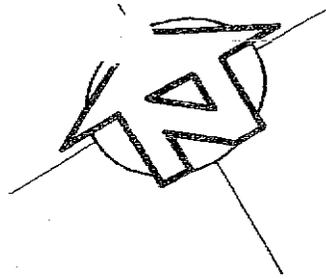
Environmental Review Initial Study  
ATTACHMENT 6, 14 of 16  
APPLICATION 06-0651 Plan

# GRAPHIC SCALE



( IN FEET )

1 inch = 30 ft.



Environmental Review Initial Study  
 ATTACHMENT 6, 15 of 16  
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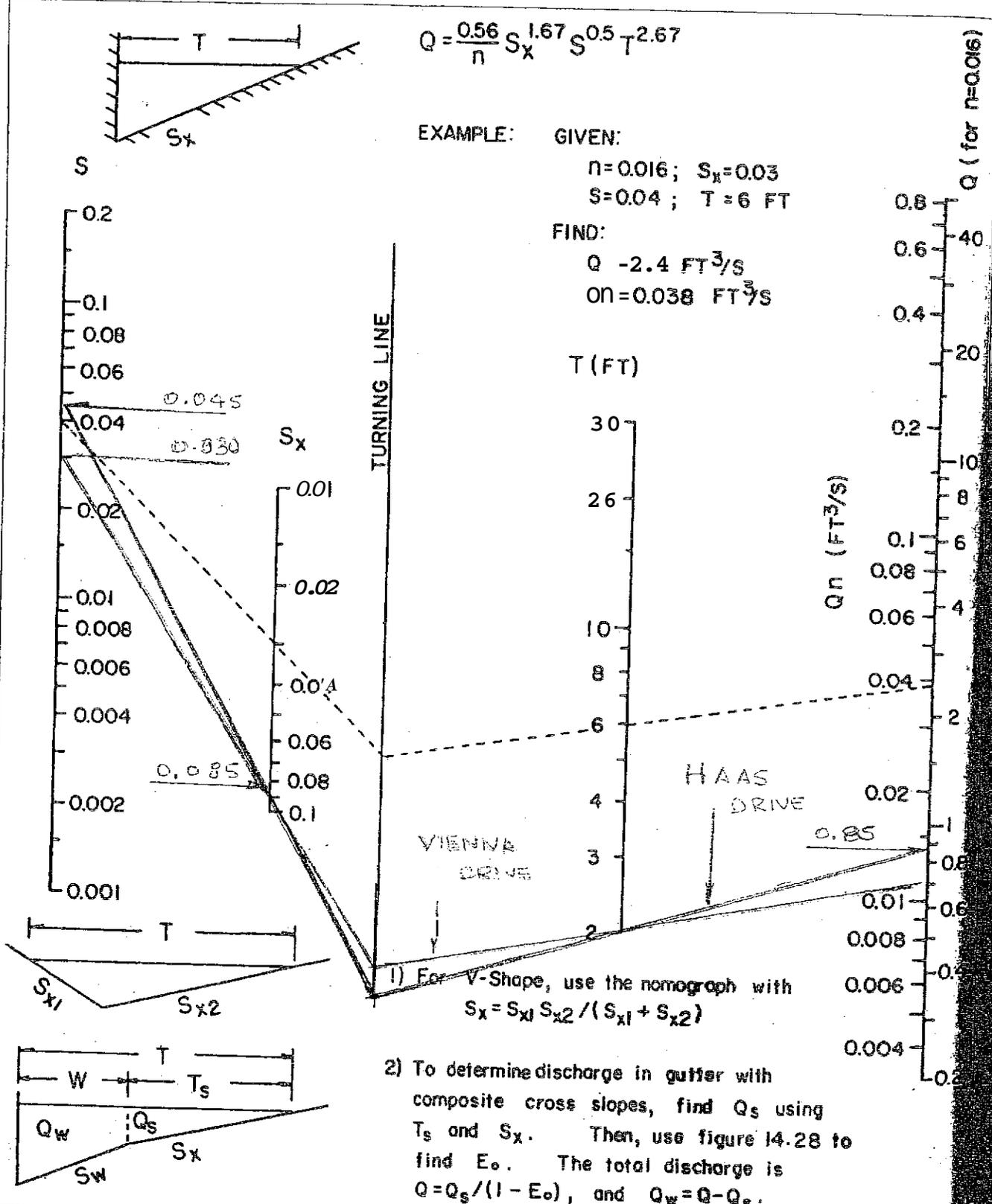
$$Q = \frac{0.56}{n} S_x^{1.67} S^{0.5} T^{2.67}$$

EXAMPLE: GIVEN:

$n=0.016$ ;  $S_x=0.03$   
 $S=0.04$ ;  $T=6$  FT

FIND:

$Q = 2.4$  FT<sup>3</sup>/S  
 $n = 0.038$  FT<sup>3</sup>/S



1) For V-Shape, use the nomograph with  $S_x = S_{x1} S_{x2} / (S_{x1} + S_{x2})$

2) To determine discharge in gutter with composite cross slopes, find  $Q_s$  using  $T_s$  and  $S_x$ . Then, use figure 14.28 to find  $E_o$ . The total discharge is  $Q = Q_s / (1 - E_o)$ , and  $Q_w = Q - Q_s$ .

FIGURE 14.24 Nomograph for flow in triangular gutter sections. Reference: US DOT, FHWA, Drainage Review, Initial Study, Environmental Management, Highway Payments, HEC-12 (1988)

ATTACHMENT 6/16/16  
 APPLICATION 06-0651

C O U N T Y O F S A N T A C 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: Randal1 Adams  
Application No.: 06-0651  
APN: 039-062-05

Date: May 1, 2007  
Time: 09:53:09  
Page: 1

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Environmental Planning Completeness Comments

===== REVIEW ON NOVEMBER 27, 2006 BY KENT M EDLER =====

Following are Completeness Comments Related to Grading and Soils

1. Show proposed grading contours on sheet TM4
2. Show a grading x-section that runs from bldg 1 to bldg 2
3. Show a grading x-section that runs from bldg 3 to bldg 6
4. Show a grading x-section that runs from bldg 8 to bldg 10.
5. The plan sheets submitted were not plotted to scale. Please submit plan sheets that are plotted to scale.
6. Clearly show where pad and FF elevations change for building 1 and also building 2. (for example plan view for building 1 shows FF at 198.62, but x-section D-D shows a FF of 202. The FF of 202 must be indicated on plan view)
7. Show top of wall and bottom of wall elevations for all proposed walls
8. Show how roof runoff will be handled from buildings 1-7.
9. Clearly show all onsite drainage patterns
10. A plan review letter from the soils engineer will be required prior to this application being deemed complete. The plan review letter must state that the proposed grading and drainage plans are in conformance with their geotechnical recommendations.

===== UPDATED ON DECEMBER 11, 2006 BY ANDREA M KOCH =====

- 1) A Riparian Exception (to be processed at an "at-cost" charge) will be required

According to Riparian Pre-site 04-0047, the stream that lies adjacent to the proposed development is an unnamed perennial stream that drains to Aptos Creek. For developed parcels within the Urban Services Line that lie adjacent to an arroyo, the appropriate riparian buffer is 20 feet, as measured from the top of the arroyo. No development may take place within the riparian buffer unless Planning grants a Riparian Exception. There is an additional construction setback of 10 feet from the edge of the buffer, meaning that structures cannot be located closer than  $20+10=30$  feet from the top of the arroyo unless a Riparian Exception is obtained.

The Riparian Pre-site stated that the requirement for a 20-foot buffer from the dripline of woody vegetation could be waived due to the many large oaks on the parcel.

For this project, proposed yard areas and structures encroach into the 20-foot wide buffer and additional 10-foot wide construction setback.

Environmental Review Initial Study

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ATTACHMENT 7, Lot 16  
APPLICATION 06-0651

Discretionary Comments - Continued

Project Planner: Randall Adams  
Application No.: 06-0651  
**APN:** 039-062-05

Date: May 1, 2007  
Time: 09:53:09  
Page: 2

2) On the Preliminary Erosion Control Plan on Sheet TM5, call out on the site plan the location of the silt fence (which appears to be indicated by the dashed line with asterisks).

3) 26 trees are proposed for removal on Sheet TM2.

On Sheet AB01 prepared by James P. Allen & Associates. 33 trees are proposed for removal

It appears that Sheet TM2 represents actual proposed tree removal, while Sheet AB01 represents the arborist's recommendations. It is acceptable, and even encouraged, to remove less trees than recommended by the arborist. However, please clearly indicate on the plans which sheet (Sheet TM2 or Sheet AB01) will dictate the amount of tree removal

4) Please show on the improvement plans a) the 20-foot wide riparian buffer, as measured from the top of the arroyo, and b) the additional 10-foot wide construction setback for structures

5) On Sheet L1 (the landscape plan), state the number of trees proposed for removal and the number of new trees proposed.

Also, several plant abbreviations are not defined on the landscape plan. Please define all plant abbreviations. For example, what species are represented by "MC" and "IL"?

Also, the landscape plan shows acacia removal occurring in the grove at the north-east corner of the parcel. If the project arborist finds it feasible, replace each acacia with a new oak tree located in the grove.

The landscape plan does not label the new tree to be planted in between Units 6 and 7. Label this as a new coast live oak.

6) Once the final project plans have been prepared, submit a plan review letter from the project arborist. The plan review letter must state that the final project plans are in general conformance with the recommendations in the arborist's report.

===== UPDATED ON FEBRUARY 21, 2007 BY KENT M EDLER ===== Updated Completeness Comments for Grading:

1. The plans are still not to scale. Please revise and re-submit plans.

Note: See compliance issues for unresolved issues with setbacks.

===== UPDATED ON FEBRUARY 21, 2007 BY ANDREA M KOCH =====

1) All Andrea Koch's completeness comments dated December 11, 2006 have been addressed. See Kent Edler's comments for any remaining completeness comments regarding grading and soils.

Note: Please see the compliance comment in the "Miscellaneous Comments" section for information regarding acacia removal and replacement with oaks.

Environmental Review Initial Study

ATTACHMENT 7, 2nd 16  
APPLICATION 06-0651

Discretionary Comments - Continued

Project Planner: Randall Adams  
Application No.: 06-0651  
APN: 039-062-05

Date: May 1, 2007  
Time: 09:53:09  
Page: 3

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===== UPDATED ON APRIL 17, 2007 BY KENT M EOLER ===== Plans are complete for Env. Planning issues.

Environmental Planning Miscellaneous Comments

===== REVIEW ON NOVEMBER 27, 2006 BY KENT M EOLER =====

Following are Compliance Comments Related to Grading and Soils:

1. The soils report states that all structures must be setback 10' from the top of slope. Buildings 5 and 6 are closer than 10' from the top of slope.
2. The top of slope line shown on sheet TM3 is not drawn at the top of slope in all locations.
3. The limits of grading disturbance are not accurate. Include the graded swale south of building 3.
4. Roof runoff from buildings 9 & 10 are shown to be concentrated at the top of a large erosional feature. The soils engineer must specifically approve of the dissipator locations in this area.

Following are Permit Conditions / Additional Information that will be required:

1. Permit Condition: Winter grading will not be allowed on this site.
2. Permit Condition: Grading must start by August 15. If grading has not started by August 15, the commencement of grading must wait until the following April 15.
3. Permit Condition: The soils engineer must review the final improvement plans and submit a plan review letter to Environmental Planning.
4. Show details for gabion dissipators
5. Show details of the graded swale south of building 3
6. The erosion control plan must include means to control runoff during the winter in the event that the permanent drainage system has not been installed.
7. The location of the silt fence must be labelled on the erosion control plan

Note: The soils report has been accepted. Letter sent on 11/27/06

===== UPDATED ON DECEMBER 11, 2006 BY ANDREA M KOCH =====

1) Planning can make the findings to grant a Riparian Exception. The Exception is necessary to provide enough usable space for the proposed development. In addition, the site is already disturbed, and the proposed project will not further degrade the riparian corridor. In fact, it will improve the riparian area by removing existing development encroaching right up to the top of the arroyo, and by removing invasive, non-native acacia trees from the riparian buffer. Implementation of proper erosion

---

Environmental Review Initial Study

ATTACHMENT 7, 3 of 16  
APPLICATION 06-0651

Discretionary Comments - Continued

Project Planner: Randall Adams  
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control and replacement of any removed trees will also help maintain the quality of the riparian area.

2) Grading, construction, tree removal, and other development shall generally conform to the recommendations in the arborist's report.

3) All development must be inspected by the arborist at the points recommended on page 14 of the arborist's report.

4) The project arborist shall submit a final letter after completion of improvements stating that the work performed was in general conformance with the recommendations in the arborist's report.

===== UPDATED ON FEBRUARY 21, 2007 BY KENT M EDLER ===== Updated Compliance Comments for Grading:

1. Buildings 5 & 6 are still not setback 10' from the top of slope. Also the measurements shown on the plans are to a contour 2' down the slope from the top of slope and are also not drawn at building 5 to the closest location of the top of slope. Revise plans accordingly

2. Building 7 has been shifted now so that it is also located within 10' of the top of slope. Revise the plans so that building 7 is setback 10' from the top of slope.

===== UPDATED ON FEBRUARY 21, 2007 BY ANDREA M KOCH =====

Updated compliance comments for tree removal/replanting:

1) Please show on the plans removal of the 5 acacias at the northeast side of the parcel. These acacias are tree #'s 128, 129, 130, 131, and 136.

Please also show replacement of each acacia with an oak tree.

Permit Conditions:

1) Before grading, install preservation fencing as shown on Sheet AB02 to protect trees to be retained from damage during construction. The project arborist shall inspect this fence prior to grading.

===== UPDATED ON APRIL 17, 2007 BY KENT M EDLER ===== Application is in compliance with grading and soils issues. Note: to Planner: See previous comments dated 11/27/06 for permit conditions.

Housing Completeness Comments

Environmental Review Initial Study  
ATTACHMENT 7, 9 of 16  
APPLICATION 06-0651

===== REVIEW ON DECEMBER 5, 2006 BY TOM POHLE =====

**COMPLETENESS:** This project proposes to divide a single parcel into 10 residential lots and to build 10 townhomes. The developer has proposed designating 2 of the common wall townhomes as affordable housing. The designation of 2 homes exceeds the affordable housing obligation (AHO) for this project.

**COMPLIANCE:** The developer has proposed to designate 2 of the common wall townhomes as

Project Planner: Randall Adams  
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the affordable homes for the project (units 3 and 5 on sheet A002 of the plans). County Code 17.10.032 requires affordable homes to be consistent with the market rate units being constructed in terms of lot size, number of bedrooms, design and other features. The developer should review the referenced section prior to submitting an application for a building permit to insure the affordable homes are consistent with County Code.

Housing Miscellaneous Comments

===== REVIEW ON DECEMBER 5, 2006 BY TOM POHLE =====  
PERMIT CONDITIONS: Prior to issuance of building permits, the developer must execute and record a Measure J Participation Agreement.

Dpw Drainage Completeness Comments

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

===== REVIEW ON DECEMBER 11, 2006 BY DAVIU W SIMS =====  
1st Review Summary Statement:

Prior guidance on development requirements was given to the applicant during a Design Review Group meeting (Applic. 06-0142). The proposal is generally in compliance with drainage policies requiring on-site mitigation measures. The required off-site assessments do not fully meet the County Design Criteria (CDC) Part 3, Stormwater Management, June 2006 edition. Additional information is needed for complete evaluation.

Reference for County Design Criteria: <http://www.dpw.co.santa-cruz.ca.us/DESIGNCRITERIA.PDF>

Policy Compliance Items:

Item 1) The types of mitigation measures proposed generally meet drainage policy requirements and appear sufficient to handle the site runoff impacts successfully. Water quality treatment is proposed to be achieved by the infiltrative character of the on-site mitigations. See information item 5.

Information Items:

Item 2) Incomplete. The **offsite** hydrology work submitted was not accepted. Please provide complete, detailed and mapped documentation that the assessment evaluates properly for full build-out based on current zoning, and allowed future land use trends for denser development, such as residential 2nd units. The use of C factors of 0.30 and 0.35 in the calculations does not agree with the allowed ranges provided in the CDC Figure SWM-1 showing 0.45 to 0.60 for low residential zoning. The areas over which these factors were applied were not presented or clear. Additionally, design flood overflow must continue to be shown to pass through the **publicly maintained** cross-culvert under Soquel Ave (100-yr.) and not overtop the road surface. See CDC Part 3, Section C, item 1.

*Environmental Review Initial Study*  
ATTACHMENT 7.5 of 16  
APPLICATION 06-0651

Discretionary Comments - Continued

Project Planner: Randall Adams  
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Item 3) Incomplete. Assessment of gutter spread, flow depth, rate and velocity is required for the 10-yr event to determine if inlets on the east side of Haas Drive and the west side of Vienna Drive are needed to pick up accumulated runoff coming down these roads prior to its passing as gutter flow across the entrance of the handicap ramps at Soquel Drive. The concern is for safe pedestrian use over the ramps when flows are heavy. Please submit for review evaluation.

Item 4) Incomplete. County policy requires topography be shown a minimum of 50 feet beyond the project work limits. This extent is not currently provided.

Item 5) Incomplete. The geotechnical report includes site drainage recommendations on page 26, 27 that are inconsistent with the requirements of having to provide development mitigation, but which do not appear to have been transferred into the proposed plan. Please have the geotechnical engineer review the proposed plans and submit a stamped letter providing comment/approval on the proposal as it pertains to the development requirements that must be followed, barring a need and formal request for an exception

Please see miscellaneous comments. ===== UPDATED ON FEBRUARY 21, 2007 BY DAVID W SIMS =====

2ND Review:

Item 1) No additional comment

Item 2 & 5) Further requirements deferred. See miscellaneous comments

Item 3 & 4) Complete

Dpw Drainage Miscellaneous Comments

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

===== REVIEW ON DECEMBER 11, 2006 BY DAVID W SIMS =====

A) Portions of the pervious pavers on lots 8, 9 and 10 driveways extend over the property boundary into County right-of-way. The County roads section may not approve of this configuration. Please review. The Stormwater section has no objections.

B) Storm drainage calculations are inconsistent between the calculation package and the plans. Please correct for consistency with all revisions.

C) A construction detail of the porous pavers and sub-grade fill will be required prior to acceptance of the improvement plans and final map. The design must maintain permeability.

D) It is not shown or noted how roof drainage from lots 1 through 7 will be mitigated. Please clarify.

E) The trench drain detail does not show use of any filter fabric. Please review. It may be advisable to extend the trench drain across the entrance of Oak Leaf Ct. to assure complete capture of pollutants.

Environmental Review Initial Study  
ATTACHMENT 7, 6 of 16  
APPLICATION 06-0651

Discretionary Comments - Continued

Project Planner: Randall Adams  
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A drainage impact fee will be assessed on the net increase in impervious area. The fees are currently \$0.95 per square foot, and are assessed upon permit issuance. Reduced fees are assessed for semi-pervious surfacing to offset costs and encourage more extensive use of these materials.

A recorded maintenance agreement may be required for certain stormwater facilities.

Please note on the plans provision for permanent bold markings at each inlet that read: "NO DUMPING - DRAINS TO BAY"

Construction activity resulting in a land disturbance of one acre or more, or less than one acre but part of a larger common plan of development or sale must obtain the Construction Activities Storm Water General NPDES Permit from the State Water Resources Control Board. Construction activity includes clearing, grading, excavation, stockpiling, and reconstruction of existing facilities involving removal and replacement. For more information see:  
<http://www.swrcb.ca.gov/stormwtr/constfaq.html>

Because this application is incomplete in addressing County requirements, resulting revisions and additions will necessitate further review comment and possibly different or additional requirements

All resubmittals shall be made through the Planning Department. Materials left with Public Works will not be processed or returned.

Please call the Dept. of Public Works, Stormwater Management Section, from 8:00 am to 12:00 noon if you have questions. ===== UPDATED ON FEBRUARY 21, 2007 BY DAVID W SIMS =====

Please address all of the following items during submittal of the final map and improvement plans.

A) Item revised

B) Storm drainage calculations are inconsistent between the calculation package and the plans. Please correct for consistency with all revisions.

C) A construction detail of the porous pavers and sub-grade fill will be required prior to acceptance of the improvement plans and final map. The design must maintain permeability. Environmental Review Initial Study

D) Item revised.

ATTACHMENT 7, 7 of 16  
APPLICATION 06-0651

E) The trench drain detail does not show use of any filter fabric. Please review.

F) Add notes to the plans detailing maintenance requirements for the on-site drainage system and mitigation measures.

G) Submit with the drainage assessment appropriate calculations for the 42" pipe flowing as a culvert under inlet control conditions. The open channel pipe flow calculation submitted does not represent the most restrictive or probable flow condition for the 100-year event.

Project Planner: Randall Adams  
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H) Provide an accurately scaled watershed area ortho-topo map (~1" = 400') with the drainage area boundary and the runoff coefficient areas used clearly delineated.

I) Watershed elevation change determined when using SWM4 was in error by approximately 100%. affecting the time of concentration.

J) Stamp and sign the drainage assessment and calculations.

K) Provide a stamped and signed copy of the geotechnical engineer's letter

L) Revise the sewer manhole connection at the frontage to avoid conflicts with all utilities. Observe appropriate separations required by each utility. The drainage section does not want a new manhole connection to the storm drain line since it is possible to discharge water to the stream channel by surface overflow through the already proposed vegetated swale behind the sidewalk.

M) The trench grate in front of the dumpster may be a rolling access problem. Perhaps a metal plate could be used. The underground continuity of the trench system should be retained.

N) A new/revised and recorded easement will be required that provides County access to the culvert headwall and perhaps to the embankment along Vienna Drive. Contact Public Works for more information on the desired configuration. Please research the current 10 feet wide easement status and submit documentation showing to whom the easement is provided and whether it was ever accepted.

O) Show details of the resurfaced A.C. sidewalk along Vienna Drive showing the gutter flowline, and specifically note and detail any surface drainage outfall configurations occurring along this resurfaced reach.

P) The recent embankment slipout just upstream of the 42" culvert entrance will be required to be stabilized and revegetated, along with minor backfill against the upstream edge of the sac-Crete culvert wingwall. Show this work on the plans.

Q) Please note on the plans provision for permanent bold markings at each inlet that read: "NO DUMPING - DRAINS TO BAY".

Environmental Review Initial Study

ATTACHMENT 7, 8 & 16  
APPLICATION 06-0651

Dpw Road Engineering Completeness Comments

===== REVIEW ON DECEMBER 11, 2006 BY GREG J MARTIN =====

A sight distance analysis will be required for the three driveways proposed on Haas Drive.

----- Exception requests will be required for Haas Drive and Vienna Drive since they have not been, or are proposed to be, improved to current standards

----- The proposed internal roadway is proposed at 24 feet which is less than the minimum local street standard (30 feet paved, 40 feet r/w). DPW cannot support the exception request for the internal road,

----- The striping for Soquel

Discretionary Comments -Continued

Project Planner: Randall Adams  
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Drive needs to be fully shown on the plan view to show the limits of the two-way left turn lane and to identify potential conflicts with any other turn movements at Haas and Vienna.

The access road from Haas Drive is for utility purposes only and is not recommended for use by this development.

The applicant must submit documentation that the road abandonment has been completed for the corner of Soquel Drive/Haas Drive (expected to be before the Board on December 12, 2006).

Pedestrian access on Haas Drive is a concern for the three units proposed. An internal pedestrian access path at the minimum is recommended to access Soquel Drive through the rest of the development.

Transportation Improvement Area fees are required for each new residential lot at the rate in effect at the time of the final map recordation. Please let me know if you have any questions.

- ===== UPDATED ON FEBRUARY 27, 2007 BY GREG J MARTIN =====
- 1. Bus stop location is required to be determined and shown to allow review.
- 2. The cross section for the internal road does not show a width of 24 feet as dimensioned.
- 3. The sidewalk is recommended to meet County standards.
- 4. All access paths need to meet ADA accessibility requirements.
- 5. Submit documentation that the corner of Soquel Drive and Haas Drive has been acquired.

6. Aptos Transportation Improvement Area fees are required. Ten residential lots multiplied by \$4,400 per unit equals \$44,000. The total TJA fee of \$44,000 is to be split evenly between transportation improvement fees and roadside improvement fees.

Contact Greg Martin at 831-454-2811 with questions.

Comments per JRS ===== UPDATED ON APRIL 25, 2007 BY GREG J MARTIN =====

- 1. Bus stop location is required to be determined and shown to allow review.

2. Aptos Transportation Improvement Area fees are required. Ten residential lots multiplied by \$4,400 per unit equals \$44,000. The total TIA fee of \$44,000 is to be split evenly between transportation improvement fees and roadside improvement fees.

Contact Greg Martin at 831-454-2811 with questions

Comments per JRS

Dpw Road Engineering Miscellaneous Comments

Environmental Review Initial Study

ATTACHMENT 7 of 16  
APPLICATION 06-0651

- ===== REVIEW ON DECEMBER 11, 2006 BY GREG J MARTIN =====
- ===== UPDATED ON FEBRUARY 27, 2007 BY GREG J MARTIN =====
- ===== UPDATED ON FEBRUARY 27, 2007 BY GREG J MARTIN =====

Project Planner: Randall Adams  
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===== UPDATED ON APRIL 25, 2007 BY GREG J MARTIN =====

Dpw Sanitation Completeness Comments

===== REVIEW ON APRIL 37, 2007 BY DREW BYRNE =====  
NO COMMENT

Dpw Sanitation Miscellaneous Comments

===== REVIEW ON APRIL 17, 2007 BY DREW BYRNE =====  
2nd Review, 1st Review done by memo  
Permit Conditions/Additional Information-

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.

All existing public sewer easements shall be shown on the tentative map

A separate public sewer easement shall be granted over the existing public sewer along the western parcel boundary. Said easement shall be shown on the Final Map

All proposed on site sewers shall be privately maintained. All proposed on site collector sewers shall be maintained by the homeowner-s association.

Following completion of the discretionary permit process and prior to obtaining a building-permit, the following conditions shall be met during the final plan (Public Works) review process:

- 1) Department of Public Works and District approval shall be obtained for an engineered sewer improvement plan showing sewers needed to provide service to each lot or unit proposed. This plan shall be approved by the District and the County of Santa Cruz Public Works prior to the issuance of building permits. This plan shall conform to the County of Santa Cruz Design Criteria and shall show any easements necessary. Existing and proposed easements shall be shown on any required Final Map.
- 2) The applicant shall form a homeowner-s association with ownership and maintenance responsibilities for all on-site sewers for this project. Privately maintained sewers shall be noted on the Final Map and the association CC&R's. Record CC&R'S after District review and approval.

Following completion of the above mentioned engineered sewer plan and Final Map, the following conditions shall be met during the building permit Process.

- 1) 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.

Environmental Review Initial Study

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APPLICATION 06-06

Discretionary Comments - Continued

Project Planner: Randall Adams  
Application No. : 06-0651  
APN: 039-062-05

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2) 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.

3) 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. ===== UPDATED ON APRIL 17, 2007 BY DREW BYRNE =====

Aptos-La Selva Beach Fire Prot Dist Completeness C

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

===== REVIEW ON JANUARY 3, 2007 BY ERIN K STOW =====

DEPARTMENT NAME: Aptos/La Selva Fire Dept. DENIED

Have the DESIGNER add the appropriate NOTES and DETAILS showing this information on the plans and RESUBMIT, with an annotated copy of this letter:

PROVIDE VERIFICATION that Oak Leaf Court has been officially submitted for approval by the Addressing Coordinator for Santa Cruz County.

Oak Leaf Court shall be marked and maintained as a Fire Lane. NOTES on the civil drawings shall show the location of the required Fire Lane signs, and shall have a notation that all curbs shall be painted red and be stenciled with the words "NO PARKING - FIRE LANE".

All apparatus access roads shall be able to support a minimum of 25 tons. NOTE and PROVIDE VERIFICATION that the gutter drains shown on TM3 and TM4 shall meet this requirement. as they are a part of the required apparatus access road.

NOTE on the plans that these plans are in compliance with California Building and Fire Codes (2001) and District Amendment.

NOTE on the plans that the building shall *be* protected by *an* approved automatic fire sprinkler system complying with the currently adopted edition of NFPA 13D and Chapter 35 of California Building Code and adopted standards *of* the authority having jurisdiction.

NOTE on the plans that installation of water meters shall meet the requirements set forth by Soquel Creek Water District Standard #S-20. This standard shall replace the notations about 3/4" services.

NOTE on the plans that a 100 foot clearance will be maintained with non-combustible vegetation around all structures or to the property line (whichever is a shorter distance). Single specimens of trees, ornamental shrubbery or similar plants used as ground covers, provided they do not form a means of rapidly transmitting fire from native growth to any structure are exempt.

===== UPDATED ON FEBRUARY 22, 2007 BY ERIN K STOW =====

DEPARTMENT NAME: Aptos/La Selva Fire Dept. APPROVED

All Fire Department building requirements and fees will be addressed in the Building Permit phase.

Plan check is based upon plans submitted to this office. **Any** changes or alterations shall be re-submitted for review prior to construction.

Environmental Review Initial

Aptos-La Selva Beach Fire Prot Dist Miscellaneous

ATTACHMENT 7, 11/16/16  
APPLICATION 06-0651

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

===== REVIEW ON JANUARY 3, 2007 BY ERIN K STOW =====

Discretionary Comments - Continued

Project Planner: Randall Adarns  
Application No.: 06-0651  
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NO COMMENT

===== UPDATED Ob: FEBRUARY 22, 2007 BY ERIN K STOW =====

NO COMMENT

Environmental Review Initial Study  
ATTACHMENT 7, 12 of 16  
APPLICATION 06-0651

**COUNTY OF SANTA CRUZ**  
**DEPARTMENT OF PUBLIC WORKS**  
*INTER-OFFICE CORRESPONDENCE*

DATE: April 5, 2007  
TO: Randall Adams, Planning Department  
FROM: Carl Rom, Department of Public Works, Survey/Development Review  
SUBJEC APPLICATION 06-0651, APN 039-062-05, TRACT NO 1529,  
HIDDEN OAKS, THIRD SUBMITTAL

---

I have no further comments on this application.

If you have any questions or need any clarification of **the** information in this memo, please call **me** at extension 2806.

CDR:cdr

Environmental Review Initial Study  
ATTACHMENT 7.13rd/6  
APPLICATION 06-0651

**INTEROFFICE MEMO**

APPLICATION NO: 06-0651 (third routing)

Date: April 3, 2007

To: Randall Adams, Project Planner

From: Larry Kasparowitz, Urban Designer

Re: Design Review for minor land division at 6851 Soquel Drive, Aptos

**GENERAL PLAN / ZONING CODE ISSUES**

Design Review Authority

13.11.040 Projects requiring design review.

(d) All minor land divisions, as defined in Chapter 14.01, occurring within the Urban Services Line or Rural Services Line, as defined in Chapter 17.02; all minor land divisions located outside of the Urban Services Line and the Rural Services Line, which affect sensitive sites; and, all land divisions of 5 parcels (lots) or more.

Evaluation Criteria	Meets criteria In code ( ✓ )	Does not meet criteria ( ✓ )	Urban Designer's Evaluation
<b>Compatible Site Design</b>			
Location and type of access to the site	✓		
Building siting in terms of its location and orientation	✓		
Building bulk, massing and scale	✓		
Parking location and layout	✓		
Relationship to natural site features and environmental influences	✓		
Landscaping	✓		
Streetscape relationship	✓		
Street design and transit facilities			N/A
Relationship to existing structures			N/A
<b>Natural Site Amenities and Features</b>			
Relate to surrounding topography	✓		Environmental Review Initial Study
Retention of natural amenities	✓		ATTACHMENT 7, 14 of 16
Siting and orientation which takes advantage of natural amenities	✓		APPLICATION 06-0651

Ridgeline protection			N/A
<b>Views</b>			
Protection of public viewshed	✓		
Minimize impact on private views	✓		
<b>Safe and Functional Circulation</b>			
Accessible to the disabled, pedestrians, bicycles and vehicles	✓		
<b>Solar Design and Access</b>			
Reasonable protection for adjacent properties	✓		
Reasonable protection for currently occupied buildings using a solar energy system			NIA
<b>Noise</b>			
Reasonable protection for adjacent properties	✓		

13.11.073 Building design.

Evaluation Criteria	Meets criteria In code ( ✓ )	Does not meet criteria ( ✓ )	Urban Designer's Evaluation
<b>Compatible Building Design</b>			
Massing of building form	✓		
Buildings silhouette	✓		
Spacing between buildings	✓		
Street face setbacks	✓		
Character of architecture	✓		
Buildings scale	✓		
Proportion and composition of projections and recesses, doors and windows, and other features	✓		
Location and treatment of entryways	✓		
Finish material, texture and color	✓		
<b>Scale</b>			
Scale is addressed on appropriate levels	✓		
Design elements create a sense of human scale and pedestrian	✓		
<b>Building Articulation</b>			
Variation in wall plane, roof line, detailing, materials and siting	✓		

Environmental Review Initial Study

ATTACHMENT 7, 1501/16  
APPLICATION 06-0651

Solar Design			
Building design provides solar access that is reasonably protected for adjacent properties	✓		
Building walls and major window areas are oriented for passive solar and natural lighting	✓		

Environmental Review Initial Study  
ATTACHMENT 7.16.07/16  
APPLICATION 06-0651



# COUNTY OF SANTA CRUZ

## PLANNING DEPARTMENT

701 OCEAN STREET, SUITE 410, SANTA CRUZ, CA 95060  
(831)454-2580 FAX: (831) 454-2131 TDD: (831) 454-2123  
TOM BURNS, DIRECTOR

February 26, 2004

AM Pomper  
Hospice Caring Project  
6851 Soquel Dr.  
Aptos, CA 95003

Re: Riparian Pre-Site for 6851 Soquel Dr., Aptos APN 039-062-05

Dear Ms. Pomper,

I have performed a Riparian Pre-site study at your request in order to establish the location of riparian resources on the subject parcel. The study included doing background research on available files in the Planning Department and performing a site visit.

For this parcel, the watercourse that lies adjacent to the proposed development is an unnamed perennial stream that drains to Aptos Creek. The stream is deeply incised and heavily vegetated with both native and non-native species, including several large coastal oaks.

For developed parcels within the Urban Services Line that **lie** adjacent to an arroyo, the appropriate riparian buffer is twenty (20) feet, plus a ten (10) foot development setback, for a total riparian setback of thirty (30) feet, measured from the top of the arroyo. Additionally, the Riparian Protection Ordinance requires a 20-foot buffer from the dripline of any woody vegetation associated with the stream. Because the dripline of the many large *oaks* on your parcel virtually cover the parcel, this requirement *can* be waived in this instance.

The site map submitted with this application is not of a sufficient scale to accurately depict the riparian setback, however an attempt was made to delineate the *estimated* setback. Please note that there are several existing buildings that already encroach into the riparian setback. The Riparian Protection Ordinance allows replacement of existing structures that encroach into the riparian setback without a Riparian Exception, as long as the new structure does not extend any further into the setback.

In my opinion, your options for the expansion of the current facility include:

- o Replacement/upgrade of the existing buildings, which would be exempt from the Riparian Protection Ordinance
- o Limiting any expansion to the western and northern portions of the property
- o Applying for a Riparian Exception to encroach further into the 30-foot riparian setback

Environmental Review Initial Study  
ATTACHMENT 8, List 3  
APPLICATION 06-0651

The question of whether or not the findings can be made for a Riparian Exception cannot be fully addressed at this time. However, such findings *cannot* be made unless it is demonstrated that less environmentally damaging alternatives do not exist. Please review the enclosed copy of the Riparian Corridor Protection Ordinance paying particular attention to the highlighted section that addresses *all* of the required findings necessary for approval of a Minor Riparian Exception.

Before submitting an application for a Minor Riparian Exception, please consider design alternatives that may reduce and/or eliminate encroachment into the riparian comdor buffers/setbacks. Please include this analysis in the application.

***Please note: This letter does not address issues related to any Environmental Planning issues (e.g., grading, soils, geology) aside from the riparian pre-site.***

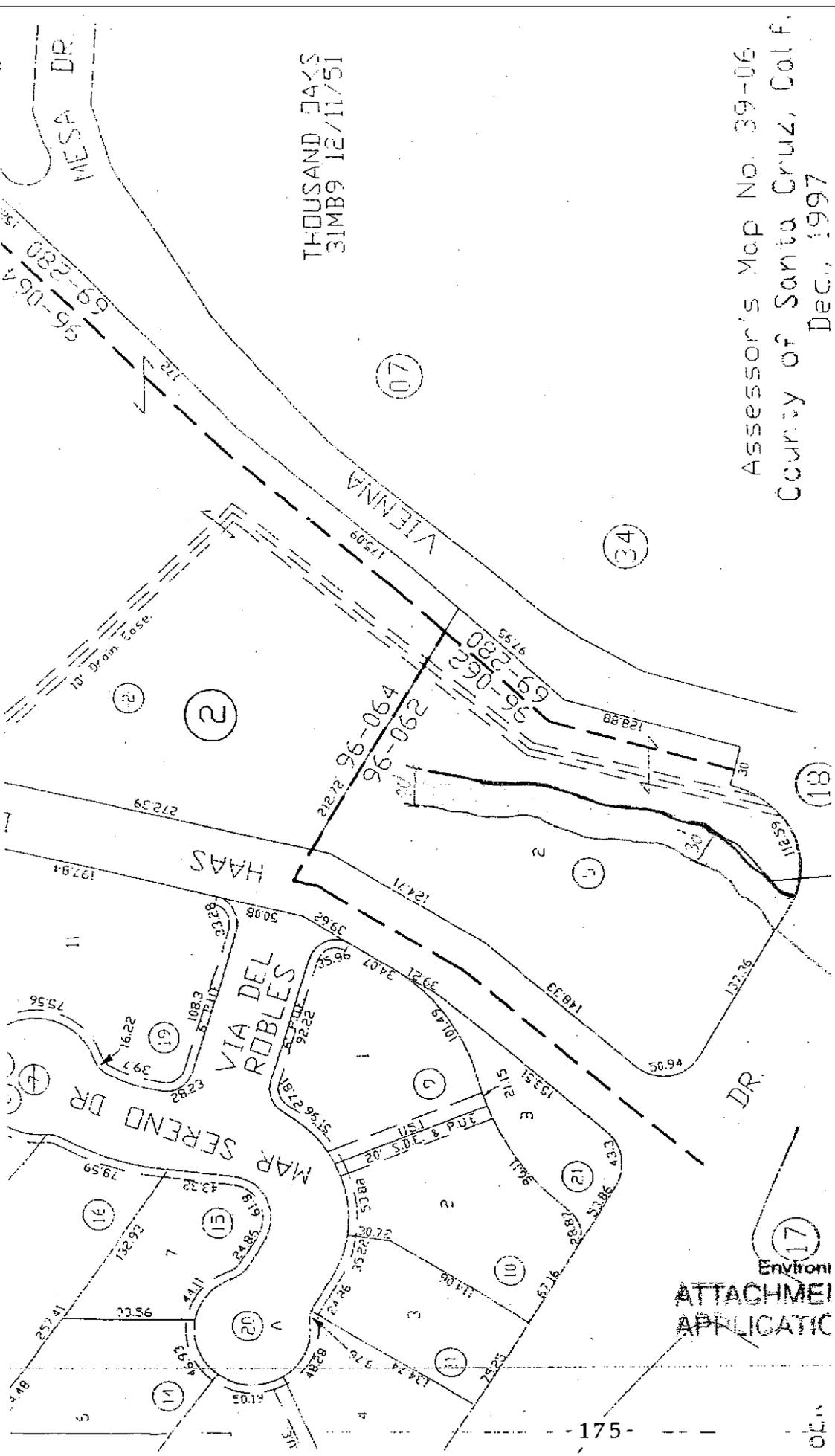
If you have questions regarding this riparian pre-site, please call me at (831) 454-3164 or e-mail me at [robin.bolster@co.santa-cruz.ca.us](mailto:robin.bolster@co.santa-cruz.ca.us)

Sincerely,

Robin M. Bolster  
Resource Planner

Enclosure

Environmental Review Initial Study  
ATTACHMENT 8, 2 of 3  
APPLICATION 06-0651



THOUSAND DAKS  
31MB9 12/11/51

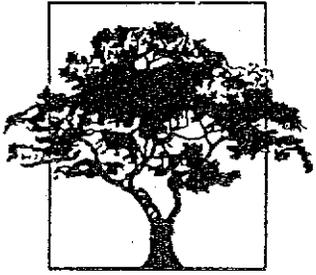
Assessor's Map No. 39-06  
County of Santa Cruz, Calif.  
Dec., 1997

APPROXIMATE LOCATION OF THE TOP OF CREEK  
BANK. NOT TO SCALE

ESTIMATED  
AFRIAN BUFFER  
130 FEET  
BACK OF

Environ  
ATTACHMEI  
APPLICATIC

tal Review Initial Study  
8, 3 and 3  
06-0651

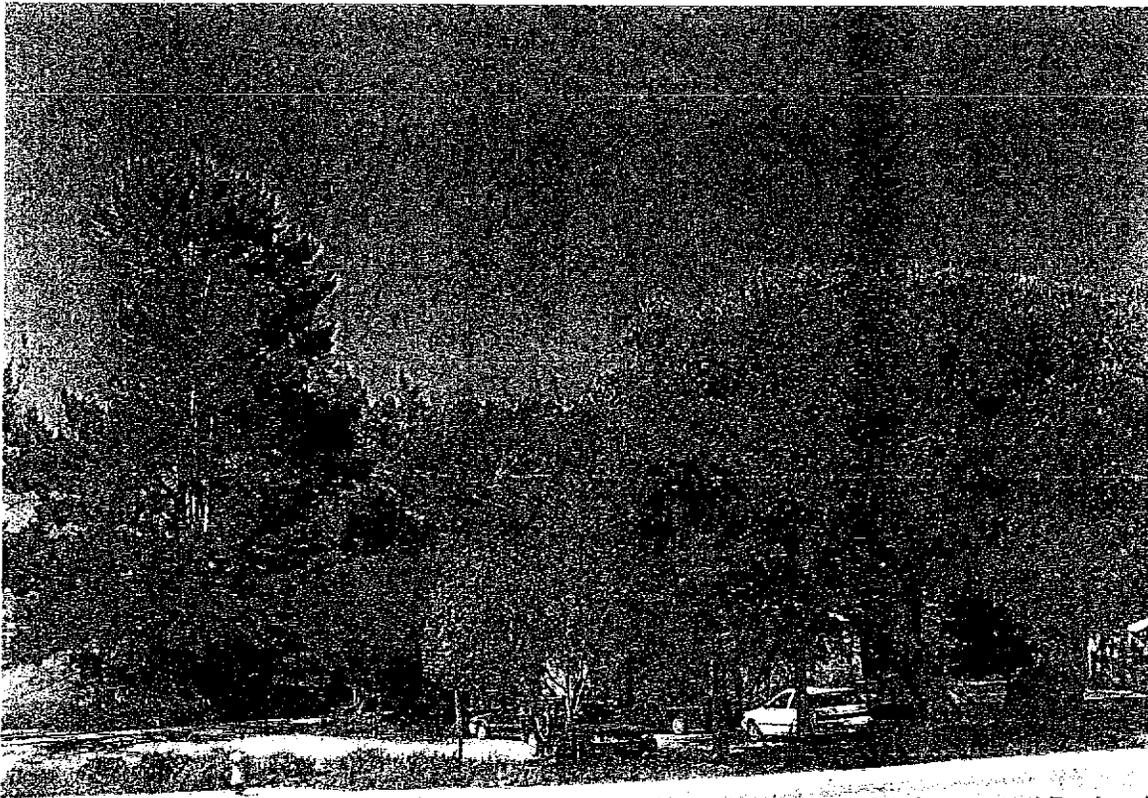


James P. Allen  
& Associates

*Dedicated to the Preservation of Trees*

## Tree Resource Evaluation/ Construction Impact Assessment

**Hidden Oaks Subdivision  
6851 Soquel Drive, Aptos, CA  
APN 039-062-05, Tract #1529**



Environmental Review Initial Study  
ATTACHMENT 9, 1 of 28  
APPLICATION '06-0651

### Consulting Arborists

611 Mission Street  
Santa Cruz, CA 95060

831.426.6603 office  
831.234.7739 mobile  
831.460.1464 fax

jpallen@consultingarborists.com  
www.consultingarborists.com

Prepared for  
**Keith Baxter and Randy D. Kanawyer**  
**BK Properties**

## ASSIGNMENT/SCOPE OF SERVICES

The demolition of existing structures and construction of a residential development is proposed for a site located 6851 Soquel Drive, APN 039-062-05. This property is populated with mature native and non-native trees that will be impacted by the proposed development of this site. To ensure the protection of the tree resources on this site, Keith Baxter and Randy D. Kanawyer, of BK Properties, L.P. have requested our firm provide a Tree Resource Evaluation and Construction Impact Assessment. To accomplish this assignment, the following tasks have been completed:

- Evaluate condition and preservation suitability for each tree? 6 inches in diameter.
- Review development plans as provided by Ifland Engineers Inc, to evaluate potential impacts.
- Make recommendations for alternative construction methods and preconstruction treatments to facilitate tree retention.
- Map approximate tree locations on an AutoCAD base map provided by Ifland Engineers.
- Create preservation specifications; including a Tree Location/Preservation Map.
- Determine the quantity of trees to be removed.
- Define appropriate replacement strategy for trees cited for removal.
- Document findings in the form of a report.

This assignment is limited to assessing the potential construction influences upon trees within the property boundary.

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## SUMMARY

Plans for this proposed project have been reviewed and the impacts to 60 inventoried trees have been assessed. The construction of plans as presented will require the removal of 22 trees. An additional 11 trees are recommended for removal due to their poor structural condition, high level of risk they will present or severe level of construction impacts.

Tree removal will occur only within previously disturbed areas and not within the Urban Arroyo.

One, 24-inch box or 15 gallon replacement tree will be planted per tree removed as components of the planned landscape.

The implementation of the procedures as defined within this document, including Demolition/Preconstruction Treatment Sequence, alternative construction methods and adherence to the Tree Preservation Specifications are required to safeguard trees proposed for retention.

Monitoring, by the Project Arborist, should occur at the intervals defined within this report to assure tree protection guidelines are adhered to and unforeseen impacts are resolved prior to damage occurring.

## BACKGROUND

This project involves the demolition of existing buildings and construction of 10 residences, associated parking lots and landscaped areas.

A preliminary site inspection with the Project Developers took place on February 2, 2006. During this inspection the general health of the existing forest system was discussed and the most appropriate position for the buildings was determined.

A more thorough inspection took place on March 15, 2006, where all single trunk trees  $\geq 6$  diameter inches or multi-bunk gees with a combination of diameters  $\geq 10$  inches were inventoried. Sixty trees in proximity to areas proposed for improvements were inventoried and assessed. Numbered metal tags were attached to the each tree/tree group's trunk at six feet above grade. The corresponding numbers and tree locations are documented on attached Tree Location Map.

Construction impacts were evaluated in the field using site plans provided by Project Engineers, Ifland Engineers Inc.

Tree health and structural integrity were evaluated visually from the root crown (where the trunk meets natural grade) to the foliar canopy.

Neither aerial inspection nor root crown excavation inspections were performed.

## OBSERVATIONS

### Site Description

Formerly the site of The Hospice Caring Center, this site has an existing home, support structures, driveways and parking. The site spans approximately 1.25 acres, located on the east of the Soquel and Haas Drive intersection, APN 039-062-05. It is bound to the east by Vienna Drive, to the south by Soquel Drive, to the west by Haas Drive and to the north by an undeveloped parcel

This parcel is varied in terrain, the eastern property boundary is a steep downward sloping drainage corridor classified as an "Urban Arroyo." The top-slope is the edge of a predominantly level midsection with a slight upslope in the northeastern section and a more dramatic slope towards Haas Drive.

Previous encroachment into the typical Urban Arroyo" buffer zone" **has** occurred. Structures have been built and landscaping has been performed within this area defined as a "Previously Disturbed Area" on the attached maps.

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### Tree Descriptions

Majority of the trees are mature specimens, components of the original landscape. Trees present on site are composed of California natives (Monterey cypress *Cupressus macrocarpa* and Monterey pine *Pinus radiata*, redwood *Sequoia sempervirens*, Coast live oak *Quercus agrifolia*) as well as non-natives (*Acacia spp.* and *Pittosporum spp.*). This area has a large population of mature and immature acacia, a highly aggressive/invasive species.

The acacia trees on this site have a history of failure. In the past 12 months several acacia trees have uprooted or broken trunks, stems and branches. This is an opportunistic species with rapid growth rates that compete with surrounding vegetation. Trunks and stems develop in long, arching or leaning configurations. These structural components reach toward light and space. The weight of the foliage in addition to the dynamic mass of the wood results in a significant load that stresses structural components and root anchorage. Trees with these formations are predisposed to failure independent of site disturbance.

### TREE INVENTORY METHODOLOGY

The appended inventory lists information on 60 individual trees growing in close proximity to proposed building locations within the property boundary, shown on the attached Tree Location Map.

The tree inventory lists species, trunk diameter, Critical Root Zone (CRZ) radius, tree condition, construction impacts, observations, recommended procedures and mitigation suggested by the County of Santa Cruz Ordinance section 16.34.

This parcel is outside of the Coastal Zone but within the Urban Services Line. Trees meeting certain size criteria are not identified as "Significant" in this geographic region as defined by Santa Cruz County Code Title 16 section 16.34.030. Conversations, with Santa Cruz County Environmental Planning staff indicated that these trees were outside of the Coastal Zone and within the previously disturbed areas of the Urban Arroyo. As a result of this investigation, it was determined that none of the trees proposed for removal meet "Significant" criteria.

**Diameter:** is the width of the trunk measured at 4.5 feet above natural grade (ground level). This inventory comprises of individuals with diameters  $\geq 6$  inches and groups (sum of diameters) with diameters  $\geq 10$  inches at 4.5 feet above natural grade. For trees that were unable to be measured at 4.5 feet above natural grade, measurement heights were provided.

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Critical Root Zone: Individual tree root systems provide anchorage, absorption of water/minerals, storage of food reserves and synthesis of certain organic materials necessary for tree health and stability. The Critical Root Zone (CRZ) is the species-specific amount of roots necessary to continue to supply these elements essential for each tree to stand upright and maintain vigor. This distance reflects the minimum footage from the trunk required for the protection of the tree's root zone. Construction activities proposed within these areas are subject to specific review and the implementation of recommended special treatments.

Health, Structure and Preservation Suitability **Inventory** ratings are based on the following criteria:

Tree health and structure are separate issues that are related since both are revealed by tree anatomy. A tree's vascular system is confined in a thin layer of tissue between the bark and wood layers. This thin layer is responsible for transport of nutrients and water between the root system and the foliar canopy. When this tissue layer is functioning properly a tree has the ability to produce foliage (leaves). As long as the tree maintains a connected vascular system it may appear to be in good health.

When conditions conducive to decay are present, fungi, bacteria or poor compartmentalization, wood strength is degraded. As decay advances, the tree's ability to continue standing is compromised. Thus, a tree can appear to be in good health, but have poor structure.

Tree Health: This rating is determined visually. Annual growth rates, leaf size and coloration are examined. Indications of insect activity, decay and dieback percentages are also used to define health ratings.

Trees in "good" health are full canopied, with dark green leaf coloration. Areas of foliar dieback or discoloration are less than 10% of the canopy. Dead material in the tree is limited to small twigs and branches less than one inch in diameter. There is no evidence of insects, disease or decay.

Trees with a "fair" health rating have from 10% to 30% foliar dieback, with faded coloration, dead wood larger than one inch, and/or visible insect activity, disease or decay.

Trees rated as having "poor" health have greater than 30% foliar dieback, dead wood greater than two inches, severe decay, disease or insect activity.

Tree Structure This rating is determined by visually assessing the roots, root crown (where the trunk meets the ground), supporting trunk, and branch structure. The presence of decay can affect both health and structural ratings.

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Trees that receive a “good” structural rating are well rooted, with visible taper in the lower trunk leading to buttress root development. These qualities indicate that the tree is solidly rooted in the growing site. No structural defects such as codominant stems (two stems of equal sizes that emerge from the same point), poorly attached branches, cavities, or decay are present.

Trees that receive a “fair” structural rating may have defects such as poor taper in the trunk, inadequate root development or growing site limitations. They may have multiple trunks, included bark (where bark turns inward at an attachment point), or suppressed canopies. Decay or previous limb loss (less than 2 inches in diameter) may be present in these trees. Trees with fair structure may be improved through proper maintenance procedures.

Poorly structured trees display serious defects that may lead to limb, trunk or whole tree failure due to uprooting. Trees in this condition may have had root loss or severe decay that has weakened their support structure. Trees in this condition can present a risk to people and structures. Maintenance procedures may reduce, but not eliminate these defects.

Suitability for preservation: This rating evaluates tree health, structure, species characteristics, age, and potential longevity

Trees with a “good” rating have adequate health and structure with the ability to tolerate moderate impacts and thrive for their safe, useful life expectancy.

A “fair” rating indicates health or structural problems have the ability to be corrected. They will require more monitoring and intense management with an expectation that their lifespan will be shortened by construction impacts.

Trees with a “poor” rating possess health or structural defects that cannot be corrected through treatment. Trees with poor suitability can be expected to continue to decline regardless of remedies provided. Species characteristics may not be compatible with redefined use of the area. Species, which are non-native and unusually aggressive, are considered to have a poor suitability rating.

## DESCRIPTION OF DEVELOPMENT IMPACTS

Site inspections and review of the plans as presented identified numerous construction impacts to individuals.

The impacts to the trees are based on the development plans provided. The exact locations of the proposed improvements must be reviewed and evaluated once the site staking is in place. There is a possibility that tree classification and inferred impacts will change once grade staking is in place.

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The construction of this project as presented requires the following procedures:

- Demolition of existing structures, hardscape and utility lines entails the dismantling and disposal of all buildings, hardscape and utility lines. Large wrecking equipment, such as an excavator, is used for building demolition. There is a possibility that the surrounding trees will be damaged. The unearthing and removal of old utility lines as well as the building foundation within defined Critical Root Zones often shatters woody roots. Mechanical damage to above ground tree parts and roots allow for the onset of decay, compromising tree health and structural stability.

Building clearance is needed where branches of trees encroach upon parking areas, sidewalks or structures will need to be pruned to gain required clearance.

- **Grading for the parking lot, trenching for foundation construction, retaining wall and building construction as well as trenching for foundation construction.** These procedures require alteration of natural grade in the form of cut and/or fill (described below) at the defined "Limits of Grading". Roots impacted during this process provide openings for opportunistic decay causing organisms degrading tree support systems and vigor.

- o Alteration of natural grade

- **Cuts**, lowering of natural grade, require the removal of soil until the desired elevation is reached. A cut within the trees Critical Root Zone can remove non-woody and woody roots. Non-woody (absorbing) roots are responsible for transporting moisture and nutrients necessary for maintaining tree health. More significant cuts remove woody roots that provide structural support, compromising the tree's ability to stand upright.
- **Fill**, increasing natural grade, often requires an initial cut to "knit in" and stabilize the material. This material is applied in layers and compacted in the process. Compaction breaks down soil structure by removing air and adding moisture. Anaerobic conditions may develop, promoting decay. Absorbing roots can suffocate from lack of oxygen. Structural roots may be compromised as a result of the decay.

- Parking lot construction Require a "cut" to a depth of six to 18 inches below the existing grade. Soils are then stabilized and by applying base materials and compacted. Asphalt chip seal, decomposed granite or concrete are then applied to create the surface.
- Drainage structures and Utility line placement. Necessary drainage structures and utility lines are to be consciously placed to avoid the Critical Root Zone of the preserved trees or brought to the attention of the Project Arborist to allow for preconstruction root severance along placement lines.

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Planned Landscape Installation typically requires the import of topsoil, rototilling the top 8 inches of native soils, digging planting holes, trenching for irrigation lines and increased water supply for establishing new plantings. Increased disturbance in the Critical Root Zone and elevated water levels will stress mature trees. It is recommended that landscape features planned within Critical Root Zones avoid the above-described procedures.

## RECOMMENDED PROCEDURES

The following section discusses the recommended procedures to construct the project as planned to increase tree vigor and reduce stress from demolition/construction impacts. Potential construction impacts that dramatically reduce the lifespan of existing trees can be abated with the implementation of pre-demolition/construction treatments, modifications to construction methods and needed maintenance pruning.

- Preconstruction root pruning is recommended for Trees # 114, 118, 119, 126, 127, 140, 142, 146, 149, 150, 154, 156 and 157. This procedure is to be performed by skilled labor. Roots are to be pruned cleanly. Bark should adhere to the wood without tearing. Wood fibers should remain intact without shattering. The following tools should be used:
  - Hand-pruners
  - Loppers
  - Handsaw
  - Reciprocating saw
  - Chainsaw

When completed, the pruned portions should be covered with burlap or similar material and kept moist.

- A backhoe **may** also be used on this site **for** preconstruction root severance treatments under the direction of the Project Arborist if the distance between the trees and the building line is not decreased. This procedure is defined below:
  - Establish a “final line of disturbance” with field staking. This line represents the furthest distance from the trees trunk that will allow the proposed construction.
  - Determine the depth of the cut required.
  - Begin digging 8 to 10 feet from the established line in a “spoke in wheel” pattern, using the tree trunk as the hub.
  - Dig to the required depth.
  - Dig toward the trees trunk to determine where roots are located.
  - Begin pruning roots using the techniques defined above.
  - Upon reaching the final line of disturbance make the final root pruning cuts.
  - Install Tree Preservation fencing with straw bales to allow maximum distance from the tree while allowing space to construct the buildings.

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Maintenance procedures are those, which are necessary to decrease risk of falling branches, provide reinforcement for weak trunk/stem attachments and improve tree health/stability.

- . Cabling has been recommended for Tree #107. A triangular cable system should be installed between the weakly attached stems using the following or comparable hardware:
  - . 5/8 inch "eye" lag bolts
  - . 1/4 inch Extra High Strength cable
  - . Pre-formed grips with thimbles

Pruning to remove dead branches has been recommended to reduce potential health and safety hazards that persisting dead branches pose, such as decay, attracting harmful insects and injury from falling branches. Preconstruction canopy clearance pruning will allow vertical space for equipment access and building construction.

- . Each tree to be preserved should have dead/broken branches greater than 1-inch diameter removed
- . Trees #107, 108, 119, 127, 146, 149, 154 and 157 will require pruning to allow building clearance. Pruning should not remove more foliage than absolutely necessary to accommodate proposed construction as determined by the Project Arborist.

Tree Removal is to be performed in a sectional manner in order to avoid damaging surrounding trees and landscape. Locations of trees to be removed are documented on the attached map (Tree Location Map #AB01).

Removal due to Construction Impacts (Trees #101, 102, 104, 105, 110, 111, 112, 113, 115, 116, 117, 120, 121, 122, 123, 124, 125, 135, 141, 151, 159 and 160) is required for trees that are in direct conflict with the proposed building footprints where plans cannot be modified

Trees recommended for removal due to Condition (Trees #103, 106, 109, 128, 129, 130, 131, 136 and 143) Recommendations are based upon the combination of health, structural, preservation suitability ratings and general species characteristics.

These trees are recommended for removal as they are either dead or structurally unsound. They are currently at **risk** of failure and present extreme hazards to people and property and should not be preserved.

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Trees recommended for removal due to a severe level of impacts

Trees #107 and 108 will require severe canopy and root pruning to accommodate the proposed construction. These required procedures will destabilize these trees and possibly lead to premature mortality. It is recommended, but not necessary that they be removed due to this high level of impacts.

The project development team has expressed interest that these trees be retained. To decrease the level of impacts, procedures have been defined to moderate these impacts including of preconstruction treatments, alternative construction methods, clearance pruning, mechanical support systems and tree protection fencing to assist in tree retention.

It is expressed that there is probability of tree failure; loss of vigor or mortality is high. Should these trees survive and remain standing they may damage adjacent structures/sidewalk in the future. These associated risks are to be understood and accepted by the County and the project development team.

Stump removal will be performed on each tree removed by "grinding" them to a depth of 24 inches or digging them out with the backhoe or an excavator when in conflict with proposed grading. When stump removal will cause undue damage to surrounding trees, they are to be left in place. Acacia stumps left in place will need to have regrowth managed mechanically or chemically.

A qualified certified arborist, using the most current version of the following industry guidelines should be contracted to perform the above-described work.

- American National Standards Institute, *A300 for Tree Care Operations- Tree, Shrub and Other Woody Plant Maintenance-Standard Practices*  
(Part 1)-2001 Pruning  
(Part 3)-2000 (Support Systems a Cabling, Bracing and Guying)
- International Society of Arboriculture: *Best Management Practices*
- American National Standards Institute *Z133.1-1994 for Tree Care Operations- Pruning, Trimming, Repairing, Maintaining, and Removing Trees and Cutting Brush-Safety Requirements*

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## Demolition/Preconstruction Treatment Guidelines Sequence

1. Tree and stump removal
2. Cabling, clearance, and maintenance pruning, recommended providing demolition/construction area access, building/driveway/walkway clearance and improving tree structure. Pruning should not remove more foliage than necessary to accommodate proposed construction as determined by the Project Arborist. The required pruning is specified for each individual tree to be preserved in the Recommended Procedure pruning section..
3. Install Tree Preservation Fencing and straw bales. The fencing is to be chain link, 72 inches in height and secured with metal stakes driven at least 18 inches into the soil. Straw bales may be secured by driving metal or wooden stakes through the bales to a depth of 12 to 18 inches below natural soil grade. This barricade will prevent damage to the fencing and prevent excess soil from grading and trenching from encroaching into the Tree Preservation Zone of the retained tree. Tree Preservation Zone fencing locations are documented on an attached map (AB02).
- 4.. Demolition of existing structures, foundations, utility lines and other hardscape in proximity of trees may be performed by equipment set up outside or at the perimeter of Critical Root Zone. A backhoe or excavator may reach toward trees gently pulling debris outward, away from tree trunks. Existing improvements set on or below natural grade shall be removed with minimal disturbance to natural grade. Debris is to be hauled out through designated avenues outside of the Critical Root Zones.

Woody roots damaged during the removal of underground portions of existing building components should be properly pruned following the pie-construction root pruning guidelines.

5. Preconstruction root pruning is recommended for Trees # 107, 108 (if retrained), 114, 118, 119, 126, 142, 146, 149, 154 and 157 are suitable for retention and are in close proximity to trenching activities. Areas in which root pruning is necessary are designated on the attached Tree Location/Preservation Map. All root pruning should be performed by skilled labor. Roots are to be pruned cleanly and bark intact. The following tools should be used:

- . Hand-pruners/loppers
- . Handsaw
- . Reciprocating saw
- . Chainsaw

When completed, the pruned portions should be covered with burlap or similar material and kept moist

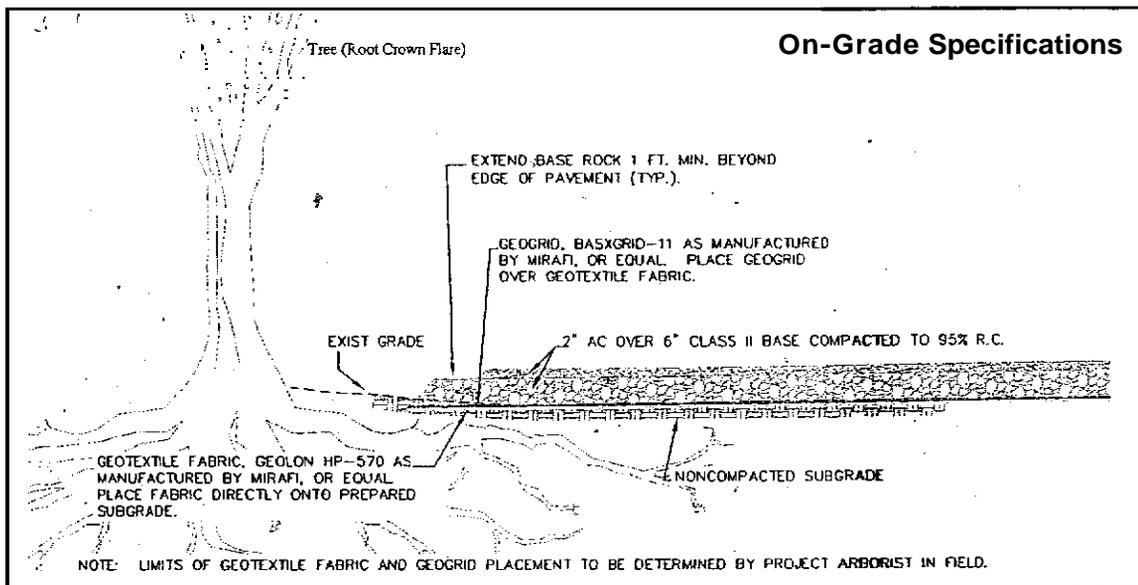
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6. Provide Invigoration Treatments for Trees #107, 108 (if retained), 118 and 119.
  - Amended tree chip mulch, 4-6 inch layer, shall be applied within the Tree Preservation Zones. Mulch should not be applied within 12 inches of tree trunks. Tree chips should be amended with 7 pounds Bloodmeal, 13-0-0, per cubic yard of chips.
  - Supplemental Irrigation should be provided by a soaker hose delivery method within the designated Tree Preservation Zones. The Project Arborist will determine supplemental irrigation levels.
7. Realign/Repair fencing to protect Tree Preservation Zones depicted on the Tree Location/Preservation Map, AB02.

#### Alternative Construction Methods

##### "On-Grade" System

This procedure is recommended for sidewalk features in close proximity to Trees #107 and 108. This system eliminates the need for excavation and the resulting root loss. These areas are defined on the attached map.

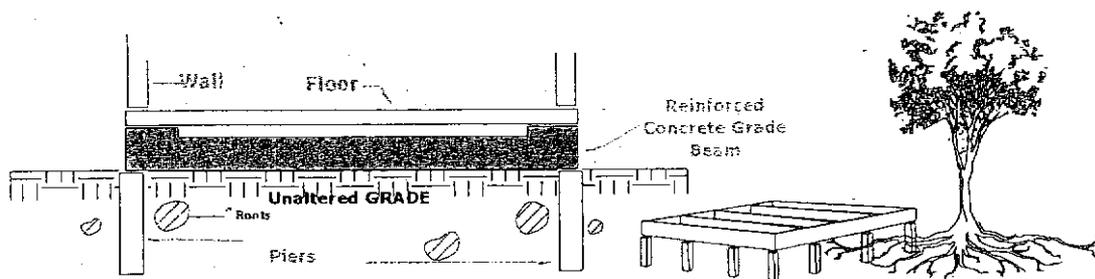


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Pier and Above Grade Beam System will be used for the construction of the foundations supporting buildings #5, 6 and 7 in close proximity to preserved trees. Locations are noted on the attached Tree Location and Preservation Map.

Piers will be placed in locations that avoid roots greater than two inches in diameter. Placement can be determined by preconstruction root exploration. As the locations are determined pier layout can be adjusted to allow for appropriate spacing as per the Project Engineer

Grade beams will be placed or constructed with minimum disturbance to natural grade. This alternative method of construction will decrease the impacts of the building foundations.



Pier and Above Grade Beam  
Foundation Detail

Diagram adapted from Clark and Mathary, Trees and Development (1998)

Tree Replacement: Thirty-three trees are cited for removal, two of these trees are dead. New trees will be planted as components of the **planned** landscape at a ratio of one-24 inch box or one fifteen-gallon tree per tree removed.

Replacement trees planted on this site should be provided an appropriate amount of area to allow adequate space for future growth.

Nursery stock selected shall be standard (single trunk). Trees planted should be well formed without co-dominant, poorly attached stems. Trees shall be disease free and absent of swirling or girdling roots.

Qualified professionals adhering to the following guidelines shall plant the replacement trees:

- Prepare the planting site by excavating 3 times the width and 2 inches less than the exact depth of the nursery container.
- Prune any visible matted or circling roots to remove, or straighten them. Cut the root ball vertically on opposite sides at least half the distance to the trunk.

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- Free roots from the root ball breaking away some of the soil to provide better contact between the root ball and the backfill soil.
- Backfill with native soil

After backfilling a two-inch layer of amended tree chip mulch should be applied to the soil layer. Chips should be amended with "Blood meal 13-0-0" at a ratio of 7 pounds per cubic yard of chips. Chips should not be applied within 8 inches of the trunk

- Stakes, for support, should be installed on opposite sides of the root ball and driven into the soil. The tree can be secured to the stakes using "Arbortape" or by using the "ReadyStake" system.

Supplemental irrigation will be provided the new trees by means of a temporary "drip" emitter system for a period of two (2) years. This system shall be designed, installed and maintained by a qualified professional to provide necessary irrigation at least twice per week to maintain appropriate moisture levels. Appropriate irrigation levels are to be determined by the Project Arborist.

Success Criteria To ensure the survivability and proper growth of the replacement trees success criteria will be defined to meet an 80% survival rate and implemented as follows.

A qualified professional will monitor the newly planted tree at six (6) month intervals for a period of five years.

- Tree health and growth rates will be assessed
- Trees suffering poor growth rates or declining health will be identified.
- Invigoration treatments will be provided
- Dead trees or trees in an irreversible state of decline will be replaced.
- At the end of the five-year period the status of the new plantings will be assessed to make certain that success criteria has been met and all mitigation trees planted are performing well.

Implementation of these success criteria shall be a condition of project approval.

### **TREE PRESERVATION**

Tree Preservation Specifications included in this report, outline specifics for tree protection fencing and other procedures that will provide the best opportunity for their long-term survivability. The exact locations for these procedures are documented on the attached map.

Tree Preservation Zone: This area is the protected area that allows the majority of the Critical Root Zone to be undisturbed while still facilitating the construction of buildings and associated construction related activities. Tree Preservation zones are defined on the Tree Location Preservation Map attached to this report.

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**Inspections** To ensure the successful implementation of the recommended procedures Site Inspections **we** recommended by the Project Arborist. Site inspections will take place at the following intervals throughout the course of the project:

- . During all tree pruning/removal activities in proximity to trees to be preserved.
- . During demolition
- . Following on-site placement of grade stakes.
- . During preconstruction root exploration and severance procedures.
- . After Tree Preservation fencing locations have been staked.
- . Following Tree Protection fencing installation; prior to the commencement of grading.
- . **As** necessary during the grading activities.
- . Three times per week during foundation and building construction.
- . Weekly during landscape installation

Site monitoring forms will be submitted to the County of Santa Cruz Planning Department at regular intervals.

## CONCLUSION

The construction of the plans as proposed, necessitates the removal of **33** trees, as a result of construction impacts, structural condition, poor species suitability and allows for the preservation of the remaining trees on this site.

Of this total, 22 trees are cited for removal as a result of unavoidable impacts from the proposed construction:

An additional nine trees are recommended for removal due to condition. These trees have structural defects and threaten the safe use of the proposed residences. Some are non-native, highly aggressive species and are not suitable for retention in the Urban Arroyo or the incorporation into the developed site.

Two trees, #107 and 108 are recommended for removal due to the severe level of impacts resulting from the proposed construction. The development team has chosen to attempt to retrain these trees in hopes they will survive. If they are retained, the implementation of preconstruction treatments and alternative construction methods *are* necessary.

Each of the trees cited for removal will be replaced by planting a replacement tree. One, 24-inch boxed or fifteen-gallon replacement tree per individual tree removed will be planted on-site as components of the planned landscape.

Clearance pruning is required for tree canopies that encroach upon building footprints or designated construction access points. Maintenance pruning is recommended for all retained trees.

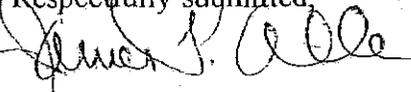
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It is anticipated that impacts to the remaining trees can be reduced by implementing the alternative construction methods and adhering to the Tree Preservation Specifications detailed in this report.

To ensure the protection of the trees remaining on this site it is imperative that the recommendations and Tree Preservation Specifications detailed within this document are incorporated as a condition of project approval.

Any questions regarding this report may be directed to my office

Respectfully submitted,



James P. Allen  
Registered Consulting Arborist #390



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## **Tree Preservation Specifications**

**6851 Soquel Drive, APN 039-062-05**

**These guidelines should be printed on all pages of the development plans. Contractors and sub contractors should be aware of tree protection guidelines and restrictions. Contracts should incorporate tree protection language that includes "damage to trees will be appraised using the Guide to Plant Appraisal 9th Edition and monetary fines assessed".**

### A pre construction meeting with the Project Arborist

A meeting with the Project Arborist, Project Manager and all contractors involved with the project shall take place prior to the onset of grading. Tree preservation specifications will be reviewed and discussed.

### Establishment of a tree preservation zone (TPZ)

Chain link fencing no less than 72 inches in height with metal stakes embedded in the ground, shall be installed in areas designated on the attached map. Bales of hay shall be placed end-to-end outside the perimeter of the fencing toward the construction activities. Bales may be stabilized by driving metal stakes or sections of #5 rebar through the bales 12 to 18 inches into the soil surface. Fencing will be installed **prior** to the onset of grading, under the supervision of the Project Arborist and shall not be moved.

### Restrictions within the Tree Preservation Zone (TPZ)

No storage of construction materials, debris, or excess soil will be allowed within the TPZ. Parking of vehicles or construction equipment in this area is prohibited. Solvents or liquids of any type should be disposed of properly, never within this protected area.

### Field decisions

The Project Arborist, Soils Engineer and Grading Contractor will determine the most effective construction methods to maintain tree health.

### Alteration of grade

Maintain the natural grade around trees. If trees roots are unearthed during the construction process the consulting arborist will be notified immediately. Exposed roots will be covered with moistened burlap until the Project Arborist makes a determination.

### Trenching requirements

Any areas of proposed trenching will be evaluated with the Project Arborist and the contractor prior to construction.

### Tree canopy alterations

Unauthorized pruning of any tree on this site will not be allowed. Tree canopy alterations will be performed to the specifications established by the Project Arborist.

### Supplemental irrigation

Shall be provided using "soaker" hoses or similar method of delivery. Supplemental irrigation requirements shall be determined by the Project Arborist and will be required prior to and after completion of the grading.

### Mulch Layer

A 4-6 inch layer of amended tree chip mulch shall be applied within the Tree Preservation Zones. Tree chips should be amended with 7 pounds Bloodmeal, 13-0-0, per cubic yard of chips.

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Dedicated to the Preservation of Trees

**HIDDEN OAKS SUBDIVISION  
TREE INVENTORY  
6851 Soquel Drive, Aptos, CA.  
APN 039-062-05, Tract #1529**

**James P. Allen  
& Associates**

TREE #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	CRITICAL ROOT ZONE (RADIAL FEET)	HEALTH	STRUCTURE	PRESERVATION SUITABILITY	SEVERITY OF IMPACTS	OBSERVATION •RECOMMENDED PROCEDURES •MITIGATION
103	Alleppo Pine <i>Pinus halepensis</i>	31	N/A	Fair	Poor	Poor	<ul style="list-style-type: none"> <li>4ft from proposed grading to northwest</li> <li>6ft from proposed driveway to northeast</li> <li>21ft from proposed building foundation to east</li> <li>Canopy Conflicts</li> </ul>	<ul style="list-style-type: none"> <li>Severe: poor trunk stem attachment @ 18ft</li> <li>At risk of breakage</li> <li>High in alleys to trunk</li> <li>Remove due to Condition</li> <li>One 24" box ed replacement tree</li> </ul>
106	Menters Pine <i>Pinus Radiata</i>	25	N/A	Poor	Poor	Poor	<ul style="list-style-type: none"> <li>High</li> <li>4ft from proposed grading to southeast</li> <li>Canopy Conflicts</li> </ul>	<ul style="list-style-type: none"> <li>Previous construction impacts</li> <li>Large diameter dead branch</li> <li>Low vigor</li> <li>Increased decline</li> <li>Remove due to Condition</li> <li>One 24" boxed replacement tree</li> </ul>

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Final Review Initial Study  
J. Allen  
03-06-05

Remove due Construction  Remove due to Condition  Recommended Removal due to Severe Impacts



Dedicated to the Preservation of Trees

James P. Allen  
Associates

TREE #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	CRITICAL ROOT ZONE (RADIAL FEET)	HEIGHT	STRUCTURE	PRESERVATION SUITABILITY	SEVERITY OF IMPACTS	OBSERVATION RECOMMENDED PROCEDURES MITIGATION
109	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
110	White Oak	10.0	12.0	10.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
111	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
112	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
113	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
114	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
115	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
116	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
117	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
118	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
119	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
120	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
121	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
122	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
123	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
124	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
125	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
126	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
127	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
128	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
129	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
130	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
131	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
132	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
133	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
134	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
135	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
136	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
137	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
138	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
139	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
140	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
141	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
142	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
143	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
144	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
145	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
146	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
147	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
148	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
149	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.
150	Red Oak	12.0	15.0	12.0	Good	Good	Minor canopy loss	Observe and monitor tree health. Prune dead limbs. Retain tree.

Initial Study  
1994  
06/5/94

Remove due Construction Impacts      Recommended Removal due to Severe Impacts

# HIDDEN OAKS SUBDIVISION



James P. Allen  
Associates

TREE #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	CRITICAL ROOT ZONE (RADIAL FEET)	HEALTH	STRUCTURE	PRESERVATION SUITABILITY	SEVERITY OF IMPACTS	OBSERVATION RECOMMENDED PROCEDURES MITIGATION
114	Douglas Fir <i>Pseudotsuga menziesii</i>	22.7	ATTACHED TO APPLIC	Fair	Fair	Fair	Medium: 14ft from proposed grading 21ft from proposed grading 25ft from proposed retaining wall to south Canopy conflicts	<ul style="list-style-type: none"> <li>Previous clearance canopy pruning to north and west</li> <li>Preserve and Protect</li> <li>Preconstruction root pruning required</li> <li>None</li> </ul>

Final Study  
06.51  
0.042

Remove due Construction Impacts

Due to Condition

Recommended Removal due to Severe Impacts



James P. Allen  
Associates

Dedicated to the Preservation of Trees

HIDDEN OAKS SUBDIVISION  
TREE INVENTORY  
6851 Soquel Drive, Aptos, CA.  
APN 039-062-05, Tract #1529

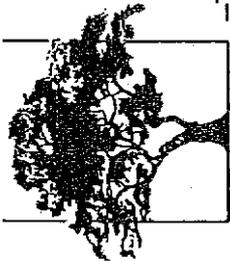
TREE #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	CRITICAL ROOT ZONE (RADIAL FEET)	HEALTH	STRUCTURE	PRESERVATION SUITABILITY	SEVERITY OF IMPACTS	OBSERVATION RECOMMENDED PROCEDURES MITIGATION
118	Coast live oak <i>Quercus agrifolia</i>	10	11	F	Fair	Fair	Medium: 8ft from driveway to southwest	<ul style="list-style-type: none"> <li>None</li> <li>Preserve and Protect</li> <li>Reduce limits of grading</li> <li>Preconstruction root pruning required</li> <li>None</li> </ul>
119	Coast live oak <i>Quercus agrifolia</i>	11.8	12		Fair	Fair	Medium: 8ft from proposed sewerline to 9ft from driveway to east	<ul style="list-style-type: none"> <li>None</li> <li>Preserve and Protect</li> <li>Canopy clearance pruning required</li> <li>Preconstruction root pruning required</li> <li>None</li> </ul>

Initial  
21/1/2  
065/1

Remove due Construction Impacts

Remove due to Condition

Recommended Removal due to Severe Impacts



James P. Allen  
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HIDDEN OAKS SUBDIVISION  
TREE INVENTORY  
6851 Soquel Drive, Aptos, CA.  
APN 039-062-05, Tract #1529

TREE #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	CRITICAL ROOT ZONE (RADIAL FEET)	HEALTH	STRUCTURE	PRESERVATION SUITABILITY	SEVERITY OF IMPACTS	OBSERVATION -RECOMMENDED PROCEDURES -MITIGATION
126	Coast live oak <i>Quercus agrifolia</i>	23.5	20	Fair	Poor	Fair	Low: 16ft from storm drain to northwest 33ft from proposed bldg foundation to northwest Canopy conflicts	<ul style="list-style-type: none"> <li>Trunk leans sharply to northwest</li> <li>Preserve and Protect</li> <li>Perform Root Crown inspection</li> <li>Preconstruction root pruning required</li> <li>May destabilize tree</li> <li>None</li> </ul>
127	Coast live oak <i>Quercus agrifolia</i>	31.5	25	Fair	Poor	Fair	Low: 14ft from proposed storm drain to northwest 30ft from proposed bldg foundation to west Canopy conflicts	<ul style="list-style-type: none"> <li>Trunk leans to north</li> <li>Divides in two stems at 6ft</li> <li>Poor trunk/limb attachments</li> <li>Large diameter dead branches in canopy</li> <li>Canopy co-mingles with group 128</li> <li>Preserve and Protect</li> <li>Perform root crown inspection</li> <li>Clearance pruning required</li> <li>None</li> </ul>

Environmental Review Initial Study  
ATTACHMENT 9.22.25  
APPLICATION 06-0651

Remove due to Construction Impacts

Recommended Removal due to Severe Impacts

Remove due to Condition



**HIDDEN OAKS SUBDIVISION  
TREE INVENTORY**  
6851 Soquel Drive, Aptos, CA.  
APN 039-062-05, Tract #1529

*Dedicated to the Preservation of Trees*

**James P. Allen  
& Associates**

TREE #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	CRITICAL ROOT ZONE (RADIAL FEET)	HEALTH	STRUCTURE	PRESERVATION SUITABILITY	SEVERITY OF IMPACTS	OBSERVATION RECOMMENDED PROCEDURES MITIGATION
128	Acacia alba baileyana	Group of 22 stems 6 to 14	N/A	Fair	Poor	Poor	None	None Remove due to Condition One 24" boxed replacement tree
129	Acacia alba baileyana	178	N/A	Fair	Poor	Poor	None	Canopy Suppression to east Remove due to Condition One 24" boxed replacement tree
130	Acacia alba baileyana	19	N/A	Fair	Poor	Poor	None	Remove due to Condition One 24" boxed replacement tree
131	Acacia alba baileyana	Double 32 & 10	N/A	Fair	Poor	Poor	None	Remove due to Condition One 24" boxed replacement tree
132	Coast live oak Quercus agrifolia	12.5	N/A	Fair	Poor	Good	None	Large wound on lower trunk to south Dominant stems Poor trunk/stem attachments Preserve and Protect None
133	Coast live oak Quercus agrifolia	30.3	N/A	Fair	Poor	Fair	None	Severe decay on lower trunk to 10ft Preserve and Protect None
134	Coast live oak Quercus agrifolia	22	N/A	Fair	Fair	Good	None	Low Live Crown Ratio Preserve and Protect None

ATTACHMENT 9.23 of 28  
APPLICATION 06-0651  
Environmental Review Initial Study



James P. Allen  
Associates

Dedicated to the Preservation of Trees

HIDDEN OAKS SUBDIVISION  
TREE INVENTORY  
6851 Soquel Drive, Aptos, CA.  
APN 039-062-05, Tract #1529

TREE #	SPECIES	@ 4.5ft ABOVE NATURAL GRADE (INCHES)	CRITICAL ROOT ZONE (RADIAL FEET)	HEALTH	STRUCTURE	PRESERVATION SUITABILITY	SEVERITY OF IMPACTS	OBSERVATION RECOMMENDED PROCEDURES MITIGATION
136	Acacia Acacia baileyana	20.8	N/A	Fair	Poor	Poor	None	Trunk leans sharply to west Remove due to Condition One 24" boxed replacement tree
137	Coast live oak Quercus agrifolia		17	Fair	Poor	Good	None	Poor trunk/stem attachments Preserve and Protect None
138	Coast live oak Quercus agrifolia		24	Fair	Poor	Good	None	Trunk leans sharply to east Poor trunk/stem attachments Within Urban Arroyo Preserve and Protect None
139	Interior live oak Quercus wisizenii		13	Fair	Poor	Good	None	Poor trunk/stem attachments Within Urban Arroyo Protect and Preserve None
140	Coast live oak Quercus agrifolia	Double 12 & 15.5	18	Fair	Poor	Poor	Low: 12.5ft from proposed grading 18ft from proposed storm drain 20ft from proposed deck to northwest	None Preserve and Protect None
142	Coast live oak Quercus agrifolia	21	16	Fair	Fair	Good	Medium: 9ft from proposed grading to west 15ft from proposed bldg foundation to west	Divides into 2 stems @ 2ft Good trunk/stem attachments Preserve and Protect Preconstruction root pruning required

ATTACHMENT 9.24  
APPLICATION 06-0657  
Environmental Review Initials



**HIDDEN OAKS SUBDIVISION  
TREE INVENTORY  
6851 Soquel Drive, Aptos, CA.  
APN 039-062-05, Tract #1529**

*Dedicated to the Preservation of Trees*

**James P. Allen  
Associates**

TREE #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	CRITICAL ROOT ZONE (RADIAL FEET)	HEALTH	STRUCTURE	PRESERVATION SUITABILITY	SEVERITY OF IMPACTS	OBSERVATION RECOMMENDED PROCEDURES MITIGATION
143	Coast live oak <i>Quercus agrifolia</i>	11.1	N/A	Dead	Dead	Dead	Medium: 12 ft from building to west	Dead Removal to Condition @ 24' for dead replacement tree
144	Maple <i>Acer macrophyllum</i>	13.8	8	Fair	Poor	Good	None	•Codominant stems @ 5.5ft Within Urban Arroyo •Preserve and Protect •None
145	Coast live oak <i>Quercus agrifolia</i>	26.8	0	Fair	Poor	Fair	None	•Suppressed lateral branch development Within Urban Arroyo •Preserve and Protect •None
146	Coast live oak <i>Quercus agrifolia</i>	40	28	Poor	Poor	poor	Medium: 13ft from proposed grading to west 21ft from proposed bldg foundation to northwest Canopy conflicts	•Significant wound on lower trunk to south Wetwood infection Poor trunk/stem attachments Borders Urban Arroyo •Preserve and Protect Preconstruction root pruning required Clearance pruning required •None
147	Pittosporum <i>Pittosporum eugenioides</i>	14	6	Fair	Fair	Fair	Low: 8ft from proposed grading to west	•Within Urban Arroyo •Preserve and Protect •None
148	Pittosporum <i>Pittosporum eugenioides</i>	8	4	Fair	Fair	Fair	None	•Within Urban Arroyo •Preserve and Protect •None

Environmental Review Initial Study  
ATTACHMENT 9, 25 of 28  
APPLICATION 06-0651

# HIDDEN OAKS SUBDIVISION



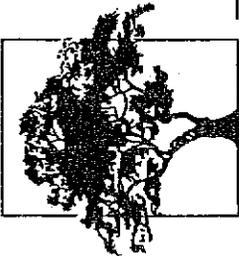
James P. Allen  
Associates

TREE #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	CRITICAL ROOT ZONE (RADIAL FEET)	HEALTH	STRUCTURE	PRESERVATION SUITABILITY	SEVERITY OF IMPACTS	OBSERVATION RECOMMENDED PROCEDURES MITIGATION
149	Coast live oak <i>Quercus agrifolia</i>	20.2	15	Fair	Fair	Fair	Medium: 6ft from proposed grading to west 10ft from proposed bldg foundation to northwest 23ft from proposed bldg Canopy conflicts	<ul style="list-style-type: none"> <li>•Poor trunk/stem attachment @ 18ft Within Urban Arroyo</li> <li>•Preserve and Protect</li> <li>•Preconstruction root pruning required</li> <li>•Canopy clearance pruning required</li> <li>•None</li> </ul>
150	Douglas fir <i>Pseudotsuga menziesii</i>	19.7	16	Fair	Fair	Fair	Low: 17.5ft from proposed grading	<ul style="list-style-type: none"> <li>•Suppressed by Ivy</li> <li>•Borders Urban Arroyo</li> <li>•Preserve and Protect</li> <li>•None</li> </ul>
152	Coast live oak <i>Quercus agrifolia</i>	12	8	Poor	Poor	Good	Low: 13ft from proposed grading	<ul style="list-style-type: none"> <li>•Suppressed by Ivy</li> <li>•Within Urban Arroyo</li> <li>•Preserve and Protect</li> <li>•None</li> </ul>
153	Coast live oak <i>Quercus agrifolia</i>	11.3	8	Poor	Poor	Good	Low: 15ft from proposed grading	<ul style="list-style-type: none"> <li>•Suppressed by Ivy</li> <li>•Within Urban Arroyo</li> <li>•Preserve and Protect</li> <li>•None</li> </ul>
154	Coast live oak <i>Quercus agrifolia</i>	57	8	Fair	Poor	Good	Medium: 14ft from proposed grading 20ft from proposed bldg to northwest Canopy conflicts	<ul style="list-style-type: none"> <li>•Trunk divides at 3ft</li> <li>•Poor trunk/stem attachments</li> <li>•Suppressed by Ivy</li> <li>•Within Urban Arroyo</li> <li>•Preserve and Protect</li> <li>•Preconstruction root pruning required</li> <li>•Canopy clearance pruning required</li> <li>•None</li> </ul>

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ATTACHMENT 8  
APPLICATION 06-0651  
Environmental Review Initial Study  
9/26/28  
40

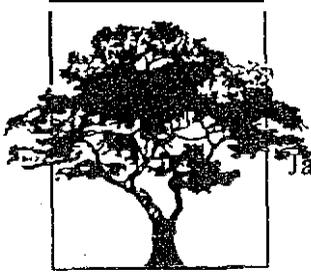
# HIDDEN OAKS SUBDIVISION



James P. Allen  
Associates

TREE #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	CRITICAL ROOT ZONE (RADIAL FEET)	HEALTH	STRUCTURE	PRESERVATION SUITABILITY	SEVERITY OF IMPACTS	OBSERVATION RECOMMENDED PROCEDURES MITIGATION
155	Coast live oak <i>Quercus agrifolia</i>	16	12	Fair	Fair	Good	None: 19ft from proposed grading	<ul style="list-style-type: none"> <li>Poor trunk/stem attachments Suppressed by Ivy</li> <li>Branches co-mingle with tree #154</li> <li>Within Urban Arroyo</li> <li>Preserve and Protect</li> <li>None</li> </ul>
156	Coast live oak <i>Quercus agrifolia</i>	14.2	6	Fair	Poor	Fair	None: 7ft from proposed grading to northwest	<ul style="list-style-type: none"> <li>Poor trunk/stem attachment @ 8ft</li> <li>Within Urban Arroyo</li> <li>Preserve and Protect</li> <li>None</li> </ul>
157	Coast live oak <i>Quercus agrifolia</i>	14.2	12	Poor	Poor	Poor	Medium: 10ft from proposed bldg foundation to west Canopy conflicts	<ul style="list-style-type: none"> <li>Trunk leans to north</li> <li>Poor trunk/stem attachments @ 20ft</li> <li>Within Urban Arroyo</li> <li>Preserve and Protect</li> <li>Preconstruction root pruning required</li> <li>Canopy clearance pruning required</li> <li>None</li> </ul>
158	<i>Pittosporum eugenioides</i>	9		Fair	Fair	Fair	None	<ul style="list-style-type: none"> <li>None</li> <li>Preserve and Protect</li> <li>None</li> </ul>

ATTACHMENT 9.27 of 2  
APPLICATION 06-0651  
Environmental Review Initial Study



January 31, 2007

**James P. Allen  
& Associates**

B K Properties  
Attention Keith Baxter  
550 Hudson Lane  
Aptos, CA 95003

**Regarding: Hidden Oaks Subdivision, 6851 Soquel Drive, Aptos, CA  
Tract #1529, APN 039-062-05**

Mr. Baxter,

I have reviewed the site plan this project provided by Sam Stivers of Ifland Engineers on January 19, 2007. This revised plan for the subdivision tentative map submittal addresses the incomplete items as defined by the Santa Cruz County Planning Department. These plan alterations **will** not result in additional impact to the tree resources on this site and to be in general conformance with the ""Tree Resource Evaluation/Construction Impact Assessment" prepared by this office dated October 5, 2006."

Please contact my office with any questions.

Thanks you for the opportunity to be of service.

James P. Allen  
Registered Consulting Arborist #390

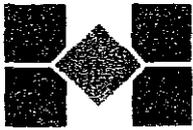


Consulting Rrborists

611 Mission Street  
Santa Cruz, CA 95060

831.426.6603 office  
831.234 7739 mobile  
831.460.1464 fax  
jpallen@consultingarborists.com  
www.consultingarborists.com

Environmental Review Inital Study  
ATTACHMENT 9, 28 of 28  
APPLICATION 06-0651



HIGGINS ASSOCIATES  
CIVIL & TRAFFIC ENGINEERS

December 22, 2006

Keith G. Baxter  
P.O. Box 1057  
Aptos, CA 95003

Re: Traffic Engineering Study to Evaluate the **Provision of Access** to Three Town Homes on Raas **Drive** in Santa Cruz County, California

Dear Keith,

Thank you for requesting Higgins Associates to assist you in providing Traffic Engineering services for your residential development on Haas Drive, Santa Cruz County, California. The project includes the provision of 10 town homes of which three will have access from Haas Drive. The remainder of the homes will have access from Soquel Drive. The project vicinity map and the site plan are indicated in Exhibit 1 and Exhibit 2 respectively.

Typically driveway vehicles back out of the driveways onto the local street or when entering, wait for a gap in the traffic stream from the front. The traffic volume on Haas Drive is low. The busiest peak hour is in the PM (4:00 PM to 5:00 PM) and the count data indicates 45 vehicles, which is one vehicle every 80 seconds and gaps are sufficient )

Driveway vehicles backing up would look up and down the street for oncoming street vehicles from the driveway and decide to either wait or proceed with the maneuver depending if there is a vehicle approaching or not.

Driveway vehicles turning into the driveway would wait for a gap from street vehicles coming from the front (which is adequate based on the approaching volumes), Street vehicles approaching the driveway vehicle wanting to turn into the driveway from behind would see the turn signal and decide to slow down and stop, if required.

The sight distance analysis indicates the minimum sight distance that is required for an approaching vehicle proceeding on the street to stop if a driveway vehicle enters or exits a driveway.

The site plan indicates that the driveways will be constructed almost horizontal with the curb level, which is advantageous to, and increases sight distance compared to existing conditions where the natural slope drops from the curb level.

This letter provides the findings of the adequacy of sight distance at the driveways to the three homes on Haas Drive per the County of Santa Cruz standards and requirements. Haas Drive is a local street that has an average daily traffic volume of 324 vehicles that was counted on November 29, 2006. The tube count data is included in Appendix A. The road has an approximately 10-12%

6208 Ltr.doc

1300-B First Street - Gilroy, California - 95020-4738 - voice/408 848-3122 - fax/408 848-2202 - www.kbhiggins.com

Environmental Review Initial Study  
ATTACHMENT 10, 10/19  
APPLICATION 06-0651

Keith G. Baxter  
December 22, 2006  
Page 2

grade immediately north of Soquel Avenue and the grade decreases to approximately 6-8% at the driveways. The road then flattens out to the north and then increases again. There are no speed limit signs posted on Haas Drive in the vicinity of the driveways and a speed limit of 25 miles per hour was assumed for analysis purposes based on the speeds surveyed. No parking is allowed on Haas Drive in the vicinity of the driveways.

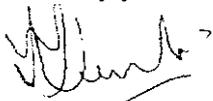
The relative steep grade and horizontal curves on Haas Drive typically results in lower uphill speeds and higher downhill speeds. Together with the volume counts, speed data was also collected. The average travel speed on northbound Haas Drive in the vicinity of the driveways is 20 miles per hour (mph), and the 85<sup>th</sup> percentile speed (design speed) is about 25 mph. In the southbound direction (downhill), the average speed is 25 mph, and the 85<sup>th</sup> percentile speed is 32 mph. The results of the speed survey are summarized in Appendix B.

Currently, sight distance to the south on Haas Drive from the project driveways is approximately 175 to 185 feet. To the north, the sight distance is approximately 400 feet. This analysis is based on a 13-foot setback from the edge of the travel way. Corner sight distance is measured from a point 3.5 feet above the existing grade at the project driveways at the location of the driver on the minor street, to a 4.25 foot object height in the center of the approaching lane of the major road. To ensure that the sight distance at the driveways is maintained, it is recommended that existing trees and shrubs be removed to ensure that adequate sight distance be maintained based on the setback.

Based on American Association of State Highway and Transportation Officials (AASHTO) standards, which are also used by the County of Santa Cruz, a sight distance of approximately 245 feet to the north and approximately 141 feet to the south, is required with the measured design speeds (85<sup>th</sup> percentile speed). Based upon the available sight distance of 400 feet to the north and 175-185 feet to the south, the project driveways exceed the required standards. The sight distance calculations are included as Exhibit 3.

In conclusion our analysis indicates that the design speeds (85<sup>th</sup> percentile) on Haas Drive provides for adequate sight distance to the north and south from the three driveways on Haas Drive. The driveways meet the County of Santa Cruz requirements for access onto the local street. If you have any questions regarding our analysis, please do not hesitate to contact us.

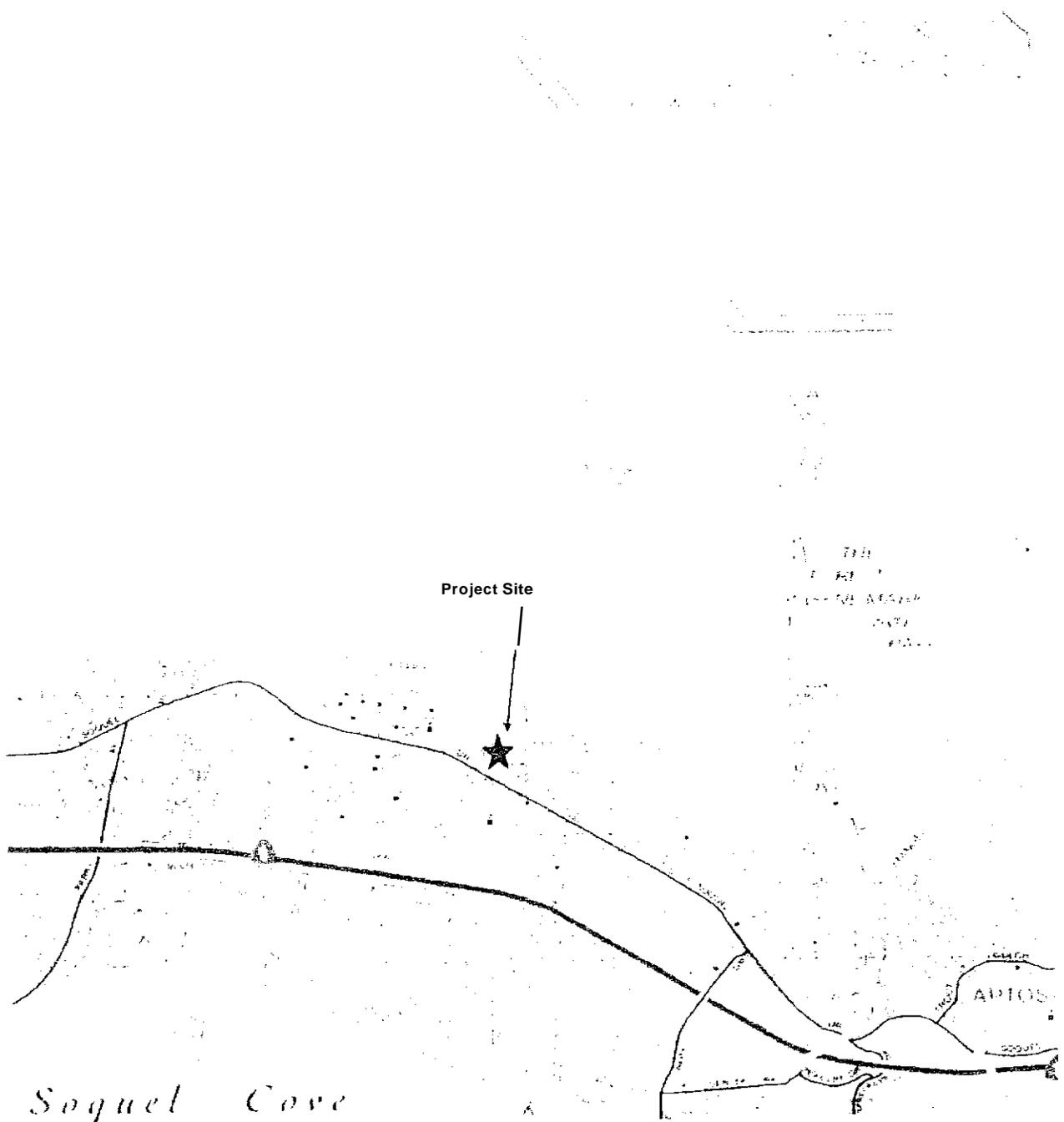
Sincerely yours,



for Keith B. Higgins, CE, TE

kbh:mm

Environmental Review Initial Study  
ATTACHMENT 10, 2 of 19  
APPLICATION 06-0651



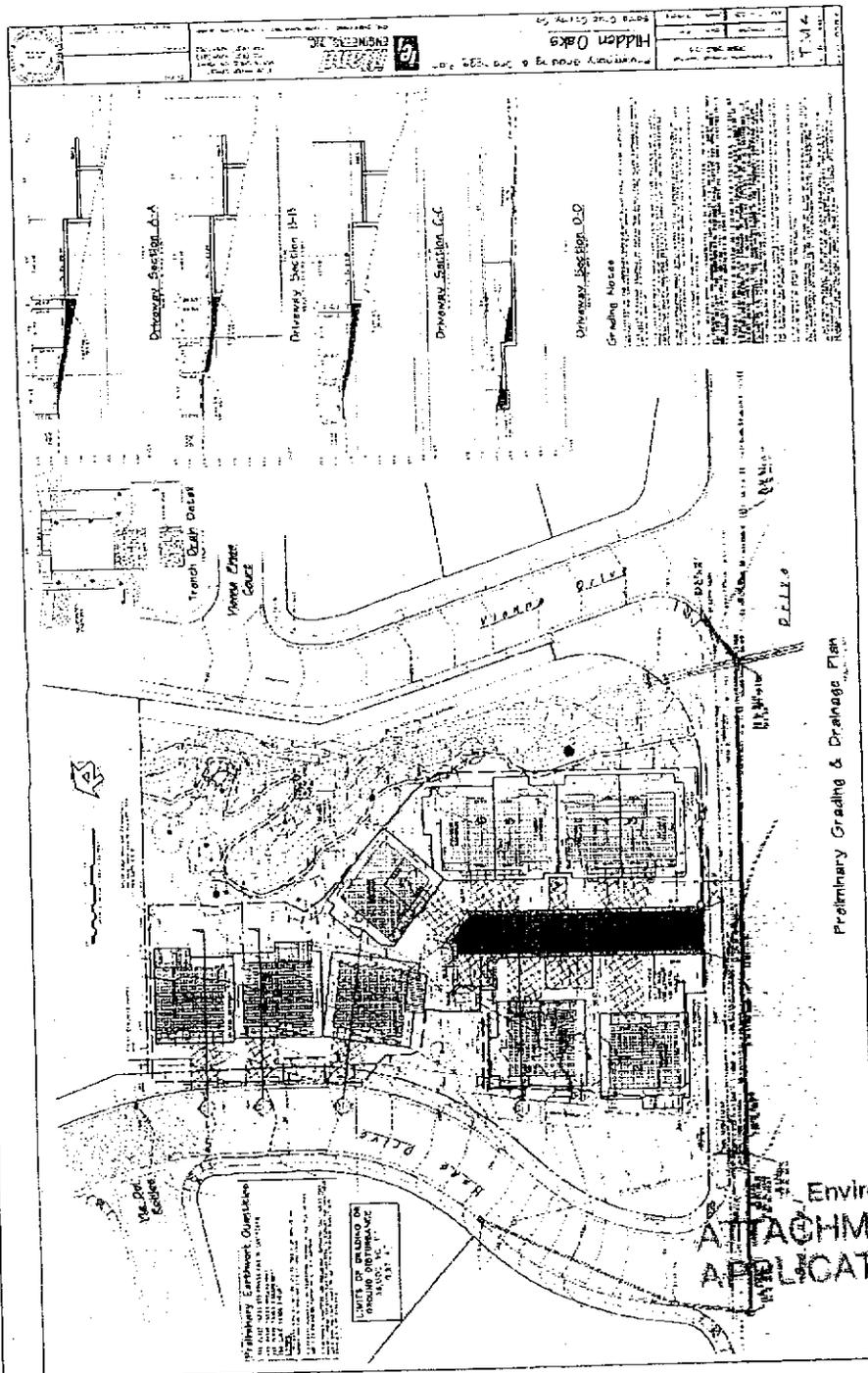
Environmental Review Initial Study  
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 APPLICATION 06-0651

**EXHIBIT 1**  
**PROJECT VICINITY MAP**

HIGGINS ASSOCIATES

6-208 Map Exhibits  
 VicinityMap

EXHIBIT 2  
SITE PLAN



6-208 Map Exhibits  
SitePlan1

Environmental Review Initial Study  
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APPLICATION 06-0651

HIGGINS ASSOCIATES.

Existing Sight Distance From Project Driveway With Measured 85th Percentile Speeds										
Direction	Design Speed	Brake Reaction		Braking Distance (feet)		Total Distance (feet)		Measured Sight Distance (feet)	Available Sight Distance Acceptable?	Cause(s) of Sight Distance Constraint
		Time	Distance	-8% grade	8% grade	-8% grade	8% grade			
SB (Looking North)	32 mph	2.5	117.3	127.4		244.8		400	Yes	NA
NB (Looking South)	25 mph	2.5	91.7	48.7		140.4		175	Yes	Vegetation and horizontal curve.

Notes: *A Policy on Geometric Design of Highways and Streets*, American Association of State Highway and Transportation Officials, 2001.

1. Source: A Policy on Geometric Design of Highways and Streets, American Association of State Highway and Transportation Officials, 2001.
2. Design speeds of 32 and 25 mph are based upon a speed survey data obtained from the tubes

Environmental Review Initial Study  
**ATTACHMENT 10, 5 of 19**  
**APPLICATION 06-0651**

APPENDIX A

Environmental Review Initial Study  
ATTACHMENT 10, 6 of 19  
APPLICATION 06-0651

Start Time	28 Nov-0 Tue	SB		Hour Totals		NB		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00			3				3				
12:15			5				5				
12:30			1	0	9		2	0	10	0	19
12:45			1				3				
01:00			3				4				
01:15			3				7				
01:30			3	0	17		4	0	18	0	35
01:45			8				5				
02:00			2				10				
02:15			7				1				
02:30			3	0	15		8	0	24	0	39
02:45			3				1				
03:00			5				4				
03:15			4				8				
03:30			5	0	18		4	0	17	0	35
03:45			4				5				
04:00			4				4				
04:15			5				1				
04:30			3	0	15		4	0	14	0	29
04:45			3				1				
05:00			0				6				
05:15			4				6				
05:30			3	0	11		4	0	17	0	28
05:45			4				8				
06:00			4				2				
06:15			3				5				
06:30			2	0	16		6	0	21	0	37
06:45			7				2				
07:00			1				4				
07:15			2				4				
07:30			0	0	8		3	0	13	0	21
07:45			5				1				
08:00			4				4				
08:15			0				4				
08:30			2	0	6		4	0	13	0	19
08:45			0				3				
09:00			0				0				
09:15			1				1				
09:30			1	0	3		1	0	5	0	8
09:45			1				1				
10:00			0				0				
10:15			0				1				
10:30			0	0	1		0	0	2	0	3
10:45			0				0				
11:00			0				0				
11:15			0				1				
11:30			0				0				
11:45			0	0	0		0	0	1	0	1
Total			0	119		0	155			0	274
Percent			0.0%	100%		0.0%	100%			0.0%	100%

Environmental Review Initial Study  
 ATTACHMENT 10, Feb 19  
 APPLICATION 06-0651

Start Time	29-Nov-0 Wed	SB		Hour Totals		NB		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		0	6			1	6				
12:15		1	2			0	4				
12:30		0	3	1	14	0	1	2	16	3	30
12:45		0	3			1	5				
01:00		0	4			0	3				
01:15		0	2			0	6				
01:30		0	3	0	12	0	2	0	14	0	26
01:45		0	3			0	5				
02:00		0	5			0	2				
02:15		0	4			0	4				
02:30		0	1	0	14	0	4	0	11	0	25
02:45		0	4			0	0				
03:00		0	5			0	4				
03:15		0	2			0	5				
03:30		1	3	1	11	1	3	1	14	2	25
03:45		0	1			0	2				
04:00		0	6			0	4				
04:15		0	5			0	5				
04:30		0	4	0	19	0	9	0	26	0	45
04:45		0	4			0	8				
05:00		0	3			0	3				
05:15		0	5			0	7				
05:30		1	3	1	11	1	2	1	12	2	23
05:45		0	0			0	0				
06:00		0	0			0	0				
06:15		1	0			1	0				
06:30		1	0	4	0	0	0	3	0	7	0
06:45		2	0			2	0				
07:00		8	0			0	0				
07:15		3	0			0	0				
07:30		1	0	14	0	2	0	4	0	18	0
07:45		2	0			0	0				
08:00		6	0			3	0				
08:15		3	0			1	0				
08:30		6	0	19	0	3	0	10	0	29	0
08:45		4	0			1	0				
09:00		1	0			4	0				
09:15		7	0			4	0				
09:30		4	0	13	0	2	0	11	0	24	0
09:45		4	0			7	0				
10:00		5	0			7	0				
10:15		6	0			2	0				
10:30		4	0	17	0	1	0	17	0	34	0
10:45		2	0			2	0				
11:00		6	0			4	0				
11:15		3	0			2	0				
11:30		5	0			2	0				
11:45		5	0	19	0	5	0	13	0	32	0
Total		89	81			62	93			151	174
Percent		52.4%	41.6%			40.0%	60.0%			46.5%	53.5%

Environmental Review Initial Study  
 ATTACHMENT 10, 8/28/19  
 APPLICATION 06-0651

Higgins Associates  
 1300 B First Street  
 Gilroy, California 95020

Site Code  
 HAAS VOLUME

Start Time	30-Nov 0 Thu	SB		Hour Totals		NB		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		0				0	0				
12:15		0				0	0			0	0
12:30		0	0	0		0	0	0	0	0	0
12:45		0	0			0	0				
01:00		0	0			0	0				
01:15		0	0			0	0			0	0
01:30		0	0	0	0	0	0	0	0	0	0
01:45		0	0			0	0				
02:00		0	0			0	0				
02:15		0	0			0	0			0	0
02:30		0	0	0	0	0	0	0	0	0	0
02:45		0	0			0	0				
03:00		0	0			0	0				
03:15		0	0			0	0			0	0
03:30		0	0	0	0	0	0	0	0	0	0
03:45		0	0			0	0				
04:00		0	0			0	0				
04:15		0	0			0	0			0	0
04:30		0	0	0	0	0	0	0	0	0	0
04:45		0	0			0	0				
05:00		0	0			0	0				
05:15		0	0			0	0			0	0
05:30		0	0	0	0	0	0	0	0	0	0
05:45		0	0			0	0				
06:00		0	0	1		0	0				
06:15		0	0			0	0			0	1
06:30		0	0	0	1	0	0	0	0	0	1
06:45		0	0			0	0				
07:00		0	0			0	0				
07:15		0	0			0	0			0	0
07:30		0	0	0	0	0	0	0	0	0	0
07:45		0	0			0	0				
08:00		0	0			0	0				
08:15		0	0			0	0			0	0
08:30		0	0	0	0	0	0	0	0	0	0
08:45		0	0			0	0				
09:00		0	0			0	0				
09:15		0	0			0	0			0	0
09:30		0	0	0	0	0	0	0	0	0	0
09:45		0	0			0	0				
10:00		0	0			0	0				
10:15		0	0			0	0			0	0
10:30		0	0	0	0	0	0	0	0	0	0
10:45		0	0			0	0				
11:00		0	0			0	0				
11:15		1	0			1	0				
11:30		1	0			2	0			5	0
11:45		0	0	2	0	3	0	3	0	5	1
Total		2	1	2	0	3	0	3	0	5	1
Percent		66.7%	33.3%			100%	0.0%			83.3%	16.7%

Environmental Review Initial Study  
 ATTACHMENT 10, 9 of 19  
 APPLICATION 06-0651

Start Time	01-Dec-0 Fri	SB		Hour Totals		NB		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		0	0			0	0				
12:15		0	0			0	0				
12:30		0	0	0	0	0	0	0	0	0	0
12:45		0	0			0	0				
01:00		0	0			0	0				
01:15		0	0			0	0				
01:30		0	0			0	0	0	0	0	0
01:45		0	0	0	0	0	0	0	0	0	0
02:00		0	0			0	0				
02:15		0	0			0	0				
02:30		0	0	0	0	0	0	0	0	0	0
02:45		0	0			0	0				
03:00		0	0			0	0				
03:15		0	0			0	0				
03:30		0	0	0	0	0	0	0	0	0	0
03:45		0	0			0	0				
04:00		0	0			0	0				
04:15		0	0			0	0				
04:30		0	0			0	0	0	0	0	0
04:45		0	0	0	0	0	0	0	0	0	0
05:00		0	0			0	0				
05:15		0	0			0	0				
05:30		0	0	0	0	0	0	0	0	0	0
05:45		0	0			0	0				
06:00		0	0			0	0				
06:15		0	0			0	0				
06:30		0	0	0	0	0	0	0	0	0	0
06:45		0	0			0	0				
07:00		0	0			0	0				
07:15		0	0			0	0				
07:30		0	0	0	0	0	0	0	0	0	0
07:45		0	0			0	0				
08:00		0	0			0	0				
08:15		0	0			0	0				
08:30		0	0	0	0	0	0	0	0	0	0
08:45		0	0			0	0				
09:00		0	0			0	0				
09:15		0	0			0	0				
09:30		0	0	0	0	0	0	0	0	0	0
09:45		0	0			0	0				
10:00											
10:15											
10:30											
10:45											
11:00											
11:15											
11:30											
11:45											
Total		0	0			0	0			0	0
Percent		0.0%	0.0%			0.0%	0.0%			0.0%	0.0%
Grand Total		91	201			65	248			156	449
Percent		31.2%	64.2%			20.8%	79.2%			25.8%	74.2%

ADT Not Calculated

Environmental Review Initial Study  
 ATTACHMENT 10, 10 of 19  
 APPLICATION 06-0651

APPENDIX B

Environmental Review Initial Study  
ATTACHMENT 10, 11 of 19  
APPLICATION 06-0651

Higgins Associates  
 1300-B First Street  
 Citroy California 95020

Southbound	15	16	21	26	31	36	41	46	51	71	Total
Start	15	16	21	26	31	36	41	46	51	71	Total
Time	15	20	25	30	35	40	45	50	55	75	
11/28/06											
01:00											
02:00											
03:00											
04:00											
05:00											
06:00											
07:00											
08:00											
09:00											
10:00											
11:00											
12 PM	21	2	1	4	3	0	0	0	0	0	31
13:00	1	3	4	4	4	1	0	0	0	0	17
14:00	0	1	1	9	2	2	0	0	0	0	15
15:00	0	4	5	7	2	0	0	0	0	0	18
16:00	0	2	6	4	3	0	0	0	0	0	15
17:00	2	0	1	3	4	1	0	0	0	0	11
18:00	0	4	1	7	3	1	0	0	0	0	16
19:00	0	0	3	3	2	0	0	0	0	0	8
20:00	0	0	1	3	0	2	0	0	0	0	6
21:00	0	0	0	0	1	1	0	0	0	0	3
22:00	0	0	0	0	0	1	0	0	0	0	1
23:00	0	0	0	0	0	0	0	0	0	0	0
Total	24	16	24	44	24	9	0	0	0	0	141
Percent	17.0%	11.3%	17.0%	31.2%	17.0%	6.4%	0.0%	0.0%	0.0%	0.0%	0%

Environmental Review Initial Study  
 ATTACHMENT 10.12.19  
 APPLICATION 06-0651

AM	12:00	13:00	14:00	15:00	16:00	17:00
Peak						
Vol.	12:00	13:00	14:00	15:00	16:00	17:00
Peak	21	4	9	6	9	2
Vol.						

Higgins Associates  
 1300-B First Street  
 Gilroy, California 95020

Site Code:  
 haas Speed +5

Southbound	15	16	21	26	31	36	41	46	51	56	61	66	71	76	Total	85th Percent	95th Percent	
Start Time	15:00	16:00	21:00	26:00	31:00	36:00	41:00	46:00	51:00	56:00	61:00	66:00	71:00	76:00	170	31	31	
11/29/06	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	1	1	2	0	0	0	0	0	0	0	0	0	4	31	32	
07:00	0	0	4	7	3	0	0	0	0	0	0	0	0	0	14	31	32	
08:00	0	3	6	8	3	1	0	0	0	0	0	0	0	0	19	29	35	
09:00	0	0	4	3	5	0	0	0	0	0	0	0	0	0	13	33	34	
10:00	0	2	2	8	3	2	0	0	0	0	0	0	0	0	17	32	36	
11:00	0	0	8	6	3	1	0	0	0	0	0	0	0	0	19	31	33	
12 PM	0	3	2	7	2	0	0	0	0	0	0	0	0	0	14	30	31	
13:00	0	2	2	5	1	1	0	0	0	0	0	0	0	0	12	30	35	
14:00	0	2	2	9	1	0	0	0	0	0	0	0	0	0	14	29	30	
15:00	0	0	1	6	3	0	0	0	0	0	0	0	0	0	11	31	32	
16:00	2	1	5	8	2	1	0	0	0	0	0	0	0	0	19	30	32	
17:00	4	0	3	3	1	0	0	0	0	0	0	0	0	0	11	27	28	
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	10	13	40	71	28	8	0	0	0	0	0	0	0	0	170	0	0	
Percent	5.9%	7.6%	23.5%	41.8%	16.5%	4.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak Vol.	09:00	08:00	11:00	08:00	09:00	10:00									08:00			
PM Peak Vol.	17:00	16:00	16:00	14:00	15:00	13:00									16:00			

Environmental Review Initial Study  
 ATTACHMENT 10, 13 of 19  
 APPLICATION 06-06.51

Higgins Associates  
 1300-B First Street  
 Gilroy, California 95020

Southbound	15	16	20	21	26	31	36	41	46	51	56	61	66	76	Total	th	nt
Start Time	15	16	20	21	26	31	36	41	46	51	56	61	66	76			
11/30/06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
12 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3
Percent	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%		
AM Peak Vol.																	11:00
PM Peak Vol.																	18:00

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Southbound	1	5	15	26	30	31	35	36	41	45	46	51	55	56	60	65	66	70	71	75	76	85 th	95 th	Total	
Start	1	5	15	26	30	31	35	36	41	45	46	51	55	56	60	65	66	70	71	75	76	85 th	95 th	Total	
Time	12/01/06																								
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Percent	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

AM	PM	Peak	Vol.	Percent	15th Percentile	50th Percentile	85th Percentile	95th Percentile	10 MPH Pace Speed	Number in Pace	Percent in Pace	Number of Vehicles > 55 MPH	Percent of Vehicles > 55 MPH	Mean Speed(Average)
37	29	64	115	9.2%	20.4%	36.6%	52	17	21-30 MPH	179	57.0%	0	0.0%	25 MPH
Grand Total	37	29	64	115	20.4%	36.6%	52	17	10 MPH Pace Speed	Number in Pace	Percent in Pace	Number of Vehicles > 55 MPH	Percent of Vehicles > 55 MPH	Mean Speed(Average)
Percent	11.8%	9.2%	20.4%	36.6%	16.6%	17 MPH	27 MPH	32 MPH	21-30 MPH	179	57.0%	0	0.0%	25 MPH

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Start Time	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	Total
11/28/06	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	999
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12 PM	3	4	7	8	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	15
13:00	3	5	8	8	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	18
14:00	3	6	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	24
15:00	1	4	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	24
16:00	0	4	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	25
17:00	2	6	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	26
18:00	0	8	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	23
19:00	0	5	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	21
20:00	0	2	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	25
21:00	0	2	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	26
22:00	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	5
23:00	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2
Total	12	47	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	83	160
Percent	7.5%	29.4%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	0.0%

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14:00  
 24

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Northbound		1	16	21	26	31	36	41	46	51	56	61	66	71	76	Total	ith
Start Time	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	999	ith
11/29/06	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	31
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.
05:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	21
06:00	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	3	21
07:00	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4	24
08:00	1	5	3	1	0	0	0	0	0	0	0	0	0	0	0	10	23
09:00	3	1	7	0	0	0	0	0	0	0	0	0	0	0	0	11	23
10:00	1	8	7	1	0	0	0	0	0	0	0	0	0	0	0	17	25
11:00	1	4	6	2	0	0	0	0	0	0	0	0	0	0	0	13	26
12 PM	1	10	3	2	0	0	0	0	0	0	0	0	0	0	0	16	26
13:00	1	7	5	1	0	0	0	0	0	0	0	0	0	0	0	14	25
14:00	2	3	5	1	0	0	0	0	0	0	0	0	0	0	0	11	24
15:00	2	1	11	0	0	0	0	0	0	0	0	0	0	0	0	14	24
16:00	8	6	11	1	0	0	0	0	0	0	0	0	0	0	0	26	25
17:00	5	2	5	0	0	0	0	0	0	0	0	0	0	0	0	12	24
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.
Total	26	49	69	10	1	0	0	0	0	0	0	0	0	0	0	155	.
Percent	16.8%	31.6%	44.5%	6.5%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		.
Peak AM	09:00	10:00	08:00	11:00	00:00											10:00	.
Peak Vol.	3	8	7	2	1											17	.
Peak PM	16:00	12:00	15:00	12:00												16:00	.
Peak Vol.	8	10	11	2												26	.

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Northbound	15	16	21	26	31	36	1	46	51	6	61	66	71	76	Total	ln
Start Time	11/30/06															
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
Percent	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	11.00
Peak AM	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
Peak Vol. PM	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
Peak Vol.																

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Environmental Consulting Services    18488 Prospect Road – Suite 1, Saratoga, CA 95070  
Phone: (408) 257-1045    [stanshell199@toast.net](mailto:stanshell199@toast.net)    FAX: (408) 257-7235

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October 16, 2006

Mr. Keith Baxter  
BK Properties, L.P.  
550 Hudson Lane  
Aptos, CA 95003

Re: Noise Study Report for the Hidden Oaks Residential Development Project;  
6851 Soquel Drive, Santa Cruz County - APN 039-061-03

Dear *Mr.* Baxter,

I have reviewed the acoustical aspects of the design documents for the subject project relative to the Santa Cruz County and State of California residential noise planning requirements. This report presents the results of the noise study, which includes on-site noise monitoring, projection of future L<sub>dn</sub> project noise levels, a description of architectural details relevant to noise protection performance, and general recommendations for compliance with County planning criteria [1] and California Title 24 Noise Insulation Standards [2].

### PROJECT DESCRIPTION [3]

The proposed 1.55-acre Hidden Oaks residential development is located on Soquel Drive between Haas Drive and Vienna Drive, and includes two duplex units (# 3-4 and 5-6), and six single-family residential units (#1, 2, 7, 8, 9, 10). There are primarily residential uses in the area, with Cabrillo College west of the site on Soquel Drive. Units #1 through 7 will be accessed through a new street to be created, Oak Leaf Court, while units #8-10 will be accessed via Haas Drive. At present there are two houses on the site, which will be demolished. This report evaluates the complete build-out scenario.

### SUMMARY OF FINDINGS

The primary source of noise at the project site is traffic on Soquel Drive, a four-lane arterial with a middle turn lane. Typical vehicle passby noise levels on site are 60-70 dBA at 50 feet. Trucks, motorcycles, and poorly-muffled vehicles produce peak levels 5 to 15 dBA higher on passby. Traffic on Soquel Drive adjacent to the project site has moderate volumes and speed. Traffic on Haas Drive to the west and Vienna Drive to the east is low volume and low speed, and contributes little to the overall noise level. There are no other significant noise sources in the project area.

Based upon site noise measurements, anticipated future traffic volumes, and noise modeling, the worst-case Design Noise Level for project residential units would be 73 dBA. The Design Noise Level is the worst-case outdoor noise level the project structures with the highest noise exposures must mitigate to provide a satisfactory interior environment. To meet Santa Cruz County residential noise criteria, described in the Noise Element of the Santa Cruz County General Plan [1], the following general design measures must be met:

- Title 24-specifies that long-term interior noise levels not exceeding 45 L<sub>dn</sub> due to exterior sources must be provided.

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- Party wall assemblies between residential units must have a minimum **50 STC** (Sound Transmission Class) rating. Standard STC ratings for different types of party wall constructions are documented in References 6 and 7.
- Floor/ceiling assemblies between attached units should have a minimum **50 IIC** (Impact Insulation Class) rating, as well as a 50 STC rating. **This** regulation does not apply to this project, since there are no units that share a floor-ceiling assembly with mother unit (party wall connections only).
- Outdoor activity areas associated with residential uses, such as decks and back yards, are recommended to meet a County Noise Element standard of 60 dBA Ldn.

**NOISE MONITORING AND DESIGN NOISE LEVEL ANALYSIS**

Field noise measurements on site were made during the late morning commute period of October 11, 2006, with a CEL-440 precision noise meter and analyzer, calibrated with a B & K Model 4230 Sound Level Calibrator. The measurement locations were chosen to represent worst-case exposure of project residential units closest to Soquel Drive:

Location 1 – approximately the location of the back yard or deck of residential unit #2, nearest to Soquel Drive on the south side of the site, about **40 feet** from the nearest lane

Location 2 – approximately the location of the back yard or deck of residential unit #8, about **180 feet** from the roadway, the only residence with an outdoor activity area directly facing Soquel Drive.

**Existing Noise Levels**

Noise levels were measured and are reported using percentile noise descriptors. L90 (the background noise level exceeded 90 % of the time), L50 (the median noise level exceeded **50%** of the time), L1 (the peak level exceeded 1% of the time), and Leq (the average energy-equivalent noise level). Measured noise levels are presented in Exhibit 1 below. The Ldn noise levels were computed as the long-term average of Leq using the typical daily traffic distribution in the area, with standard weighted penalties for the nighttime hours.

EXHIBIT 1  
**EXISTING NOISE LEVELS (dBA)**  
 Main Street Village Residential Project Site - Soquel

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Location	L90	L50	Leq	L1	Ldn
1. Unit 2 deck/yard, south side of site	55	65	67	76	70
3. Unit 8 deck/yard, middle of site	46	51	52	60	55

Noise levels on the site are typical for locations adjacent to an arterial such as Soquel Drive, which has relatively high speeds and moderate traffic volumes. The future residential locations are somewhat elevated and look down on Soquel Drive, which raises noise levels somewhat. At locations in the middle and at the north end of the site noise levels are lower due to increased distance and shielding from intervening structures.

**Future Project Noise Levels**

The Design Noise Level is the outdoor noise level anticipated within the next ten years (2016) for the residential units experiencing the highest noise exposure—the maximum noise level that the building

Location	First Floor and Yards	Second Floor
1. Units near Soquel Drive, south end	71	73
3. Units near mid-site and north end	55-58	55-58

The estimated worst-case noise levels for units closest to and facing the roadway, the architectural Design Noise Level, would be 73 dBA for upper floor units. Areas further back from the roads, such as the interior areas and units at the north section of the site, would have significantly lower noise levels than those near the roadway.

This project is adjacent to residential uses to the north, east and west. As in any busy area, some non-traffic activities could cause sporadic disturbance to the project. However, the proximity to steady arterial traffic would provide a noise background covering most incidental noise from adjacent properties.

### STATE OF CALIFORNIA and SANTA CRUZ COUNTY RESIDENTIAL NOISE STANDARDS

County and State noise criteria require that new residential housing developments provide an interior  $L_{dn}$  noise level of 45 dBA or less due to exterior noise sources. As described in the previous section, the worst-case project noise environment for architectural design purposes is 73 dBA for units next to Soquel Drive. Therefore, to achieve an interior  $L_{dn}$  of 45 dBA, a minimum noise reduction of at least 28 dB must be provided by the combined elements of the building shell, particularly those units near the freeway. The transmission loss of architectural building elements is designated by Sound Transmission Class (STC) ratings for wall elements and by Impact Insulation Class (UC) ratings for floor/ceiling assemblies, both of which are methods of estimating the inherent ability to attenuate noise transmission. Residences not near the roadway would have lower noise exposure levels due to both distance and shielding effects.

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Standard wood and gypsum exterior wall constructions have STC ratings of approximately 40 dBA or more. Standard hollow-core doors and openable single pane windows are rated at about 22-28 STC. Typical dual-layer thermal pane windows are rated at 27-30 dB STC. Except for actual cracks and openings in a structure, doors and windows are usually the weakest elements in the design and construction of a good sound-rated building, and usually reduce the overall protection provided by the more substantial wall structures.

County Noise Element guidelines for residential areas specify outdoor protected areas of 60 dBA Ldn. In high volume traffic environments this often means noise reduction by means of noise walls, special property line or rear yard walls, or individual deck enclosures. In some developments the residential structures themselves offer some or all of the protection necessary from traffic noise impacts. The three units nearest to Soquel Drive, #2, 3 and 4, have yards or deck areas that require 10-11 dB noise reduction in order to meet the 60 dB Ldn outdoor criteria, which is difficult using normal height noise walls. A solid E-foot wall or fence can provide at most 9 dB noise reduction in these key areas. Outdoor yards and decks further back can be protected with standard 6-foot property line wood fences.

**RECOMMENDATIONS**

Following are recommendations for meeting the primary criteria for good residential noise insulation design by the Hidden Oaks residential development:

- 1. **WINDOWS.** Windows should have STC rating of at least 28 dB, although a 30 STC rating is recommended for units near the roadway to provide more protection from peak noise levels from motorcycles and trucks. High quality double-glazed thermal windows, with two 1/8" lights separated by a 1/2" to 3/4" air space, and good weather seals if openable, typically have ratings of 29-30 STC.
- 2. **PARTY WALL ASSEMBLIES.** For minimizing noise transmitted between attached residential units, the party wall assembly should have several inches of air space, fiberglass insulation and minimal structural connections, and generally resilient channel (RC) on one side of the party wall, in order to meet the 50 dBA STC requirement. Acceptable types of party wall assemblies are described in References 6 and 7.

In addition, any fire stops between units should not provide a strong structural connection. That is, they should be of lightweight material, such as sheet metal or fiberglass that cannot conduct low-frequency sound and vibration between units.

- 3. **EXTERIOR DOORS.** Entrance doors and sliding glass doors, particularly those in residences near and facing the roadway, should meet an STC rating of at least 28 dB to match the building shell noise reduction criteria
- 4. **PROTECTED OUTDOOR ACTIVITY AREAS.** As shown in Exhibit 2, without protection noise levels in outdoor areas near Soquel Drive are going to be in the 70-71 dBA range. As described previously, the three units nearest to Soquel Drive, #2, 3 and 4, have yards or deck areas that require 10-11 dB noise reduction in order to meet the 60 dB Ldn outdoor criteria, which is difficult using normal height noise walls. A solid E-foot wall or fence, double layer wood or masonry, is recommended to provide about 8-9 dB noise reduction in these key areas, which would provide an outdoor noise environment in the 60-62 dBA Ldn range. Outdoor yards and decks further back should be protected with standard solid 6-foot property line wood fences
- 5. **VENTILATION.** Mitigation of outside traffic noise is based upon windows that are closed in order to provide the required noise protection. Therefore all units, particularly those units nearest the traffic noise sources producing the primary noise, must have a ventilation system that provides a habitable interior environment with the windows closed, regardless of outside temperature. In addition, if air conditioning units are installed, the noise levels produced by the AC Units must

not themselves cause a noise problem for any of the residential units associated with the project Or adjacent residential properties.

6. GENERAL DESIGN AND CONSTRUCTION PRACTICES. Good **noise** design must be implemented by good field construction practices or the design performance will not be achieved. **This** includes minimizing all penetrations of and connections between **party wall** and floor/ceiling assemblies, and acoustical sealant around **any** necessary penetrations.

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 11, 5 of 6  
APPLICATION 06-0651

**REFERENCES**

1. "Noise Element", **Santa Cruz County General Plan, Santa Cruz County Planning Department, 1999.**
2. "Noise Insulation Standards," Section 3501, Title 24, Pan 2, California Building Standards Code, revised September 1989.
3. Architectural **Site** Plan and elevations: "Tentative Map – Tract No 1529, **Hidden Oaks**" Jfland Engineers, Inc, Santa Cruz; and "Soquel Subdivision" elevations, W, R & D Architects LLP, Monterey.
4. Traffic volume counts: Soquel Drive near project (year 2003), "Transportation Monitoring Report", Santa Cruz County Regional Transportation Commission website, October 2006.
5. **Highway Noise - A Design Guide for Highway Engineers**, National Cooperative Highway Research Program Report 117, Highway Research Board, National Academy of Sciences, Washington, D.C., 1971 (model enhanced and field validated by ECS).
6. **DuPree, Russell B., Catalog of STC and IIC Ratings for Wall and Floor/Ceiling Assemblies**, California Dept of Health Services, Office of Noise Control, Berkeley, CA, Feb. 1980.
7. "Fire Resistance and Sound Control Design Manual", 17<sup>th</sup> Ed., Gypsum Association, Washington, DC, 2003.
8. "Noise Insulation Problems in Buildings", Paul Veneklasen & Associates, for **Santa Clara County Airport Land Use Commission San Jose**, January 1973.

Environmental Review Initial Study  
ATTACHMENT 11.604.6  
APPLICATION 06-0651

To Matt Johnston, Environmental Coordinator for the county of Santa Cruz, CA  
From: Thousand Oaks Neighborhood  
Re: comments on the review of the initial study for Application **06-0651**, APN  
039-062-05.

Sept 15th, 2007

We oppose these aspects of the development of the property at 6851 Soquel Dr,  
Aptos. CA

1) The three driveways that enter onto and exit from Haas Dr

a) To exit onto Haas Dr is impractical is not needed and not wanted. These three homes should enter and exit onto Soquel Dr. like the other 7 homes that are proposed.

b) We as residents that live here feel that backing out of the driveways in these locations **is unsafe**. We **feel** that the traffic study that was conducted by Higgins Associates was inadequate and didn't completely reflect the conditions that exist. See the following items i - vii:

i) Measurements of traffic volume were only done for one day. We feel this is inadequate to accurately reflect the volume of traffic.

ii) The additional volume of traffic from the Mar Sereno development directly to the west on the other side of Haas Dr from the proposed development was not taken into account. There will be ten additional homes constructed two of which are currently under construction.

iii) Additionally, a greater number of students from Cabrillo College are parking their vehicles on Mar Sereno compared with last year. This generates an additional amount of traffic from those looking for parking.

iv) Residents also feel that there is much more morning traffic than there is evening traffic which is opposite of what the Higgins Associates report states. This is significant in that attempting to back out of one of the driveways onto Haas to go to work during such a busy time will be more **difficult** than the report concludes. Backing out into traffic that is traveling faster in the southbound direction is more dangerous since the 85th percentile speeds were significantly higher than the 85th percentile speeds for the northbound traffic. Also, if people backing out of their driveways onto Haas Dr are late for work, they may take a greater risk in attempting to get onto Haas Dr. during this time when there are a lot of vehicles on Haas Dr.

v) There was no mention in the report by Higgins Associates about the vehicles from the northern most home as being required to back into the intersection of Mar Sereno and Haas Dr. This puts an additional burden on **the** drivers already backing out across 2 lanes of traffic to watch for traffic at this intersection.

vi) There was no mention in the Higgins Associates report about how many location(s) on the proposed development were used for distance measurements and where those location(s) were. The three proposed homes that access Haas

Environmental Review Initial Study  
**ATTACHMENT - 12, 1 of 5**  
**APPLICATION - 06-0651**

Dr have a difference in driveway height where the driveways intersect Haas Dr of at least 4.5 ft from the northern most home to the southern most home according to the sections for the driveways in the Preliminary Grading and Drainage Plan. This is significant given that it was stated that the distance measurements were taken at 3.5 ft in height at the driveway and 4.25 ft in height from the street and that the elevation gradient on Haas Dr is significant - 10 to 12 % near Soquel Dr and 6 - 8% at the proposed driveways on Haas Dr. as per the Higgins Associates report. The viewing distance from the southern most driveway looking to the southbound traffic could be completely blocked at this elevation difference.

vii) As per the data in the Higgins Associates report the 85th percentile southbound traffic speed is 32mph which is already exceeding a 25mph speed limit. As residents of this area know a significant number of drivers exceed the 32mph 85th percentile speed by a significant amount which increases the chances of an accident occurring. Even the one day's worth of data shown in the Higgins Associates reports shows this.

c) The wait times to get onto Soquel Drive from Haas Drive in the mornings are already significant. Often you can not turn left onto Soquel Dr the traffic is so heavy at these times. So you have to turn right and then turn around as you can. With all the residential housing going in such as the units at Mar Vista Dr. and Soquel Dr., the 10 units that are currently being proposed, the 10 new homes at Mar Sereno, the units just west of Cabrillo, at Atherton Dr and Soquel Dr, and the additional traffic from Cabrillo College it will be even more difficult to turn onto Soquel Dr from Haas Dr. We feel that the traffic for the whole area hasn't been adequately addressed and planned for similar to the highway 1 situation in the mornings.

2) There is a proposal to remove 33 trees with a diameter greater than 6 inches

a) As per the report from the arborist, James Allen only 9 of those trees to be removed are for poor health. Removing 25 additional trees with greater than a 6 in diameter due to the construction is significant. The view of the neighbors will be significantly deteriorated from a forested area to only the trees in the Riparian area. We disagree and object to the interoffice memo from Larry Kasparowitz, urban designer to Randall Adams, project planner concerning the Design Review for minor land division at 6851 Soquel Drive, Aptos it is stated that the "retention of natural amenities" and "the minimize impact on private views criteria" in the code are met. We feel the developer needs to rethink the development so as not to remove so many trees. This is a rural portion of Aptos that has its own character. That's why this area is called Thousand Oaks. To remove this many trees changes the character of the neighborhood.

b) In addition, the damage to the surrounding Coastal Live Oak trees due to the oak moths has been so significant already. To have that many additional trees

Environmental Review Initial Study  
**ATTACHMENT** 12, 2 of 5  
**APPLICATION** 06-0651

removed due to the construction will make it difficult for birds and other wildlife that depend on trees to survive in this area.

c) **Also**, the planting plan does not adequately address the removal of the 33 trees with regard to neighbor views or wildlife survival.

d) In the report from the arborist, James Allen he recommends a five year plan to maintain and monitor the health of the remaining trees as well as the new trees. There is no mention of this being part of the mitigations that are attached to the Negative Declaration in the review of the initial study by the environmental coordinator. We feel this recommendation by the arborist should be a requirement and funds should be set aside by the developer to make sure this occurs.

3) We feel that this proposed development already will have such a significant impact on the area and the riparian arroyo that no riparian exceptions should be granted. A minimum 30ft (20ft + 10ft) set back from the top of the bank should be maintained at all times for all the reasons that a 30ft total setback was established as well as mitigating any further damages.

4) In the discretionary comments section of the report an entry dated 12/11/06 by David W Sims on pages 6 and 7 item **E** indicated that a state permit must be obtained for the "Construction **A c t i v i t i e s** Storm Water General NPDES Permit from the State Water Resources Control Board". However, In the environmental review initial study, section M, "Non-Local Approvals" the "No" is checked in answer to the question "Does the project require approval of federal, state, or regional agencies?"

Environmental Review Initial Study  
ATTACHMENT 12, 30 of 5  
APPLICATION 06-0651



# COUNTY OF SANTA CRUZ

## PLANNING DEPARTMENT

701 OCEAN STREET, 4<sup>TH</sup> FLOOR, SANTA CRUZ, CA 95060  
(831) 454-2580 FAX: (831) 454-2131 TDD: (831) 454-2123  
TOM BURNS, PLANNING DIRECTOR

Randy Forcier  
Thousand Oaks Neighbors

October 1, 2007

Re: Comments on Application 06-0651

Dear Randy,

Thank you for your comments regarding the proposed development of parcel 039-062-05. Below are the County's responses.

1. The traffic study is not adequate.
  - a. The traffic study was reviewed and approved by the County's Traffic Engineer and deemed adequate. Under the California Environmental Quality Act (CEQA), in order for the issues you've raised to be considered as substantial enough to discredit the approved study, they must be expressed as the findings and expert opinions of a qualified traffic engineer. As they appear to be observations by local residents and critiques of the methods used in the study, with no expert basis to offer, the County cannot discredit the findings of an approved study by a qualified engineer.
    - i. County action: none.
2. Issues with the tree removal,
  - a. As to the review and design to retain trees to preserve the nature of the site, the applicant has gone through a process to minimize tree removal. All trees that are removed shall be replaced with native species. Of the trees to be removed, 9 are non-native, primarily acacia, 4 are natives in poor health, and 2 are dead. Five trees to be removed will be relocated to a more suitable location, and all trees that are to be removed will be replaced with a 24-inch box or 15 gallon native tree. The Planning Department feels this is suitable as mitigation for the trees removed.
    - i. County action: add mitigation for 5-year monitoring and maintenance of trees.
  - b. As to the damage by the oak moth, the common opinion in the scientific community is that the damage from this year's moth hatch, while excessive, is temporal damage that should have no lasting effects. The massive numbers of larvae and moths should serve as a food source for various animal species.
    - i. County action: none.
  - c. As to the removal of the trees as it pertains to neighbor views, this is not an impact covered by CEQA. While the Santa Cruz County General Plan does allow for the protection of public view sheds, it is not feasible to protect all private view sheds.
    - i. County action: none.

Environmental Review Initial Study  
ATTACHMENT 12, 4 of 5  
APPLICATION 06-0651

- d. **As to** the effects of tree removal on wildlife, because this parcel is already developed and in a developed neighborhood, on a main thoroughfare, and measures are in place to prevent further intrusion into the riparian corridor and to prevent impacts to nesting birds during construction, potential impacts to wildlife due to tree removal are considered less than significant.
  - i. County action: none.
- 3. Impacts on the riparian conidor.
  - a. The proposed development will constitute less development and usage within **the** riparian conidor than exists currently. Fencing will be installed to limit activities to the predevelopment disturbed area.
    - i. County action: none.
- 4. Non-local approvals.
  - a. The *commenter* is correct in noting that the State Water Resources Control Board must issue a permit on this project.
    - i. County action: The Initial Study has been updated to reflect this change.

Thank you for the submitted comments. Your comments and this response will be included in the staff report to the Planning Commission. You will have a chance to speak to this project when it is presented to the Planning Commission for their approval.



Matthew Johnston  
Deputy Environmental Coordinator

Environmental Review Initial Study  
12, 5 of 5  
ATTACHMENT APPLICATION -06-0651

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. 06-0651, involving property located at 6851 Soquel Drive, Aptos (APN 039-062-06), and the Planning Commission has considered the proposed General Plan amendment, rezoning, subdivision, and residential development, 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 resolution amending the General Plan by changing property from the "R-UVL" Urban Very Low Density land use designation to the "R-UM" Urban Medium Density Residential and "O-U" Urban Low Density land use designation(s);

BE IT FURTHER RESOLVED, that the Planning Commission recommends that the Board of Supervisors adopt the attached ordinance amending the Zoning Ordinance by changing property from the "R-1-IAC" Single Family Residential - 1 acre minimum zone district to the "RM-4" Multi-Family Residential - 4,000 square foot minimum zone district;

BE IT FURTHER RESOLVED, that the Planning Commission makes findings on the proposed rezoning, subdivision, and residential development 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 14th day of November, 2007, by the following vote:

AYES: COMMISSIONERS  
NOES: COMMISSIONERS  
ABSENT: COMMISSIONERS  
ABSTAIN: COMMISSIONERS

\_\_\_\_\_  
RENEE SHEPHERD, Chairperson

ATTEST: \_\_\_\_\_  
MARK DEMING, Secretary

APPROVED AS TO FORM:

  
\_\_\_\_\_  
COUNTY COUNSEL

BEFORE THE BOARD OF SUPERVISORS OF THE COUNTY OF SANTA CRUZ,  
STATE OF CALIFORNIA

RESOLUTION NO. \_\_\_\_\_

On the motion of Supervisor:  
Duly seconded by Supervisor:  
The following Resolution is adopted:

RESOLUTION ADOPTING A GENERAL PLAN LAND USE DESIGNATION REFERRED  
TO AS APPLICATION NO. 06-0651 CONCERNING APN 039-062-06

WHEREAS, the Board of Supervisors for the County of Santa Cruz has held a public hearing on Application No. 06-0651, involving property located within the Soquel planning area, and the Planning Commission has considered the proposed General Plan Land Use Designation Amendment, all testimony and evidence received at the public hearing, and the attached staff report; and

WHEREAS, the Board of Supervisors finds that the proposed General Plan Land Use Designation Amendment, as shown on the attached exhibit, is consistent with State Law and all other portions of the County of Santa Cruz General Plan; and

WHEREAS, the Board of Supervisors has reviewed the Mitigated Negative Declaration associated with this project and finds that the General Plan Land Use Designation Amendment has been processed consistent with applicable provisions of the California Environmental Quality Act and the County of Santa Cruz Environmental Review Guidelines.

NOW, THEREFORE, BE IT RESOLVED AND ORDERED that the Board of Supervisors hereby certifies the environmental determination and adopts the General Plan Land Use Designation Amendment by changing the "Urban Very Low Density Residential" designation for an area, as shown the attached map, to "Urban Medium Density Residential" and "Urban Open Space".

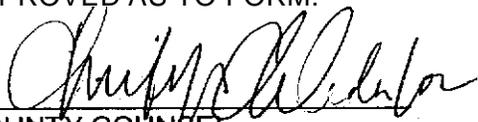
PASSED AND ADOPTED by the Board of Supervisors of the County of Santa Cruz, State of California, this \_\_\_\_\_ day of \_\_\_\_\_, 2007 by the following vote:

AYES: SUPERVISORS  
NOES: SUPERVISORS  
ABSENT: SUPERVISORS  
ABSTAIN: SUPERVISORS

\_\_\_\_\_  
Janet Beautz  
Chairperson of the Board of Supervisors

ATTEST: \_\_\_\_\_  
Clerk of the Board

APPROVED AS TO FORM:

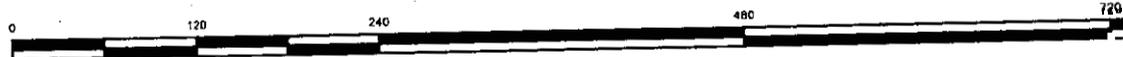
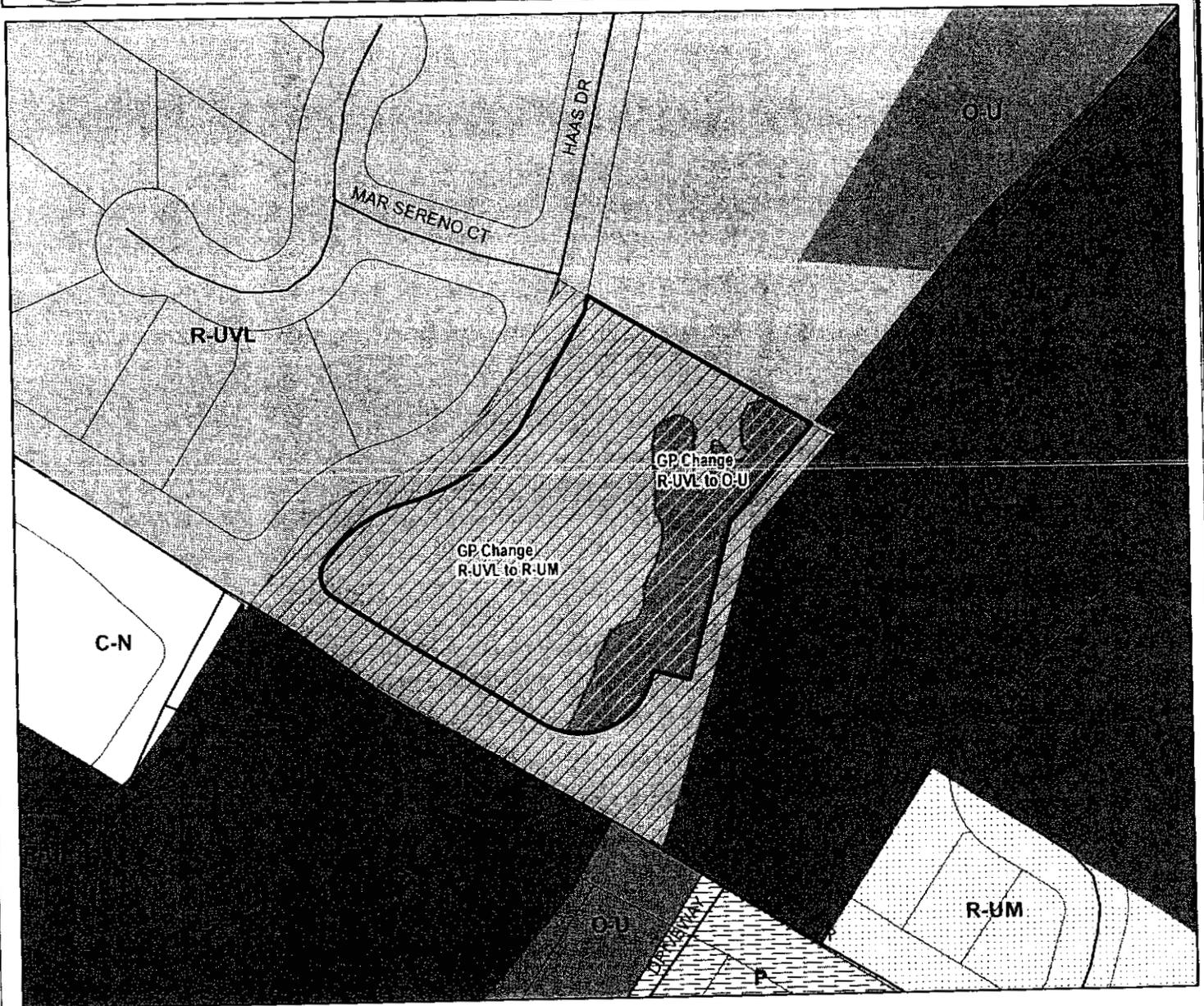
  
\_\_\_\_\_  
COUNTY COUNSEL

**Exhibit:** General Plan Amendment Map

DISTRIBUTION:      County Counsel  
                         Planning-Randall Adarns  
                         Assessor  
                         County GIS

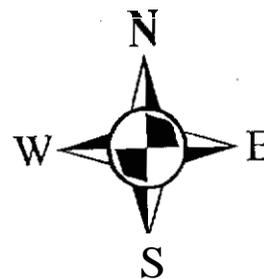


# General Plan Amendment Map



## Legend

- APN 039-062-06
- Streets
- Assessors Parcels
- R-UVL to R-UM
- R-UVL to O-U
- Residential- Urban Very Low Density (R-UVL)
- Urban Open Space (O-U)
- Residential- Urban Low Density (R-UL)
- Residential - Urban Medium Density (R-UM)
- Commercial-Neighborhood (C-N)
- Public Facilities (P)



Map Created by  
 County of Santa Cruz  
 Planning Department  
 October 2007

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 I**

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 northeast corner of the intersection of Soquel Drive and Haas Drive, at 6851 Soquel Drive, Aptos; finds that the zoning established herein, as shown on the attached exhibit, 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>
039-062-06	R-1-1A C	RM-4

**SECTION IV**

This ordinance shall **take** effect on the 31<sup>st</sup> 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

\_\_\_\_\_  
Janet Beautz  
Chairperson of the Board of Supervisors

ATTEST: \_\_\_\_\_  
          **Clerk** of the Board

APPROVED AS TO FORM:

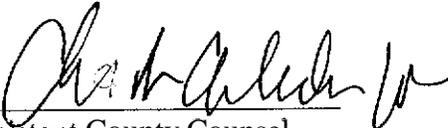
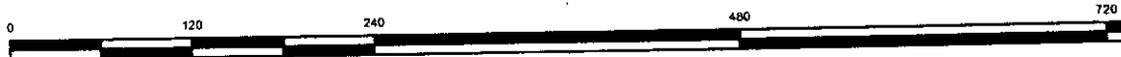
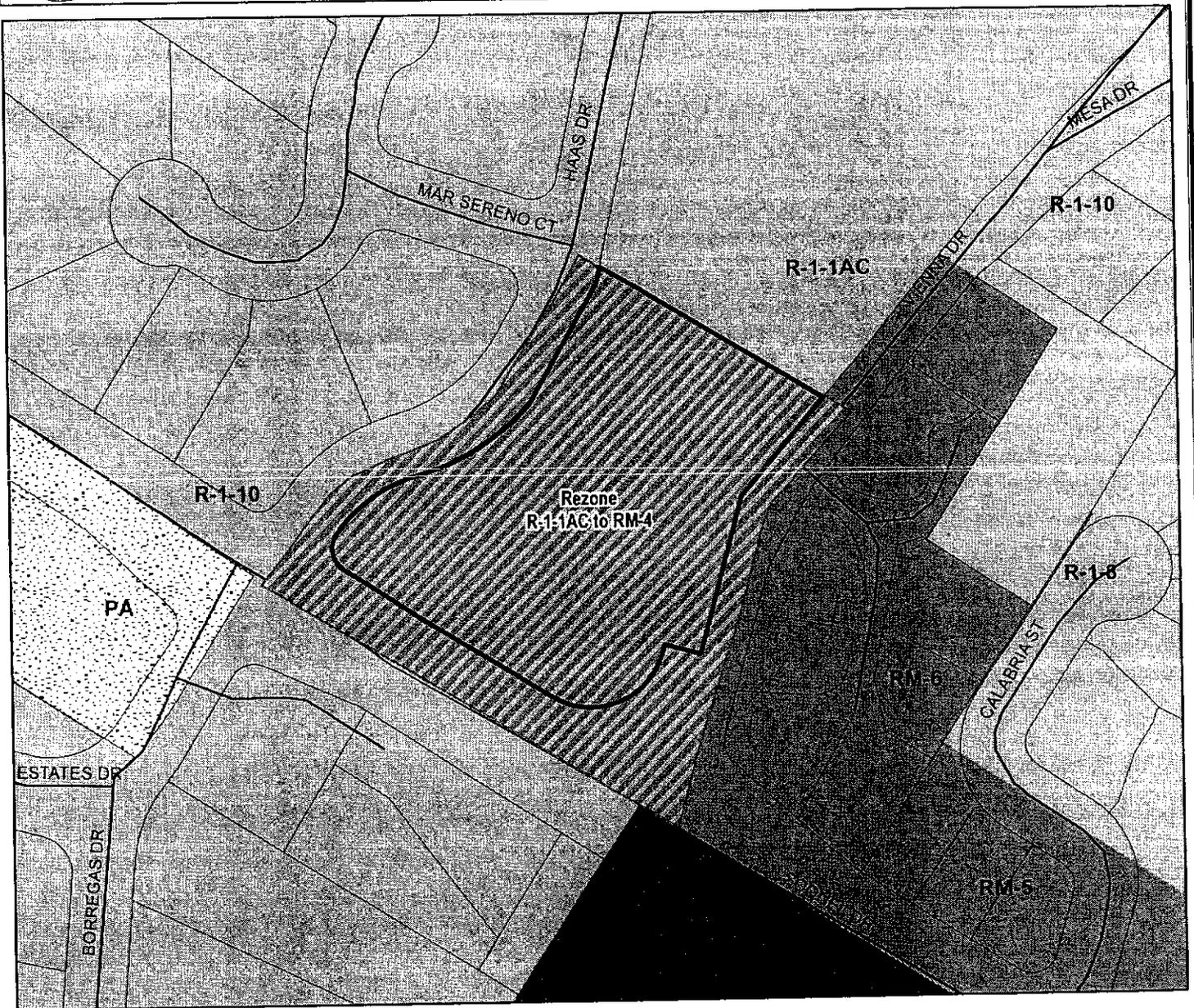
  
\_\_\_\_\_  
Assistant County Counsel

Exhibit: Rezoning Map

DISTRIBUTION:    County Counsel  
                          Planning-Randall **Adams**  
                          Assessor  
                          County GIS



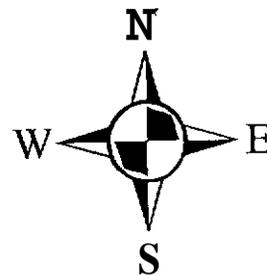
# Re-zoning Map



## Legend

- APN 039-062-06
- Streets
- Assessors Parcels
- R-1-1AC to RM-4
- RESIDENTIAL-SINGLE FAMILY (R-1)
- RESIDENTIAL-MULTI FAMILY (RM)
- PUBLIC FACILITY (PF)
- COMMERCIAL-PROF OFFICE (PA)

- 240



Map Created by  
 County of Santa Cruz  
 Planning Department  
 October 2007

# EXHIBIT E

# **Exhibit F**

## **Comments & Correspondence**

**Application Number 06-0651  
Planning Commission Hearing 11/14/07**

**EXHIBIT F**

Planning Department  
701 Ocean Street, Room 400  
Santa Cruz, CA 95050

Regarding: Hidden **Oaks** Project

My wife, **kids** and I live in the Vienna Woods community adjacent to the proposed development.

When the Hospice offices were located on the site, there were always cars parked everywhere. We are looking forward to a family community with new homes and a nicely preserved wooded area replacing the old commercial use. The site of the homes and medium density seem to fit the area very well.

I urge you to vote "yes" for this project.

Sincerely,



P.J. Kiely  
263 Danube Drive

EXHIBIT F

October 25,2007

Planning Commission  
Attn: Lani Freeman  
Planning Department  
701 Ocean Street, Room 400  
Santa **Cruz**, CA 95060

Regarding: Application 06-0651

To Whom It May Concern:

**I am writing to request** that **you** support the proposed development at the intersection of Hass and Soquel Drive.

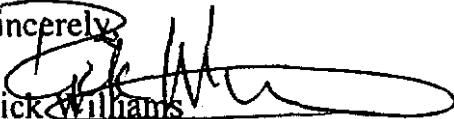
I live in **just** up the hill from the site and have attended one of the informational meetings that were hosted by Keith Baxter. I understand that the three additional driveways' traffic usage levels on Haas have been studied and found to be satisfactory, yet I still have my concerns as this has always been a country toad.

Because it is less dense than the last development on Mar Vista, I think the 10 unit town home development will make a nice transition from the more densely developed Soquel Drive to lower density residential community of Thousand Oaks.

The design renderings presented were very attractive and blended nicely with the heavily wooded site.

I definitely support that there is no wall surrounding it and as it will continue to be attractive with a combination of new plantings, landscape and the older trees in the little park on the comer.

Sincerely,



Rick Williams  
3355 Haas Drive  
Aptos

EXHIBIT F

**Planning Commission  
Attn: Lani Freeman  
Planning Department  
701 Ocean Street, Room 400  
Santa Cruz, CA 95060**

**Regarding: BK Properties Development on Soquel &  
Vienna**

**Dear Planning Commission**

**I live on Vienna Drive north of the proposed development. I understand that there will be 10 new town homes of around 2,200 sq. ft. with two car garages. I feel that this will be a nice addition to our neighborhood.**

**I have known the builders for many years and can attest to the quality and care of both the design and construction elements they require. It will definitely fit the site and be something that they will be proud of.**

**Please support the approval of this project.**

**Sincerely,**

**Dan Laughlin**

**3704 Vienna Drive**

**EXHIBIT F**

Planning Commission  
do Planning Department  
701 Ocean street, Room 400  
Santa Cruz, CA 95060

Regarding Planned Development on Soquel and Heas/Vienna Drive

Dear Commission:

I live in Vienna Woods and think the new 10 town home project will be great for our area.

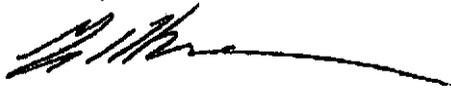
It will be priced below the big houses and give people a chance to live here.

It preserves most of the trees that are not already sick and will replace with new trees so it will end with the same number that is already there.

I know Randy and Keith and they build very nice homes

Please approve this development

Thank You,



Gary Bruce  
105 Jennifer Court

EXHIBIT F

Planning Commission  
Santa Cruz, CA 95060

Regarding Hidden Oaks Application 06-0651

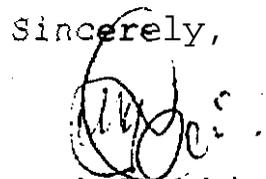
I am writing to support the proposed development on Soquel between Hass and Vienna.

I live behind Cabrillo College with my wife and three small children. We have been renting here for two years. We love the area, but cannot find homes in our price range. These new homes will be within walking distance to elementary schools, bus stops, shopping, and restaurants.

We have seen the site and it is beautiful. Once the diseased trees have been cleared and the dense trees thinned, it will be a beautiful site.

Our neighborhood needs this type of development.

Sincerely,



Mark Horobin  
609 Hudson Lane

EXHIBIT F

Planning Commission  
Attn: Lani Freeman  
Planning Department  
701 Ocean Street, Room 400  
Santa Cruz, CA 95060

Regarding: BK'Properties Development on Soquei &  
Vienna

Dear Planning Commission

I live on Vienna Drive north of the proposed  
development. I understand that there will be 10 new  
town homes of around 2,200 sq. ft. with two car  
garages. I feel that this will be a nice addition to our  
neighborhood.

I have known the builders for many years and can attest  
to the quality and care of both the design and  
construction elements they require, It will definitely fit  
the site and be something that they will be proud of.

Please support the approval of this project.

Sincerely,



Dan Laughlin

3704 Vienna Drive