ASCA
AMERICAN SOCIETY of CONSULTING ARBORISTS

Ed Gurka, Consulting Arborist
Member, American Society of Consulting Arborists

Member, International Society of Arboriculture
Certified Arborist, Western Chapter, # 0418

August 1, 2011

ASSIGNMENT:

A request to provide an Arborist Report for Stefan Hastrup, Turnbull Griffen & Haeslopp and Daphane Edwards, MLA, for the Collier Reynolds Residence located at 2-2½ Bulkley Avenue construction project. Plants scheduled for removal, and replacement are located on public right of way and private property locations. The proposed removals will include replacement of landscape plants with plants suitable to the designated location. This report will provide information on trees within the front yard area and make recommendations for future construction plans.

OBSERVATIONS and DISCUSSIONS:

On July 7, 2011, I met with Mr. Stephan Hastrup at 2 Bulkley Avenue property. The residence is in the process of renovation construction. The access to the courtyard is through an entrance gate that opens to a stairway that serves as a passage from Bulkley Avenue to the front courtyard and entrance to the residence. A retaining wall supports Bulkley Avenue from the courtyard approximately 12-15 feet below. To soften the effect of the retaining wall, two narrow planter beds on either side of the stairway and just above the courtyard are where four trees grow. Numbered tree inventory tags were placed on each tree and are referenced to this report. They are described as follows:

Four trees are located in the public right of way. This is based on the site plan presumed to be accurate. These trees are completely out of public view and provide the main benefit to the property due to their location below the street level.

To either side of the stairway landing there are two Arborvitae Evergreen trees of the Cupressaceae family. The trees frame the stairway from the courtyard to Bulkley Avenue.

- **#1, Chamaecyparis, False Cypress, Arborvitae.** CBH (Circumference at Breast Height) 5.7 inches, located 57 inches from retaining wall in raised planter bed between the courtyard and retaining wall. Photograph page 3.

- **#2 Chamaecyparis, False Cypress, Arborvitae.** CBH 2.3 inches, located opposite tree #1 in raised planter bed between the courtyard and retaining wall. Photograph page 3.

- **#3 Magnolia, soulangiana,** CBH 2.4, 1.2, 1.3 feet and 8.2 inches. The tree's height is 18 feet. The tree consists of four stems originating at the base of the tree. The tree placement is directly against the retaining wall and 43 inches from the outer edge. Upper canopy branches are defoliated on alternate branch tips. The bare branch tips indicate a root problem from the restricted space location. Photograph page 4.

- **#4 Acer palmatum,** Japanese Maple, CBH 4.5,4, 1.5, and 7 inches. This is a young multi-stem Maple tree with three upright stems originating at the base of the tree. It has a height of 18 feet. Photograph page 5.

Trees that are located on private property subject to review are two trees located in the courtyard area between the retaining wall and front wall of the residence. They are identified as follows;

- **#5 Betula pendula, European White Birch.** The tree consists of three upright stems originating at the trunk base. The complete CBH is 1.9, 1.6 feet and 8 inches. This equals 50 inches. The tree is a non-native species and native to summer rainy climates. It does not perform well in California climates due to the lack of summer rainfall. The upper canopy exhibits branch tip dieback associated with root problems. The dieback can be attributed to the climate conditions. Condition is rated as fair to poor. See photograph page 6

- **#6 Betula pendula, European White Birch.** This tree is directly next to Birch number 5 in the courtyard. CBH is two, and 1.7 feet total CBH is 44 inches. Condition is rated as fair to poor. See Photograph page 6.

- **#7 Chamaecyparis, obtusea, Arborvitae. Cypress.** This tree is located 30 inches from the front wall of the home. CBH is 1.5 feet. This tree species and its varieties are native and non-native to California. The tree is in good condition and pruned to be displayed as a feature tree. See photograph on page 7.

- **#8, 9, 10, Three Chamaecyparis, False Cypress, Arborvitae.** These trees from a screen between 2 Bulkley Avenue front yard and the neighboring property to the south. These three trees are in good condition. See photograph on page 8 of this report.

RECOMMENDATIONS:

Chamaecyparis trees 1 and 2, removal is recommended. The location in a very constricted space for a tree of this size roots will soon damage the planter and retaining wall if not removed. This planter is 5 feet wide and appropriate plants for this location are small shrubs, small perennial plants.

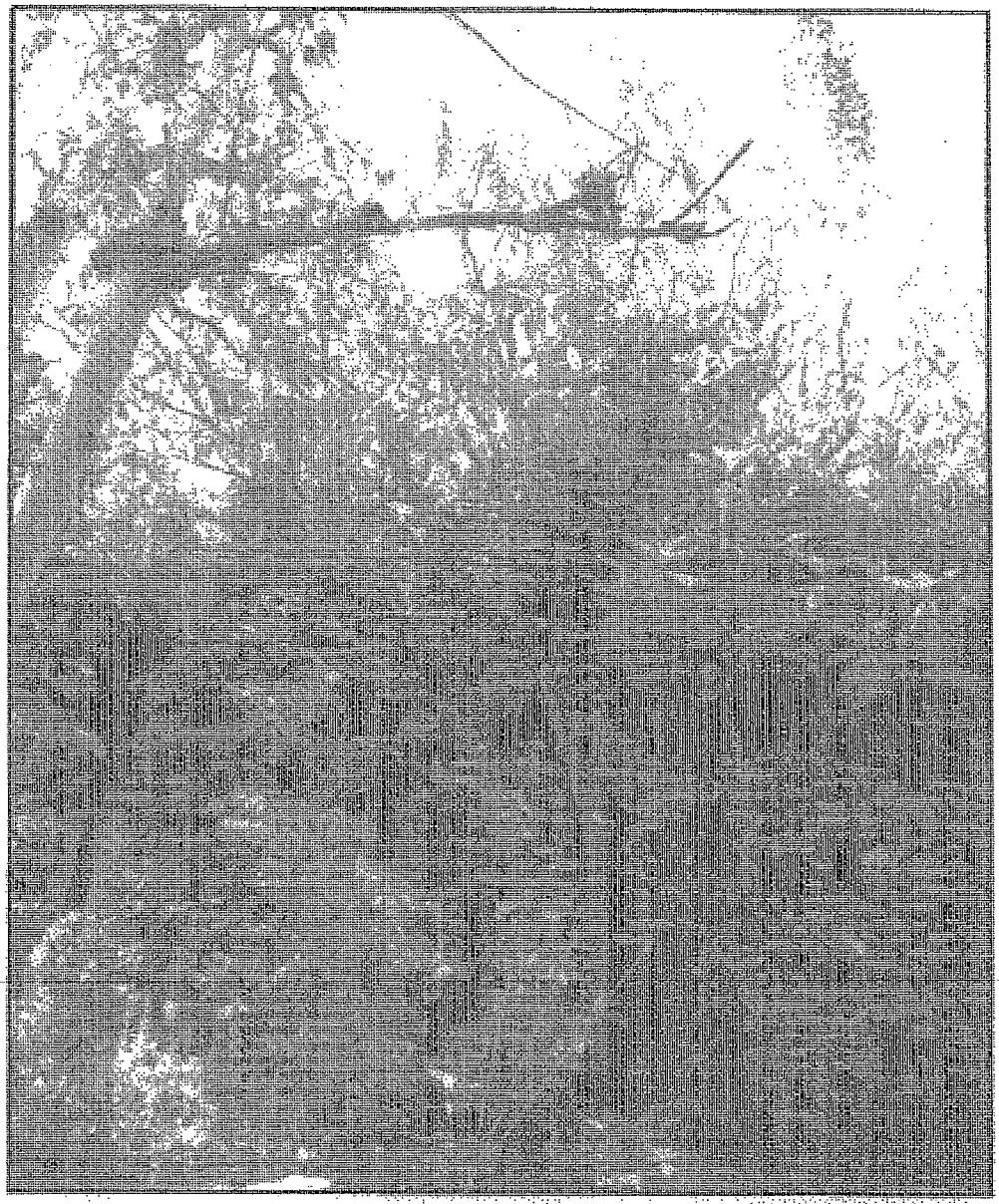
Trees #3 and #4, Magnolia and Acer palmatum both located in the public right of way area of the landscape are recommended for removal. The planter bed size cannot contain the root system of these trees. When they mature the root confinement will crack the retaining wall requiring extensive repair work and this wall supports Bulkley Avenue directly 6 feet above the patio. The retaining wall and planter is the only buffer to Bulkley Avenue. The separation is now visible in the lower section of the wall nearest the Acer tree along the outer planter wall. Replacing the removed trees is not advised. Planting even a small tree would eventually require removal when roots conflict with the retaining wall. The narrow shallow planter is only suitable for small shrubs or annual perennial flower plants such as Santolina, Erigeron, or Nandina.

Trees #5 and #6, the two Birch trees are recommended for removal and replacement with species more adaptable to a Sausalito climate. They are rated as fair to poor condition and maintaining them to fit the climate and conditions is difficult and would eventually require removal. Betula species are best suited in a climate with abundant rainfall throughout the year and best suited for riparian locations. Selection of a more suitable feature tree such as *Magnolia soulangiana* Saucer Magnolia, twelve species listed in Western Gardening, *Magnolia stellata* Star Magnolia, seven varieties, *Cercis occidentalis,* Western Red Bud, *Arbutus unedo*, Strawberry tree, or *Prunus yedoensis,* Flowering Cherry are species that provide features such as red color trunk, spring flowers, or fall color. All are deciduous with the exception of Arbutus species that are evergreen. These choices require less maintenance and are most adaptable to the climate and location. If removal is granted, the selections are an opportunity for a replacement tree that will not block neighboring views or require topping to reduce height.

Tree # 7 Chamaecyparis obtuse is recommended for removal. The tree is within the area if the front wall expansion a direct conflict with the building construction plans. The replacement of courtyard patio trees is suggested as the alternative to replacing this tree.

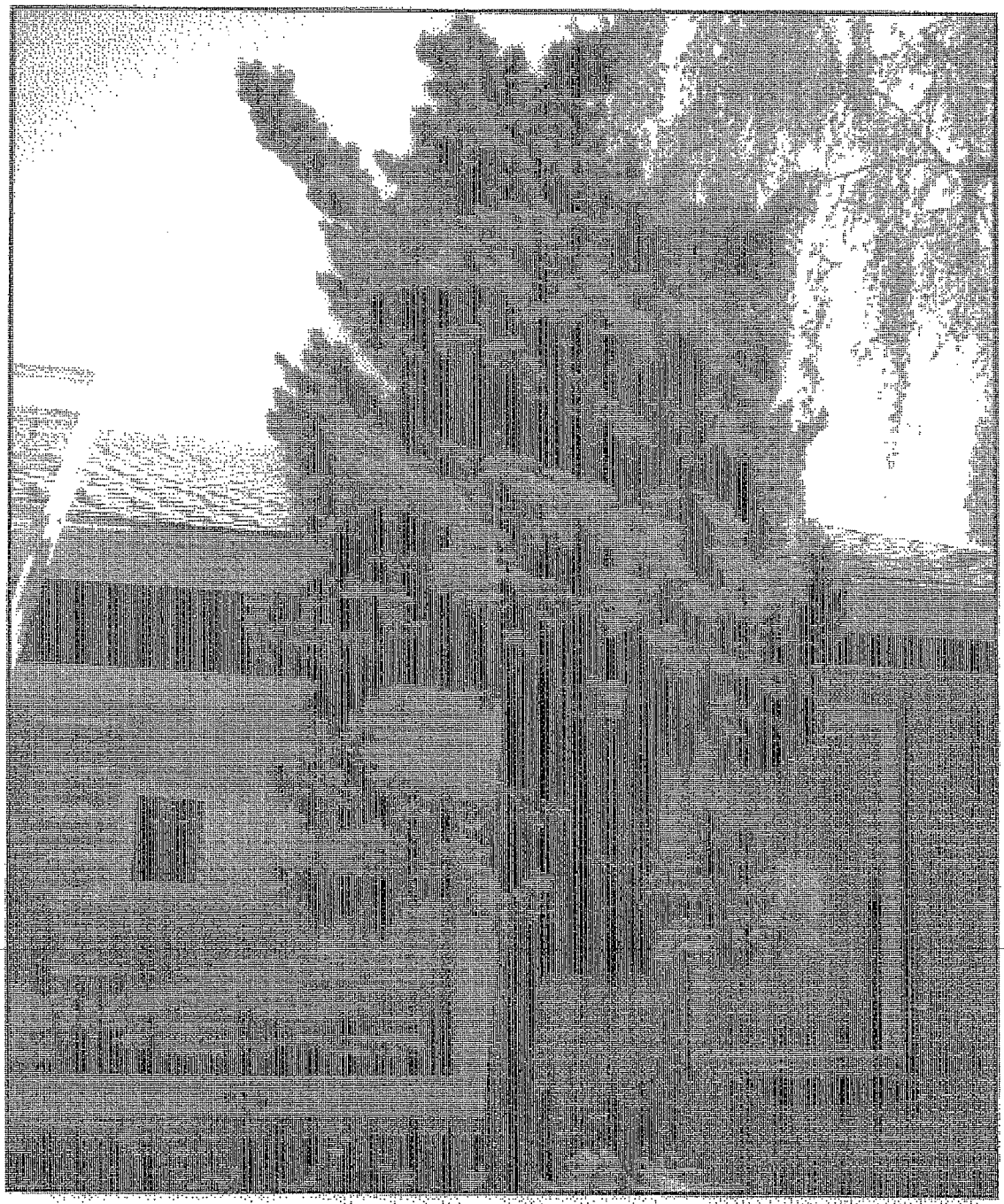
Trees 8, 9, and 10, Chamaecyparis, obtusa, are planned as removals and replacement with Podocarpus species that form a denser screening at maturity. The recommendation is that the existing three Chamaecyparis trees planned for removal are replaced with four replacements to form the screen between 2 Bulkley Avenue and the neighboring property just to the south.

The row of Chamaecyparis obtusa planted against the property line recommended for removal

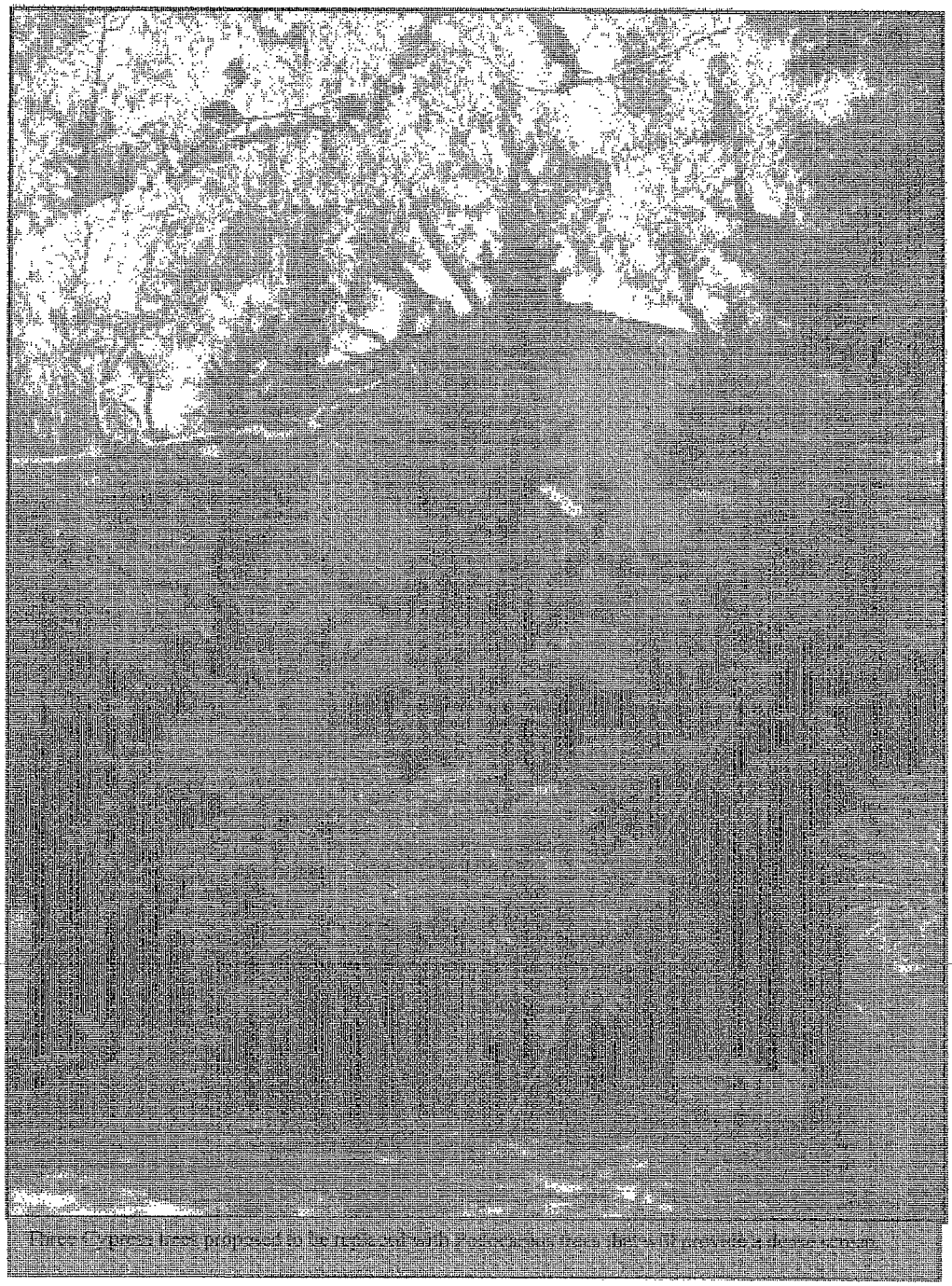


Tree #3, a multi stem Magnolia against the retaining wall is recommended for removal.

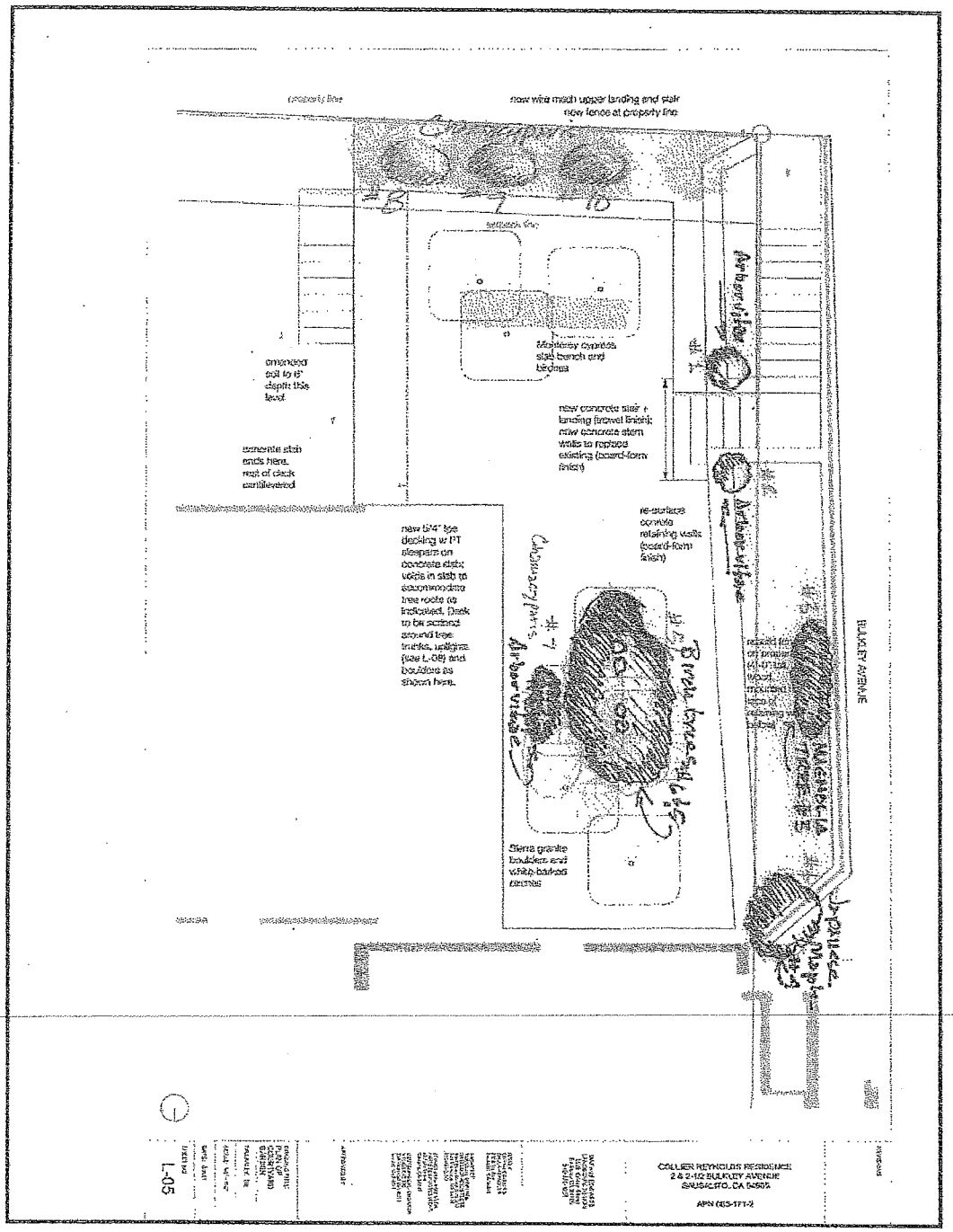
#5 and #6 two Betula trees in front courtyard of property in fair to poor condition. Recommendation is for replacement with a more suitable species for a Sausalito climate and a lower height when mature to accommodate views from neighboring properties.



Architect plans indicate front wall extension that is within the area of existing Cypress tree # 7



Three Cypress trees proposed to be removed with [illegible]



Site map with tree locations trees numbered 1, 2, 3, 4, 5, 6,7,8,9, and 10 are to be removed and replaced with other trees, small shrubs, and perennials.

2 Bulkley Avenue Tree Appraisals

	2 Bulkley Avenue, Sausalito Tree Appraisals Sheet				
	Trunk Formula Method 9th edition				
Tree numbers	Tree Species	CBH (inches)	Condition rating	Appraised value	Comments
1	Cupressus, species	2	80%	$99.00	conflicting location
2	Cupressus, species	2.25	80%	$100.00	conflicting location
3	Magnolia, soulangeana	50.2	90%	$783.00	conflicting location
4	Acer, palmatum	17	70%	$89.00	conflicting location
5	Betula, pendula	50	30%	$123.00	Not recommended for N. California climates
6	Betula, pendula	50	30%	$137.00	Not recommended for N. California climates
7	Cupressus, species	12.5	80%	$281.00	conflicting location
8	Cupressus, species	9.5	80%	$194.00	Replace
9	Cupressus, species	12.5	80%	$281.00	Replace
10	Cupressus, species	14	80%	$157.00	Replace

SUMMARY:

This report concludes with all criteria necessary for consideration for the tree permits. The tree appraisal is listed above in this brief spreadsheet format. The detailed forms of these calculations are available on request. The most critical issue are the trees within the planter bed. If they are not removed, they will compromise the retaining wall and planter structure. There is no apparent loss of soil stability if the trees are removed since they are located on flat terrain. If additional information is required, a soil engineer should be retained for a comprehensive study of the location. Replacement trees will be installed in locations where trees are proposed to be removed. In these situations, it will be necessary to grind tree stumps to install replacement trees. Suggestions for replanting including select plants are mentioned in this report and the Landscape Architect will provide additional selection of plant material suitable for the location.

Contact Information:

Ed Gurka
Independent Services
197 Coleman Drive
San Rafael, CA. 94901.
Mobile: 415 601-5337
Email: Egurka1@aol.com

Affiliations and Licenses:

International Society of Arboriculture, Certified Arborist # 418, 1984 to present.
American Society of Consulting Arborists, Member, 2000 to present.
California Department of Pesticide Regulation, Pest Control Advisor PCA74846, 1989 to present
Independent Consulting Arborist Services, 2004-present.

TREEMASTERS

3175 Kerner Blvd Ste. A
San Rafael, CA 94901
(415) 455-9933 Main
(415) 455-9934 Fax

HONESTY • INTEGRITY • CRAFTSMANSHIP

WWW.TREEMASTERS.COM
treemail@treemasters.com

CA Lic. #660226

November 6, 2010

Miguel Micheltorena
255 Glen Dr
Sausalito, CA 94965

ARBORIST REPORT

I have inspected 4 Pittosporum *undulatum* located at 254 Glen Drive and have made the following report.

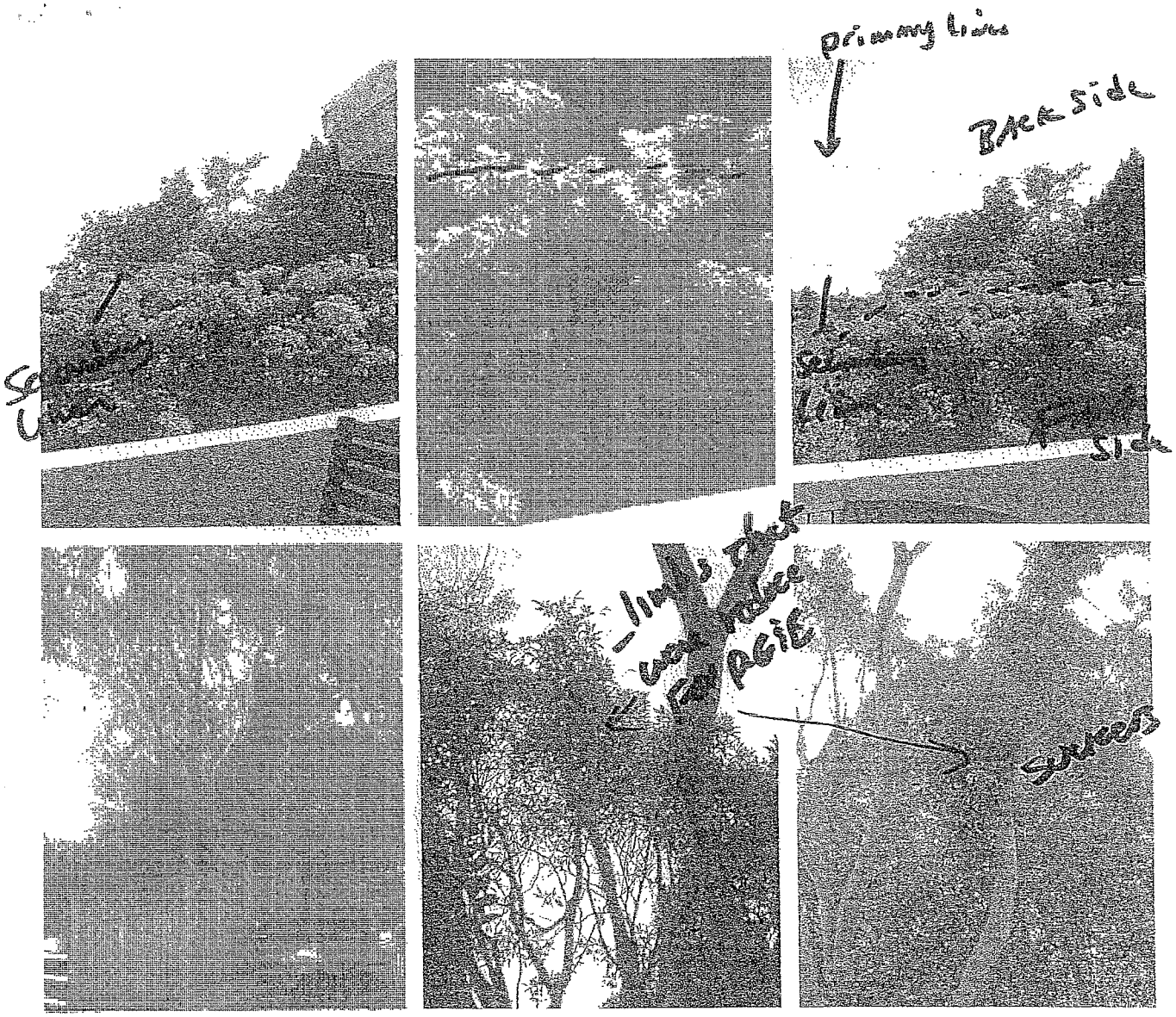
Pittosporum *undulatum* is an evergreen tree that is often used as an ornamental plant, due to its attractive fragrant flowers. It is a slender-branched shrub or tree, can grow to 60ft tall, with smooth, gray bark. It has a straight bole, regular whorls of branches, and a dense crown. Leaves alternate, shiny, and flowers almost white. It is a hardy tree that takes well to severe pruning. It is native to south-eastern Australia. This tree is invasive in Australia outside its native range.

The 4 Pittosporum *undulatum* are located in the front yard area of 254 Glen Drive, near street just behind the fence. The overall health of these trees is good. One is to the North side of the gate and other three to the south side. These trees are growing under the PG&E's high voltage power lines and have been pruned various times before to maintain clearance from the high voltage power lines. The constant pruning has unbalanced three of the four Pittosprums. These trees are higher and heavier on the East side; they lean and overhang over the home. The largest of the four (north side of gate) has a multi-spar at about 5 feet from soil line and has weak areas of attachment due to included bark. This along with the unbalanced heavier side has increased the potential for this tree to fail. Pruning these trees will help reduce the potential for tree failure.

These Pittisporums are also obstructing the view from the property at 255 Glen Dive. In order to improve the view these trees will need to be reduced just below the height of the secondary power lines (second set of lines from the highest). Because these trees are hardy and take to heavy pruning there should not be a problem to reducing these trees. The trees will look bare for a few months because there is no inner canopy. The canopy under the power lines have been reduced and continue to grow and flourish on these trees. Reducing these trees should not be a problem nor have a negative impact on these trees but it will help balance the weight & canopy and reduce potential tree failure. The pruning will also allow for lower canopy to grow and create a better screen and a sound barrier. My recommendation for pruning these trees is in January – March.

If you have any questions or if I can be of service please free to contact our office at (415) 455-9933 or email treemail@treemasters.com.

Uriel Barron
ISA Certified Arborist WE-1328A


primary line
Back side
Sick

CREW + / EQ L/S 1/4 1/2 3/4 FULL W 11/1/10 - 11 AM-12 PM

Fully Insured

TREEMASTERS

(415) 455-9933 • Fax (415) 455-9934
3175 Kerner Blvd Ste. A • San Rafael, CA 94901
WWW.TREEMASTERS.COM
treemail@treemasters.com
CA Lic. #660226

Name: Miguel Micheltorena Date: 10/29/2010

Company: _____ E-mail: miguel.micheltorena@citi.com

Address: 255 Glen Dr Sausalito CA 94965

Billing: _____

Phone: 415-971-3190 Cell 650-496-3286 Office 415-324-5816 Home

Map: 627-B3 X-Street: Bridgeway Ref. By: Google

Description of Job: ***TREEMASTERS*** will perform the following work itemized below and furnish the following labor, materials & equipment to complete that work:

Job Items	Set-up, breakdown and dump fee: $120
1) Reduce just below secondary lines (lines below highest set of lines) and shape	
Pittosporum *Pittosporum andulatum* across street for improved view	760

Note: Trees not listed on this contract were not inspected or evaluated by TREEMASTERS

☒ Haul Brush & Debris ☒ Haul Wood ☐ Wood left cut 16" Rounds piled at base of tree ☐ Leave Stump Mulch.

Estimator: Uriel Barron ISA Certified Arborist WE-1328A Date: 11/6/10 Job Cost Total: $880.00

CLIENT HAS THE RIGHT TO REQUIRE CONTRACTOR TO PROVIDE A PERFORMANCE AND PAYMENT BOND.

Authorization To Proceed: The Client hereby authorizes Treemasters to perform the job as described above. Unless otherwise agreed upon in writing by Treemasters, Client agrees to make total payment of the estimated costs and all authorized additional costs upon completion of the Job. By signing below, Client acknowledges that ***Client has read and understands all of the provisions on the front and back of this Agreement and agrees to abide by all terms and conditions.*** Client also acknowledged receipt of the attached Notice of Owner.

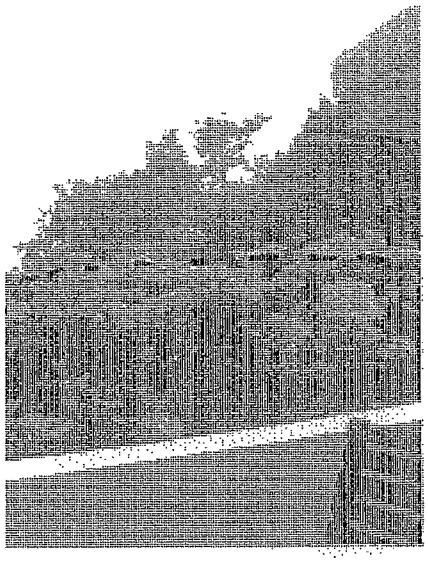
Client's Signature _____ **Date:** _____

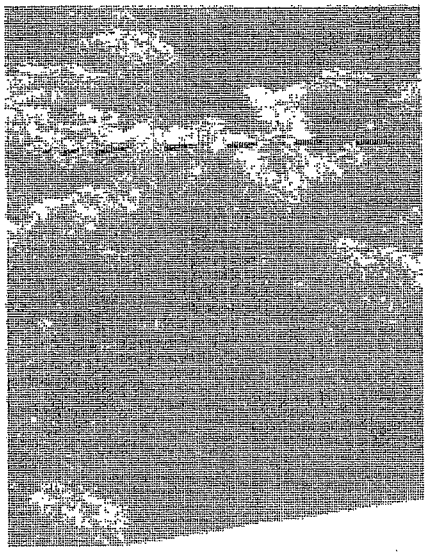
Time For Completion: Treemasters' work crews and equipment will arrive at the job site unannounced unless otherwise noted in this Agreement. Treemasters agrees to substantially commence work within 30 days after Client has executed this agreement and shall diligently pursue the Job to completion within 14 working days, subject to permissible delays. Work will begin approximately on N/A and all work will be completed approximately on N/A. Substantial commencement of the work shall be deemed to be the date when Treemasters first supplies workers to the job who actually start Job operations. Treemasters' failure to commence work substantially within 20 days after the approximate date specified is a violation of the Contractors' State License Law.

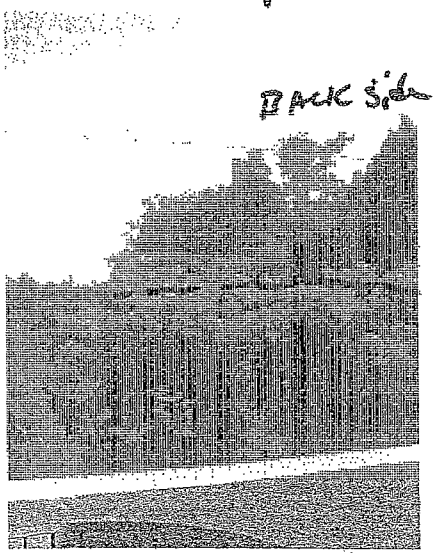
Deposit. Client agrees to make the following deposit of $ 0. (Pursuant to California law, deposit cannot exceed $1,000 or 10% of contract price, whichever is less). Client shall pay said deposit with signed contract, or by: N/A.

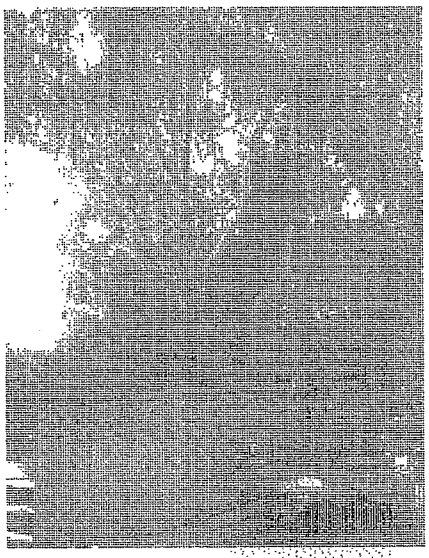
"Providing great care and attention to the ONE TREE we are working on at that moment."

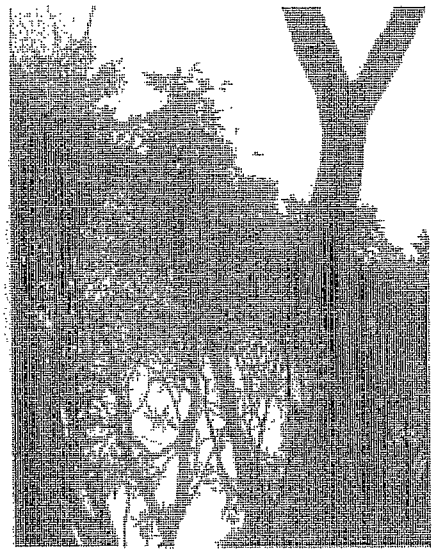
ITEM NO. C1 PAGE 40

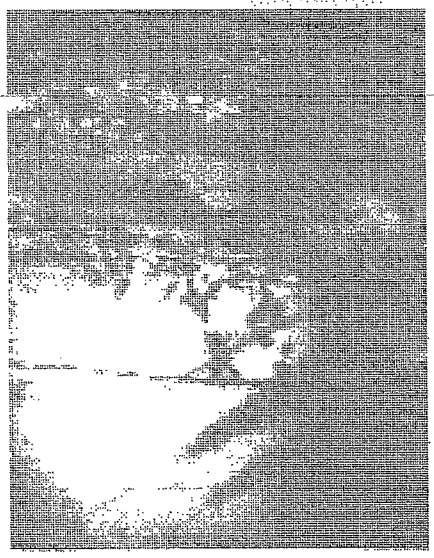












255 Glen Dr.

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ARBORSCIENCE PROVIDING SOUND TREE ADVICE
P.O. Box 111 • Woodacre, CA 94973 • (415) 419-5197 • KENT.JULIN@GMAIL.COM

August 3, 2011

Tom Skunda
141 Santa Rosa Avenue
Sausalito, CA

View Obstruction Arborist Report
141 Santa Rosa Avenue
Sausalito, CA

ASSIGNMENT

ARBORSCIENCE was hired by Tom Skunda to prepare an arborist report in support of his request to trim three (3) City of Sausalito coast live oaks (*Quercus agrifolia*) to maintain his downslope view of Strawberry Point, Richardson Bay, and the Tiburon Peninsula from his home at 141 Santa Rosa Avenue. I conducted my inspection on July 27, 2011.

SCOPE OF WORK AND LIMITATIONS

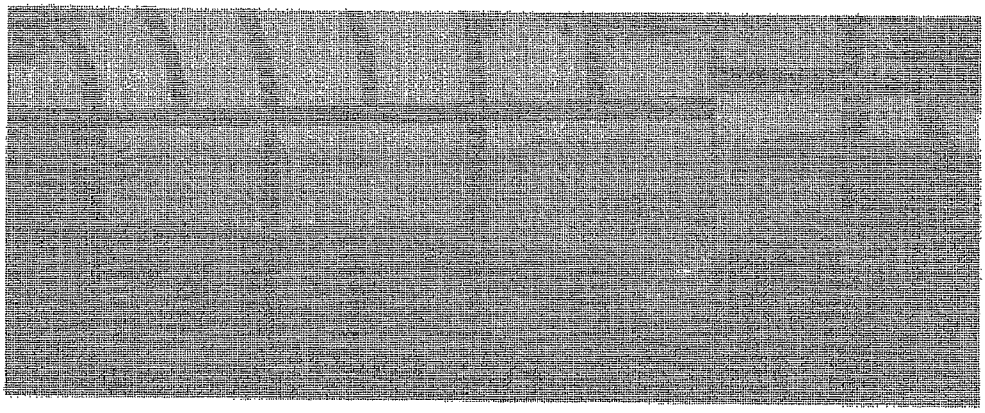
Information regarding property boundaries, land and tree ownership were provided by Tom Skunda and confirmed by adjoining neighbors. Mr. Skunda also provided a 1996 photograph to document the view at that time. I have neither personal nor monetary interest in the outcome of this matter. All determinations reflected in this report are objective and to the best of my ability. All observations and conclusions regarding the subject trees and site conditions in this report were made by me, independently, based on my education, experience, and inspection of the site.

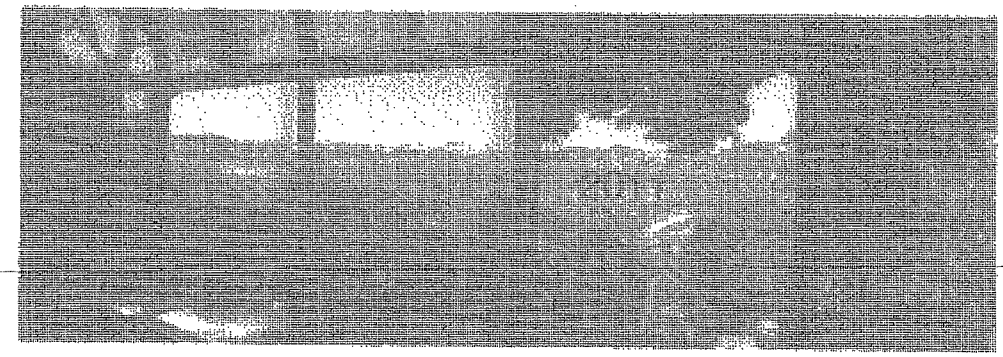
SITE PLAN

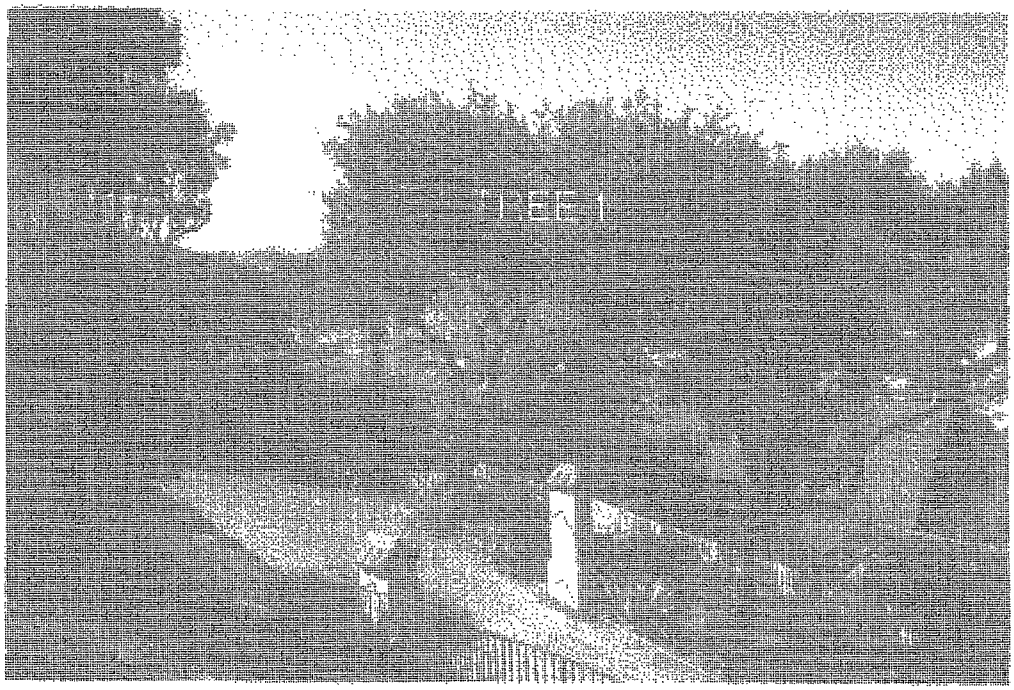
Attached is a site plan that includes information including trunk location, circumference and diameter at breast height, total height, drip lines, species, appraised value (Trunk Formula Method), nearby structures, parcel lines, and view impairment lines. Appraisal calculation sheets are also attached.

PHOTOGRAPHS

Below are two photographs showing the view from the Skunda sun room that were present in 1996 and in 2011. Also included are ground photographs of the four subject trees for which pruning is requested.



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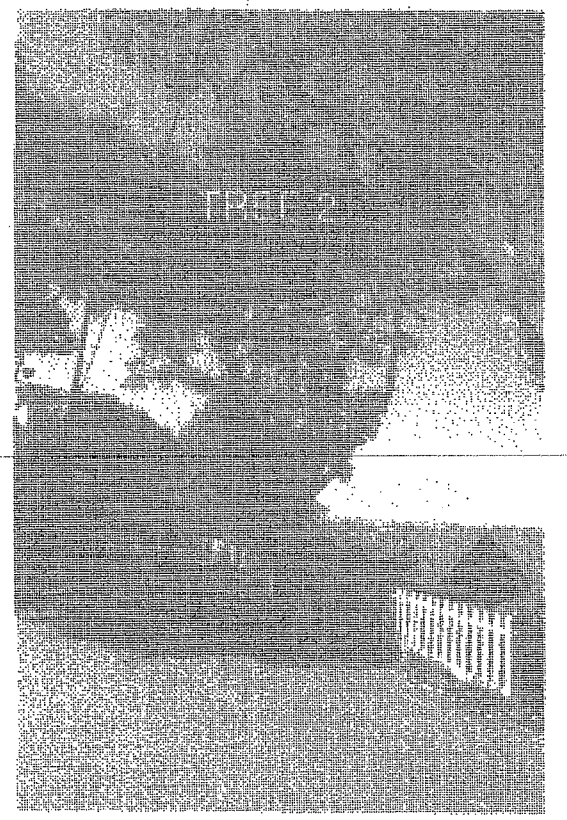
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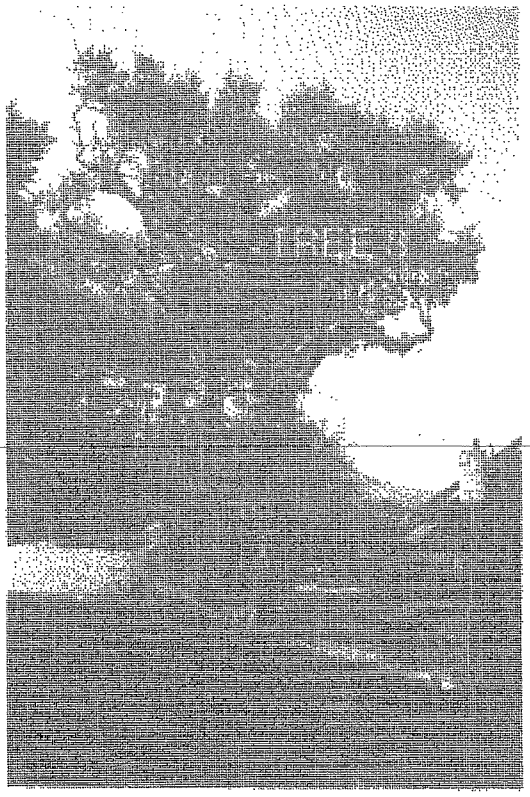

TREE 3

NARRATIVE

Description and reasons for alteration. Mr. Skunda proposes to maintain three coast live oaks downslope of his property to restore pre-existing views of Strawberry Point, Richardson Bay, and the Tiburon Peninsula from his sun and living rooms. Approximately 2-4 feet of the upper canopies will be pruned per American National Standards Institute (ANSI A300) pruning standards.

Dangers which may result by continued existence of the tree if alteration is not performed. Without this maintenance Mr. Skunda's view will continue to diminish the enjoyment and value of his home.

Structural or health effects on the tree which would result from the proposed alteration. The subject trees have received periodic ongoing maintenance pruning in the past are expected to maintain their structural integrity and systemic health after pruning is completed.

Estimated frequency and future costs to sustain the desired view. Proposed pruning work is estimated to be $1,625 Future maintenance will occur at 2- to 3-year-intervals at a comparable cost to the proposed work as adjusted by inflation.

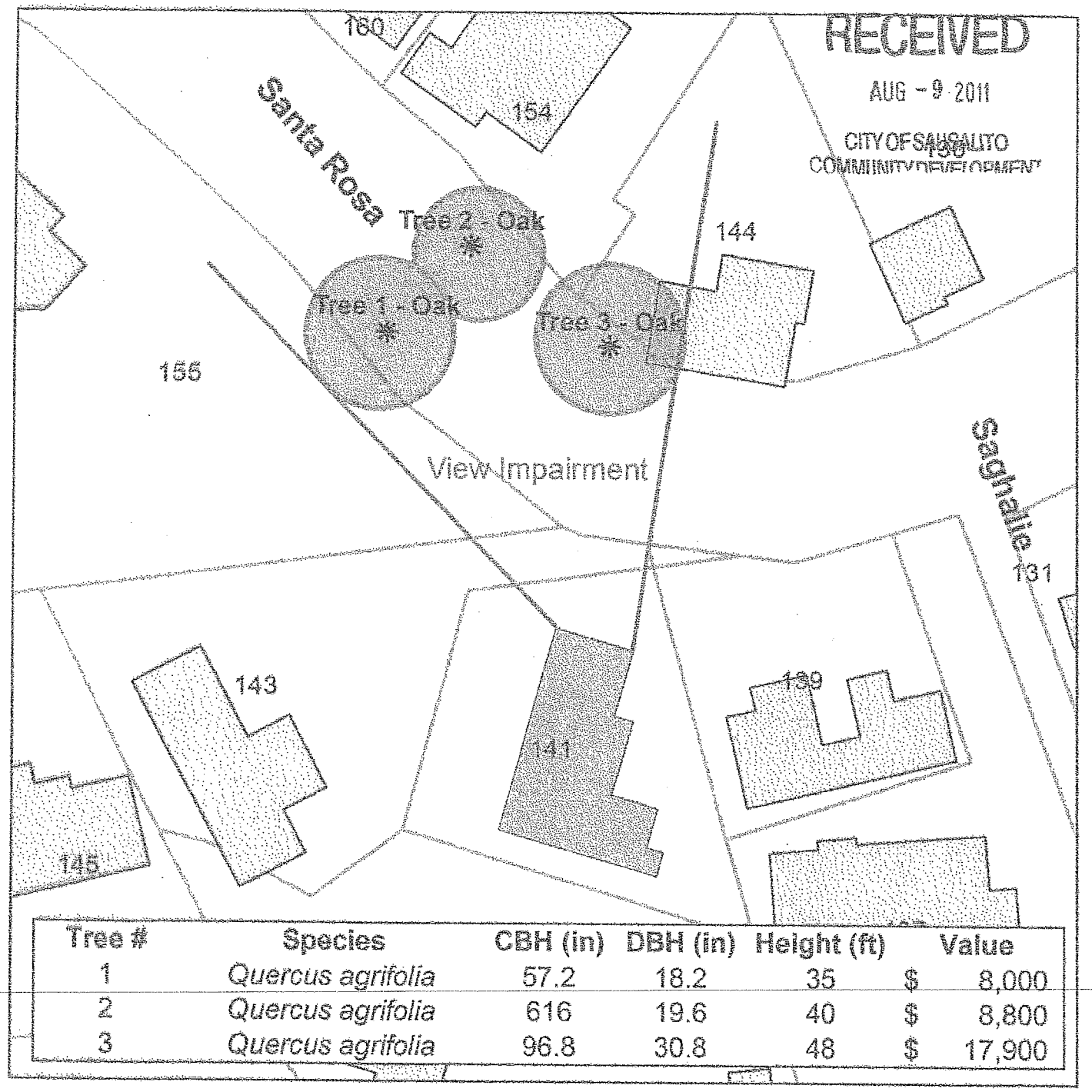
Effects of the alteration on neighboring vegetation. The proposed work is not expected to adversely affect the health of surrounding vegetation. A dense blanket of English ivy (*Hedra helix*) covers the ground under all three trees.

Suggestions for improving the health of the tree, such as improving root or soil conditions beneath the tree. I have no recommendations for improving the health of the subject trees. All three trees show no symptoms of sudden oak death (*Phytopthora ramorum*) and are growing under stable soil conditions. Tree #3 has incipient trunk decay that warrants regular safety inspections.

Sincerely,

ARBORSCIENCE

Kent R. Julin, Ph.D.
Principal Consulting Arborist and Forester
International Society of Arboriculture Certified Arborist WE-8733A



Tree #	Species	CBH (in)	DBH (in)	Height (ft)		Value
1	*Quercus agrifolia*	57.2	18.2	35	$	8,000
2	*Quercus agrifolia*	616	19.6	40	$	8,800
3	*Quercus agrifolia*	96.8	30.8	48	$	17,900

Site Map for Pruning Application
141 Santa Rosa Avenue
Sausalito, CA

N

0 50 100 200 Feet

ARBORSCIENCE PROVIDING SOUND TREE ADVICE

RECEIVED

AUG – 9 2011

CITY OF SAUSALITO
COMMUNITY DEVELOPMENT

Trunk Formula Method

Tree Case # 1 Property 141 Santa Rosa Ave Date 8-3-11

Appraiser Kent Julia ISA #8733A

Field Observations

1. **Species** Quercus agrifolia
2. **Condition** 85 %
3. **Trunk Circumference** 57.2 (in)/cm **Diameter** 18.2 in./cm
4. **Location %** = [Site 90 % + Contribution 90 % + Placement 80 %] ÷ 3 = 87 %

Regional Plant Appraisal Committee and/or Appraiser-Developed or -Modified Information

5. **Species** rating 90 %
6. **Replacement Tree Size** (diameter) 2.2 (in)/cm
   (Trunk Area) 3.80 (in²)/cm² TA_R
7. **Replacement Tree Cost** $ 172.73
   (see Regional Information to use Cost selected)
8. **Installation Cost** $ 172.73
9. **Installed Tree Cost** (#7 + #8) $ 345.46
10. **Unit Tree Cost** $ 45.46 per (in²)/cm²
    (see Regional Information to use Cost selected)

Calculations by Appraiser using Field and Regional Information

11. **Appraised Trunk Area:**
    (TA_A or ATA_A; use Tables 4.4–4.7)
    or c^2 (#3) _____ × 0.08
    or d^2 (#3) _____ × 0.785
    = 260.92 in²/cm²
12. **Appraised Tree Trunk Increase** (TA_{INCR}) =
    TA_A or ATA_A 260.92 (in²)/cm² (#11) – TA_R 3.8 (in²)/cm² (#6) = 256.22 (in²)/cm²
13. **Basic Tree Cost** = TA_{INCR} (#12) 256.22 (in²)/cm² × **Unit Tree Cost** (#10) $ 45.46 per (in²)/cm² + **Installed Tree Cost** (#9) $ 345.46 = $ 11993.32
14. **Appraised Value** = **Basic Tree Cost** (#13) $ 11993.32 × **Species rating** (#5) 90 % × **Condition** (#2) 85 % × **Location** (#4) 87 % = $ 7951.27
15. If the **Appraised Value** is $5,000 or more, round it to the nearest $100; if it is less, round to the nearest $10.
16. **Appraised Value** = (#14) $ 8000

Items 5 through 10 are determined by the Regional Plant Appraisal Committee. The **Wholesale Replacement Tree Cost**, the **Retail Replacement Tree Cost**, or the **Installed Tree Cost** (#9) divided by the **Replacement Tree Size** (#6) can be used for the **Unit Tree Cost** (#10), or it can be set by the Regional Plant Appraisal Committee.

Trunk Formula Method

Tree Case # 2 Property 141 Santa Rosa Ave Date 8-3-11

Appraiser Kent Julin ISA # 8733A

Field Observations

1. **Species** Quercus agrifolia
2. **Condition** 85 %
3. **Trunk Circumference** 61.6 (in.)/cm **Diameter** 19.6 (in.)/cm
4. **Location** % = [Site 90 % + Contribution 80 % + Placement 80 %] ÷ 3 = 83 %

Regional Plant Appraisal Committee and/or Appraiser-Developed or -Modified Information

5. **Species** rating 90 %
6. **Replacement Tree Size** (diameter) 3.2 (in.)/cm
   (Trunk Area) 3.8 (in.²)/cm² TA_R
7. **Replacement Tree Cost** $ 172.73
   (see Regional Information to use Cost selected)
8. **Installation Cost** $ 172.73
9. **Installed Tree Cost** (#7 + #8) $ 345.46
10. **Unit Tree Cost** $ 45.46 per (in.²)/cm²
    (see Regional Information to use Cost selected)

Calculations by Appraiser using Field and Regional Information

11. **Appraised Trunk Area:**
    (TA_A or ATA_A; use Tables 4.4–4.7)
    or c^2 (#3) _____ × 0.08
    or d^2 (#3) _____ × 0.785
    = 301.57 (in.²)/cm²
12. **Appraised Tree Trunk Increase** (TA_{INCR}) = TA_A or ATA_A 301.57 (in.²)/cm² (#11) − TA_R 3.8 (in.²)/cm² (#6) = 297.76 (in.²)/cm²
13. **Basic Tree Cost** = TA_{INCR} (#12) 297.76 (in.²)/cm² × **Unit Tree Cost** (#10) $ 45.46 per (in.²)/cm² + **Installed Tree Cost** (#9) $ 345.46 = $ 13881.82
14. **Appraised Value** = **Basic Tree Cost** (#13) $ 13881.82 × **Species** rating (#5) 90 % × **Condition** (#2) 85 % × **Location** (#4) 83 % = $ 8849.66
15. If the **Appraised Value** is $5,000 or more, round it to the nearest $100; if it is less, round to the nearest $10.
16. **Appraised Value** = (#14) $ 8800

Items 6 through 10 are determined by the Regional Plant Appraisal Committee. The **Wholesale Replacement Tree Cost**, the **Retail Replacement Tree Cost**, or the **Installed Tree Cost** (#9) divided by the **Replacement Tree Size** (#6) can be used for the **Unit Tree Cost** (#10), or it can be set by the Regional Plant Appraisal Committee.

Trunk Formula Method

Tree Case # 3 Property 141 Santa Rosa Ave Date 8-3-11

Appraiser Kent Julia ISA # 8733A

Field Observations

1. **Species** Quercus agrifolia
2. **Condition** 70 %
3. **Trunk Circumference** 98 (in)/cm **Diameter** 30.8 (in)/cm
4. **Location %** = [Site 90 % + Contribution 80 % + Placement 80 %] ÷ 3 = 83 %

Regional Plant Appraisal Committee and/or Appraiser-Developed or -Modified Information

5. **Species** rating 90 %
6. **Replacement Tree Size** (diameter) 2.2 (in)/cm
   (Trunk Area) 3.80 $(in^2)/cm^2$ TA_R
7. **Replacement Tree Cost** $ 172.73
   (see Regional Information to use Cost selected)
8. **Installation Cost** $ 172.73
9. **Installed Tree Cost** (#7 + #8) $ 345.46
10. **Unit Tree Cost** $ 45.46 per $(in^2)/cm^2$
    (see Regional Information to use Cost selected)

Calculations by Appraiser using Field and Regional Information

11. **Appraised Trunk Area:**
    (TA_A or ATA_A; use Tables 4.4–4.7)
    or c^2 (#3) _____ × 0.08
    or d^2 (#3) _____ × 0.785
    = 744.68 in^2/cm^2
12. **Appraised Tree Trunk Increase** (TA_{INCR}) = TA_A or ATA_A 744.68 $(in^2)/cm^2$ (#11) – TA_R 3.80 $(in^2)/cm^2$ (#6) = 740.88 in^2/cm^2
13. **Basic Tree Cost** = TA_{INCR} (#12) 740.88 $(in^2)/cm^2$ × **Unit Tree Cost** (#10) $ 45.46 per in^2/cm^2 + **Installed Tree Cost** (#9) $ 345.46 = $ 34025.91
14. **Appraised Value** = **Basic Tree Cost** (#13) $ 34025.91 × **Species** rating (#5) 90 % × **Condition** (#2) 70 % × **Location** (#4) 83 % = $ 17863.60
15. If the **Appraised Value** is $5,000 or more, round it to the nearest $100; if it is less, round to the nearest $10
16. **Appraised Value** = (#14) $ 17,900

Items 5 through 10 are determined by the Regional Plant Appraisal Committee. The **Wholesale Replacement Tree Cost**, the **Retail Replacement Tree Cost**, or the **Installed Tree Cost** (#9) divided by the **Replacement Tree Size** (#6) can be used for the **Unit Tree Cost** (#10), or it can be set by the Regional Plant Appraisal Committee.

Emergency Removal of both
Trees 1 and 2
Approved 22SEP11

CITY OF SAUSALITO
TREE REMOVAL / ALTERATION PERMIT

APPLICATION

TRP 11-274

APPLICANT INFORMATION
Name Robert Stramon & Elizabeth Stramon

Address 49 Lowen Crescent Ave, Sausalito 94965

Day Phone 415-332-0434 Email Address rstramon@pacbell.net

PROPERTY OWNER INFORMATION (If different from Applicant)
Name Same

Address

Day Phone Email Address

TREE OWNER INFORMATION (If different from Property Owner)
If this application is for work on a tree located on property not owned by the applicant, provide the following information and attach a completed "Permission to Enter" Form. If this application is for work on a tree on City-owned property, describe the location and state "City property".

Name Same

Address

Day Phone Email Address

EXPLANATION OF PROPOSED WORK
Describe the extent of the proposed tree work.
Remove Live Oak Tree w/ Sudden Oak Tree Disease
At South East corner of our Property Abt 2nd
Live Oak next to Driveway & House

Explain why the work is needed.
S.O.D.
& Dead Tree

TREE #1

CITY OF SAUSALITO
TREE REMOVAL / ALTERATION PERMIT

If the tree will be removed, will a replacement tree be planted?
[ ] Yes – List species, location, and container size of replacement tree.

[✓] No – Explain why not.
ARBORIST RECOMMENDS C/ TREES.

APPLICANT'S AUTHORIZATION AND VERIFICATION
I (We) hereby grant permission for the Trees and Views Committee members and any City Officials to enter the property to inspect the tree(s) for making a decision on this Permit application. If a quorum (three or more members) of the Trees and Views Committee meets on the property, a publicly-noticed meeting is required and interested parties are allowed to enter the property during the publicly-noticed meeting. I (We) grant this permission subject to the following conditions. If none, check here [✓]

I (We) hereby declare under penalty of perjury under the laws of the State of California that the information in this application and the accompanying materials are true, complete, and correct.

SIGNATURES

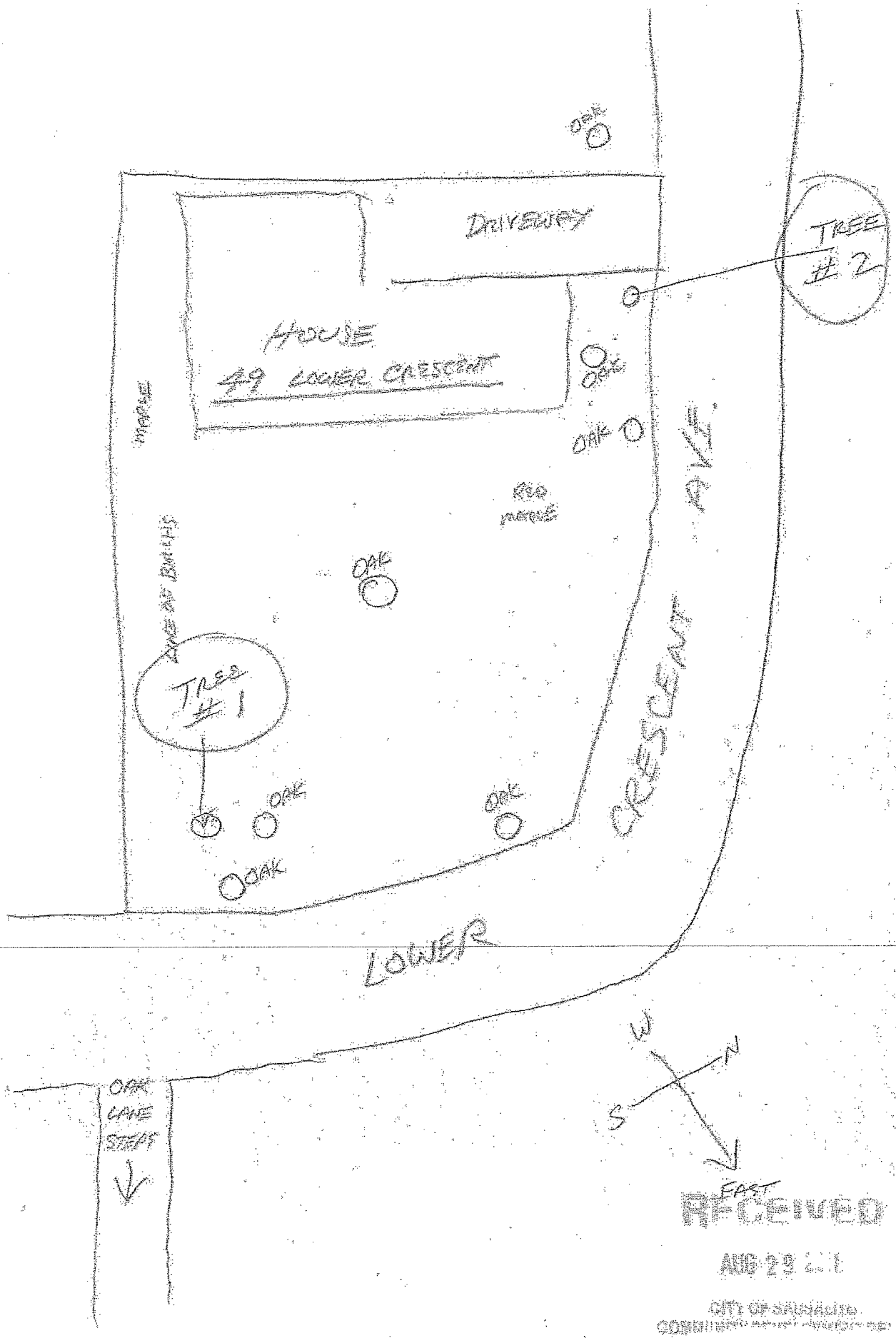
Applicant Date 8/25/11

Property Owner Date

For questions contact:
Community Development Department
420 Litho Street
Sausalito, CA 94965
415/289-4128 Voice
415/339-2256 Fax

Permit Fee Paid	$ 250.00
Receipt No.	92666
By (Initials)	
Date Stamp	

RECEIVED
AUG 29 2011
CITY OF SAUSALITO
COMMUNITY DEVELOPMENT DEPT.



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ASCA
AMERICAN SOCIETY of CONSULTING ARBORISTS

Ed Gurka, Consulting Arborist
Member, American Society of Consulting Arborists

Member, International Society of Arboriculture
Certified Arborist, Western Chapter, # 0418

August 14, 2011

ASSIGNMENT:

I received a call for a tree evaluation from Robert Stroman to assess two trees on his property. The Stroman's requested my services because of their concern regarding the trees' condition, if they are safe, and how to proceed if any risk is associated with their condition. This report will provide information on the trees' condition and make recommendations from a site inspection, the discoveries, and the risks that are associated.

OBSERVATIONS and DISCUSSIONS:

I arrived for the scheduled site visit July 12, 2011. Mr. Stroman led me to the trees of his concern.

Tree #1

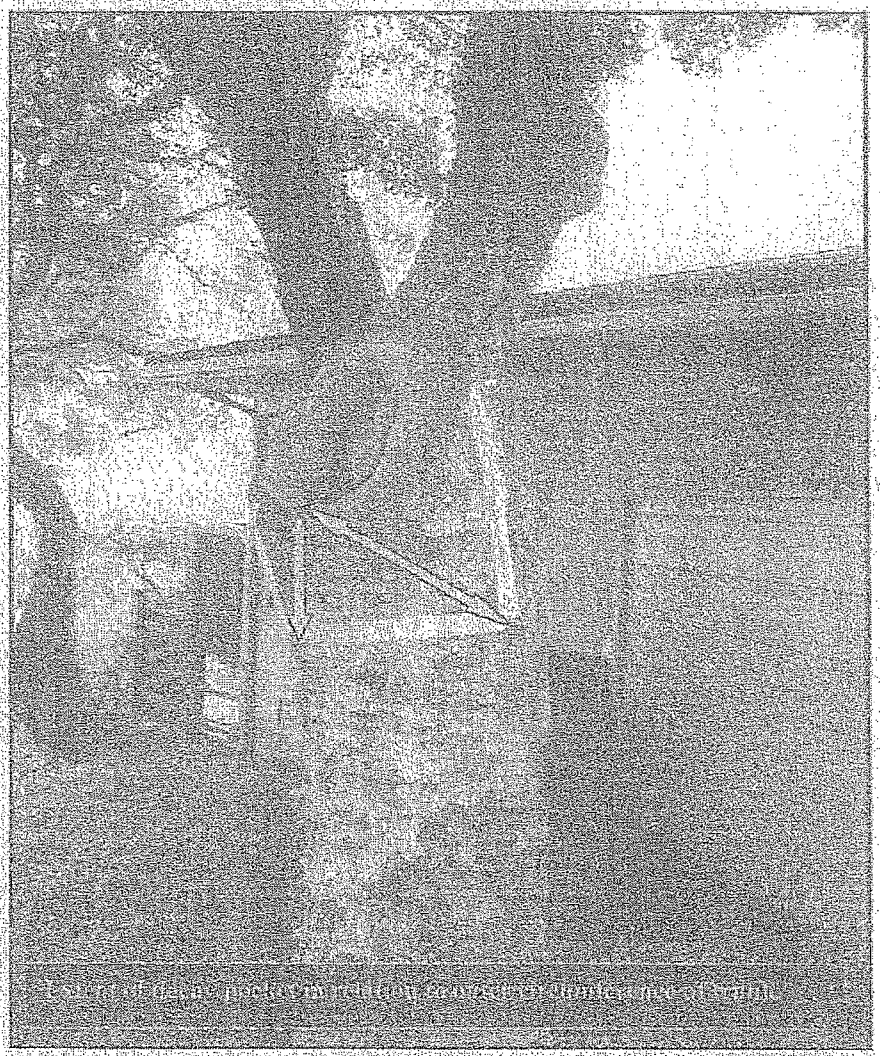
This tree is identified as a *Quercus agrifolia*, Coast Live Oak. The Quercus agrifolia is indigenous to Northern California.

The tree is located in the front yard on a bank above Lower Crescent Avenue. The tree is at the southeast corner of the property 7 feet from the south and east corner inside the property fence. It is 12 feet from the street curb with a height of 20 feet. Mr. Stroman stated a discoloration on the tree's lower trunk was discovered, and a tree company owner informed him that it appeared to be symptoms resembling Sudden Oak Disease, and he was referred to me. I inspected the tree, took a sample specimen, performed an odor test, measured and noted the location of the bark discoloration. The discoloration measured 36 inches in length and 8 inches in width, see photograph. The tree has a 40-degree lean towards Lower Crescent Avenue. The tree is marked with engineering tape around the lower trunk.

42" CBH

Tree #2

This tree is identified as a *Quercus agrifolia*, Coast Live Oak. The Circumference at Breast Height, (CBH) is 3.8 feet. This Oak tree is located on the North property boundary 12 inches from the curb of Lower Crescent Avenue opposite the neighboring property of 54 Lower Crescent Avenue. The tree is 5 feet left of the driveway at 49 Lower Crescent Avenue, and the canopy extends over the home. A large trunk cavity was noticed at 6 feet above grade. The cavity opening measured 11x6 inches. The interior of the cavity, (cavity pocket) measured 5 inches in depth from the lowest part of the cavity opening. The extent of the decay was masked with tape to indicate the extent of the decay in proportion to the overall circumference of the tree, see photograph at right.



RECOMMENDATIONS:

Coast Live Oak Tree #1

The tree has Sudden Oak Disease. The odor from the sample has a tannin odor that resembles a wine barrel odor. The discoloration is consistent with Sudden Oak Disease appearing on the lower trunk where the pathogens are in high concentrations. Experience and site inspections confirm the disease to be in the vicinity of and on a property, a short distance from this 49 Lower Crescent address. At this stage of the disease, the only course of action is to remove the tree. It is impossible to control or reverse the disease once established. Oak trees with this disease can fail suddenly without any indication of failure. The path of the failure is directly onto Lower Crescent Avenue. The recommendation is to remove the tree immediately. The removal permit for trees with Sudden Oak Disease should be waived because Sudden Oak Disease failures are unpredictable and trees with this disease can fail at any time.

Coast Live Oak Tree #2

This tree has an extensive decay pocket at a critical section with scaffold limb that supports the entire canopy. The dense wood tissue that provides support for a tree's canopy is compromised by at least 75 percent and there is only 25 percent of the support wood structure remaining. The most critical factor is that the heartwood which is the

densest wood that provides support for the canopy is compromised by the decay. The canopy is positioned over the home and will fall on the home when it fails. The recommendation is that the tree is removed as soon as possible to eliminate structure damage.

SUMMARY:

The recommendation is to remove the two Coast Live Oak trees Identified in this report. Coast Live Oak Tree #1 has Phytophthora ramorum, Sudden Oak Disease and this disease once established cannot be controlled or eliminated. Coast Live Oak Tree #2 has an extensive decay pocket that equals 80 percent of the total wood volume in the area of the trunk decay. The amount of decay cannot support the canopy over the home, and the decay will slowly increase until it cannot support the canopy. At 80 percent of total volume, this is very close to failure point.

Since Oak Disease is present in this area of Sausalito, treatments for Oak Disease are advised. The treatments to remaining Oak trees to increase the chance of further infections are necessary. The application recommended for prevention is Agri Fos and Pentrabark. The minimum scheduled applications are twice the first year in the spring and fall seasons and one application per year every year thereafter. Pruning of Oak trees should only be done in the summer months, and small 2-3-inch cuts are preferred to larger pruning cuts. Pruning equipment should be sterilized before moving from one Oak tree to another.

There are several Coast Live Oak trees on the property and replacement planting is not recommended. The canopy cover is adequate and other Coast Live Oak trees will fill the area of the two trees recommended for removal.

Contact Information:
Ed Gurka
Independent Services
197 Coleman Drive
San Rafael, CA. 94901
Mobile: 415 601-5337
Email: Egurka1@aol.com

Affiliations and Licenses:
International Society of Arboriculture, Certified Arborist # 418, 1984 to present.
American Society of Consulting Arborists, Member, 2000 to present.
California Department of Pesticide Regulation, Pest Control Advisor PCA 74846, 1989 to present.
City of Sausalito, Municipal Arborist, 1989-2004
Independent Consulting Arborist Services, 2004-present.

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Ed Gurka, Consulting Arborist
Member, American Society of Consulting Arborists

Member, International Society of Arboriculture
Certified Arborist, Western Chapter, # 0418

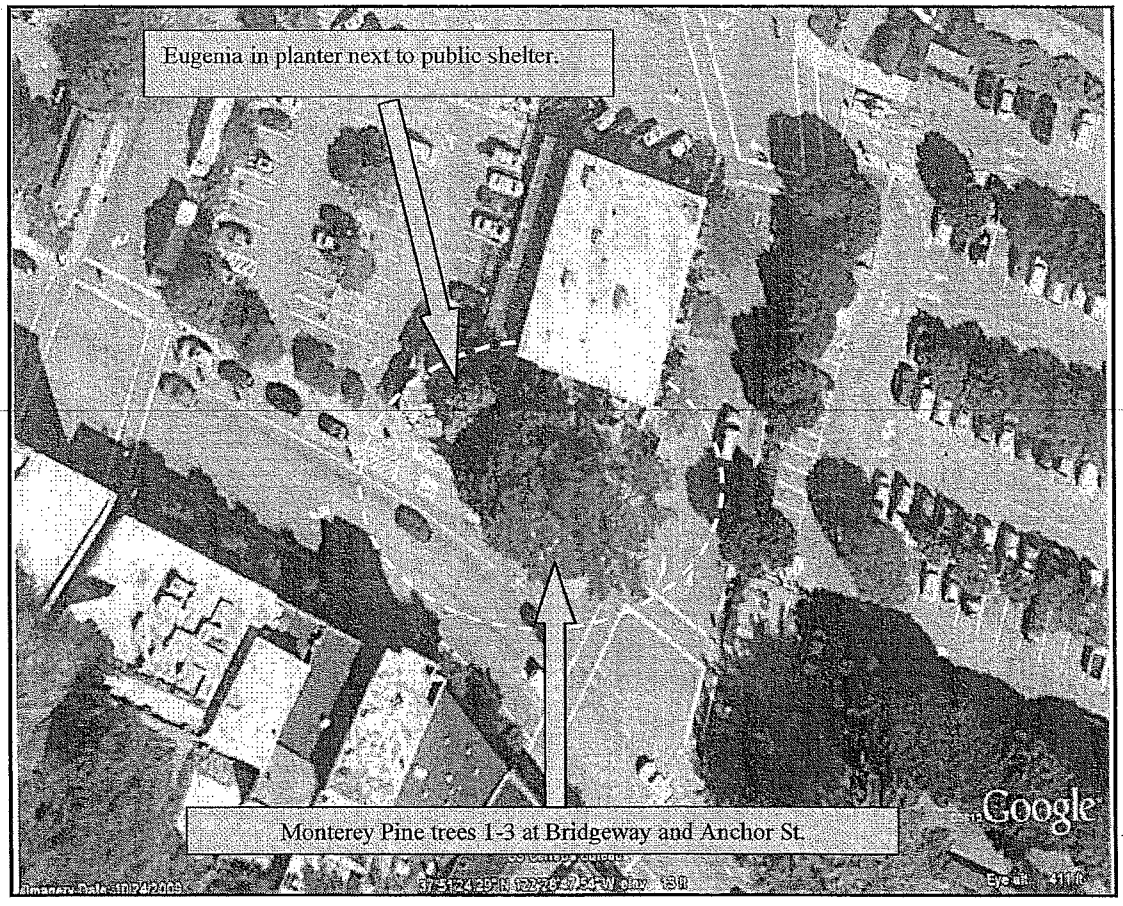
August 3, 2011

ASSIGNMENT:

I received a request to prepare an Arborist Report that will describe trees located within a proposed public works construction project on the public right of way in front of 750 Bridgeway, Sausalito, California. A report is necessary because the trees are located in the construction area and will affect the planning and outcome of the project. This report will provide information on the trees' condition, their compatibility for the location, and make a recommendation based on the information and knowledge of the species.

OBSERVATIONS and DISCUSSIONS:

There were a total of four site visits made to collect information in preparation for this report. The site visits were made July 7th, July 13th, and July 27th 2011. A preliminary appointment occurred June 27th, 2011, with the Sausalito Director of Public Works, Jonathan Goldman to provide information and trees within the project site. The second and fourth visits were on July 7th and July 27th to collect specific



information on these trees. The third visit was made July 13th, after a large limb failure on one of the trees.

The trees are identified as three mature *Pinus radiata*, Monterey Pine and a *Syzygium paniculatum,* Eugenia paniculata, Australian Brush Cherry. The three Monterey Pine trees are located in a planter area bordered by a brick plaza and Bridgeway sidewalk. The Eugenia tree is located just to the left in a small planter that is next to and below the ramp leading from the bus shelter portion of the structure to the public restrooms. See aerial photograph page 1. The circle indicates the three pine trees in the planter and the Eugenia tree by the bus stop and restrooms.

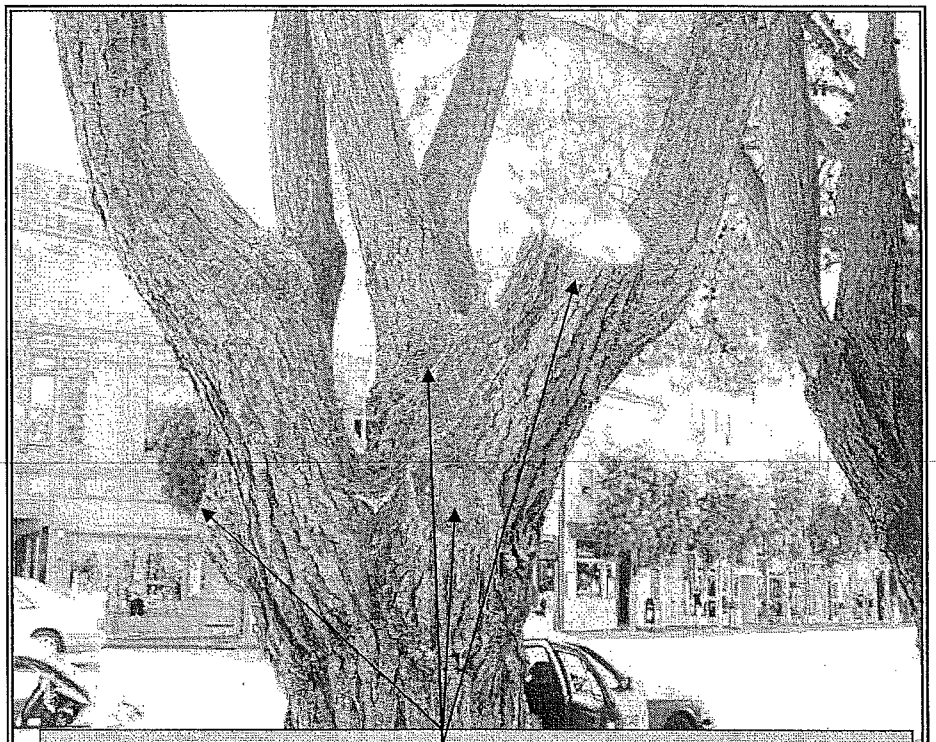
The Monterey Pine trees are numbered M. Pine 1-3 with aluminum tree tags attached to the trunks beginning from the Tree closest to Anchor Street and proceeding west towards the public restrooms and bus shelter. They are described as follows:

Monterey Pine tree #1

Circumference measurement at just below the lowest attachment point is 12.9 feet. Measuring at this location gives a more accurate measurement of the trunk size than if taken where limb attachments are because the attachments bulge there. The status of Monterey Pine trees is described as **undesirable** in the Sausalito Trees and Views Preservation Ordinance, 11.12.030, DEFNITIONS, Undesirable Tree. The tree has several larger diameter pruning cuts including one recent event when a large-diameter limb (16 inches in diameter) fell and damaged a street tree located on Anchor Street approximately 30 feet away from the trunk of the Monterey Pine. A count of remaining and removed limbs was made during the last site visit July 27, 2011. On this tree, there are five of eleven limbs remaining. A total of six large-diameter limbs were removed because of limb breakage. Two of the remaining limbs have very acute angles at their point of attachment to the trunk.

At the point of attachment, the two limbs have a condition referred to in arboricultural terms as bark inclusion, (bark that becomes embedded in a crotch (union) between branch and trunk or between codominant stems; causing a weak structure, ISA Glossary of Arboricultural Terms.)

This condition presents a very high-risk failure of one of the two limbs because of the extreme pressure of the two limbs against each other. The brick plaza where these trees are located is a very high density of pedestrian traffic. The bank entrance is located here, and the plaza is the location of a self-service bicycle rental location.



Monterey Pine tree #1 illustrating multiple pruning cuts to remove 6 broken limbs, five limbs remain two have included bark. Limb attachments are all in one location indicates the tree was topped at when young.

A close examination of the lower trunk revealed Pine Bark Beetle attacks very likely to be Red Turpentine Beetle, an important pest that introduces Pine Pitch Canker especially common in Monterey Pine trees. Bark Beetle is an indication

of environmental related stress. Monterey Pine trees are more vulnerable to beetle attacks when weakened by unfavorable environmental conditions.

Monterey Pine Tree #2

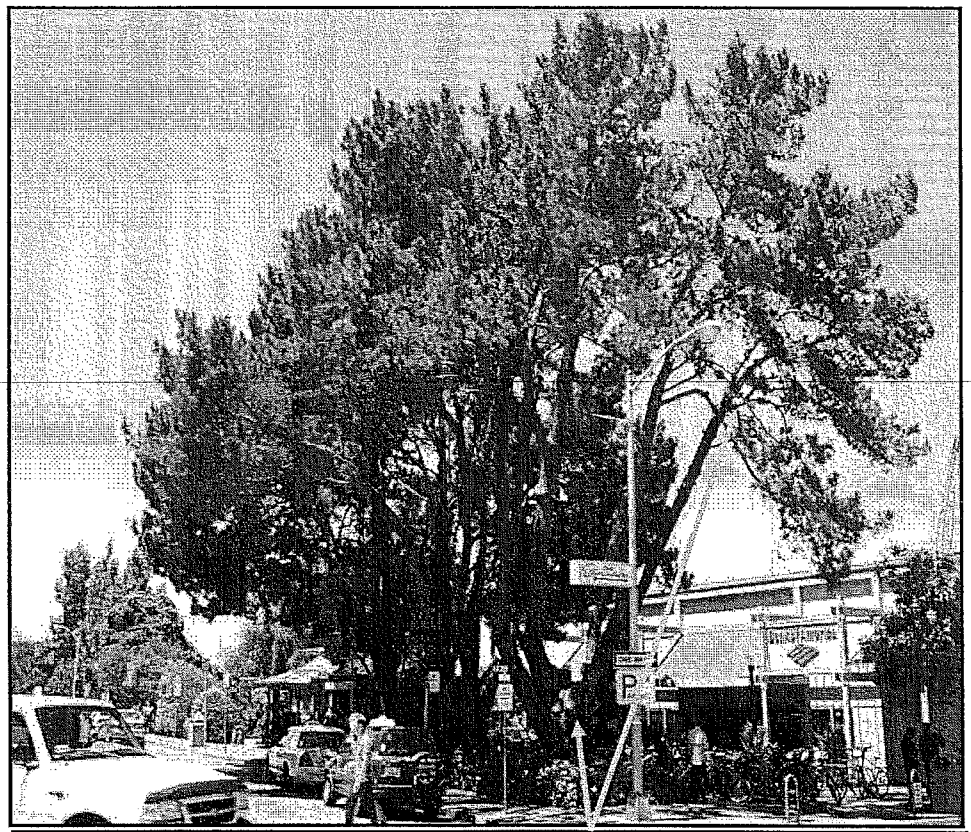
The trunk circumference is 8.75 feet. The height is 40.5 feet with a canopy spread of 57 feet. The live crown ratio is 30 percent. The tree has very sparse foliage because it is competing with the two other Monterey Pines to either side. A rust color sap was visible on the lower trunk. The tree has signs of a fungal disease known as Western Pine Rust. This fungal disease is not treatable and will continue to reduce the health of the tree. The status of Monterey Pine trees is described as **undesirable** in the Sausalito Trees and Views Preservation Ordinance, 11.12.030, DEFNITIONS, Undesirable Tree.

Monterey Pine Tree #3

The trunk circumference is 12.6 feet measured at 24 inches above grade. Height is 44.5 feet, and canopy spread is 57 feet. The canopy structure consists of the main trunk, which divides into six main scaffold limbs attached to the main trunk beginning at 32 inches above grade to a height of 6 feet above grade. The condition rating is 50 percent of normal. The status of Monterey Pine trees is described as **undesirable** in the Sausalito Trees and Views Preservation Ordinance, 11.12.030, DEFNITIONS, Undesirable Tree.

***Syzygium paniculatum*, Eugenia paniculata, Australian Brush Cherry**

The tree consists of 4 main upright stems that originate at four feet above grade. The average Circumference at Breast Height (CBH) is 24 inches the combined CBH is 8.1 feet. Tree height is 35 feet and canopy spread is 26 feet. The tree is in good condition located in a small planter bed that is 26 inches in width and 16 feet in length, directly next to a walkway that leads to a multi-use building that is the Bus Shelter and Public Restrooms. The restrooms and building are planned to be renovated soon and the tree is located within the path of the proposed renovation. Removing and transplanting the tree would be a difficult labor intensive job and transplant survival is unpredictable. The impact from construction work is unknown at this point. The removal of the main root system of this tree would produce a negative impact and cause a long-term decline.



Monterey Pine #1 has large extended scaffold limb leaning over a brick Plaza. This tree has several large diameter pruning cuts due to limb failures caused by poor structure the result of topping when the tree was in its early growth stage.

RECOMMENDATIONS:

The three Monterey Pine trees should be considered in the renovation plan for the area. The three trees have developed poor canopy structure because of topping cuts when they were young, Monterey Pine trees. They genetically belong to a group of trees with an excurrent pattern, (tree growth habit

characterized by a central leader and a pyramidal crown.) Topping pruning cuts have created a tree with multiple leaders and all origination at the same location on the trunk.

These multiple leaders all compete for space and eventually fail because of their structure. In a location with infrequent traffic, risk would be reduced because potential for injury would be limited. The location of these Pine trees on Bridgeway in the down town business district has constant activity, the frequency of activity, the bicycle rental station, bank, bus shelter, public restrooms, and tourist traffic increase the risk of personal injury exponentially when limb failures occur. There are a poor canopy structure and history of limb failure, especially on Monterey Pine tree #1. There is very little that can be done to correct the trees' structure at this stage of the trees' growth. All three pines have either Pine pitch canker or Western Pine Rust fungal diseases most likely introduced by Pine Beetles. These compound conditions will very likely cause more limb failure that may cause personal injury if the heavy weight limbs strike a pedestrian. Monterey Pine tree #1 should be removed immediately. The Bridgeway corridor is a windy location and wind influence on heavy end-weighted limbs with poor attachments increases limb failure. The two limbs with bark inclusion are high failure potentials. These multiple factors are the basis of the recommendation for removal.

The three Monterey Pine trees are a group of trees that developed to maturity together. Removal of one will impact the remaining two trees. These two trees have the same structure and heavy end weight on each limb. Based on these factors and the fungal symptoms, removal of the two remaining trees is recommended.

The Eugenia tree would be difficult to preserve if proposed construction work requires additional space for the bus shelter and public restroom expansion. The tree is directly against the existing walkway, and any change would require removal of the tree. It would be more practical to replace the tree because relocating the tree would not have successful results.

SUMMARY:

The information and recommendations collected for this report are made to provide an independent study to assist with the decision for the trees as a component of the project. The green space that the Monterey Pine trees create is a benefit to the Sausalito Down Town Business District. If the recommendation made in this report is accepted, and decision granted for removal the approval process should recommend replacement plants with equal mature canopy cover as a requirement for the project. Replacement trees will require additional site improvements to be successful. Soil analysis and addition to existing soil should have adequate organic matter and amendments to be compatible with the surrounding soil. Irrigation to establish newly planted trees is necessary for proper growth and development. Training young trees for structure and health is necessary to grow into maturity. Tree species, container size, and location are necessary for the tree replacement plan.

Suggestions for Replacement Trees:

In Ground Installations:

Botanical Name	Common Name	Comments
Tristiana laurina	Tristiana	Evergreen tree, standard growth
Metrosideros excelsus	New Zeland Christmas Tree	Evergreen, ht. 30 ft. spread 35ft.
Pinus nigra	Austrian Pine	Evergreen ht. 35-50ft. spread25-40 ft
Melaleuca leucadendron	Cajeput or *Paper* bark tree	Evergreen ht. 40ft. spread 15ft.
Ceratonia siliqua	Carob Tree	Evergreen, ht. 20-45ft. spread 20-55ft.
Pyrus calleryana, 'Chanticleer'	Pyrus	Deciduous ht.40 spread 16 ft.
Maytenus boaria	Mayten Tree	Evergreen, ht.20-30 spread 10-20

Container Installations suitable for 24 inch box:

Botanical Name	Common Name	Comments
Podocarpus gracilior	Fern Pine	Native to East Africa to 60 ft. 40 ft if in container.
Thuja occidentalis	American Arborvitae	Height 40-60 ft.
Cupressus sempervirens	Italian Cypress	narrowly columnar to 60 ft in containers 40 ft. 5 varities depend on shade of green.
Cupressocyparis leylandii	Laeyland Cypress	20-25 ft. tall x 6-8 ft wide.

Contact Information:

Ed Gurka
Independent Services
197 Coleman Drive
San Rafael, CA. 94901
Mobile: 415 601-5337
Email: Egurka1@aol.com

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Independent Consulting Arborist Services, 2004-present.

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