



Staff Report to the Planning Commission

Application Number: 06-0370

Applicant: Robert Olson, County of Santa Cruz
Owner: County of Santa Cruz
APN: 028-041-02 and 03

Agenda Date: May 26, 2010
Agenda Item #: 9
Time: After 9:00 a.m.

Project Description: This is a proposal to demolish an existing house and garage, remove three significant trees, and construct a neighborhood park to include: community garden; picnic, lawn and play areas; bocce courts; skateboard area; art features; paths connecting to Del Mar Elementary School; an eight-car parking lot; restrooms; and various drainage and landscape improvements.

Location: The property is located on the south side of Felt Street, about 400 feet east of 17th Avenue (1904 Felt Street and adjacent vacant parcel to the east).

Supervisory District: First District (District Supervisor: John Leopold)

Permits Required: Development Permit for a Master Site Plan and an over-height riverstone archway, Coastal Development Permit, Variances to allow for about 40% impervious surfacing instead of the 20% allowed by County Code, and to reduce the front yard setback from the required 30 feet to about 19 feet to allow for a skateboard area, Significant Tree Removal Permit and Preliminary Grading Approval

Technical Reviews: Design Review and Environmental Review

Staff Recommendation:

- Certification that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.
- Approval of Application 06-0370, based on the attached findings and conditions.

Exhibits

- A. Project plans
- B. Findings
- C. Conditions
- D. Mitigated Negative Declaration
(CEQA determination)
- E. Initial Study with attachments;
including:
 - Attachment 1 – Assessor's Parcel, Location, Zoning, General Plan*
 - Attachment 2 – Master Site Plan*
 - Attachment 3 – Summary of Drainage Calculations*
 - Attachment 4 – Discretionary Application Comments*
Including updated City of Santa Cruz Water Department comments and
permission for pre-construction tree treatments affecting trees on the
adjacent property
 - Attachment 5 – Will-serve from City of Santa Cruz Water Department*
 - Attachment 6 – Arborist's Reports*
 - Attachment 7 – Parking Study*
 - Attachment 8 – Acoustical Study*
- F. Parks and Recreation Commission Minutes
- G. Addendum to Acoustical Study

Parcel Information

Parcel Size:	028-041-02 is 35,618 square feet; 028-041-03 is 42,463 square feet
Existing Land Use - Parcel:	028-041-02: Residential; 028-041-03: Vacant
Existing Land Use - Surrounding:	Church to west; Residential to north, northeast and east; Del Mar Elementary to south
Project Access:	Felt Street
Planning Area:	Live Oak
Land Use Designation:	O-R (Parks, Recreation and Open Space)
Zone District:	PR (Parks, Recreation and Open Space)
Coastal Zone:	<u>X</u> Inside ___ Outside
Appealable to Calif. Coastal Comm.	___ Yes <u>X</u> No

Environmental Information

Geologic Hazards:	Not mapped/no physical evidence on site
Soils:	Soils report to be reviewed at building permit stage
Fire Hazard:	Not a mapped constraint
Slopes:	0-2%
Env. Sen. Habitat:	No physical evidence on site
Grading:	600 cubic yards of cut; 600 cubic yards of fill

Tree Removal: Two Significant Trees (eucalyptus and plum) and several smaller trees (see tree removal section below)
Scenic: Not a mapped resource
Drainage: Preliminary drainage plan reviewed and accepted by Department of Public Works, Stormwater Management
Archeology: Not mapped/no physical evidence on site

Services Information

Urban/Rural Services Line: X Inside ___ Outside
Water Supply: City of Santa Cruz Water Department
Sewage Disposal: County of Santa Cruz County Sanitation District
Fire District: Central Fire Protection District
Drainage District: Zone Five

History

The 1994 County of Santa Cruz General Plan and Local Coastal Plan designates the subject parcels as having a priority use as a neighborhood park with a requirement to provide a pedestrian connection to the adjacent Del Mar School site to the south. The Parks and Recreation Commission approved the Draft Master Plan on January 13, 2003. Their approval was preceded by three public meetings to gather input on the plan from residents. In the fall of 2005, the Board of Supervisors approved a design contract, and in July of 2006, the Parks, Open Space and Cultural Services (POSCS) Department submitted the current application to the Planning Department.

Project Setting

The Felt Street park site is composed of two adjacent parcels and is located in the Live Oak Planning Area. The uses surrounding the park site are: the Center for Conscious Living to the west; single-family residential to the north, northwest and east; multi-family residential to the northeast, and Del Mar Elementary school directly to the south. Further to the west, across 17th Avenue, is Shoreline Middle School and north of the middle school is Simpkins Family Swim Center.

One of the subject parcels (028-041-02) is developed with a single-family dwelling and garage with a community garden in the parcel's southwest corner. The other subject parcel (028-041-03) is vacant. The most significant vegetation on-site is two tall eucalyptus trees and several smaller trees. Informal dirt paths connect Felt Street and the northern entrance of Del Mar Elementary. Felt Street is improved with a bike lane, gutter, curb and sidewalk on its southern side where the park is located.

Zoning & General Plan Consistency

Zoning

1. Use

The subject parcels together are about 1.8 acres in size and are located in the PR (Parks, Recreation and Open Space) zone district, a designation which allows park uses.

2. Impervious Area

The proposed percentage of the park that is to be surfaced in impervious material is about 40% where County Code 13.10.354 limits impervious area to 20 percent of the gross acreage of the property. In addition, the small skate park feature is located within the required 30-foot front yard setback. Please see the variance discussion below and the Variance Findings in Exhibit B.

3. Parking

Eight parking spaces, including one accessible space, are proposed. The County's Parking Ordinance does not contain any parking standards for a neighborhood park such as this. In order to insure that adequate parking is provided, Park Planner Robert Olson, submitted a parking analysis which evaluated the parking demand at other parks in the area. Based on that analysis, he extrapolated that the eight proposed parking spaces will be sufficient.

Corroborating this evaluation is data from the Institute of Transportation Engineers' (ITE) reference, *Parking Generation* (3rd Edition). *Parking Generation* identifies different types of uses and their resulting parking needs. The closest example of park parking generation is a park that contains softball and soccer fields, outdoor group area, and an administrative building that together generate a peak parking demand of 5.1 parked vehicles per acre. Here, if Felt Street Park had those features that are listed in the ITE example, the parking demand would be 9 ($5.1 \times 1.8 \text{ acre} = 9.18$). Felt Street Park does not have the features listed in the ITE example and is a neighborhood park where the expectation is that a large proportion of the users will walk to the park. Given this and Mr. Olson's analysis (Exhibit E, Attachment 7), eight spaces are considered to be appropriate.

General Plan

Both of the subject parcels have a General Plan designation of O-R (Parks, Recreation and Open Space). The parcels are specifically identified in the General Plan as having a preferred use as a neighborhood park (Figure 2-5, Page 2-50) and, if developed as a park, are required to have a pedestrian connection to the adjacent Del Mar School site. This site plan complies with the General Plan requirements.

Local Coastal Program Consistency

The proposed neighborhood park is in conformance with the County's certified Local Coastal Program, in that the structure is sited and designed to be visually compatible with and integrated into the character of the surrounding neighborhood. Developed parcels in the area contain single- and multi-family dwellings as well as institutions such as Del Mar Elementary, Shoreline Middle School and a church directly to the west of the subject parcel. The proposed restroom is about 580 square feet and to be constructed of split face concrete block walls with a pitched metal roof.

The structure will be located behind the skateboard area and a landscape area so its visibility from Felt Street will be limited. The color will be neutral. The project site is not located between the shoreline and the first public road and is not identified as a priority acquisition site in the County's Local Coastal Program. Consequently, the proposed project will not interfere with public access to the beach, ocean, or other nearby body of water.

Master Site Plan

County Code Section 13.10.355 sets forth special standards and conditions for development in the PR zone district and requires that the Planning Commission approve a Master Site Plan for public agency facilities.

County Code Section 13.10.355 states, among other things, that the Master Site Plan shall include items A through E below. Below each Master Site Plan Element is the relevant information for Felt Street Park.

A. A description of all proposed uses;

The General Plan identifies this 1.8 acre park site as a neighborhood park. Neighborhood parks are intended to serve the residents within one-half mile of the park site, serving a population between 1,500 to 2,000 people. Felt Street Park will have a variety of recreational components serving a diverse number of needs and interests. Facilities include: a 21,240 square foot turf area intended for general play and pick-up sports and not intended for organized sports. Other recreational components include a children's play area for both 2-5 year olds and 5-12 year olds; a small, above ground skate feature; two bocce ball courts; picnic area; a 19 plot community garden; game table and bench area; restroom; an eight space parking lot and landscaping. In addition, a path will connect Felt Street to the northern entrance of Del Mar Elementary.

B. Proposed immediate and future phases of construction;

The park will be built in one phase.

C. Anticipated future boundary expansions, if any;

The adjacent parcel to the west, where The Center for Conscious Living is located, has an R-1-6-D zoning. The "D" indicates that the parcel is a designated park site. However, the County does not own the parcel, and there are no current plans to expand the park.

D. Provisions for adequate access and public services;

The design and implementation of Felt Street Park will result in a variety of recreational facilities and opportunities and will be accessible. Passive park uses will include picnicking, game board table, reading and rest area, gardening and walking paths. Active park uses will include bocce ball, a children's play area for age groups 2-5 year olds and 5-12 year olds, skateboarding and pick-up sports on the turf area. Restroom facilities will be provided to accommodate both female and male park users.

E. A management plan for the conservation and use of the open space resource.

The open space resource here is the turf area and no special management plan is necessary, unlike what might be the situation with a larger, less developed park in a rural area.

County Code 13.10.365(a)(1) also states that the Planning Commission approval must include “a finding of General Plan consistency pursuant to Section 65402 of the California Government Code,” which states, in pertinent part:

If a general plan or part thereof has been adopted...no public building or structure shall be constructed or authorized, if the adopted general plan or part thereof applies thereto, until the location, purpose and extent of...such public building or structure have been submitted to and reported upon by the planning agency as to conformity with said adopted general plan or part thereof.

The proposal is to construct a park on two parcels with the land use designation of O-R (Parks, Recreation and Open Space) and is zoned PR (Parks, Recreation and Open Space). The application therefore is consistent with the General Plan, pursuant to Government Code 65402. Please also see the Development Permit Findings in Exhibit B.

Variances

As noted above, two variances are requested as a part of this application. The first is to allow about 40% impervious area where County Code 13.10.354 limits impervious area to 20%. The second variance is to allow the skate park feature to be located 19 feet from the front property line, where 30 feet is required.

The front yard setback variance is warranted for the following reason. The County Code site standards, including the 30-foot setback required on all yards, are based upon a minimum park size of 20 acres. With 1.8 acres, the proposed Felt Street Park is just nine percent of this minimum and a 30-foot front yard setback is considered unreasonable for a park of this size. When the site standards for County parks were developed, what was envisioned were large parks to be kept mostly in open space. The proposed park—an infill, urban area park—cannot be developed if the setbacks that fit rural areas are applied. In addition, the skate park was sited in its proposed location based upon consideration of the surrounding residential and school uses. By locating it in the northwest corner of the park, it is located as far away as possible from the residences to the east and the school to the south. For the dwellings across Felt Street, the street provides an additional 40 feet of buffer, creating an effective setback from of about 60 feet to the skate feature. For these reasons, the variance to the front yard setback for the skate feature is considered to be reasonable and in keeping with the intent of the zoning regulations.

The variance to allow approximately 40% impervious area where the Code limits parks to 20% is based upon the same special circumstance as the setback variance. The County Code establishes site standards for 20-acre minimum parks. One of these standards is a maximum impervious area of 20%. Twenty percent of 20 acres is four acres of impervious area, a limit ample enough to accommodate virtually any park design. In the case of a Felt Street Park, with 1.8 acres, 20% is just .36 acres, an area insufficient to provide the amenities needed for a neighborhood park serving a diversity of age-groups and needs such as the children’s play equipment, play lots, paved game areas and restrooms identified in General Plan Policy 7.2.1 (Neighborhood Park Standards). The parking lot, play area and restroom areas alone are almost .36 acres. Therefore, the approximately 40% impervious area is considered to be reasonable.

Over-height Fence

County Code Subsection 13.10.525(c)(2) restricts fences to no more than three feet in height if located within a front yard setback. Heights greater than six feet may be allowed with a Level V (or higher) Development Permit approval. Here, an art feature—a river stone archway demarcating the park's entrance—is nine and one-half feet tall and located within the front yard setback at the park entrance.

The purposes for limiting the height of fences in a yard abutting a street to three feet are: 1) to ensure adequate visibility of vehicles entering the street and adequate sight distance for stopping and turning, 2) to ensure adequate light and air for the street area and, 3) to preserve a harmonious and compatible street front appearance (County Code Section 13.10.525(a)). In this case, the archway will be located sufficiently distant from the park's entrance to the parking lot that the line of sight for drivers exiting the parking lot will not be affected. The archway is 16 feet in length, just six percent of the park's frontage, and so will not compromise the light and air available to the street area. The archway will be a piece of public art which will create a harmonious and compatible street front appearance.

Tree Removals

County Code 13.11.075(a)(2)I requires the retention of trees greater than six inches in diameter at breast height unless the trees are dead, dying or diseased; would obstruct solar access; or if the tree(s) obstruct the prime building site to provide a better project design not possible without the tree removal. For projects located within the Coastal Zone, trees which are 20" in diameter at breast height are considered to be "Significant Trees" and are protected unless the required findings in County Code 16.34.060 can be made. James P. Allen & Associates completed an Arborist Report for the project which included an inventory of and recommendations for the trees on-site (see Exhibit E, Attachment 6).

There are three trees proposed for removal which are greater than six inches in diameter at breast height. They are: two walnut trees-- each with four trunks-- and a golden rain tree with a double trunk (trees 8, 11 and 12 in the arborist report). These trees all were graded as being in fair or poor health, structure and suitability.

In addition, three trees are proposed for removal which are Significant Trees. These are a multi-trunk plum tree, a eucalyptus tree, and a double trunk eucalyptus tree (trees 4, 5 and 10 in the arborist report). For trees 4 and 10, the trees received grades of fair health but poor structure and suitability. Tree 5 is identified as having poor trunk / stem attachment. All three were identified as having a risk of failure, which is an unacceptable hazard at a public park. While it would be possible to stabilize tree 5 with cabling, this requires on-going monitoring for which the County's Parks, Open Space and Cultural Services does not have a budget.

To compensate for these tree removals, 57 replacement trees are required. A qualified professional will monitor these replacement trees for five years by to ensure that they survive. In addition, the arborist report provides tree protection measures for the eucalyptus that is to remain, as well as for three trees located on the parcel to the west.

Design Review

The proposed neighborhood park complies with the requirements of the County Design Review Ordinance, in that the proposed project will incorporate site and architectural design features such as screening landscape borders and a low-profile restroom structure to reduce the visual impact of the proposed development on surrounding land uses and the natural landscape.

Grading and Drainage Improvements

About 600 cubic yards of both cut and fill (balanced on-site) would be graded to establish the finish grades of the parking lot, concrete walkways and the slopes required for the vegetative swales. Along the perimeter of the park, the vegetative swales would direct runoff from the parking lot and other improvements to inlets. These inlets would connect to a pipe system that is to be oversized to provide adequate capacity for detention. The pre-development release rate would be maintained by reducing the outflow pipe from 24-inches to four inches. This drainage plan represents a minor diversion of stormwater as the property naturally drains to the south but the drainage pipes would be sloped such that the stormwater would flow north to the Felt Street storm drain system. The Department of Public Works has reviewed and accepted the proposed plan.

Acoustical Study

Charles M. Salter Associates, Inc (Exhibit E, Attachment 8) completed an acoustical study for the project. Construction noise and noise from the skate feature are anticipated to be the most significant generators of noise for the project. For the skate feature, the day / night average (DNL) at the nearest property lines is anticipated to increase by a maximum of .2 decibels over the existing DNL. The future DNL, including the skate feature, is calculated to be a maximum of 64 decibels at the northern property line which is below what the General Plan specifies as "normally acceptable" for neighborhood parks and playgrounds. The maximum noise anticipated to come from the skate feature is predicted to be at or below the existing environmental noise sources. The average noise levels during the time when the skate feature will be open is calculated to have a maximum increase of .4 decibels at the northern property line (Exhibit G). Note that no nighttime noise generation is anticipated as the park is closed from dusk to dawn.

Noise generated during construction would increase the ambient noise levels for adjoining areas. Construction would be temporary, however, and given the limited duration of this impact it is considered to be acceptable. A condition of approval is included to limited construction hours to weekdays between 8 AM and 5 PM.

Neighborhood Meeting

As required by County Code Section 18.10.224, the applicant for a project subject to review by the Planning Commission must hold a neighborhood meeting to inform neighbors of the proposal and to solicit feedback. The results of the meeting must be submitted to the Planning Department. Here, the Redevelopment Agency and the Parks Department held three neighborhood meetings. Additionally, the County Parks and Recreation Commission reviewed the proposal at two separate public hearings. Together, these public meetings fulfill the

requirements of County Code Section 18.10.224. Excerpts from materials documenting the public process are attached as Exhibit F.

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 April 26, 2010. A preliminary determination to issue a Negative Declaration with Mitigations (Exhibit D) was made on April 26, 2010. The mandatory public comment period expired on May 19, 2010.

The environmental review process focused on the potential impacts of the project in the areas of Hydrology/Water Supply/Water Quality and Noise. The environmental review process generated mitigation measures that will reduce potential impacts from the proposed development and adequately address these 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

- Certification that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.
- **APPROVAL** of Application Number **06-0370**, based on the attached findings and conditions.

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

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Report Reviewed By: Paia Levine

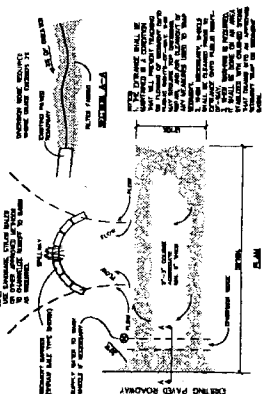
Paia Levine
Principal Planner
Santa Cruz County Planning Department

FELT STREET PARK
SANTA CRUZ, CALIFORNIA



EROSION CONTROL NOTES

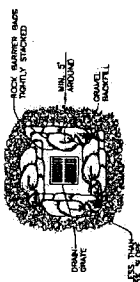
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2 TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT



DETAIL

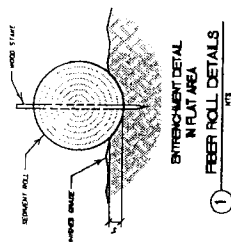


PLAN VIEW

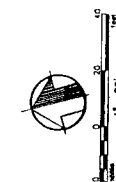
PLAN VIEW

- NOTES:
1. FILL ROCK BARRIER BAGS 3/4 FULL OF #4 ROCK.
 2. PLACE BAGS SUCH THAT NO GAPS ARE EVIDENT IN A SINGLE OR DOUBLE LAYER. STAMP EXTERIOR LAYER INTO PLACE PRIOR TO STARTING THE NEXT LAYER.
 3. ROCK BARRIER BAGS FOR CATCH BASIN SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DAMAGE AREAS (LESS THAN 25').





ROCK BAG CATCH
BASIN SEDIMENT BARRIER

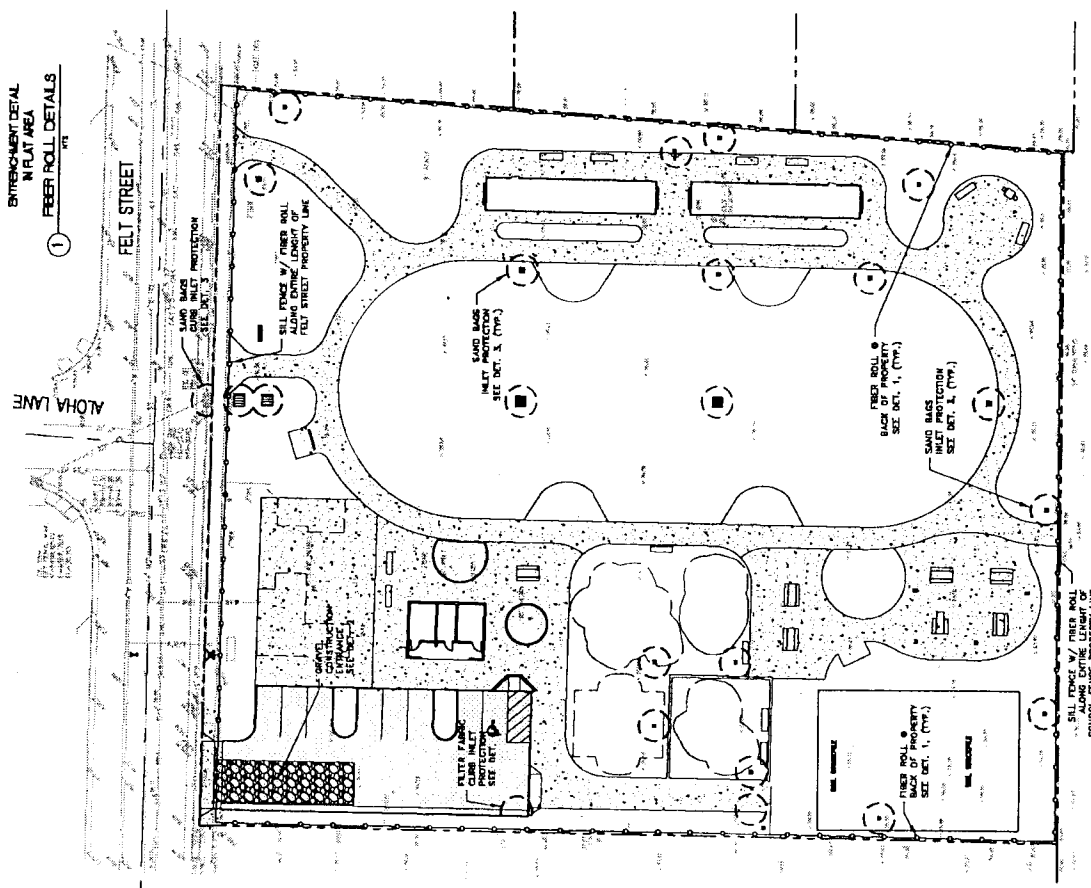


ENTRENCHMENT DETAIL
IN FLAT AREA



LEGEND

- | | |
|---|-----------------------------------|
|  | SALT FENCE OR
SEDIMENT BARRIER |
|  | CULVERT INLET |
|  | FIBER ROLL |
|  | GRAVEL
CONSTRUCTION |



UNIVERSITY OF
WISCONSIN



UR
**UNDERWOOD &
ROSSEN LUM, INC.**

DEMOLITION NOTES

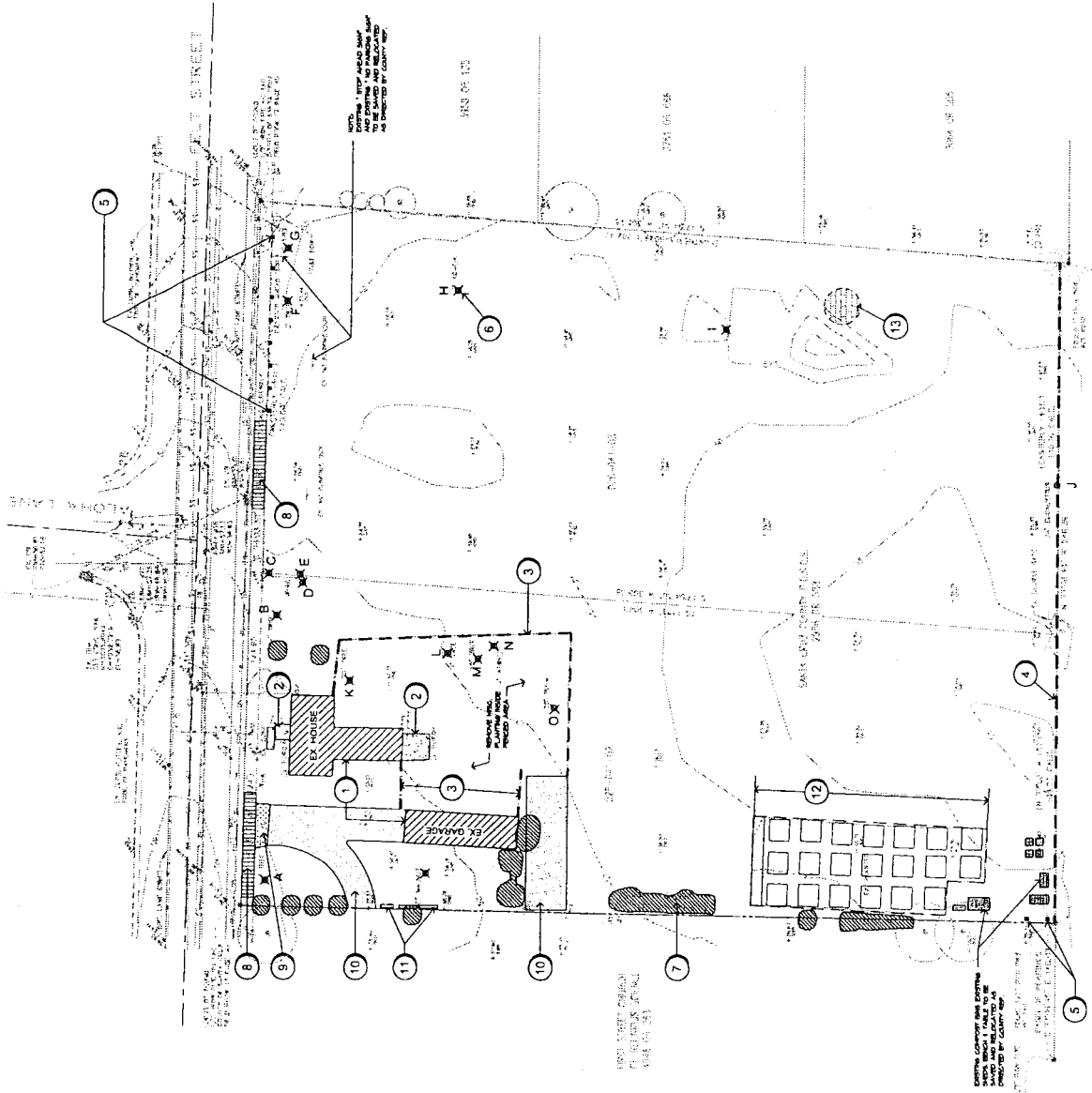
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DEMOLITION LEGEND

KEY	DESCRIPTION
1	REMOVE SCALD AND BURNAGE
2	REMOVE CORROSIVE FUMING AT HOUSE
3	REMOVE MOOD PULSE AT HOUSE
4	REMOVE CHAIN LINK PULSE AND WATERS AT SCHOOL
5	REMOVE HEAT AND MOOD PULSE PUMPS
6	REMOVE BASS PUMP/LL
7	REMOVE BASS PUMP/LL
8	REMOVE BASS PUMP/LL
9	REMOVE BASS PUMP/LL
10	REMOVE BASS PUMP/LL
11	REMOVE MOOD LOSS
12	REMOVE WATERS/SCALD AT BURNAGE
13	REMOVE PLE OF PULSE

(E) TREE DISPOSITION LEGEND

KEY	BOTANICAL COMMON NAME	SIZE & CONDITION	PRESERVE/REMOVE
A	HAIRY	8" DIAM. MOON	REMOVE
B	RAILGUN RAIN TREE	8" DIAM. MOON	REMOVE
C	HAIRY	8" DIAM. MOON	REMOVE
D	SPRINGS WANDONG	8" DIAM. MOON	REMOVE
E	SPRINGS WANDONG	8" DIAM. MOON	REMOVE
F	SPRINGS WANDONG	8" DIAM. MOON	REMOVE
G	GRASSY W. SHAW	8" DIAM. MOON	REMOVE
H	GRASSY W. SHAW	8" DIAM. MOON	REMOVE
I	AGAVEA W. (AGAVEA)	72" 8" DIAM. PALE	REMOVE
J	REAL VINE W. (REAL VINE)	72" 34" DIAM. PALE	REMOVE
K	REAL VINE W. (REAL VINE)	30" DIAM. PALE	PRESERVE
L	JAILHOUSE W. (REAL VINE)	30" DIAM. MOON	REMOVE
M	PALE W. (JAILHOUSE)	8" DIAM. MOON	REMOVE
N	PALE W. (JAILHOUSE)	60" DIAM. PALE	REMOVE
O	PALE W. (JAILHOUSE)	8" DIAM. MOON	REMOVE
P	PLAIN	30" DIAM. PALE	REMOVE



North

Angle of Knee Joint (°)	Force Exerted by Quadriceps (N)
0	10
10	30
20	60
30	90
40	80
50	70
60	60

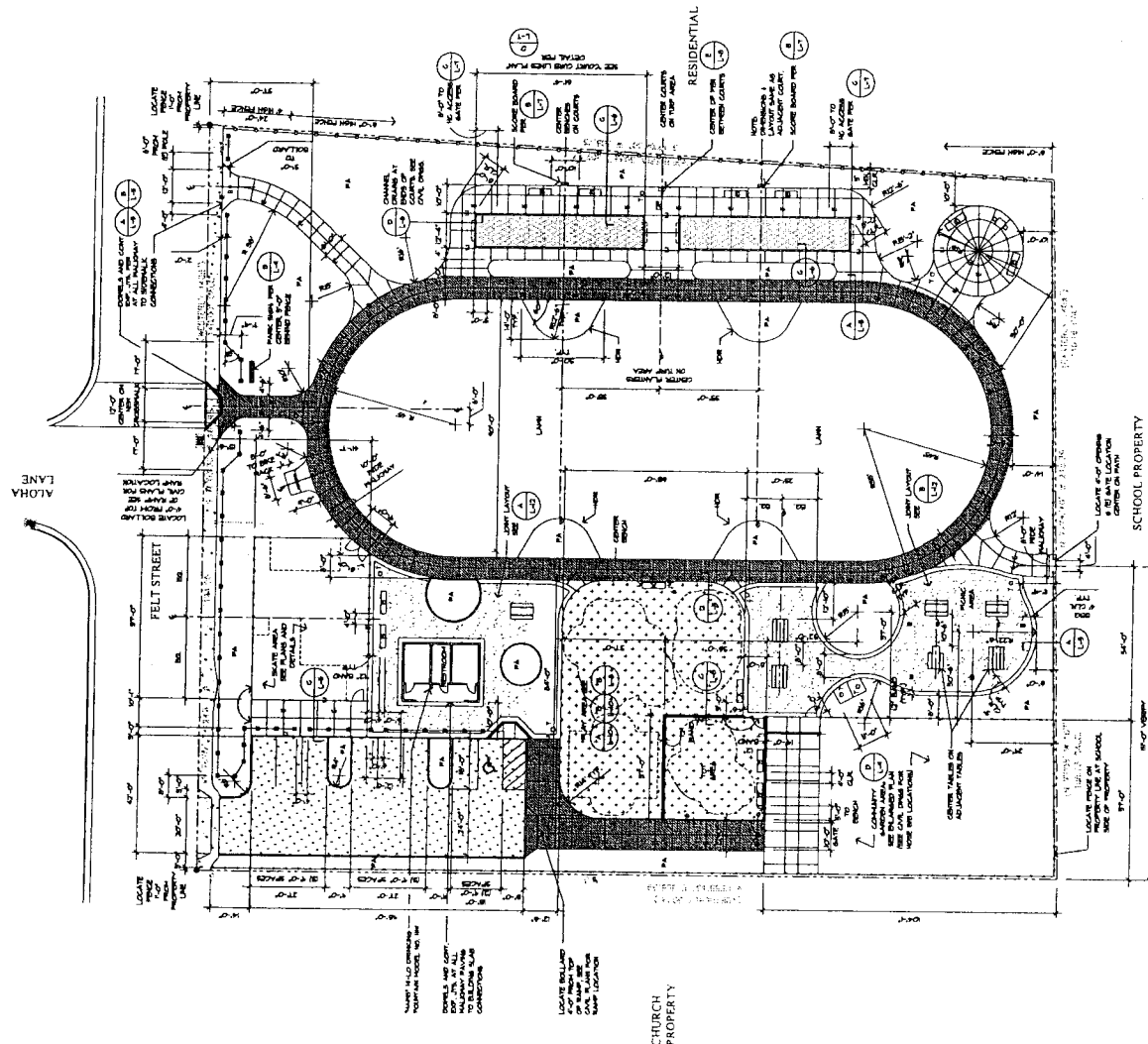
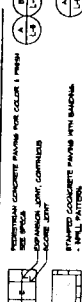
SITE CONSTRUCTION NOTES

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NOTES

THE CONTRACTOR SHALL BE FURNISHING THE CAD FILES ON A CD FOLLOWING AWARD OF CONTRACT, AND SHALL USE THEM AS NEEDED TO FACILITATE LAYOUT, LIGHTING AND LOCATIONS, RADARS, ETC. TO THE EXTENT THAT THEY ARE NOT PROVIDED ON THESE PLANS FOR ALL SITE IMPROVEMENTS.

SITE CONSTRUCTION LEGEND



North

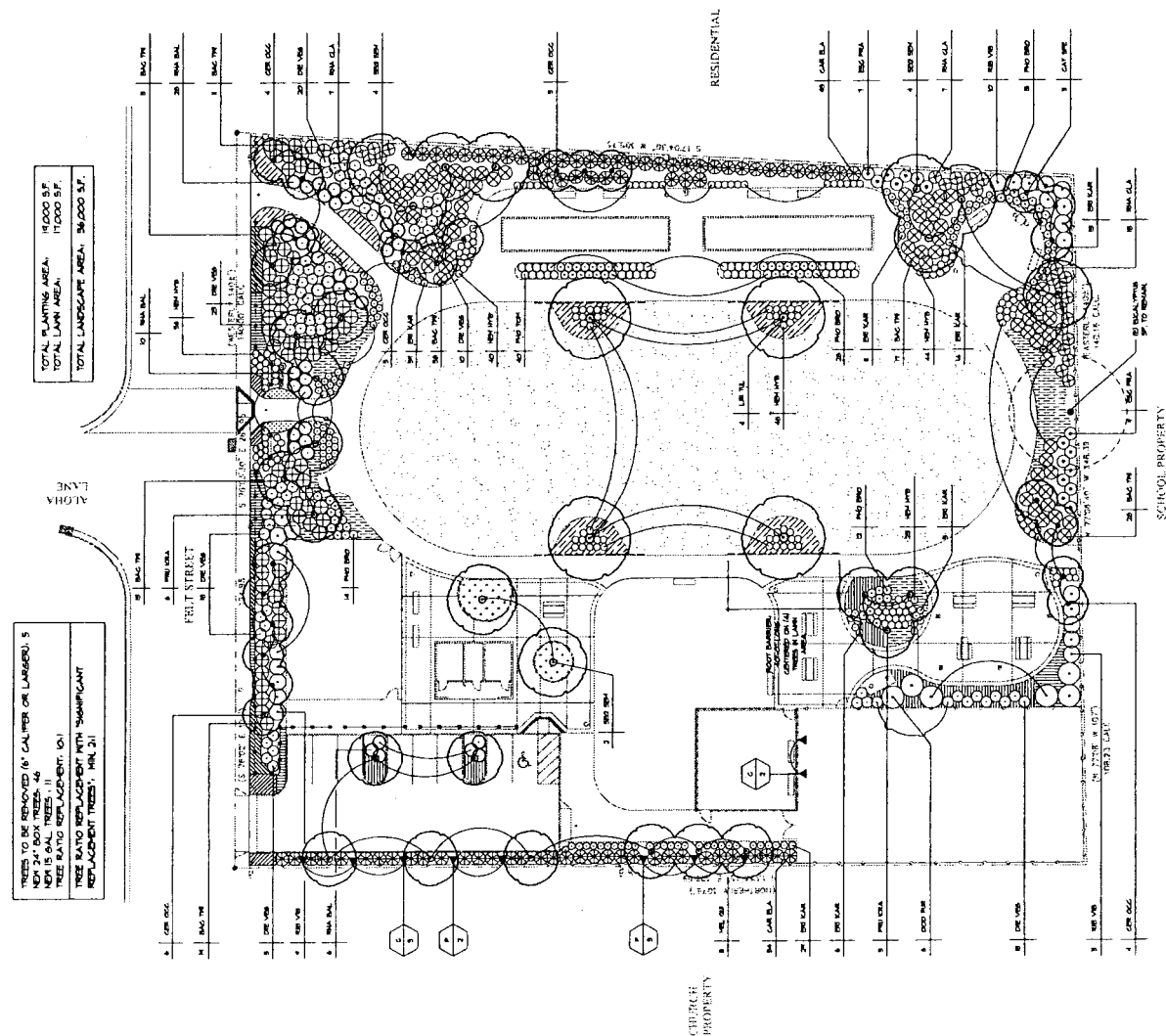


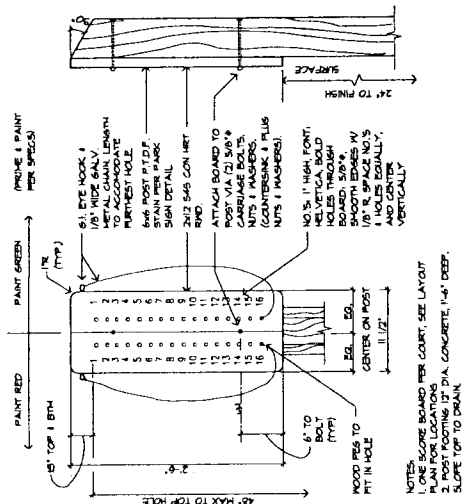
PLANT LIST		
Key	Botanical/Common Name	Size Qty.

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Species	Size	Qty.
<i>Parthenococcus truncipetala</i> (Barton N.Y.)	5 gal.	5
<i>Calymene salicoides</i> (Laverend Transport Vase)	5 gal.	5

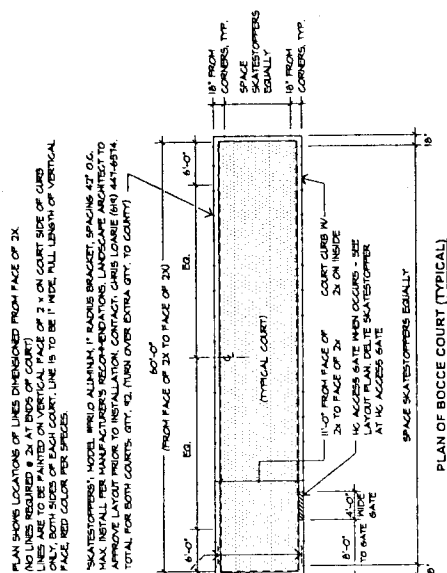
1. SOIL PREPARATION: See specifications and refer to Soil and Plant Laboratory Soil Analysis Report dated 4/19/05, 5/20/06.
2. STRIP AND STOCKPILE: See grading plan for strip and stockpile information.
3. BARK MULCH: All planting areas shall receive a 3" layer of "branded Cedar bark" made by "Sun Up Forest Products", (800)222-2591, or approved equal.
4. PLANT REVIEW: Notify County's representative minimum 48 hours in advance for plant material review and acceptance. Representative reserves the right to reject any or all plant material that is deemed to be unacceptable in size or health.
5. PLANT LAYOUT: All plant and locations to be reviewed by County Representative prior to installation.





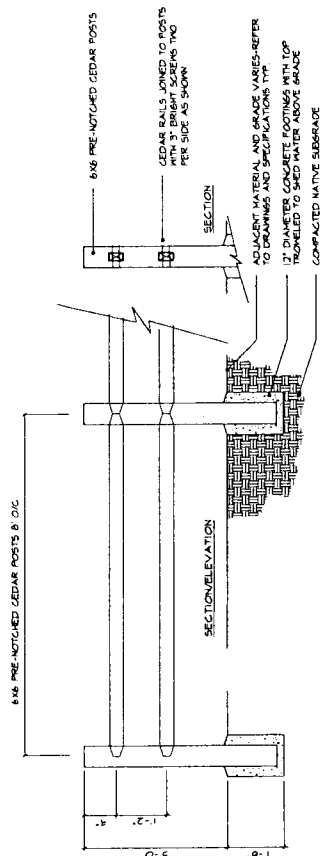
SCORE BOARD DETAIL

SCALE: 1 1/2" = 1'-0"



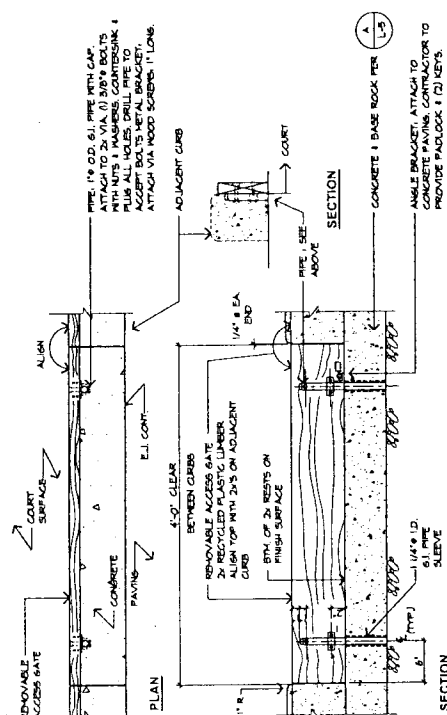
PLAN OF BOCCE COURT (TYPICAL)

SCALE: 1/8" = 1'-0"



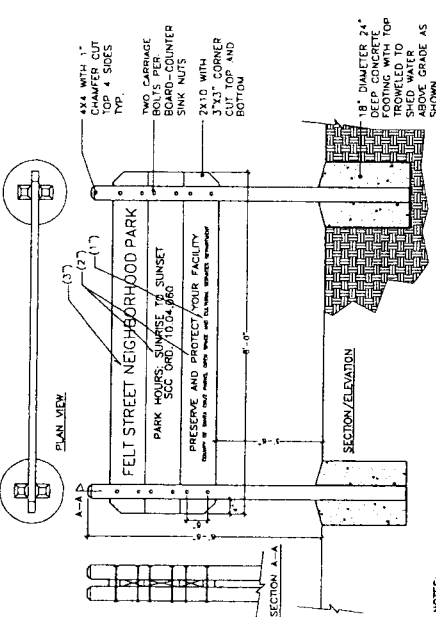
A SPLIT RAIL FENCE

SCALE: 3/4"=1'-0"



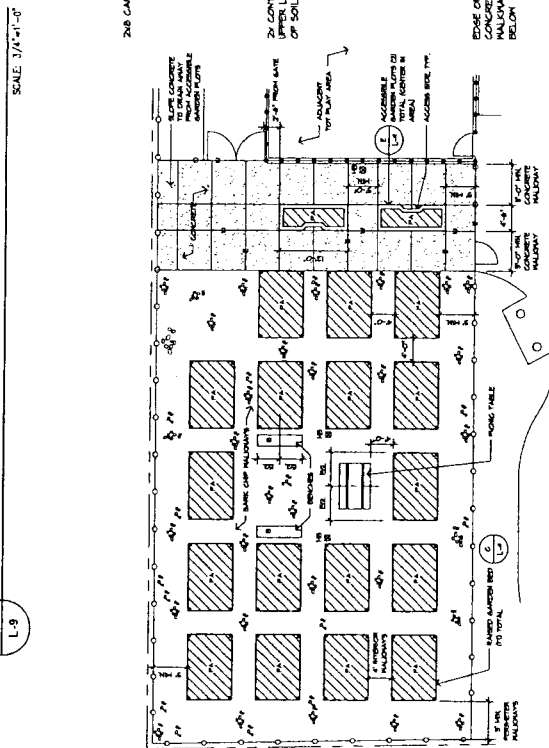
HANDICAP ACCESS GATE AT COURTS

SCALE: 1 1/2"=1'-0"

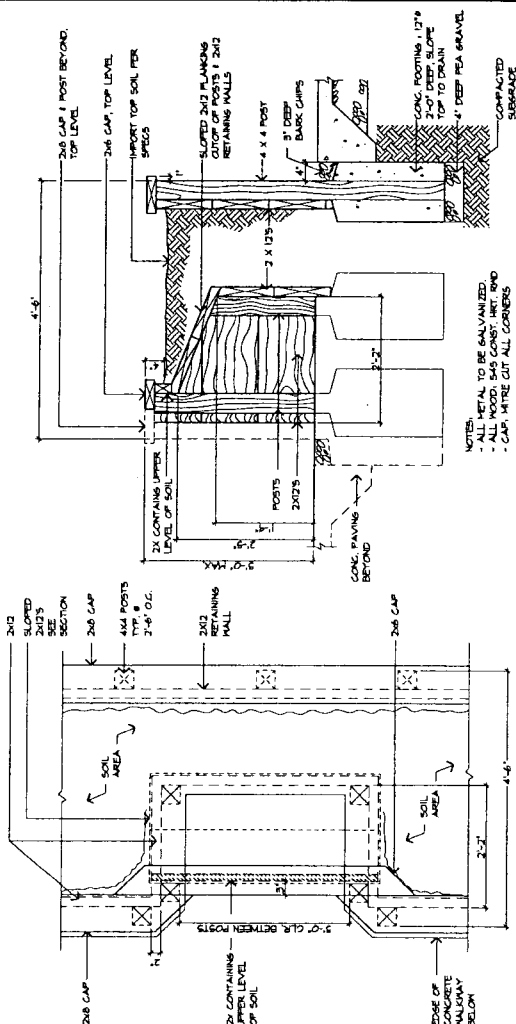


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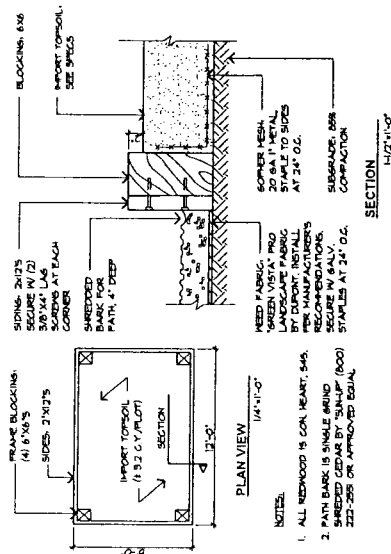
PARK SIGN



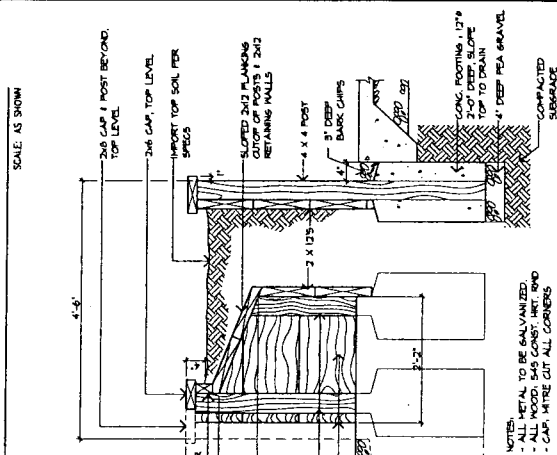
COMMUNITY GARDEN ENLARGED PLAN



ACCESSIBLE GARDEN PLOT DETAIL



B RAISED GARDEN BED



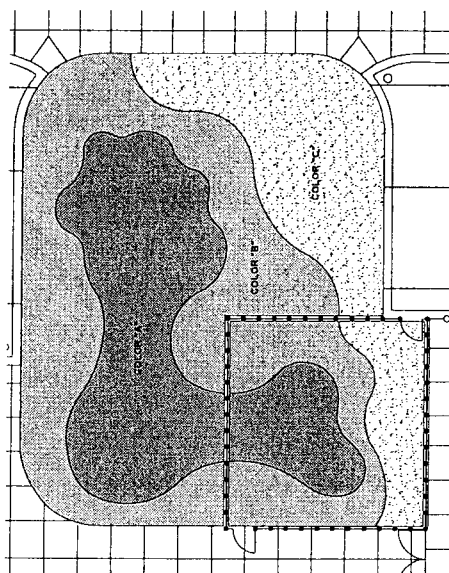
SECTION

NOTES:

- ALL METAL TO BE GALVANIZED.
- ALL WOOD: 54S CONST. HKT. ROAD
- CAP. METRE CUT ALL CORNERS

SCALE: 1" = 1'-0"





RESILIENT SURFACING COLORS:

- COLOR "A" : 75% BLACK AND 75% ROYAL BLUE (#590)
 COLOR "B" : 25% BLACK AND 75% TEAL (#580)
 COLOR "C" : 25% BLACK AND 75% BEIGE (#210)

Resilient surfacing by "SurfaceAmerica"; Contact Liz Riehl with Rose Recreation Equipment Apco, CA (800) 684-4110

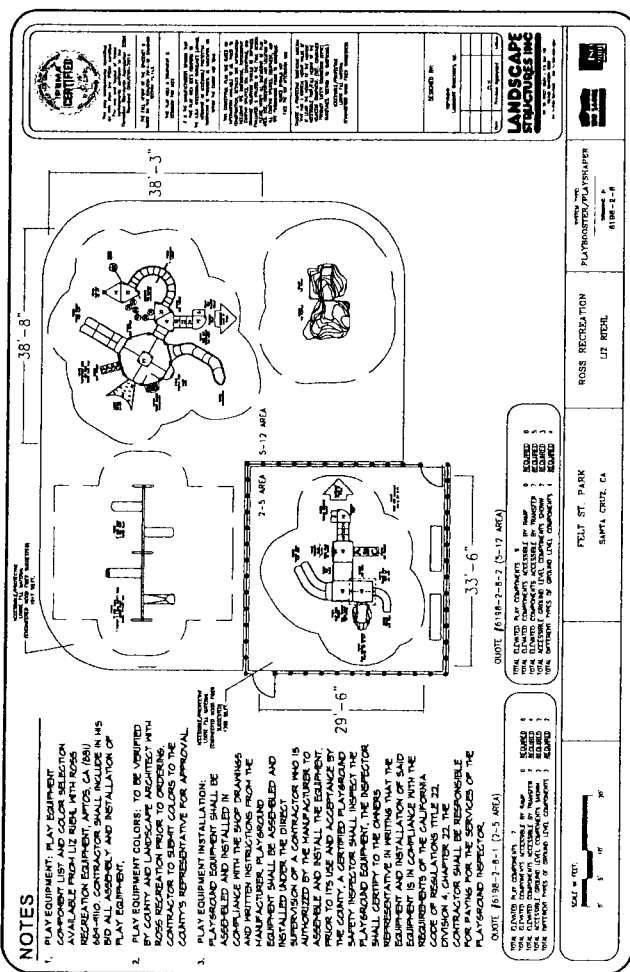
NOTES: Contractor shall stake off the curve layouts for resilient surfacing with Landscape Architect and County Representative. Do not proceed with installation until layout has been thoroughly reviewed and approved by Landscape Architect and County Representative.

2. The contractor will be furnished the CAD files on a CD following award of contract, and shall use them as needed to facilitate layout, lengths and locations, radius, etc. to the extent that they are not provided on these plans for all site improvements.

LAYOUT PLAN FOR RESILIENT SURFACING

SCALE: 1"=10'-0"

B
L-10



A **PLAY AREA PLAN**

L-10

SCALE: 1"=10'-0"

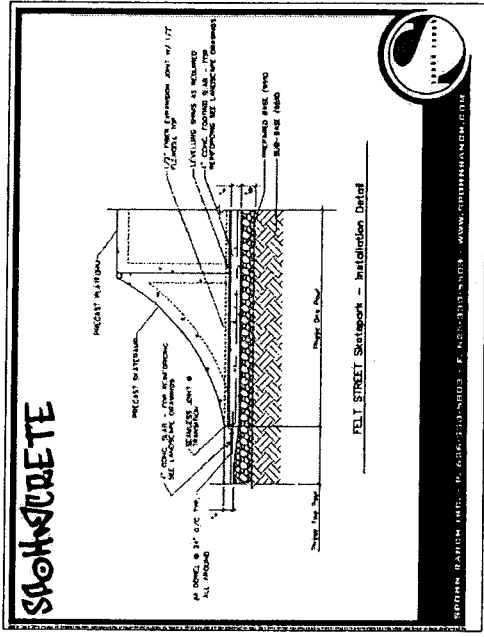
REVISION	
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SKATE AREA PLANS

Prepared For:
County of Santa Cruz Department of Parks
Open Space & Cultural Services
819 17th Avenue, Santa Cruz, CA 95062
APN 29-04-01-03
1924 First Street, Santa Cruz, CA 95062

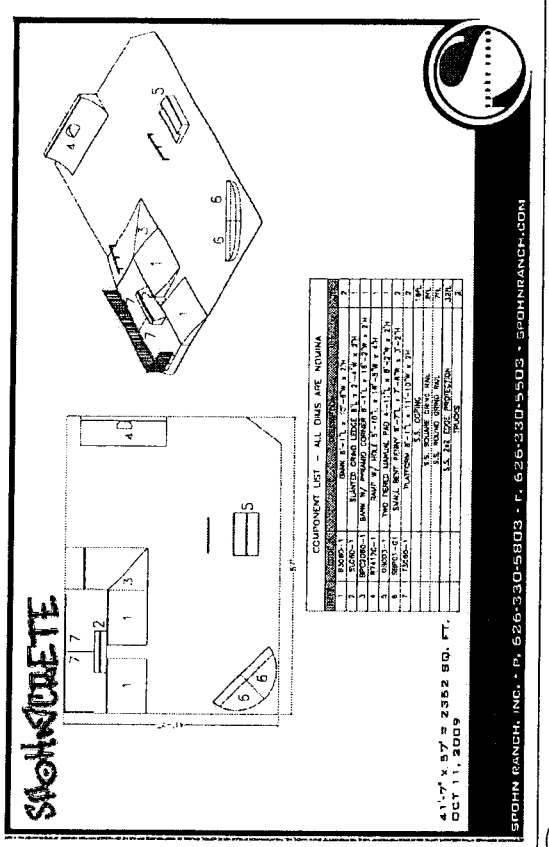
DATE	11-11
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DATE	



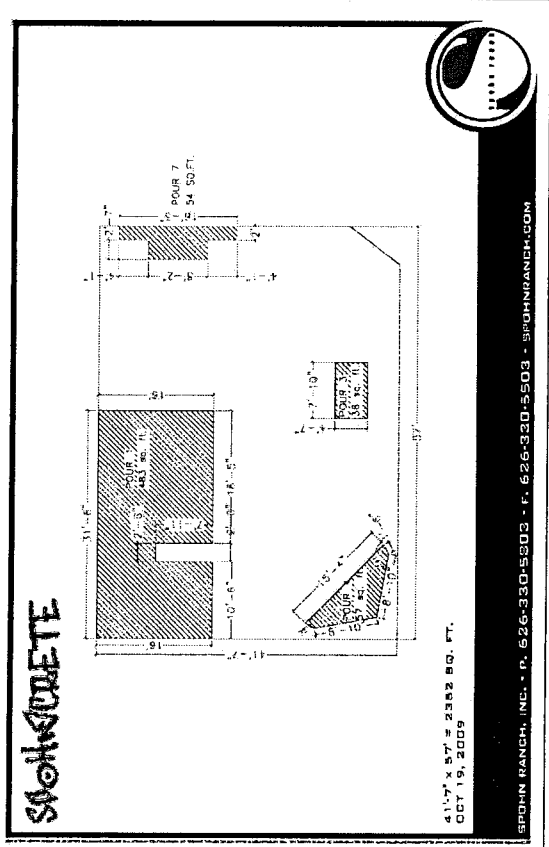
B INSTALLATION DETAIL
L-11
SCALE: N.T.S.

NOTES

1. BAROMAN CONCRETE TO SUPPLY SKATE COMPONENTS. BAROMAN CONCRETE SHALL BE RESPONSIBLE FOR THE INSTALLATION OF THE SKATE COMPONENTS PER MANUFACTURER'S RECOMMENDATIONS.
2. INSTALLATION SUPERVISION OF PRE-CAST CONCRETE SKATE FEATURES. SUPERVISION OF THE SKATE COMPONENTS SHALL BE THE RESPONSIBILITY OF BAROMAN CONCRETE. SUPERVISION OF THE SKATE COMPONENTS SHALL BE THE RESPONSIBILITY OF BAROMAN CONCRETE.
3. CONCRETE SLAB INSIDE SKATE AREA TO BE STANDARD GREY.
4. CONCRETE SLOPE AT 1/4\"/>

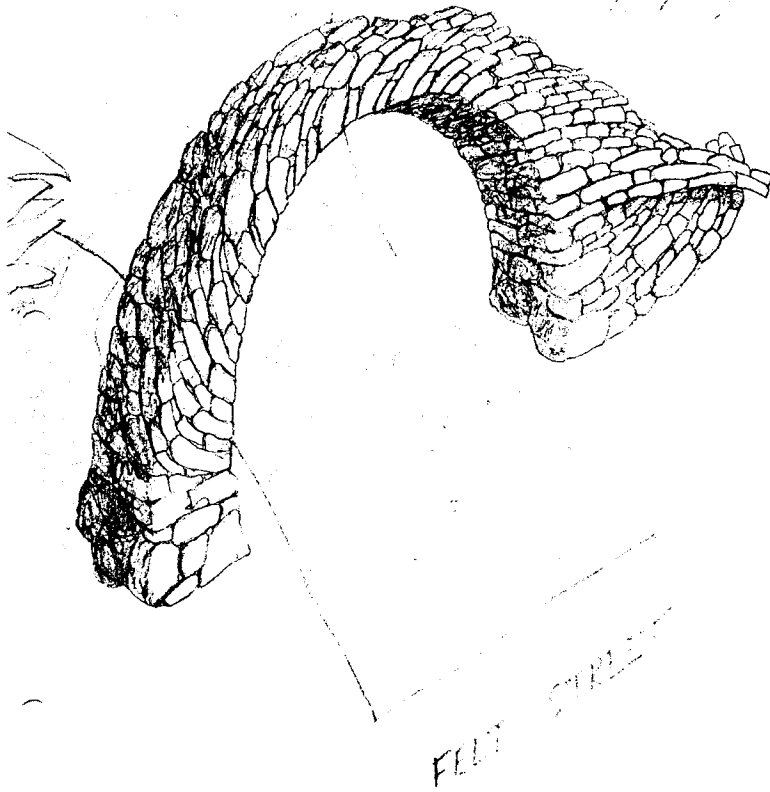


A SKATE LAYOUT PLAN
L-11
SCALE: N.T.S.



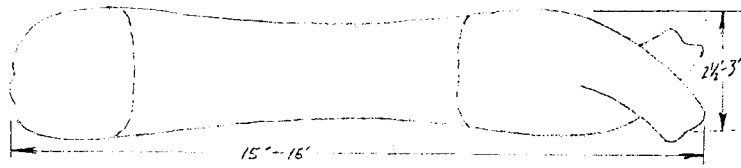
C FOOTINGS LAYOUT PLAN
L-11
SCALE: N.T.S.

STONE ARCH/ENTRY FOR
FELT STREET COUNTY PARK, SANTA CRUZ, CA
DESIGNED AND DRAWN BY MICHAEL ECKERMAN 2006

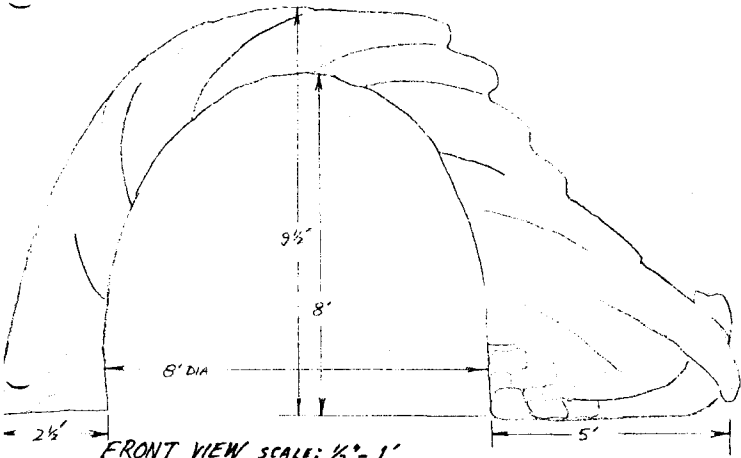


STONE ARCH/FREE-STANDING ENTRY TO
FELT STREET COUNTY PARK, SANTA CRUZ, CA.
OCT., 2006

DESIGNED AND DRAWN BY MICHAEL ECKERMAN



TOP VIEW SCALE: 1/2" = 1'



FRONT VIEW SCALE: 1/2" = 1'

Coastal Development Permit Findings

1. That the project is a use allowed in one of the basic zone districts, other than the Special Use (SU) district, listed in section 13.10.170(d) as consistent with the General Plan and Local Coastal Program LUP designation.

This finding can be made, in that the property is zoned PR (Parks, Recreation and Open Space), a designation which allows park uses, consistent with the site's (O-R) Parks, Recreation and Open Space General Plan designation.

2. That the project does not conflict with any existing easement or development restrictions such as public access, utility, or open space easements.

This finding can be made, in that the proposal does not conflict with any existing easement or development restriction such as public access, utility, or open space easements in that no such easements or restrictions are known to encumber the project site.

3. That the project is consistent with the design criteria and special use standards and conditions of this chapter pursuant to section 13.20.130 et seq.

This finding can be made, in that the development complies with the coastal zone regulations design criteria in that the restroom design, landscaping, and overall park design are all appropriate for an area of single-family and small multi-family developments; the proposal complies with County Code Chapter 13.11 (Design Review regulations) because the features of the proposed parks, including the restroom building and other features (landscaping, hardscaping, skate feature, playground equipment, etc.) are designed to be compatible with the surrounding development and to enhance the subject parcels, one of which is vacant and the other which is developed with a now dilapidated house and garage. The features are sited to minimize visual impacts and the volume of grading is appropriate given the size of the park.

The proposal is consistent with the coastal zone regulations' special use standards and conditions (County Code Section 13.20.150(b)(1)) in that the proposal is subject to the General Plan and Local Coastal Plan Land Use Plan and all applicable ordinances.

4. That the project conforms with the public access, recreation, and visitor-serving policies, standards and maps of the General Plan and Local Coastal Program land use plan, specifically Chapter 2: figure 2.5 and Chapter 7, and, as to any development between and nearest public road and the sea or the shoreline of any body of water located within the coastal zone, such development is in conformity with the public access and public recreation policies of Chapter 3 of the Coastal Act commencing with section 30200.

This finding can be made, in that the project site is not located between the shoreline and the first public road. Consequently, the neighborhood park will not interfere with public access to the beach, ocean, or any nearby body of water. Further, the project site is not identified as a priority acquisition site in the County Local Coastal Program.

5. That the proposed development is in conformity with the certified local coastal program.

This finding can be made in that the property is zoned PR (Parks, Recreation and Open Space) a designation that allows neighborhood park uses, consistent with the site's O-R (Parks, Recreation and Open Space) General Plan designation; the zoning and General Plan designation are part of the certified local coastal program; the proposal does not conflict with any existing easement or development restrictions such as public access, utility, or open space easements; the proposal complies with the County Code Chapter 13.11 (Design Review regulations) because the features of the proposed park, including the restroom building and other features (landscaping, fences, benches, playground equipment, etc) establish the park as a neighborhood place and beautify the subject parcels, the features are sited to minimize visual impacts, and grading is minimal; and the proposal's location, design, and parking will not interfere with public access to the beach, ocean, or any nearby body of water.

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 on a parcel designated for neighborhood park uses in a residential neighborhood and is not encumbered by physical constraints to development. Construction will comply with prevailing building technology, the California Building Code, and the County Building ordinance to insure the optimum in safety and the conservation of energy and resources.

The proposed park facilities will not deprive adjacent properties or the neighborhood of light, air, or open space, in that they are small and/or open to light and air. The restroom structure is a small, single-story building which would be over 100 feet from the nearest residence. The play and skate structures are unenclosed features.

The park design includes an art feature—a river stone archway at the park's entrance—which is about nine and one-half feet tall. The reasons the Zoning Ordinance limits the height of fences in the front yard to three feet are: 1) to ensure adequate visibility of vehicles entering the street and adequate sight distance for stopping and turning, 2) to ensure adequate light and air for the street area and, 3) to preserve a harmonious and compatible street front appearance (County Code Section 13.10.525(a)). In this case, the archway will be located sufficiently distant from the park's entrance to the parking lot that the line of sight for drivers exiting the parking lot will not be affected. The archway is 16 feet in length, just six percent of the park's frontage, and so will not compromise the light and air available to the street area. The archway will be a piece of public art which will create a harmonious and compatible street front appearance.

The proposed grading of 600 cubic yards of cut and fill of earth to establish final grades and to facilitate improved drainage is consistent with County Chapter 16.20, Grading Regulations in that this permit is conditioned to require the applicant to obtain a grading permit from the Building Official as part of the building permit approval.

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.

County Code Section 13.10.355 sets forth special standards and conditions for development in the PR zone district and requires that the Planning Commission approve a Master Site Plan for public agency facilities. The Master Site Plan shall include the following:

- A. A description of all proposed uses;
- B. Proposed immediate and future phases of construction;
- C. Anticipated future boundary expansions, if any;
- D. Provisions for adequate access and public services;
- E. A management plan for the conservation and use of the open space resource.

This proposal establishes a Master Site Plan, based on the new Park Master Plan approved in 2003. As discussed in the staff report, the required Master Site Plan elements are met or included in this proposal.

County Code 13.10.365(a)(1) also states that the Planning Commission approval must include “a finding of General Plan consistency pursuant to Section 65402 of the California Government Code. The proposal is to develop a new neighborhood park, including a restroom. The parcel clearly is intended for park use as it has a land use designation of O-R (Parks, Recreation and Open Space) and is zoned PR (Parks, Recreation and Open Space). It is also identified in Figure 2-5, on page 2-50 of the General Plan as having a designated priority use as a neighborhood park. The application, therefore, is consistent with the General Plan, pursuant to Government Code 65402.

The purposes of the PR zone district relative to this parcel are 1) to preserve public park lands as open space and, 2) to protect those locations designated by the adopted County General Plan for local park use and to provide development and operation standards for local park uses. The proposal is consistent with these two purposes in that the minimal structural development will preserve public park lands as open space, the park is designated by the General Plan for local park use, and the development and operation are guided by the Master Site Plan.

With approval of the variances for the skate feature and for additional impervious area, approval for over-height fences in the front yard setback, and as conditioned to meet the requirements of other County agencies and departments, the proposal is consistent with all pertinent County ordinances and the zone district purpose.

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 public facility use is consistent with the use and density requirements specified for the Parks, Recreation and Open Space (O-R) land use designation in the County General Plan.

The proposed neighborhood park will not adversely impact the light, solar opportunities, air, and/or open space available to other structures or properties, and meets all current site and development standards for the zone district as specified in Policy 8.1.3 (Residential Site and Development Standards Ordinance), in that the neighborhood park will not adversely shade adjacent properties, and will meet current setbacks for the zone district that ensure access to light, air, and open space in the neighborhood.

The proposed neighborhood park (including parking lot, restroom, fencing, skate and play

structures) will not be improperly proportioned to the parcel size or the character of the neighborhood as specified in General Plan Policy 8.6.1 (Maintaining a Relationship Between Structure and Parcel Sizes), in that the proposed neighborhood park, with the variance approvals and over-height fence approval, will comply with the site standards for the PR zone district (including setbacks, lot coverage, height, and number of stories) and will result in a structure consistent with a design that could be approved on any similarly sized lot in the vicinity. 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 proposed neighborhood park is to be constructed on two existing lots which are identified in Figure 2-5, on page 2-50 of the General Plan as having a designated priority use as a neighborhood park. Electricity use will increase, but the proposed electrical use will comply with the current Building Code requirements. In addition, the security lighting will be motion-activated and therefore will only be illuminated when needed. Water use will also increase but will comply with the City of Santa Cruz Water Department's Cruz's Water Efficient Landscape Ordinance. In addition, the toilets and urinals would be low-flow fixtures. New sanitary service is required for the restroom. All commenting utility providers indicated that service is available. The expected level of traffic generated by the proposed project is expected to be minimal. Because this is a neighborhood park, most park users are expected to walk or bicycle to the park. In addition, trips generated by park users who might have traveled to a more distant park, will be eliminated when Felt Street Park is opened.

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 for the following reasons. The proposal is to develop a neighborhood park, including a new restroom building and other features (landscaping, fences, benches, playground equipment, skate feature etc), which will beautify and upgrade the existing under-developed subject parcels, and create a neighborhood place, complementing the surrounding, existing residential land use. This neighborhood park is located in a neighborhood of single-family dwellings and small multi-family developments containing a variety of architectural styles. As a park, the site's land use intensity is appropriately less than that of the surrounding residential area. Dwelling unit density is not applicable as the park has no dwellings.

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.

The proposal complies with the requirements of the County Code sections 13.11.070 through 13.11.076 as demonstrated by the County's Urban Designer's memo (Exhibit E, Attachment 4). The restroom's small scale, finish materials (split faced concrete masonry units construction with a metal roof) and the screening provided by landscaping and other park features, together create a building that fits in its setting and in the neighborhood. In addition, the Urban Designer agreed that the proposed landscaping is appropriate. Therefore, as proposed and conditioned, the

Application #: 06-0370
APN: 028-041-02 and 03
Owner: County of Santa Cruz

development is consistent with the Design Standards and Guidelines and any other applicable requirements.

Variance Findings

1. That because of special circumstances applicable to the property, including size, shape, topography, location, and surrounding existing structures, the strict application of the Zoning Ordinance deprives such property of privileges enjoyed by other property in the vicinity and under identical zoning classification.

The special circumstances that support the two proposed variances are the small size of the parcel. The proposed variances are to allow the skate feature to encroach into the front yard setback—creating a front yard setback of 19 feet where County Code requires 30 feet-- and to increase the amount of impervious area from the 20% allowed by County Code to about 40%, as shown in Exhibit A.

Unlike residentially zoned parcels that can have different setbacks based on the specific zone district and the size of the parcel, parcels in the PR zone district have uniform setbacks of 30 feet from all property lines regardless of the size of the parcel. In addition, County Code sets the minimum size for parcels in the PR zone district at 20 acres while the entire subject parcel is approximately 1.8 acres, just nine percent of the required minimum. A setback of 30 feet is inappropriately burdensome for a small, neighborhood park. The parcels that would be affected by this reduced setback are the residences across Felt Street. However, because of Felt Street's width, the effective setback from the skate park to the residences is about 58 feet, a distance that meets the intent of the 30-foot setback to protect the surrounding uses from the park's impacts.

The variance to allow approximately 40% impervious area where the Code limits parks to 20% is based upon the same special circumstance as the setback variance. The County Code establishes site standards for 20-acre minimum parks. One of these standards is a maximum impervious area of 20%. Twenty percent of 20 acres is four acres of impervious area, a limit ample enough to accommodate virtually any park design. In the case of a Felt Street Park, with 1.8 acres, 20% is just .36 acres, an area insufficient to provide the amenities needed for a neighborhood park serving a diversity of age-groups and needs such as the children's play equipment, play lots, paved game areas and restrooms identified in General Plan Policy 7.2.1 (Neighborhood Park Standards). For a project site this small, which is clearly intended for this use, the approximately 40% impervious area is considered to be reasonable.

2. That the granting of the variance will be in harmony with the general intent and purpose of zoning objectives and will not be materially detrimental to public health, safety, or welfare or injurious to property or improvements in the vicinity.

This finding can be made, in that the general intent and purpose of zoning objectives is to promote orderly development and the objective of the PR district is to provide neighborhood park spaces in settings such as this one. The granting of the variances for the skate feature will foster orderly development of the park while meeting the intent of the Code to provide a setback sufficient enough to protect adjacent properties from park impacts. With an effective setback of about 58 feet, the skate park's impacts will be mitigated to the same or greater degree as they would with a 30-foot setback where there is no intervening street. The granting of additional impervious area is also consistent with the intent and purpose of zoning objectives in that it will allow the development of a local park that meets the needs of a range of ages and needs. The renovation of the park will be

beneficial to public health by providing an open space with play equipment and a community garden and will be beneficial overall to property and improvements in the vicinity by providing a recreational amenity for the neighborhood.

3. That the granting of such variances shall not constitute a grant of special privileges inconsistent with the limitations upon other properties in the vicinity and zone in which such is situated.

The subject property is the only one in the immediate neighborhood that is in the PR zone district. It is surrounded by properties in two different residential zone districts and the Public Facility-zoned school property to the south. The granting of the variance does not constitute a grant of special privileges inconsistent with the limitations upon other properties in the vicinity and in the same zone district because there are no other such properties. Where there are similar situations somewhat further away, for example at Floral Park on 38th Avenue, a similar variance was approved.

Significant Tree Removal Findings

Per the Significant Trees Protection ordinance (County Code 16.34.060) one or more of the following findings must be made in order to grant approval for the removal of a significant tree:

1. That the removal is necessary to protect health, safety, and welfare.

As a part of developing the park, three trees are proposed for removal which are considered to be Significant Trees in that their trunks exceeds 20 inches in diameter at breast height. These are a multi-trunk plum tree, a eucalyptus and a double trunk eucalyptus tree (trees 4, 5 and 10 in the arborist report, Exhibit E, Attachment 6). For trees 4 and 10, the trees received grades of fair health but poor structure and suitability. Tree 5 is identified as having poor trunk / stem attachment. All three were identified as having a risk of failure, which is an unacceptable hazard at a public park. While it would be possible to stabilize tree 5 with cabling, this requires on-going monitoring for which the County's Parks, Open Space and Cultural Services does not have a budget.

To compensate for these tree removals and to enhance the park in general, 57 trees are proposed. Of these 57 trees, 13 trees-- including 10 redwood trees-- were selected from the County's Significant Tree Replacement List to compensate for the loss of the three Significant Trees.

Conditions of Approval

Exhibit A: Project Plans: prepared by John Cahalan, Landscape Architect, dated 10/22/09; Civil Engineering Plans prepared by David B. Voorhies, Registered Professional Engineer, of Underwood & Rosenblum, Inc, dated 10/22/09; Survey by David B. Voorhies, Registered Professional Engineer, of Underwood & Rosenblum, Inc, dated 2/22/06; Restroom design by Romtec; Skate Area Plan by Spohn Ranch.

This permit establishes a Master Site Plan for and authorizes the construction of Felt Street Park, including the demolition of the existing house and garage, removal of three significant trees and the construction of a park consisting of a parking lot, accessible restrooms, accessible play areas, bocce courts, skate park, group picnic area, community garden, fences, motion-activated security lighting, signage, art features, and various drainage and landscaping improvements.

This approval does not confer legal status on any existing structure(s) or existing use(s) on the subject property that are not specifically authorized by this permit.

I. Prior to exercising any rights granted by this permit including, without limitation, any construction or site disturbance, the applicant/owner shall:

- A. Sign, date, and return to the Planning Department one copy of the approval to indicate acceptance and agreement with the conditions thereof.
- B. Pay a Negative Declaration De Minimis fee plus a \$50 filing fee (subject to change) to the Clerk of the Board of the County of Santa Cruz as required by the California Department of Fish and Game mitigation fees program. If you have received a "letter of no effect" from the Department of Fish and Game, you may submit this letter in lieu of the De Minimis fee, however the \$50 filing fee is still required. You must submit either a "letter of no effect" or the De Minimis fee with your \$50 filing fee.
- C. Obtain a Demolition Permit from the Santa Cruz County Building Official.
- D. Obtain a Building Permit from the Santa Cruz County Building Official.
 - 1. Any outstanding balance due to the Planning Department must be paid prior to making a Building Permit application. Applications for Building Permits will not be accepted or processed while there is an outstanding balance due.
- E. Obtain a Grading Permit from the Santa Cruz County Building Official.
- F. Obtain an Encroachment Permit from the Department of Public Works for all off-site work performed in the County road right-of-way.

- G. Submit proof that these conditions have been recorded in the official records of the County of Santa Cruz (Office of the County Recorder) within 30 days from the effective date of this permit.

II. Prior to issuance of a Building Permit the applicant/owner shall:

A. General

1. Submit final architectural plans for review and approval by the Planning Department. The final plans shall be in substantial compliance with the plans marked Exhibit "A" on file with the Planning Department. Any changes from the approved Exhibit "A" for this development permit on the plans submitted for the Building Permit must be clearly called out and labeled by standard architectural methods to indicate such changes. Any changes that are not properly called out and labeled will not be authorized by any Building Permit that is issued for the proposed development. The final plans shall include the following additional information:
 - a. One elevation shall indicate materials and colors. If specific materials and colors have not been approved with this Discretionary Application, in addition to showing the materials and colors on the elevation, the applicant shall supply a color and material board in 8 1/2" x 11" format for Planning Department review and approval.
 - b. The side property line fences shall be shown as reducing to three feet in height within the front yard setback.
 - c. Grading, drainage, and erosion control plans.
 - d. Only motion-activated security lighting is allowed. It shall be directed onto the site and away from adjacent properties. Light sources shall not be visible from adjacent properties. The light fixtures shall be integrated into the restroom building design or sited in such a way as to fit into the site design.
 - e. All utilities, including irrigation and fire protection back flow preventers, must be located in the least visually obtrusive location possible. All new electrical power service connections shall be installed underground. Utility equipment such as gas meters and electrical panels shall not be visible from public streets or building entries.
 - f. Submit four copies of the approved Discretionary Permit with the Conditions of Approval attached. The Conditions of Approval shall be recorded prior to submittal, if applicable.

B. Environmental Planning

1. Submit 3 copies of a soils report prepared and stamped by a licensed Geotechnical Engineer.
2. Final plans shall include the following:
 - a. Tree protection measures as recommended by the project;
 - b. A monitoring program for the replacement trees. The monitoring program shall show that a qualified professional shall monitor the replacement trees for five years at six-month intervals.
 - c. The following notes to minimize the impacts of construction on air quality:
 - i. Water the site as needed on a daily basis for dust suppression.
 - ii. Cover all inactive spoils piles.
 - iii. Refrain from grading on windy days (15 MPH or more average wind speed).
 - iv. Install a minimum of 30 feet of one-inch rock at site entrance and exit to prevent the tracking of sediment off-site.

C. Accessibility

1. Additional accessibility details such as restroom elevations, door details, drinking fountain elevations, etc must be submitted with the building permit application submittal. The submittal should incorporate an accessibility plan sheet.
2. Clearly show that adequate clearance has been provided around the fire hydrant located in the project's northwest corner.
3. The project must comply with the 2007 California Building Code.

D. Department of Public Works, Stormwater Management (Drainage)

1. Meet all requirements of and pay Zone 5 drainage fees to the County Department of Public Works, Stormwater Management. Drainage fees will be assessed on the net increase in impervious area.
2. Inspection of the drainage related items will be performed by a public works inspector. Once all other reviewing have approved the final building permit plans, submit a set of reproducible civil plans sheets to Public Works, with our signature block, for review and signature, along with an engineer-s estimate for the drainage related work. A 2% fee (\$560 minimum) will be assessed for inspection.
3. Please add a note to provide signage adjacent to all inlets stating "No Dumping - Drains to Bay" or equivalent. This signage is to be maintained by the property owner.

4. Maintenance agreements for proposed water quality treatment and detention/retention facilities will be required. Provide a copy of a notarized, recorded agreement.
 5. Please provide measures for preventing debris from entering the detention and retention facilities in order to minimize future clogging and maintenance.
 6. This project will result in disturbance of more than an acre. The owner/applicant is responsible for obtaining coverage under the State's general construction storm water permit. Submit the Storm Water Pollution Prevention Plan to the State.
- E. Department of Public Works, Driveway Encroachment
1. If any trenching is to occur within three years of an overlay of Felt Street Park, then trenching fees, in addition to the Encroachment Permit fee, will apply.
- F. Department of Public Works, Road Engineering
1. The mid-block crosswalk should be yellow and either be similar in appearance to piano keys or a ladder.
 2. Show the existing sidewalk easement on the project plans.
- G. Department of Public Works, Sanitation
1. Put a note on plans that the uncovered drinking fountain near the bocce court shall not be connected to the sewer.
 2. Omit note No. 15 on sheet C-1.
 3. All future revisions to the project plans shall be routed to the Department of Public Works, Sanitation for review and approval. All changes shall be highlighted as plan revisions and changes may cause additional requirements to meet District standards.
- H. City of Santa Cruz Water Department
1. Pay all applicable fees and meet all requirements of the City of Santa Cruz Water Department.
 2. Present evidence of parcel combination of APNs 028-041-02 and 028-041-03.

3. Indicate on the plans whether or not the existing service will be retired or utilized.
4. Show only 1"-meters being used.
5. Report the Fire Department requirements with regards to fire sprinklers and/or hydrants.
6. RP backflow protection devices are required on each service.
7. Plants must be separately valved according to water use.
8. Overhead spray irrigation systems shall be separated from adjacent sidewalks, driveways or other paved surfaces by at least two feet in width.
9. A rain shut-off device is required.
10. Anti-drain valves shall be installed in strategic points to minimize or prevent low-head drainage.

I. Central Fire Protection District

1. Meet all requirements and pay any applicable plan check fee of the Central Fire Protection District.

III. All construction shall be performed according to the approved plans for the Building Permit. Prior to final building inspection, the applicant/owner must meet the following conditions:

A. General

1. All site improvements shown on the final approved Building Permit plans shall be installed.
2. All inspections required by the building permit shall be completed to the satisfaction of the County Building Official.
3. Construction shall be limited to weekdays between 8 AM and 5 PM.
4. 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.
5. 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.

B. Environmental Planning

1. Prior to any disturbance, the applicant shall convene a pre-construction meeting on the site. The following parties shall attend: the project engineer, project contractor supervisor, project grading contractor, Santa Cruz County Environmental Planning staff, and project arborist. Tree protection measures as detailed in the arborist report shall be installed prior to the meeting and identified at the meeting. The project must comply with all the recommendations of the approved arborist report. In addition, the attendees will discuss the requirement of condition III.B.3.
2. The project must comply with all recommendations of the approved soils reports.
3. To minimize the impacts of construction on air quality, the following measures must be implemented throughout construction:
 - a. Water the site as needed on a daily basis for dust suppression.
 - b. Cover all inactive spoils piles.
 - c. Refrain from grading on windy days (15 MPH or more average wind speed).
 - d. Install a minimum of 30 feet of one-inch rock at site entrance and exit to prevent the tracking of sediment off-site.
4. All construction and demolition waste shall be processed through the Buena Vista Construction and Demolition Waste program. A hold will be placed upon the Building Permit to be released pending demonstration by the applicant that the construction and demolition waste was processed through the Buena Vista Construction and Demolition Waste program (e.g. submittal a receipt or letter from Buena Vista landfill).

C. County of Santa Cruz Redevelopment Agency / Department of Public Works: If existing roadside or roadway improvements including overlay, curbs, gutters, sidewalks or bike lane striping are damaged during construction, they shall be repaired or replaced in kind by the applicant to County Design Standards.

D. City of Santa Cruz Water Department:

1. If the existing water service is to be retired, a representative of the City of

Santa Cruz Water Department must witness the retiring (no pipe crimping).

2. Provide an irrigation audit performed by a certified landscape irrigation auditor. Once completed, contact the Water Conservation Department for a final inspection.

IV. Operational Conditions

A. General

1. In the event that future County inspections of the subject property disclose noncompliance 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 permit revocation.
2. Submit a post-operation acoustical study to confirm whether or not the anticipated noise generated by the skate park is consistent with actual noise generation. If actual noise generation exceeds the anticipated noise, provide noise attenuation recommendations by the project acoustical engineer and, after gaining Planning Department approval, install those improvements.

B. Environmental Planning

1. Replacement trees shall be monitored by a qualified professional for five years at six month intervals. One hundred percent survival rate is required. Should trees die or become diseased, they must be replaced in-kind. All recommendations of the arborist report shall be implemented.
2. Submit an annual report to the Deputy Environmental Coordinator of the County of Santa Cruz Planning Department from the County Parks, Open Space and Cultural Services (POSCS) Department documenting the results of the inspections (two inspections per annual report).

V. Mitigation Monitoring Program

The mitigation measures listed under this heading have been incorporated into 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 mitigations is hereby adopted as a condition of approval for this project. This monitoring 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 A. Condition III.B.4

Monitoring Program: A hold shall be placed upon the building permit to be lifted pending the submission of evidence (e.g. a receipt or letter from Buena Vista landfill) by the applicant to the project planner documenting that all construction and demolition waste was processed through the Buena Vista Construction and Demolition Waste program.

B. Mitigation Measure B. Conditions II.B.2.A & B, III.B. 1, and IV.B.2

Monitoring Program: Prior to Building Permit issuance, the applicant shall submit a revised planting plan showing at least 57 replacement trees. In addition, the project plans shall reflect the project arborist's tree protection recommendations and detail a monitoring program for the replacement. The monitoring program shall show that a qualified professional (landscape architect or arborist) shall monitor the replacement trees for five years at six-month intervals. Annual reports shall be submitted by the County Parks, Open Space and Cultural Services (POSCS) Department to the County Deputy Environmental Coordinator. One hundred percent survival rate of the replacement trees is required and should trees die or become diseased, they shall be replaced in kind and according to the arborist report recommendations.

A. Mitigation Measure C. Conditions II.B.2.C, III.B.1 and III.B.3

Monitoring Program: Prior to Building Permit issuance, the applicant shall submit plans that have the following notes:

- a. Water the site as needed on a daily basis for dust suppression.
- b. Cover all inactive spoils piles.
- c. Refrain from grading on windy days (15 MPH or more average wind speed).
- d. Install a minimum of 30 feet of one-inch rock at site entrance and exit to prevent the tracking of sediment off-site.

During construction, the applicant shall be responsible for ensuring that these requirements are met.

Minor variations to this permit which do not affect the overall concept or density may be approved by the Planning Director at the request of the applicant or staff in accordance with Chapter 18.10 of the County Code.

Please note: This permit expires three years from the effective date listed below unless a building permit (or permits) is obtained for the primary structure described in the development permit (does not include demolition, temporary power pole or other site preparation permits, or accessory structures unless these are the primary subject of the development permit). Failure to exercise the building permit and to complete all of the construction under the building permit, resulting in the expiration of the building permit, will void the development permit, unless there are special circumstances as determined by the Planning Director.

Approval Date: _____

Effective Date: _____

Expiration Date: _____

Paia Levine
Principal Planner

Annette Olson
Project Planner

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.

NAME: Felt Street Park
APPLICATION: 06-0370
A.P.N: 028-041-02/03

NEGATIVE DECLARATION MITIGATIONS

- A. In order to reduce the impacts of temporary construction debris on the capacity of the regional landfill to less than significant, the applicant and/or property owner shall recycle and reuse materials, as appropriate, and to the maximum extent possible. Notes to this affect shall be included on the final building permit plan set. At a minimum, all construction and demolition waste shall be processed through the Buena Vista Construction and Demolition Waste program.
- B. In order to reduce the impacts of tree removal to a less than significant level, 57 replacement trees will be included in the landscape plan. Prior to Building Permit issuance, the applicant shall provide an updated planting plan showing at least 57 trees. In addition, the plans shall reflect the project arborist's tree protection recommendations and detail a monitoring program for the replacement trees. The monitoring program shall show that a qualified professional shall monitor the replacement trees for five years at six-month intervals. Annual reports shall be submitted to the Deputy Environmental Coordinator of the County of Santa Cruz Planning Department from the County Parks and Open Space Department. One hundred percent survival rate is required and shall be implemented according to the recommendations in the arborist's report.
- C. In order to mitigate impacts to air quality, standard dust control Best Management Practices shall be implemented during all grading and demolition work. Notes reflecting this shall be included in the final project plans and shall include at a minimum the following measures:
1. Water site as needed on a daily basis.
 2. Cover all inactive spoils piles.
 3. Refrain from grading on windy days (15mph or more average wind speed)
 4. Install minimum 30 feet of 1-inch rock at site entrance and exit to prevent tracking sediment off site.



COUNTY OF SANTA CRUZ

PLANNING DEPARTMENT

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

NOTICE OF ENVIRONMENTAL REVIEW PERIOD

SANTA CRUZ COUNTY

APPLICANT: County of Santa Cruz (Parks)

APPLICATION NO.: 06-0370

PARCEL NUMBER (APN): 028-041-02, 028-041-03

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: May 19, 2010

Annette Olson, staff planner

Phone: (831) 454-3134

Date: April 30, 2010



Environmental Review Initial Study

Application Number: **06-0370**

Date: April 26, 2010
Staff Planner: Annette Olson

I. OVERVIEW AND ENVIRONMENTAL DETERMINATION

APPLICANT: Bob Olson, County Parks **APNs:** 028-041-02, 028-041-03

OWNER: County of Santa Cruz **SUPERVISORAL DISTRICT:** 1

LOCATION: Property located on the south side of Felt Street (1904 Felt Street) about 400 feet east of 17th Avenue, in Santa Cruz. (Attachment 1)

SUMMARY PROJECT DESCRIPTION:

Proposal to demolish the existing house and garage and construct a park consisting of a parking lot, accessible restroom, accessible play area, bocce courts, skate park, group picnic area, community garden, fences, signage, art features, and various drainage and landscaping improvements.

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 type="checkbox"/> Geology/Soils	<input checked="" type="checkbox"/> Noise
<input checked="" type="checkbox"/> Hydrology/Water Supply/Water Quality	<input type="checkbox"/> Air Quality
<input 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 type="checkbox"/> Transportation/Traffic	

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

DISCRETIONARY APPROVAL(S) BEING CONSIDERED

<input type="checkbox"/> General Plan Amendment	<input checked="" type="checkbox"/> Grading Permit
<input type="checkbox"/> Land Division	<input type="checkbox"/> Riparian Exception
<input type="checkbox"/> Rezoning	<input checked="" type="checkbox"/> Other: Master Site Plan Approval
<input checked="" type="checkbox"/> Development Permit	<input checked="" type="checkbox"/> Variance
<input checked="" type="checkbox"/> Coastal Development Permit	<input checked="" type="checkbox"/> Significant Tree Removal

NON-LOCAL APPROVALS

Other agencies that must issue permits or authorizations: Regional Water Quality Control Board

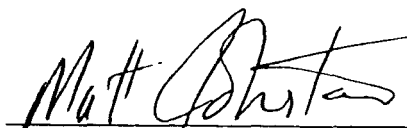
ENVIRONMENTAL REVIEW ACTION

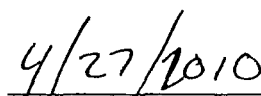
On the basis of this Initial Study and supporting documents:

☐ 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

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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II. BACKGROUND INFORMATION

EXISTING SITE CONDITIONS

Parcel Size: 78,081 square feet (total of both parcels)

Existing Land Use: Single-family dwelling

Vegetation: grasses, eucalyptus, fruit trees

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

Nearby Watercourse: Arana Gulch; Monterey Bay; Rodeo Creek Gulch

Distance To: Respectively: 2,300 feet to west; 2,500 feet to south; 2,000 feet to east

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: Not mapped; none seen on-site

Fire Hazard: Not mapped

Floodplain: Not mapped

Erosion: Not mapped

Landslide: Not mapped

Liquefaction: Mapped as low potential

Fault Zone: Not mapped

Scenic Corridor: Not mapped

Historic: No historic resource on site

Archaeology: Not Mapped

Noise Constraint: Not mapped, Acoustical study completed

Electric Power Lines: N/A

Solar Access: Adequate

Solar Orientation: Southern exposure

Hazardous Materials: N/A

SERVICES

Fire Protection: Central FPD

School District: Live Oak USD

Sewage Disposal: Santa Cruz County
Sanitation District

Drainage District: Zone 5

Project Access: Felt Street

Water Supply: City of Santa Cruz

PLANNING POLICIES

Zone District: PR

General Plan: O-R

Urban Services Line:

Coastal Zone:

X Inside

X Inside

___ Outside

___ Outside

Special Designation: None

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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PROJECT SETTING AND BACKGROUND:

The subject property is approximately 78,081 square feet (1.8 acres) in area and is located on the south side of Felt Street, about 400 feet east of 17th Avenue in Santa Cruz. The project site is composed of two parcels. APN 028-041-02 (the eastern parcel) is about 35,618 and is developed with a single-family dwelling and detached garage which are both accessed via Felt Street. APN 028-041-03 is about 42,463 square feet and is vacant. The site has slopes of 0-2 percent, with the most significant vegetation being eucalyptus and fruit trees.

Although the current use is residential, both properties are zoned PR (Parks, Recreation and Open Space) and have a General Plan Designation of O-R (Parks, Recreation and Open Space). The parcels are specifically identified in the General Plan as having a preferred use as a neighborhood park (Figure 2-5, Page 2-50) and, if developed as a park, are required to have a pedestrian connection to the adjacent Del Mar School site.

Few permits have been issued for the subject parcels. In 1990, a plumbing permit was finalled for the dwelling on APN 028-041-02. In March 2006, a Significant Tree removal permit allowed for the removal of three dead eucalyptus trees.

The uses surrounding the property are a church to the west; single-family residential to the north, northwest and east; multi-family residential to the northeast, and an elementary school to the south. An informal series of dirt paths connects Felt Street and the southern entrance of Del Mar Elementary through the subject parcel. Monterey Bay is located about 2,500 feet to the south.

DETAILED PROJECT DESCRIPTION:

The project description is based upon a plan set by John Cahalan, landscape architect, dated 10/22/09 with civil engineering completed by David B. Voorhies of Underwood & Rosenblum, Inc. The restroom is the only building proposed. It is proposed to be a pre-fabricated structure by Romtec. Spohn Ranch designed the skate park.

This application is a proposal to construct a neighborhood park on two adjacent parcels where one single-family dwelling and a garage currently exist. Neighborhood parks are intended to serve the residents within one-half mile of the park site, in this case, serving a population of between 1,500 to 2,000 people.

The park would consist of: a 21,240 square foot lawn area which is not designed or intended for organized sports, children's play areas for both 2-5 year olds and 5-12 year olds, two bocce courts, a 2,352 square foot skate park, a group picnic area with barbeques, an 18-plot community garden, a paved and accessible path connecting Felt Street and Del Mar Elementary, an eight-stall parking lot with one accessible parking space, accessible male and female restrooms, fences, signage, art features, and

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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various drainage and landscaping improvements. The required permits are: Development Permit (Master Site Plan), Coastal Development Permit and Variance to allow for about 39% impervious surfacing instead of the 20% allowed by County Code and to reduce the front yard setback from the required 30 feet to about 19 feet to allow for a skateboard area. The only off-site improvements proposed is a crosswalk across Felt Street to provide safe access for pedestrians approaching the park from the north. The park would be open from dawn to dusk with maintenance provided by the County Parks Department. The County Sheriff Department would be responsible for enforcing park rules and regulations.

To prepare the site for the park, the existing dwelling and garage would be demolished, and two Significant Trees and several smaller trees would be removed. The park would have 30,988 square feet of impervious area and 47,103 square feet of pervious surfaces. To control runoff from the impervious area, a series of swales, inlets and detention pipes would be utilized. About 600 cubic yards of both cut and fill (balanced on-site) would be graded to establish the finish grades of the parking lot and concrete walkways and the slopes required for the vegetative swales. Along the perimeter of the park, the vegetative swales would direct runoff from the parking lot and other improvements to inlets. These inlets would connect to a pipe system that is oversized to provide adequate capacity for detention. The pre-development release rate would be maintained by reducing the outflow pipe from 24-inches to four inches. This drainage plan represents a minor diversion of stormwater as the property naturally drains to the south but the drainage pipes would be sloped such that the stormwater would flow north to the Felt Street storm drain system. The Department of Public Works has reviewed and accepted the proposed plan.

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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III. ENVIRONMENTAL REVIEW CHECKLIST

A. Geology and Soils

Does the project have the potential to:

1. Expose people or structures to potential adverse effects, including the risk of material loss, injury, or death involving:
 - a. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or as identified by other substantial evidence?
 - b. Seismic ground shaking?
 - c. Seismic-related ground failure, including liquefaction?
 - d. Landslides?

_____	_____	X	_____
_____	_____	X	_____
_____	_____	X	_____
_____	_____	_____	X

All of Santa Cruz County is subject to some hazard from earthquakes. However, the project site is not located within or adjacent to a County or state mapped fault zone. For this reason the potential for rupture of a known earthquake fault is unlikely to occur on the subject property. The improvements would be designed in accordance with the California Building Code, which should mitigate the hazards of seismic shaking and liquefaction to a less than significant level. There is no indication that landsliding is a significant hazard at this site.

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	_____
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See responses A-1-b, A-1-c & A-1-d.

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 no slopes exceeding 30% on the subject parcel.

- | | | | | | |
|----|--|-------|-------|-------------|-------|
| 4. | Result in soil erosion or the substantial loss of topsoil? | _____ | _____ | _____X_____ | _____ |
|----|--|-------|-------|-------------|-------|

Given that the slopes on site are from 0-2% and the fact that the applicant has provided a preliminary erosion control plan, soil erosion or the substantial loss of topsoil is not anticipated.

- | | | | | | |
|----|---|-------|-------|-------------|-------|
| 5. | Be located on expansive soil, as defined in section 1802.3.2 of the California Building Code, creating substantial risks to property? | _____ | _____ | _____X_____ | _____ |
|----|---|-------|-------|-------------|-------|

There is no indication that the development site is subject to substantial risk caused by expansive soils. In addition, a pre-fabricated restroom structure is the only proposed building for the project.

- | | | | | | |
|----|--|-------|-------|-------------|-------|
| 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 would connect to the Santa Cruz County Sanitation District, and the applicant would be required to pay standard sewer connection and service fees that fund sanitation improvements within the district as a Condition of Approval for the project.

- | | | | | | |
|----|----------------------------------|-------|-------|-------|-------------|
| 7. | Result in coastal cliff erosion? | _____ | _____ | _____ | _____X_____ |
|----|----------------------------------|-------|-------|-------|-------------|

The subject parcels are not located on a coastal cliff.

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.

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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2. Place development within the floodway resulting in impedence 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

According to the Santa Cruz Office of Emergency Services, in extreme cases along the west coast of north America, a tsunami can reach heights of up to 100 feet. The site is located at an elevation of approximately 60 feet above mean sea level. The impact of a tsunami would be mitigated by the fact that most of the tsunami's force would be directed up Logan Creek to the west and Rodeo Creek to the east. In addition, the coastal bluff and existing structures that line the coast south of the project site, would slow the tsunami and reduce its impact upon the project site.

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 would obtain water from City of Santa Cruz Water Department and would not rely on private well water. Although the project would incrementally increase water demand, City of Santa Cruz Water Department has indicated that adequate supplies are available to serve the project (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

County Code section 16.22 (Erosion Control) requires the preparation an implementation of an erosion control plan for all projects involving ground disturbance. Potential siltation from the proposed project would be mitigated through implementation of the required erosion control plan.

Park maintenance involves the use of antimicrobial soaps, fertilizers and Category 1

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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(caution) pesticides. These products are regulated by the United States Environmental Protection Agency and, based upon those standards, a less than significant impact is anticipated to affect the water supply. To reduce the amount of pesticides used, the County Parks Department uses integrated pest management (IPM). IPM is a pest management strategy that prevents or suppresses pest problems through a combination of techniques such as monitoring for pests, using non-chemical practices to make the habitat less inviting to the pest, improving sanitation, and employing mechanical and physical controls.

The parking and driveway associated with the project would incrementally contribute urban pollutants to the environment; however, the contribution would be minimal given the size of the driveway and parking area. A silt and grease trap, and a plan for maintenance, would be required by the Department of Public Works to reduce this impact to a less than significant level.

6. Degrade septic system functioning? _____ X _____

There are no septic systems in the area.

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 drainage plan proposes a small diversion that would not affect the overall drainage pattern for the area. The park site slopes from north to south, but the proposed drainage pipes would be placed to slope from south to north. This is to facilitate the park connecting to the existing storm drain system in Felt Street. To the south is Del Mar Elementary school's track field. No storm drain facility is available on the school property and ponding on the track and field is already a problem during winter months. The ultimate destination of the runoff in both scenarios (i.e. in the natural pattern and in the proposed diversion) is Rodeo Creek Gulch. From there, the Monterey Bay is less than 2500 feet away. The proposed diversion would not alter the existing drainage pattern of the broader area in a manner which could result in flooding, erosion, or siltation on- or off-site.

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 Dave Voorhies, revised to June 13, 2008, have been reviewed for potential drainage impacts and accepted by the Department of

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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Public Works (DPW) Drainage Section staff. The calculations show that the pre-development runoff flow rate for the entire site for the five year storm event as being .94 cubic feet per second (cfs). The 10 year storm post-development rate is calculated to be 1.71 cfs. The runoff rate from the property would be controlled by first encouraging on-site infiltration and then detaining runoff on-site and releasing it through an orifice sized to maintain the pre-development runoff rate. In this case, the outflow rate would be .32 cfs, which is below the existing five-year storm release rate. DPW staff have determined that existing storm water facilities are adequate to handle the increase in drainage associated with the project. Refer to response B-5 for discussion of urban contaminants and/or other polluting runoff.

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

_____ X _____

See response B-8.

10. Otherwise substantially degrade water supply or quality?

_____ X _____

A silt and grease trap, and a plan for maintenance, would be required by the Department of Public Works 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 _____

Although the California Natural Diversity Data Base (CNDDDB), maintained by the California Department of Fish and Game shows that the Zayante band-winged grasshopper and the white-rayed pentachaeta are mapped as being on the subject and adjacent properties, these species are associated with sandhills habitat which is not present in the area. The CNDDDB also maps the area as possibly supporting the pallid bat. However, none were identified on-site and the favored habitat of the bat is desert rock outcrops of which there are none on-site or nearby.

Although there are eucalyptus trees on the project site which can provide habitat to the monarch butterfly, a state species of concern, none was observed on-site. In addition, to provide overwintering habitat for the monarch butterfly, stand-alone eucalyptus trees

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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are not adequate; the monarch butterfly requires a grove of the trees in order to create the micro-climate and wind protection needed by the butterfly.

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

_____ X _____

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

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 _____

See response C.1 above.

4. Produce nighttime lighting that will illuminate animal habitats?

_____ X _____

The subject property is located in an urbanized area and is surrounded by existing institutional facilities (Del Mar Elementary, a church, Shoreline Middle School and Simpkins Swim Center) and residential development that currently generates nighttime lighting. The park is closed at night. The only nighttime lighting would be motion-sensitive security lighting to illuminate the restroom area. Except when the light is triggered, no animal habitats in the vicinity would be illuminated as a result of this project.

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

_____ X _____

See responses C.1.

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 _____

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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County Code 13.11.075(a)(2)I requires the retention of trees greater than six inches in diameter at breast height unless the trees are dead, dying or diseased; would obstruct solar access; or if the tree(s) obstruct the prime building site to provide a better project design not possible without the tree removal. In addition, to this regulation, for projects within the Coastal Zone, trees which are 20" in diameter at breast height, are considered to be "Significant Trees" and are protected unless the required findings in County Code 16.34.060 can be made. James P. Allen & Associates completed an Arborist Report for the project which included an inventory of and recommendations for the trees on-site and three trees on the parcel to the west (see Attachment 7).

In this case, the following trees which are less than six inches in diameter at breast height are proposed for removal: two oaks, an acacia, a walnut, a golden rain, and a pear tree. These trees are not required to be retained; they were, however, evaluated by James P. Allen in his arborist report. All, except the acacia and golden rain, were evaluated as having "poor" health, structure and suitability. The acacia and golden rain trees were evaluated as having fair health, poor structure and poor suitability.

In addition to these tree removals are three trees which are greater than six inches in diameter at breast height. They are: two walnut trees, each with four trunks; and a golden rain tree with a double trunk (trees 8, 11 and 12 in the arborist report). These trees all were graded as being in fair or poor health, structure and suitability.

The final category of tree removals are the three trees which are considered to be Significant Trees. These are a multi-trunk plum tree, a eucalyptus, and a double trunk eucalyptus tree (trees 4, 5 and 10 in the arborist report). For trees 4 and 10, the trees received grades of fair health but poor structure and suitability. Tree 5 is identified as having poor trunk / stem attachment. All three were identified as having a risk of failure, which is an unacceptable hazard at a public park.

To mitigate the impact of these tree removals, 57 replacement trees will be included in the landscape plan. Prior to Building Permit issuance, the applicant shall provide an updated planting plan showing at least 57 trees. In addition, the plans shall reflect the project arborist's tree protection recommendations and detail a monitoring program for the replacement trees. The monitoring program shall show that a qualified professional shall monitor the replacement trees for five years at six month intervals. One hundred percent survival rate is required and shall be implemented according to the recommendations in the arborist's report.

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

The primary resource that would be used at the park is water. All of the landscape irrigation would comply with the City of Santa Cruz's Water Efficient Landscape Ordinance. In addition, the toilets and urinals would be low-flow fixtures.

- | | | | | | |
|----|--|-------|-------|-------|------------|
| 4. | Have a substantial effect on the potential use, extraction, or depletion of a natural resource (i.e., minerals or energy resources)? | _____ | _____ | _____ | X
_____ |
|----|--|-------|-------|-------|------------|

No natural resources such as minerals or energy resources are available or mined in the vicinity.

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 site is neither mapped as being a scenic resource, nor is it within the line of sight of any scenic resource. Therefore, the project would not have any adverse effect on a scenic resource.

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-1.

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 visual character and quality of the site and its surrounding would be improved as a result of the project. The existing single-family dwelling is not well maintained and the proposed park, which includes substantial areas of landscaping, would enhance the visual character of both the site and the surrounding neighborhood. No substantial change in topography is proposed and the project is not located on a ridgeline.

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

Only motion-activated nighttime lighting is proposed. During the day, the only potential source of glare would be from the skylights in the restroom structure. Given the height of the structure and the height from where it would be viewed by pedestrians and motorists, the potential glare of these skylights is less than significant.

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

There are no unique geological or physical features on or adjacent to the site that

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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would be destroyed, covered, or modified by the project.

F. Cultural Resources

Does the project have the potential to:

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

_____ X _____

The existing structures on the property are 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 _____

The project site is not mapped as having the potential to contain archaeological resources and no archaeological resources have been identified on the subject parcels. However, pursuant to Section 16.40.040 of the Santa Cruz County Code, if archeological resources are uncovered during construction, the responsible persons shall immediately cease and desist from all further site excavation and comply with the notification procedures given in County Code Chapter 16.40.040.

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

_____ X _____

See response F-2. 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 _____

No paleontological resources have been mapped or identified on the project site.

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

Park maintenance involves the application of antimicrobial soaps, fertilizers and Category 1 pesticides. Category 1 products are regulated by the United States Environmental Protection Agency and, based upon those standards, a less than significant impact is anticipated to affect the water supply. To reduce the amount of pesticides used, the County Parks Department uses integrated pest management (IPM). IPM is a pest management strategy that prevents or suppresses pest problems through a combination of techniques such as monitoring for pests, using non-chemical practices to make the habitat less inviting to the pest, improving sanitation, and employing mechanical and physical controls..

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 1/14/09 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 _____

No public or private airport is located within two miles of the project site.

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

_____ X _____

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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5. Create a potential fire hazard? _____ X _____

The project design incorporates all applicable fire safety code requirements and would include fire protection devices as required by the local fire agency. The only structure proposed for the park is a restroom made of CMU (Concrete Masonry Unit) block, a fire restive material.

6. Release bio-engineered organisms or chemicals into the air outside of project buildings? _____ X _____

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 proposed park is designed to serve the surrounding neighborhood and is not intended to have regional appeal. The park opening would result in an increase of pedestrian and bicycle trips, and possibly an increase in vehicle trips from surrounding neighborhoods on Felt Street, Corcoran Avenue and 17th Avenue. Most of the vehicular trips would occur during off-peak hours (i.e. not during weekdays from 7 to 9 AM and 4 to 7 PM). Weekends are expected to be the peak use days. The volume of pedestrian, bicycle and vehicular trips is not expected to result in a significant impact on the surrounding streets or circulation system.

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

As noted above, this is to be a neighborhood park, not a regional park, so most park users would walk or ride bicycles. As such, this park is not expected to generate a significant parking demand. To accommodate park users who do drive, such as the disabled, eight parking spaces would be available, including one van-accessible parking space. Limited on-street parking is available on the north side of Felt Street.

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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3. Increase hazards to motorists, bicyclists, or pedestrians?

X

The proposed project would not increase hazards to motorists, bicyclists or pedestrians. Rather, it would reduce hazards to these groups through the provision of a new driveway with accessible wrap around, new crosswalk from the southeast corner of Aloha Lane to the park entrance, new sidewalk along the frontage, and pedestrian paths on-site. The proposed driveway and sidewalk was reviewed by the Department of Public Works, Road Engineering; DPW had no issue with the location of the driveway or with its line of sight. In addition, the informal dirt path, which currently connects Felt Street to Del Mar Elementary, would be formalized as a paved path which would make it accessible as well as reduce tripping hazards to pedestrians.

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.

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

Charles M. Salter Associates, Inc (Attachment 9) completed an acoustical study for the project. The skate feature is anticipated to be the most significant generator of noise for the project. For the skate feature, the day / night average (DNL) at the nearest property lines is anticipated to increase by a maximum of .2 decibels over the existing DNL. The future DNL, including the skate feature, is calculated to be a maximum of 64 decibels at the northern property line which is below what the General Plan specifies as "normally acceptable" for neighborhood parks and playgrounds. The maximum noise anticipated to come from the skate feature is predicted to be at or below the existing environmental noise sources. Note that no nighttime noise generation is anticipated as the park is closed from dusk to dawn.

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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2. Expose people to noise levels in excess of standards established in the General Plan, or applicable standards of other agencies?

X

See response I-1.

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

J. Air Quality

Does the project have the potential to:

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

X

The North Central Coast Air Basin does not meet State standards for ozone and particulate matter (PM10). Therefore, the regional pollutants of concern that would be emitted by the project are ozone precursors (Volatile Organic Compounds [VOCs] and nitrogen oxides [NOx]), and dust.

Given the modest amount of new traffic that would be generated by the project there is no indication that new emissions of VOCs or NOx would exceed Monterey Bay Unified Air Pollution Control District (MBUAPCD) thresholds for these pollutants and therefore there would not be a significant contribution to an existing air quality violation.

Project construction may result in a short-term, localized decrease in air quality due to generation of dust. In order to mitigate the potential impacts of dust on air quality, standard dust control Best Management Practices shall be implemented during all grading and demolition work. Notes reflecting this shall be included in the final project plans and shall include at a minimum the following measures:

1. Water site as needed on a daily basis.
2. Cover all inactive spoils piles.
3. Refrain from grading on windy days (15mph or more average wind speed)
4. Install minimum 30 feet of 1-inch rock at site entrance and exit to prevent tracking sediment off site.

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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2. Conflict with or obstruct implementation of an adopted air quality plan?

_____ X _____

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

3. Expose sensitive receptors to substantial pollutant concentrations?

_____ X _____

Although Del Mar Elementary is directly south of the park, no substantial pollutant concentrations are anticipated as resulting from the proposed project.

4. Create objectionable odors affecting a substantial number of people?

_____ X _____

The construction phase may generate objectionable odors such diesel exhaust for a short period of time. Given its limited duration, however, the affect is not anticipated to be significant.

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 _____

The proposed restroom facility, to be constructed of CMU block, would be less flammable than the existing single-family dwelling and garage. Therefore, the park is not anticipated to generate a significant increase in fire protection services. The park may generate additional emergency medical services on the project site; however, without the park, these events likely would occur elsewhere in the community and would still require a response from the fire agency. Therefore, no significant increase in emergency medical calls is anticipated to occur as a result of the park use.

- b. Police protection?

_____ X _____

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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The County's Sheriff Department would be responsible for park security. Given that the park is closed at night and the fact that the park's location imbedded within a neighborhood where many people would be able to easily observe activities within the park, no significant increase in Sheriff services over the existing vacant lot and residential use is anticipated.

- | | | | | |
|--|-------|-------|-------------|-------|
| c. Schools? | _____ | _____ | _____X_____ | _____ |
| d. Parks or other recreational activities? | _____ | _____ | _____X_____ | _____ |

Because this project is for a neighborhood park, it would increase the availability of recreational opportunities for the area and decrease the demand on the existing parks / recreational facilities in the area.

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

Once the park site and associated improvements are constructed by the Redevelopment Agency, the Parks Department would operate and maintain the facility. Felt Street is a county-maintained roadway. Therefore, the construction of this park would not result in a significant impact to available County resources.

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

Drainage analysis of the project by David B. Voorhies, Registered Professional Engineer, of Underwood & Rosenblum, Inc, concluded that no new storm water drainage facilities or expansion of existing facilities would be required. Department of Public Works Drainage staff have reviewed the drainage information and have determined that downstream storm facilities are adequate to handle the increase in drainage associated with the project (Attachment 3).

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

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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The development would be connected to the City of Santa Cruz Water Department and Santa Cruz County Sanitation District for water and sanitary sewer service.

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

_____ X _____

The wastewater flows from the proposed development would 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 (Attachment 4), 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 existing driveway access has been approved by the local fire agency (Attachment 4). In addition, the Felt Street frontage would provide adequate access to the bathrooms which are housed in the only permanent structure on-site.

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

_____ X _____

The proposed park use's contribution would be relatively small and would be of similar magnitude to that created by existing land uses around the project. However, demolition waste makes up about 22% of the waste stream entering the local landfill. To mitigate the impact of the construction waste generated by this project on the landfill's capacity, the applicant and/or property owner shall recycle and reuse materials, as appropriate, and to the maximum extent possible. Notes to this affect shall be included on the final building permit plan set. At a minimum, construction and demolition waste shall be processed through the Buena Vista Construction and Demolition Waste program.

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

_____ X _____

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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L. Land Use, Population, and Housing

Does the project have the potential to:

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

See response C-6 for information on tree removals.

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

See response C-6 for information on tree removals.

- | | | | | |
|--|-------|-------|-------------|-------|
| 3. Physically divide an established community? | _____ | _____ | _____X_____ | _____ |
|--|-------|-------|-------------|-------|

The project would not include any element that would physically divide an established community. Rather, the project would formalize the connection between the Felt Street neighborhood and Del Mar Elementary as the northern entrance to the school is accessed via the project site. Where there is currently an informal dirt path, there would be a paved, accessible, all-season path.

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

The proposed project is a park intended to serve the surrounding neighborhood. Parks are not considered to be growth-inducing infrastructure. The project does not propose any new or additional units or involve extensions of utilities (e.g., water, sewer, or new road systems) into areas previously not served. Consequently, it is not expected to have a 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 would result in the demolition of one single-family dwelling. The

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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loss of one dwelling does not necessitate the construction of housing elsewhere. In addition, this is a site zoned for a park, not a residential use.

M. GREENHOUSE GAS EMISSIONS

Would the project:

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

X

The proposed park project, like all development, is responsible for an incremental increase in green house gas emissions by usage of fossil fuels during the project construction. On-going green house gas emissions are limited that resulting from park security lighting and the pumping of water for irrigation.

At this time, Santa Cruz County is in the process of developing a Climate Action Plan (CAP) intended to establish specific emission reduction goals and necessary actions to reduce greenhouse gas levels to pre-1990 levels as required under SB 375 legislation. Until the CAP is completed, there are no specific standards or criteria to apply to this project. However, the following factors, when considered as a whole, are expected to reduce any impacts of increased green house gas emissions to a less than significant level:

1. The only structure proposed on site would be the restroom building which is not proposed to be heated or cooled and therefore would not contribute to the emission of green house gas emissions.
 2. The facility is intended to be a neighborhood park and most park users are expected to arrive by foot or bicycle.
 3. The proposed park is located in a residential neighborhood and would reduce vehicle trips of nearby residents that would otherwise travel to visit a park.
 4. Finally, the project construction would be required to comply with the Regional Air Quality Control Board emissions requirements for construction equipment involved in the project.
-
2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

X

See Item 1, above.

Significant Or Potentially Significant Impact	Less than Significant with Mitigation Incorporation	Less than Significant Or No Impact	Not Applicable
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N. Non-Local Approvals

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

Yes X No

The project's Storm Water Pollution Prevention Plan is required to be approved by the
Regional Water Quality Control Board.

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

Significant
Or
Potentially
Significant
Impact

Less than
Significant
with
Mitigation
Incorporation

Less than
Significant
Or
No Impact

Not
Applicable

TECHNICAL REVIEW CHECKLIST

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

Attachments:

1. Vicinity Map, Map of Zoning Districts, Map of General Plan Designations, Assessors Parcel Map
2. Master Site Plan as shown on Master Site Plan by Robert Olson, Park Planner and Project Plans: prepared by John Cahalan, Landscape Architect, dated 10/22/09; Civil Engineering Plans prepared by David B. Voorhies, Registered Professional Engineer, of Underwood & Rosenblum, Inc, dated 10/22/09; Survey by David B. Voorhies, Registered Professional Engineer, of Underwood & Rosenblum, Inc, dated 2/22/06; Restroom design by Romtec; Skate Area Plan by Spohn Ranch.
3. Summary of Drainage calculations prepared by David B. Voorhies, Registered Professional Engineer, of Underwood & Rosenblum, Inc, Revised to June 13, 2008 (calculations on file with the County of Santa Cruz).
4. Discretionary Application Comments, dated April 14, 2010
5. Letter from City of Santa Cruz Water District, dated April 14, 2010
6. Arborists Report prepared by James P. Allen, dated April 9, 2008 and Project Arborist Final Plan Review, undated.
7. Parking Study (Conclusions and Recommendations) prepared by Robert Olson, Park Planner, dated March 30, 2010
8. Acoustical Study (Conclusions and Recommendations) prepared by Charles M. Salter, Associates, Inc., dated August 18, 2009

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POR. SECS. 16, 17, 20, & 21,
T.11S., R.1W., M.D.B. & M.

Tax Area Code
82-040

28-04



Assessor's Map No. 28-04
County of Santa Cruz, Calif.
July, 1996

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

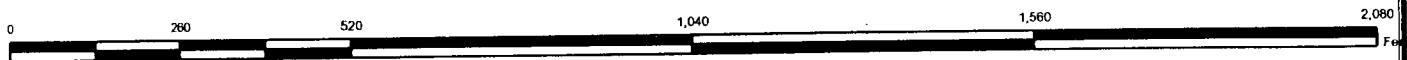
Rev. 4/4/91 from (changed page refs.)
Electronically Redrawn 1/9/97
1/29/98 CD (CA) corrected (bld)

Exhibit E Attachments

- Attachment 1 – Assessor’s Parcel, Location, Zoning, General Plan
- Attachment 2 – Master Site Plan
- Attachment 3 – Summary of Drainage Calculations
- Attachment 4 – Discretionary Application Comments
- Attachment 5 – Will-serve from City of Santa Cruz Water Department
- Attachment 6 – Arborist’s Reports
- Attachment 7 – Parking Study
- Attachment 8 – Acoustical Study

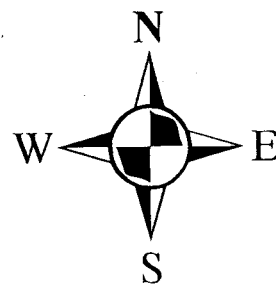


Location Map



Legend

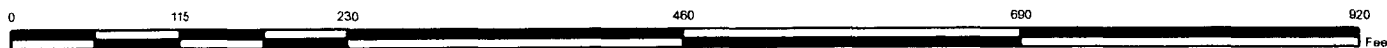
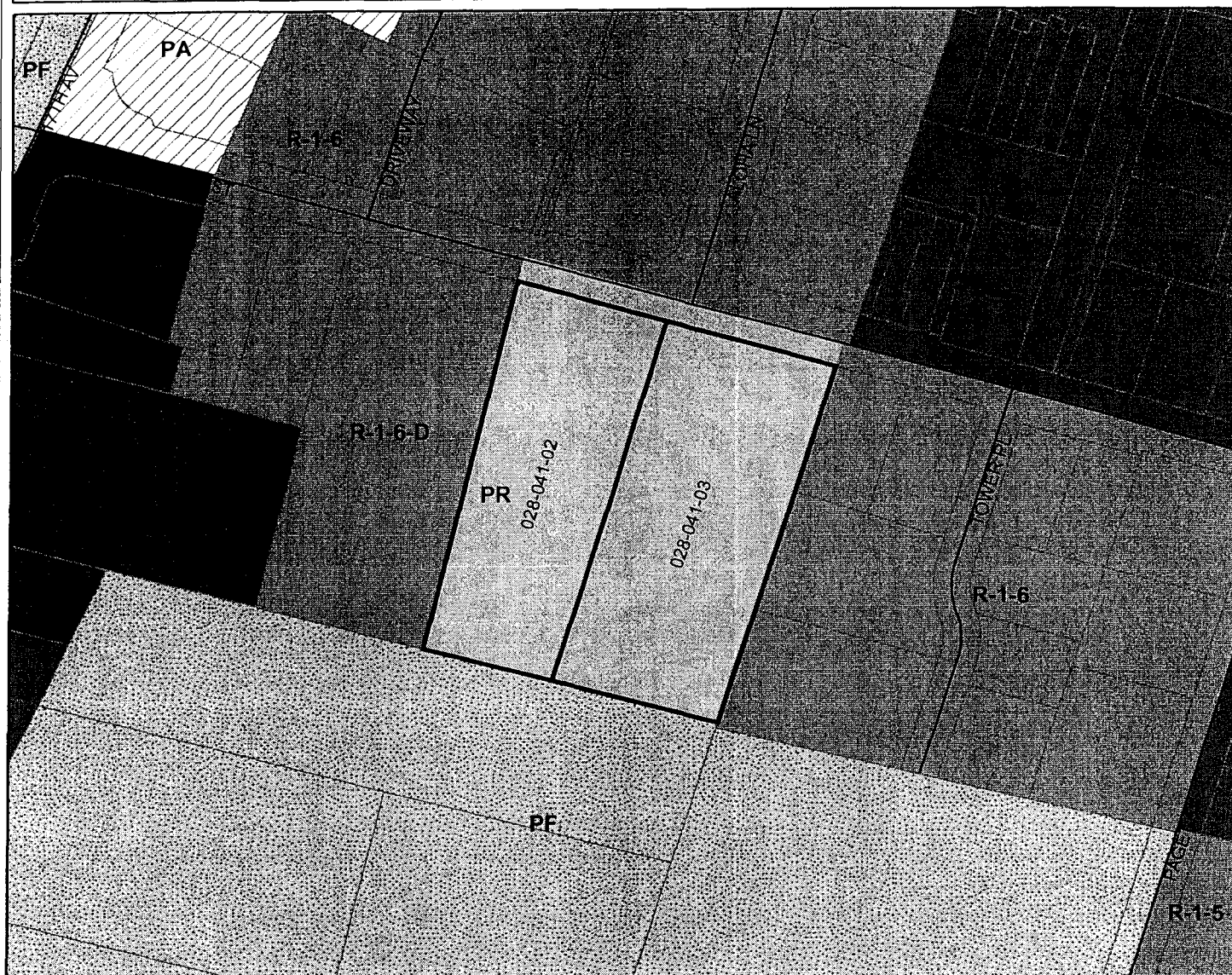
-  Assessors Parcels selection
-  Assessors Parcels
-  Streets
-  Railroads



Map Created by
County of Santa Cruz
Planning Department
August 2006

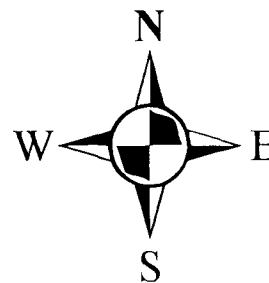


Zoning Map



Legend

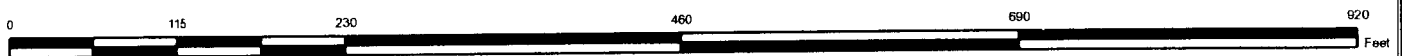
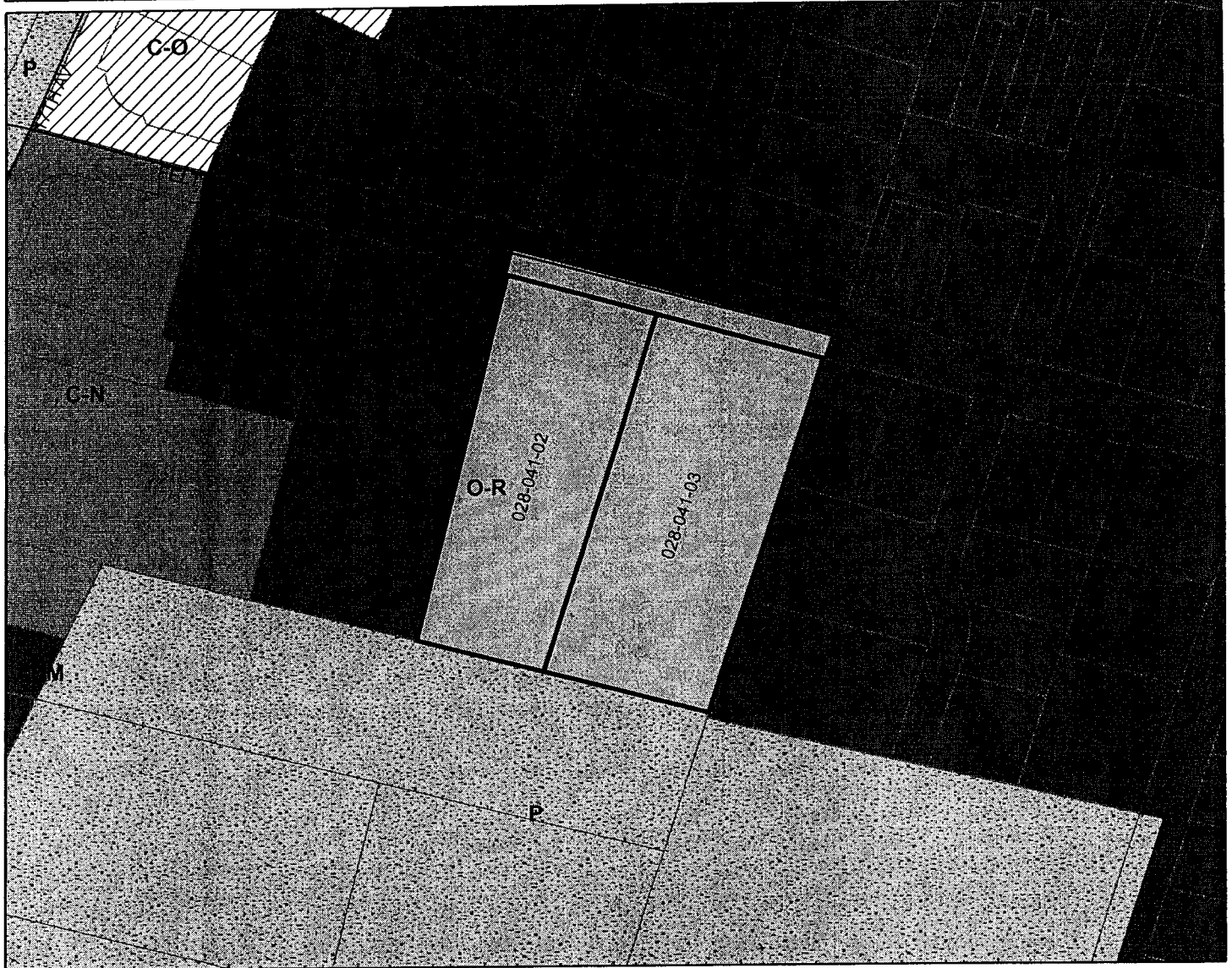
- Project Parcels
- Assessors Parcels
- Streets
- PARK (PR)
- RESIDENTIAL-SINGLE FAMILY (R-1)
- RESIDENTIAL-MULTI FAMILY (RM)
- COMMERCIAL-NEIGHBORHOOD (C-1)
- COMMERCIAL-PROF OFFICE (PA)
- PUBLIC FACILITY (PF)









Map Created by
County of Santa Cruz
Planning Department
August 2006

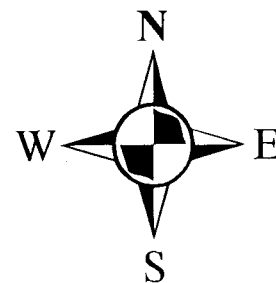


General Plan Designation Map



Legend

-  Assessors Parcels selection
-  Assessors Parcels
-  Streets
-  Parks and Recreation (O-R)
-  Public Facilities (P)
-  Commercial-Neighborhood (C-N)
-  Residential - Urban Medium Density (R-UM)
-  Commercial-Office (C-O)



Map Created by
County of Santa Cruz
Planning Department
August 2006

Felt Street Park
Master Site Plan Information
March 23, 2010

I. Proposed Park Uses:

Felt Street Park is located in the Live Oak planning Area of Santa Cruz County at 1904 Felt Street, Santa Cruz, APN 028-041-02,03. The General Plan identifies this 1.8 acre park site as a neighborhood park. Neighborhood parks are intended to serve the residents within one-half mile of the park site, serving a population between 1,500 to 2,000 people.

Felt Street Park will have a variety of recreational components serving a diverse number of needs and interests. Facilities include: a 21,240 S.F. turf area intended for general play and pick up sports. The turf area is not intended to be utilized for organized sports. Other recreational components include a children's play area for both 2-5 year olds and 5-12 year olds; a 2,352 S.F. above ground skate feature; two bocce ball courts; picnic area; an eighteen plot community garden; game table and bench area; restroom; an eight space parking lot and area landscaping consisting of native and ornamental plant material.

The park is adjacent to Del Mar Elementary School. Walking paths in the park have been designed to maintain a vital link between the neighborhood and the school. School personnel will regulate the gate that adjoins the school and the park for safe passage to and from school.

II. Construction Phasing:

The park will be built in one phase. However, the demolition of the existing structures and the development of the park will be done with two separate contracts.

III. Future Boundary Expansions:

The park is surrounded by Del Mar Elementary School to the south, Center for Conscious Living to the west, Felt Street and R-1-6 residential to the north and east. The Center for Conscious Living has an R-1-6-D zoning and is designated as PK-N in the future General Plan. In the event the owner of this site files an application to the Planning Department, this would initiate the park site review process.

IV. Provision of Adequate Access and Public Service:

The design and implementation of Felt Street Park will result in a variety of recreational facilities and opportunities and will be fully ADA compliant. Passive

park uses will include picnicking, bocce ball, game board table, reading and rest area, gardening and walking paths. Active park uses will include a children's play area for age groups 2-5 year olds and 5-12 year olds, skateboarding and pick up sports on the turf area. Restroom facilities will be provided to accommodate both female and male park users.

V. Park Management Plan

Please refer to the attached management manual.

Felt Street Park Management Manual

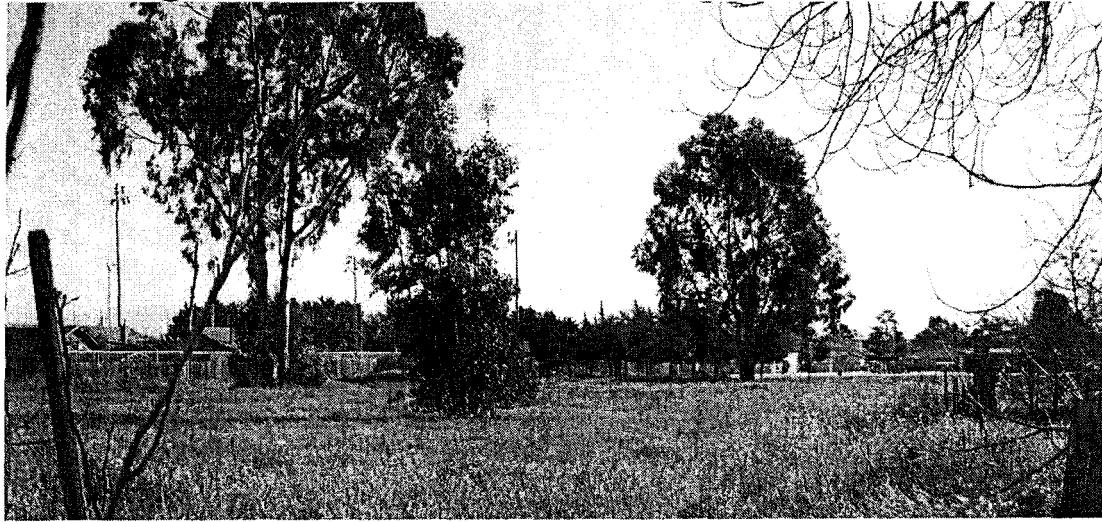
March 2010

Prepared by County of Santa Cruz Department of
Parks, Open Space, and Cultural Services

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Background



Felt Street Park is located in the Live Oak area of Santa Cruz County. The new park at Felt Street will be incorporated into the existing parks system. Currently, the Parks Department maintains over 50 parks and beach access sites. This park will come under the jurisdiction of the mid-county maintenance zone.

Park hours will be from dawn to dusk unless special hours have been designated. Gates, restrooms and special features (i.e. enclosed skate areas) are locked when the park is not open to the public. Both maintenance staff and private security are assigned park opening and closings. It is the responsibility of the County Sheriffs Department to enforce park rules and regulations. Park rules, including special skate park rules and hours of operation will be posted at the park site. Per the recommendations from the Acoustical Report dated August 18, 2009, the immediate neighborhood will be notified as to the schedule and duration of the construction. A point person (during construction: the Project Manager; after construction: the Maintenance Superintendent) will be appointed for noise inquiries from neighboring residents.

The park soils have been determined to be primarily sandy clay loam with a substantial increase in clay below 18" in depth. Prior to the development of this park a soils report was conducted and is included in this manual. The indigenous plant community of this area is Coastal Sage Scrub and Mixed-evergreen Forest. An arborist's report (included within this management plan) evaluated existing trees and made recommendations for trees during both construction and long-term maintenance of the park.

The primary objective of the Felt Street Park Maintenance Manual is to provide guidance for Park Maintenance staff of the landscape maintenance practices which encourage the maximum drought tolerance and least maintenance of the selected plant species without sacrificing vigor, health, and the overall landscape appeal. Routine maintenance will include cleaning the restroom, mowing, irrigation system testing and repair, plant care, litter pick-up (trash and recycling by Green Waste), inspection and repair of playground equipment. Per County Code, pets will be allowed but must be on a leash. A doggie bag dispenser will be installed at the park site.

Integrated Pest Management Policy

2009-10

SANTA CRUZ COUNTY INTEGRATED PEST MANAGEMENT POLICY

1. Statement of Goals

It is the goal of the Santa Cruz County Board of Supervisors to eliminate the use of pesticides on County property. In establishing this policy, it is acknowledged that this is a long-term goal, which cannot be achieved instantaneously. It is also acknowledged that, even after dedicated review and exploration of all available options, it may not be possible to completely eliminate all pesticide use on County property. However, in those situations where pesticides cannot be completely eliminated, it is the Board's intention that the quantity and the risk level of pesticides which are used be reduced to the maximum degree possible. The Board of Supervisors further establishes the following:

- a. The County shall reduce its use of pesticides through the development and implementation of a comprehensive Integrated Pest Management Policy.
- b. Effective July 1, 2001, and except for pesticides granted an exemption pursuant to Section 2 below, the following pesticides shall not be applied to County property:
 - i. EPA Toxicity Category I pesticides,
 - ii. Pesticides which contain chemicals identified by the State of California as known to cause cancer or reproductive toxicity pursuant to the California Safe Drinking Water and Toxic Enforcement Act of 1986, or
 - iii. Pesticides classified as proven human carcinogens by the United States Environmental Protection Agency.
- c. Effective January 1, 2003, and except for pesticides granted an exemption pursuant to Section 2 below, County departments shall not apply EPA Toxicity Category II pesticides on County property.
- d. When pesticides are used on county property, County departments will follow the Integrated Pest Management Guidelines established below.

- e. Contractors applying pesticides to County property shall comply with the terms of this policy.
- f. Effective June 1, 2005, there shall be a three year moratorium on the spraying of pesticides for the control of roadside vegetation, with the exception of precise spot treatments for significant infestations of invasive, highly flammable exotic plant species that can be spread by mowing.
- g. Effective January 28, 2008, the moratorium on spraying of herbicides on County roads is amended to allow implementation of a County Integrated Vegetation Management Program (IVMP). The IVMP permits limited applications of herbicide by means of brushing the materials onto invasive woody plant stumps to prevent re-growth or hand-spraying by means of a back pack sprayer on stands of invasive perennials and grasses. Both applications are to be implemented once only or infrequently in order to prepare difficult sites for long-term, non-herbicidal, management strategies. The IVMP calls for applications in the amount of one or two ounces per study site.

2. Exemptions:

- a. Departments may apply for exemptions to the restrictions imposed by this policy by providing a written request to the Integrated Pest Management Coordinator addressing the required exemption criteria. The IPM Coordinator will review the request and prepare a staff report and recommendation for consideration by the Integrated Pest Management Departmental Advisory Group (IPM DAG). The IPM DAG will review the request and recommendation at a public meeting and will issue a decision. Exemption requests and their final dispositions will be reported in the annual reports to the Board of Supervisors.
- b. Exemption criteria include the following:
 - i. Documentation of attempts to find alternatives to the proposed pesticide usage
 - ii. Identification of a specific legal, public health, or safety consideration
 - iii. A specified time frame for the proposed exemption
 - iv. A requirement for continued evaluation of alternatives during the exemption period.
- c. It is the intent of the Board that this policy be followed to the fullest extent possible. However, the policy is not intended to prohibit the application of any pesticides, which are required by state or federal law.

- d. Pesticides used by the Santa Cruz County Mosquito Abatement District are exempt from restrictions imposed by this policy but shall be reviewed as part of the Integrated Pest Management program to ensure that every effort is being made to use the least toxic pesticides available for this purpose.
- e. The following pesticides are exempt from restrictions imposed by this policy
 - i. Antimicrobials used to protect public health and safety are exempt from prohibitions imposed by this policy. This exemption shall be reviewed annually, and departments using antimicrobials shall develop written protocols and criteria for the use of these agents.
 - ii. Category I pesticides used to control burrowing rodents on the Pajaro and Salsipuedes levees and on athletic fields are exempt from prohibitions imposed by this policy until July 1, 2010.
 - iii. A Category I fumigant for termites at the University of California Cooperative Extension (UCCE) offices at 1432 Freedom Blvd.

3. Evaluation

- a. The Integrated Pest Management Coordinator in conjunction with County departments shall annually evaluate progress towards achieving the goals adopted by the Board of Supervisors
- b. The Integrated Pest Management Coordinator will include an evaluation of progress towards achieving the goals in the annual report.

4. Public Involvement

- a. The Integrated Pest Management Coordinator will convene one public meeting each year in April to review the County's IPM program and pesticide use.
- b. The IPM Coordinator will convene an Integrated Pest Management Departmental Advisory Group (IPM DAG).
 - i. The Integrated Pest Management Departmental Advisory Group will work with the IPM Coordinator to review the effectiveness of the IPM policy and program and make recommendations to the County Administrative Officer.
 - ii. The Integrated Pest Management Departmental Advisory Group will include representatives from involved County departments, public health professionals, the Agricultural Commissioner, a representative from Caltrans, and members of the community.

5. Reports to Board of Supervisors

- a. The Integrated Pest Management Coordinator will provide an annual report to the Board of Supervisors in June of each year.
- b. The annual report will include the following:
 - i. Any recommended modifications to the Integrated Pest Management Policy
 - ii. Recommended exemptions to the Integrated Pest Management Policy
 - iii. Recommendations for increased staff and materials, if needed, to implement the Integrated Pest Management Policy
 - iv. A comparison of the types and amounts of pesticides used annually by County departments
 - v. A measure of progress towards achieving the goals established by the Board of Supervisors

6. Integrated Pest Management Guidelines

For all pest problems on County property, County departments will utilize the following IPM guidelines:

- a. Perform thorough in-field assessments of each pest problem.
- b. Use pest resistant plants and planting systems that minimize pest infestations.
- c. Establish injury levels and action thresholds for each individual pest species based on how much biological, aesthetic or economic damage the site can tolerate to determine when corrective action must be initiated.
- d. Establish scouting or inspection procedures to monitor pest population levels and severity of the pest problem.
- e. Select corrective actions using the following criteria:
 - i. least disruptive of natural controls
 - ii. least hazardous to human health
 - iii. least toxic to non-target organisms
 - iv. least damaging to the general environment
 - v. most likely to produce permanent reduction of the pest
 - vi. easiest to carry out effectively
 - vii. most cost-effective in the short- and long-term
- f. Modify pest ecosystems to reduce food and living space through physical and cultural practices and the use of biological pest controls.

- g. Maintain an accurate record-keeping system to catalogue the following:
 - i. the identification of the pest
 - ii. the size or density of the pest infestation
 - iii. the geographic distribution of the pest problem
 - iv. complete information on how you treated the pest, including what, how much, where, when, who, cost, and any application difficulties
 - v. the effectiveness of treatment of solving the problem
 - vi. any observable side effects of the treatment on nontarget organisms
 - vii. any comments from residents
 - h. Recommended modifications to these guidelines may be submitted to the Board for consideration in the annual IPM reports.
7. Guidelines for Antimicrobial Usage

The following guidelines will be used by all County departments except where more stringent federal or state requirements are mandated.

Disinfectants will be used primarily in restrooms within County facilities. Disinfectants may also be used in other locations where there is clear evidence that disinfectant is needed.

- a. Routinely disinfected
 - i. Toilets, including walls and tile within the stall and fixtures
 - ii. Urinals and surrounding walls and partitions
 - iii. Sinks, including fixtures, pipes, and surrounding walls
 - iv. All tiles in the restrooms and floors
 - v. Paper towel dispensers, garbage containers and other wall mounted fixtures
- b. Not routinely disinfected
 - i. Mirrors and windows
 - ii. Ceilings
 - iii. Doorknobs in locations other than restrooms
- c. Protocols
 - i. Follow the label (the label is the LAW)
 - ii. Wear Personal Protective Equipment (PPE) when required
 - iii. Accurately dilute product according to the label
 - iv. Allow product contact time as specified on the label
- d. Procedures
 - i. Spray all fixtures, including pipes and faucets with an approved detergent disinfectant mixed or diluted according to the label.

Allow product contact time as specified on label (usually 10 minutes contact time).

- ii. Use a damp rag to thoroughly wipe fixtures and pipes or a clean cloth
- iii. Always use PPE when handling chemicals or diluting (refer to label or MSDS)
- iv. Always dilute product to proper ratios according to the label

8. Notification of Pesticide Use

County departments applying Toxicity Category I, II, or III pesticides shall comply with the following notification procedures:

- a. Signs shall be posted the day before the application of the pesticide and will remain posted at least four days after the application of the pesticide.
- b. Posting shall only be required in areas where the public can reasonably be expected to frequent and as near as possible to the site of the application.
- c. Signs shall be posted at every entry point where the pesticide is applied if it is applied in an enclosed area, and in highly visible locations around the perimeter of the area where the pesticide is applied if the pesticide is applied in an open area.
- d. Signs shall be of a design that is easily recognizable to the public and workers.
- e. Signs shall contain the name and active ingredient of the pesticide, the target pest, the date of pesticide use, the signal word indicating the toxicity category of the pesticide, the date for re-entry if required, and the name and contact number of the County department responsible for the application.
- f. County Departments shall not be required to post signs in right-of-way locations that the general public does not use for recreation purposes. However, each department that uses pesticides in such right-of-way locations shall develop and maintain a public access telephone number, which will provide the information required in Section VII. E. Information shall be available from this telephone number on any pesticides which will be applied within the next four days or that have been applied within the last four days.
- g. County Departments using pesticidal baits shall not be required to post notification signs. However, each department using pesticidal baits shall post a permanent sign at the facility where the baits are used. The sign shall indicate the type of baits used in the area, the target

pests, the area or areas where the baits are commonly placed, and the contact number of the department responsible for the bait application.

- h. Recommended modifications to these notification procedures may be submitted to the Board for consideration in the annual IPM reports.

9. Training

In addition to all training mandated by State and federal regulations, County departments will provide training in the following areas to staff who are responsible for applying pesticides or who supervise staff who apply pesticides:

- a. Principles of Integrated Pest Management
- b. Toxicology of commonly used pesticides
- c. General introduction to the evaluation of alternative strategic control options
- d. Monitoring protocols for different pest problems, including record keeping; and
- e. General introduction to identification of plant diseases and common pest problems procedures for developing site-specific IPM implementation plans. Recommended modifications to these training procedures may be submitted to the Board for consideration in the annual IPM reports.

10. Early Stage Design Consultation with IPM Coordinator

County departments shall consult with the IPM Coordinator when they begin planning projects involving the installation of vegetation or other features that have pest management implications. The IPM Coordinator shall consult the full IPM DAG when appropriate and feasible. The IPM Coordinator shall analyze the proposed actions and make recommendations as needed for alternatives that would reduce the need for pesticides.

Irrigation and Water Conservation

Water conservation is a major consideration in the design of any Santa Cruz County Park. There are several methods to incorporate water conservation in the design of a park. At Felt Street Park many plants were chosen for their drought tolerance such as, *Ganzania*, *Baccharis*, and *Cercis*. In addition to plant material selection, tree and shrub planting details specify the use of mulch to conserve water. Irrigation hardware specified for the park is technologically advanced for dealing with water efficiency. The irrigation controller is a Calsense, weather-based system that gives plants the exact amount of water needed by using software to gather weather data and control irrigation valves according to precipitation. The tree species have been designed with bubbler irrigation hardware which, after a 2-3 year establishment period, may be removed (depending on the health of the trees).

Irrigation Schedules

MONTH	STATION NO. 8 GPM						LEGEND: GALLONS USED/WEEK											
	1. (30)		2. (38)		3. (30)		4. (38)		5. (38)		6. (13)		RUN TIME HOURS/DAY NO. OF DAYS/WEEK					
JAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	X	XX	XXX	
FEB	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
MAR	1	35	1050	1	35	1330	1	35	1050	1	35	1330	1	35	1330	1	10	130
APRIL	2	25	1500	2	25	1900	2	25	1500	2	25	1900	2	25	1900	1	10	130
MAY	2	30	1800	2	30	2280	2	30	1800	2	30	2280	2	30	2280	1	10	130
JUNE	3	22	1980	3	22	2508	3	22	1980	3	22	2508	3	22	2508	2	10	360
JULY	3	22	1980	3	22	2508	3	22	1980	3	22	2508	3	22	2508	2	10	360
AUG	2	30	1800	2	30	2280	2	30	1800	2	30	2280	2	30	2280	2	10	360
SEPT	2	30	1800	2	30	2280	2	30	1800	2	30	2280	2	30	2280	1	10	130
OCT	1	35	1050	1	35	1330	1	35	1050	1	35	1330	1	35	1330	1	10	130
NOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DEC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SUBTOTALS:	12960		16416		12960		16416		16416		1730							
(x4 WKS/MONTH)	51840		65664		51840		65664		65664		6920							
GRAND TOTAL:																	GALLONS/YEAR	

MONTH	STATION NO. 8 GPM			LEGEND: GALLONS USED/WEEK											
	7. (10)			8. (14)		9. (NOT USED)		10. (13)		11. (9)		12. (5)		RUN TIME MINS/DAY NO. OF DAYS/WEEK	
JAN	0	0	0	0	0			0	0	0	0	0	0	0	X
FEB	0	0	0	0	0			0	0	0	0	0	0	0	XX
MAR		10	100	1	10	140		1	10	130	1	10	90	1	10 50
APRIL		10	100	1	10	140		1	10	130	1	10	90	1	10 50
MAY		10	100	1	10	140		1	10	130	1	10	90	1	10 50
JUNE	2	10	200	2	10	280		2	10	260	2	10	180	2	10 190
JULY	2	10	200	2	10	280		2	10	260	2	10	180	2	10 100
AUG	2	10	200	2	10	280		2	10	260	2	10	180	2	10 100
SEPT		10	100	1	10	140		1	10	130	1	10	90	1	10 50
OCT		10	100	1	10	140		1	10	130	1	10	90	1	10 50
NOV	0	0	0	0	0	0		0	0	0	0	0	0	0	0
DEC	0	0	0	0	0	0		0	0	0	0	0	0	0	0
SUBTOTALS:		1100		1540				1430		990		550			
(x4 WKS/MONTH)		4400		6160				5720		3960		2200			
GRAND TOTAL:															
GALLONS/YEAR															

MONTH	STATION NO. & GPM												LEGEND: GALLONS USED/WEEK											
	1. (30)			2. (38)			3. (30)			4. (38)			5. (38)			6. (13)			RUN TIME MINS/DAY NO. OF DAYS/WEEK					
JAN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	X	XX	XXX		
FEB	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
MAR	1	35	1050	1	35	1330	1	35	1050	1	35	1330		35	1330	1	10	130						
APRIL	2	25	1500	2	25	1900	2	25	1500	2	25	1900	2	25	1900	1	10	130						
MAY	2	30	1800	2	30	2280	2	30	1800	2	30	2280	2	30	2280	1	10	130						
JUNE	3	22	1980	3	22	2508	3	22	1980	3	22	2508	3	22	2508	2	10	360						
JULY	3	22	1980	3	22	2508	3	22	1980	3	22	2508	3	22	2508	2	10	360						
AUG	2	30	1800	2	30	2280	2	30	1800	2	30	2280	2	30	2280	2	10	360						
SEPT	2	30	1800	2	30	2280	2	30	1800	2	30	2280	2	30	2280	1	10	130						
OCT	1	35	1050	1	35	1330	1	35	1050	1	35	1330		35	1330	1	10	130						
NOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
DEC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
SUBTOTALS:	12960			16416			12960			16416			16416			1730								
(x4 WKS/MONTH)	51840			65664			51840			65664			65664			6920								
GRAND TOTAL:																							GALLONS/YEAR	

MONTH	STATION NO. & GPM						LEGEND: GALLONS USED/WEEK									
	7. (10)	8. (14)	9. (NOT USED)	10. (13)	11. (9)	12. (5)	RUN TIME MINS/DAY NO. OF DAYS/WEEK									
JAN	0	0	0	0	0	0	0	0	0	0	0	X	XX	XXX		
FEB	0	0	0	0	0	0	0	0	0	0	0					
MAR	1	10	100	1	10	140	1	10	130	1	10	90	1	10	50	
APRIL	1	10	100	1	10	140	1	10	130	1	10	90	1	10	50	
MAY	1	10	100	1	10	140	1	10	130	1	10	90	1	10	50	
JUNE	2	10	200	2	10	280	2	10	260	2	10	180	2	10	100	
JULY	2	10	200	2	10	280	2	10	260	2	10	180	2	10	100	
AUG	2	10	200	2	10	280	2	10	260	2	10	180	2	10	100	
SEPT	1	10	100	1	10	140	1	10	130	1	10	90	1	10	50	
OCT	1	10	100	1	10	140	1	10	130	1	10	90	1	10	50	
NOV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
DEC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SUBTOTALS:	1100		1540		1430		990		550							
(x4 WKS/MONTH)	4400		6160		5720		3960		2200							
GRAND TOTAL:																GALLONS/YEAR

Soils Report

FELT STREET PARK - ATTACHMENT 'A'
SOIL & PLANT LAB REPORT

FELT STREET PARK - ATTACHMENT 'A'
SOIL & PLANT LAB REPORT



Soil and Plant Laboratory, Inc.

www.soilandplantlaboratory.com

352 Mathew Street
Santa Clara, CA 95050
408-727-0330 phone
408-727-5125 fax

SANTA CLARA OFFICE
March 31, 2006
Lab No. 70175

JOHN CAHALAN LANDSCAPE ARCHITECTS
15495 Los Gatos Blvd, #5
Los Gatos, CA 95032

Attn: Linda Garrett

RE: FELT STREET PARK - SANTA CRUZ

Background

The four samples collected 3/27 represented various depth at Parcels 1 & 2 scheduled for landscape renovation for a community park. Of interest is the dense clay subsoil noted to be at 3-foot depth and its potential impact on plant performance.

Parcel 1 had a consistent texture to 30 inches with a substantial increase in clay at 30 inches with standing water evident at 18 inches. At Parcel 2 coarse sand content was higher in the upper foot with an increase in clay content from 12 to 30 inches. A substantial increase in clay occurred at 36 inches with standing water encountered at 30 inches.

Analytical Results

Particle size data for the top foot at Parcel 1 show a sandy clay loam classification by USDA standards. At Parcel 2, gravel fractions are higher in the upper foot with clay a bit less placing this into the gravelly sandy loam textural class. From 12 to 30 inches at Parcel 2, particle size data show a sandy clay loam classification. At 36-inches depth, clay content at about 50% results in a clay textural class. Organic matter content is fair in the upper foot samples and low in the subsoils. The infiltration rates for the upper 30-inches of the soil at Parcels 1 & 2 are estimated on average at 0.32 inch per hour. The clay subsoil at 36 inches has a slow estimated infiltration rate of 0.12 inch per hour.

The reaction levels for the upper foot at Parcels 1 & 2 are slightly acidic and within the range preferred by most plants. Acidity increases into the moderately acidic range in Parcel 2 at 12 to 36 inches and is suitable for most plants. Lime content is favorably absent. Potentially troublesome salinity, sodium and boron are safely low throughout and the SAR values reveal calcium and magnesium adequately balance soluble sodium.

Nutritional data show nitrogen and sulfate low throughout. Phosphorous is low in the upper foot at Parcel 1. At Parcel 2, phosphorous is fair in the upper foot and low at 12 to 30 inches in depth. Potassium is just fair at 12 to 30 inches. Remaining major nutrients are sufficient.



Soil and Plant Laboratory, Inc.

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JOHN CAHALAN LANDSCAPE ARCHITECTS

March 31, 2006

Lab No. 70175

Comments

The dense clay subsoil encountered at 30 inches in Parcel 1 and at 36 inches in Parcel 2 has much slower drainage capacity in comparison to the upper soil profile. This presents concern over adequate drainage and the potential for water logged conditions to occur that can be conducive to disease. Aside from loosening this dense subsoil, if exposed during grading procedures, no other treatment is suggested to improve its drainage capacity. It was mentioned that this dense clay layer may extend 3 feet in depth. You may or may not have the option of boring through this clay layer into better draining subsoil to take advantage of a route for excess water to drain away from the root zone. Providing subsurface drains to carry excess water that may accumulate at the interface of this clay soil would be beneficial to prevent waterlogged conditions. Also choosing primarily shallow rooting shrubs and groundcover may help to offset the concern by keeping the majority of roots out of saturated conditions. The concern of water backing up could still be a problem with heavy rains.

Chemistry and composition of the upper soils are suitable for a wide range of plants given nutritional shortcomings are addressed as follow.

Recommendations

Drainage of the root zone should be improved by first loosening the top 10-inches of any undisturbed or compacted soil. The following materials should then be evenly spread and thoroughly blended with the top 6 inches of soil to form a homogenous layer:

Amount / 1000 Square Feet

4 cubic yards	Nitrogen Stabilized Organic Amendment
5 pounds	Mono-Ammonium Phosphate (11-52-0)
OR	
15 pounds	Bone Meal (3-15-0)

The above rate of organic amendment is based on an organic content of 270 pounds per cubic yard and may be adjusted based on the amendment selected.

To Prepare Backfill:

- Excavate planting pits at least twice as wide as the diameter of the rootball.
- Soil immediately below the root ball should be left undisturbed to provide support but the sides and the bottom around the side should be cultivated to improve porosity.
- The top of the rootball should be at or slightly above final grade.



Soil and Plant Laboratory, Inc.

3

JOHN CAHALAN LANDSCAPE ARCHITECTS

March 31, 2006

Lab No. 70175

- The top 12-inches of backfill around the sides of the rootball of trees and shrubs may consist of the above amended soil or may be prepared as follows:

3 parts	Pulverized Site Soil
1 part	Nitrogen Stabilized Organic Amendment

Uniformly blended with:

Amount / Cubic Yard of Backfill Mix

1/4 pound	Mono-Ammonium Phosphate (11-52-0)
OR	
3/4 pound	Bone Meal (3-15-0)

-Backfill below 12 inches required for 24-inch box or larger material **should not contain** the organic amendment.

- Ideally a weed and turf free zone should be maintained just beyond the diameter of the planting hole. A 2-4 inch deep layer of coarse mulch can be placed around the tree or shrub. **Mulch should be kept a minimum 4 inches from the trunk.**
- Irrigation of new plantings should take into consideration the differing texture of the rootball substrate and surrounding soil matrix to maintain adequate moisture during this critical period of establishment.

Maintenance

Maintenance fertilization **should begin 2 weeks after planting is complete** and may rely on a nitrogen only program using ammonium sulfate (21-0-0) at a rate of 5 pounds per 1000 square feet with refertilization scheduled at 45-60 day intervals. Alternatively, slow release Sulfur Coated Urea (42-0-0) may be applied at a 6-pound rate with refertilization scheduled at 3-month intervals. In the winter months, calcium nitrate (15.5-0-0) may be applied at a 6-pound rate for a quick greening effect. Next spring and fall, substitute a complete fertilizer such as 15-15-15 to help insure continuing adequate phosphorus and potassium. Once plants have established, the frequency of fertilization may be decreased depending on color and rate of growth desired.

HEIDI FISHER

Email and mail 5 pages.



Soil and Plant Laboratory, Inc.

www.soilandplantlaboratory.com

JOHN CAHALAN LANDSCAPE ARCHITECTS
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Los Gatos, CA 95032

352 Madew Street
Santa Clara, CA 95050
408-727-0330 phone
408-727-5125 fax

COMPREHENSIVE SOIL ANALYSIS
(AO5-1, AO5-2 or AO5-3)

Santa Clara Office
Lab No. 70175
FELT STREET PARK-SANTA CRUZ

Samples Taken: 3/27/06

Sam #	Half pH/ Qual	Parts Per Million Parts Dry Soil										Organic % dry wt.	Sample Description & Log Number
		NO ₃ N	NH ₄ N	PO ₄ P	K	Ca	Mg	Cu	Zn	Mn	Fe		

11	20	6.2	0.5	5	8	11	160	1270	282			2.2	Parcel 1, 0-12"
91				0.3		0.5	1.2	0.8	1.4				1.1206-AS417 24 4
12	22	6.7	0.4	4	8	20	190	1480	334			3.3	Parcel 2, 0-12"
107		None		0.3		0.8	1.1	0.8	1.4				1.1906-AS418 24 4
13	16	5.8	0.4	3	0	7	70	950	298			1.4	Parcel 2, 12-30"
78				0.1		0.4	0.7	0.8	1.9				0.9006-AS419 24 4

Sam #	Saturation Extract Values										Percent of Sample Passing 2 mm Screen			
	Ca me/l	Mg me/l	Na me/l	K me/l	B ppm	SO ₄ me/l	SAR	Coarse 5-12	Fine 2-5	Very Coarse 1-2	Med. to Coarse 0.05-0.5	V. Fine 0.002-0.05	Silt 0.002-0.05	Clay 0.002-0.05

11	1.9	1.2	1.4	0.2	0.13	1.6	1.1	0.9	3.1	2.4	6.1	41.4	27.1	23.0
12	1.5	0.9	1.6	0.2	0.11	0.8	1.5	17.5	7.3	7.1	11.9	41.9	21.1	18.0
13	0.7	0.4	2.2	0.1	0.07	1.2	3.0	2.1	1.5	2.3	6.0	43.1	27.1	21.5

Sufficiency factor (1.0=sufficient for average crop) below each nutrient value. N factor based on 200 ppm constant feed.
SAR = Sodium adsorption ratio. Half Saturation & approx field moisture capacity. Nitrogen(N), Potassium(K), Calcium(Ca) and Magnesium(Mg) by sodium chloride extraction. Phosphorus(P) by sodium bicarbonate extraction. Copper(Cu), Zinc(Zn), Manganese(Mn) & Iron(Fe) by DTPA extraction. Sat. ext. method for salinity (ECe as dS/m), Boron(B), Sulfate(SO₄), Sodium(Na) and SAR. TEC(listed below Half Sat) = Est.Total Exchangeable Cations(meq/kg). Gravel fraction expressed as percent by weight of oven-dried sample passing a 12mm(1/2 inch) sieve. Particle sizes in millimeters.

3/29/06



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332 Mathew Street
Santa Clara, CA 95050
408-727-0330 phone
408-727-5125 fax

SOIL APPRAISAL ANALYSIS
(AO3)

Santa Clara Office
Lab Number 70175
FELT STREET PARK-SANTA CRUZ

Samples Taken: 3/27/06

Sam Ple #	Half Sat. %	Org ECe	pH	Percent of Sample Passing 2 mm Screen							USDA Soil	Sample Description & Log Number		
				Gravel		Very Coarse 3-12	Sand		Med. to Coarse 0.5-1	Silt v. Fine 0.002-0.05			Clay 0-0.002	
				Coarse 3-12	Fine 2-5		Very Coarse 1-2	Med. to Coarse 0.5-1						
14	36	5.8	0.6	0.4	0.1	3.6	0.8	3.2	30.4	19.6	46.0	Clay	Parcel 2, @ 36°	06-A5420

3/29/06
Half Saturation & approximate field moisture capacity. Salinity = ECe(ds/m at 25 degree C). Gravel fraction expressed as percent by weight of oven-dried sample passing a 12mm (1/2 inch) sieve. Particle sizes in millimeters.

Turf Management

The turf management of Felt Street Park shall be consistent with the turf management of all our parks.

Fertilization of the turf area shall occur three times per year: spring, summer, and fall (totaling approximately one pound of Nitrogen per 1000 square feet per year). There is approximately 17,000 square feet of turf at Felt Street Park.

The specified turf "Dwarf Enduro" is a drought-tolerant turf fescue. It shall be aerated a minimum of twice a year and re-seeded with a mechanical slit seeder in early fall.

During the growing season the turf shall be mowed every week. During the cooler months mow as needed. Mower blades should be sharp and set at approximately 3.5 inches above grade. The Integrated Pest Management Policy shall dictate any use of herbicides.

June 13, 2008

Robert Olson
Parks, Open Space and Cultural Services
979 17th Ave
Santa Cruz, CA 95062-4170

RE: Felt Street Park
Drainage Study

Dear Mr. Olson:

Attached is the drainage study for the Felt Street Park located in Santa Cruz County, California. The drainage calculations were prepared using software based upon the Haested Method.

The new drainage system will be tied into the existing curb inlet located in the middle front of the property at Felt Street. The existing storm drain pipe is a 15" RCP.

This storm drain system report has been sized for the 5 year storm event per comment #6 in the DPW Discretionary Application Comments, dated 8/3/06. The 5 year storm event data was taken from the Santa Cruz County Precipitation IDF, P60 = 1.4, which is the 10 year storm intensities multiplied by 0.85 (refer to pages 24 thru 27).

Page 1 shows the calculated 5 year storm pre-development runoff flow rate for the entire site (0.94 cfs) and for the portion of the site which currently drains toward the street (0.33 cfs). Page 2 shows the proposed 10 year storm post-development runoff flow rate (1.71 cfs) for the entire site based upon the rational method. The pre-development runoff coefficient is for a park with poorly draining soil ($C=0.3$); 7 minute time of concentration.

Because the 10 year post-development runoff flow rate is greater than the 5 year pre-development runoff flow rate, a small pipe (4" diameter) was used to connect the new Park drainage system to the existing curb inlet. This small pipe effectively reduces the outfall flow rate from the Felt Street Park to the City storm drain system to 0.32 cfs (see graph on Page 10). This peak outflow occurs 16 minutes after the peak rainfall. However, since all of the runoff on the Park is allowed to sheet flow to swales before entering the new storm drain system, the actual peak outflow will be further delayed.

Page 3 is a diagrammatic plan view of the storm drain system to be installed at the Felt Street Park. This sheet identifies pipes, catch basins, and catchments by label. Catchments are approximations of the drainage areas tributary to each catch basin. The catchments are connected to their outflow catch basins by a dashed line. Pages 4 through 9 are descriptive tables for the system components.

Pages 11 through 18 shows a graphic profile of the main pipe line for the storm drain system. The water level is maintained within the 36" storage pipes as well as the main conveyance piping for the 10 year storm.

Pages 19 through 23 are the Detailed Summary Report. This summary provides the maximum flow, maximum velocity, and the maximum hydraulic grade. (Refer to Page 3 for the label diagram.) The total simulation time was set for 30 minutes.


In compliance with Rachel Fatoohi's latest review comments, we have added off line detention (storage) piping, a silt interceptor positioned upstream of the detention piping, and a weir outlet control structure prior to the point of connection in the street. The weir will allow low flow to bypass through a small orifice pipe and higher flows will be diverted into the detention piping. For high flow bypass, there is a small gap between the top of the weir box and the top of the weir itself. Finally, the conveyance pipe sizes have been reduced in order to increase the pipe slope while maintaining minimal pipe cover.

Since the point of connection in the street (invert) is 51.61', and the distance to the farthest catch basin is about 400', and because the park slopes down from the street toward the school (grade elev. = 54.80'), we are limited to relatively flat pipes with minimum cover. Consequently, regular maintenance of the storm pipes in addition to the detention piping and the silt interceptor will be essential for best performance.

If you have any questions regarding this matter do not hesitate to contact me at (408) 453-1222 x24

Very Truly Yours,

UNDERWOOD & ROSENBLUM, INC.



David B. Voorhies, RCE 26429
Principal Engineer

C O U N T Y O F S A N T A C R U Z
DISCRETIONARY APPLICATION COMMENTS

Project Planner: Annette Olson
Application No.: 06-0370
APN: 028-041-02

Date: April 14, 2010
Time: 10:29:07
Page: 1

Environmental Planning Completeness Comments

===== REVIEW ON AUGUST 8, 2006 BY JESSICA L DEGRASSI =====

Please show the trees to be removed under Sig tree permit 06-0014 on the topographic survey. Also the project should be designed to retain the other viable mature trees onsite. If this is not feasible, please replace with 2:1 for those to be removed.

===== UPDATED ON JANUARY 11, 2008 BY JESSICA L DEGRASSI =====

Please submit an arborist report which addresses the condition of the eucalyptus trees to be removed. It appears that these trees are healthy and can remain within the design aspects of the proposed project.

The significant tree removal permit, 06-0014, was approved due to poisoning of three other eucalyptus trees. The remaining trees appear to be healthy and in good condition.

Grading has been reduced from 1200 cubic yards to 600 cubic yards. ===== UPDATED ON MARCH 24, 2010 BY ANTONELLA GENTILE =====
Project complete per Environmental Planning.

Environmental Planning Miscellaneous Comments

===== REVIEW ON AUGUST 8, 2006 BY JESSICA L DEGRASSI =====

Please provide a stockpile location on the erosion control plan.

Please provide a time frame for construction. Will drainage be installed prior to Oct 15.? ===== UPDATED ON AUGUST 8, 2006 BY JESSICA L DEGRASSI =====

===== UPDATED ON MARCH 24, 2010 BY ANTONELLA GENTILE =====

Prior to approval of this project, written permission from the owner of trees 13, 14, and 15 is required to allow the necessary preconstruction treatments as detailed in the arborist's report.

Prior to approval of this project, a plan review letter is required from the project arborist stating that the proposed improvements as shown and as recommended by the soils engineer shall not have a significant negative impact on trees 5, 13, 14, and 15.

Final plans shall include the following:

1. Tree protection measures as recommended by the project arborist.
2. A schedule of inspections to be performed by a qualified certified arborist, as recommended by the project arborist.
3. Cabling details for tree 5.

Additional Conditions:

4. Replacement trees shall be monitored by a qualified professional for five years

Discretionary Comments - Continued

Project Planner: Annette Olson
Application No.: 06-0370
APN: 028-041-02

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at six month intervals. One hundred percent survival rate is required and shall be implemented according to the recommendations in the arborist's report.

Please note that this application includes the removal of the following trees due to construction impacts: a 4.7" oak, a 3.3" oak, a double-trunk (4" and 4") acacia, a double-trunk (33" and 36") eucalyptus, a 3" walnut, a 3" golden rain, two four-trunk walnuts, and a double-trunk (6" and 3") golden rain.

Please note that this application also includes the removal of the following trees due to poor condition: a 4" fruiting pear and a multi-trunk plum.

Proposed replacement trees include 20 24" box western redbuds, 4 24" box tulip trees, 9 24" box purple leaf plums, 10 24" box redwoods, 8 15 gallon cajeput trees, and 3 15 gallon catalpas.

The soils report will be reviewed prior to building/grading permit approval.

Dpw Drainage Completeness Comments

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

===== REVIEW ON AUGUST 3, 2006 BY CARISA R DURAN =====

Not enough drainage information has been given to consider acceptance of this application. To be approved by this division at the discretionary application stage, all potential off-site impacts and mitigations must be determined and compliance with the County Design Criteria (CDC) and County General Plan policies (GPP) demonstrated.

Please address the following items:

1) Please specify on the civil plans the amount of impervious surface that will result from the proposed development.

2) (GPP #7.23.1 - New Development) Projects are required to maintain predevelopment rates where feasible. Mitigating measures should be used on-site to limit increases in post-development runoff leaving the site. Best Management Practices should be employed within the development to meet this goal as much as possible. Such measures include limiting impervious areas, using pervious or semi-pervious pavements, runoff surface spreading, discharging runoff from impervious areas into landscaping, retention facilities, etc. Please show proposed mitigations on the plans and account for the affects in stormwater calculations.

3) (GPP #7.23.2 - Minimizing Impervious Surfaces) Extensive impervious surfaces are proposed by this project. New development is required to limit such coverage to minimize post-development runoff. Consider limiting proposed impervious surfaces and / or using pervious or semi-pervious type surfaces.

4) The submitted drainage design proposes to collect and dispose all runoff generated by the project to an existing off-site system. This does not comply with County requirements to limit runoff leaving the site to pre-development levels.

Discretionary Comments - Continued

Project Planner: Annette Olson
Application No.: 06-0370
APN: 028-041-02

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Please show what measures, such as directing runoff into landscaping, vegetated swales to catchbasins, etc., will be taken to mitigate for the increase in runoff by the development and account for the affects in stormwater calculations. (Also see item #2 above.) Consider retention or a combination of retention and detention in addition to BMP methods. Utilizing only detention to meet this requirement is only allowed if other measures are not feasible. If detention is the only method available to meet pre-development requirements, please submit reasons of infeasibility for review.

5) As indicated in the CDC, runoff from parking areas are required to go through water quality treatment prior to discharge. Consider outslowing parking area to drain to landscaped areas for filtering prior to discharge from the site. If use of landscaped areas is not feasible and structural treatment is proposed, recorded maintenance agreements are required. Please clarify on the plans the method to be used for treatment.

6) If it is determined that resulting runoff from the proposed development cannot be completely handled on-site, the project will be limited to a runoff release rate equivalent to a 5-year storm due to downstream restrictions in the existing off-site system proposed for use. (Reference: Zone 5 Master Drainage Plan) Please submit drainage calculations for proposed design.

For your information:

7) A source for BMP style mitigation methods can be found in the following publication: START AT THE SOURCE, Design Guidance Manual for Stormwater Quality Protection, 1999 Edition, Bay Area Stormwater Management Agencies Association, Forbes Custom Publishing.

A free copy may be obtained:
<http://www.mcstoppp.org/acrobat/StartattheSourceManual.pdf>

A bound version may be ordered: <http://www.basmaa.org/>

(Additional references can be found in the CDC.)

Until further information is submitted addressing the above comments, including calculations for proposed drainage systems, a thorough review of this application cannot be completed. Once submitted, additional items may need to be addressed before the application can be deemed complete.

This application is for development in the Zone 5 Flood Control & Water Conservation District. For increases in impervious area, a drainage fee of \$0.90 per square foot will be assessed.

All subsequent submittals for this application must be done through the Planning Department. Submittals made directly to Public Works will result in delays.

Please call or visit the Dept. of Public Works, Stormwater Management Division, from 8:00 am to 12:00 pm if you have any questions. ===== UPDATED ON JANUARY 17, 2008 BY LOUISE B DION =====

Discretionary Comments - Continued

Project Planner: Annette Olson
Application No.: 06-0370
APN: 028-041-02

Date: April 14, 2010
Time: 10:29:07
Page: 4

We have reviewed the resubmitted plans dated 12/14/07, the drainage study dated August 28, 2007 by Underwood & Rosenblum, Inc. and Robert Olsen's response to our first drainage review comments.

Soil data indicates that retention alone will not be feasible to retain post development runoff to predevelopment rates based on a 5 year storm event. This implies that some type of detention will be required. While detailed review of the detention calculations can be performed during building permit stage, a conceptual plan for detention needs to be proposed at a minimum to complete the discretionary phase. The proposal to limited discharge from the site by reducing the diameter of the discharge pipe does not adequately address storage required per the County's storm drainage design criteria. Please refer to our previous comment (August 3, 2006) for guidance (comments #2-#4, #6 & #7).

We have noted some of the improvements made to the original submittal with the addition of a swale as well as the drainage from the parking lot to the swale. We still want to recommend using the open area in the soccer field as a BMP for filtration and whatever percolation the subsurface will allow.

Please provide a detail of the perimeter swales and an evaluation of how overflow runoff from the swales will be handled until it reaches a safe point of release such as an adequate drainage system or a water course. Provide downstream impact assessment identifying capacity restrictions in existing drainage facilities receiving site runoff and identify the water body receiving the flow. This applies both to overflow from the swales in addition to the proposed discharge into the existing storm drain system.

According to sheet TS-1, predevelopment drainage is to the south while post development runoff is directed towards the north to Felt Street. Please clarify the reason for the diversion.

For questions regarding this review Public Works stormwater management staff is available from 8-12 Monday through Friday.

If you have questions, please contact me at 831-233-8083.

===== UPDATED ON JANUARY 17, 2008 BY LOUISE B DION =====
===== UPDATED ON JANUARY 17, 2008 BY LOUISE B DION =====
===== UPDATED ON APRIL 28, 2009 BY LOUISE B DION =====

Revised plans dated 06-13-2008 have been received. Our concerns have been addressed and the application is deemed complete with respect to the discretionary permit application stage. Please see miscellaneous comments for additional guidance.

Please note the drainage plan is approved in concept for the discretionary application process; detailed review of the design and calculations will be completed during the building permit stage.

Discretionary Comments - Continued

Project Planner: Annette Olson
Application No.: 06-0370
APN: 028-041-02

Date: April 14, 2010
Time: 10:29:07
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===== UPDATED ON MARCH 23, 2010 BY LOUISE B DION =====

Discretionary review approved based on 6-13-2008 schematic plans. As previously stated, while the concept is feasible, detailed review of the calculations and design will occur during building permit application process. Miscellaneous comments should also be addressed at that time.

Please note that the SWPPP submitted, is not reviewed by Santa Cruz County. Applicant will need to submit SWPP to the state when they apply for the construction permit.

Dpw Drainage Miscellaneous Comments

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

===== REVIEW ON AUGUST 3, 2006 BY CARISA R DURAN =====

No comment. ===== UPDATED ON JANUARY 17, 2008 BY LOUISE B DION =====

Please note that detailed design and design calculations review for drainage system will be left for the building permit application stage however please keep the following comments in mind:

- 1) Inspection of the drainage related items will be done by a public works inspector. Once all other reviewing have approved the final building permit plans, submit a set of reproducible civil plans sheets to Public Works, with our signature block, for review and signature, along with an engineer's estimate for the drainage related work. A 2% fee (\$560 minimum) will be assessed for inspection.
- 2) Please add a note to provide signage adjacent to all ets stating "No Dumping - Drains to Bay" or equivalent. This signage is to be maintained by the property owner.
- 3) Maintenance agreements for proposed water quality treatment and detention/retention facilities will be required. Provide a copy of a notarized, recorded agreement.
- 4) Please provide measures for preventing debris from entering the detention and retention facilities in order to minimize future clogging and maintenance.
- 5) This project will result in disturbance of more than an acre. The owner/applicant is responsible for obtaining coverage under the State's general construction storm water permit.

Discretionary Comments - Continued

Project Planner: Annette Olson
Application No.: 06-0370
APN: 028-041-02

Date: April 14, 2010
Time: 10:29:07
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===== UPDATED ON MARCH 23, 2010 BY LOUISE B DION =====

Discretionary review complete based on schematic plans dated 6-13-08. Detailed review of design and hydraulic calculations will occur during the building permit application process. Miscellaneous comments should also be addressed at that time.

Please note that Santa Cruz County does not review SWPPP. The applicant must submit the SWPPP to the State when they apply for the construction permit.

Dpw Road Engineering Completeness Comments

===== REVIEW ON AUGUST 10, 2006 BY GREG J MARTIN =====

The road should meet County Standards for a 2 lane Urban Collector Street with Parking - No Bike Lanes. This requires two 12 foot travel lanes, 8 feet on each side for parking, and 4 foot separated sidewalks on each side. The right-of-way requirement for this road section is 60 feet. The remainder is 2.75 feet. The structural section shall be a minimum of 3 inches of asphalt concrete over 9 inches of aggregate base.

----- It appears from the plan view that the road is 40 feet wide from curb to curb which meets the above standard. The existing contiguous sidewalk along the frontage of the project was constructed by the County. Please show the existing easement for the sidewalk on the plans. Public Works has no objection to an exception for the proposed road section.

----- Exceptions to the County Standards for streets may be proposed by showing 1) a typical road section of the required standard on the plans crossed out, 2) the reason for the exception below, and 3) the proposed typical road section.

----- The midblock crosswalk should be yellow and either be similar in appearance to piano keys at a minimum or a ladder.

----- The driveway apron is recommended to be 24 feet wide. The parking aisle and parking stalls are 42 feet wide which is less than the 44 feet required (standard 26 foot aisle and 18 foot parking stall).

----- If you have any questions please call Greg Martin at 831-454-2811. =====
8, 2008 BY GREG J MARTIN =====
No comment.

Dpw Road Engineering Miscellaneous Comments

===== REVIEW ON AUGUST 10, 2006 BY GREG J MARTIN =====

Discretionary Comments - Continued

Project Planner: Annette Olson
Application No.: 06-0370
APN: 028-041-02

Date: April 14, 2010
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===== UPDATED ON JANUARY 8, 2008 BY GREG J MARTIN =====

Dpw Sanitation Completeness Comments

===== UPDATED ON MARCH 24, 2010 BY DIANE ROMEO =====

Sanitation Engineering Division No. 3 Review Summary Statement; Appl. No. 06-0370; APN: 28-041-02, 03: Sewer service is available for this project based upon the plans submitted for the third review dependent upon the following comments being reflected on the building permit plans. (Any future changes to these plans submitted for discretionary review shall be routed to the District for review to determine if additional conditions by the District are required by the plan change. All changes shall be highlighted as plan revisions and changes may cause additional requirements to meet District standards). This review 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 availability letter must be obtained by the applicant. Once a tentative map is approved this letter shall apply until the tentative map approval expires.

Changes to plans for approval: Put note on plans that uncovered drinking fountain near bocce court shall not be connected to sewer. Omit note no. 15 on sheet C-1. There are no Miscellaneous comments. Any questions regarding the above criteria should be directed to Diane Romeo of the Sanitation Engineering division at (831) 454-2160.

Dpw Sanitation Miscellaneous Comments

===== REVIEW ON JANUARY 7, 2008 BY DIANE ROMEO ===== There are no miscellaneous comments.

COUNTY OF SANTA CRUZ
INTER-OFFICE CORRESPONDENCE

DATE: January 3, 2008
TO: Annette Olson, Planning Department, Project Planner
Bob Olson, Parks Department Planner
FROM: Melissa Allen, Planning Liaison to the Redevelopment Agency
SUBJECT: Application #06-0370 2nd Rtg, Felt Street Park, APN 028-041-02 & 03, 1904 Felt St, LO

The applicant is proposing to demolish the existing house and garage and construct a park consisting of a parking lot, accessible restroom, accessible play area, bocce courts, skate park, group picnic area, community garden, fences, signage, river-stone archway and other art features, and various drainage and landscaping improvements. The project requires a Master Site Plan Approval, Coastal Development Permit, Preliminary Grading Approval, Design Review and Environmental Review. The property is located on the south side of Felt Street about 400 feet east of 17th Avenue (1904 Felt Street).

The Parks Department is responsible for managing and constructing this project, whereas, RDA is involved in the project funding. RDA supports the provision of additional recreational opportunities and the construction of new parks in Live Oak residential neighborhoods where the historic need for additional park amenities is well established.

This application was considered at Engineering Review Group (ERG) meetings on August 2, 2006 and January 2, 2008. The Redevelopment Agency (RDA) previously commented on this application on 8/21/06. The Redevelopment Agency has no additional comments on this application's second routing.

RDA does not need to see any future routings of revised plans unless there are changes relevant to RDA's previous comments. RDA appreciates this opportunity to comment. Thank you.

cc: Greg Martin, DPW Road Engineering
Paul Rodrigues, RDA Program Manager

Betsey Lynberg, RDA Administrator
Jan Beautz, 1st District Supervisor

INTEROFFICE MEMO

APPLICATION NO: 06-0370

Date: July 20, 2006

To: Annette Olson, Project Planner

From: Larry Kasparowitz, Urban Designer

Re: Design Review for a new park at Felt Street, Santa Cruz

GENERAL PLAN / ZONING CODE ISSUESDesign Review Authority

13.11.040 Projects requiring design review.

(e) All County projects.

Design Review Standards

13.11.072 Site design.

Evaluation Criteria	Meets criteria in code (✓)	Does not meet criteria (✓)	Urban Designer's Evaluation
Compatible Site Design			
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			N/A
Street design and transit facilities			N/A
Relationship to existing structures			N/A
Natural Site Amenities and Features			
Relate to surrounding topography	✓		
Retention of natural amenities			N/A
Siting and orientation which takes advantage of natural amenities	✓		
Ridgeline protection			N/A
Views			
Protection of public viewshed	- 107 -		

Minimize impact on private views	✓		
Safe and Functional Circulation			
Accessible to the disabled, pedestrians, bicycles and vehicles	✓		
Solar Design and Access			
Reasonable protection for adjacent properties	✓		
Reasonable protection for currently occupied buildings using a solar energy system	✓		
Noise			
Reasonable protection for adjacent properties	✓		

13.11.073 Building design.

Evaluation Criteria	Meets criteria In code (✓)	Does not meet criteria (✓)	Urban Designer's Evaluation
Compatible Building Design			
Massing of building form			N/A
Building silhouette			N/A
Spacing between buildings			N/A
Street face setbacks			N/A
Character of architecture	✓		
Building scale	✓		
Proportion and composition of projections and recesses, doors and windows, and other features	✓		
Location and treatment of entryways	✓		
Finish material, texture and color	✓		
Scale			
Scale is addressed on appropriate levels	✓		
Design elements create a sense of human scale and pedestrian interest	✓		
Building Articulation			
Variation in wall plane, roof line, detailing, materials and siting.	✓		
Solar Design			
Building design provides solar access that is reasonably protected for adjacent properties.	✓		

ATTACHMENT 4

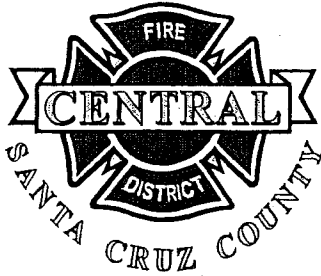
Building walls and major window areas are oriented for passive solar and natural lighting.	✓		
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13.11.074 Access, circulation and parking.

Parking			
Minimize the visual impact of pavement and parked vehicles.	✓		
Parking design shall be an integral element of the site design.	✓		
Site buildings toward the front or middle portion of the lot and parking areas to the rear or side of the lot is encouraged where appropriate.	✓		
Lighting			
All site, building, security and landscape lighting shall be directed onto the site and away from adjacent properties.			<i>Suggest as Condition of Approval</i>
Area lighting shall be high-pressure sodium vapor, metal halide, fluorescent, or equivalent energy-efficient fixtures.			<i>Suggest as Condition of Approval</i>
All lighted parking and circulation areas shall utilize low-rise light standards or light fixtures attached to the building. Light standards to a maximum height of 15 feet are allowed.			<i>Suggest as Condition of Approval</i>
Building and security lighting shall be integrated into the building design.			<i>Suggest as Condition of Approval</i>
Light sources shall not be visible from adjacent properties.			<i>Suggest as Condition of Approval</i>
Loading areas			
Loading areas shall be designed to not interfere with circulation or parking, and to permit trucks to fully maneuver on the property without backing from or onto a public street.	✓		
Landscape			
A minimum of one tree for each five parking spaces should be planted along each single or double row of parking spaces.	✓		
A minimum of one tree for each five parking spaces shall be planted along rows of parking.	✓		
Trees shall be dispersed throughout the parking lot to maximize shade and visual relief.	✓		

At least twenty-five percent (25%) of the trees required for parking lot screening shall be 24-inch box size when planted; all other trees shall be 15 gallon size or larger when planted.	✓		
Parking Lot Design			
Driveways between commercial or industrial parcels shall be shared where appropriate.			N/A
Avoid locating walls and fences where they block driver sight lines when entering or exiting the site.			N/A
Minimize the number of curb cuts	✓		
Driveways shall be coordinated with existing or planned median openings.	✓		
Entry drives on commercial or industrial projects greater than 10,000 square feet should include a 5-foot minimum net landscaped median to separate incoming and out going traffic, where appropriate.			N/A
Service Vehicles/Loading Space. Loading space shall be provided as required for commercial and industrial uses.			N/A
Where an interior driveway or parking area parallels the side or rear property line, a minimum 5-foot wide net landscape strip shall be provided between the driveway and the property line.	✓		
Parking areas shall be screened from public streets using landscaping, berms, fences, walls, buildings, and other means, where appropriate.	✓		
Bicycle parking spaces shall be provided as required in. They shall be appropriately located in relation to the major activity area.	✓		
Reduce the visual impact and scale of interior driveways, parking and paving.	✓		
Parking Lot Landscaping			
It shall be an objective of landscaping to accent the importance of driveways from the street, frame the major circulation aisles, emphasize pedestrian pathways, and provide shade and screening.	✓		
Parking lot landscaping shall be designed to visually screen parking from public streets and adjacent uses.	✓		
Parking lots shall be landscaped with large canopy trees.	✓		
A landscape strip shall be provided at the end of each parking aisle.	✓		

A minimum 5-foot wide landscape strip (to provide necessary vehicular back-out movements) shall be provided at dead-end aisles.	✓		
Parking areas shall be landscaped with large canopy trees to sufficiently reduce glare and radiant heat from the asphalt and to provide visual relief from large stretches of pavement.	✓		
Variation in pavement width, the use of texture and color variation in paving materials, such as stamped concrete, stone, brick, pavers, exposed aggregate, or colored concrete is encouraged in parking lots to promote pedestrian safety and to minimize the visual impact of large expanses of pavement.	✓		
As appropriate to the site use, required landscaped areas next to parking spaces or driveways shall be protected by a minimum six-inch high curb or wheel stop, such as concrete, masonry, railroad ties, or other durable materials.	✓		
Pedestrian Travel Paths			
On-site pedestrian pathways shall be provided from street, sidewalk and parking areas to the central use area. These areas should be delineated from the parking areas by walkways, landscaping, changes in paving materials, narrowing of roadways, or other design techniques.	✓		
Plans for construction of new public facilities and remodeling of existing facilities shall incorporate both architectural barrier removal and physical building design and parking area features to achieve access for the physically disabled.	✓		
Separations between bicycle and pedestrian circulation routes shall be utilized where appropriate.	✓		



**CENTRAL
FIRE PROTECTION DISTRICT**
of Santa Cruz County
Fire Prevention Division

930 17th Avenue, Santa Cruz, CA 95062
phone (831) 479-6843 fax (831) 479-6847

Date: July 25, 2006
To: County of Santa Cruz Parks
Applicant: same
From: Tom Wiley
Subject: 06-0370
Address: 1904 Felt St.
APN: 028-041-03 & 03
OCC: 2804102
Permit: 20060240

We have reviewed plans for the above subject project.

The following NOTES must be added to notes on velums by the designer/architect in order to satisfy District requirements when submitting for **Application for Building Permit**:

NOTE on the plans that these plans are in compliance with California Building and Fire Codes (2001) as amended by the Central Fire Protection District.

NOTE on the plans **construction classification** as determined by the building official and outlined in Part IV of the California Building Code.

NOTE on the plans the **occupancy classification** as determined by the building official and outlined in Part III of the California Building Code.

NOTE on the plans whether the building will be either **SPRINKLERED** or **NON-SPRINKLERED** as outlined in the 2001 California Building Code and via District Amendment.

The FIRE FLOW requirement for the subject property is 1500 gallons per minute.

NOTE, on the plans, the required FIRE FLOW and the available FIRE FLOW. This information can be obtained from the water company upon request.

SHOW on the plans a public fire hydrant meeting the minimum required fire flow for the building, within 150 feet of any portion of the building.

NOTE ON PLANS: New/upgraded hydrants, water storage tanks, and/or upgraded roadways shall be installed PRIOR to and during time of construction (CFC 901.3).

The job copies of the building and fire systems plans and permits must be on-site during inspections.

Submit a check in the amount of \$100.00 for this particular plan check, made payable to Central Fire Protection District. A \$35.00 **Late Fee** may be added to your plan check fees if payment is not received within 30 days of the date of this Discretionary Letter. INVOICE MAILED TO APPLICANT. Please contact the Fire Prevention Secretary at (831) 479-6843 for total fees due for your project.

NEW WATER SERVICE INFORMATION FORM

City of Santa Cruz Water Department 212 Locust Street Suite C Santa Cruz, CA 95060 Phone (831) 420-5210 Fax 831-420-5201

APN: 028-041-02 Multiple APN? ☒ Y Project Address: 1904 Felt St Date: 2/14/2006

Revision 1: 1/3/2007

Revision 2: 3/22/2010

PROJECT DESCRIPTION:

Proposed County Park with restrooms. Includes APN 028-041-03. (irr/ls PRF \$170 pd Receipt 9294 5/7/10)

APPLICANT INFORMATION:

Name: SC County Parks & Rec/Bob Olson Phone: (831) 454-7939

Mailing Address: 979 17th Ave Cell:

City/St/Zip: Santa Cruz CA 95062- Fax:

Email:

REPRESENTATIVE INFORMATION:

Name: Phone:

Mailing Address: Cell:

City/St/Zip: Fax:

Email:

SECTION 1 EXISTING MAIN AND SERVICES

Sizes	Account #'s	Old SIO #'s	Status	Date Closed	Type
3/4"	079-0430		Active		SFD

Main Size/Type/Age: 10" PVC 2003

Elevation zone: ☒ N ☐ No connection fee credit(s) for services inactive over 24 months

SECTION 2

Hyd #	1456	Size/Type:	6"dbi	Static	86	Res	76	Flow	1256	Flow w/20# Res.	3480	FF Date	09/04	Location: on Felt @ 17th
Hyd #	1306	Size/Type:	6"slmr	Static	88	Res	76	Flow	1186	Flow w/20# Res.	3026	FF Date	09/04	Location: on Tower @ Felt

SECTION 3 WATER SERVICE FEE Totals (see Page 2 for Details)

Plan Review Fees:	Permit Fees:	Meter Inst Fees:	Water Conn Fees:	Sewer Conn Fees:	Zone Cap Fees:	Credits:	Total Due:
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Service/Hydrant Eng	\$300	Service/Hydrant Install	\$310.00
Backflow	\$200	Backflow	\$200.00
Irrigation	\$0	St. Opening	\$0.00
		Misc Fees	\$50.00

Totals	\$500	\$360	\$26,120	\$0	\$0.00	\$100	\$27,440.00
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SECTION 4:

BP# PLAN APP # 06-0370 PLANNER Annette Olson REVIEWED BY J. Segal/AV

ADDITIONAL COMMENTS ABOVE FEES ARE ESTIMATES. Fire sprinklers to be determined by Central Fire Protection Dist. No fire sprinkler system connection is shown. Parcels need to be combined to be served as shown on the design. Plans show 1-1/2" meters for both domestic and irrigation use. Only 1"-meters will be allowed based on fixture counts and gpm demands. The existing domestic service is not called out on the Grading and Utility Plan Sheet C-1. Please revise plans to note if the existing service will be retired or utilized. If existing service is to be retired the Water Dept will need to witness the retirement. (Credit \$100 for backflow assembly plan review fee correction/5/1/10 - sr)

QUALIFICATIONS

Service will be furnished upon: (1) payment of the required fees due at the time service is requested (an approved building permit set of plans is required), and; (2) installation of the adequately sized water services, water mains and fire hydrants as required for the project under the rules and regulations of the Santa Cruz Water Department and the appropriate Fire District and any restrictions that may be in effect at the time application for service is made. NOTICE: This form does not in any way obligate the city. It is provided only as an estimate to assist you in your planning and as a record for the Water Department. The requirements set forth on this form may be changed or corrected at any time without prior notice. Fees collected by other agencies are not included on this form.

ATTACHMENT 4

SECTION 5 WATER SERVICE FEE DETAILS APN: 028-041-02

SIO Info		Use Info				SIO Fees				Permit Fees				Totals		
Lat Size / Br Config	Use Type	Mtr ID	Mtr Size	Mtr Type	Num Units	Inst Fee	Water	Sys Dev Chgs Sewer	Zone Capacity	Insp Fee	Eng Rvw Hrs	Fee	BF Rvw	Backflow Permit Type	# Dev	Fee
6 6" STMR	Hydrant				0					155						
					Credits	\$0	\$0	\$0	\$0.00		2	\$100	\$0		0	\$0
						\$0	\$0	\$0	\$0.00							
					Sub total Fees:	\$0	\$0	\$0	\$0.00							
					Sub total Credits:	\$0	\$0	\$0	\$0.00							
					SIO Totals:	\$0	\$0	\$0	\$0.00		2	\$100	\$0		0	\$0
																\$100.00
SIO Info		Use Info				SIO Fees				Permit Fees				Totals		
Lat Size / Br Config	Use Type	Mtr ID	Mtr Size	Mtr Type	Num Units	Inst Fee	Water	Sys Dev Chgs Sewer	Zone Capacity	Insp Fee	Eng Rvw Hrs	Fee	BF Rvw	Backflow Permit Type	# Dev	Fee
2 2"x 1-1"D	Business		1	Disc	0	\$310	\$16,325	\$0	\$0.00	155	2	\$100	\$100	RP	1	\$100
					Credits	\$260	\$6,530	\$0	\$0.00							
	Irrigation		1	Disc	0	\$310	\$16,325	\$0	\$0.00		2	\$100	\$100	RP	1	\$100
					Credits	\$0	\$0	\$0	\$0.00							
					Sub total Fees:	\$620	\$32,650	\$0	\$0.00							
					Sub total Credits:	\$260	\$6,530	\$0	\$0.00							
					SIO Totals:	\$360	\$26,120	\$0	\$0.00		4	\$200	\$200		2	\$200
																\$27,080.00
					Grand Totals:	\$360	\$26,120	\$0	\$0.00		6	\$300	\$200		2	\$200
																\$27,180.00

Total Permit Insp Fees: 360

Annette Olson

From: Laurel Sato [lsato@cityofsantacruz.com]
Sent: Thursday, May 06, 2010 4:10 PM
To: Annette Olson; john.cahalan@comcast.net
Cc: Aerin Martin

Hi Bob and John,

Aerin and I have received your revisions for the Felt Street Park project. Thank you for making the requested revisions. I have approved the plans, and our Water Engineering Department has processed your payment. John, I am mailing a receipt for payment to you.

As the park includes a large turf area, an irrigation audit performed by a certified landscape irrigation auditor is required once the landscape and irrigation system are installed. When the irrigation audit is completed, our department will visit the site for a final inspection. Please contact our department to set up a final inspection when ready.

Thank you,

Laurel Sato

Water Conservation Representative
City of Santa Cruz Water Department
212 Locust Street, Ste. B, Santa Cruz, CA 95060
Phone: 831-420-5235
Fax: 831-420-5231
New email: lsato@cityofsantacruz.com

Water Conservation Office 212 Locust Street, Suite B Santa Cruz, CA 95060
Phone: (831) 420-5230 FAX: (831) 420-5231

County of Santa Cruz

March 22, 2010

Subject Property: Felt Street Park BP#: 06-0370 APN: 028-041-02, -03

Dear Applicant:

Thank you for submitting a landscape plan dated October 22, 2009 for the above project. The Water Conservation Office has reviewed the plan and found much of the plan to be consistent with the City of Santa Cruz's Water Efficient Landscape Ordinance. However, additional information and plan revisions are needed before we can release water service.

Please provide the following information and revisions to the landscape plans:

IRRIGATION PLAN

1. Water and irrigation lines may not cross parcel boundaries. The project site includes two parcels, with proposed irrigation on both parcels. If the parcels are combined into a single lot, one irrigation meter may be used as proposed. If the lots remain as separate parcels, two water meters with separate irrigation systems is required, one for each parcel.
2. The irrigation system must be designed to minimize runoff and overspray on sidewalks, roadways and slopes. Overhead spray irrigation systems shall be separated from adjacent sidewalks, driveways, or **other paved surfaces** by at least two feet in width. The irrigation details and plans indicate a set back of 24" for pop up spray heads and a note is indicated to set back heads along Felt Street. Please extend this note to include the western side of the plan where heads are proposed next to paved surfaces such as the skate, parking, restroom, and picnic areas.
3. Plants must be separately valved according to water use. Low and medium plants may be grouped together, but high water using plants must be separately irrigated. *Sequoia sempervirens* (coast redwood) is listed as "high water use" in the WUCOLS reference listing. The planting plan indicates three separate locations where redwoods are specified. Due to water requirements of established redwoods in this region, we can make an exception for valving *Sequoia sempervirens* with medium water use plants, as is the case for the redwoods specified on the northeast and west portion of the planting plan. The redwoods

located in the southeast corner of the plan are not hydrozoned nor valved separately. Please substitute either a low or medium water requiring species for this location or valve these redwoods separately.

4. The ordinance states that anti-drain valves shall be installed in strategic points to minimize or prevent low-head drainage. If the selected spray heads do not address this in every case, please add check valves to irrigation notes.
5. A rain shut-off device is required.

ADDITIONAL COMMENTS

6. A water audit is required for properties with turf areas over 5,000 square feet. Upon completion of the landscaping installation, an irrigation audit performed by a certified landscape irrigation auditor prior to the final field inspection is required.
7. A landscape review fee of \$170 payable to City of Santa Cruz Water is due prior to approval of the landscape plans.

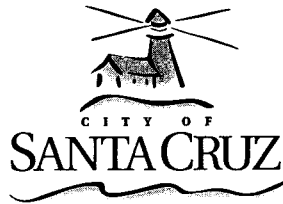
We appreciate your cooperation in meeting the conditions of the City's Water Efficient Landscape Ordinance. The ordinance is available on the City of Santa Cruz website at www.cityofsantacruz.com/index.aspx?page=411 or a copy can be mailed to you on request.

Please submit 3 sets of revised plans to the engineering counter. All revisions must be marked with revision clouds on the plan and noted in the legend. If you have any questions, please call me at (831) 420-5230.

Sincerely,

Aerin Martin
Water Conservation Representative

cc: John Cahalan, Landscape Architect
Water Engineering



W A T E R D E P A R T M E N T

212 Locust Street, Suite C, Santa Cruz, CA 95060 • (831) 420-5200 • Fax (831) 420-5201

March 22, 2010

RE: PLAN REQUIREMENTS: FELT STREET PARK

Hello Annette:

Here is a list of items that need to be addressed:

1. Since the landscaping is crossing over two separate parcels the parcels will need to either be combined or have two separate irrigation meters installed to serve each parcel. This will also be the case for the domestic service if the service crosses parcel lines.
2. Meter size on both the domestic and irrigation service will be 1". Flow capacity through the 1" service is estimated to be 50 GPM; it is typically higher in reality.
3. We need to know what is being planned for the existing 3/4" service line (with 5/8"-meter).
4. Fire department requirements have not been reported. We still need to know if fire sprinklers and/or hydrants are required for this project.
5. RP backflow protection devices are required on each service.

Let me know if you have any questions.

Adrian Valmonte
(831) 420-5318
avalmonte@cityofsantacruz.com

Annette Olson

From: Bob Olson
Sent: Thursday, May 06, 2010 5:07 PM
To: Annette Olson
Cc: John Cahalan; Joe Schultz
Subject: FW: Center for Spiritual Living
Importance: High

Annette:

Here is the written permission from the Center for Spiritual Living to perform any of the pre-construction root pruning and tree trimming. With the information from the latest revision to the Arborist Report (plan review letter), it sounds like we will only be affecting the Monterey Pine next to the street.

Bob

-----Original Message-----

From: Joe Schultz
Sent: Thursday, May 06, 2010 4:41 PM
To: 'Angela Geary'
Cc: Bob Olson; John Leopold; Rita Winings
Subject: RE: Center for Spiritual Living

Thank you Angela!

Bob and I enjoyed our visit with you and getting the chance to show you the park plans. Please thank the Board of Trustees from us and we assure you that it will be a great park.

**Take care,
Joe Schultz
454-7901**

-----Original Message-----

From: Angela Geary [mailto:revangelageary@sbcglobal.net]
Sent: Thursday, May 06, 2010 4:36 PM
To: Joe Schultz
Subject: Center for Spiritual Living

Dear Joe,

It was good to meet with you and see the plans for the park on Felt St. I know it will benefit the community greatly.

As per our conversation, the Board of Trustees and I give you full permission to do any work on the trees on our property that needs to be done as part of the building of the park.

Please feel free to contact me if you have any further questions.

Thank you,



W A T E R D E P A R T M E N T

212 Locust Street, Suite C, Santa Cruz CA 95060 Phone (831) 420-5210 Fax (831) 420-5201

April 14, 2010

Annette Olson
Santa Cruz County Planning
701 Ocean St., 4th Floor
Santa Cruz, CA 95060

Re: **APN 028-041-02, 1904 Felt St., Felt Street Park**

Dear Ms. Olson:

This letter is to advise you that the subject parcel is located within the service area of the Santa Cruz Water Department and potable water is currently available for normal domestic use and fire protection. Service will be provided to the parcel upon payment of the fees and charges in effect at the time of service application and upon completion of the installation, at developer expense, of any water mains, service connections, fire hydrants and other facilities required for the development under the rules and regulations of the Santa Cruz Water Department. The development will also be subject to the City's Landscape Water Conservation requirements.

At the present time:

- the required water system improvements are not complete; and
- financial arrangements have not been made to the satisfaction of the City to guarantee payment of all unpaid claims.

This letter will remain in effect for a period of two years from the above date. It should be noted, however, that City Council may elect to declare a moratorium on new service connections due to drought conditions or other water emergency. Such a declaration would supersede this statement of water availability.

If you have any questions regarding service requirements, please call the Engineering Division at (831) 420-5210. If you have questions regarding landscape water conservation requirements, please contact the Water Conservation Office at (831) 420-5230.

Sincerely,

Bill Kocher
Director

TECHNICAL REVIEW CHECKLIST

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

Attachments:

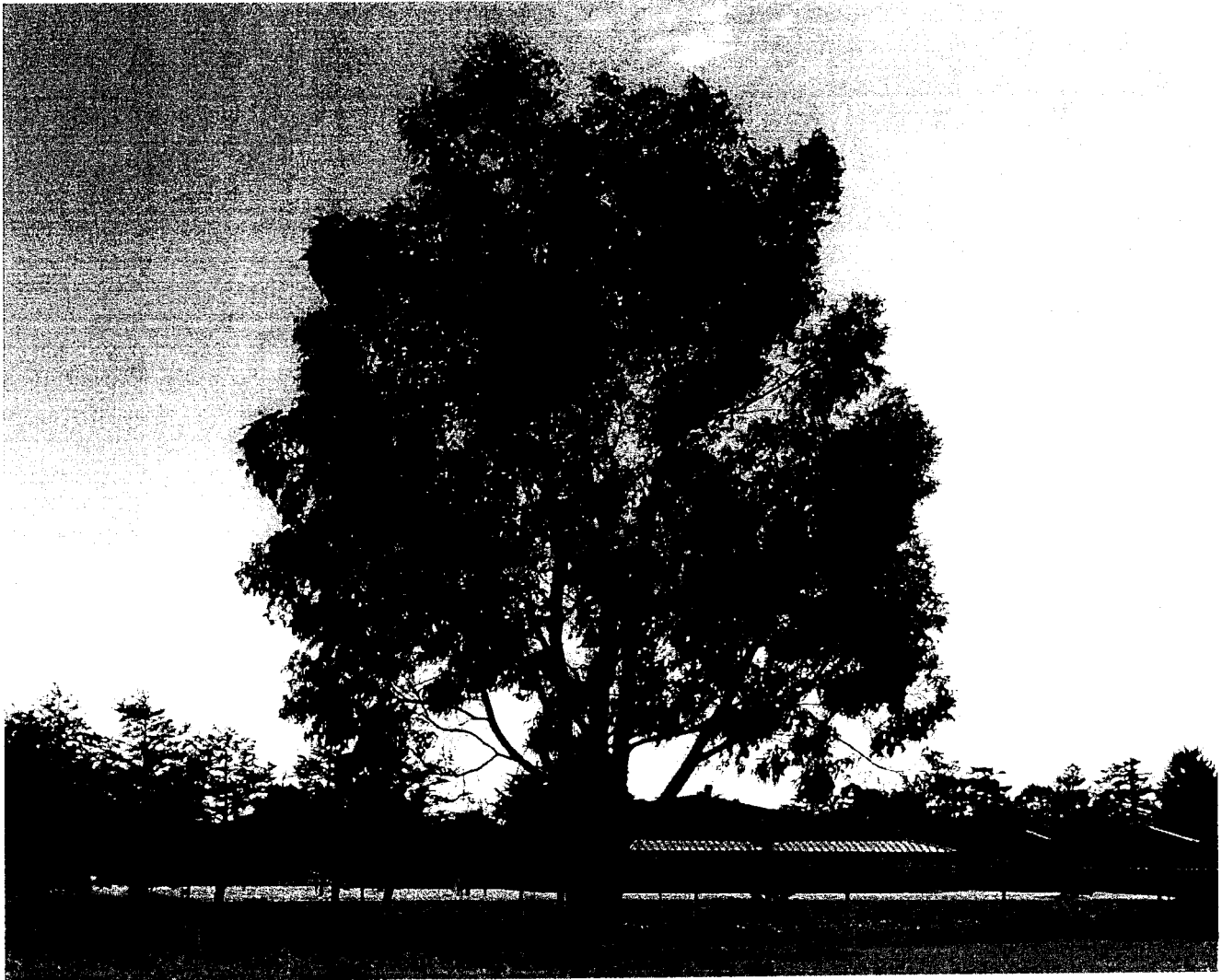
1. Vicinity Map, Map of Zoning Districts, Map of General Plan Designations, Assessors Parcel Map
2. Project Plans prepared by John Cahalan, Landscape Architect, dated 10/22/09; Civil Engineering Plans prepared by David B. Voorhies, Registered Professional Engineer, of Underwood & Rosenblum, Inc, dated 10/22/09; Survey by David B. Voorhies, Registered Professional Engineer, of Underwood & Rosenblum, Inc, dated 2/22/06; Restroom design by Romtec; Skate Area Plan by Spohn Ranch.
3. Drainage calculations prepared by David B. Voorhies, Registered Professional Engineer, of Underwood & Rosenblum, Inc, Revised to June 13, 2008.
4. Discretionary Application Comments, dated April 14, 2010
5. Letter from City of Santa Cruz Water District, dated April 14, 2010
6. Arborists Report prepared by James P. Allen, dated April 9, 2008
7. Parking Study (Conclusions and Recommendations) prepared by Robert Olson, Park Planner, dated March 30, 2010
8. Acoustical Study (Conclusions and Recommendations) prepared by Charles M. Salter, Associates, Inc., dated August 18, 2009



James P. Allen
& Associates

Tree Resource Analysis/ Construction Impact Assessment

Felt Street Park
1904 Felt Street, Santa Cruz, CA
APN 028-041-02 & 03



Consulting Arborists

611 Mission Street
Santa Cruz, CA 95060
831.426.6603 office
831.460.1464 fax
jpallen@cruzio.com

Prepared for
Robert Olson
Santa Cruz County Parks Department

ASSIGNMENT/SCOPE OF SERVICES

The construction of a public park is proposed for a vacant lot and existing single-family residential parcel at 1904 Felt Street, Santa Cruz, California 95062, APNs 028-041-02 & 03.

The site is populated with mature native/non-native as well as smaller landscape and fruit trees. To insure tree stability, the safe use of the area, and protect tree resources on this site during construction, Robert Olson, County of Santa Cruz Park Planner, has requested a proposal for a Tree Resource Evaluation/Construction Impact Analysis. To complete this assignment the following tasks have been completed:

- Locate, catalog and map trees growing within and immediately adjacent to the property boundary
- Identify each tree as to species and trunk diameter
- Rate individual tree health and structure as "good, fair or poor"
- Determine suitability for incorporation into the developed site
- Define trees that meet "Significant" status as defined by Santa Cruz County ordinances
- Make recommendations for necessary tree maintenance
- Work with project architects to create an effective tree protection plan
- Document findings in the form of a report accompanied by a Tree Location Map and Inventory

SUMMARY

Plans for the proposed demolition and park construction project at this location have been reviewed and impacts to the tree population have been assessed. Twelve trees growing on this property and three trees standing on the neighboring property to the west will be affected by the proposed project. Two of these trees meet 'Significant' criteria as defined by County of Santa Cruz Code.

Construction of the project as currently planned requires the removal of eleven trees. **Trees #1 through 4 and 6 through 11** are in conflict with site improvements and grading requirements. Although **Trees #8, 9 and 10** were considered for retention by the Project Design Team, these trees are recommended to be removed since they were found to be structurally unsound, potentially dangerous to park users and unsuitable for incorporation into this project. One of the trees required to be removed, **Tree #4** meets "Significant" criteria.

Tree #5, a Significant tree also has defined structural defects. It may be retained and incorporated into the park site with the installation of a cable support system and annual monitoring by a qualified arborist.

Mitigation, for the removed trees will be in the form of replacement trees planted as components of the planned landscape. The number of replacement trees required will be determined by the Planning Department.

Trees #13, 14 and 15 grow adjacent to the western boundary on a neighboring property. Canopy clearance and root pruning are required to construct the project as proposed. Permission, from the tree owner will be required prior to the implementation of these procedures.

Three Significant eucalyptus trees previously growing on this site and displayed on some of the project maps died approximately two years ago. A Significant Tree Removal Permit Application #06-0014 was granted on 1/19/06 and the trees were subsequently cut down.

The implementation of the procedures as defined within this document, including *Tree Preservation Specifications*, will decrease the construction related impacts to the tree proposed for retention. Recommendations for cable support system and maintenance pruning have been made for **Tree #5** which has weak stem/trunk attachments.

Monitoring by the Project Arborist should occur at the intervals defined within this report to assure tree protection specifications are adhered to during construction.

BACKGROUND

To complete the assessment, site inspections were performed on February 26, and during the month of March in 2008. For purposes of identification, metal numbered tags have been affixed to tree trunks at 6 feet above natural grade. Tree locations with corresponding numbers are documented on the attached.

Three Significant eucalyptus trees previously growing on this site and displayed on some of the project maps died approximately two and one half years ago. A Significant Tree Removal Permit Application #06-0014 was granted on 1/19/06 and the trees were subsequently cut down.

Construction related impacts were assessed using plans provided by John Cahalan, Landscape Architect.

The trees were evaluated visually from the root crown (where the trunk meets natural grade), to the foliar canopy to determine condition/suitability for preservation.

Project Description

The .8-acre level site is located approximately 400 feet east of the intersection of 17th Avenue and Felt Street in the Live Oak area, APNs 028-041-02 & 03. Program elements include demolition, drainage and utilities, installation of a parking lot, an accessible flush restroom, accessible pre school and school-age play areas, accessible bocce courts with synthetic surfacing, pre-fabricated skate area, accessible group picnic area, accessible community garden, walkways, fences, park signage, accessible site furnishings, automatic irrigation, soil preparation and fine grading, sod turf area, landscaping and landscape maintenance.

TREE DESCRIPTIONS

Tree resources on this site are composed of eucalyptus *Eucalyptus sp.*, acacia *Acacia sp.*, non-native species naturally occurring oak *Quercus sp.*, Golden Rain *Koelreuteria paniculata sp.* planted as street trees, walnut *Juglans sp.*, fruiting pear *pyrus sp.*, plum *Prunus sp.* planted as components of the residential landscape. Two of the fifteen trees evaluated meet "Significant" criteria as defined by the Santa Cruz County Significant Trees Protection Ordinance (Chapter 16.34 of the County Code). All trees are located within the property boundary except for Trees #13, 14 and 15, two willows *Salix sp.* and one Monterey pine *Pinus radiata* tree growing on the neighboring property to the west.

TREE INVENTORY METHODOLOGY

The attached inventory lists information on trees ≥ 3 inches in diameter growing within or directly adjacent to the property boundary. Tree locations are documented on the attached Tree Location Map.

The tree inventory lists species, trunk diameter, tree health, structure and suitability for preservation, level/description of construction impacts, observations, recommended procedures whether trees on the site meet Significant status as defined by *Santa Cruz County Significant Trees Protection Ordinance (Chapter 16.34 of the County Code)*. Two trees, #4 and #5 meet Significant status.

Diameter: is the width of the trunk measured at 4.5 feet above natural grade (ground level). For trees that were unable to be measured at 4.5 feet above natural grade, measurement heights are provided.

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 measurement 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.

This information is provided only for **Tree #5**, proposed for retention.

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.

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 monitoring 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.

Construction Impacts: This section describes what procedures are proposed near the individual tree. The influences the proposed construction activities will have on the tree are classified as **None, Low, Medium or High**. These classifications are defined as follows:

None, the tree is not near the impact area of the proposed construction.

Low, adverse affects from the proposed construction activities are minimal.

Medium, this level of impacts will result in loss in tree vigor and/or stability. Recommended procedures must be implemented to decrease these impacts.

High, requiring tree removal or the understanding that premature tree mortality can be anticipated. Mitigation is required for trees subject to this level of impacts.

DESCRIPTION OF DEVELOPMENT IMPACTS

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

Impacts to these 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 recommended procedures will change once the exact positions of the proposed improvements are known.

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

Grading for site stabilization as well as trenching for drainage structures and utility line 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 shattered during this process provide openings for opportunistic decay causing organisms degrading tree support systems and vigor.

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.

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.

Parking lot construction requires 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.

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

SPECIAL TREATMENTS

Potential construction impacts that dramatically reduce the lifespan of existing trees can be abated with the implementation of pre-construction treatments, modifications to construction methods and needed maintenance pruning/cabling.

Preconstruction root pruning is necessary for Trees #5, 13, 14 and 15. This procedure may be performed by "Ditchwitch" type of trencher within areas identified on the attached map under the direction of the Project Arborist. This procedure is defined as follows:

- 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 trenching along the "final line of disturbance".
- Trench to the required depth.
- "Clean up" shattered roots using the root pruning techniques defined below.

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 until backfilled. Supplemental irrigation will be required to retain soil moisture during the summer months.

Maintenance Procedures:

- **Pruning** to remove dead branches and provide adequate vertical clearance 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.
 - **Tree #5** should have dead/broken branches greater than 1-inch diameter removed
 - **Trees #13 and 15** will require pruning to allow clearance for proposed improvements and construction access. Pruning should not remove more foliage than absolutely necessary to accommodate proposed construction as determined by the Project Arborist.
- **Cabling** has been recommended for **Tree # 5**. Simple Direct Cables should be installed between the weakly attached stems. The following or similar hardware should be used:
 - 5/8 inch "eye" through bolts, depending on stem diameter
 - 1/4 inch Extra High Strength cable
 - Pre-formed grips with thimbles

Tree #5, has defined structural defects, codominant stems with included bark. As stem diameters increase bark development between stems creates external forces that "push against" one another. This system is one typical of those prone to failure. This tree can be retained and stabilized for the short term with cable installation and annual monitoring by a qualified arborist.



The installation of cables, bolts and other hardware in trees is intended to reduce hazard potential. Such bracing does not permanently remedy structural weaknesses, and is not a guarantee against failure. The trees and hardware must be inspected periodically for hardware deterioration, adequacy and changes in the tree's and site condition. I recommend inspection by a competent arborist at least every year.

Three of the trees requiring Special Treatments, **Trees #13, 14 and 15** pictured below stand on the neighboring property. Written permission from the tree owner is required to allow the necessary preconstruction treatments.



Tree Removal is to be performed in a sectional manner. Locations of trees to be removed are documented on the attached map (Tree Location/Preservation Map).

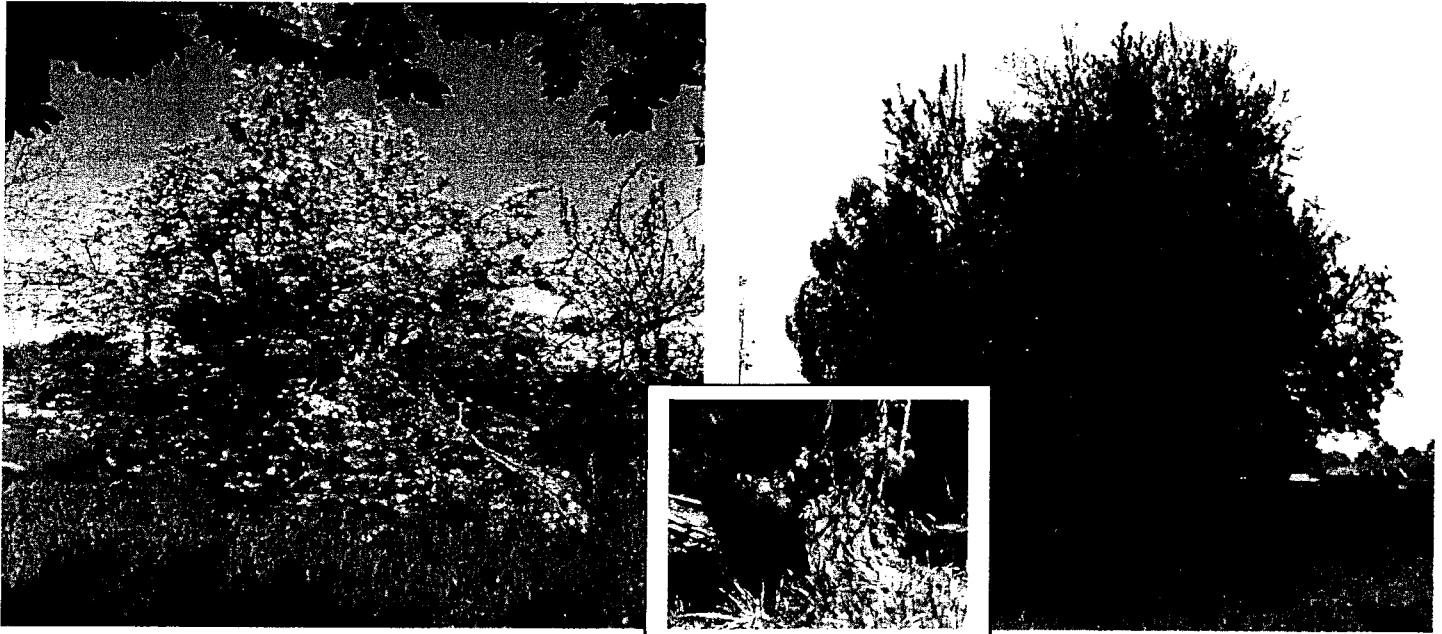
Removal due to Construction Impacts (Trees #1 through 4 and 6, 7 and 11) is required for trees that are in direct conflict with the proposed construction where plans cannot be modified.

Removals due to Poor Condition (Trees #8, 9 & 10) Recommendations are based upon the combination of health, structure, preservation suitability ratings and general species characteristics.

Tree #8 exhibits poor trunk/stem attachments that are typical of systems prone to fail. Walnut is a species with low tolerance to minimal construction impacts. It is unsuitable for preservation and incorporation into the proposed project.



Trees #9 and 10, a fruit-bearing pear and fruitless plum are aging individuals with decayed trunks and poor stem attachments. They will present a personal injury risk from stem failure potential or branches jabbing passers by.



A qualified certified arborist, using the following industry guidelines should be contracted to perform all 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

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 the building. Tree Preservation Zones are documented in the Tree Preservation map attached to this report.

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 an attached map.

- **Amended tree chip mulch**, 4-6 inch layer, shall be applied within the Tree Preservation Zones allowing a 12-inch separation between the tree trunks and mulch. 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.
- **Preservation fencing and straw bales** will be placed end to end inside of the protection fencing. The fencing is to be 48 inches in height and secured with stakes. 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, tree trunks and prevent excess soil from grading and trenching from encroaching into the Tree Preservation Zone of the retained trees. Tree Preservation Zone fencing locations are documented on an attached map (Tree Preservation Map).

These special treatment areas are documented on the attached map.

INSPECTIONS

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

- During all tree clearance pruning activities.
- 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 and prior to the commencement of driveway demolition.
- As necessary during foundation trenching activities to ensure compliance with all conditions of project approval.

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

REQUIRED TREE REPLACEMENT: This project was configured to minimize the amount of tree removal.

Significant trees proposed for removal are required to be replaced at a rate of one 24-inch box or three 15-gallon trees. Replacement trees will be nursery grown container trees planted as a component of the planned landscape.

The replacement planting is to be provided adequate space for future growth.

Nursery stock obtained from local nurseries shall be standard (single trunk). The tree planted should be well formed without co-dominant, poorly attached stems. It shall be disease free and absent of swirling or girdling roots.

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

- 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.
- 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 tree 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 tree success criteria will be defined to meet a 100% 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.

Any questions regarding these trees on this site and the proposed construction may be directed to my office.

James P. Allen
Registered Consulting Arborist #390

Tree Preservation Specifications

Felt Street Park, APNs 028-041-02 & 03

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 mobilization onto the site. Tree preservation specifications will be reviewed and discussed.

Establishment of a tree preservation zone (TPZ)

Fencing with metal stakes embedded in the ground, shall be installed in areas designated by the project arborist. Fencing will be installed prior to the onset of construction, under the supervision of the project arborist and shall not be moved.

Preservation fencing

Straw bales will be placed end to end outside of the protection fencing. The fencing is to be 48 inches in height and secured with stakes. 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 trees. The Tree Preservation Zone of each preserved tree is documented on the attached Tree Location/Preservation map.

Restrictions within the 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.

Alteration of grade

Maintain the natural grade. If tree 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 as to how they should be dealt with.

Tree canopy alterations

Unauthorized pruning of trees will not be allowed. Tree canopy alterations will be performed to the specifications established by the Project Arborist.

Supplemental irrigation

Shall be provided if construction takes place outside of the winter months when normal rainfall occurs. Supplemental irrigation shall be applied 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 construction.

Mulch Layer

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



James P. Allen
& Associates

Felt Street Park 1904 Felt Street, APN 028-041-02, 03

DATE: 4/9/08

TREE RESOURCE INVENTORY

Dedicated to the Preservation of Trees

TREE #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	HEALTH	STRUCTURE	SUITABILITY	IMPACTS Level/Description	OBSERVATIONS •RECOMMENDED PROCEDURES •MEETS "SIGNIFICANT" CRITERIA Yes/No
1	oak	4.7	Poor	Poor	Poor	HIGH/ Within proposed grading	•Small street tree in low vigor •Remove due to Construction Impacts •No
2	oak	3.3	Poor	Poor	Poor	HIGH/ Within proposed grading	•Small street tree in low vigor •Remove due to Construction Impacts •No
3	acacia	Double trunk 4 & 4	Fair	Poor	Poor	HIGH/ Within proposed grading	•Poor trunk/stem attachments •Remove due to Construction Impacts •No
4	eucalyptus	Double trunk 33 & 36	Fair	Poor	Poor	HIGH/ Within proposed grading	•Poor trunk/stem attachments Decayed wounds Risk of Failure •Remove due to Construction Impacts •Yes
5	eucalyptus	35	Good	Poor	Poor	MODERATE/ Proximity to proposed drainage swale and irrigation supply line	•Poor trunk/stem attachments Risk of failure •Preserve and Protect Triangular cable system Relocate drainage swale and irrigation supply line outside of Critical Root Zone •Yes
6	walnut	3	Poor	Poor	Poor	HIGH/ Within proposed grading	•Small sprout •Remove due to Construction Impacts •No



James P. Allen
& Associates

Felt Street Park

1904 Felt Street, APN 028-041-02, 03

DATE: 4/9/08

TREE RESOURCE INVENTORY

Dedicated to the Preservation of Trees

TREE #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	HEALTH	STRUCTURE	SUITABILITY	IMPACTS Level/Description	OBSERVATIONS •RECOMMENDED PROCEDURES •MEETS "SIGNIFICANT" CRITERIA Yes/No
7	Golden rain	3	Fair	Poor	Poor	HIGH/ Within proposed grading	•Small street tree •Remove due to Construction Impacts •No
8	walnut	Four trunks 11.5, 13, 9 & 12	Fair	Poor	Poor	HIGH/ Proximity to proposed structure. Within proposed grading	•Poor trunk/stem attachments •Remove due to Construction Impacts •No
9	fruiting pear	4	Poor	Poor	Poor	MODERATE/ Proximity to proposed grading	•Aging fruit tree with decayed trunk sections •Remove due to Poor Condition •No
10	plum	multi-trunk 30 @ grade	Fair	Poor	Poor	MODERATE/ Proximity to proposed grading	•Poor trunk/stem attachments Risk of failure •Remove due to Poor Condition •No
11	walnut	Four trunks 7.3, 8, 6 & 4.5	Fair	Poor	Fair	HIGH/ Within proposed parking lot	•Poor trunk/stem attachments •Remove due to Construction Impacts •No
12	Golden rain	Double trunk 6.3 & 3	Fair	Poor	Poor	HIGH/ Within proposed grading	•Small street tree •Remove due to Construction Impacts •No



James P. Allen
& Associates

Felt Street Park

1904 Felt Street, APN 028-041-02, 03

DATE: 4/9/08

TREE RESOURCE INVENTORY

Dedicated to the Preservation of Trees

TREE #	SPECIES	DIAMETER @ 4.5ft ABOVE NATURAL GRADE (INCHES)	HEALTH	STRUCTURE	SUITABILITY	IMPACTS Level/ Description	OBSERVATIONS •RECOMMENDED PROCEDURES •MEETS "SIGNIFICANT" CRITERIA Yes/No
13	Monterey pine	16.5	Good	Fair	Good	MODERATE/ Proximity to proposed parking lot, drainage swale and irrigation supply lines	•Grows on neighboring property Excellent young tree No visible Sequoia Pitch moth activity •Preserve and Protect Pre-construction root and possible canopy clearance pruning •No
14	willow	Double trunk 9 & 4	Fair	Poor	Fair	MODERATE/ Proximity to proposed parking lot, drainage swale and irrigation supply lines	•Grows on neighboring property Poor trunk/stem attachments Decay at basal area •Preserve and Protect Pre-construction root pruning construction •No
15	willow	Four trunks 8, 6, 7 & 5	Fair	Poor	Fair	MODERATE/ Proximity to proposed parking lot, drainage swale and irrigation supply lines	•Grows on neighboring property Poor trunk/stem attachments •Preserve and Protect Pre-construction root and canopy clearance pruning •No

Legend

- X Surveyed Tree Trunk Location
- Preserve and Protect
- Remove due to Construction Impacts
- Remove due to Tree Condition
- Critical Root Zone
- Tree Preservation Zone
- Tree Preservation Fencing
- Pre-construction Root Pruning

FELT STREET PARK

Santa Cruz, CA
APN 021-041-02 & 03

Tree Location Map And Tree Protection Plan

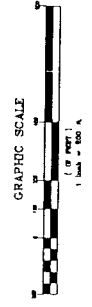
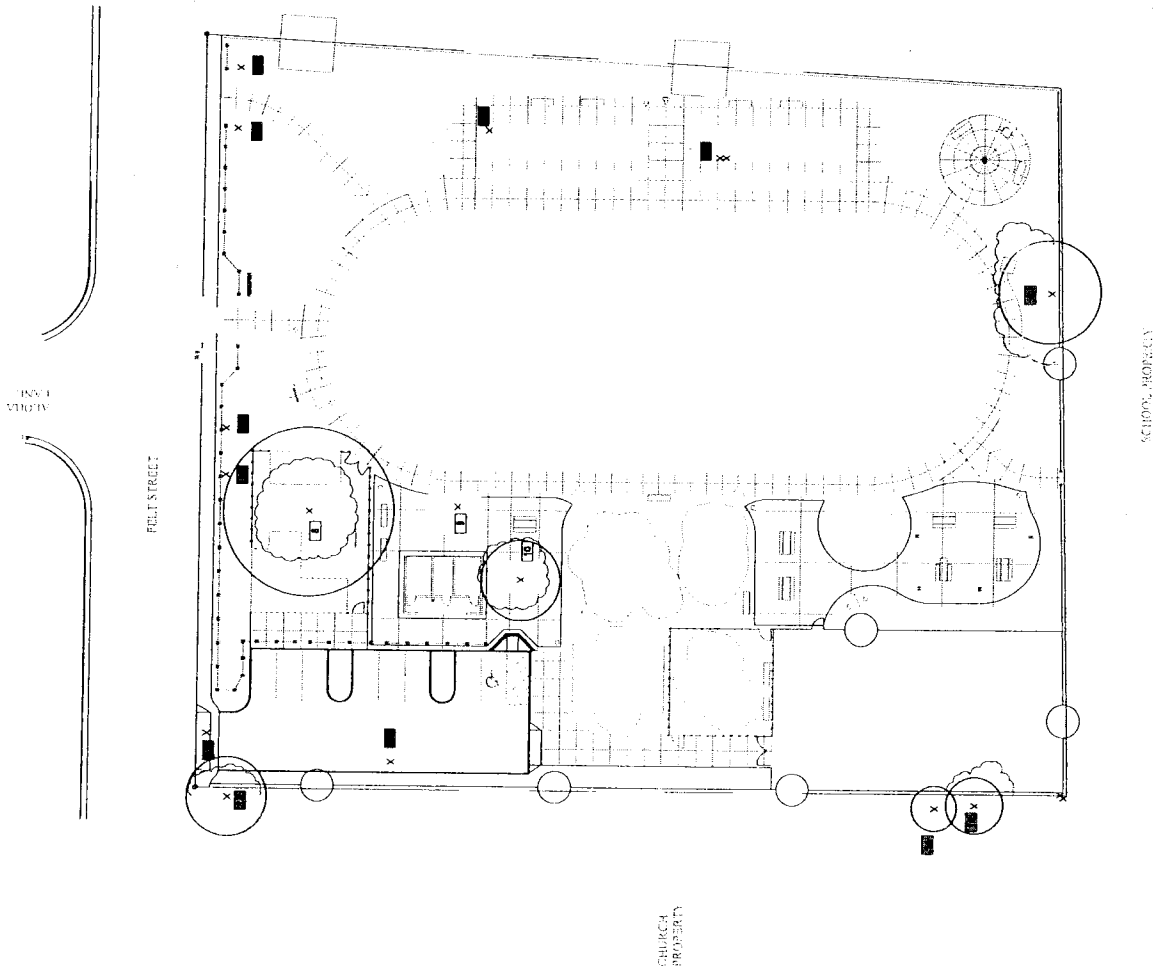


James P. Allen
& ASSOCIATES

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1 M 1

Scale: 1" = 100'
North Arrow
Date: 02/07/09
Revision: 02/07/09





Dedicated to the Preservation of Trees

Felt Street Park
APN's 028-041-02 & 03

Project Arborist Final Plan Review

Consulting Arborists

611 Mission Street
Santa Cruz, CA 95060
831 426 6603 office
831 460 1464 fax
jpallen@cruzio.com

Prepared for
Robert Olson,
County of Santa Cruz Parks,
Open Space and Cultural Services

ASSIGNMENT/SCOPE OF SERVICES

The construction of a public park at 1904 Felt Street is proposed. In order to receive project approval, the following information has been requested by the Project Planner:

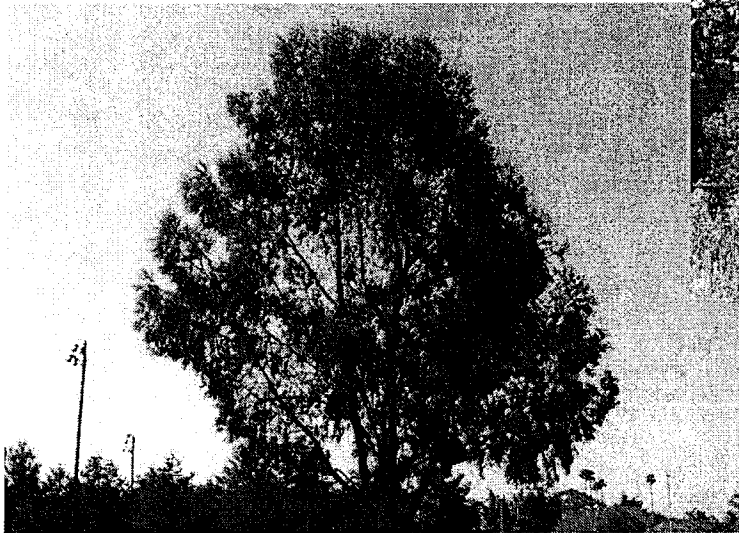
- Project Arborist review of:
 - Soils report
 - Final project plans
 - Required procedures adjacent to Tree #5, 13, 14 and 15

SUMMARY OF FINDINGS

Project plans dated 10/22/09 and the *Limited Geotechnical Investigation* dated 9/6/09 were provided for my review by Robert Olson, Park Planner for County of Santa Cruz Parks, Open Space and Cultural Services. I reviewed these plans and found a few minor changes from the previous plans and one section where adjustments are necessary:

Impacts Adjacent to Tree #5

A drainage swale and irrigation lines are proposed within the Critical Root Zone of **Tree #5**. The construction of these elements will result in destruction of major supporting roots and potential destabilization of this tree. Additionally, this tree has a serious structural weakness; codominant stems with included bark, at red arrow. This condition is typical of those prone to failure. Although this condition can be stabilized with the installation of a cable system, it requires frequent monitoring and continued maintenance by qualified personnel. Without the implementation of recommended stabilization procedures and a management commitment, this tree is at risk of falling, potentially injuring persons using the park or the adjacent school playground.

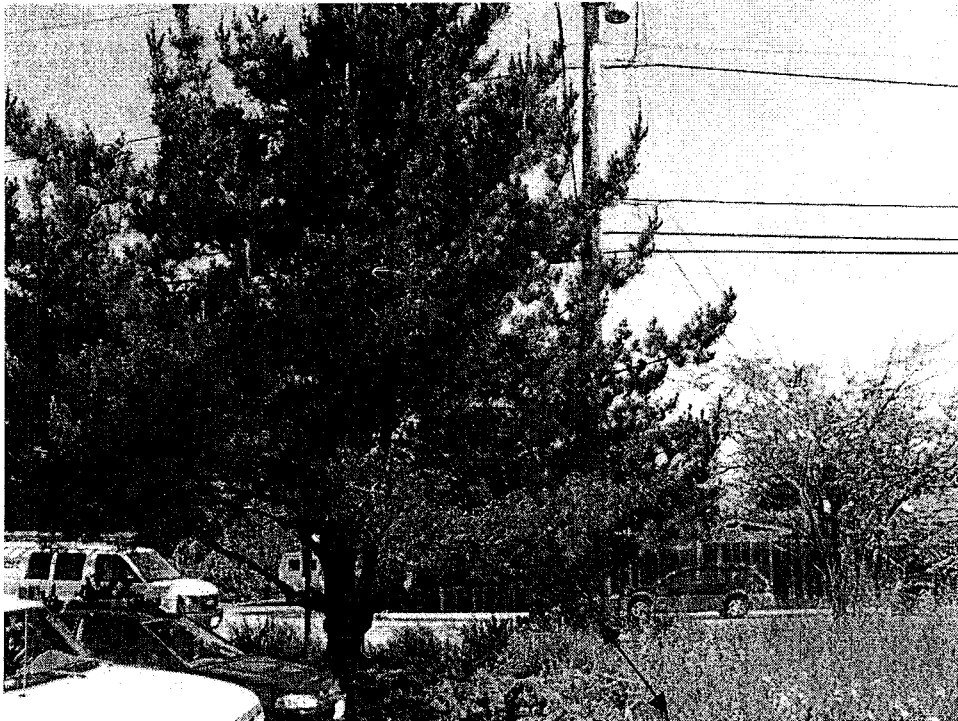


Considering existing tree condition, proposed impacts and diminishing tree maintenance budgets, I modify my original recommendation and suggest the removal of this tree. I further recommend replanting two, 36-inch boxed coast redwoods *Sequoia sempervirens* *Soquel* or *Santa Cruz* to restore lost resources and provide large- scale canopy similar to that of Tree #5, recommended for removal.

Site stabilization, Parking Lot Construction adjacent to Tree #13

The geotechnical requirements involve removing existing soils to a depth of 8 to 32 inches and 36 inches beyond the edge of pavement depending on existing soil conditions, determined by the project soils engineer.

These objectives can be met without adverse affects on tree health or structure by performing preconstruction root pruning at the line indicated in blue on the photo below. A "Ditch Witch" or similar type trencher is to be used before grading begins to sever roots at this "final line of disturbance".



Roots severed during this trenching operation can be pruned cleanly by hand, 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.

The tree canopy does not need to be pruned in order to construct the project as proposed. Tree protection fencing should be installed at the property boundary prior to equipment being mobilized on the site.

Site stabilization, Community Garden adjacent to Tree #14 and 15

Since this area is proposed to be a community garden it should not require stabilization. Hopefully the existing nutrient rich soil will remain.

Trees #14 and 15 pictured below will not require root or canopy pruning. Tree protection fencing should be installed at the property boundary, indicated by the red line prior to equipment being mobilized on the site.



The adjacent property owners should be advised of the intended actions and protection strategies proposed in proximity to Tree #13, 14 and 15.

Questions regarding the tree resources on this project may be directed to my office.

James P. Allen
Registered Consulting Arborist #390



County of Santa Cruz

PARKS, OPEN SPACE & CULTURAL SERVICES

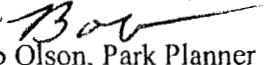
979 17TH AVENUE, SANTA CRUZ, CA 95062

(831) 454-7901 FAX: (831) 454-7940 TDD: (831) 454-7978

JOE SCHULTZ, DIRECTOR

DATE: March 30, 2010

TO: Annette Olson, Project Planner Development Review

FROM:  Bob Olson, Park Planner

SUBJECT: FELT STREET PARK PARKING ANALYSIS

In response to your request regarding the proposed parking for Felt Street Park, I have prepared a table comparing the parking availability at other neighborhood park sites within the Live Oak Soquel areas. As you take a look at this table, you will find a wide range in the extremes. Brommer Park with 7.6 acres has 38 parking spaces and Winkle Farm Park with 6.3 acres has very limited unmarked parking at the end of a cul-de-sac. I think the difference can be attributed to the type and intensity of the facilities provided. Brommer Park has two tennis courts and a softball field that can be used by "organized sports". Even though Brommer Park is a neighborhood park, the organized sports field can draw uses from outside the immediate neighborhood, therefore creating the demand for more parking.

In looking at Winkle Farm Park, the facility development is limited. There is a large turf area but it is not marked and not rented for organized sports. This park like many other neighborhood parks, are built to serve the immediate neighborhood. Walking and bicycling are encouraged as the means of visiting these parks.

Jose Avenue Park with 2.7 acres and 23 parking spaces is within a mile of Felt Street Park. Jose Avenue Park is heavily programmed with a large playground, basketball court skate park, sand volleyball, turf area, community garden, restroom building and 28' group picnic shelter. The group picnic shelter has a large draw and is used constantly. Jose Avenue Park is also surrounded by a high density of apartment complexes.

With Felt Street Park, the proximity and configuration of the park allows for the design of a small parking area (8 spaces) to accommodate accessibility requirements and provide limited parking for other uses. The provision of a small parking area will discourage park users from using the church parking area next door, therefore suppressing potential conflicts later on.

The Felt Street Park skate area is relatively small and is geared toward the beginner and intermediate level skater. This design should only attract the immediate neighborhood users. In addition, the Jose Avenue Park skate area and the proposed Chanticleer Park skate area are less than a mile away in opposite directions from the proposed Felt Street Park skate area.

The Mission of the Santa Cruz County Department of Parks, Open Space and Cultural Services is to provide safe, well designed and maintained parks and a wide variety of recreational and cultural opportunities for our diverse community

The proposed turf area at Felt Street Park is not designed or large enough for organized sports. Its purpose is to provide an area for pick up sports such as throwing a Frisbee or a football to one another. The play area, picnic area and bocce ball courts are intended for use by the immediate neighborhood. Parks feels confident that the small parking area proposed will be adequate for the park users. Limited on-street parking is available on the opposite side of Felt Street.

There are bike lanes on both sides of Felt Street with only one side wide enough for on-street parking. A bike rack will be installed at Felt Street Park, therefore encouraging the use of bicycles as a mode of transportation to visit the park. In addition, the park is served by sidewalks in both directions and has controlled gated access to the Del Mar School property. This arrangement will encourage travel to the park by walking or biking. If you need any additional information about the Felt Street Park parking, please let me know.

Thanks,

Bob

Attachment: Parking Lot Evaluation for Neighborhood Parks

cc: Joe Schultz, Director POSCS

PARKING LOT EVALUATION
OF EXISTING NEIGHBORHOOD PARKS IN LIVE OAK AND SOQUEL
UNDER THE JURISDICTION OF THE
SANTA CRUZ COUNTY PARKS DEPARTMENT

Number	Park Site	Park Acreage	Parking Spaces	Facilities
	Felt Street Park	1.8	8	Playground, turf, skate area, picnic, community garden, bocce ball
1	Brommer Park	7.6	38	Playground, softball field, other turf, group picnic, tennis courts, restroom
2	Coffee Lane Park	2.7	10	Playground, basketball court, picnic tables, turf
3	Floral Park	.9	Limited street	Playground, turf, future picnic, restroom, dog area
4	Hestwood Park	.6	Limited street	Playground, turf, restroom, picnic
5	Jose Avenue Park	2.7	23	Playground, turf, restroom, picnic shelter, skate park, community garden, sand volleyball, basketball
6	Richard Vessey Park	.5	None	Small playground, picnic area and small turf
7	Santa Cruz Gardens	1.9	Limited street	Small playground, turf
8	Soquel Lions Park	.2	None	Small playground, turf, picnic area, portable toilet
9	Twin Lakes Park	1.4	Limited on street	Playground, tennis court, basketball court, restroom, turf
10	Willowbrook Park	2.7	On street	Playground, tennis court, basketball court, restroom, turf
11	Winkle Farm Park	6.3	Limited on street	Playground, turf, horseshoes, picnic

FELT STREET PARK

ACOUSTICAL REPORT

Santa Cruz County, CA
18 August 2009

Prepared by:

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CSA Project No. 09-0244

INTRODUCTION

This report provides our acoustical analysis of the project site for its proposed development as a multi-use neighborhood park with a skateboard area. It summarizes the applicable County of Santa Cruz requirements including the General Plan Noise Element and County Code Noise Ordinance, the results of our July 2009 acoustical measurements, calculated noise effects on surrounding land uses due to future park activities, and project compliance with County acoustical standards.

EXECUTIVE SUMMARY

Although activity noise at the skateboarding area portion of the proposed Felt Street Park project will be intermittently audible at the surrounding neighbors, the skateboarding area portion of the proposed Felt Street Park project will not cause acoustical impacts on the surrounding land uses, and meets the County of Santa Cruz requirements. Noise due to construction of the park will be mitigated to County policies.

PROJECT DESCRIPTION

The proposed project is an approximately 2 acre park located across from the intersection of Felt Street and Aloha Lane in Santa Cruz County. It will include parking for eight cars, a large central turf area, walking paths, public restrooms, two bocce courts, children's play area, community garden, as well as an approximately 2,200-square foot skateboard area along Felt Street.

According to the proposed skateboarding area manufacturer, Skate Concept/Barkman Concrete, skateboarding areas incorporate design features that help to reduce noise impacts¹, including fabrication techniques that minimize necessary seams and joints, as well as smoother, high-compressive strength concrete.

Per the County Parks Department the skateboarding area area will have enough room for approximately 3 to 5 skateboarders and will be open from 9:00am to dusk² (it will not be lighted).

EXISTING SITE

A majority of the site is an unimproved dirt lot surrounded by residences to the north and east, Shoreline Middle School to the south³, and a church to the west. An abandoned residence takes up the northwest portion of the project site along Felt Street. The residences across Felt Street (north) are one story; the ones to the east are two stories.

¹ Skate Concept website: <http://skateconcept.com/construction/quality.html>. Proposed skateboarding area plan shown on Sheet L-15 of the project plans.

² Emails from the County Parks Department received on 28 May and 30 July 2009.

³ Shoreline Middle School was unoccupied during our measurements.

The residences to the east have wooden fences ranging in height from about six to eight feet, sufficient to visually shield the first level of those homes from view at the project site.

ACOUSTICAL CRITERIA

1994 Santa Cruz County General Plan, Chapter 6, Public Safety and Noise

Objective 6.9a states that the purpose of Chapter 6 is to "To promote land uses which are compatible with each other and with the existing and future noise environment. Prevent new noise sources from increasing the existing noise levels above acceptable standards and eliminate or reduce noise from existing objectionable noise sources."

Policy 6.9.1 summarizes the noise levels that would be considered "acceptable" based on their exposure to exterior noise sources. The table below summarizes the applicable levels:

Santa Cruz County General Plan Noise Element Chapter 6, Figure 6-1 – Land Use Compatibility for Outdoor Sports and Recreation, Neighborhood Parks and Playgrounds		
Exterior Noise Exposure (dB DNL ⁴ or CNEL ⁵)	Category of Acceptability	Definition
Below 65 dB	"Normally Acceptable"	Specified land use is satisfactory, based upon the assumption that any buildings involved are of conventional construction, without any special noise insulation requirements.
65 dB to 80 dB	"Conditionally Acceptable"	Specified land use may be permitted only after detailed analysis of the noise reduction requirements and needed noise insulation features included in the design.
Above 80 dB	"Unacceptable"	New construction or development should generally not be undertaken because mitigation is usually not feasible to comply with noise element policies.

Policy 6.9.7 requires that construction noise be mitigated as a condition of future project approvals.

Project Operational Noise – Thresholds of Significance⁶

⁴ Day-Night Average Sound Level (DNL) – A descriptor established by the U.S. Environmental Protection Agency to represent a 24-hour average noise level with a penalty applied to noise occurring during the nighttime hours (10 p.m. to 7 a.m.) to account for the increased sensitivity of people during sleeping hours. A 10-dB increase in sound level is perceived by people to be twice as loud.

⁵ Community Noise Equivalent Level (CNEL) – A descriptor for the 24-hour A-weighted average noise level. The CNEL concept accounts for the increased acoustical sensitivity of people to noise during the evening and nighttime hours. Sound levels during the hours from 7 p.m. to 10 p.m. are penalized 5 dB; sound levels during the hours from 10 p.m. to 7 a.m. are penalized 10 dB. As noted in the County Noise Element, the DNL and CNEL metrics are considered to be equivalent.

⁶ Derived from Jose Avenue Park acoustical report by Illingworth & Rodkin, pages 11-14. Received 28 May 2009 from John Cahalan and the County of Santa Cruz.

For proposed "non-transportation" noise sources such as the skateboarding area, the County thresholds for significance are as follows:

- New project-generated noise sources which would significantly increase existing ambient noise levels
- New project-generated noise sources which would exceed 60 dB DNL at noise-sensitive land uses

ASSESSMENT OF EXISTING NOISE ENVIRONMENT

24-Hour Noise Levels

To quantify the existing noise environment we conducted two 48-hour long-term measurements and two simultaneous spot measurements at the site between 20 and 22 July 2009. These measurements identified existing sources of noise at the project property lines; we compared them to the County Land Use Compatibility requirements in the General Plan. From our measurements we were able to determine the DNL at each location. The measured data is summarized below and also shown in Figure 1:

Felt Street Park: On-Site Acoustical Measurement Locations and DNL		
Monitor	Measurement Location	DNL
L1	Approximately 20 feet to the south of the centerline of Felt Street, 150 feet to the west of the east property line, 12 feet above grade on a light pole	64 dB
L2	In a tree approximately 40 feet to the west of the east property line, 200 feet south of the centerline of Felt Street, 12 feet above grade	54 dB
S1	At approximately the west property line of the Felt Street property, 140 feet to the south of the centerline of Felt Street, five feet above grade	56 dB*
S2	At south property line of Felt Street property adjacent to Shoreline Middle School track; approximately 80 feet to the east of the existing community garden, 5 feet above grade	48 dB**
* DNL calculated from increased setback distance from Felt Street.		
** DNL calculated from 15-minute simultaneous offset from monitor L2.		

At the project property lines, the DNL is calculated to range from about 64 dB to 48 dB. These levels are within the County's "normally acceptable" range for new land uses.

Those readers not familiar with the fundamental concepts of environmental noise please refer to Appendix A.

Noise from Typically-Occurring Events

While on site we measured typically-occurring maximum noise levels (i.e., L_{max}^7) from various neighborhood sources. The table below summarizes these data and where the maximum levels were measured:

Felt Street Park: Measured Maximum Noise Levels		
Source	Range of Measured L_{max} , dBA	Measurement Location
Cars	76-82	L1
Trucks	75-81	
Motorcycles	74-84	
Dog barks	68-75	L2
Local home maintenance*	67-72	
Train horn**	45	S1
Aircraft	55	S2
People using Shoreline Middle School track	48	S2
*This included hammering and some motor noise		
**Nearest train tracks are about 700-800 feet north of the project site.		

CALCULATIONS AND ANALYSIS

Assumptions

To estimate the change in day-night average noise levels (DNL) due to proposed skateboarding area activities, we calculated the potential effects due to the 2,200 square foot skate area on the neighbors. For our analysis we assumed the following:

- A maximum of 5 skateboarders using the skateboarding area simultaneously
- Noise sources are primarily skateboard wheels and boards impacting the concrete, as well as skateboarders' voices
- Hours of operation from 9:00am to dusk;⁸ for this analysis, dusk was assumed to be 8:00pm
- No skateboarder activity when park is closed
- Skateboard noise levels from 2002 Jose Avenue acoustical report from Illingworth & Rodkin, Inc. (I&R)⁹, see below
- Noise-reducing features of skateboarding area manufacturer incorporated into the design (e.g., "smooth" concrete, minimal joints)
- No acoustical shielding to homes along east side of the park (second story)

⁷ L_{max} – The maximum A-weighted sound level measured during a period of time.

⁸ Park hours of operation from County of Santa Cruz email, received 30 July 2009.

⁹ Jose Avenue Park acoustical report by Illingworth & Rodkin, pages 11-14.

Skateboarding Area Noise

The County supplied us with the 2002 I&R Jose Avenue skateboarding area report. This report noted both average (Hourly Leq) and maximum (Lmax) noise levels; the number of skaters that the firm noted in their report is similar to the number planned for the Felt Street skateboarding area. Their data is summarized as follows:

- Hourly Leq: 56 dBA at a distance of 30 feet
- Maximum noise levels as high as 75 dBA at a distance of 30 feet from the "skate pit"; noise sources included wheel-concrete noise, yelling, and wipeouts¹⁰

These data agree with our noise predictions for similar skateboarding area projects. We understand that the proposed Felt Street skateboarding area will be about half the size of the Jose Avenue site¹¹.

Construction Noise

The County Parks Department expects that construction will last about 4 months. They stated that typical construction hours will be 8:00am to 5:00pm, Monday through Friday. Construction noise mitigation falls under the purview of the County noise requirements.

The civil engineer foresees the following construction activities¹²:

- Demolition of the abandoned residence on Felt Street
- Rough grading and installation of irrigation piping
- Finish grading of the site
- Concrete work including the skateboarding area
- Construction of the bathroom building

Construction could employ common construction equipment such as a skip loader, backhoe, saws, bulldozer, or other diesel-powered equipment. These types of equipment typically produce noise levels between about 78 to 85 dBA at a distance of 50 feet.

ASSESSMENT OF NOISE ENVIRONMENT AND RECOMMENDATIONS

Measured DNL noise levels at the project property lines are exposed to noise levels that are considered to be "normally acceptable" per the County Noise Element. Therefore, no "special noise insulation requirements" are needed.

¹⁰ Jose Avenue Park acoustical report by Illingworth & Rodkin, pages 12.

¹¹ 27 May 2009 email from Bob Olson of the County to John Cahalan, Landscape Architect, received 28 May 2009.

¹² Email from Dave Vorhees of Underwood and Rosenblum, Inc., received 4 August 2009.

Skateboarding area DNL

Under the assumptions noted above, we calculate the following change in DNL at the nearest property lines due to skateboarding area activities:

Felt Street Park: Calculated Change in Future DNL with Project						
Property Line	Nearest Neighbor	Approx. Distance to Nearest Neighbors	Calculated Skateboarding area DNL at property lines (dB)	DNL at nearest neighbors	Change in measured/calculated existing DNL due to skateboarding area (dB)	Calculated Future DNL including Skateboarding area (dB)
North	Residential 1-story	65 feet	51 dB	64 dB	+0.1 dB	64 dB
East	Residential 1 & 2-story	165 feet	37 dB	50 dB	+0.1 dB	50 dB
West	Church	140 feet	48 dB	56 dB	+0.1 dB	57 dB
South	Middle School	270 feet	35 dB	48 dB	+0.2 dB	48 dB

The calculated increase in average noise levels at all four proposed Felt Street Park property lines is expected to be less than 1 dB, and is not significant. Each calculated DNL due to skateboarding area activity also falls below the 60 dB threshold for significance.

Skateboarding Area Maximum Noise Levels

Maximum noise levels from skateboarding area activity (e.g., board slams, wheel-on-concrete noise) are not calculated to be significantly louder than typically-occurring events such as cars, trucks, construction activity in the neighborhood, or dog barks as shown in the table below:

Felt Street Park: Calculated Maximum Noise Levels due to Skateboarding area at Neighbors		
Direction	Nearest Occupied Area	Calculated Maximum Skateboarding Area Noise Levels (Lmax dBA)
North	Residences – Outside first story of homes	69
East	Residences – Outside second story of homes	60
West	Church façade, north	62
South	Middle School Track area closest to skateboarding area (north property line)	56

A comparison of these values to the measured levels of onsite typically occurring noise sources such as traffic, aircraft overflights, dog barks, or home maintenance (refer to Page 5 above) shows that predicted skateboarding area noise levels are at or below the existing environmental noise sources.

During lulls in traffic or temporary cessation of other sources of environmental noise, skateboarding area noise is expected to be intermittently audible to the nearest receivers.

Construction Noise

The maximum noise level at adjacent noise-sensitive land uses will vary depending on the location of the various pieces of equipment. As stated above, construction noise mitigation is under the purview of County noise requirements (Policy 6.9.7).

Assuming typical construction equipment, we calculate the following skateboarding area construction noise levels at the nearest receivers:

Felt Street Park: Calculated Maximum Noise Levels due to Skateboarding Area Construction at Neighbors	
Location(s)	Maximum Calculated Construction Noise Levels (dBA)
Residential to the north	72 to 81
Residential to the east	65 to 74
Church to the west	67 to 76
Middle School track to the south	61 to 70

At the second story of the east single-family homes for example, maximum noise levels are calculated to be as loud as 81 dB from construction approximately 65 feet away. These levels would only occur when construction activity is closest to the property line.

The project should also consider implementing a neighborhood program to educate local residents as to the schedule and duration; also, appointing a "point person" for noise inquiries from neighboring residents during construction should be considered.

*

*

*

Enclosures as noted

ES/es

2009 08 18 Felt Street Park Acoustical Report

APPENDIX A FUNDAMENTAL CONCEPTS OF ENVIRONMENTAL NOISE

This section provides background information to aid in understanding the technical aspects of this report.

Three dimensions of environmental noise are important in determining subjective response. These are:

- The intensity or level of the sound
- The frequency spectrum of the sound
- The time-varying character of the sound

Airborne sound is a rapid fluctuation of air pressure above and below atmospheric pressure. Sound levels are usually measured and expressed in decibels (dB), with 0 dB corresponding roughly to the threshold of hearing.

The "frequency" of a sound refers to the number of complete pressure fluctuations per second in the sound. The unit of measurement is the cycle per second (cps) or hertz (Hz). Most of the sounds, which we hear in the environment, do not consist of a single frequency, but of a broad band of frequencies, differing in level. The name of the frequency and level content of a sound is its sound spectrum. A sound spectrum for engineering purposes is typically described in terms of octave bands, which separate the audible frequency range (for human beings, from about 20 to 20,000 Hz) into ten segments.

Many rating methods have been devised to permit comparisons of sounds having quite different spectra. Surprisingly, the simplest method correlates with human response practically as well as the more complex methods. This method consists of evaluating all of the frequencies of a sound in accordance with a weighting that progressively de-emphasizes the importance of frequency components below 1000 Hz and above 5000 Hz. This frequency weighting reflects the fact that human hearing is less sensitive at low frequencies and at extreme high frequencies relative to the mid-range.

The weighting system described above is called "A"-weighting, and the level so measured is called the "A-weighted sound level" or "A-weighted noise level." The unit of A-weighted sound level is sometimes abbreviated "dBA." In practice, the sound level is conveniently measured using a sound level meter that includes an electrical filter corresponding to the A-weighting characteristic. All U.S. and international standard sound level meters include such a filter. Typical sound levels found in the environment and in industry are shown in Figure A-1.

Although a single sound level value may adequately describe environmental noise at any instant in time, community noise levels vary continuously. Most environmental noise is a conglomeration of distant noise sources, which results in a relatively steady background noise having no identifiable source. These distant sources may include traffic, wind in

trees, industrial activities, etc. and are relatively constant from moment to moment. As natural forces change or as human activity follows its daily cycle, the sound level may vary slowly from hour to hour. Superimposed on this slowly varying background is a succession of identifiable noisy events of brief duration. These may include nearby activities such as single vehicle pass-bys, aircraft flyovers, etc. which cause the environmental noise level to vary from instant to instant.

To describe the time-varying character of environmental noise, statistical noise descriptors were developed. "L10" is the A-weighted sound level equaled or exceeded during 10 percent of a stated time period. The L10 is considered a good measure of the maximum sound levels caused by discrete noise events. "L50" is the A-weighted sound level that is equaled or exceeded 50 percent of a stated time period; it represents the median sound level. The "L90" is the A-weighted sound level equaled or exceeded during 90 percent of a stated time period and is used to describe the background noise.

As it is often cumbersome to quantify the noise environment with a set of statistical descriptors, a single number called the average sound level or " L_{eq} " is now widely used. The term " L_{eq} " originated from the concept of a so-called equivalent sound level which contains the same acoustical energy as a varying sound level during the same time period. In simple but accurate technical language, the L_{eq} is the average A-weighted sound level in a stated time period. The L_{eq} is particularly useful in describing the subjective change in an environment where the source of noise remains the same but there is change in the level of activity. Widening roads and/or increasing traffic are examples of this kind of situation.

In determining the daily measure of environmental noise, it is important to account for the different response of people to daytime and nighttime noise. During the nighttime, exterior background noise levels are generally lower than in the daytime; however, most household noise also decreases at night, thus exterior noise intrusions again become noticeable. Further, most people trying to sleep at night are more sensitive to noise. To account for human sensitivity to nighttime noise levels, a special descriptor was developed. The descriptor is called the L_{dn} (Day/Night Average Sound Level), which represents the 24-hour average sound level with a penalty for noise occurring at night. The L_{dn} computation divides the 24-hour day into two periods: daytime (7:00 am to 10:00 pm); and nighttime (10:00 pm to 7:00 am). The nighttime sound levels are assigned a 10 dB penalty prior to averaging with daytime hourly sound levels.

For highway noise environments, the average noise level during the peak hour traffic volume is approximately equal to the L_{dn} .

The effects of noise on people can be listed in three general categories:

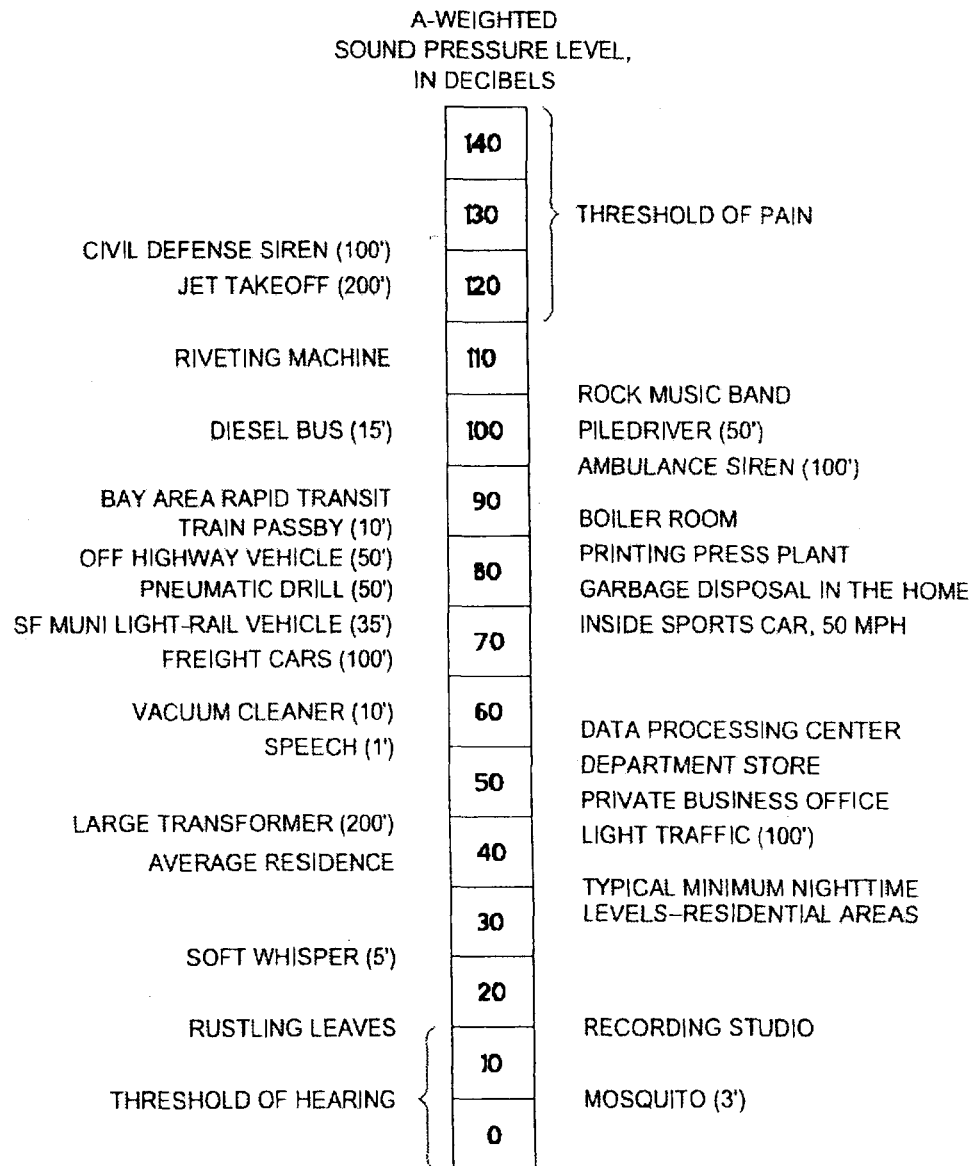
Subjective effects of annoyance, nuisance, dissatisfaction
Interference with activities such as speech, sleep, and learning
Physiological effects such as startle, hearing loss

The sound levels associated with environmental noise usually produce effects only in the first two categories. Unfortunately, there has never been a completely predictable measure for the subjective effects of noise nor of the corresponding reactions of annoyance and dissatisfaction. This is primarily because of the wide variation in individual thresholds of annoyance and habituation to noise over time.

Thus, an important factor in assessing a person's subjective reaction is to compare the new noise environment to the existing noise environment. In general, the more a new noise exceeds the existing, the less acceptable the new noise will be judged.

With regard to increases in noise level, knowledge of the following relationships will be helpful in understanding the quantitative sections of this report:

Except in carefully controlled laboratory experiments, a change of only 1 dB in sound level cannot be perceived. Outside of the laboratory, a 3 dB change is considered a just-noticeable difference. A change in level of at least 5 dB is required before any noticeable change in community response would be expected. A 10 dB change is subjectively heard as approximately a doubling in loudness, and would almost certainly cause an adverse community response.



(100') = DISTANCE IN FEET
BETWEEN SOURCE
AND LISTENER

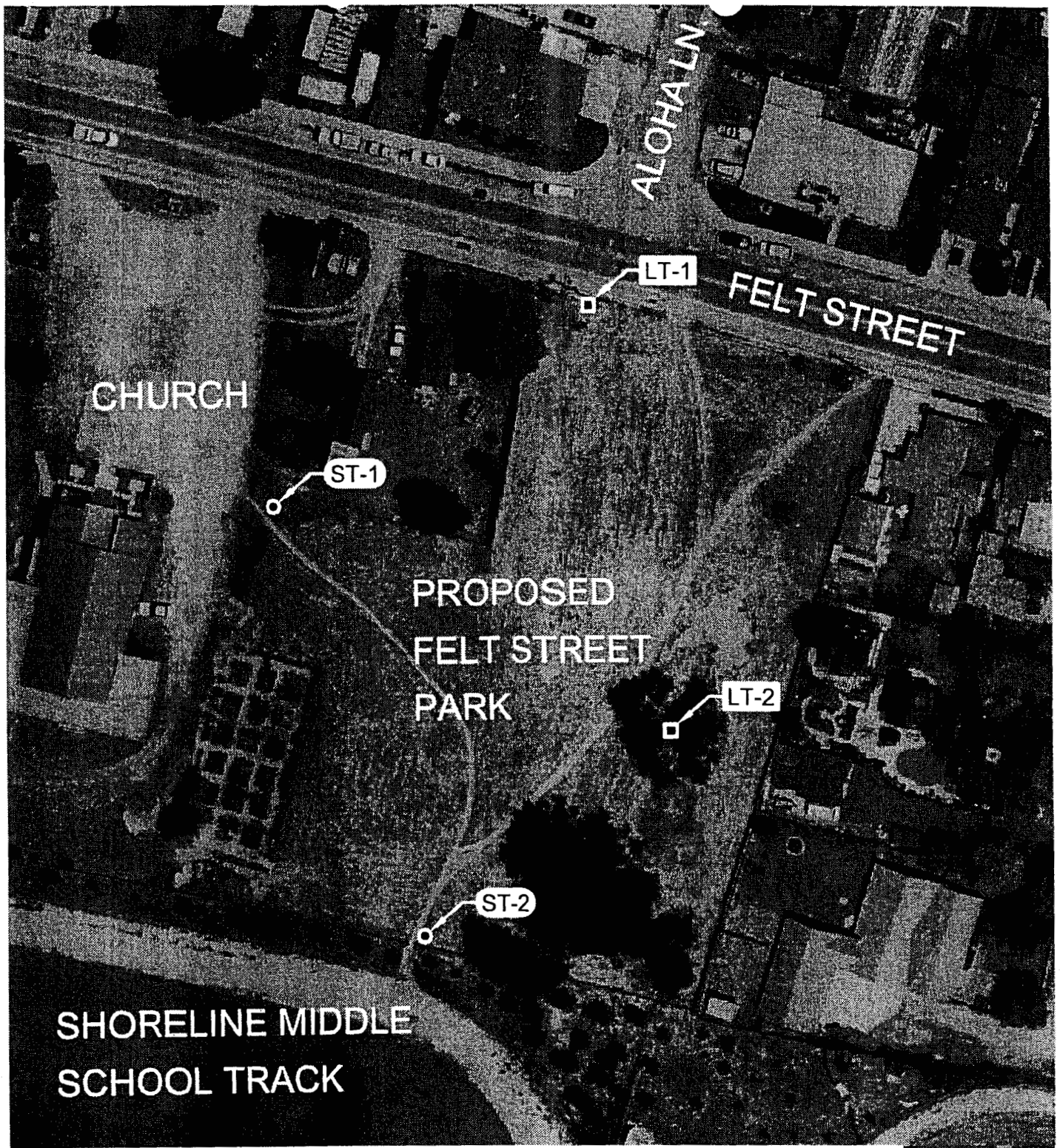
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TYPICAL SOUND LEVELS
MEASURED IN THE
ENVIRONMENT AND INDUSTRY

FIGURE A1

1107

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11.25.03



○ = SHORT-TERM 15-MINUTE NOISE MEASUREMENT

■ = LONG-TERM 48-HOUR NOISE MEASUREMENT

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PROPOSED FELT STREET PARK ACOUSTICAL MEASUREMENT LOCATIONS 7/20/09-7/22/09

FIGURE 1

CSA #
09-0244

ECS
07.30.09



County of Santa Cruz

PARKS, OPEN SPACE & CULTURAL SERVICES

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BARRY C. SAMUEL, DIRECTOR

PARKS AND RECREATION COMMISSION MINUTES

Monday, January 13, 2003

7:15 p.m.

Joint Arts and Parks Commission Meeting

Simpkins Family Swim Center

979 17th Avenue

Santa Cruz, CA 95062

I. CALL TO ORDER / ROLL CALL

The meeting was called to order at 7:15 PM.

Members: Janet Doten, Dave Mercer, Katharine Minott, Tim Jenkins, Michael Rosenberg,

Present: Janet Doten, Dave Mercer, Katharine Minott, Tim Jenkins, Michael Rosenberg

Guests: Arts Commissioners: Bruce Arnold, Barbara Beerstein, Shirlee Byrd, Maribel Cuervo, Bill Fravel, Roy Holmberg, Delwyn Pezzoni, Sue Struck, Deborah Turner

Staff: Barry Samuel, Christina Mowrey-Riggs, Clark Beattie, Gretchen Iliff, Michael Scheele, Beth Porter

II. AGENDA MODIFICATIONS OR APPROVAL

The agenda was approved. (5/0)

III. CONSENT AGENDA

A. Minutes - Minutes of November 18, 2002 were approved as written. (5/0)

B. Information and Reports (Accept and File)

- 1) Facilities Division - Status Report
- 2) Maintenance Division - Status Report
- 3) Planning Division - Status Report
- 4) Recreation & Cultural Services Division - Status Report

The Information and Reports were accepted and filed. (5/0)

IV. ORAL COMMUNICATIONS - None

The Mission of the Santa Cruz County Department of Parks, Open Space and Cultural Services is to provide safe, well designed and maintained parks and a wide variety of recreational and cultural opportunities for our diverse community

V. DIRECTOR'S REPORT

Director Samuel displayed a photo and discussed the serious erosion problem at Scott Creek Beach. The problem is a result of the very high surf run up and the direction the river has taken this winter. The Parks Department is working closely with CalTrans and they will be taking steps to stabilize the situation and prevent further erosion of the shoulder and possible damage to Highway 1. The Brommer Park play structure is installed and the project is 99% complete. Hestwood Park is going out to bid again tomorrow (1/14/03).

VI. REGULAR AGENDA (DISCUSSION ITEMS)

A. Felt Street Park Master Plan

Park Planner Mike Sheele displayed the revised Master Plan for Felt Street Park and discussed the revisions made as a result of the public hearing of November 18, 2002: Walk ways added around the bocce ball court, additional trees to provide shade, addition (possibly) of fruit trees around garden area, fence enlarged to abut both property lines, allowing more space around the community garden, a locking shed and compost area were added to the garden area, play area relocated to allow better access from parking area to garden, parking area now faces park and includes two landscaped medians, a planter strip along the fence and a gate from church parking area to park. The children's play area will be themed. A motion was made and passed to accept and approve the revised Master Plan. (TJ/KM 5/0)

B. Introductions of Parks and Arts Commissioners

The Commissioners introduced themselves and told how many years they have served as Commissioners.

C. Powers and Duties of Arts Commission

The Commissioners received written information on the powers and duties of both Commissions in their packets. The Arts Commission approached the Board of Supervisors about five years ago and asked to double their membership to strengthen their Commission and bring more participation. Both Commissions share their goals and objectives.

D. Powers and Duties of Parks Commission

The Parks Commissioners received and have reviewed written information on the powers and duties of each Commission. The same goals and objectives are shared by both commissions.

E. Parks Master Plan Process

Director Samuel explained the Parks Master Plan process. A public meeting is held and staff provides all the constraints of the property and project with public input following. Staff prepares a series of plan alternatives for the second public meeting where the public chooses the best plan and suggests modifications to the plans. Public input is assimilated into a revised draft Master Plan and staff presents the revised plan to the Park Commissioners for their



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BARRY C. SAMUEL, DIRECTOR

PARKS AND RECREATION COMMISSION MINUTES

Monday, November 18, 2002
7:15 p.m.
Public Meeting

Simpkins Family Swim Center
979 17th Avenue
Santa Cruz, CA 95062

I. CALL TO ORDER / ROLL CALL

The meeting was called to order at 7:15 PM.

Members: Janet Doten, Dave Mercer, Katharine Minott, Tim Jenkins, Michael Rosenberg,

Present: Dave Mercer, Katharine Minott, Tim Jenkins, Michael Rosenberg

Excused Absence: Janet Doten

Staff: Barry Samuel, Christina Mowrey-Riggs, Clark Beattie, Gretchen Iliff, Michael Scheele, Bob Olson, Beth Porter

II. AGENDA MODIFICATIONS OR APPROVAL

The agenda was approved. (Jenkins/Mercer 4/0)

III. CONSENT AGENDA

A. Minutes - Minutes of October 21, 2002 were approved as written. (Jenkins/Minott 4/0)

B. Information and Reports (Accept and File)

- 1) Facilities Division - Status Report
- 2) Maintenance Division - Status Report
- 3) Planning Division - Status Report
- 4) Recreation & Cultural Services Division - Status Report
- 5) Arts Commission Agenda - October 7, 2002

The Information and Reports were accepted and filed. (Jenkins/Minott 4/0)

IV. ORAL COMMUNICATIONS - None

V. DIRECTOR'S REPORT

Due to the full agenda the Director will forego his report.

VI. REGULAR AGENDA (DISCUSSION ITEMS)

A. Felt Street Park Master Plan - Public Hearing

The Commission's protocol is usually to review a draft master plan one month and the following month hold a public hearing on the master plan. Due to the December hiatus and the joint meeting in January, 2003 with the Arts Commission, the public meeting on Felt Street Park has been scheduled for this evening. It is hoped the Commission will approve the Master Plan this evening, Staff will present the Master Plan to the Board of Supervisors early in 2003 for their public hearing and then secure permits and begin construction by the summer of 2003.

Mike Sheele, Park Planner, presented the Master Plan for Felt Street Park, a product of three previous public meetings. The Master Plan evolved from the meetings which addressed the concerns and desires of the community. The plan begins with a new crosswalk across Felt Street, keeps the community garden, contains open space in the center for recreational play surrounded by planting areas with drip irrigation and mulching, a small skate area to recognize the large number of skaters in the area, a shaded picnic and barbeque area, a parking area with nine parking spaces for cars and maintenance vehicles. There will be a play area with a structure for children 5 to 12, a climbing rock or wall, a small children's play area surrounded by a four foot fence with benches inside. The community garden will be more refined, similar to the Jose Avenue Park. The school will have the option to lock the gate between the park and school during school hours. Drought tolerant plants will be incorporated along with native and exotic plants in the botanical garden with low growing plants. A small reading area for sitting, relaxing and peace and quiet will be in a corner. There will be two bocce ball courts (the only county park containing bocce ball courts), shaded seating areas, restrooms and a drinking fountain.

Chair Rosenberg opened the public hearing on the project. The following concerns were expressed by the public: The size of the skate park (2,500 square feet), noise and domination of older kids, access to park through the school grounds, before and after school access to park, dimensions of the community garden, water source, wheel chair accessible plots. Suggested additions to Felt Street Park plan were: Doggie bag boxes, walkway on all four sides of bocce ball court, additional trees to provide shade for bocce and turf area, possibility of fruit trees in community garden, trees in the large cement area, theme play structure for 0-5, covered reading area or picnic pavilion, gazebo style structure around reading area, enlarge community garden to existing fence, locking shed for community garden tools, access to community garden away from play area traffic pattern and moveable features in skate area. Construction is expected in the summer or fall of 2003. The time line for this project includes: Commission holds public hearings, adoption or modification of the Master Plan, present to Board of Supervisors for additional public hearings, and if approved, apply for construction permit from the planning department and out to bid for construction in summer or fall of 2003. A motion was made and passed to direct staff to revise the Master Plan as per the comments and present the revised plan at the January 13, 2003 meeting for final approval. (4/0).

B. Discussion of 2002 Annual Report

A question was raised about the status of the Ben Lomond Dam. Director Samuel was asked to include the Dam in the Annual Report. Mr. Samuel explained that the permit to install and operate the Ben Lomond Dam expires on June 25, 2003. Meetings have been held with the Department of Fish and Game and the National Marine Fisheries to discuss what would be required to reinstall the dam. The bare minimum would be the installation of fish ladders. The

County will move forward with the permit process. A motion was made and approved to forward the annual report to the Board of Supervisors (4/0).

C. Aptos High Skate Park Update

Commissioner Minott reported that the search for a location of the Aptos Skate Park will continue in the new year. The Aptos High School master plan does not call for a skate park, so in the future, the project will be referred to as "Aptos Skate Park".

D. Highland Skate Park Update

The official opening of the Jim Keeffe Skate Park in Felton is Saturday, November 23 at 11:00 a.m. and all Commissioners are invited. One hundred tiles were sold as a community fund raiser.

A second arborist's opinion and report on the ailing Giant Sequoia at Highland Park will be sought. The Department will attempt to hire Barry Coates (arborist) to determine if there is another method of saving the tree rather than drastic pruning. For the present, mulching and trimming will take place along with a fence around the tree for protection.

E. Joint Park and Arts Commission Meeting January 13, 2003

A joint meeting of the Arts and Parks commissions will take place at the Live Oak Community Room at the Simpkins Family Swim Center at 7:15 p.m. on Monday, January 13, 2003. Discussion will include common goals and the master planning process along with the art component in the initial stages of park planning, the incorporation of art element into the park planning process (facility for art lessons, easels, photography studios, etc.) and a refocus on how the park planning process is viewed.

Michael Rosenberg will act as chair in hosting the Arts Commission.

VII. AGENDA / MEETING FOR January 13, 2003, Simpkins Family Swim Center, Live Oak Community Room, 7:15 p.m.

- A. Felt Street Park Master Plan
- B. Introductions of Parks and Arts Commissioners
- C. Powers and Duties of the Arts Commission
- D. Powers and Duties of the Parks Commission
- E. Parks Master Plan Process
- F. Possible Areas of Collaboration Between Commissions

VIII. ADJOURNMENT — Meeting was adjourned at 8:30 p.m. (4/0)

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Jephania B Reddick
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5 May 2010

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Subject: **Proposed Felt Street Park –
Requested Additional Acoustical Analysis**
CSA Project No. 09-0244

Dear Annette:

Several days ago, we discussed our 18 August 2009 acoustical report for the proposed Felt Street Park. You emailed us four questions based on our discussion. You asked us to provide an additional analysis of measured noise data over the hours of operation of the proposed park's skateboard area¹. In summary, we predict that there will be NO NOISE IMPACT to the surrounding land uses from the skateboard area. This letter summarizes our analysis and responses.

QUESTIONS

1. *What is the average noise level of 9:00 am to dusk at the site?*
2. *What is the predicted average noise level of 9:00 am to dusk at the site with the skateboard area?*
3. *What is the noise threshold for a perceptible and/or significant change to the human ear (i.e. if you were a neighbor, what, typically, would be a significant increase to you)?*
4. *What are the mitigation options for an outdoor skate park?*

RESPONSES

1. The existing average noise levels from 9:00am to 8:00pm at the site' property lines are as follows in Table 1:

¹ The proposed hours of operation are 9:00am to dusk. In our 18 August 2009 acoustical report, we assumed dusk to be 8:00pm. The measured hourly noise data is summarized in Appendix A attached to this letter.

Table 1	
Property Line	Average Measured Noise Levels (dBA ²) from 9:00am to 8:00pm
North	63 dBA
East	53 dBA
South	47 dBA
West	55 dBA

2. The predicted average noise levels of skateboard area activity at the site's property lines are as follows in Table 2. Consistent with our 18 August 2009 report, we used the 2002 Jose Avenue park noise study data for our calculations.

Table 2	
Property Line	Predicted Skateboard Area Average Noise Levels (dBA) from 9:00am to 8:00pm
North	53 dBA
East	42 dBA
South	40 dBA
West	42 dBA

Table 3 shows the resulting average levels when noise from the skateboard area is added to existing noise levels:

Table 3		
Property Line	Existing plus Predicted Skateboard Area Noise (dBA) from 9:00am to 8:00pm	Change (in dB) with Skateboard Area
North	63 dBA	+0.4 dB
East	53 dBA	+0.3 dB
South	47 dBA	+0.5 dB
West	55 dBA	+0.2 dB

The calculations show that as compared to existing levels, the skateboard area will have NO NOISE IMPACT on the adjacent property lines.

3. Humans have a wide range of sensitivity to noise from various sources. Typically, outside of controlled laboratory conditions, a change in noise level of 3 to 5 decibels

² dBA – A-weighted sound pressure level (or noise level) represents the noisiness or loudness of a sound by weighting the amplitudes of various acoustical frequencies to correspond more closely with human hearing. A 10-dB (decibel) increase in noise level is perceived to be twice as loud. A-weighting is specified by the U.S. EPA, OSHA, Caltrans, and others for use in noise measurements.

Annette Olson
5 May 2010
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would be considered "noticeable". A fraction of a decibel increase would not be perceptible.

4. Our analysis concludes that the skateboard area has no anticipated hourly noise impact on the surrounding property lines. In our report, we assumed that the skate park manufacturer's noise-reducing features are incorporated into the project design.

*

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*

This concludes our current comments on the subject project. Please call with any questions.

Sincerely,

CHARLES M. SALTER ASSOCIATES, INC.



Ethan Salter, LEED AP
Principal Consultant

cc: John Calahan
John Calahan Landscape Architect
Email: john.calahan@comcast.net

Bob Olson
County of Santa Cruz Parks Department
prc031@park.co.santa-cruz.ca.us

Enclosures as noted

ES/CMS/es
2010_05_04 Felt Street Park Additional Acoustical Analysis for County

APPENDIX A
Hourly Average Noise Data
Proposed Felt Street Park Site
July 2009

Hour	Hourly Average Noise Levels at Felt Street Park Property Lines (dBA)			
	North	East	South	West
9:00	64	56	50	56
10:00	62	56	50	54
11:00	64	58	51	57
12:00	63	54	48	55
13:00	63	51	45	55
14:00	63	56	49	55
15:00	63	47	40	55
16:00	63	46	40	56
17:00	64	48	42	57
18:00	64	48	42	56
19:00	63	48	42	55
20:00	62	47	41	54
21:00	61	46	40	53

Notes:

1. See 18 August 2009 report for measurement locations.