#4d. Woodrats

#4e. Feb - Aug. Birds Survey Within 2 Weeks Before Tree Remo.

#4f. Bat Study April - August

4j. - Erosion Plan Done

?? 4m - Geo - Lots 1-4 Prior to Grading
3 & 4 Done of Bio Plans
Bullet #3

4o - Prior to grading - Need Geo Sign-off on GRD Permit

Not applicable for Lots 1-4
4p - No Noi Needed -

OK Need to do
4t - Noise Notification Needed 200' of Work area.

N/A Tree To Remove
4w - Need Truck Route To Avoid Commute Peak Hours.

change
17) 12 grading permits issued ??

change
(19. d.) No Tree Removal ~~GRD Issues~~ Until Grading Permit issued.
also see 4f for B10C-2c

yes
21.) Tree Protection in place before grd issuance

4-d - Survey Woodrats - 30 days before
4-e - " Bird Nests - 2 weeks "
4-f - " Bats - ??
4-g - " Frogs - Just Before Start

OK J.M per "Minor Modification"

4-h - Confirm Tree With ~~Count~~ Lot 4 Needs RM Permit For Lot 4 Tree Removal
Tree Replacement To Be On A 2:1 Ratio

4k - Before Bld Issuance. Planning Approval
4m - Geo - Bullets 3 & 4 & 6 Geo all 3
4n - Geo & 4r Geo

4p - NOI & SWPPP

4v - Soil samples

4w - To Planning

17b - individual grading permits -

Read again

19a & 19d
19a - Geo 3, Trans - 1 Bio 2a, b, c, d 5b & 5c & Hazmat 3
19d - Bio 2-C

~~21 - Needs Tree Removal RM Permit for Lot 4~~ No

#22 - Confirm Erosion Control In Place.

#24 - Letter For Grading Schedule

#25 - Confirm No NOI & SWPPP Not Required

#35 - Details For Grading, etc.

#53 - As Built Grading (Letter)

#57 - Grading In R/W, etc.

2. This subdivision approval is valid for two years, during which time a Final Map shall be filed and recorded. An extension to this time period in accordance with Section 7013.5.c of the Subdivision Regulations may be issued by the Planning and Building Department upon written request and payment of any applicable extension fees (if required).

3. The Final Map shall be recorded pursuant to the plans approved by the Board of Supervisors; any deviation from the approved plans shall be reviewed and approved by the Community Development Director. Revisions or modifications not in compliance with parcel size and configuration as approved by the Board of Supervisors and applicable conditions of approval (including but not limited to) Condition Nos. 8, 9 and 11 shall be deemed a major modification and shall be subject to review and approval by the Planning Commission at a public hearing.

4. The property owner shall comply with all mitigation measures as revised and listed below (based on the Mitigation Monitoring and Reporting Program (MMRP) incorporated within the Final EIR and made available to the public on January 4, 2010). When timing has not been specified below, then mitigation timing and monitoring shall be as specified in the MMRP. The applicant shall enter into a contract with the San Mateo County Planning and Building Department for all mitigation monitoring for this project prior to the issuance of any grading permit "hard card" for the project. The fee shall be staff's cost, plus 10 percent, as required in the current Planning Service Fee Schedule. Planning staff may, at their discretion, contract these services to an independent contractor at cost, plus an additional 10 percent for contract administration.

   a. **Improvement Measure AES-1a:** The Project Applicant shall provide "finished floor verification" to certify that the structures are actually constructed at the height shown on the approved plans. The Project Applicant shall have a licensed land surveyor or engineer establish a baseline elevation datum point in the vicinity of the construction site. Prior to the below floor framing inspection or the pouring of concrete slab for the lowest floors, the land surveyor shall certify that the lowest floor height as constructed is equal to the elevation of that floor specified by the approved plans. Similarly, certifications of the garage slab and the topmost elevation of the roof are required. The applicant shall provide the certification letter from the licensed land surveyor to the Building Inspection Section.

   b. **Improvement Measure AES-1b:** The Project Applicant shall plant a total of eight (8) native trees (minimum 24-gallon each), two directly in front of each home on Lots 5 through 8 to soften and screen views of the new homes from off-site locations. These trees will be in addition to the fourteen (14) required replacement trees (15-gallon size). Of the 14 replacement trees, three (3) trees shall be planted at the back of each of the homes on Cowpens Way and Cobblehill Place (three homes, nine (9) trees total). The applicant shall plant the remaining five (5) trees in the right side yard of Lot 8 in order to provide screening of this residence and other residences on Ticonderoga Drive as viewed from Lakewood Circle. All trees or replacement trees

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    a. The "hard card" for grading of improvements related to the subdivision (including a sidewalk for Lots 5-8 and all shared access ways) may be issued after the final approval of this project, subject to the approval of the Planning and Building Department's Geotechnical Engineer, Department of Public Works and the Current Planning Section, **and subject to the conditions below**.

    b. The "hard card" for grading of improvements related to the residences (the preparation of building sites and yard areas) can only be issued simultaneously or after the issuance of a building permit for the construction of each new residence, subject to the approval of the Planning and Building Department's Geotechnical Engineer, Department of Public Works and the Current Planning Section.

18. Lots 1-4: Prior to issuance of grading permits, BKF shall prepare cross sections through each lot illustrating existing slopes, proposed final slopes, areas of fill placement and the stepping of houses across the slope. No fill placement will be permitted downslope of proposed residences (with the exception of fill as shown on the grading plans as approved by the Board of Supervisors).

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    a. Grading Permit hard card cannot be issued until a design-level geotechnical investigation of the site has been performed and submitted to the Planning and Building Department's Geotechnical Section and evidence of completion of Mitigation Measures GEO-3; TRANS-1; BIO-2a through 2d, 5b and 5c; and HAZMAT-3 has been submitted and approved by the project planner.

    b. Grading Permit hard card cannot be issued for Lot 8 until evidence of completion of Mitigation Measures BIO-6 has been submitted and approved by the project planner.

    c. Grading Permit hard card cannot be issued for Lot 11 until evidence of completion of Mitigation Measures BIO-2d and 5a has been submitted and approved by the project planner.

    d. Trees shall not be removed until evidence of implementation of Mitigation Measure BIO-2c has been submitted and approved by the project planner and the Grading Permit hard card has been issued.

required by this condition shall be maintained in perpetuity by the respective property owner in order to maintain screening of the project.

c. **Improvement Measure AES-2:** Construction contractors shall minimize the use of on-site storage and when necessary store building materials and equipment away from public view and shall keep activity within the project site and construction equipment laydown areas.

d. **Mitigation Measure BIO-2a:** No earlier than 30 days prior to the commencement of construction activities, a survey shall be conducted to determine if active woodrat nests (stickhouses) with young are present within the disturbance zone or within 100 feet of the disturbance zone. If active woodrat nests (stickhouses) with young are identified, a fence shall be erected around the nest site adequate to provide the woodrat sufficient foraging habitat at the discretion of a qualified biologist and based on consultation with the CDFG. At the discretion of the monitoring biologist, clearing and construction within the fenced area would be postponed or halted until young have left the nest. The biologist shall serve as a construction monitor during those periods when disturbance activities will occur near active nest areas to ensure that no inadvertent impacts on these nests will occur.

If woodrats are observed within the disturbance footprint outside of the breeding period, individuals shall be relocated to a suitable location within the open space by a qualified biologist in possession of a scientific collecting permit. This will be accomplished by dismantling woodrat nests (outside of the breeding period), to allow individuals to relocate to suitable habitat within the adjacent open space.

e. **Mitigation Measure BIO-2b:** No earlier than two weeks prior to commencement of construction activities that would occur during the nesting/breeding season of native bird species potentially nesting/roosting on the site (typically February through August in the project region), a survey for nesting birds shall be conducted by a qualified biologist experienced with the nesting behavior of bird species of the region. The intent of the survey would be to determine if active nests of special-status bird species or other species protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code are present in the construction zone or within 500 feet of the construction zone. The surveys shall be timed such that the last survey is concluded no more than two weeks prior to initiation of construction or tree removal work. If ground disturbance activities are delayed, then an additional pre-construction survey shall be conducted such that no more than two weeks will have elapsed between the last survey and the commencement of ground disturbance activities.

If active nests are found in areas that could be directly affected or subject to prolonged construction-related noise, a no-disturbance buffer zone shall be created around active nests during the breeding season or until a qualified biologist determines that all young have fledged. The size of the buffer zones and types of con-

Pete Bentley - Fwd: Rats nest

From: <JTUTTLEC@aol.com>
To: <pbentley@smcgov.org>
Date: 10/29/2013 10:13 AM
Subject: Fwd: Rats nest

From: meisel@traenviro.com
To: JTUTTLEC@aol.com
Sent: 10/28/2013 10:53:12 P.M. Pacific Daylight Time
Subj: RE: Rats nest

Hi Jack,

The mitigation measure in your condition of approval does not require that the nests be relocated. It is not the breeding season, and thus nests can simple be dismantled.

Right now I don't have confirmation if we are meeting with Ralph tomorrow or not. I could meet at noon for about an hour.

Best,

Autumn Meisel

Senior Biologist

TRA Environmental Sciences, Inc.

(415) 254-0805

From: JTUTTLEC@aol.com [mailto:JTUTTLEC@aol.com]
Sent: Monday, October 28, 2013 1:38 PM
To: Autumn Meisel
Subject: Fwd: Rats nest

Autumn,

This is a good point. The entire project is almost 100 acres. This immediate project is less than 1 acre. Please call me so that we can talk about proceeding.

Jack

From: ralph@ralphosterling.com
To: jtuttlec@aol.com
Sent: 10/28/2013 1:20:05 P.M. Pacific Daylight Time
Subj: Fwd: Rats nest

Another thing to look at is how many others are located on the entire property. Probably lots and if so, this may be a "minor take" and removal of the nests might be permitted. She should follow up on that also.

RO

Ralph Osterling
President
Registered Professional Forester No. 38
ralph@ralphosterling.com

Ralph Osterling Consultants, Inc.
1650 Borel Place, #204
San Mateo, California
94402

(650) 573-8733 office
(415) 860-1557 cell
(650) 345-7890 fax



Begin forwarded message:

From: Ralph Osterling <ralph@ralphosterling.com>

Subject: **Rats nest**

Date: October 28, 2013 1:07:54 PM PDT

To: Jack Chamberlain <jtuttlec@aol.com>

Jack

The state does have some sort of protocol that probably should be followed. I think it is important to see if they are active nests. Per our conversation, I have a remote camera that will record motions to see if they are running around. She did not make mention of any fresh scat or droppings from them. If moving, monitoring or other activities are required, we need to do so before they decide to make babies.

RO

Ralph Osterling
President
Registered Professional Forester No. 38
ralph@ralphosterling.com

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shall be notified prior to the start of any excavation in areas containing naturally occurring asbestos.

w. **Improvement Measure TRANS-1:** The Project Applicant shall prepare and submit a Construction Management Plan that will, among other things, require that all truck movement associated with project construction occur outside the commute peak hours.

x. **Mitigation Measure TRANS-2:** The Project Applicant shall be required to pay for the installation of advisory traffic signs on Ticonderoga Drive in the vicinity of the proposed homes if determined necessary by the County of San Mateo Department of Public Works.

y. **Mitigation Measure UTIL-1:** The Project Applicant shall mitigate the project-generated increase in sewer flow such that there is a "zero net increase" in flow during wet weather events, by reducing the amount of existing Inflow and Infiltration (INI) into the Crystal Springs County Sanitation District (District) sewer system. This shall be achieved through the construction of improvements to impacted areas of the sewer system, with construction plans subject to District approval. Construction of improvements, as approved by the District, shall be completed prior to the start of the construction of the residences. In addition, as project sewage will be treated by the City of San Mateo's Wastewater Treatment Plant, the Project Applicant shall submit payment of the City of San Mateo Wastewater Treatment Plant Expansion development impact fee to the City of San Mateo. This fee is based on the number of bedrooms in each residential unit and is calculated at the time of the final plans, using the City's fee schedule in effect at the time of the building permit application.

prior to BO Issuance NOT Grading permit

The following conditions of approval document points of discussion among the County, the applicant and neighborhood groups:

5. This project will be implemented as proposed, mitigated, conditioned, and approved by the Board of Supervisors, regarding parcel size and configuration, home sizes, home locations, architectural design, style and color, materials, height and foundation design. Prior to the issuance of a Certificate of Occupancy for any residence, the applicant shall provide photographs to the Current Planning Section staff to demonstrate utilization of the approved colors and materials. Materials and colors shall not be highly reflective.

6. Colors and Materials: The following language shall be recorded as a deed restriction on the applicable parcels when they are sold:

   a. Lots 1 through 11: Development shall employ colors and materials which blend in with, rather than contrast with, the surrounding soil and vegetative cover of the open space parcel. All exterior construction materials shall be of deep earth hues such as

b. A dust palliative shall be applied to the site when required by the County. The type and rate of application shall be recommended by the soils engineer and approved by the Department of Public Works, the Planning and Building Department's Geotechnical Section, and the Regional Water Quality Control Board.

29. Final approval of all Grading Permits is required. For final approval of the Grading Permits, the applicant shall ensure the performance of the following activities within thirty (30) days of the completion of grading at the project site:

a. The engineer shall submit written certification that all grading has been completed in conformance with the approved plans, conditions of approval/ mitigation measures, and the Grading Regulations, to the Department of Public Works and the Planning and Building Department's Geotechnical Section.

b. The geotechnical consultant shall observe and approve all applicable work during construction and sign Section II of the Geotechnical Consultant Approval form, for submittal to the Planning and Building Department's Geotechnical Engineer and Current Planning Section.

Other Planning and Building Department Project Conditions

30. The color and materials of the bio-retention planters for all homes shall match the surrounding native landscaping, such that planters will blend with the surrounding environment.

31. Building plans for each residence shall demonstrate compliance with the California Water Efficient Landscape Ordinance (AB 1881), prior to the Current Planning Section's approval of the building permit application for each residence.

32. The applicant and contractors must be prepared to carry out the requirements of California State law with regard to the discovery of human remains during construction, whether historic or prehistoric. In the event that any human remains are encountered during site disturbance, all ground-disturbing work shall cease immediately and the County coroner shall be notified immediately. If the coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within 24 hours. A qualified archaeologist, in consultation with the Native American Heritage Commission, shall recommend subsequent measures for disposition of the remains.

33. The property owner is responsible for the annexation of the project site to County governed special districts that will provide utility or other service. The project applicant is responsible for application and fees to the San Mateo Local Agency Formation Commission.

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21. This permit does not authorize the removal of any additional trees with trunk circumference of more than 55 inches beyond those approved by the Board of Supervisors. Such activity would require application for and issuance of a separate Resource Management (RM) Permit. All trees not approved for removal under this permit shall be protected during grading operations. Prior to the issuance of the Grading Permit hard card, the applicant shall implement the following tree protection plan:

    The applicant shall establish and maintain tree protection zones throughout the entire length of the project. Tree protection zones shall be delineated using 4-foot tall orange plastic fencing supported by poles pounded into the ground, located as close to the driplines as possible while still allowing room for construction/grading to safely continue. The applicant shall maintain tree protection zones free of equipment and materials storage and shall not clean any equipment within these areas. Should any large roots or large masses of roots need to be cut, the roots shall be inspected by a certified arborist or registered forester prior to cutting. Any root cutting shall be monitored by an arborist or forester and documented. Roots to be cut should be severed cleanly with a saw or toppers. Normal irrigation shall be maintained, but oaks should not need summer irrigation. The above information shall be on-site at all times.

22. Prior to the issuance of the grading permit "hard card," the applicant shall schedule an erosion control inspection by Current Planning Section staff to demonstrate that the approved erosion control plan has been implemented. The applicant is responsible for ensuring that all contractors minimize the transport and discharge of pollutants from the project site into local drainage systems and water bodies by adhering to the San Mateo Countywide Water Pollution Prevention Program's (SMCWPPP) "General Construction and Site Supervision Guidelines," including:

    a. Stabilizing all denuded areas and maintaining erosion control measures continuously between October 15 and April 15. Stabilizing shall include both proactive measures, such as the placement of straw bales or coir netting, and passive measures, such as minimizing vegetation removal and revegetating disturbed areas with vegetation that is compatible with the surrounding environment.

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x. **Mitigation Measure TRANS-2:** The Project Applicant shall be required to pay for the installation of advisory traffic signs on Ticonderoga Drive in the vicinity of the proposed homes if determined necessary by the County of San Mateo Department of Public Works.

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Called Roland 4/12/11 and read him this condition

The following conditions of approval document points of discussion among the County, the applicant and neighborhood groups:

5. This project will be implemented as proposed, mitigated, conditioned, and approved by the Board of Supervisors, regarding parcel size and configuration, home sizes, home locations

20 of 32

start | Ti... | 3 N... | Fr... | A... | Search Desktop

No sure they are under the same belief

UTIL 1 - says construction (no reference to paying instead. & also says pay City of San Mateo in addition to construct.

Suggested Roland talk to Mark Chow or Anne Stillman

Tuesday, Apr 12, 2011 11:11 AM

Notify neighbors of construction
↳ Notice

5/16/11

Parcel Map → R. flags
This week

BLD permits → in 30 days (sooner? Outside plan check)

Printer-Friendly Caltrain Schedule

Southbound - Weekday Service

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SAN FRANCISCO to SAN JOSE / GILROY - Southbound — WEEKDAY SERVICE

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	2:12	-	3:12	22nd Street	-	-	-	4:32	-	-	-	-	5:32	-	-	-	6:32	-	-	7:35	8:45	9:45	10:45	12:06
	2:17	-	3:17	Bayshore	-	-	-	4:40	-	-	-	-	5:40	-	-	-	6:40	-	-	7:40	8:50	9:50	10:50	12:11
	2:23	-	3:23	So. San Francisco	-	-	-	4:48	-	5:08	-	-	5:48	-	6:08	-	6:48	-	7:08	7:46	8:56	9:56	10:56	12:17
	2:27	2:51	3:27	San Bruno	3:51	-	4:33	4:52	-	-	-	5:34	5:52	-	-	-	6:52	-	-	7:50	9:00	10:00	11:00	12:21
	2:31	2:55	3:31	Millbrae	3:55	4:25	-	4:56	4:49	5:14	5:30	-	5:56	5:49	6:14	6:30	6:56	6:49	7:14	7:54	9:04	10:04	11:04	12:25
	2:35	2:59	3:35	Burlingame	3:59	-	4:38	5:00	-	-	-	5:39	6:00	-	-	-	7:00	-	-	7:58	9:08	10:08	11:08	12:29
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	2:44	3:06	3:44	Hillsdale	4:06	4:33	4:47	5:11	-	5:22	5:38	5:48	6:11	-	6:22	6:38	7:11	-	7:22	8:07	9:17	10:17	11:17	12:38
	2:47	3:09	3:47	Belmont	4:09	-	-	5:14	-	-	-	-	6:14	-	-	-	7:14	-	-	8:10	9:20	10:20	11:20	12:41
	2:50	3:12	3:50	San Carlos	4:12	-	4:51	5:18	-	-	-	5:52	6:18	-	-	-	7:18	-	-	8:13	9:23	10:23	11:23	12:44
	2:55	3:17	3:55	Redwood City	4:17	-	-	5:22	5:06	5:28	-	-	6:22	6:06	6:28	-	7:22	7:06	7:28	8:18	9:28	10:28	11:28	12:49
	3:00	3:22	4:00	Menlo Park	4:22	-	-	5:28	-	5:34	-	-	6:28	-	6:34	-	7:28	-	7:34	8:23	9:33	10:33	11:33	12:54
	3:03	3:25	4:03	Palo Alto	4:25	4:44	5:01	-	5:12	5:38	5:49	6:02	-	6:12	6:38	6:49	-	7:12	7:38	8:26	9:36	10:36	11:36	12:57
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	3:15	3:37	4:15	Mountain View	4:37	4:51	5:11	5:36	-	5:50	5:56	6:12	6:36	-	6:50	6:56	7:36	-	7:50	8:38	9:48	10:48	11:48	1:09
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	3:24	3:46	4:24	Lawrence	4:46	-	-	-	-	6:01+	-	-	6:43	-	7:01+	-	-	-	7:59	8:47	9:57	10:57	11:57	1:18
	3:29	3:51	4:29	Santa Clara	4:51	-	-	5:47	-	6:08+	-	-	6:48	-	7:08+	-	7:47	-	8:04	8:52	10:02	11:02	12:02	1:23
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			5:17	San Martin						6:54			7:34											
			5:30	Gilroy						7:07			7:47									PM	AM	

Local Limited Baby Bullet 6:45 ▸ 6:51 / 7:12 ▸ 7:18 Timed Transfers - Train bypasses station. + Train may leave up to 5 minutes early.

EFFECTIVE AUGUST 31, 2009

08.09 - RJC

The Chamberlain Group
655 Skyway #230
San Carlos, CA. 94070
650 595-5582 fax 650 595-5066

facsimile transmittal

To: Camille Leung Fax: 363-4849

From: Sylvia Nelson Date: 5-26-11

Re: Highlands Pages: 3

CC:

☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

As per your request.

Sy

HIGHLANDS RECREATION DISTRICT EST. 1957

Highlands Recreation District

1851 Lexington Avenue • San Mateo, CA 94402
(650) 341-4251 • Fax (650) 349-9627
www.highlandsrec.ca.gov
"Where Family Traditions Begin"

Ticonderoga Partners, LLC
655 Skyway, Suite 230
San Carlos, CA 94070

May 26, 2011

To Whom It May Concern:

The Highlands Recreation District is requesting the use of the empty lot next to the Highlands Recreation Center parking lot to stage soil removal from the Landslide Repair Project.

The soil would be moved in stages beginning on Friday, May 27. All the soil would be removed from the empty lot by Friday, June 3.

While the soil is on the empty lot, it will be covered with a tarp and erosion control measures will taken.

Hold Harmless
Highlands Recreation District agrees to indemnify, defend, and hold harmless Ticonderoga Partners, LLC and its officers, directors, agents, and employees from and against any and all demands, claims, and damages to persons or property, losses and liabilities, including reasonable attorney's fees, arising out of or caused by Highland Recreation District officers, employees negligence or willful misconduct.

Please let me know if you have any questions.

Sincerely,

Margaret Glomstad
General Manager

THE

CHAMBERLAIN GROUP

May 26, 2011

Margaret Glomstad
General Manager
Highlands Recreation District
1851 Lexington Avenue
San Mateo, CA 94402

Dear Margaret:

We are in receipt of your letter dated May 26, 2011. We would be happy to help you facilitate your repair project. You may pile the dirt on our property which is adjacent to the Recreation Center on Lexington Avenue.

As you have stated in your letter, you must comply with the County of San Mateo's erosion control ordinance..

We do accept the hold harmless in the name of Ticonderoga Partners LLC.

Please notify us if you will be needing to use this property longer than June 3rd.

We wish you good luck & a speedy completion of your project

Cordially,

Jack T. Chamberlain
Sylvia Nelson
Ticonderoga Partners LLC

655 SKY WAY, SUITE 230 · SAN CARLOS, CA 94070
TELEPHONE 650 / 595-5582 · FAX: 650-595-5066

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Contact Details:		☑ Please check to confirm or give actual data:
Record Nr:	5-232401294	☐
Company:	San Mateo Cnty Bldg Inspection	☐
Street / No.:	455 County Ctr	☐
City / Zip:	Redwood City, 94063-1663	☐
State:	CALIFORNIA	☐
Phone:	650-599-7311	☐
Fax:	650-363-4849	☐
e-Mail:		☐
Website:		☐

Products & Services:

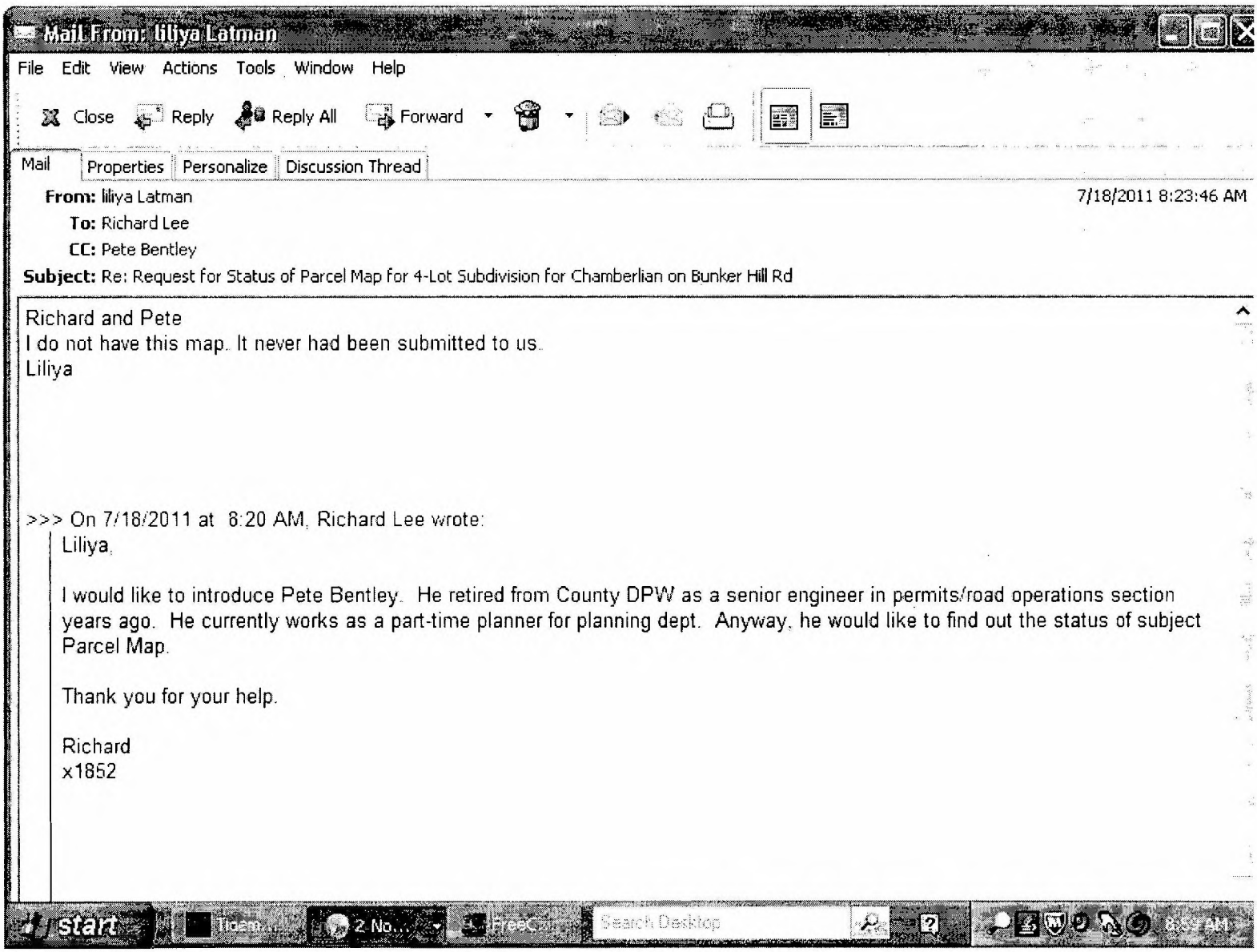
(Please provide relevant keywords that summarize the range of products and services that your company offers:)

In case that you would like to be removed from our fax list - please check here: ☐

Order: We hereby certify that all information and details about our company as given above are correct and we hereby order registration at the business directory Yellow-Page-USA.com managed by Open Business Directory Ltd. (herein referred as "Yellow-Page-USA") for a term of two years, at a price of US$99 per month, payable one year in advance. Payment terms are 10 days from the date of registration. We authorize Yellow-Page-USA to create an official page for our company and its business community at www.facebook.com and to manage its content following our instructions as given herein. We understand that this offer does not indicate an agreement exists between Yellow-Page-USA and Facebook Inc. and that page creation is a professional service offered by Yellow-Page-USA. Referring to Facebook's "Pages Terms" we herewith confirm that Yellow-Page-USA shall be the authorized representative to set up this page at www.facebook.com.

We understand that Facebook has no obligation to distribute this content and may decide to stop publishing the official page at any time. Termination of this agreement with Yellow-Page-USA is required in writing by giving notice to Open Business Directory Ltd. (Email: info@open-business-directory.com - Postal Address: One Post Office Square, Suite 3600, Boston MA 02109) at least three months prior to the expiry of the order or the agreement will automatically renew for one year. Any omissions, errors or other incorrect data appearing in the directory are the sole responsibility of the client. Should the client elect to have their records removed from the listing, payment is still required. Yellow-Page-USA reserves the right to assign all contractual rights to a third party. This agreement and all questions of interpretation hereof shall be governed by the applicable state's statutory and common law. The customer can make any changes or amendments to their listing at any time, free of charge.

Print Name:	Authorized Signature:	Date:


Mail From: liliya Latman
File Edit View Actions Tools Window Help
Close Reply Reply All Forward
Mail Properties Personalize Discussion Thread
From: liliya Latman
7/18/2011 8:23:46 AM
To: Richard Lee
CC: Pete Bentley
Subject: Re: Request for Status of Parcel Map for 4-Lot Subdivision for Chamberlian on Bunker Hill Rd
Richard and Pete
I do not have this map. It never had been submitted to us.
Liliya
>>> On 7/18/2011 at 8:20 AM, Richard Lee wrote:
Liliya,
I would like to introduce Pete Bentley. He retired from County DPW as a senior engineer in permits/road operations section years ago. He currently works as a part-time planner for planning dept. Anyway, he would like to find out the status of subject Parcel Map.
Thank you for your help.
Richard
x1852
start
Search Desktop

County of San Mateo

Geotechnical Consultant Approval

County Government Center • 455 County Center, 2nd Floor
Redwood City • CA • 94063 • Mail Drop PLN 122
Phone: 650 • 363 • 4161 Fax: 650 • 363 • 4849

Applicant (Owner): Ticonderoga Partners LLC | Geo. File No. 9E-199

Site Address: 2265 Bunker Hill, Lot 1, San Mateo Highlands | APN: 041-101-290

Permit Type: BLD2013-01792 | Required by: JFD Date: 10-25-13

NOTICE TO APPLICANT:
SECTION I of this form must be completed and a copy returned to Geotechnical Section prior to approval of application by the Planning and Building Department.

SECTION II must be completed and a copy returned to Geotechnical Section prior to final approval of the completed construction by the Planning and Building Department.

IMPORTANT: It is the responsibility of the applicant to ensure that **ALL** geotechnical factors as noted in SECTION I have been observed and approved in SECTION II by the applicants' consultant.

FAILURE TO DO SO WILL RESULT IN UNNECESSARY DELAYS PENDING SUCH APPROVAL.

SECTION I Cornerstone Earth Group has reviewed the development
(Name of legally qualified geotechnical consultant)

Plans prepared for Highlands Estates - Lot 1 by: Mark Gross/ESI_FME/BKF

Plan No. 4106/C169/950168-14

Dated: 7-8-13/10-4-13/7-10-13 Revision: _____

and find that such plans are in accordance with the recommendations provided by us or presented in our report(s) No. 230-1-2, dated 7-22-11 with respect to geotechnical factors affecting or affected by the proposed site development. These include include but are not limited to: grading (cuts / fills), surface and subsurface water control measures, foundation design criteria, seismic hazard consideration, slope stability, "restricted from building" areas, and _____

(Geotechnical Consultant)

12-13-13
(Date)

COUNTY APPROVAL
Co. Geol. _____ Date: 1/26/14
CC: _____

SECTION II Cornerstone Earth Group has observed and approved as
(Name of legally qualified geotechnical consultant)

having been done in accordance with their recommendations all applicable work as noted in SECTION I.

NOTE:
Grading Report Required: ☐ Yes ☐ No

(Geotechnical Consultant)

(Date)

COUNTY APPROVAL
Co. Geol. _____ Date: _____
CC: _____

CORNERSTONE EARTH GROUP

Type of Services	**Design-Level Geotechnical Investigation**
Project Name	**Highland Estates Lots 1 through 4**
Location	**Bunker Hill Drive**
	San Mateo County, California
Client	**The Chamberlain Group**
Client Address	**655 Skyway, Suite 230**
	San Carlos, California
Project Number	**230-1-2**
Date	**July 22, 2011**



Prepared by **Scott E. Fitinghoff, P.E., G.E.**
Principal Engineer
Geotechnical Project Manager



Craig S. Harwood, C.E.G.
Project Geologist

John R. Dye, P.E., G.E.
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CORNERSTONE EARTH GROUP

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Type of Services	**Design-Level Geotechnical Investigation**
Project Name	**Highland Estates Lots 1 Through 4**
Location	**Bunker Hill Drive** **San Mateo County, California**

SECTION 1: INTRODUCTION

This geotechnical report was prepared for the sole use of The Chamberlain Group for the Highland Estates Lots 1 through 4 project in San Mateo County, California. The approximate location of the project site is shown on Figure 1, Vicinity Map. For our use, we were provided with the following documents:

- Plan set titled "Highland Estates Improvement Plan" for Lots 1 through 4, prepared by BKF Engineers, Inc. dated May 25, 2011.
- A report titled "Revised Geologic Evaluation, Environmental Impact Report, Highland Estates Residential Development Project, San Mateo County, California" prepared by Treadwell & Rollo dated August 27, 2009.
- A report titled "Supplemental Geotechnical Report Responding to Geotechnical Review Comments for Highland Estates, San Mateo County, California" prepared by Soil Foundation Systems, Inc. dated November 1994.
- A report titled "Geotechnical Investigation Report for Highland Estates, San Mateo, California" prepared by Soil Foundation Systems, Inc. dated July 1993.

1.1 PROJECT BACKGROUND AND PURPOSE

Lots 1 through 4 were once part of a much larger parcel of land known as the "Highland Estates Parcel" located west of Polhemus Road. The vacant, irregularly-shaped parcel consists of approximately 99-acres of land bounded by existing residential and commercial development in San Mateo County, California. During the past two decades, there have been many previous land development proposals and geotechnical/geologic reports prepared for the Highland Estates project site. The current approved land development plan, which consists of 11 lots, is a scaled back version of previous land planning proposals and consists of construction of homes to "infill" undeveloped portions around the perimeter of the large parcel which will remain undeveloped.

Numerous geotechnical and geologic reports have been prepared for the site. The first investigations were performed by Soil Foundation Systems, Inc. (SFSI) in 1990, 1993, and 1994, then recently by TRC/Lowney Associates in 2006. Mr. K.C. Sohn, G.E., the geotechnical engineer for SFSI is deceased. Mr. Scott Fitinghoff, G.E., principal engineer at Cornerstone Earth Group became the geotechnical engineer for the project after Mr. Sohn's death in 1999 while employed by Lowney Associates and which was acquired by TRC in 2000. In 2008 and 2009, Treadwell and Rollo, Inc. performed an geologic evaluation for the Environmental Impact Report for the project. To maintain continuity of geotechnical engineers on this project, Cornerstone Earth Group is accepting the role of geotechnical engineer-of-record for the project.

The purpose of this report is to provide a summary of the previous reports, the results of our supplemental exploration and engineering analysis, and to prepare a design-level geotechnical investigation report for Lots 1 through 4 based on revised grading for the project shown on the plans by BKF Engineers.

1.2 PROJECT DESCRIPTION

Lots 1 through 4 will be infill lots constructed on the southern side of Bunker Hill Drive on an approximately 2:1 (horizontal:vertical) or flatter eastern facing slope. Each house will consist of multiple levels that are designed to step down the hill and follow the natural contours. Grading for the project will consist of up to 10 feet of fill and 5 feet of cut in the driveway and garage areas. No cuts or fills are proposed for the living areas which are positioned on the downhill side of the garages. Some of the driveways will be partially bridged to provide access to the garages. We assume that a retaining wall will be built to retain the fill in the garage areas. The structure will be of wood-frame construction and supported on pier and grade beam foundations. Loads for the structures are anticipated to be typical of these buildings with interior columns loads on the order of 5 to15 kips. Rainfall runoff from the residences will be piped to a dissipation structure below the residences and spread out across the existing hillslope. The proposed layout of the residences is shown in Figure 2, Site Plan and Geologic Map.

1.3 SCOPE OF SERVICES

Our scope of services was presented in our proposal dated June 8, 2011 and consisted of file review, site reconnaissance, field and laboratory programs to evaluate physical and engineering properties of the subsurface soils and bedrock, engineering analysis to prepare recommendations for site work and grading, building foundations, flatwork, retaining walls, and pavements, and preparation of this report. Brief descriptions of our field exploration and laboratory programs are presented below.

1.4 PREVIOUS INVESTIGATIONS BY OTHERS

Soil Foundation Systems (1993 and 1994) and Treadwell & Rollo (2009) performed geotechnical Investigations and geologic feasibility review for Lots 1 through 4. This previous work was reviewed and data obtained from the previous investigations was incorporated into

our investigation. For Lots 1 through 4, subsurface exploration consisted of performing two borings and a test pit. Additionally, a geologic reconnaissance was performed of the sites.

1.5 EXPLORATION PROGRAM

To supplement the previous investigation by others at Lots 1 through 4, our field exploration consisted of three borings drilled on June 20, 2011 with portable Minuteman hollow-stem auger drilling equipment. The borings were drilled to depths ranging from approximately 12½ to 22½ feet. The borings were backfilled with cement grout in accordance with local requirements. Details regarding our laboratory program are included in Appendix A.

1.6 LABORATORY TESTING PROGRAM

In addition to visual classification of samples, the laboratory program focused on obtaining data for foundation design and seismic ground deformation estimates. Testing included moisture contents (ASTM D2216), dry densities (ASTM D2937), grain size analyses (ASTM D 422), washed sieve analyses (ASTM D1140), and Plasticity Indices (ASTM D4318). Details regarding our laboratory program are included in Appendix B.

1.7 NATURALLY OCCURING ASBESTOS TESTING

As required by the conditions of approval, we performed testing for naturally occurring asbestos on two soil samples from our borings drilled closest to the previously mapped serpentinite contact which located west of Lot 4. One sample from our borings EB-1 and EB-2were tested for naturally occurring asbestos (NOA) using Polarized Light Microscopy in accordance with the CARB Method 435. NOA was not detected. The analytical report is included in Appendix C.

1.8 ENVIRONMENTAL SERVICES

Environmental services were not requested for this project. If environmental concerns are determined to be present during future evaluations, the project environmental consultant should review our geotechnical recommendations for compatibility with the environmental concerns.

SECTION 2: REGIONAL SETTING

2.1 GEOLOGICAL SETTING

The San Francisco peninsula is a relatively narrow band of rock at the north end of the Santa Cruz Mountains separating the Pacific Ocean from San Francisco Bay. It represents one mountain range in a series of northwesterly-aligned mountains forming the Coast Ranges geomorphic province of California that stretches from the Oregon border nearly to Point Conception. In the San Francisco Bay area, most of the Coast Ranges have developed on a basement of tectonically mixed Cretaceous- and Jurassic-age (70 to 200 million years old) rocks of the Franciscan Complex. Locally, these basement rocks are capped by younger sedimentary

and volcanic rocks. Most of the Coast Ranges are covered by younger surficial deposits that reflect geologic conditions for approximately the last million years.

Lateral and vertical movement on the many splays of the San Andreas Fault system and other secondary faults has produced the dominant northwest-oriented structural and topographic trend seen throughout the Coast Ranges today. This trend reflects the boundary between two of the Earth's major tectonic plates: the North American plate to the east and the Pacific plate to the west.

The San Andreas Fault is the dominant structure in the system, nearly spanning the length of California, and capable of producing the highest magnitude earthquakes. Many other sub-parallel or branch faults within the San Andreas system are equally active and nearly as capable of generating large earthquakes. Right-lateral movement dominates these faults, but an increasingly large amount of thrust faulting resulting from compression across the system is now being identified as well.

The San Andreas Fault is located approximately 4,900 feet west of the site, where it trends northwesterly through Crystal Springs Reservoir. Distances other nearby active faults are present in the following section.

More locally, the site is in an area dominated by bedrock units of the Cretaceous and/or Jurassic Franciscan Complex. Several regional scale geologic maps covering the area have been published of the area including those by Lajole et al. (1974), Leighton (1976), Brabb and Pampeyan (1983), Wentworth et al. (1985), Pampeyan (1994), Brabb et al. (1998) and Brabb et al. (2000) depict similar geologic units underlying the site. Of these published maps Pampeyan's depiction of the bedrock units is consistent with our site observations (see below). The Pampeyan mapping depicts the area of the Highland Estates as underlain by "Sheared rock" of the Franciscan Complex.

The sheared rock forms an extensive outcrop across the immediate area. No structural trends within the sheared rock are shown on the Pampeyan map. Pampeyan also shows Quaternary surficial deposits ("slope wash, ravine fill and colluvium," "Qsr") overlying the sheared rock on a northeast facing hillside located about 300 feet to the southwest of the site. Small, isolated outcrops of greenstone occur in the general area but not adjacent to the site.

The following geologic unit descriptions come from the Pampeyan map (1994). The Holocene deposits (Qsr) are described as "interfingering deposits of colluvium and ravine fill which is unconsolidated to moderately consolidated deposits of sand, silt, clay and rock fragments." The sheared rock is described as "small to large fragments of hard rock in a matrix of sheared rock that is derived mostly from shale and sandstone of the Franciscan Complex." The sheared rock is generally "coherent and firm, but soft in places, especially where weathered."

2.2 REGIONAL SEISMICITY

The San Francisco Bay area is recognized by geologists and seismologists as one of the most seismically active regions in the United States. Significant earthquakes occurring in the Bay

area are generally associated with crustal movement along well-defined, active fault zones of the San Andreas Fault system (see Figure 3). The San Andreas Fault generated the great San Francisco earthquake of 1906 and the Loma Prieta earthquake of 1989. Known active faults in order of increasing distance within 25 kilometers (16.5 miles) of the site are presented in Table 1. The seismic characteristics of some faults vary along its length so different segments of the same fault could be listed separately in the table.

The faults considered capable of generating significant earthquakes are generally associated with the well-defined areas of crustal movement, which trend northwesterly. The table below presents the State-considered active faults within 25 kilometers of the site.

Table 1: Approximate Fault Distances

Fault Name	Distance	
	(miles)	(kilometers)
San Andreas (1906)	0.4	0.6
Monte Vista-Shannon	8	12.0
San Gregorio	8.5	13.0

A regional fault map is presented as Figure 3, illustrating the relative distances of the site to significant fault zones.

SECTION 3: SITE CONDITIONS

3.1 GEOMORPHOLOGY AND SITE HISTORY

The larger Highland Estates development is located on the northwest side of Ticonderoga Drive within the western boundary of the City of San Mateo, on unincorporated land in San Mateo County, California at Latitude 37.5155° and Longitude 122.3385°. The proposed 4-lot development is located on the northeast flank of Pulgas Ridge, a knob of resistant bedrock that rises a few hundred feet above the surrounding hilly terrain. The site topography is shown on Figure 2. This area is characterized with rolling terrain and northwest trending ridges and drainages on the peninsula segment of the Santa Cruz Mountains. Lots 1 through 4 are located on a southeast-facing slope on the southeast side of Bunker Hill Drive. The lots are bound to the northwest by Bunker Hill Drive, to the southeast by a natural drainage course and undeveloped slope, and to the northeast and southwest by developed residential parcels. The lots slope down moderately steep to very steep, with gradients between approximately 2:1 to 3:1 (horizontal:vertical). Graywacke sandstone is present in the creek at the bottom of the drainage course.

Sheet flow coming off the ridges and hillsides have deposited slope debris and colluvium over the older Franciscan rocks. The 1943 and 1946 aerial photographs reveal there was no residential development at or near the site and the eastern slope of the site was covered with shrubs and trees, similar to the present condition. The photographs reveal an apparent old landslide located southeast of the smallest water tower within the development. By the time of

the 1956 photographs, the Highland Estates development area had been completely cleared and graded but no homes had been constructed yet. By the fall of 1956, roughly one-third of the homes within the Highlands Estates development had been completed and all the streets had been graded. No evidence of landslides was observed in the area of the subject Lots 1 through 4 in the 1956 photos. By 1961, most of the Highland Estates development had been completed. The 1968 photographs reveal abundant oak trees in the area proposed for Lots 1 through 4.

A fill berm parallels Bunker Hill Drive, on top of which there are fill desiccation cracks. The fill covers an area up to about 30 feet wide by 170 feet long along the front of Lots 2 and 3, and is up to about 3 to 4 feet thick. Additional minor grading has been performed in Lot 1, resulting in a small roughly level fill pad and small cut slopes up to about 5 to 6 feet in height. Sandstone bedrock is exposed at the base of the larger cut slope. Prior borings and test pit in this area encountered approximately 2 to 3 feet of colluvium mantling the sandstone bedrock (SFS, 1993). Vegetation on these lots is dense and consists of mature oak and other trees, with associated grasses and brush. Site drainage is characterized by uncontrolled sheet-flow down to the southeast.

3.2 SURFACE DESCRIPTION

Lots 1 through 4 (Lots) are located in a residential area on a southeast facing hillside slope on the southeast side of Bunker Hill Drive in unincorporated San Mateo County, California. As discussed above the lots are currently undeveloped, however, minor grading has been performed on the Lots during construction of Bunker Hill Drive. The Lots are bound to the northwest by Bunker Hill Drive, to the southeast by a natural drainage course and undeveloped hillside slope, and to the northeast and southwest by developed residential parcels. From Bunker Hill Drive, the existing ground surface for the Lots slopes down moderately steep to very steep, with gradients of 2:1 to 3:1 (horizontal:vertical) to the southeast with a total fall of 34 to 40 feet to the back of the property line. Large trees were observed on the property with varying amounts of ground cover. Sandstone is exposed in the natural drainage below the Lots.

A fill berm has been placed on Lots 2 and 3 as part of the construction of Bunker Hill Drive. The fill covers an area of about 30 feet wide by 170 feet long and appears to be up to about 4 feet thick. Additional grading has been performed on Lot 1, consisting of a road cut and minor fill. Sandstone is exposed in this road cut on Lot 1. The previous grading is shown on our Site Plan and Geologic Map, Figure 2.

3.3 SITE GEOLOGY

<u>The 99-acre Highland Estates Development:</u>

Several prior investigations were performed for the development of the site. At the time, Lots 1 through 4 were in the same configuration as the present development concept, but the other lots were in different areas/alignments. Previous investigations (1993) and a supplemental investigation (1994) of the overall Highland Estates were conducted in by Soil Foundation Systems, Inc. (SFSI). These studies included the logging of numerous borings and test pits,

laboratory testing and slope stability analyses. Blocks of Graywacke sandstone up to 2 acres in size were identified in their mapping which they broke as distinct mapping units. SFSI characterized the 99 acre parcel as consisting of Franciscan mélange which contains "isolated monument-like blocks of competent rock (mainly graywacke sandstone) projecting out of the brushy slope." The bedrock within the Highland Estates area is mantled by colluvium, alluvium, artificial fill and landslides. The landslides are typically shallow (less than 5 feet thick).

Subject Lots 1 Through 4

On the subject Lots 1 through 4, SFSI logged two borings (P-6, BS-2) and one test pit (TP-7). Near the ridge crest (including the lots adjacent to the southwest side of the Lots) is a large serpentinite body which is locally altered into silica carbonate. The serpentinite is highly variable in character, ranging from hard, blocky-jointed rock to highly sheared rock. The SFSI subsurface investigation revealed the subject Lots 1 through 4 have a thin layer of soil (clay varying from 1 to 2 feet thick) overlying a large body of hard sandstone. Graywacke sandstone is exposed on Lot 1 and within the creek located downslope of these lots. Sandstone is also exposed at the top of cuts made during the construction of Bunker Hill Drive. The lower elevations of lot 2 and 3 contain a small topographic swale underlain by colluvium, which is susceptible to creep. The SFSI investigations concluded that in area proposed for Lots 1 through 4 (still the same as presently planned), there was no significant slope stability hazard. They concluded graywacke sandstone is very shallow on the site, is stable and therefore recommended supporting residences on these lots on drilled piers, gaining support in the underlying sandstone. They identified a one-acre landslide on a southwest facing slope adjacent to Lot 4, which is characterized as "relatively shallow and constrained to the colluvium and topsoil mantling the bedrock on these slopes." They noted that this slide is separated from Lot 4 by a ridge of resistant sandstone bedrock that also coincides with a contact (a shear zone) with serpentinite on the southwest. This contact is associated with year-round seepage.

Earth Systems Inc. (ESI) and Harlen Tait and Associates (HTA) performed a review of the slope stability analyses conducted from the 1993 SFSI investigation. ESI generally concurred with the results of the earlier SFSI investigation. ESI and HTA also reviewed proposed grading plans, noting that there was no significant grading planned for Lots 1 through 4. The review comments by ESI and HTA were responded to by SFSI in their 1994 supplemental report.

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The mapping and field exploration for the present evaluation were conducted concurrently. We have adopted the nomenclature of Pampeyan (1994) in assigning geologic unit names for our characterization of the site. We did not distinguish the sandstone separately, but have included it within the sheared rock mapping unit (Fsr) of Pampeyan, as shown on the Site Plan and Geologic Map (Figure 2). A reconnaissance of the site and immediate vicinity was performed by our Certified Engineering Geologist on June 20, 2011, for the purpose of observing and recording data and field relations onto a base map (Site Plan and Geologic Map, Figure 2).

3.4 GROUND WATER

Ground water was not encountered in any of our borings during drilling; however, the borings were not left open but were immediately backfilled when the boring was completed. As

predominantly clays were encountered, the borings were not left open long enough for water to seep into the boring holes. Based on our previous experience in the area, depth to ground water maps, CGS maps, etc., we anticipate that the high ground water level will be on the order of 50 or more feet below current grades.

Fluctuations in ground water levels occur due to many factors including the following: seasonally water levels can generally fluctuate 2 to 5 feet, underground drainage patterns can cause perched water conditions above steady ground water levels, regionally the average ground water level can fluctuate over long time periods and other factors.

SECTION 4: GEOLOGIC HAZARDS

4.1 FAULT RUPTURE

Although there are several significant faults located within 25 kilometers of the site, no active or potentially active faults are mapped transecting the site. The site is not located within a currently designated Alquist-Priolo Earthquake Fault Zone (known formerly as a Special Studies Zone) (CDMG, 1982). A regional fault map illustrating known active faults relative to the site is presented in Figure 3. We encountered no evidence suggesting active fault surface traces at the site. This is also consistent with the findings of previous consultants in their studies of the Highland Estates subdivision. It is our conclusion that there is a low potential for the occurrence of fault surface rupture (primary or coseismic) to occur at the subject site.

4.2 ESTIMATED GROUND SHAKING

Moderate to severe (design-level) earthquakes can cause strong ground shaking at the site, which is the case for most sites within the Bay Area. This hazard can be mitigated by designing the building in accordance with the current building code.

4.3 LIQUEFACTION POTENTIAL

Liquefaction hazard mapping of the site by the California Geologic Survey has not been completed for the site area. Mapping by the Association of Bay Area Governments (ABAG) indicates that the site is located in an area of very low liquefaction potential. During strong seismic shaking, cyclically induced stresses can cause increased pore pressures within the soil matrix that can result in liquefaction triggering, soil softening due to shear stress loss, potentially significant ground deformation due to settlement within sandy liquefiable layers as pore pressures dissipate, and/or flow failures in sloping ground or where open faces are present (lateral spreading) (NCEER 1998). Limited field and laboratory data is available regarding ground deformation due to settlement; however, in clean sand layers settlement on the order of 2 to 3 percent of the liquefied layer thickness can occur. Soils most susceptible to liquefaction are loose, non-cohesive soils that are saturated and are bedded with poor drainage, such as sand and silt layers bedded with a cohesive cap. Our analyses indicate that the shallow bedrock is not susceptible to liquefaction which is consistent with the mapping in the area by ABAG.

4.4 LATERAL SPREADING

Lateral spreading is horizontal/lateral ground movement of relatively flat-lying soil deposits towards a free face such as an excavation, channel, or open body of water; typically lateral spreading is associated with liquefaction of one or more subsurface layers near the bottom of the exposed slope. As failure tends to propagate as block failures, it is difficult to analyze and estimate where the first tension crack will form.

There are no open faces within 200 feet of the site where lateral spreading could occur; therefore, in our opinion, the potential for lateral spreading to affect the site is low.

4.6 LANDSLIDING

The California Geological Survey (CGS) has been producing Seismic Hazard Zone maps for earthquake-induced landsliding; however, the San Mateo Quadrangle has not been published at of the time of the current study. The site is located within a hilly area with slopes described by Pampeyan (1994) as "unstable, especially when wet," and where small isolated landslides were mapped nearby by Brabb and Pampeyan (1972) and Leighton (1973). The aerial photographs revealed no geomorphic evidence of recent slope movement. The interpretive landslide susceptibility map published by Brabb et al. (1978) shows the site within an area designated as moderately susceptible to landsliding based on slopes of greater than 30%, but also includes areas with 15% to 30% that are underlain by unstable rock units. Wieczorek et al. (1985) indicates most of the Highlands Estates site is located in an area mapped as having moderate susceptibility, and the northwest portion of the subdivision is shown as having very low susceptibility to landsliding triggered by a major earthquake. This map suggests the hazard needs to be addressed in future developments located on these slopes. The subject lots are located on the moderate to steep slopes near the crest of Pulgas Ridge, which is underlain at shallow depths by competent sandstone of the Franciscan Complex, we judge the potential for landsliding to be low in the bedrock material and moderate to high in the mapped landslide deposit areas. .

Based on our surface reconnaissance, research of published and unpublished geologic maps and reports, and our review of aerial photographs, no significant landslides are present at the site. As noted above, SFSI and others identified a one-acre landslide on a southwest facing slope adjacent to Lot 4, which is characterized as "relatively shallow and constrained to the colluvium and topsoil mantling the bedrock on these slopes." They noted that this slide is separated from Lot 4 by a ridge of resistant sandstone bedrock that also coincides with a contact (a shear zone) with serpentinite on the southwest. Our findings are consistent with the earlier consultant's investigations of the subject Lots 1 through 4, we concur that the landslide adjacent to Lot 4, does not present a significant risk to the development for the reasons noted above.

4.8 FLOODING

Based on our internet search of the Federal Emergency Management Agency (FEMA) flood map public database (Panel 0603110140B) the site is located within any mapped flood zone.

We recommend the project civil engineer be retained to confirm this information and verify the base flood elevation, if appropriate.

The Association of Bay Area Governments has compiled a database of Dam Failure Inundation Hazard Maps (ABAG, 1995). The generalized hazard maps were prepared by dam owners as required by the State Office of Emergency Services; they are intended for planning purposes only. Based on our review of these maps, the site is not located within a dam failure inundation area.

4.9 NATURALLY OCCURRING ASBESTOS

Chrysotile and amphibole asbestos (such as tremolite) occur naturally in certain geologic settings in California, most commonly in association with ultramafic rocks and along associated faults. Asbestos is a known carcinogen and inhalation of asbestos may result in the development of lung cancer or mesothelioma. When this material is disturbed in connection with construction, grading, quarrying or surface mining operations, asbestos-containing dust can be generated. Exposure to asbestos can result in health ailments. To evaluate this hazard, we tested two samples for naturally occurring asbestos. The results of the testing are presented in Appendix C. Our testing indicated naturally occurring asbestos was not present in the soil samples tested.

SECTION 5: CONCLUSIONS

From a geotechnical viewpoint, the project is feasible provided the concerns listed below are addressed in the project design. Descriptions of each concern with brief outlines of our recommendations follow the listed concerns.

- Potential for soil creep and localized slope instability
- Presence of existing undocumented fills

5.1 POTENTIAL FOR SOIL CREEP AND LOCALIZED SLOPE INSTABILITY

Our investigation indicated that a thin layer of colluvium mantles the bedrock in the area of the proposed residences. On Lots 1 and 2, the colluvium is estimated to be on the order of 2 to 3 feet thick. On Lots 3 and 4, the colluvium is estimated to be on the order of 5 to 9 feet thick. The existing slopes in the areas to be developed are 2:1 to 3:1; we judge the upper 2 feet of the soil to be susceptible to creep. To address this concern, we recommend that the proposed structures, including site retaining walls be supported on drilled piers designed to resist creep forces. Detailed recommendations for the design of drilled pier foundations are presented in the "Foundations" section of this report.

Another geotechnical concern associated with the presence of colluvium is that concentrated water could cause erosion and localized slope instability. To mitigate this condition and satisfy current storm water requirements, we recommend that the storm water be directed to a concrete lined bio-retention basin. Once the water passes through the bio-retention basin, it should be collected in a solid drainage pipe and conveyed to dissipater/spreader outlet structure which will

spread out the flow across the slope without concentrating the water. Detailed recommendations for the design of the dissipater/spreader structure are presented in the "Earthwork" section of this report.

5.2 UNDOCUMENTED FILL

Undocumented fill was mapped at Lots 1 to 3 as shown on the Site Plan and Geologic Map, Figure 2. If this fill is left in place during driveway grading, it should be removed and replaced as properly compacted engineered fill. Detailed recommendations are presented in the "Earthwork".

5.3 PLANS AND SPECIFICATIONS REVIEW

We recommend that we be retained to review the geotechnical aspects of the project structural, civil, and landscape plans and specifications, allowing sufficient time to provide the design team with any comments prior to issuing the plans for construction.

5.5 CONSTRUCTION OBSERVATION AND TESTING

As site conditions may vary significantly between the small-diameter borings performed during this investigation, we also recommend that a Cornerstone representative be present to provide geotechnical observation and testing during earthwork and foundation construction. This will allow us to form an opinion and prepare a letter at the end of construction regarding contractor compliance with project plans and specifications, and with the recommendations in our report. We will also be allowed to evaluate any conditions differing from those encountered during our investigation, and provide supplemental recommendations as necessary. For these reasons, the recommendations in this report are contingent of Cornerstone providing observation and testing during construction. Contractors should provide at least a 48-hour notice when scheduling our field personnel.

SECTION 6: EARTHWORK

6.1 SITE DEMOLITION, CLEARING AND PREPARATION

6.1.1 Site Stripping

The site should be stripped of all surface vegetation, and surface and subsurface improvements within the proposed development area. Demolition of existing improvements is discussed in detail below. Surface vegetation and topsoil should be stripped to a sufficient depth to remove all material greater than 3 percent organic content by weight. Based on our site observations, surficial stripping should extend about 3 to 12 inches below existing grade.

6.1.2 Tree and Shrub Removal

Trees and shrubs designated for removal should have the rootballs and any roots greater than ½-inch diameter removed completely. Grade depressions resulting from rootball removal

should be cleaned of loose material and backfilled in accordance with the recommendations in the "Compaction" section of this report.

6.1.3 Abandonment of Existing Utilities

No utility lines are known to exist within the proposed lots. If encountered, all utilities should be completely removed from within planned building areas. For any utility line to be considered acceptable to remain within building areas, the utility line must be completely backfilled with grout or sand-cement slurry (sand slurry is not acceptable), the ends outside the building area capped with concrete, and the trench fills either removed and replaced as engineered fill with the trench side slopes flattened to at least 1:1, or the trench fills are determined not to be a risk to the structure. The assessment of the level of risk posed by the particular utility line will determine whether the utility may be abandoned in place or needs to be completely removed. The contractor should assume that all utilities will be removed from within building areas unless provided written confirmation from both the owner and the geotechnical engineer.

Utilities extending beyond the building area may be abandoned in place provided the ends are plugged with concrete, they do not conflict with planned improvements, and that the trench fills do not pose significant risk to the planned surface improvements.

The risks associated with abandoning utilities in place include the potential for future differential settlement of existing trench fills, and/or partial collapse and potential ground loss into utility lines that are not completely filled with grout. The risk for each issue are relatively low for single utility lines less than 4 inches in diameter and increase with increasing pipe diameter.

6.2 REMOVAL OF EXISTING FILLS

All existing fills should be completely removed from within proposed garage and driveway areas and to a lateral distance of at least 2 feet beyond the edge of the improvements. The approximate limits of undocumented fill encountered in our investigation are shown on Figure 2. Provided the fills meet the "Material for Fill" requirements below, the fills may be reused when backfilling the excavations. Based on review of the samples collected from our borings, it appears that the fill may be reused. If materials are encountered that don't meet the requirements, such as debris, wood, trash, those materials should screened out of the remaining material and not be reused. Backfill of excavations should be placed in lifts and compacted in accordance with the "Compaction" section below.

6.3 TEMPORARY CUT AND FILL SLOPES

The contractor is responsible for maintaining all temporary slopes and providing temporary shoring where required. Temporary shoring, bracing, and cuts/fills should be performed in accordance with the strictest government safety standards. On a preliminary basis, the upper 10 feet at the site may be classified as OSHA Site B materials. A Cornerstone representative should be retained to confirm the preliminary site classification.

Excavations performed during site demolition and fill removal should be sloped at a 1:1 (horizontal:vertical) within the upper 5 feet below building subgrade. Excavations extending more than 5 feet below building subgrade and excavations in pavement and flatwork areas should be slope at a 1:1 inclination unless the OSHA soil classification indicates that slope should not exceed 1.5:1.

6.4 SUBGRADE PREPARATION

After site clearing and demolition is complete, and prior to backfilling any excavations resulting from fill removal or demolition, the excavation subgrade and subgrade within areas to receive additional site fills, slabs-on-grade and/or pavements should be scarified to a depth of 6 inches, moisture conditioned, and compacted in accordance with the "Compaction" section below.

6.5 MATERIAL FOR FILL

6.5.1 Re-Use of On-site Soils

On-site soils with an organic content less than 3 percent by weight may be reused as general fill. General fill should not have lumps, clods or cobble pieces larger than 6 inches in diameter; 85 percent of the fill should be smaller than 2½ inches in diameter. Minor amounts of oversize material (smaller than 12 inches in diameter) may be allowed provided, the oversized pieces are not allowed to nest together, and the compaction method will allow for loosely placed lifts not exceeding 12 inches, heavy vibratory compactor. It is noted that excavation of piers and retaining wall cut, and grade beams may result in large rock fragments that require special handling and disposal. The contractor should anticipate handling of this material during construction.

6.5.2 Potential Import Sources

Imported and non-expansive material should be inorganic with a Plasticity Index (PI) of 15 or less. To prevent significant caving during trenching or foundation construction, imported material should have sufficient fines. Samples of potential import sources should be delivered to our office at least 10 days prior to the desired import start date. Information regarding the import source should be provided, such as any site geotechnical reports. If the material will be derived from an excavation rather than a stockpile, potholes will likely be required to collect samples from throughout the depth of the planned cut that will be imported. At a minimum, laboratory testing will include PI tests. Material data sheets for select fill materials (Class 2 aggregate base, ¾-inch crushed rock, quarry fines, etc.) listing current laboratory testing data (not older than 6 months from the import date) may be provided for our review without providing a sample. If current data is not available, specification testing will need to be completed prior to approval.

Environmental and soil corrosion characterization should also be considered by the project team prior to acceptance. Suitable environmental laboratory data to the planned import quantity should be provided to the project environmental consultant; additional laboratory testing may be required based on the project environmental consultant's review. The potential import source

should also not be more corrosive than the on-site soils, based on pH, saturated resistivity, and soluble sulfate and chloride testing.

6.6 COMPACTION REQUIREMENTS

All fills, and subgrade areas where fill, slabs-on-grade, and pavements are planned, should be placed in loose lifts 8 inches thick or less and compacted in accordance with ASTM D1557 (latest version) requirements as shown in the table below. In general, clayey soils should be compacted with sheepsfoot equipment and sandy /gravelly soils with vibratory equipment; open-graded materials such as crushed rock should be placed in lifts no thicker than 18 inches consolidated in place with vibratory equipment. Each lift of fill and all subgrade should be firm and unyielding under construction equipment loading in addition to meeting the compaction requirements to be approved. The contractor (with input from a Cornerstone representative) should evaluate the in-situ moisture conditions, as the use of vibratory equipment on soils with high moistures can cause unstable conditions. General recommendations for soil stabilization are provided in the "Subgrade Stabilization Measures" section of this report.

Table 4: Compaction Requirements

Description	Material Description	Minimum Relative[1] Compaction (percent)	Moisture[2] Content (percent)
General Fill (within upper 5 feet)	On-Site Low Expansion Soils	90	>1
General Fill (below a depth of 5 feet)	On-Site Low Expansion Soils	93	>1
Basement Wall Backfill	Without Surface Improvements	90	>1
Basement Wall Backfill	With Surface Improvements	93[4]	>1
Trench Backfill	On-Site Low Expansion Soils	90	>1
Trench Backfill (upper 6 inches of subgrade)	On-Site Low Expansion Soils	95	>1
Crushed Rock Fill	¾-inch Clean Crushed Rock	Consolidate In-Place	NA
Flatwork Subgrade	On-Site Low Expansion Soils	90	>1
Flatwork Aggregate Base	Class 2 Aggregate Base[3]	90	Optimum
Pavement Subgrade	On-Site Low Expansion Soils	90	>1
Pavement Aggregate Base	Class 2 Aggregate Base[3]	95	Optimum
Asphalt Concrete	Asphalt Concrete	95 (Marshall)	NA

1 – Relative compaction based on maximum density determined by ASTM D1557 (latest version)
2 – Moisture content based on optimum moisture content determined by ASTM D1557 (latest version)
3 – Class 2 aggregate base shall conform to Caltrans Standard Specifications, latest edition, except that the relative compaction should be determined by ASTM D1557 (latest version)
4 – Using light-weight compaction or walls should be braced

6.7 TRENCH BACKFILL

Utility lines constructed within public right-of-way should be trenched, bedded and shaded, and backfilled in accordance with the local or governing jurisdictional requirements. Utility lines in private improvement areas should be constructed in accordance with the following requirements unless superseded by other governing requirements.

All utility lines should be bedded and shaded to at least 6 inches over the top of the lines with crushed rock (3/8-inch-diameter or greater) or well-graded sand and gravel materials conforming to the pipe manufacturer's requirements. Open-graded shading materials should be consolidated in place with vibratory equipment and well-graded materials should be compacted to at least 90 percent relative compaction with vibratory equipment prior to placing subsequent backfill materials.

General backfill over shading materials may consist of on-site native materials provided they meet the requirements in the "Material for Fill" section, and are moisture conditioned and compacted in accordance with the requirements in the "Compaction" section.

On hillside sites it is desirable to reduce the potential for water migration into building areas through the granular shading materials. We recommend that a plug of low-permeability clay soil, sand-cement slurry, or lean concrete be placed within trenches just outside where the trenches pass into building areas.

6.8 PERMANENT CUT AND FILL SLOPES

All permanent cut I slopes in soil should have a maximum inclination of 2:1 (horizontal:vertical) for slopes up to 10 feet high; slopes greater than 10 feet should be inclined at no greater than 2.5:1. Un-retained fill slopes constructed on slopes steeper than 4:1 should not be allowed on this project unless our office is contacted for review of the proposed slope. Fill slopes constructed on slopes 4:1 or flatter should have a maximum inclination of 2:1. Refer to the "Erosion Control" section of this report for a discussion regarding protection of slope surfaces.

6.9 PLAN REVIEW AND CONSTRUCTION MONITORING

We should be retained to review the grading and sub-drainage plans and we can provide more specific input regarding the location of subdrainage drainage for the final plans. A Cornerstone representative should be on site during grading and foundation construction. Field modifications to the planned construction may be required based on encountered field conditions. In addition, it has been our experience that cut slopes in the Franciscan Formation bedrock are prone to localized weak zones and sloughing along bedding planes. We recommend that a Cornerstone engineering geologist observe the condition of all cut slopes and evaluate the potential for localized adverse materials or bedding orientation.

We recommend that the project civil engineer or land surveyor be retained to survey in place all keyways, sub-drainage lines, solid pipes, and cleanouts, and create an as-built plan. This plan will be of use for any future maintenance or repair work.

6.10 SITE DRAINAGE

6.10.1 General Surface Drainage

Surface runoff should not be allowed to flow over the top of or pond at the top or toe of engineered slopes or retaining walls. Ponding should also not be allowed on or adjacent to pavements or concrete flatwork. Surface drainage should be directed towards suitable drainage facilities such as lined v-ditches or drain inlets. Lined v-ditches should be included at the top of slopes and intermediate benches, and at the toe of open space adjacent to planned development. All v-ditches and drain inlets should be sized to accommodate the design storm events for the upslope tributary area. Concrete-lined v-ditches should be reinforced as required and have adequate control and construction joints, and should be constructed neat in excavations; backfill around formed ditches should not be allowed.

Upslope sources of water should be evaluated. If upslope irrigation of is present or planned, additional surface and subsurface drainage, or construction of subdrians may be needed to protect site improvements. We should be consulted if this issue will affect the project.

6.10.2 Lot Surface Drainage

Ponding should not be allowed adjacent to building foundations, slabs-on-grade, or pavements. Hardscape surfaces should slope at least 1 percent towards suitable discharge facilities; landscape areas should slope at least 2 percent. Roof runoff should be directed away from building areas. Where minimal side yards are planned (10 feet or less), we recommend that area drains collect surface runoff and transmit the runoff to other suitable landscape drainage facilities to prevent ponding adjacent to building foundations. Landscape drainage such as drain inlets and storm water filtration and/or infiltration trenches should be provided to collect and transmit storm water runoff to project storm drains discharge facilities.

Rainfall runoff from the residences will be piped to a dissipation structure below the residences and spread out across the existing hillslope. The proposed layout of the proposed dissipation structures is shown in Figure 2, Site Plan and Geologic Map. As discussed previously, a geotechnical concern associated with the presence of colluvium is that concentrated water could cause erosion and localized slope instability. To mitigate this condition and satisfy current storm water requirements, we recommend that the storm water be directed to a concrete lined bio-retention basin. Once the water passes through the bio-retention basin, it should be collected in a solid drainage pipe and conveyed to dissipater/spreader outlet structure which will spread out the flow across the slope without concentrating the water. The dissipater/spreader should be at least 10 feet wide and discharge the water uniformly along the hillside. The outfall should be protected by Rip-Rap rock on Mirafi 700x or equal geotextile fabric.

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6.11 PERMANENT EROSION CONTROL MEASURES

Hillside grading will require periodic maintenance after construction to reduce the potential for erosion and sloughing. At a minimum all slopes should be vegetated by hydroseeding or other landscape ground cover. The establishment of vegetation will help reduce runoff velocities, allow some infiltration and transpiration, trap sediment within runoff, and protect the soil from raindrop impact. Depending on the exposed material type and the slope inclination, more aggressive erosion control measures may be needed to protect slopes for one or more winter seasons while vegetation is establishing. For slopes with inclinations of 2:1 (horizontal:vertical) or greater, erosion control may consist of jute netting, straw matting, or erosion control blankets used in combination with hydroseeding.

Both construction and post-construction Storm Water Pollution Prevention Plans (SWPPPs) should be prepared for the project-specific requirements. We recommend that final grading plans be provided for our review.

6.12 CRAWL SPACE SEEPAGE MITIGATION

For structures with raised floor foundation systems, crawl spaces are typically lower than adjacent exterior grades and grade beams are generally poured neat in shallow trenches or constructed at-grade. For this type of foundation system, in our opinion, water accumulation in the crawl space is possible even if adequate surface drainage is provided adjacent to the structure. Although water seepage into the crawl space does not generally affect the foundation from a geotechnical viewpoint, it may have undesirable impacts to the floor system.

To mitigate water seepage into crawl space areas, we recommend either minimizing water from getting into the crawl space, or collecting and discharging the water if it does migrate beneath the house. Listed below are several methods for mitigating crawl space seepage, in order of decreasing effectiveness, in our opinion.

1. Grade crawl spaces to drain to common low points; install area drains or sump pumps at low points to collect and discharge water.

2. Construct a series of shallow drainage channels (4 to 6 inches deep and 6 to12 inches wide) around the perimeter of the crawl space. These channels should also drain toward a common low point; install area drains or sump pumps at low points to collect and discharge water.

3. Install adequate crawl space ventilation to help drying of wet or moist soil.

Due to the complex geologic conditions and unpredictable landscape watering patterns, some minor seepage may still occur, especially if exterior grades are adversely modified by homeowners. Therefore, if desired to further reduce therisk of crawl seepage, Items 2 or 3 may

be used in conjunction with Item 1. We recommend that we review the finished grading and landscaping plans to check for conformance with the above recommendations.

SECTION 7: FOUNDATIONS

7.1 SUMMARY OF RECOMMENDATIONS

In our opinion, the proposed structures may be supported on drilled pier foundations provided the recommendations in the "Earthwork" section and the sections below are followed.

7.2 SEISMIC DESIGN CRITERIA

We understand that the project structural design will be based on the 2010 California Building Code (CBC), which provides criteria for the seismic design of buildings in Chapter 16. The "Seismic Coefficients" used to design buildings are established based on a series of tables and figures addressing different site factors, including the soil profile in the upper 100 feet below grade and mapped spectral acceleration parameters based on distance to the controlling seismic source/fault system. Based on our borings and review of local geology, the site is underlain by shallow bedrock and/or hard soils with typical SPT "N" values above 50 blows per foot. Therefore, we have classified the site as Soil Classification C. The mapped spectral acceleration parameters S_S andS_1 were calculated using the USGS computer program Earthquake Ground Motion Parameters, Version 5.1.0, revision date February 10, 2011, based on the site coordinates presented below and the site classification. The table below lists the various factors used to determine the seismic coefficients and other parameters.

TABLE 5: CBC SITE CATEGORIZATION AND SITE COEFFICIENTS

Classification/Coefficient	Design Value
Site Class	C
Site Latitude	37.524746°
Site Longitude	-122.348139°
0.2-second Period Mapped Spectral Acceleration[1], S_S	2.226g
1-second Period Mapped Spectral Acceleration[1], S_1	1.273g
Short-Period Site Coefficient – Fa	1.0
Long-Period Site Coefficient – Fv	1.3
0.2-second Period, Maximum Considered Earthquake Spectral Response Acceleration Adjusted for Site Effects - S_{MS}	2.226g
1-second Period, Maximum Considered Earthquake Spectral Response Acceleration Adjusted for Site Effects – S_{M1}	1.655g
0.2-second Period, Design Earthquake Spectral Response Acceleration – S_{DS}	1.484g
1-second Period, Design Earthquake Spectral Response Acceleration – S_{D1}	1.103g

[1]For Site Class B, 5 percent damped.

7.3 DEEP FOUNDATIONS

Because the residential structures will be located on the existing moderately steep slope, we recommend they be founded on drilled piers and designed with the parameters recommended below.

7.3.1 Drilled Piers

The proposed structural loads may be supported on drilled, cast-in-place, straight-shaft friction piers. The piers should have a minimum diameter of 16 inches and extend to a depth of at least 10 feet below adjacent grade or at least 5 feet into bedrock, whichever is greater. Adjacent piers centers should be spaced at least three diameters apart, otherwise, a reduction for group effects may be required. Grade beams should span between piers and/or pier caps in accordance with structural requirements. Conventional slabs-on-grade for the garages may be used provided the subgrade soils are restrained laterally with retaining walls of grade beams and subgrade is prepared in accordance with the "Earthwork" section in our forth coming geotechnical report.

The vertical capacity of the piers may be designed based on an allowable skin friction of 500 psf for combined dead plus live loads based on a factor of safety of 2.0; dead loads should not exceed two-thirds of the allowable capacities. The allowable skin friction may be increased by one-third for wind and seismic loads. Frictional resistance to uplift loads may be developed along the pier shafts based on an allowable frictional resistance of 400 psf.

Total settlement of individual piers should not exceed ½ inch to mobilize static capacities and post-construction differential settlement between adjacent piers should not exceed ¼inch due to static loads.

7.3.2 Lateral Capacity

Lateral loads exerted on the structure may be resisted by a passive resistance based on an ultimate equivalent fluid pressure of 450 psf acting against twice the projected area of piers below the pier cap or grade beam within pier groups of two or more and over two pier diameters for single piers, up to a maximum uniform pressure of 3,000 psf at depth. The upper 24 inches of soil should be neglected when determining lateral capacity due to the sloping ground conditions. The upper 24 inches of each pier also should be designed to resist an equivalent lateral earth pressure of 60 pcf acting over two pier diameters to simulate soil creep on the piers. The structural engineer should apply an appropriate factor of safety to the ultimate passive pressures.

7.3.3 Construction Considerations

The excavation of all drilled shafts should be observed by a Cornerstone representative to confirm the soil profile, verify that the piers extend the minimum depth into suitable materials

and that the piers are constructed in accordance with our recommendations and project requirements. The drilled shafts should be straight, dry, and relatively free of loose material before reinforcing steel is installed and concrete is placed. If ground water cannot be removed from the excavations prior to concrete placement, drilling slurry or casing may be required to stabilize the shaft and the concrete should be placed using a tremie pipe, keeping the tremie pipe below the surface of the concrete to avoid entrapment of water or drilling slurry in the concrete.

SECTION 8: CONCRETE SLABS AND PEDESTRIAN PAVEMENTS

8.1 INTERIOR SLABS-ON-GRADE

As the plasticity index (PI) of the surficial soils is 15 or less, the proposed slabs-on-grade for the garages may be supported on 4 inches of Class II Aggregate Base or ¾-inch crushed rock over subgrade prepared in accordance with the recommendations in the "Earthwork" section of this report. If moisture-sensitive floor coverings are planned, the recommendations in the "Interior Slabs Moisture Protection Considerations" section below may be incorporated in the project design if desired. If significant time elapses between initial subgrade preparation and slab-on-grade construction, the subgrade should be proof-rolled to confirm subgrade stability, and if the soil has been allowed to dry out, the subgrade should be re-moisture conditioned to near optimum moisture content.

The structural engineer should determine the appropriate slab reinforcement for the loading requirements and considering the expansion potential of the underlying soils. Consideration should be given to limiting the control joint spacing to a maximum of about 2 feet in each direction for each inch of concrete thickness.

8.3 INTERIOR SLABS MOISTURE PROTECTION CONSIDERATIONS

The following general guidelines for concrete slab-on-grade construction where floor coverings are planned are presented for the consideration by the developer, design team, and contractor. These guidelines are based on information obtained from a variety of sources, including the American Concrete Institute (ACI) and are intended to reduce the potential for moisture-related problems causing floor covering failures, and may be supplemented as necessary based on project-specific requirements. The application of these guidelines or not will not affect the geotechnical aspects of the mat foundation performance.

- Place a minimum 10-mil thick vapor retarder conforming to ASTM E 1745, Class C requirements or better directly below the concrete slab; the vapor barrier should extend to the slab edges and be sealed at all seams and penetrations in accordance with manufacturer's recommendations and ASTM E 1643 requirements. A 4-inch-thick capillary break, consisting of ½- to ¾-inch crushed rock with less than 5 percent passing the No. 200 sieve, should be placed below the vapor retarder and consolidated in place with vibratory equipment.

- The concrete water:cement ratio should be 0.45 or less. Mid-range plasticizers may be used to increase concrete workability and facilitate pumping and placement.
- Water should not be added after initial batching unless the slump is less than specified and/or the resulting water:cement ratio will not exceed 0.45.
- Polishing the concrete surface with metal trowels should not be allowed versus light broom or limited trowel finishing.
- Where floor coverings are planned, all concrete surfaces should be moist cured (kept continuously wet) for at least 7 days by soaking burlap, cotton mats, or carpet, or frequent sprinkling. The moist cure method should be placed as soon after concrete finishing as possible, while resisting surface damage. Chemical curing may be an option depending on the floor covering type.
- Water vapor emission levels and concrete pH should be determined in accordance with ASTM F1869-98 and F710-98 requirements and evaluated against the floor covering manufacturer's requirements prior to installation.

8.4 EXTERIOR FLATWORK

8.4.1 Pedestrian and Driveway Concrete Flatwork

Exterior concrete flatwork subject to pedestrian and/or occasional light pick up loading should be at least 4 inches thick and supported on at least 4 inches of Class 2 aggregate base overlying subgrade prepared in accordance with the "Earthwork" recommendations of this report. Flatwork that will be subject to heavier or frequent vehicular loading should be designed in accordance with the recommendations in the "Vehicular Pavements" section below. To help reduce the potential for uncontrolled shrinkage cracking, adequate expansion and control joints should be included. Consideration should be given to limiting the control joint spacing to a maximum of about 2 feet in each direction for each inch of concrete thickness. Flatwork should be isolated from adjacent foundations or retaining walls except where limited sections of structural slabs are included to help span irregularities in retaining wall backfill at the transitions between at-grade and on-structure flatwork.

SECTION 9: RETAINING WALLS

9.1 LATERAL EARTH PRESSURES

The structural design of any site retaining wall should include resistance to lateral earth pressures that develop from the soil behind the wall, any undrained water pressure, and surcharge loads acting behind the wall. Provided a drainage system is constructed behind the wall to prevent the build-up of hydrostatic pressures as discussed in the section below, we recommend that the walls be designed for the following pressures:

Table 6: Recommended Lateral Earth Pressures

Sloping Backfill Inclination (horizontal:vertical)	Lateral Earth Pressure*	
	Unrestrained – Cantilever Wall	Restrained – Braced Wall
Level	45 pcf	45 pcf + 8H
3:1	55 pcf	55 pcf + 8H
2½:1	60 pcf	60 pcf + 8H
2:1	65 pcf	65 pcf + 8H
Additional Surcharge Loads	1/3 of vertical loads at top of wall	½ of vertical loads at top of wall

* Lateral earth pressures are based on an equivalent fluid pressure
** H is the distance in feet between the bottom of footing and top of retained soil

In our opinion, the garage walls should be designed as restrained walls. If adequate drainage cannot be provided behind the wall, an additional equivalent fluid pressure of 40 pcf should be added to the values above for both restrained and unrestrained walls for the portion of the wall that will not have drainage. Damp proofing or waterproofing of the walls may be considered where moisture penetration and/or efflorescence are not desired.

Section 1802A.2.7 of the 2010 CBC states that lateral pressures from earthquakes should be considered in the design of basements and retaining walls. Based on recent work by Lew, et. Al (2011), it is our opinion that retaining walls less than 12 feet in height, which are designed for at-rest earth pressures and a static factor of safety of 1.5 not to consider seismic earth pressure increments because the at-rest design case will govern the earth pressure design.

9.2 WALL DRAINAGE

9.2.1 At-Grade Site Walls

Adequate drainage should be provided by a subdrain system behind all walls. This system should consist of a 4-inch minimum diameter perforated pipe placed near the base of the wall (perforations placed downward). For walls adjacent to habitable living areas, we recommend that the wall subdrain be placed at least 12 inches below the bottom of the adjacent interior floor slab. The pipe should be bedded and backfilled with Class 2 Permeable Material per Caltrans Standard Specifications, latest edition. The permeable backfill should extend at least 12 inches out from the wall and to within 2 feet of outside finished grade. Alternatively, ½-inch to ¾-inch crushed rock may be used in place of the Class 2 Permeable Material provided the crushed rock and pipe are enclosed in filter fabric, such as Mirafi 140N or approved equivalent. The upper 2 feet of wall backfill should consist of compacted on-site soil. The subdrain outlet should be connected to a free-draining outlet or sump.

Miradrain, Geotech Drainage Panels, or equivalent drainage matting can be used for wall drainage as an alternative to the Class 2 Permeable Material or drain rock backfill. The drainage panel should be connected to the perforated pipe at the base of the wall, or to some other closed or through-wall system such as the TotalDrain system from AmerDrain. Miradrain

panels should terminate 18 to 24 inches from final exterior grade. The Miradrain panel filter fabric should be extended over the top of and behind the panel to protect it from intrusion of the adjacent soil.

9.3 BACKFILL

Where surface improvements will be located over the retaining wall backfill, backfill placed behind the walls should be compacted to at least 93 percent relative compaction using light compaction equipment. Where no surface improvements are planned, backfill should be compacted to at least 90 percent. If heavy compaction equipment is used, the walls should be temporarily braced. Based on the current plans, we understand that v-ditches are planned behind the retaining walls, which we highly recommend.

9.4 FOUNDATIONS

Retaining walls may be supported on a continuous spread footing designed in accordance with the recommendations presented in the "Foundations" section of this report.

SECTION 10: LIMITATIONS

This report, an instrument of professional service, has been prepared for the sole use of The Chamberlain Group specifically to support the design of the Highland Estates Lots 1 through 4project in San Mateo County, California. The opinions, conclusions, and recommendations presented in this report have been formulated in accordance with accepted geotechnical engineering practices that exist in Northern California at the time this report was prepared. No warranty, expressed or implied, is made or should be inferred.

Recommendations in this report are based upon the soil and ground water conditions encountered during our subsurface exploration. If variations or unsuitable conditions are encountered during construction, Cornerstone must be contacted to provide supplemental recommendations, as needed.

The Chamberlain Group may have provided Cornerstone with plans, reports and other documents prepared by others. The Chamberlain Group understands that Cornerstone reviewed and relied on the information presented in these documents and cannot be responsible for their accuracy.

Cornerstone prepared this report with the understanding that it is the responsibility of the owner or his representatives to see that the recommendations contained in this report are presented to other members of the design team and incorporated into the project plans and specifications, and that appropriate actions are taken to implement the geotechnical recommendations during construction.

Conclusions and recommendations presented in this report are valid as of the present time for the development as currently planned. Changes in the condition of the property or adjacent properties may occur with the passage of time, whether by natural processes or the acts of

other persons. In addition, changes in applicable or appropriate standards may occur through legislation or the broadening of knowledge. Therefore, the conclusions and recommendations presented in this report may be invalidated, wholly or in part, by changes beyond Cornerstone's control. This report should be reviewed by Cornerstone after a period of three (3) years has elapsed from the date of this report. In addition, if the current project design is changed, then Cornerstone must review the proposed changes and provide supplemental recommendations, as needed.

An electronic transmission of this report may also have been issued. While Cornerstone has taken precautions to produce a complete and secure electronic transmission, please check the electronic transmission against the hard copy version for conformity.

Recommendations provided in this report are based on the assumption that Cornerstone will be retained to provide observation and testing services during construction to confirm that conditions are similar to that assumed for design, and to form an opinion as to whether the work has been performed in accordance with the project plans and specifications. If we are not retained for these services, Cornerstone cannot assume any responsibility for any potential claims that may arise during or after construction as a result of misuse or misinterpretation of Cornerstone's report by others. Furthermore, Cornerstone will cease to be the Geotechnical-Engineer-of-Record if we are not retained for these services.

SECTION 11: REFERENCES

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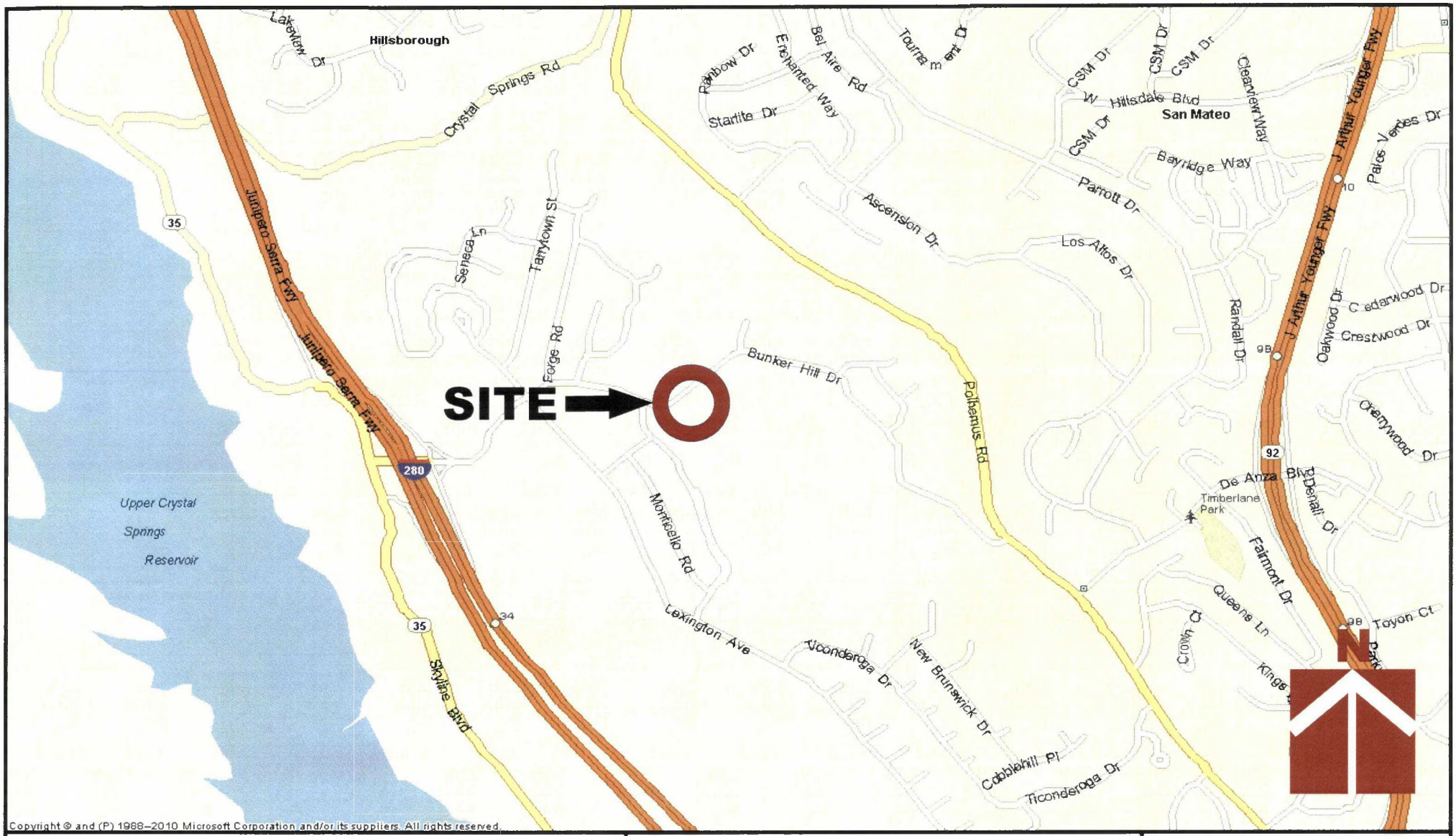
Aerial Photographs

Geomorphic features on the following aerial photographs were interpreted at the U.S. Geological Survey in Menlo Park as part of this investigation:

Date	Flight	Frames	Scale	Type
October 11, 1943	DDB	2B-111, 112, 56, 57	1:20,000	Black & White
July 29, 1946	GS-CP	2-136, 137	1:20,000	Black & White
May 27, 1956	DDB	1R-89, 90	1:20,000	Black & White
April 18, 1968	GS-VBZJ	1-204, 205	1:30,000	Black & White
May 8, 1973	3567	3-117, 118, 119,	1:12,000	Black & White
June 25, 1974	Area 9	9-20,	1:20,000	Natural color



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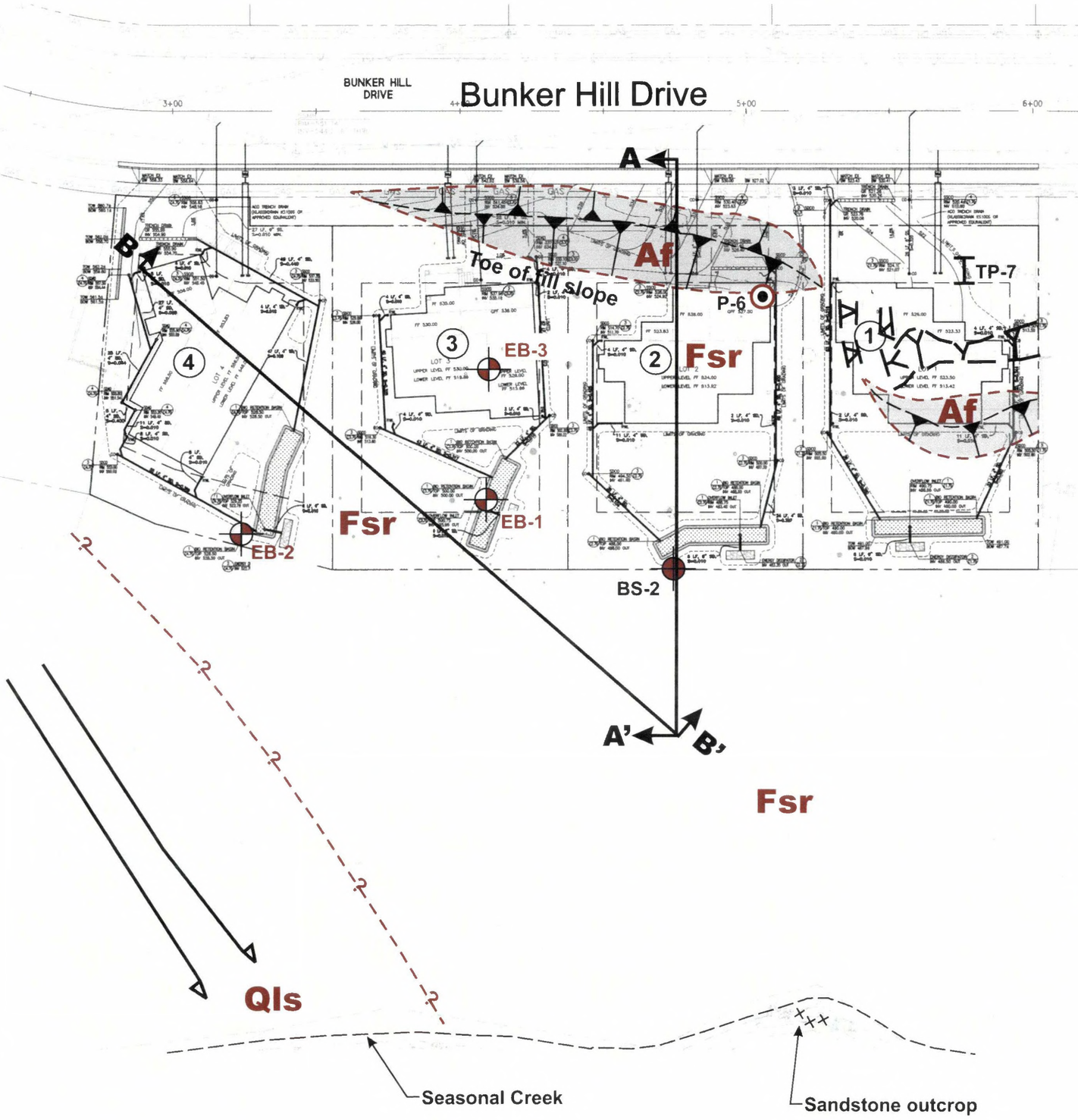
CORNERSTONE EARTH GROUP

Vicinity Map

Highland Estates
Lots 1 through 4
San Mateo County, CA

Project Number	230-1-2
Figure Number	Figure 1
Date	July 2011
Drawn By	RRN



Explanation

Map Symbol

- Approximate location of exploratory boring performed by Cornerstone Earth Group, 2011
- Approximate location of boring performed by SFSI, 1990
- Approximate location of boring performed by SFSI, 1993
- Approximate location of exploratory trench by SFSI, 1993
- A A' Geologic section (see Figure 5 and 6)
- Geologic contact (dashed where approximate)
- Cut slope
- Fill slope

Geological Units

- **Af** Artificial fill
- **Qls** Landslide
- **Fsr** Franciscin sheared rock

Note: Colluvium not shown

N

0 40 80

APPROXIMATE SCALE (FEET)

Base: Highland Estates Lots 1-11 Grading Plan by BKF Engineers, dated July 22, 2011

Project Number 230-1-2

Figure Number Figure 2

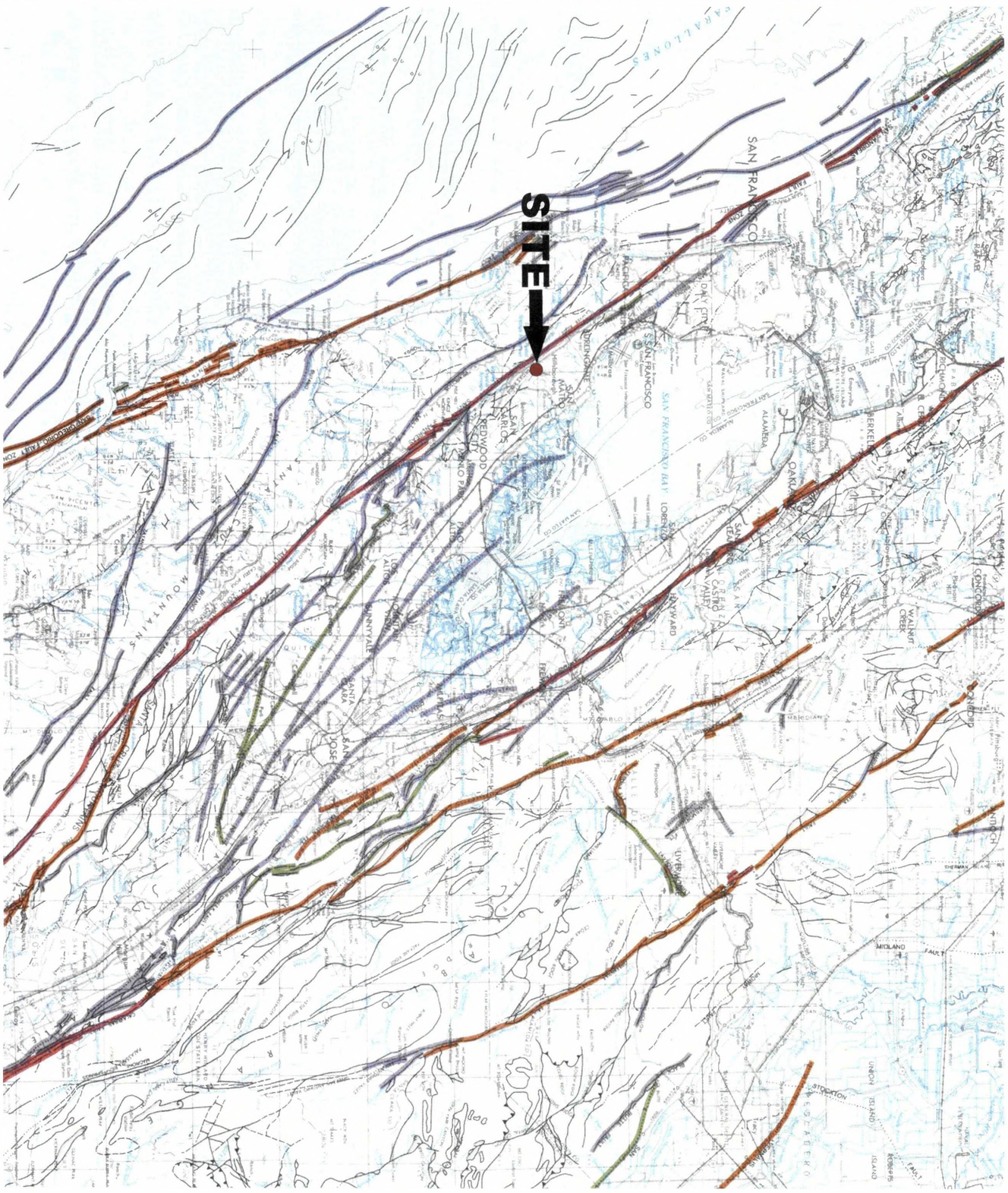
Drawn By RRN

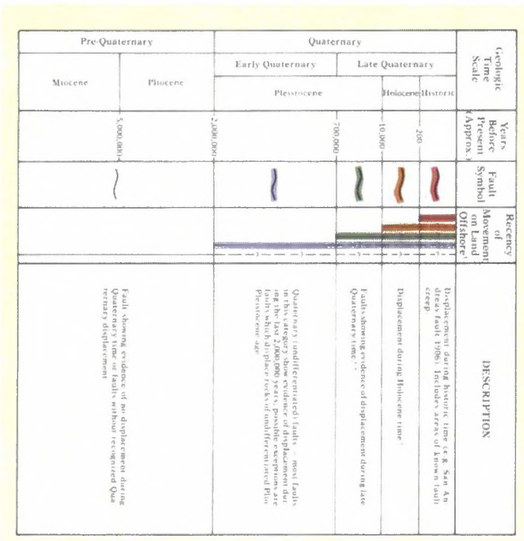
Date July 2011

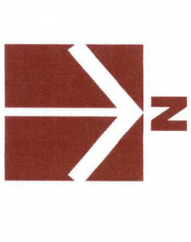
Site Plan

Highland Estates
Lots 1 through 4
San Mateo County, CA

CORNERSTONE EARTH GROUP







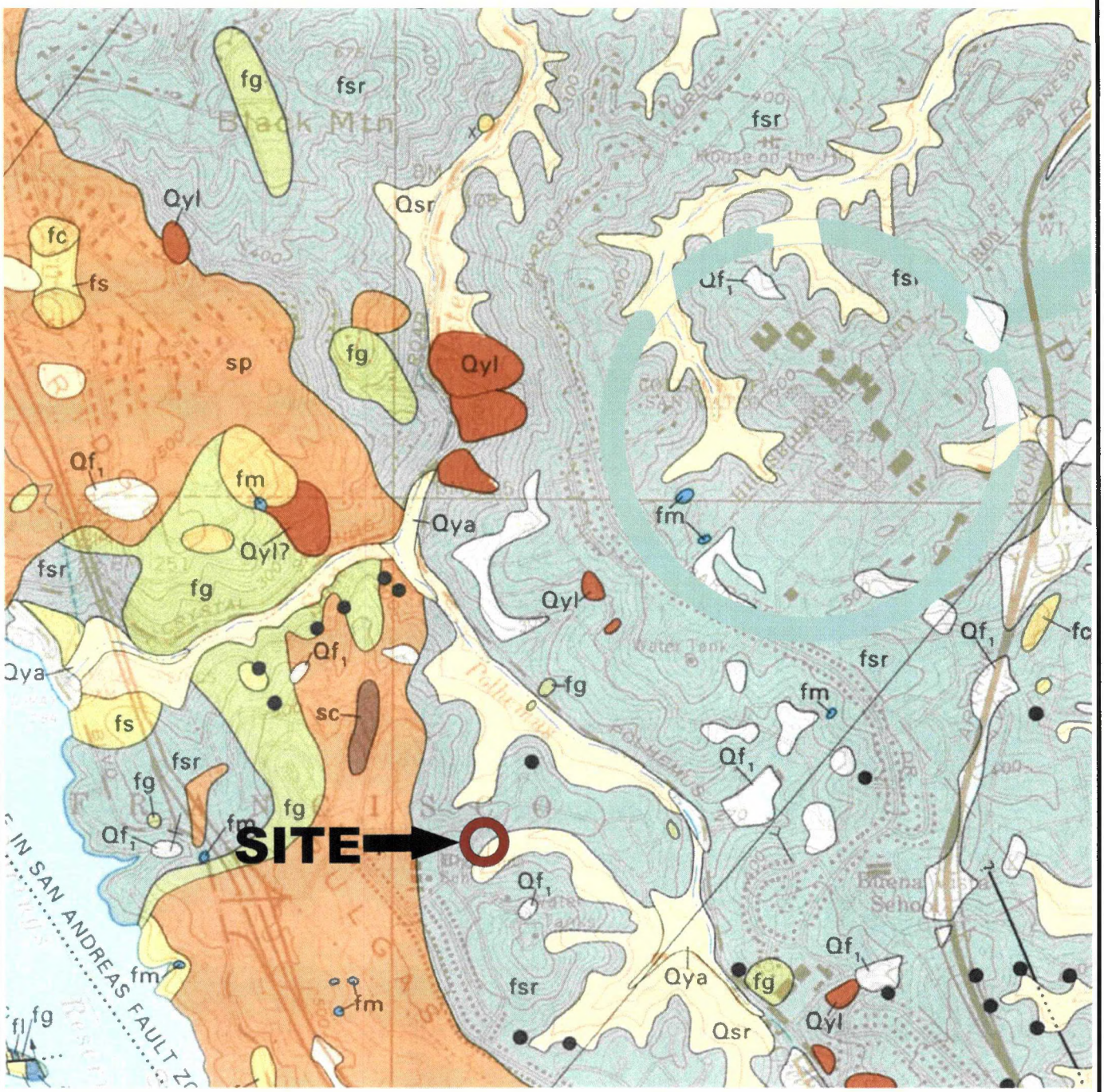
Base Map: "Map showing recency of faulting, San Francisco - San Jose Quadrangle California," by Bortugno, et.al. (California Division of Mines and Geology) dated 1991.

CORNERSTONE EARTH GROUP

Regional Fault Map

Highland Estates
Lots 1 through 4
San Mateo County, CA

Project Number	230-1-2
Figure Number	Figure 3
Date	July 2011
Drawn By	RRN



Local Geologic Units

Qf	Artificial Fill (Holocene)
Qsr	Geologically recent (Holocene) slope wash, ravine fill and colluvium
fg	Greenstone of the Franciscan Complex (Cretaceous or Jurassic)
fc	Chert of the Franciscan Complex (Cretaceous or Jurassic)
fm	Metamorphic rock of the Franciscan Complex (Cretaceous or Jurassic)
fsr	Sheared rock of the Franciscan Complex (Cretaceous or Jurassic)

Explanation

- Contact- dotted where concealed, queried where uncertain
- Fault- dashed where approximate, dotted where concealed, queried where uncertain

N

0 1500 3000

APPROXIMATE SCALE (FEET)

Base by Pampeyan, dated 1994.

CORNERSTONE EARTH GROUP

Vicinity Geologic Map

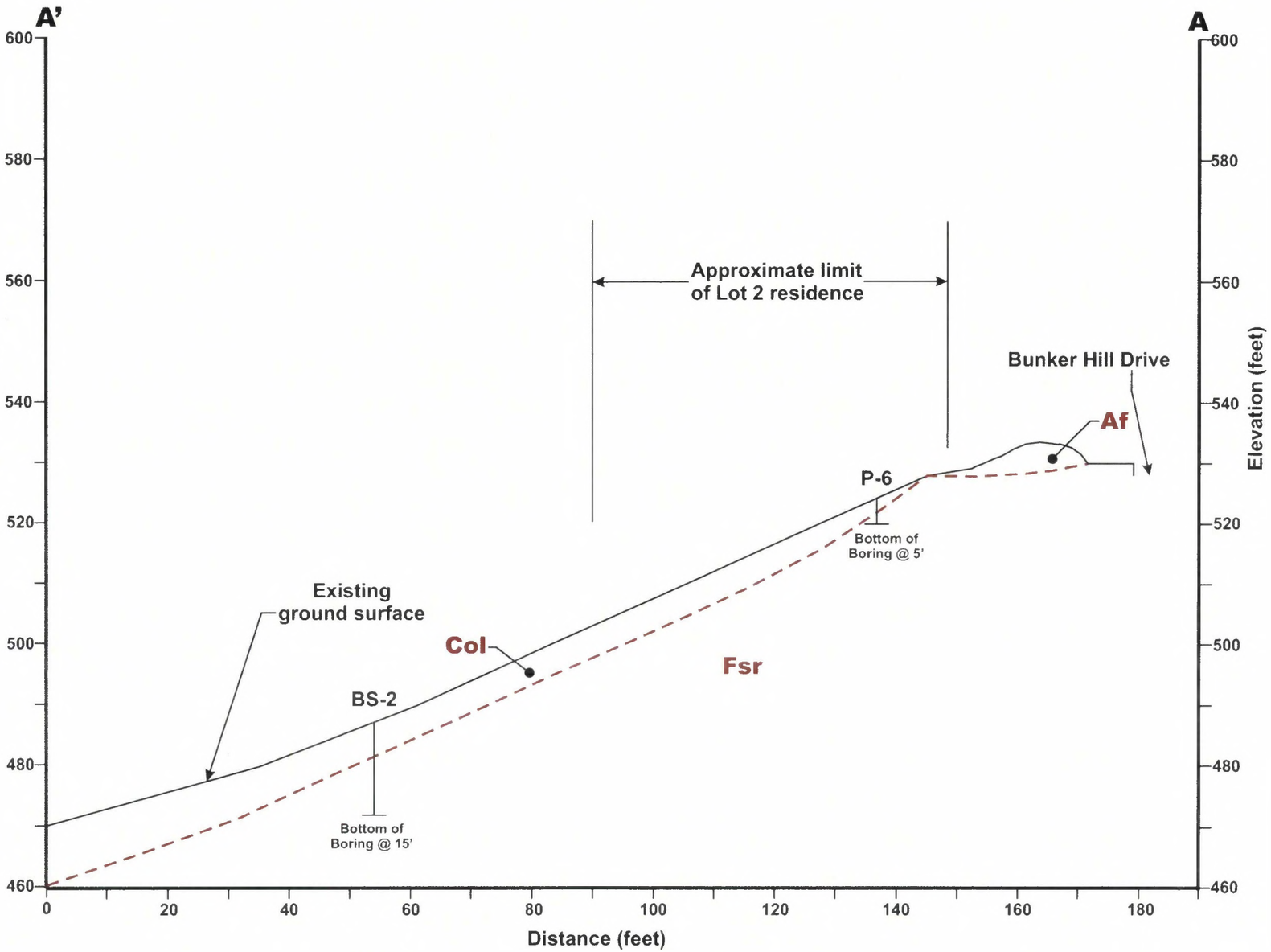
Highland Estates
Lots 1 through 4
San Mateo County, CA

Project Number: 230-1-2

Figure Number: Figure 4

Date: July 2011

Drawn By: RRN



Geologic Units

Af	Artificial fill
Col	Colluvium
Fsr	Franciscan sheared rock
- - -	Geologic contact, approximate where dashed

Section A-A'

1"=20' Horiz. and Vert.
(View Looking Northeast)

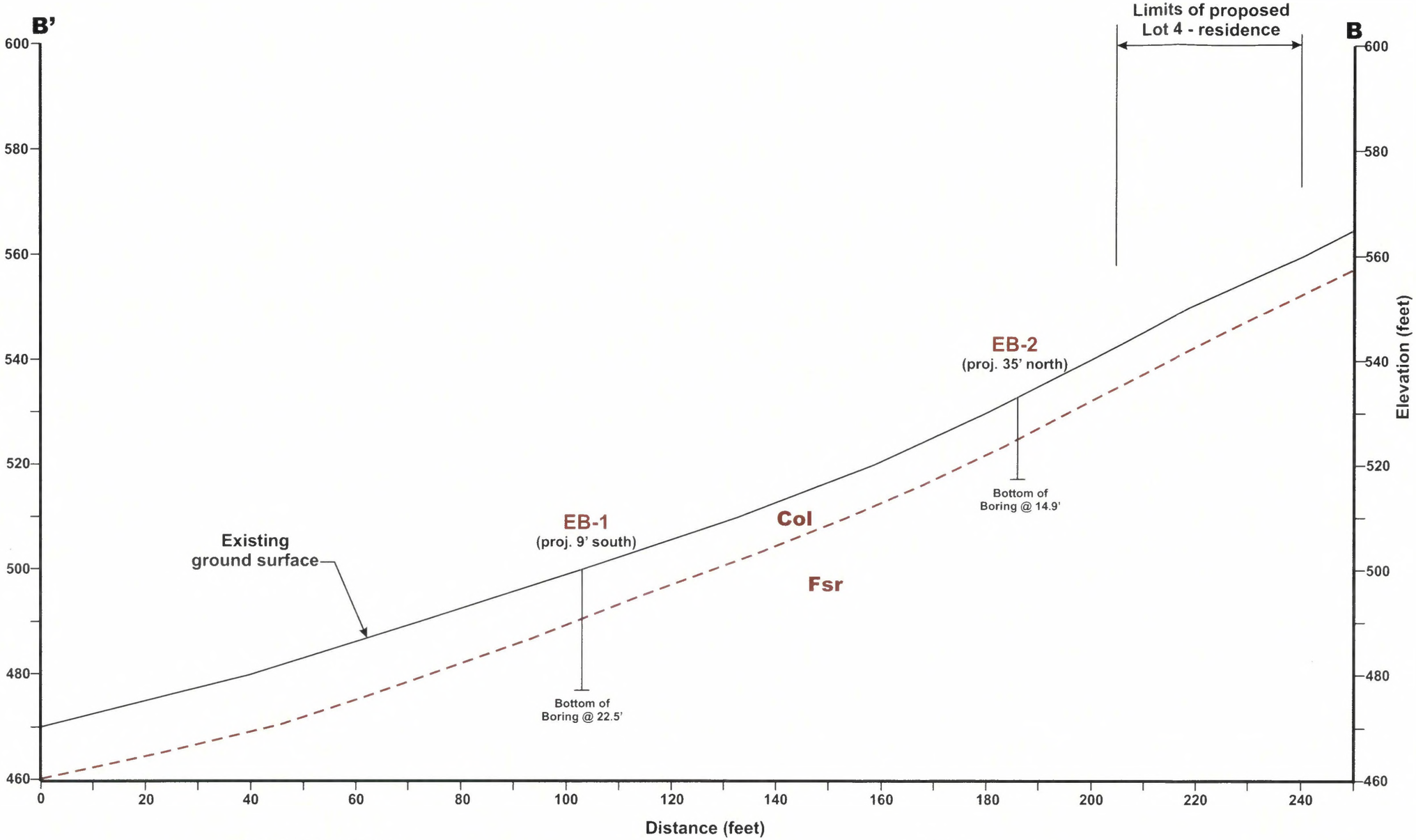
Notes:
1) Surficial fills associated with existing pavements are not shown.
2) Topographic information based on survey from BKF Engineers, dated July 22, 2011.
3) The subsurface profile is conceptual and is based on limited subsurface data obtained from widely spaced borings. Actual subsurface conditions may vary between borings.
4) See Figure 2 for locations of cross sections.

Project Number: 230-1-2
Figure Number: Figure 5
Drawn By: RRN
Date: July 2011

Cross Section A-A'

Highland Estates
Lots 1 through 4
San Mateo County, CA

CORNERSTONE EARTH GROUP



Geologic Units

Af	Artificial fill
Col	Colluvium
Fsr	Franciscan sheared rock
- - -	Geologic contact, approximate where dashed

Section B-B'

1"=20' Horiz. and Vert.
(View Looking NE)

Notes:
1) Surficial fills associated with existing pavements are not shown.
2) Topographic information based on survey from BKF Engineers, dated July 22, 2011.
3) The subsurface profile is conceptual and is based on limited subsurface data obtained from widely spaced borings. Actual subsurface conditions may vary between borings.
4) See Figure 2 for locations of cross sections.

Project Number 230-1-2
Figure Number Figure 6
Drawn By RRN
Date July 2011

Cross Section B-B'

Highland Estates
Lots 1 through 4
San Mateo County, CA

CORNERSTONE EARTH GROUP

APPENDIX A: FIELD INVESTIGATION

The field investigation consisted of a surface reconnaissance and a subsurface exploration program using limited-access auger drilling equipment. Three 4-inch-diameter exploratory borings were drilled on June 21, 2011 to depths of 14 to 22 feet. The approximate locations of exploratory borings are shown on the Site Plan and Geologic Map, Figure 2. The soils encountered were continuously logged in the field by our representative and described in accordance with the Unified Soil Classification System (ASTM D2488). Boring logs, as well as a key to the classification of the soil and bedrock, are included as part of this appendix.

Boring locations were approximated using existing site boundaries, a hand held GPS unit, and other site features as references. Boring elevations were based on interpolation of plan contours. The locations [and elevations] of the borings should be considered accurate only to the degree implied by the method used.

Representative soil samples were obtained from the borings at selected depths. All samples were returned to our laboratory for evaluation and appropriate testing. The standard penetration resistance blow counts were obtained by dropping a 140-pound hammer through a 30-inch free fall. The 2-inch O.D. split-spoon sampler was driven 18 inches and the number of blows was recorded for each 6 inches of penetration (ASTM D1586). 2.5-inch I.D. samples were obtained using a Modified California Sampler driven into the soil with the 140-pound hammer previously described. Unless otherwise indicated, the blows per foot recorded on the boring log represent the accumulated number of blows required to drive the last 12 inches. The various samplers are denoted at the appropriate depth on the boring logs.

Field tests included an evaluation of the unconfined compressive strength of the soil samples using a pocket penetrometer device. The results of these tests are presented on the individual boring logs at the appropriate sample depths.

Attached boring logs and related information depict subsurface conditions at the locations indicated and on the date designated on the logs. Subsurface conditions at other locations may differ from conditions occurring at these boring locations. The passage of time may result in altered subsurface conditions due to environmental changes. In addition, any stratification lines on the logs represent the approximate boundary between soil types and the transition may be gradual.

UNIFIED SOIL CLASSIFICATION (ASTM D-2487-10)

MATERIAL TYPES	CRITERIA FOR ASSIGNING SOIL GROUP NAMES			GROUP SYMBOL	SOIL GROUP NAMES & LEGEND
COARSE-GRAINED SOILS >50% RETAINED ON NO. 200 SIEVE	GRAVELS >50% OF COARSE FRACTION RETAINED ON NO 4. SIEVE	CLEAN GRAVELS <5% FINES	Cu>4 AND 1<Cc<3	GW	WELL-GRADED GRAVEL
			Cu>4 AND 1>Cc>3	GP	POORLY-GRADED GRAVEL
		GRAVELS WITH FINES >12% FINES	FINES CLASSIFY AS ML OR CL	GM	SILTY GRAVEL
			FINES CLASSIFY AS CL OR CH	GC	CLAYEY GRAVEL
	SANDS >50% OF COARSE FRACTION PASSES ON NO 4. SIEVE	CLEAN SANDS <5% FINES	Cu>6 AND 1<Cc<3	SW	WELL-GRADED SAND
			Cu>6 AND 1>Cc>3	SP	POORLY-GRADED SAND
		SANDS AND FINES >12% FINES	FINES CLASSIFY AS ML OR CL	SM	SILTY SAND
			FINES CLASSIFY AS CL OR CH	SC	CLAYEY SAND
FINE-GRAINED SOILS >50% PASSES NO. 200 SIEVE	SILTS AND CLAYS LIQUID LIMIT<50	INORGANIC	PI>7 AND PLOTS>"A" LINE	CL	LEAN CLAY
			PI>4 AND PLOTS<"A" LINE	ML	SILT
		ORGANIC	LL (oven dried)/LL (not dried)<0.75	OL	ORGANIC CLAY OR SILT
	SILTS AND CLAYS LIQUID LIMIT>50	INORGANIC	PI PLOTS >"A" LINE	CH	FAT CLAY
			PI PLOTS <"A" LINE	MH	ELASTIC SILT
		ORGANIC	LL (oven dried)/LL (not dried)<0.75	OH	ORGANIC CLAY OR SILT
HIGHLY ORGANIC SOILS		PRIMARILY ORGANIC MATTER, DARK IN COLOR, AND ORGANIC ODOR		PT	PEAT

OTHER MATERIAL SYMBOLS

- Poorly-Graded Sand with Clay
- Clayey Sand
- Sandy Silt
- Artificial/Undocumented Fill
- Poorly-Graded Gravelly Sand
- Topsoil
- Well-Graded Gravel with Clay
- Well-Graded Gravel with Silt
- Sand
- Silt
- Well Graded Gravelly Sand
- Gravelly Silt
- Asphalt
- Boulders and Cobble

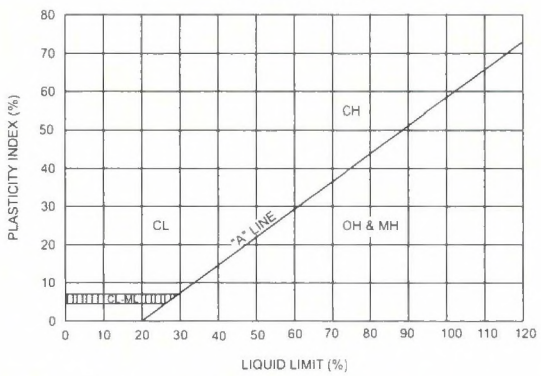
SAMPLER TYPES

- SPT
- Modified California (2.5" I.D.)
- Rock Core
- Shelby Tube
- No Recovery
- Grab Sample

ADDITIONAL TESTS

CA	-	CHEMICAL ANALYSIS (CORROSIVITY)	PI	-	PLASTICITY INDEX
CD	-	CONSOLIDATED DRAINED TRIAXIAL	SW	-	SWELL TEST
CN	-	CONSOLIDATION	TC	-	CYCLIC TRIAXIAL
CU	-	CONSOLIDATED UNDRAINED TRIAXIAL	TV	-	TORVANE SHEAR
DS	-	DIRECT SHEAR	UC	-	UNCONFINED COMPRESSION
PP	-	POCKET PENETROMETER (TSF)	(1.5)	-	(WITH SHEAR STRENGTH IN KSF)
(3.0)	-	(WITH SHEAR STRENGTH IN KSF)	UU	-	UNCONSOLIDATED UNDRAINED TRIAXIAL
RV	-	R-VALUE			
SA	-	SIEVE ANALYSIS: % PASSING #200 SIEVE			
	-	WATER LEVEL			

PLASTICITY CHART



PENETRATION RESISTANCE
(RECORDED AS BLOWS / FOOT)

SAND & GRAVEL		SILT & CLAY		
RELATIVE DENSITY	BLOWS/FOOT*	CONSISTENCY	BLOWS/FOOT*	STRENGTH** (KSF)
VERY LOOSE	0 - 4	VERY SOFT	0 - 2	0 - 0.25
LOOSE	4 - 10	SOFT	2 - 4	0.25 - 0.5
MEDIUM DENSE	10 - 30	MEDIUM STIFF	4 - 8	0.5-1.0
DENSE	30 - 50	STIFF	8 - 15	1.0 - 2.0
VERY DENSE	OVER 50	VERY STIFF	15 - 30	2.0 - 4.0
		HARD	OVER 30	OVER 4.0

* NUMBER OF BLOWS OF 140 LB HAMMER FALLING 30 INCHES TO DRIVE A 2 INCH O.D. (1-3/8 INCH I.D.) SPLIT-BARREL SAMPLER THE LAST 12 INCHES OF AN 18-INCH DRIVE (ASTM-1586 STANDARD PENETRATION TEST).

** UNDRAINED SHEAR STRENGTH IN KIPS/SQ. FT. AS DETERMINED BY LABORATORY TESTING OR APPROXIMATED BY THE STANDARD PENETRATION TEST, POCKET PENETROMETER, TORVANE, OR VISUAL OBSERVATION.

CORNERSTONE EARTH GROUP

LEGEND TO SOIL DESCRIPTIONS

Figure Number A-1

HARDNESS

Soft – Reserved for plastic material alone.
Low hardness – Can be gouged deeply or carved easily with a knife blade.
Moderately hard – Can be readily scratched by a knife blade: scratch leaves a heavy trace of dust and is readily visible after the powder has been blown away.
Hard – Can be scratched with difficulty: scratch produces little powder and is often faintly visible.
Very hard – Cannot be scratched with knife blade: leaves a metallic streak.

STRENGTH

Plastic or very low strength.
Friable – Crumbles easily by rubbing with fingers.
Weak – An unfractured specimen of such material will crumble under light hammer blows.
Moderately strong – Specimen will withstand a few heavy hammer blows before breaking.
Strong – Specimen will withstand a few heavy ringing blows and will yield with difficulty only dust and small flying fragments.
Very strong – Specimen will resist heavy ringing hammer blows and will yield with difficulty only dust and small flying fragments.

WEATHERING – The physical and chemical disintegration and decomposition of rocks and minerals by natural processes such as oxidation, reduction, hydration, solution, carbonation, and freezing and thawing.

Deep – Moderate to complete mineral decomposition: extensive disintegration: deep and thorough discoloration: many fractures, all extensively coated or filled with oxides, carbonates and/or clay or silt.
Moderate – Slight change or partial decomposition of minerals: little disintegration: cementation little to unaffected. Moderate to occasionally intense discoloration. Moderately coated fractures.
Little – No megascopic decomposition of minerals: little or no effect on normal cementation. Slight and intermittent, or localized discoloration. Few stains or fracture surfaces.
Fresh – Unaffected by weathering agents. No disintegration or discoloration. Fractures usually less numerous than joints.

FRACTURING

Intensity	Size of Pieces in Feet
Very little fractured	Greater than 4.0
Occasionally fractured	1.0 to 4.0
Moderately fractured	0.5 to 1.0
Closely fractured	0.1 to 0.5
Intensely fractured	0.05 to 0.1
Crushed	Less than 0.05

BEDDING OF SEDIMENTARY ROCKS

Splitting Property	Thickness	Stratification
Massive	Greater than 4.0 feet	very thick-bedded
Blocky	2.0 to 4.0 feet	thick-bedded
Slabby	0.2 to 2.0 feet	thin-bedded
Flaggy	0.05 to 0.2 feet	very thin-bedded
Shaly or Platy	0.01 to 0.05 feet	laminated
Papery	less than 0.01 feet	thinly laminated

BORING NUMBER EB-1

CORNERSTONE EARTH GROUP

PROJECT NAME Highland Estates Lots 1 Through 4
PROJECT NUMBER 230-1-2
PROJECT LOCATION San Mateo County, CA

DATE STARTED 6/20/11 **DATE COMPLETED** 6/20/11
GROUND ELEVATION 503 FT +/- **BORING DEPTH** 22.5 ft.
DRILLING CONTRACTOR Access Soil Drilling Inc. **LATITUDE** _____ **LONGITUDE** _____
DRILLING METHOD Minuteman, 4 inch Solid Flight Auger
GROUND WATER LEVELS:
LOGGED BY CSH
▽ **AT TIME OF DRILLING** Not Encountered
NOTES _____
▼ **AT END OF DRILLING** Not Encountered

This log is a part of a report by Cornerstone Earth Group, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

ELEVATION (ft)	DEPTH (ft)	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT, %	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE
503.0	0	**Clayey Sand (SC) [Colluvium]** loose, moist, dark gray to brown, fine sand, some fine subangular to subrounded gravel	11	MC-1	87	9		46
500.0		**Sandy Lean Clay (CL) [Colluvium]** very stiff to hard, moist, gray to brown, fine sand, some fine subangular to subrounded gravel	22	MC-4	105	15		
	5		23	MC-6	106	16		
			69	MC-8	104	17		
496.0		**Sandy Lean Clay (CL) [Colluvium]** hard, moist, yellowish brown, fine sand, some fine subangular to subrounded gravel	50 5"	MC-9	96	15		
494.0		**Sandstone - Franciscan Complex [Fsr]** low hardness, weak, deep weathering, yellowish brown, medium sand	40	SPT-10		14		
	10		50 5"	SPT-11				
	15	cemented veins, some fine subangular gravel	28	SPT				
			38	SPT-13		12		
484.5		**Shale - Franciscan Complex [Fsr]** low hardness, weak, moderate weathering, dark gray to brown						
	20		55	SPT				
480.5		Bottom of Boring at 22.5 feet.						
	25							

UNDRAINED SHEAR STRENGTH, ksf
○ HAND PENETROMETER
△ TORVANE
● UNCONFINED COMPRESSION
▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL
1.0 2.0 3.0 4.0
>4.5

CORNERSTONE EARTH GROUP2 - CORNERSTONE.GDT - 7/25/11 10:30 - P:\DRAFTING\GINT FILES\230-1-2 HIGHLAND ESTATES.GPJ

BORING NUMBER EB-2

CORNERSTONE EARTH GROUP

PROJECT NAME Highland Estates Lots 1 Through 4
PROJECT NUMBER 230-1-2
PROJECT LOCATION San Mateo County, CA

DATE STARTED 6/20/11 **DATE COMPLETED** 6/20/11
GROUND ELEVATION 536 FT +/- **BORING DEPTH** 14.9 ft.
DRILLING CONTRACTOR Access Soil Drilling Inc. **LATITUDE** _____ **LONGITUDE** _____
DRILLING METHOD Minuteman, 4 inch Solid Flight Auger
GROUND WATER LEVELS:
LOGGED BY CSH
▽ **AT TIME OF DRILLING** Not Encountered
NOTES _____
▼ **AT END OF DRILLING** Not Encountered

This log is a part of a report by Cornerstone Earth Group, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

ELEVATION (ft)	DEPTH (ft)	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT, %	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE
536.0	0	**Clayey Sand (SC) [Colluvium]** loose, moist, dark gray to brown, fine sand, some fine subangular gravel	6	MC-1	89	10		
533.5		**Sandy Lean Clay (CL) [Colluvium]** very stiff to hard, moist, yellowish brown, fine sand, some fine subangular to subrounded gravel	18	MC-2	112	10		
	5		45	MC-5	104	20		
			63	MC-7	116	15		
529.0		**Sandstone - Franciscan Complex [Fsr]** low hardness, weak, deep weathering, yellowish brown, medium sand	50/4"	MC-8	111	12		
			77	SPT-9		11		
	10	moderate weathering	75	SPT-10		16		
			54/4.5"	SPT-11		14		
			50/5"	SPT				
521.1	15	Bottom of Boring at 14.9 feet.						
	20							
	25							

UNDRAINED SHEAR STRENGTH, ksf
○ HAND PENETROMETER
△ TORVANE
● UNCONFINED COMPRESSION
▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL
1.0 2.0 3.0 4.0
>4.5

CORNERSTONE EARTH GROUP2 - CORNERSTONE.GDT - 7/25/11 10:30 - P:\DRAFTING\GINT FILES\230-1-2 HIGHLAND ESTATES.GPJ

BORING NUMBER EB-3

CORNERSTONE EARTH GROUP

PROJECT NAME Highland Estates Lots 1 Through 4
PROJECT NUMBER 230-1-2
PROJECT LOCATION San Mateo County, CA

DATE STARTED 6/20/11 **DATE COMPLETED** 6/20/11
GROUND ELEVATION 509 FT +/- **BORING DEPTH** 12.4 ft.
DRILLING CONTRACTOR Access Soil Drilling Inc. **LATITUDE** **LONGITUDE**
DRILLING METHOD Minuteman, 4 inch Solid Flight Auger
GROUND WATER LEVELS:
LOGGED BY CSH ▽ **AT TIME OF DRILLING** Not Encountered
NOTES ▼ **AT END OF DRILLING** Not Encountered

This log is a part of a report by Cornerstone Earth Group, and should not be used as a stand-alone document. This description applies only to the location of the exploration at the time of drilling. Subsurface conditions may differ at other locations and may change at this location with time. The description presented is a simplification of actual conditions encountered. Transitions between soil types may be gradual.

ELEVATION (ft)	DEPTH (ft)	DESCRIPTION	N-Value (uncorrected) blows per foot	SAMPLES TYPE AND NUMBER	DRY UNIT WEIGHT PCF	NATURAL MOISTURE CONTENT, %	PLASTICITY INDEX, %	PERCENT PASSING No. 200 SIEVE
509.0	0	**Clayey Sand (SC) [Colluvium]** medium dense, moist, dark brown, fine sand, trace fine to coarse subangular to subrounded gravel	18	MC-2	96	9		
506.0		**Sandy Lean Clay (CL) [Colluvium]** very stiff to hard, moist, yellowish brown with orangish gray mottles, fine sand, sandstone inclusions, low plasticity Liquid Limit = 26, Plastic Limit = 16	29	MC-4	114	13	10	
	5		54	MC-5	108	16		
502.5		**Sandstone - Franciscan Complex [Fsr]** low hardness, weak, moderate weathering, yellowish brown, medium sand	71	MC-6.5	112	17		
			93	MC-8	113	15		
	10		50/5"	SPT-11		14		
496.6		Bottom of Boring at 12.4 feet.	100/4"	SPT				
	15							
	20							
	25							

UNDRAINED SHEAR STRENGTH, ksf
○ HAND PENETROMETER
△ TORVANE
● UNCONFINED COMPRESSION
▲ UNCONSOLIDATED-UNDRAINED TRIAXIAL
1.0 2.0 3.0 4.0
>4.5

CORNERSTONE EARTH GROUP2 - CORNERSTONE.GDT - 7/25/11 10:30 - P:\DRAFTING\GINT FILES\230-1-2 HIGHLAND ESTATES.GPJ

EXPLORATORY BORING LOG						LABORATORY TESTS								
Sample Number	Depth, feet	Boring Log	Unified Soil Classification System Symbols	Description	Standard Penetration Test, blows/foot	Moisture Content, %	Dry Density, p.c.f.	Unconfined Compressive Strength, k.s.f.	Direct Shear Test "C", k.s.f.	Direct Shear Test "φ", degrees	Liquid Limit, %	Plasticity Index, %		
Hole P-5						Date of Drilling : 4/6/90								
	2		CL	FILL: Mixture of light to dark brown silty clay, sandy Clay and Serpentine rock fragments, stiff										
5-1	4				20*	16.5	102.5							
	6		-	(Qaf)										
	8		ML											
5-2	10				51*	16.6	115.0		1.4	0				
	12													
	14		CL	Black to dark brown silty Clay with rock fragments, stiff, moist										
	16			(Qc)										
	18			Medium to dark gray Serpentine rock, hard (highly expansive)- Sp		11.2	120.2							
5-3	20				45*	10.1	131.8		0.5	14				
				Bottom at 21 feet										
				Hole P-6		Date of Drilling : 4/6/90								
	2		CL	Brown sandy Clay										
				Massive Sandstone, very hard (Ss) (refusal to drilling)										
	4													
				Bottom at 5 feet										

Plate 28 - Log of Test Borings: P-5 & P-7

SOIL FOUNDATION SYSTEMS, INC.

File No. S24-634-2S
November 7, 1994

EXPLORATORY BORING LOG

Location: Site #3
Boring No. BS-2
Date of Drilling: 12/3/93
Equipment: Minuteman; 3" diameter continuous flight augers

Drilling Time
12-inch Advance - minutes

Sample Number	Depth, feet	Boring Log	Unified Soil Classification System Symbols	Description	Standard Penetration Test, blows/foot
	2			Colluvium: dark brown clayey Silt, sandy (Qc)	2'
	4			Siltstone; light brown, dry, firm (Fm)	4'
	6				6'
	8			Sandstone; fine grained, dry, fairly hard (Ss)	8'
	10			becoming very hard at 9'	10'
				Bottom at 11 feet	12'

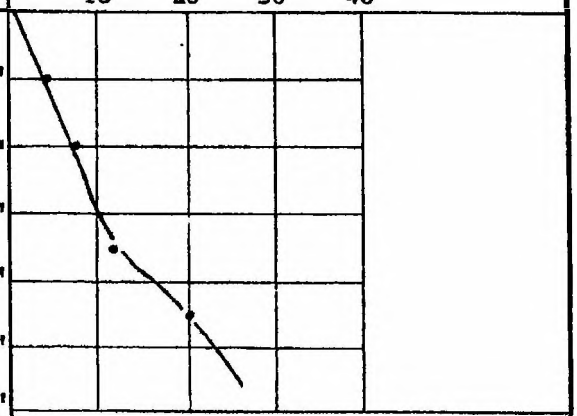
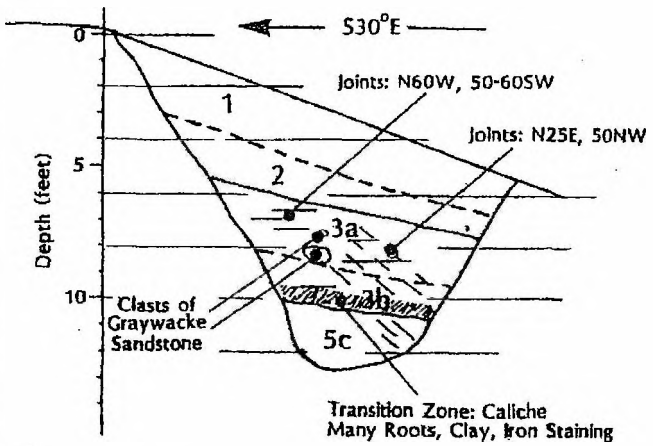


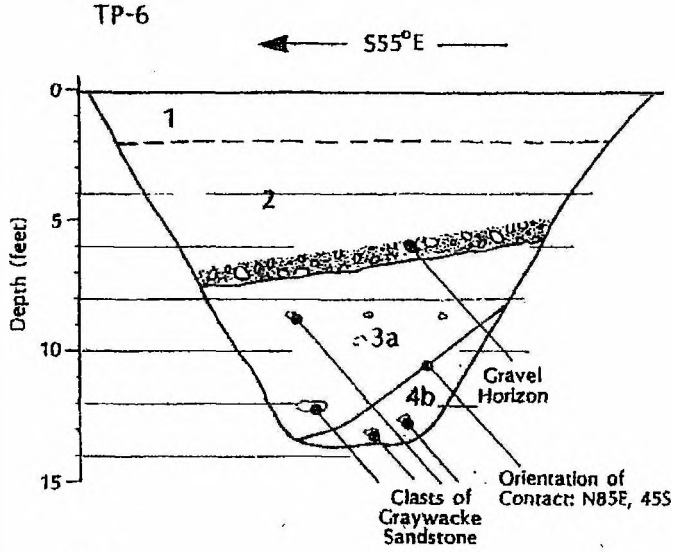
Plate B - Log of Test Boring, BS-2

SOIL FOUNDATION SYSTEMS, INC.

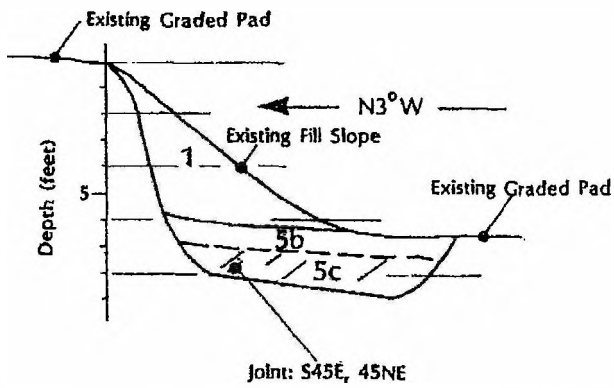
TP-5



TP-6



TP-7



Lithological Units

1 Fill. Clayey sand with angular clasts of graywacke; dark yellowish brown (10YR4/2) damp, many roots; minor disseminated caliche, chunks of glass, loose to firm.

2 Colluvium. Clayey, sandy silt with graywacke inclusions up to 18" in maximum dimension. Unconsolidated and unsorted; moderate yellowish brown, damp; many roots; caliche staining at basal contact; firm.

3a Sheared Siltstone/Shale. With graywacke inclusions; severely weathered; dark yellowish brown (10YR4/2), many roots, minor caliche, moist to slightly moist, stiff to very stiff. Small partings dip in direction of slope at 25° ±5°.

3b Sheared Siltstone/Shale. With graywacke inclusions, moderately weathered, grayish red purple (5RP4/2), many roots, minor caliche; slightly moist, stiff to very stiff.

4b Sandstone. Clayey, moderately to severely weathered; light yellowish brown (6/4) arkostic (dull feldspars weathering to clay; mica flakes?) slightly moist, friable, medium compact to compact

5b Graywacke Sandstone. Moderately weathered; dark yellowish brown (10YR4/2), damp, roots, iron staining and minor caliche, fine- to medium-grained, compact (hard to rip).

5c Graywacke Sandstone. Slightly weathered, light olive gray (5Y 5/2), with dark yellowish brown (10YR4/2) staining on joint planes; joints typically spaced at 6" to 12"; damp, massive, very compact, (very hard to rip).

Symbols

Geologic Contact (dashed where approximate)

Gravel Horizon

Joint Set

Test pits logged by Darwin Myers, CEG 946, on 3 December 1993

Plate C - Log of Test Pits TP-5 Through TP-7

SOIL FOUNDATION SYSTEMS, INC.

APPENDIX B: LABORATORY TEST PROGRAM

The laboratory testing program was performed to evaluate the physical and mechanical properties of the soils retrieved from the site to aid in verifying soil classification.

Moisture Content
The natural water content was determined (ASTM D2216) on 21 samples of the materials recovered from the borings. These water contents are recorded on the boring logs at the appropriate sample depths.

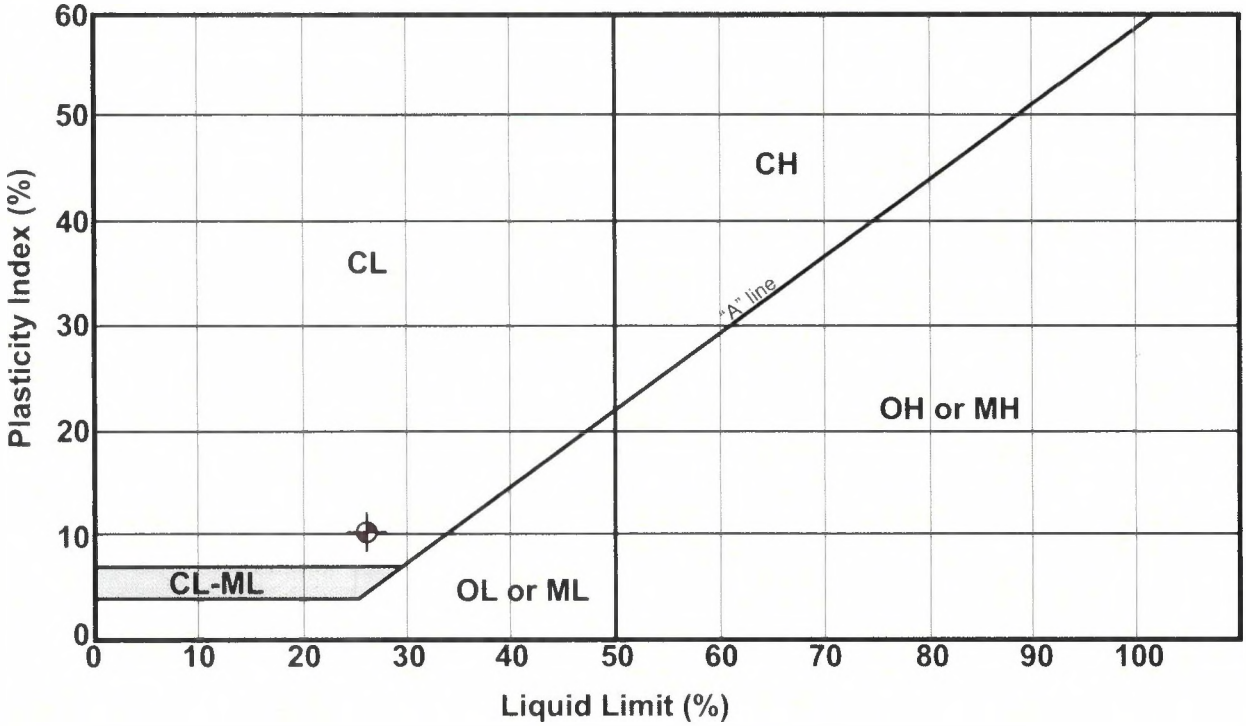
Dry Densities
In place dry density determinations (ASTM D2937)were performed on 15 samples to measure the unit weight of the subsurface soils. Results of these tests are shown on the boring logs at the appropriate sample depths.

Washed Sieve Analyses
The percent soil fraction passing the No. 200 sieve (ASTM D1140) was determined on 2 samples of the subsurface soils to aid in the classification of these soils. Results of these tests are shown on the boring logs at the appropriate sample depths.

.**Plasticity Index:** One Plasticity Index determinations (ASTM D4318) were performed on samples of the subsurface soils to measure the range of water contents over which this material exhibits plasticity. The Plasticity Index was used to classify the soil in accordance with the Unified Soil Classification System and to evaluate the soil expansion potential. Results of these tests indicate that the surficial soil is low plasticity. Results of these tests are shown on the boring logs at the appropriate sample depths.

APPENDIX C: NATURALLY OCCURING ASBESTOS EVALUATION

Plasticity Index (ASTM D4318) Testing Summary



Symbol	Boring No.	Depth (ft)	Natural Water Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index	Passing No. 200 (%)	Group Name (USCS - ASTM D2487)
⊕	EB-3	11	3.5	26	16	10		Sandy Lean Clay (CL) [Colluvium]

CORNERSTONE EARTH GROUP

Plasticity Index Testing Summary

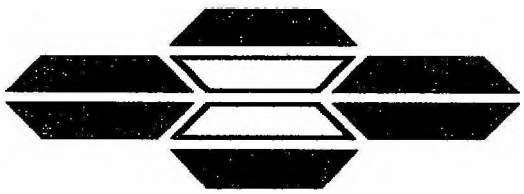
Highland Estates
Lots 1 through 4
San Mateo County, CA

Project Number: 230-1-2

Figure Number: Figure B1

Date: July 2011

Drawn By: FLL



ASBESTOS TEM LABORATORIES, INC.

CARB Method 435
Polarized Light Microscopy
Analytical Report

Laboratory Job # 1206-00014

630 Bancroft Way
Berkeley, CA 94710
(510) 704-8930
FAX (510) 704-8429

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ASBESTOS TEM LABORATORIES, INC

Jul/07/2011

Paul Cunningham
Cornerstone Earth Group, Inc.
1259 Oakmead Parkway
Sunnyvale, CA 94085

RE: LABORATORY JOB # 1206-00014
Polarized light microscopy analytical results for 2 bulk sample(s).
Job Site: 230-1-2
Job No.: Highlands Estate, San Mateo

Enclosed please find the bulk material analytical results for one or more samples submitted for asbestos analysis. The analyses were performed in accordance with the California Air Resources Board (ARB) Method 435 for the determination of asbestos in serpentine aggregate samples.

Prior to analysis, samples are logged-in and all data pertinent to the sample recorded. The samples are checked for damage or disruption of any chain-of-custody seals. A unique laboratory ID number is assigned to each sample. A hard copy log-in sheet containing all pertinent information concerning the sample is generated. This and all other relevant paper work are kept with the sample throughout the analytical procedures to assure proper analysis.

Sample preparation follows a standard CARB 435 prep method. The entire sample is dried at 135-150 C and then crushed to ~3/8" gravel size using a Bico Chipmunk crusher. If the submitted sample is >1 pint, the sample was split using a 1/2" riffle splitter following ASTM Method C-702-98 to obtain a 1 pint aliquot. The entire 1 pint aliquot, or entire original sample, is then pulverized in a Bico Braun disc pulverizer calibrated to produce a nominal 200 mesh final product. If necessary, additional homogenization steps are undertaken using a 3/8" riffle splitter. Small aliquots are collected from throughout the pulverized material to create three separate microsope slide mounts containing the appropriate refractive index oil. The prepared slides are placed under a polarizing light microscope where standard mineralogical techniques are used to analyze the various materials present, including asbestos. If asbestos is identified and of less than 10% concentration by visual area estimate then an additional five sample mounts are prepared. Quantification of asbestos concentration is obtained using the standard CAL ARB Method 435 point count protocol. For samples observed to contain visible asbestos of less than 10% concentration, a point counting techinique is used with 50 points counted on each of eight sample mounts for a total of 400 points. The data is then compiled into standard report format and subjected to a thorough quality assurance check before the information is released to the client.

While the CARB 435 method has much to commend it, there are a number of situations where it fails to provide sufficient accuracy to make a definitive determination of the presence/absence of asbestos and/or an accurate count of the asbestos concentration present in a given sample. These problems include, but are not limited to, 1) statistical uncertainty with samples containing <1% asbestos when too few particles are counted, 2) definitive identification and discrimination between various fibrous amphibole minerals such as tremolite/actinolite/hornblende and the "Libby amphiboles" such as tremolite/winchite/richterite/arfvedsonite, and C) small asbestiform fibers which are near or below the resolution limit of the PLM microscope such as those found in various California coast range serpentine bodies. In these cases, further analysis by transmission electron microscopy is recommended to obtain a more accurate result.

Sincerely Yours,

Lab Manager
ASBESTOS TEM LABORATORIES, INC.

--- These results relate only to the samples tested and must not be reproduced, except in full, without the approval of the laboratory. ---

POLARIZED LIGHT MICROSCOPY
CARB 435 ANALYTICAL REPORT

Contact: Paul Cunningham

Address: Cornerstone Earth Group, Inc.
1259 Oakmead Parkway
Sunnyvale, CA 94085

Samples Submitted: 2

Samples Analyzed: 2

Job Site / No. Highlands Estate, San Mateo
230-1-2

Report No. **302785**
Date Submitted: Jun-24-11
Date Reported: Jul-07-11

SAMPLE ID	POINTS COUNTED	ASBESTOS %	ASBESTOS TYPE	LOCATION / DESCRIPTION
EB-1, 3 @ 3'.		**<0.25%**	**None Detected**	2.5" MC, Sampled @3'
Lab ID # 1206-00014-001	- Total Points			No point count performed - ARB Exception I.
EB-2, 3 @ 3'.		**<0.25%**	**None Detected**	2.5" MC, Sampled @3'
Lab ID # 1206-00014-002	- Total Points			No point count performed - ARB Exception I.
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			
Lab ID #	- Total Points			

QC Reviewer R. McBride **Analyst** Melissa Grozman

ASBESTOS TEM LABORATORIES CHAIN OF CUSTODY

Ph:(510)704-8930 Fax:(510)704-8429
630 Bancroft Way, Berkeley, CA 94710

Ph:(775)359-3377 Fax:(775)359-2798
1350 Freeport Blvd. Unit 104, Sparks, NV 89431

Company: Cornerstone Earth Group	Job Site: Highlands Estate, San Mateo
Contact: Paul Cunningham	
Phone: (408) 245-4600	Job No: 230-1-2
Address: 1259 Oakmead Pkwy, Sunnyvale, CA	P.O. No:

Asbestos	☐ PLM-standard	☐ PLM-std. pt. ct.	☐ TEM-AHERA	☐ TEM-EPA Qualitative	☐ TEM-drinking water
	☒ PLM-Carb435	☐ PCM-NIOSH 7400	☐ TEM-Yamate II	☐ TEM-EPA Quantitative	☐ TEM-well/surface water
Lead	☐ AA-paint chips	☐ AA-air cassettes	☐ AA-dust wipes	☐ AA-soil	☐ GF-AA-drinking water
☐ Other:					

☐ phone:	☐ n/a, pre-paid	☐ <4hrs/RUSH ☐ 48hrs/2days
☐ fax:	☐ fax:	☐ 8 hrs ☐ 3-5 days
☒ email: See invoice →	☒ email: pcunningham@cornerstoneearth.com	☐ 24 hrs ☑ 6-10 days
☐ mail	☐ mail	☐ Other:
☐ FTP/post online	☐ FTP/post online	

EB-1, 3@3'	6/20, 8:10am	2.5" MC, sampled @ 5'	1 tube
EB-2, 2@3'	6/20, 8:30am	" "	1 tube

Name/Company: Paul	Name/Company: ATEM
Signature: Paul Cunningham	Signature:
Date/Time:	Date/Time: 06-24-11

Pete Bentley - Chamberlain Final Map-Delegated

From: Camille Leung
To: Pete Bentley
Date: 9/1/2011
Time: 11:00 AM - 12:00 PM
Subject: Chamberlain Final Map-Delegated
Place: Room 102 (1st Floor - thru door to the right of the elevator)

Are you available?

>>> Camille Leung 8/23/2011 1:02 PM >>>
Hi Jack, Sylvia, and Diana,

Hope this appointment time works out. If not, please let me know :)
Diana - if you feel Richard should be involved, please send this to him :)

Jack - If you feel Roland should be involved, please feel free to invite him :)

Thanks!

Camille M. Leung
Planning and Building Department
455 County Center, Second Floor
Redwood City, CA 94063
Phone: (650) 363-1826
Fax: (650) 363-4849

Please help us to serve you better and take a moment to complete our survey, just click on the link below:
http://www.co.sanmateo.ca.us/planning/survey

Confidentiality Notice: This e-mail message, including any attachments, is for the sole use of intended recipient (s) and may contain confidential and protected information. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

Parcel Map Submittal 9/1/11

- Final Map
- Grading plans → 1 sub (17)
  hard card 4 per house ← just prelim check prior to BLD.

① Exclusion areas / limits of grading

① BOND for subdiv improv
② 4 hard cards
③ subdiv hard card ①

Wen Chang
→ must remove on their own
→ Jack doing ret wall
but they need to worry about their own geo stability.

BKF
ENGINEERS · SURVEYORS · PLANNERS

255 Shoreline Drive, Suite 200
Redwood City, CA 94065
(650) 482-6300, Fax (650) 482-6399

TRANSMITTAL

Date: September 1, 2011

BKF No.: 19950168-14

To: Camille M. Leung
Planning and Building Department
455 County Center, Second Floor
Redwood City, CA 94063

Copies To: Pete Bentley, San Mateo County Public Works (Transmittal Only)
Jack Chamberlain
Sylvia Nelson

From: Roland Haga, PE, LEED® AP
Associate/Project Manager

Subject: Highland Estates, San Mateo County
Street Improvement Plans and Lots 1-4 Improvement Plans
Supporting Documentation and Attachments

We Are Sending You ☒ Attached ☐ Under separate cover **Via** ☒ **Hand Deliver**

The Following Items:
☐ Photocopies ☒ Prints ☐ Plan originals ☒ Report ☐ Proposal
☐ Specifications ☐ Shop drawings ☐ Change order ☒ Other: Estimate, Matrix

Copies	Date	No.	Description
1	09/01/11	-	Submittal Description Letter
2	09/01/11	-	Full Size Set Street Frontage Improvement Plans for Highland Estates – Bunker Hill Drive (J:\Eng95\950168\dwg\Xarc-plt\2011-09-01_First_Plan_Check_Submittal)
2	09/01/11	-	Full Size Set Individual Lot (Building Permit Drawings) Improvement Plans for Highland Estates – Lots 1 through 4
2	09/01/11	-	Responses to Conditions of Approval Matrix
2	09/01/11	-	Highlands Estates Storm Drain Report for Lots 1-4, Bunker Hill Drive
2	09/01/11	-	Engineer's Opinion of Probable Cost
2	07/22/11	-	Geotechnical Report

These Are Transmitted As Checked Below:
☐ For signature ☒ For review and comment ☐ No exception taken
☐ For approval ☐ Returned after loan to us ☐ Returned for resubmittal
☒ For your use ☐ Response to proposal request ☐ With corrections noted
☒ As requested ☐ Other

Remarks: See attached Submittal Description Letter.

BkF
ENGINEERS
SURVEYORS
PLANNERS

September 1, 2011
BKF No. 19950168-14

Camille M. Leung
County of San Mateo
Planning and Building Department
455 County Center, Second Floor
Redwood City, CA 94063

Subject: Highland Estates
Street Improvement Plans for Highland Estates – Bunker Hill Drive
Improvement Plans for Highland Estates – Lots 1 through 4 Bunker Hill Drive
Supporting Documentation and Attachments
Parcel Map for Highland Estates

Dear Camille:

On behalf of the Chamberlain Group, we are submitting the first phase of the Highland Estates Project, which includes the Highland Estates Bunker Hill Drive Frontage Improvement Plans, Highland Estates Lots 1 through 4 individual lot Improvement Plans, other documentation in support of the street improvement plans, and the Parcel Map for Highland Estates. Attached is the 1st submittal package for the Phase I Highland Estates Project associated with development of Lots 1, 2, 3, and 4 on Bunker Hill Drive and associated Improvement Plans and supporting documentation for the County of San Mateo Planning and Building Department's review. Note that the Highlands Estates Lots 1 through 4 individual lot Improvement Plans are being submitted for your information as these plans will be individually submitted as part of the building permit package at a later date.

In clarifying the submittal information and how the Conditions of Approval (COA) are addressed as part of the this 1st submittal of this project , BKF has prepared and included a Matrix of the Responses to Conditions of Approval, dated 9/1/11, to the COA received to date. This matrix should help guide county staff through the items referenced in the COA and response to the COA of where they can be found in the documentation submitted as part of the Highland Estates Bunker Hill Drive Street Improvement Plans and other project information submitted herein.

The following is a list of the items submitted for plan check associated with the Highland Estates project associated with the Improvement Plan and Parcel Map submittal:

Plan Check Submittal:

1. Two full size (2) sets of the Street Frontage Improvement Plans for Highland Estates – Bunker Hill Drive, dated September 1, 2011.

2. Two full size (2) sets of each of the individual lot Improvement Plans for Highland Estates – Lots 1 through 4 Bunker Hill Drive, dated September 1, 2011.

3. Matrix of the Responses to Conditions of Approval for the Highland Estates Project, Conditions of Approval that were approved by the Board of Supervisors on April 27, 2010. Prepared by BKF Engineers dated September 1, 2011. (2 copies)

Supporting Documentation and Attachments:

A. Highland Estates Storm Drain Report for Lots 1-4, Bunker Hill Drive. Dated September 1, 2011. (2 copies)

B. Engineer's Opinion of Probable Construction Cost for the Street Improvements at Highland Estates Lots 1-4, Bunker Hill Drive, San Mateo County, California dated September 1, 2011. (2 copies)

255 Shoreline Drive
Suite 200
Redwood City
California 94065
phone 650.482.6300
fax 650.48.6399

C. Geotechnical Report prepared by Cornerstone Earth Group dated July 22, 2011 "Design-Level Geotechnical Investigation, Highland Estates Lots 1 through 4, Bunker Hill Drive, San Mateo County, California" (2 copies)

Parcel Map Submittal:

1. Two full size (2) copies of the Parcel Map for Highland Estates.
2. Closure Calculations. (1 copy).
3. Title Report. (1 copy).
4. Supporting Documents. (1 copy; 3 each).
5. Existing Subdivision Map. Highlands No. 3 Vol. 43 Page 27. (1 copy).
6. Existing Subdivision Map. Highlands No. 8 Vol. 48 Page 16. (1 copy).

Once staff has had a chance to initially review the responses to Conditions of Approval, Plans and Support Information, our project team will be happy to meet with the County staff to walk them through the material submitted for 1st plan check and review associated Parcel Map and Improvement Plans and support information & attachments and clarify any issues, if needed.

Upon your review of the enclosed information, please contact me at (650) 482-6407, about any questions you may have or if you would like to schedule subsequent meetings to discuss this project.

Very truly yours,
BKF Engineers

Roland Haga, P.E., LEED AP
Associate/Project Manager

Encl.: Copies of Highland Estates Street Improvement Plans and Lots 1 through 4 Improvement Plans, Responses to COA Matrix and attachments A through C.
Parcel Map Transmittal, Maps and Supporting Documents.

cc: Pete Bentley, San Mateo County Public Works
Jack Chamberlain, Chamberlain Group
Sylvia Nelson, Chamberlain Group

BKF Engineers
255 Shoreline Drive, Suite 200
Redwood City, CA 94065
650-482-6300, 650-482-6399 Fax

8/30/2011

DRAFT

STREET IMPROVEMENTS AT HIGHLAND ESTATES LOTS 1-4
BUNKER HILL DRIVE
San Mateo County, California
Engineer's Opinion of Probable Construction Cost

No.	Item	Quantity	Unit	Unit Price	Amount
Demolition					
1	Remove AC Curb	330	LF	$ 1.00	$330
2	Remove Concrete Sidewalk/Driveway	1,800	SF	$ 1.00	$1,800
3	Remove Pavement	700	SF	$ 1.00	$700
					$2,830
Sanitary Sewer					
4	Sanitary Sewer Cleanout	4	EA	$ 500.00	$2,000
5	6" PVC Pipe	110	LF	$ 40.00	$4,400
					$6,400
Street Improvements					
6	Curb and Gutter	330	LF	$ 30.00	$9,900
7	Sidewalk	1,800	SF	$ 10.00	$18,000
8	Asphalt Concrete Pavement	120	SF	$ 5.00	$600
9	AC Deeplift	330	SF	$ 5.00	$1,650
					$30,150
Miscellaneous					
10	Fence	375	LF	$ 50.00	$18,750
11	Signage	3	EA	$ 160.00	$480
12	Striping	1	LS	$ 2,500.00	$2,500
13	Erosion Control	1	LS	$ 5,000.00	$5,000
					$26,730
	SUBTOTAL				**$66,110**
	15% Contingency				$9,917
	TOTAL				**$76,027**

GENERAL NOTES

1. This Opinion of Probable Construction Cost Estimate is based upon Street Improvement Plans for Highlands Estates - Bunker Hill Drive prepared by BKF dated September 1, 2011.

Confirm Dina
will forward
to Nefiy

Confirm which items
Dr Nafiy's this meets

DRAFT

Highland Estates Storm Drain Report
for
Lots 1-4, Bunker Hill Drive

September 1, 2011
BKF Engineers
19950168-10

DESIGN ENGINEER:

BKF ENGINEERS
255 Shoreline Drive
Redwood City, CA 94065
Edward Boscacci, Jr.
P.E. CA 34369

1.0 INTRODUCTION

The following report presents the proposed storm drain system improvements necessary to serve the proposed Chamberlain Group, Highland Estates Development in the County of San Mateo, California. The Chamberlain Group proposes to subdivide and develop a portion of the Highland Estates 99 acre parcel into 11 residential lots (Lots 1 through 11) and designated remainder parcel. The project vicinity is shown on Figure 1. At this time, Lots 1 through 4 along Bunker Hill Drive is to be developed during the first phase of this project. Lots 5 through 11 will follow under a separate phase in the future. Lots 1 through 4 will be developed with one residential unit with associated roadway and utility improvements. This report will address Lots 1 through 4 of the Highland Estates Development. Future Phases of the Highland Estates Development will require a separate storm drain report at the time of the future development.

This report is developed to identify pre-development and post-development peak stormwater discharges from Lots 1 through 4, estimate storm water detention needs to limit post-development peak discharge to pre-development levels, and address stormwater source control measures, treatment control measures, and hydromodification management in accordance with the County of San Mateo's permit application with the San Francisco Bay Regional Water NPDES Permit (MRP) Order No. R2-2009-0074.

2.0 DESIGN CRITERIA

The storm drain calculations for the project site are prepared in accordance with the County of San Mateo Standards. Peak stormwater runoff rates are calculated using the Rational Method.

$$Q = C \times I \times A$$

Requirements and Assumptions:

- Storm drainage design event; 10-year and 100-year storm events.
- Minimum Time of Concentration (Tc) for each drainage area is 10-minutes. The time of concentration is adjusted based on travel time in the storm drain pipes.
- Rainfall Intensities (I) are derived from Rainfall Data as provided by the Department of Water Resources program WinIDF Intensity-Duration-Frequency Curves. Refer to Table 1 for rainfall intensities for the project site.
- C.3 Treatment Rainfall Intensity = 0.2 inches per hour per the "San Mateo County C.3 Stormwater Technical Guidance Handbook", dated October 20, 2010.
- Storm water detention volume (V) will be estimated based on the following equation,

  $$V=3/2 \times Tc \times (Qpr\ peak - Qex\ peak)$$

  Stormwater detention volume is calculated based on the pre-development and post-development 100-year storm events. The stormwater detention equation assumes the proposed runoff hydrograph distribution is triangular in shape and the duration of the hydrograph is three times that of the Tc in proposed conditions. In our experience, this equation provides an accurate estimate of storm water detention volume in the San Francisco Bay Area.

- Runoff Coefficient (C);
  - C = 0.25 for Open Space Pervious Areas
  - C = 0.95 for Paved Impervious Areas
  - C (Treatment) = 0.10 for Open Space Pervious Areas
  - C (Treatment) = 0.75 for Paved Impervious Areas
- Pipe Roughness Coefficient (n);
  - n = 0.013 for Reinforced Concrete Pipe (RCP)
  - n = 0.010 for Polyvinyl Chloride Pipe (PVC)
- Tailwater Elevation for each Lot is set at the top of ponding elevation for each bioretention area.

3.0 EXISTING CONDITIONS

The 99 acre Highland Estates site is located within the unincorporated portions of San Mateo County. The site is included in the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map Panel 0603110140B and is designated as an area within Zone C, identified as an area of minimal flooding. See Figure 2 for the FEMA Flood Insurance Rate Map.

Lots 1 through 4 total 0.89 acres and currently consist of natural vegetation. Site drainage is as overland flow into a drainage creek to the southeast which discharges into the Polhemus Creek, which then joins the San Mateo Creek and into the San Francisco Bay. There are no dedicated stormwater storage or treatment facilities on the existing site. The existing drainage conditions are shown on Figure 3.

Under existing conditions, the peak flows for Lots 1 through 4 combine for 0.91 cfs during the 10-year storm event and 1.23 cfs during the 100-year storm event. See Table 2 for existing hydrology calculations.

4.0 PROPOSED CONDITIONS

Proposed drainage improvements include stormwater storage, treatment, conveyance, and energy dissipation facilities. The project area is divided into four separate drainage areas, one for each lot that will store, treat, convey, and discharge stormwater runoff as separate facilities. Proposed drainage conditions are shown in Figure 3.

Under proposed conditions, the peak flows for Lots 1 through 4 combine for 1.5 cfs during a 10-year storm event and 2.05 cfs during a 100-year storm event. The increase in runoff will be conveyed and stored in individual on-lot bioretention basins. See Table 2 for proposed hydrology and bioretention storage and sizing calculations.

Lots 1 through 4 each consist of a bioretention basin that provides 9-inches of ponding depth for storage. Bioretention media consists of 21-inches of sand/compost mix (per California Regional Water Quality Control Board Soil Media Specifications) underlain

with 12-inches of class II permeable material. The bioretention basin is sized based on the 100-year storage volume calculated. The bioretention basin will store, treat and release to a storm drain outfall line and will discharge through an energy dissipation system on the existing slope. Refer to Detail 1 on Sheets C1.70, C2.70, C3.70, and C4.70 for bioretention basin details. Refer to Appendix A for soil media specifications.

5.0 SOURCE CONTROL AND STORMWATER TREATMENT CONTROL MEASURES

The San Mateo Countywide Water Pollution Prevention Program permit application with the San Francisco Bay Regional Water NPDES Permit (MRP) Order No. R2-2009-0074 requires incorporation of both Low Impact Development (LID) source control and storm water treatment control measures on-site.

The project proposes the use of the following source control measures:

- Landscaping that minimizes irrigation
- Direct roof leaders to landscaped areas and treatment facilities
- Protection of slopes and conserve natural areas

The project proposes the use of the following treatment control measures:

- Bioretention basin with soil media for stormwater treatment and filtration
- Bioretention basin to limit post-development peak runoff to less than or equal to pre-development peak runoff levels

The project proposes to capture and treat 100% of the amount of runoff based on a Volume Hydraulic Design Basis as identified in Section C.3.d.i of the MRP. Under proposed conditions, a total treatment area of 473 sf is required for on-site treatment prior to discharge. This flow is proposed to be treated through on-lot stormwater bioretention basins, each sized based on individual lot areas to meet minimum sizing requirements. See Table 3 for proposed treatment sizing calculations. Refer to Appendix A for bioretention basin soil media specifications.

Implementation of the use of infiltration devices in stormwater treatment systems at the project site is infeasible due to the following factors as indicated in Section C.3.d.iii of the MRP:

- Underlying soil conditions cannot meet the inclusion of a minimum of two feet of suitable soil to achieve a maximum of 5 inches per hour infiltration rate.
- Steep slopes and site constraints with potential geological hazards.

Though the project proposes to implement several source control and stormwater treatment measures per Sections C.3.c and C3.d of the MRP, the project cannot meet all recommendations due to site constraints, underlying soil characteristics and steep slope conditions. However, we have made an effort to implement as many source control and stormwater treatment control measures as possible to meet the intent of Sections C.3.c and C.3.d of the MRP.

6.0 HYDROMODIFICATION MANAGEMENT PLAN

The San Mateo Countywide Water Pollution Prevention Program permit application with the San Francisco Bay Regional Water NPDES Permit (MRP) Order No. R2-2009-0074 requires incorporation of hydromodification management to match pre-project discharge rates and duration from 10% of the pre-project 2-year peak flow up to the pre-project 10-year peak flow. Per Section C.3.g of the MRP, projects that create and/or replace one acre or more of impervious surface require hydromodification management.

Lots 1 through 4 create less than one acre of impervious surface and is exempt from hydromodification management. However, proposed stormwater facilities have been checked for hydromodification for this project and stormwater treatment facilities with detention will be utilized for Hydrograph modification practices. These facilities are sized to decrease the stormwater runoff for the ranges of flows from 10% of the 2-year storm event to the 10-year storm event, to match the pre-development stormwater runoff rates. Peak flows are controlled by orifices sizing. The function of these facilities was verified using the Bay Area Hydrology Model (BAHM) software version 1.0 updated 7/13/09 by Clear Creek Solutions, which was developed and approved for San Mateo, Alameda and Santa Clara Counties.

The following describe proposed facilities for each drainage area:

Lots 1: Provide a bioretention basin that provides 12-inches of ponding depth. Bioretention media consists of 18-inches of bio-retention soil media and 16-inches of Caltrans class II permeable non-compacted material (per Caltrans Standard Specifications Section 68-1.025). The bioretention basin will release to a storm drain line and from there will discharge to a dissipater/spreader that will release the discharge along the existing slope.

Lot 2: Provide a bioretention basin that provides 12-inches of ponding depth. Bioretention media consists of 18-inches of bio-retention soil media and 16-inches of Caltrans class II permeable non-compacted material (per Caltrans Standard Specifications Section 68-1.025). The bioretention basin will release to a storm drain line and from there will discharge to a dissipater/spreader that will release the discharge along the existing slope.

Lot 3: Provide a bioretention basin that provides 12-inches of ponding depth. Bioretention media consists of 18-inches of bio-retention soil media and 16-inches of Caltrans class II permeable non-compacted material (per Caltrans Standard Specifications Section 68-1.025). The bioretention basin will release to a storm drain line and from there will discharge to a dissipater/spreader that will release the discharge along the existing slope.

Lot 4: Provide a bioretention basin that provides 12-inches of ponding depth. Bioretention media consists of 18-inches of bio-retention soil media and 16-inches of Caltrans class II permeable non-compacted material (per Caltrans Standard Specifications Section 68-1.025). The bioretention basin will release to a storm drain line and from there will discharge to a dissipater/spreader that will release the discharge along the existing slope.

7.0 CONCLUSIONS

In accordance with with the County of San Mateo's permit application with the San Francisco Bay Regional Water NPDES Permit (MRP) Order No. R2-2009-0074, stormwater detention, treatment and hydromodification facilities are proposed for Lots 1 thorugh 4 of the Highland Estates development. On-site runoff from Lots 1 through 4 will be collected and allowed to pond and stored in an on-lot bioretention basin with controlled orifice release points to a discharge lateral spreader and flow dissipation system. Hydromodification management will be by control of runoff from the facilities described above. With the proposed mitigation measures, flow will not increase to the downstream creek.

BKF recommends that these proposed drainage facilities be approved for stormwater conveyance, treatment, storage and hydromodification in accordance with the County of San Mateo's permit application with the San Francisco Bay Regional Water NPDES Permit (MRP) Order No. R2-2009-0074.

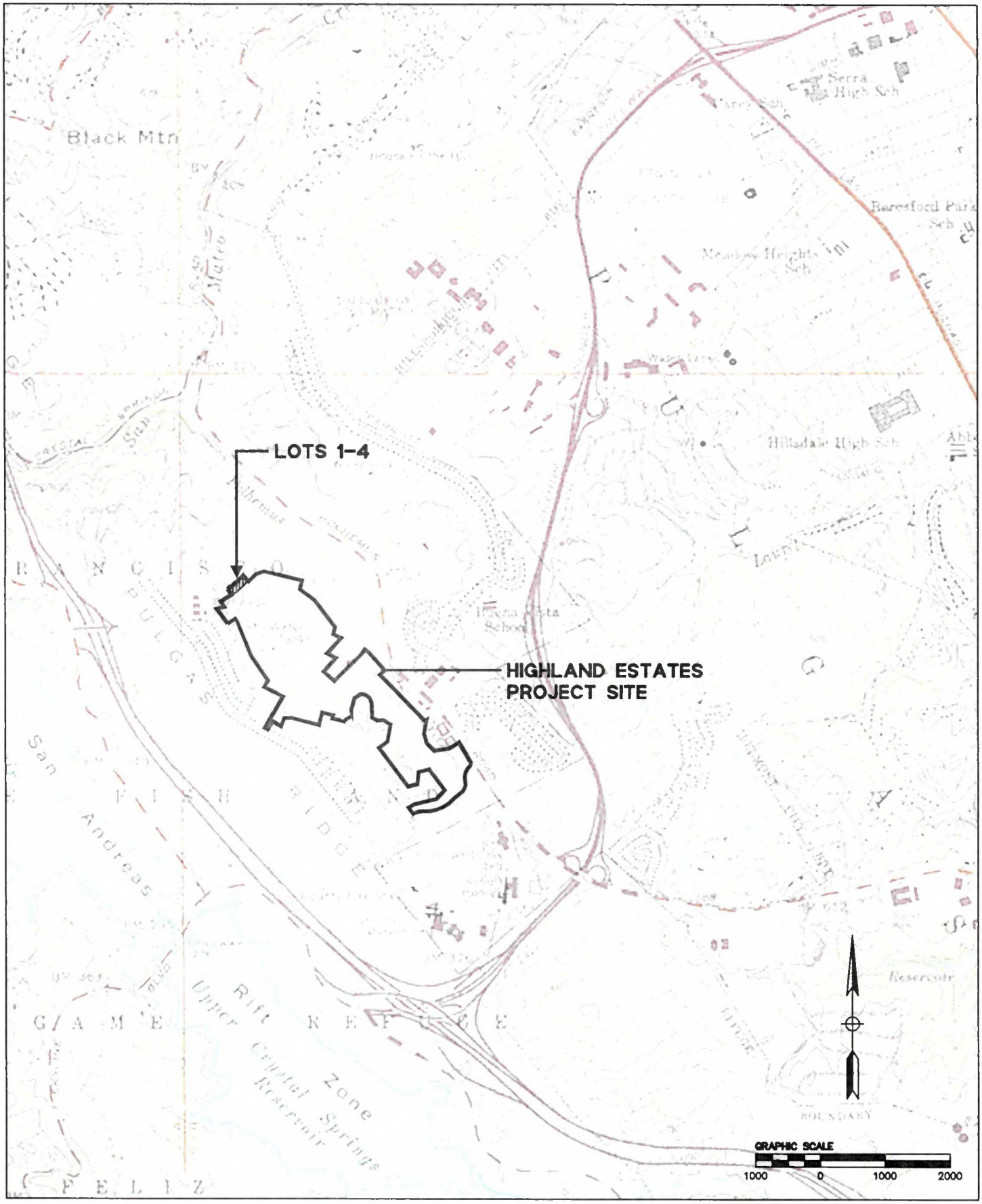

FIGURE 1 - VICINITY MAP
HIGHLAND ESTATES
COUNTY OF SAN MATEO

BkF

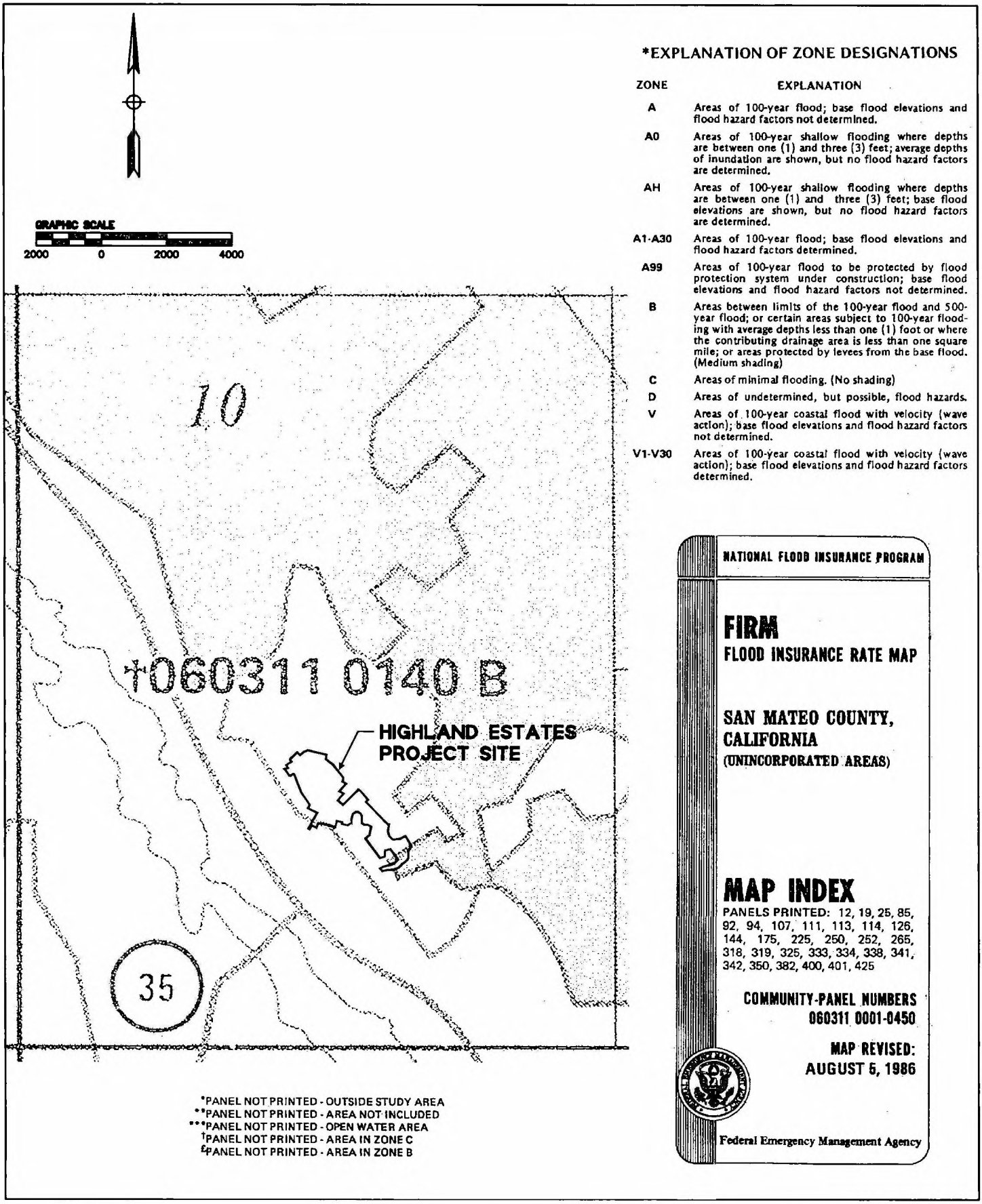

FIGURE 2 - FEMA FLOOD INSURANCE RATE MAP
HIGHLAND ESTATES
COUNTY OF SAN MATEO

BkF

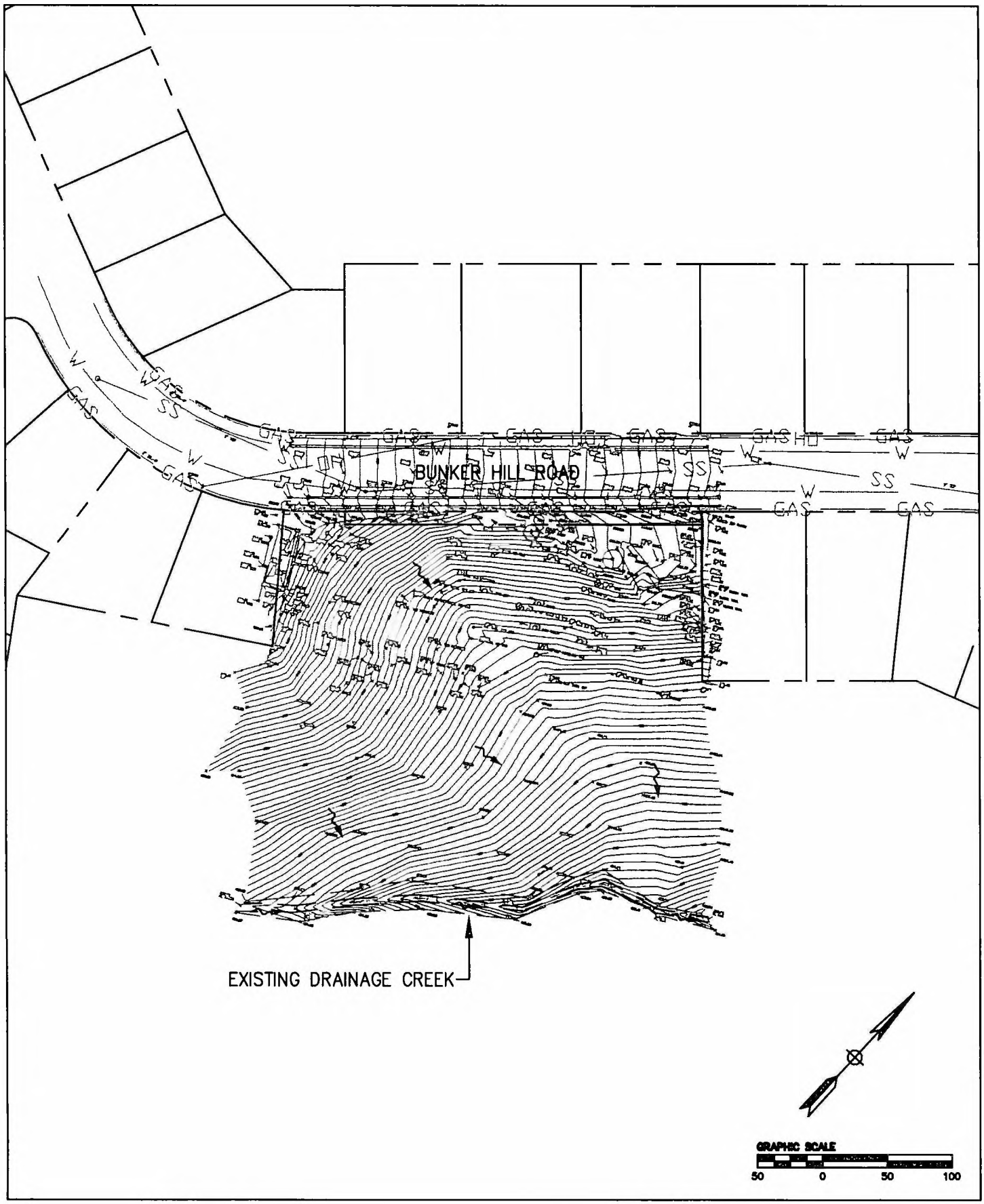

FIGURE 3 - EXISTING CONDITIONS
HIGHLAND ESTATES
COUNTY OF SAN MATEO

BkF

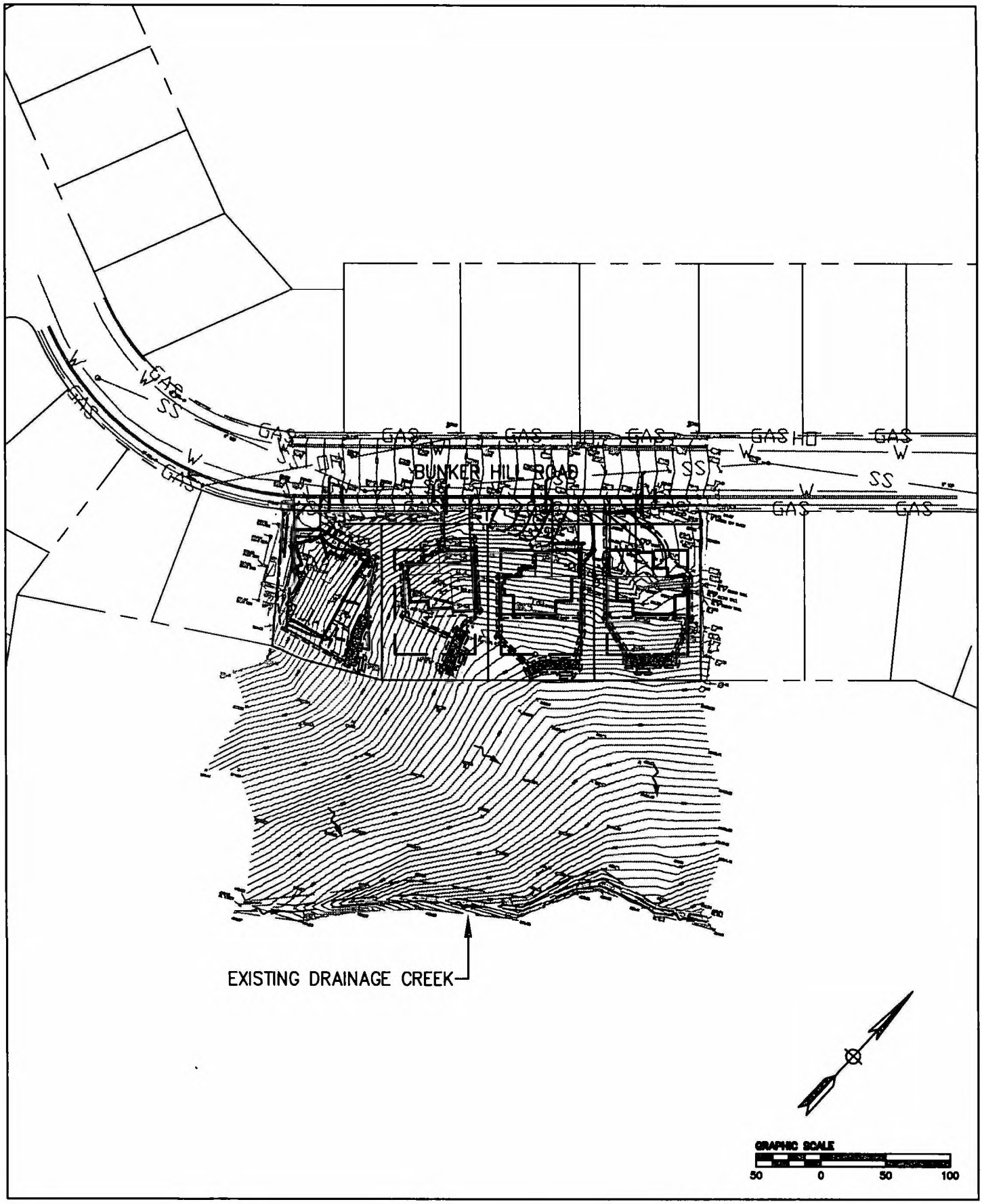

FIGURE 4 - PROPOSED CONDITIONS
HIGHLAND ESTATES
COUNTY OF SAN MATEO

BkF

BKF Engineers
255 Shoreline Drive, Suite 200
Redwood City, CA 94065

8/29/2011

HIGHLAND ESTATES
Lots 1-4
Table 1 - Rainfall Intensity

Duration (minutes)	10-Year Intensity (inches/hour)	100-Year Intensity (inches/hour)
10	3.42	4.61
15	2.61	3.89
30	1.64	2.45
60	1.03	1.54

Notes:
1. Rainfall intensities are derived from Caltrans Department of Water Resources WinIDF version 1.00

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8/29/2011

HIGHLAND ESTATES
Lots 1-4
Table 2 - Existing and Proposed 10-Year and 100-Year Hydrology

Intensity 10-year, 10-minute, I =	3.42	in/hr
Intensity 100-year, 10-minute, I =	4.61	in/hr
Impervious Runoff Coefficient, C =	0.95	
Pervious Runoff Coefficient, C =	0.30	

Existing Peak Flow

Drainage Area	Total Area (acres)	Area Impervious (acres)	Percent Impervious (%)	Area Pervious (acres)	Percent Pervious (%)	Weighted Runoff Coefficient	Flow, 10-Year (cfs)	Flow, 100-Year (cfs)
Lot 1	0.23	0.00	0	0.23	100	0.30	0.23	0.31
Lot 2	0.23	0.00	0	0.23	100	0.30	0.23	0.31
Lot 3	0.23	0.00	0	0.23	100	0.30	0.23	0.31
Lot 4	0.21	0.00	0	0.21	100	0.30	0.22	0.29
Total							0.91	1.23

Proposed Peak Flow

Drainage Area	Total Area (acres)	Area Impervious (acres)	Percent Impervious (%)	Area Pervious (acres)	Percent Pervious (%)	Weighted Runoff Coefficient	Flow, 10-Year (cfs)	Flow, 100-Year (cfs)
Lot 1	0.23	0.06	28	0.16	72	0.48	0.37	0.50
Lot 2	0.23	0.06	28	0.16	72	0.48	0.37	0.50
Lot 3	0.23	0.06	28	0.16	72	0.48	0.37	0.50
Lot 4	0.21	0.08	39	0.13	61	0.55	0.40	0.54
Total							1.52	2.05

Bioretention Area Sizing Calculations

Drainage Area	Area Impervious (acres)	4% of Area Impervious (sf)	Required Bioretention Area (sf)	Provided Bioretention Area (sf)
Lot 1	0.06	108	108	190
Lot 2	0.06	108	108	190
Lot 3	0.06	112	112	190
Lot 4	0.08	144	144	220

Orifice Sizing Calculations

These calculations provide the size of orifice at the bottom of the bioretention basin to limit the post-project discharge and duration rate to match 10% of the pre-project 2-year peak flow per HMP.

Orifice Equation = C x A x (2 x g x H)^1/2

Drainage Area	Existing Flow, 10-Year Flow (cfs)	Orifice Coefficient	Head (feet)	Orifice Area (sf)	Orifice Diameter (in)	Orifice Sizing
Lot 1	0.23	0.61	3.50	0.03	2	Use 2" diam orifice, or shape equivalent to 0.03 sf
Lot 2	0.23	0.61	3.50	0.03	2	Use 2" diam orifice, or shape equivalent to 0.03 sf
Lot 3	0.23	0.61	3.50	0.03	2	Use 2" diam orifice, or shape equivalent to 0.03 sf
Lot 4	0.22	0.61	3.50	0.02	2	Use 2" diam orifice, or shape equivalent to 0.03 sf

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HIGHLAND ESTATES
Lots 1-4
Table 3 - Proposed Stormwater Treatment Sizing Calculations

Proposed Treatment Flow
Per San Mateo County C.3 Handbook, an intensity of 0.20 in/hr was used to calculate the required treatment flow.

Treatment Rainfall Intensity, I =	0.20	in/hr
Treatment Pervious Runoff Coefficient =	0.10	
Treatment Impervious Runoff Coefficient =	0.75	

Treatment Drainage Area	Total Area (acres)	Area Impervious (acres)	Percent Impervious (%)	Area Pervious (acres)	Percent Pervious (%)	Weighted Runoff Coefficient	Treatment Flow (cfs)	Treatment BMP
Lot 1	0.23	0.06	28	0.16	72	0.28	0.01	Bioretention
Lot 2	0.23	0.06	28	0.16	72	0.28	0.01	Bioretention
Lot 3	0.23	0.06	28	0.16	72	0.28	0.01	Bioretention
Lot 4	0.21	0.08	39	0.13	61	0.35	0.01	Bioretention

Bioretention Treatment:

Drainage Area	Proposed Area Impervious (acres)	4% of Impervious Area (sf)	Bio-Retention Depth (feet)	Bio-Retention Area Required (sf)	Bio-Retention Area Provided (sf)
Lot 1	0.06	108	3.5	108	230
Lot 2	0.06	108	3.5	108	230
Lot 3	0.06	112	3.5	112	235
Lot 4	0.08	144	3.5	144	325

APPENDIX A

California Regional Water Quality Control Board
Bioretention Soil Media Specifications

Alameda Countywide
Clean Water Program

Contra Costa
Clean Water Program

Fairfield-Suisun
Urban Runoff
Management Program

Marin County
Stormwater Pollution
Prevention Program

Napa County
Stormwater Pollution
Prevention Program

San Mateo Countywide
Water Pollution
Prevention Program

Santa Clara Valley
Urban Runoff Pollution
Prevention Program

Sonoma County
Water Agency

Vallejo Sanitation
and Flood
Control District

B A S M A A

Bay Area
Stormwater Management
Agencies Association

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Menlo Park, CA 94026

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December 1, 2010

Bruce Wolfe, Executive Officer
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612

Subject: Model Bioretention Soil Media Specifications–MRP Provision C.3.c.iii.(3)

Dear Mr. Wolfe:

This letter and attachments are submitted on behalf of all 76 permittees subject to the requirements of the Municipal Regional Stormwater NPDES Permit (MRP).

Provision C.3.c.iii.(3) requires the permittees, collaboratively or individually, to submit a report containing the following information:

- Proposed soil media specifications for biotreatment systems;
- Proposed soil testing methods to verify a long-term infiltration rate of 5-10 inches/hour;
- Relevant literature and field data showing the feasibility of the minimum design specifications;
- Relevant literature, field, and analytical data showing adequate pollutant removal and compliance with the Provision C.3.d hydraulic sizing criteria; and
- Guidance for the permittees to apply the minimum specifications in a consistent and appropriate manner.

The permittees have worked diligently since the MRP was adopted in October 2009 to develop this information. The work has been carried out collaboratively among the permittees and in cooperation with your staff.

In April 2010 the permittees sponsored a roundtable discussion of bioretention soils. The roundtable included members of your staff, consultants, permittee staff, and representatives of the building industry. This diverse group included soil scientists and soils engineers with expertise in soil testing and construction of bioretention facilities. The meeting was facilitated by Sandi Potter of your staff.

Based on that discussion, BASMAA retained WRA, Inc., to develop regional guidance for bioretention soil. WRA was directed to use as a starting point guidance they had previously developed for the Contra Costa Clean Water Program (CCCWP). The CCCWP published its guidance in February 2009 as Appendix B to their *Stormwater C.3 Guidebook*. Contra Costa permittees have overseen construction of many bioretention facilities using this guidance and have had the opportunity to see the facilities perform through at least one full rainy season. The "soil" is a mix of 60-70% sand meeting a size gradation consistent with ASTM C33 for fine aggregate and

30-40% compost meeting the standards developed by the US Composting Council. The sand and compost are readily available from Bay Area suppliers, and at least two companies currently provide and advertise their own versions of the bioretention "soil" mix. For the regional guidance, WRA has recommended some minor improvements and clarifications to the Contra Costa guidance.

The permittees are pleased to make this guidance available to permittee staff and the land development community. However, we believe the MRP should continue to allow, as it does now, room for experimentation and innovation with bioretention soils, as long as that experimentation and innovation is within the bounds of the minimum requirements needed to achieve effective stormwater treatment.

MRP Provision C.3.c.i.(2)(b)(vi) currently provides that: "Bioretention systems shall be designed to have a surface area no smaller than what is required to accommodate a 5-inch-per-hour stormwater runoff surface loading rate." This existing permit requirement sets the minimum square footage of the bioretention facility. For a facility this size to successfully treat the design runoff flow, the soil media must infiltrate runoff at a rate of at least 5 inches per hour. Thus, the essential characteristic of the bioretention soil is already established within the permit.

Accordingly, we recommend that the Regional Water Board take no action with regard to bioretention soil specifications, as the current MRP language is already adequate to the purpose. However, if the permit is to be amended to explicitly incorporate a bioretention soil objective, we recommend the following:

> "Soils for bioretention facilities must be sufficiently permeable to infiltrate runoff at a minimum rate of 5 inches per hour during the life of the facility, and must provide sufficient retention of moisture and nutrients to support healthy vegetation."

The guidance developed by WRA on behalf of the permittees meets this objective, and the guidance is clearly feasible to implement, but it would be incorrect (and counterproductive) to suggest this guidance is the only means and method by which the objective can be achieved.

Similarly, WRA's report includes proposed testing methods for verification of alternative bioretention soil mixes. Although this information will be useful to permittee staff, some permittees have already indicated a preference for fewer or different tests to estimate the long-term infiltration rate.

WRA's report also includes guidance on soil installation, the use of mulch, water conservation, and other topics of interest to designers and operators of bioretention facilities. This information is outside the scope of permit requirements, but will be useful to permittee staff and land development professionals.

We thank your staff for their helpful and attentive participation in the April roundtable and other discussions leading to this submittal.

We certify under penalty of law that this document was prepared under our direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on our inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of our knowledge and belief, true, accurate, and complete. We are aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

James Scanlin, Alameda Countywide Clean Water Program

Tom Dalziel, Contra Costa Clean Water Program

Kevin Cullen, Fairfield-Suisun Urban Runoff Management Program

Matt Fabry, San Mateo Countywide Water Pollution Prevention Program

Adam Olivieri, Santa Clara Valley Urban Runoff Pollution Prevention Program

Lance Barnett, Vallejo Sanitation and Flood Control District

Attachments:

Technical Memorandum, "Regional Bioretention Soil Guidance and Model Specification," by WRA, Inc.

Technical Memorandum, "Regional Bioretention Installation Guidance," by WRA, Inc.

Annotated Bibliography, "Regional Biotreatment Soil Guidance," by WRA, Inc.

cc: Tom Mumley, Regional Water Board
Shin-Roei Lee, Regional Water Board
Dale Bowyer, Regional Water Board
Sue Ma, Regional Water Board
BASMAA Board of Directors

TECHNICAL MEMORANDUM

Regional Bioretention Soil Guidance & Model Specification
Bay Area Stormwater Management Agencies Association

Prepared For:

Bay Area Stormwater Management Agencies Association (BASMAA)

Contact:

Megan Stromberg
stromberg@wra-ca.com

Date:

November 12, 2010

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INTRODUCTION

Recently the San Francisco Bay Regional Water Quality Control Board issued the Municipal Regional Stormwater Permit. The Bay Area Stormwater Management Agencies Association (BASMAA) engaged WRA to provide guidance and specification for bioretention soils to assist stormwater agencies at the associated municipalities in meeting the requirements of the permit.

This report provides model soil guidance and specification with the goal of providing a long-term infiltration rate of 5 to 10 inches per hour, providing stormwater treatment and supporting plant health. The guidance and specification is provided such that Permittees can apply the minimum specifications in a consistent and appropriate manner.

This report is organized into two parts. Part 1 provides the justification for recommendations made for the Regional Bioretention Soil Mix Guidance to better meet the requirements of the Municipal Regional Stormwater Permit. Part 2 provides guidance and a draft Model Specification for Bioretention Soil.

PART 1 - JUSTIFICATION

1.0 COMPOST

Compost has been a focus of many bioretention soil mixes because it has been shown to increase water holding capacity and attenuate pollutants from stormwater.

1.1 Compost Particle Size

Fines play an important role in bioretention facilities. Cation exchange capacity (CEC) is known to improve the removal of metals in bioretention soils (Jurries 2003). CEC refers to the quantity of negative charges in soil. The negative charges attract positively charged ions, or cations, hence the name 'cation exchange capacity'. In addition to metals, many essential plant nutrients exist in the soil as cations. The primary factor determining CEC is the clay and organic matter content of the soil. Fines will raise the CEC of a soil and thus the pollutant removal capacity as well as the nutrient availability for plant health.

However, there is mixed information on how fines relate to permeability. In part this is due to the different ways the fine fraction of a soil may be characterized. Some research indicates that hydraulic conductivity of bioretention soil mixes is correlated to percent passing the 200 sieve (0.003"), i.e. fines. Curtis Hinman's bioretention soil mix review and recommendations for Western Washington states that fines passing the 200 sieve should ideally be between 2 and 4 percent to produce a bioretention soil mix with a long-term infiltration rate of between 1 and 12 inches per hour (Hinman 2009). In contrast, Scott Wikstrom of the City of Walnut Creek states that the mineralogy and particle size of the fines is critical to the degree of impact they will have on permeability. Although both silt and clay pass the 200 sieve, his experience is that silt will have minimal impact while highly plastic clay will have a significant effect on permeability. In practice, he has observed that the bioretention soils formulated using Contra Costa County's specification are more likely to easily meet the minimum standard 5 inches per hour than they are to fail (Personal Communication 2010). Current Contra Costa guidance only specifies 0 - 5% passing the 200 sieve size for the fine aggregate and has no specification for compost particle gradation.

A third hypothesis is proposed by Frank Shields of Soil Control Lab. He points to particle size gradation, not particle size distribution, as determining a soil's infiltration rate (Personal

Communication 2010). He has implied that to limit the risk of compost plugging the bioretention soil mix, we should target the correct gradation. Perhaps both size and gradation are important to consider. Screening compost to remove fines effectively creates an 'open graded' compost. 'Open graded' refers to a gradation that contains only a small percentage of aggregate particles in the small range relative to the overall mix. This results in more air voids because there are not enough small particles to fill in the voids between the larger particles. Open graded aggregate is used to create pervious concrete, for example.

Anecdotally, in mixing soils to meet the Contra Costa County performance specification for infiltration rate, Rob Hawkins of LH Voss Landscape Materials in Dublin and Stockton, California has experienced problems when using whole compost that was not screened to remove some fines. His company uses a blend of different compost types to create a custom coarse compost. He provided analytical testing results for his bioretention soil mix conducted from earlier this year. Particle size distribution test results show that his bioretention mix contains over 12% passing the 200 sieve size. Yet, the percolation rate using the 'dirt bong' method developed by Contra Costa County, was between 14 and 72 inches per hour. More recently, his compost blend has been the following blend: 1/3 BFI 'whole compost,' 1/3 Zanker wood fines (screened compost with particle sizes between ¼" to ½") and 1/3 recycled redwood fencing in its bioretention soil mix. He will provide particle size analysis and infiltration rate testing of his new blend as soon as it becomes available in the next few weeks.

Screening whole compost will reduce percentages of fine particles in the compost but this screened 'coarse' compost is only available from some suppliers. Adding to the lack of clear information on this topic, compost is not routinely tested for particle size distribution to below the size 10 sieve (0.079"). Earl Boyd of Lyngso Garden Materials in Redwood City, California stocks 'Verma Green' compost that is a coarser blend than their premium compost. Boyd stated that Verma Green compost has less than 10% passing the 200 sieve (Personal communication 2010). If used with ASTM C33 fine aggregate which has a maximum of 5% passing the 200 sieve, the overall bioretention soil mix would therefore have more than 5% passing the 200 sieve size. However, without comprehensive testing of compost and ASTM C33 blends, we may not have a clear answer about how the permeability relates to fines.

In summary, existing literature suggests that fines in the overall mix should include fines in the range 2 – 4% but even within this range, the permeability will vary from 1 to 12 inches per hour. Scott Wikstrom suggests that fines in the range of 6-12% may produce an acceptable infiltration rate. This hypothesis is confirmed by the analytical testing provided by LH Voss Materials. Compost is widely available with fines in the range of 8 - 12%. Municipalities have observed that previously constructed biofiltration basins are meeting the minimum infiltration rate specification without limiting the fines in compost.

1.2 Nutrient Leaching from Compost

Compost amended soils are generally good or very good at retaining metals, hydrocarbon, organics, and bacteria (Davis 2006, Hinman 2009). Total phosphorous and total nitrogen removal in bioretention is good compared to other stormwater treatment practices; however, phosphate and nitrate reduction is variable in bioretention basins with underdrains (Davis 2006, Chi-hsu 2005, Hunt 2003, Hunt 2006). Until recently, loadings of nitrogen and phosphorous to San Francisco Bay have not been a high-priority regulatory concern; however, the State Water Resources Control Board, supported by USEPA Region IX is implementing an Estuarine Nutrient Numeric Endpoint Project.

Hinman (2009) and Hunt (2006) suggest that the design of bioretention facilities is at the heart of the issue of nutrient export rather than compost or media design.Hinman suggests that depth of media should be 24" to 36" to minimize export of phosphorous (2009). Current specification requires a minimum depth of 18". Recent research by Hunt (2006) also suggests that a laboratory analysis for bio-available phosphorous may correlate with phosphorous export from bioretention areas. Biosolids and manure composts can be higher in bio-available phosphorous than compost derived from yard or plant waste. Accordingly, biosolids or manure compost in bioretention areas are not recommended to reduce the possibility of exporting bio-available phosphorous in effluent.

Hunt's studies (2006) indicate that bioretention designs with underdrains do not reduce nitrate-nitrogen levels sufficiently, as such bioretention facilities are constructed without any zone designed to be saturated and anaerobic. For nitrate-nitrogen to be converted to nitrogen gas, thus enhancing total nitrogen removal, an anaerobic zone is necessary (Hunt 2003, Hunt 2006). An elevated underdrain, allowing for a saturated zone beneath the drain, may improve nitrate removal more consistently than changing the bioretention soil mix.

Because design changes are beyond the scope of this report, we researched ways to minimize nitrate export from bioretention soils. Compost is intermediate between soil organic matter and fertilizers in its release rates of nitrate in the first season of application (Claassen and Young 2010). However, diversity in the types and sources of raw organic solid waste combined with the various processing procedures used to produce composted materials results in different physical and chemical properties in the composted products (Frank Shields, personal communication 2010). It is therefore difficult to generalize nutrient leaching from compost with the variety of sources of composted materials.

However, one recent study by CalTrans has identified some trends in compost and leaching. They propose that organic carbon, phosphorous and metal leaching losses steadily decline as compost ages; but that losses of nitrogen-rich compounds peak with mature compost (4 weeks old) and then decline with curing (except nitrate, which remains at very low levels). In addition, potassium increases with compost age, as does nitrate slightly. (Claassen and Young 2010).

In contrast, Frank Shields of Soil Control Lab states that while compost age and texture may generally relate to nutrient leaching, he hypothesizes that these factors will not always predict leaching potential. He explains that it is possible to estimate nitrate leaching potential by evaluating compost for its stability. He therefore provides some background on how nitrate is released from compost: Young compost that has not been cured contains many different forms of organic matter. Many of these types are readily available to soil organisms (fats, oils, polysaccharides, etc) and some are not (lignin, cellulose, proteins). As organisms consume carbon they must also consume nitrogen. The bio-available forms of carbon are consumed first and nitrogen is not released. As the consumption of carbon slows the compost may then begin to leach nitrates. With cured or aged compost, all the bio-available forms of carbon have already been consumed. Such compost is therefore said to be 'stable.' Stable composts will release nitrogen at a slow and steady rate (Shields, personal communication, 2010). Current specification already requires that compost be stable because this is a basic requirement for certification by the US Composting Council.

Shields further recommends that the Carbon to Nitrogen (C:N) ratio should be evaluated. Some composts are stable but are high in nitrogen (such as those from grass clippings or chicken manure). A C:N ratio below 10:1 can supply nitrogen even if it is stable. Hinman (2009) recommends a C:N ratio of between 20:1 and 25:1 for compost used in bioretention basins.

Soil and Compost Lab states that a compost with a C:N ratio above 20:1 can deplete nitrogen from the soil (Broadmoor 2010). Therefore, a compost with a C:N ratio of between 15:1 and 25:1 may balance the need for nitrogen for plant health with the desire to limit nitrate leaching.

Claassen and Young state that compost only boosts nutrient export temporarily. In the long-term (perhaps three or four years), most plant-based composts appear to develop similar rates of nitrogen release that are generally similar to soil organic matter (Claassen and Young 2010). By specifying compost that is stable, peaks in nitrogen export should be minimized. The specification should therefore balance the need for added nutrients for plants while they are getting established and the need to limit exporting nutrients.

In summary, nutrient export from bioretention soil media appears to be an issue related more to the design of the bioretention areas rather than the media itself. Greater depths of treatment media and anaerobic areas appear to be promising developments in the design of bioretention facilities that could limit nutrient export more predictably than in changing the compost specification.

1.3 Inert Materials in Compost

Current specifications for inert materials in compost range from a maximum of 0.1% by weight in Alameda County to 1% by weight in Contra Costa County. Frank Shields of Soil Control Lab suggests that his visual assessment test is more appropriate because the inert materials are an aesthetic issue (for example, glass, plastics and paper) more than one of function. Dan Cloak, in working with Contra Costa County, comments that he has not encountered problems with trash in bioretention soils (Personal communication 2010). This suggests that the current specifications are already stringent enough to eliminate composts from green waste sources which tend to have high percentage of inert materials.

1.4 Recommendations for Guidance

Particle Size: Fines in compost may cause clogging of the bioretention soil mix. In contrast, fines offer enhanced metals retention, fertility, and water-holding capacity. Current specifications require that the aggregate component to have between 0-5% fines. Contra Costa County has not experienced problems with the infiltration rate of bioretention soils as currently specified but there may be some risk of low infiltration rate if compost with a high percentage of fines is used.

We recommend one of three options:

- No change to the specification OR
- Provide a required particle size gradation for the compost component including a maximum of 10% passing the 200 sieve OR
- Require the overall mix to have between 2% and 5% passing the 200 sieve as recommended in Western Washington.

Nutrient Leaching: Nutrient leaching may be unavoidable without changes to the design of bioretention facilities such as increased media depth and raising the underdrain. However, we identified some guidance to limit leaching of nutrients from compost. We recommend that guidance continue to specify compost certified by the US Composting Council certified to

ensure stability. In addition, we recommend that the C:N ratio of compost be specified between 15:1 and 25:1.

Inert Materials: We recommend specifying a performance level of "no visual impact" from inert materials. Each municipality can interpret the specification as desired to avoid high content of inert materials in compost.

2.0 SOIL ADDITIVES

2.1 Water Retention and Cationic Exchange Capacity in Bioretention Soils

Cation exchange capacity (CEC) is known to improve the removal of metals in bioretention soils (Jurries 2003). CEC refers to the quantity of negative charges in soil existing on the surfaces of clay and organic matter. The negative charges attract positively charges ions, or cations, hence the name 'cation exchange capacity'. In addition to metals, many essential plant nutrients exist in the soil as cations. A high CEC can indicate a more fertile soil. As discussed earlier, the primary factor determining CEC is the clay and organic matter content of the soil.

Water-holding capacity helps to improve plant survival during dry periods and reduce irrigation needs. Water is held in soil in two ways: as a thin coating on the outside of soil particles and in the pore spaces. Soil water in the pore spaces can be divided into two different forms: gravitational water and capillary water. Gravitational water generally moves quickly downward in the soil due to the force of gravity. Capillary water is the most important for plant growth because it is held by soil particles against the force of gravity. Soil texture is related to water-holding capacity with loams and silt loams having the greatest available water for plants. Clays hold water very tightly so less is available to plants and sands hold very little water so even less is available to plants. Composted organic material is the most common soil amendment because it offers improved water holding capacity and supplies nutrients for soil.

2.2 Perlite and Vermiculite Blends

Vermiculite and perlite are both mined materials that are quickly heated to expand the mineral. Recently, perlite and vermiculite have been utilized in stormwater treatment facilities. Perlite improves drainage and wicks water well. Vermiculite has a tremendous water holding capacity but can drown roots when used alone. Perlite dries out quickly between rain events or waterings. Vermiculite and perlite are often used together in horticultural applications because of these complimentary attributes.

Granular perlite is sometimes used as a filter media for stormwater treatment. El Dorado County Department of Transportation is currently researching the effectiveness of perlite filters for stormwater as compared to fine sand filters for areas where infiltration is not feasible (Kooyman and Wigart 2009). Perlite is used in proprietary stormwater treatment systems including Aqua Filter. Preliminary small scale tests with perlite show effectiveness of reducing turbidity in stormwater between 40% and 90% (Kooyman and Wigart 2009). It is unclear if perlite, when included in a soil mix would have the same effectiveness. It seems that it would perform similarly to the sand component of the bioretention soil mix.

Additionally, vermiculite is commonly used to treat waste waters from mining activities to remove waterborne heavy metals. Vermiculite may be attractive for use in watersheds that are known to have a problem with heavy metals. Research is not available regarding the benefits vermiculite offers in reducing heavy metals within watersheds that have lower levels of heavy

metals typical of runoff from urban areas as compared to runoff from areas with contaminated soils or mining areas.

In summary, perlite appears to be equivalent to the sand component in the engineered bioretention soil mix. Vermiculite may improve water-holding capacity of a soil, but without further study it is difficult to prescribe the proper amount to include in the mix. Furthermore, the drawbacks of perlite and vermiculite are that these minerals do not contain nutrients needed for plant growth. Costs may also exceed that of compost.

2.3 Calcined Clay

Eliminating fines from the soil mix is likely to increase the infiltration rate as discussed under Section 1.1. On the other hand fine particles increase the cation exchange capacity of a soil which in turn increases metals retention. Fines also improve fertility and water-holding capacity by slowing the drainage through the media. Further study on the use of calcined clay was therefore suggested during the April 2010 roundtable discussion as a way to ensure that fines are not eliminated from the bioretention soil mix.

Calcined clay is clay that has been heated to drive out volatile materials. It is commonly used in potting soil mixes and as a garden bed amendment. In heavy clay soils and compacted soils, it can improve aeration, as well as water and nutrient holding capacity. Calcined clay has high levels of calcium and sulfur but doesn't have additional nutrient value for plants.

As discussed earlier, the primary factor determining CEC is the clay and organic matter content of the soil. Higher quantities of clay and organic matter beget higher CEC. Calcined clay is sometimes added to sand-based fields to increases CEC. No research exists on the use of calcined clay in bioretention soils. .

2.4 Recommendations for Guidance

Limited research exists on these soil amendments for use in bioretention soil mixes. It is also unclear that they provide greater benefits than compost alone, and they will have an unpredictable effect on the infiltration rate of the bioretention soil mix. Compost is proven to improve water holding capacity, increase CEC, and to support plant health, and has been studied to provide some measure of predictability in infiltration. At this time, the existing research does not warrant adding vermiculite, perlite or calcined clay to the bioretention soil mix.

3.0 NON-FLOATING MULCH MATERIAL

Generally, soft woods like fir and pine trees are less dense than water. Wood chip mulch made from softwoods will float because the specific gravity is less than that of water. Some hardwood trees are very dense and will float less or even sink. Locally, only Mountain mahogany (Cercocarpus betuloides) will sink in water, but not likely to be available commercially (Armstrong 2010). Some oaks and acacias are also very dense and only barely float, but these materials are also unlikely to be commercially available as mulch. The most common material for commercially available wood chip mulch is pine and fir.

Shredded redwood bark mulch does not float because the fibrous strands tend to stick together and to the soil surface. Unfortunately, some fire departments will not allow shredded bark mulches due to the perceived fire hazard.

Some success has been noted in surface mulching with compost. The City of Seattle recommends mulching with compost because it is less likely to float than wood chips. The University of Maine Cooperative extension recommends two types of mulch: Super Humus brand of compost and Erosion Control mulch. Super Humus is commercially available from local soil products suppliers.

In-organic mulches such as pea gravel, are also non-floating. However, they only provide some of the benefits of mulch. Organic mulches add organic matter and nutrients for plant health.

We therefore recommend that the guidance specify applying non-floating mulch, such as compost, or other non-floating mulch as specified by the landscape-architect and approved by the local jurisdiction, as mulch within bioretention basins and wood chips adjacent to basins (above the maximum water line).

4.0 METHODS FOR EVALUATION OF ALTERNATE MIXES

Alternative mixes should be required to meet performance criteria if they do not fulfill the prescriptive 'recipe' for bioretention soil. We recommend that municipalities be discouraged from using alternative mixes because the specifications are fine tuned to produce a bioretention soil that achieves the desired performance in infiltration rate and fertility. However, if it is necessary to include alternative options we recommend that alternate mixes are evaluated for infiltration rate and certified for appropriate fertility.

Infiltration tests should be conducted by a qualified geotechnical soil testing laboratory. Field infiltration rates will differ from permeability rates measured in the laboratory. Variables during construction can have a significant influence on as-constructed and long-term infiltration rates. However, laboratory permeability testing is a relative indicator of the overall drainage performance of a particular aggregate compost mix. As discussed at the April 14, 2010, soil specifications roundtable meeting, the objectives of onsite infiltration testing can be met alternatively by reviewing the soil mix, overseeing installation, and observing the functioning of the facility. The soil should be required to have a percolation rate between 5 and 12 inches per hour to provide adequate drainage but not be too fast draining to support plants.

The following tests are suggested:

- Moisture – density relationships (compaction tests) should be conducted on a minimum of two samples of bioretention soil. We recommend compacting the bioretention soil to 85 to 90 percent of the maximum dry density (ASTM D1557). This level of relative compaction of bioretention soil mixes should be similar to field conditions.

- Constant head permeability – testing in accordance with ASTM D2434 should be conducted with a 6-inch mold and vacuum saturation. Municipalities should require at least two samples be tested.

- Particle size analysis – particle size analysis on the mixed bioretention soil should be provided.

Due to the expense associated with laboratory testing, the suggested testing may discourage developers from using alternative mixes. The above tests cost about $900. If the alternative mix fails, retesting will be required.

Fertility is also an important aspect of the bioretention soil. Rather than specifying performance benchmarks for all the various elements that contribute to soil fertility (pH, salinity, nitrate, ammonium nitrogen, phosphate phosphorous, potassium, calcium, magnesium, sodium, copper, zinc, manganese, iron, sulfate, and boron, etc), we recommend that alternative soil mixes should be certified as appropriate for plants by a qualified soil analysis laboratory or landscape architect. The qualified expert should submit a signed letter certifying that the bioretention soil will support the selected species of plants.

PART 2 – GUIDANCE AND SPECIFICATIONS

The following text is based on the guidance found in Appendix B of Contra Costa County Clean Water Program's Stormwater C.3 Guidebook, 4th Edition. **Bold and underlined text** indicates additions to the specifications.

SOILS FOR BIORETENTION FACILITIES

Soils for bioretention areas must meet two objectives:

- Be sufficiently permeable to infiltrate runoff at a minimum rate of 5" per hour during the life of the facility, and
- Have sufficient moisture retention to support healthy vegetation.

Achieving both objectives with an engineered soil mix requires careful specification of soil gradations and a substantial component of organic material (typically compost).

The San Francisco Regional Water Board has developed specifications for a bioretention soil mix. Local soil products suppliers have expressed interest in developing 'brand-name' mixes that meet these specifications. At their sole discretion, municipal construction inspectors may choose to accept test results and certification for a 'brand-name' mix from a soil supplier. Updated soil and compost test results may be required; tests must be **conducted** within 120 days prior to the delivery date of the bioretention soil to the project site.

Typically, batch-specific test results and certification will be required for projects installing more that 100 cubic yards of bioretention soil.

SOIL SPECIFICATION

Bioretention soils should meet the following criteria.

1. General Requirements
   Bioretention soil shall achieve a long-term, in-place infiltration rate of at least 5 inches per hour. Bioretention soil shall also support vigorous plant growth.

   Bioretention Soil shall be a mixture of fine sand, and compost, measured on a volume basis:

   60%-70% Sand
   30%-40% Compost

1.1. Submittals
The applicant must submit to the municipality for approval:

A. A sample of mixed bioretention soil.

B. Certification from the soil supplier or an accredited laboratory that the Bioretention Soil meets the requirements of this guideline specification.

C. Grain size analysis results of the fine sand component performed in accordance with ASTM D 422, Standard Test Method for Particle Size Analysis of Soils.

D. Quality analysis results for compost performed in accordance with Seal of Testing Assurance (STA) standards, as specified in Section 1.4.

E. Organic content test results of mixed Bioretention Soil. Organic content test shall be performed in accordance with by Testing Methods for the Examination of Compost and Composting (TMECC) 05.07A, "Loss-On-Ignition Organic Matter Method".

F. Grain size analysis results of compost component performed in accordance with ASTM D 422, Standard Test Method for Particle Size Analysis of Soils.

G. A description of the equipment and methods used to mix the sand and compost to produce Bioretention Soil.

H. Provide the following information about the testing laboratory(ies) name of laboratory(ies) including

1) contact person(s)

2) address(es)

3) phone contact(s)

4) e-mail address(es)

5) qualifications of laboratory(ies), and personnel including date of current certification by STA, ASTM, or approved equal

1.2. Sand for Bioretention Soil

A. General

Sand shall be free of wood, waste, coating such as clay, stone dust, carbonate, etc., or any other deleterious material. All aggregate passing the No. 200 sieve size shall be non-plastic.

B. Sand for Bioretention Soil Texture

Sand for Bioretention Soils shall be analyzed by an accredited lab using #200, #100, #40, #30, #16. #8, #4, and 3/8 inch sieves (ASTM D 422 or as approved by municipality), and meet the following gradation:

Sieve Size	Percent Passing (by weight)	
	Min	*Max*
3/8 inch	100	100
No. 4	90	100
No. 8	70	100
No. 16	40	95
No. 30	15	70
No. 40	5	55
No. 100	0	15
No. 200	0	5

Note: all sands complying with ASTM C33 for fine aggregate comply with the above gradation requirements.

1.3. Composted Material

Compost shall be a well decomposed, stable, weed free organic matter source **derived from waste materials including yard debris, wood wastes or other organic materials not including manure or biosolids** meeting the standards developed by the US Composting Council (USCC). The product shall be certified through the USCC Seal of Testing Assurance (STA) Program (a compost testing and information disclosure program).

A. Compost Quality Analysis

Before delivery of the soil, the supplier shall submit a copy of lab analysis performed by a laboratory that is enrolled in the US Composting Council's Compost Analysis Proficiency (CAP) program and using approved Test Methods for the Evaluation of Composting and Compost (TMECC). The lab report shall verify:

1) Feedstock Materials shall be specified and include one or more of the following: landscape/yard trimmings, grass clippings, food scraps, and agricultural crop residues.

2) Organic Matter Content: 35% - 75% by dry wt.

3) Carbon and Nitrogen Ratio: C:N < 25:1 **and C:N >15:1**

4) Maturity/Stability: shall have a dark brown color and a soil-like odor. Compost exhibiting a sour or putrid smell, containing recognizable grass or leaves, or is hot (120F) upon delivery or rewetting is not acceptable. In addition any one of the following is required to indicate stability:

a. Oxygen Test < 1.3 O2 /unit TS /hr

b. Specific oxy. Test < 1.5 O2 / unit BVS /

c. Respiration test < 8 C / unit VS / day

d. Dewar test < 20 Temp. rise (°C) e.

e. Solvita® > 5 Index value

5) Toxicity: any one of the following measures is sufficient to indicate non-toxicity.

a. NH4- : NO3-N < 3

b. Ammonium < 500 ppm, dry basis

c. Seed Germination > 80 % of control

d. Plant Trials > 80% of control

e. e. Solvita® > 5 Index value

6) Nutrient Content: provide analysis detailing nutrient content including N-P-K, Ca, Na, Mg, S, and B.

a. Total Nitrogen content 0.9% or above preferred.

b. Boron: Total shall be <80 ppm; Soluble shall be <2.5 ppm

7) Salinity: Must be reported; < 6.0 mmhos/cm

8) pH shall be between 6.5 and 8. May vary with plant species.

B. Compost for Bioretention Soil Texture

Compost for Bioretention Soils shall be analyzed by an accredited lab using #200, 1/4 inch, 1/2 inch, and 1 inch sieves (ASTM D 422 or as approved by municipality), and meet the following gradation:

Sieve Size	Percent Passing (by weight)	
	Min	*Max*
1 inch	99	100
1/2 inch	90	100
1/4 inch	40	90
No. 200	2	10

C. Bulk density: shall be between 500 and 1100 dry lbs/cubic yard

D. Moisture Content shall be between 30% - 55% of dry solids.

E. Inerts: compost shall be relatively free of inert ingredients, including glass, plastic and paper, < 1 % by weight or volume.

F. Weed seed/pathogen destruction: provide proof of process to further reduce pathogens (PFRP). For example, turned windrows must reach min. 55C for 15 days with at least 5 turnings during that period.

G. Select Pathogens: Salmonella <3 MPN/4grams of TS, or Coliform Bacteria <10000 MPN/gram.

H. Trace Contaminants Metals (Lead, Mercury, Etc.) Product must meet US EPA, 40 CFR 503 regulations.

I. Compost Testing

The compost supplier will test all compost products within 120 calendar days prior to application. Samples will be taken using the STA sample collection protocol. (The sample collection protocol can be obtained from the U.S. Composting Council, 4250 Veterans Memorial Highway, Suite 275, Holbrook, NY 11741 Phone: 631-737-4931, www.compostingcouncil.org). The sample shall be sent to an independent STA Program approved lab. The compost supplier will pay for the test.

VERIFICATION OF ALTERNATIVE BIORETENTION SOIL MIXES

Bioretention soils not meeting the above criteria may be evaluated on a case by case basis. Alternative bioretention soil must meet the following specification:
"Soils for bioretention facilities must be sufficiently permeable to infiltrate runoff at a minimum rate of 5 inches per hour during the life of the facility, and must provide sufficient retention of moisture and nutrients to support healthy vegetation."

The following guidance is offered to assist municipalities with verifying that alternative soil mixes meet the specification:

1. General Requirements
Bioretention soil shall achieve a long-term, in-place infiltration rate of at least 5 inches per hour. Bioretention soil shall also support vigorous plant growth.

1.1. Submittals
The applicant must submit to the municipality for approval:

A. A sample of mixed bioretention soil.

B. Certification from the soil supplier or an accredited laboratory that the Bioretention Soil meets the requirements of this guideline specification.

C. Certification from an accredited geotechnical testing laboratory that the Bioretention Soil has an infiltration rate between 5 and 12 inches per hour as tested according to Section 1.2.

E. Organic content test results of mixed Bioretention Soil. Organic content test shall be performed in accordance with by Testing Methods for the Examination of Compost and Composting (TMECC) 05.07A, "Loss-On-Ignition Organic Matter Method".

F. Grain size analysis results of mixed bioretention soil performed in accordance with ASTM D 422, Standard Test Method for Particle Size Analysis of Soils.

G. A description of the equipment and methods used to mix the sand and compost to produce Bioretention Soil.

H. Provide the following information about the testing laboratory(ies) name of laboratory(ies) including

1) contact person(s)

2) address(es)

3) phone contact(s)

4) e-mail address(es)

5) qualifications of laboratory(ies), and personnel including date of current certification by STA, ASTM, or approved equal

1.2. Bioretention Soil

A. Bioretention Soil Texture

Bioretention Soils shall be analyzed by an accredited lab using #200, and 1/2" inch sieves (ASTM D 422 or as approved by municipality), and meet the following gradation:

Sieve Size	Percent Passing (by weight)	
	Min	*Max*
1/2 inch	97	100
No. 200	2	5

B. Bioretention Soil Permeability testing

Bioretention Soils shall be analyzed by an accredited geotechnical lab for the following tests:

1. Moisture – density relationships (compaction tests) shall be conducted on bioretention soil. Bioretention soil for the permeability test shall be compacted to 85 to 90 percent of the maximum dry density (ASTM D1557).

2. Constant head permeability testing in accordance with ASTM D2434 shall be conducted on a minimum of two samples with a 6-inch mold and vacuum saturation.

MULCH FOR BIORETENTION FACILITIES

Mulch is not required by this guidance but is recommended for the purpose of retaining moisture, preventing erosion and minimizing weed growth. It should be noted that projects subject to the State's Model Water Efficiency Landscaping Ordinance (or comparable local ordinance) will be required to provide at least two inches of mulch. Aged mulch, also called compost mulch, reduces the ability of weeds to establish, keeps soil moist, and replenishes soil nutrients. Aged mulch can be obtained through soil suppliers or directly from commercial recycling yards. Apply 1" to 2" of composted mulch, once a year, preferably in June following weeding.

Compared to green wood chip or bark mulch, aged mulch has somewhat less of a tendency to float into overflow inlets during intense storms. Bark or wood chip mulch may be used on the side slopes of basins above the maximum water line. The project landscape architect may also specify another type of non-floating mulch, subject to approval by the local jurisdiction.

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TECHNICAL MEMORANDUM

Regional Bioretention Installation Guidance
Bay Area Stormwater Management Agencies Association

Prepared For:

Bay Area Stormwater Management Agencies Association (BASMAA)

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Date:

November 12, 2010

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INTRODUCTION

Recently the San Francisco Bay Regional Water Quality Control Board issued the Municipal Regional Stormwater Permit. The Bay Area Stormwater Management Agencies Association (BASMAA) engaged WRA to provide guidance and specification for bioretention soils to assist stormwater agencies at the associated municipalities in meeting the requirements of the permit.

This report provides guidance for the installation of bioretention soils with the goal of preserving the integrity of the soil media to support a long-term infiltration rate of 5 to 10 inches per hour, provide stormwater treatment and support plant health.

INSTALLATION OF BIORETENTION SOILS

The following section provides considerations for proper bioretention soil installation.

Prior to Installing Bioretention Soil:

- Is the contractor familiar with constructing bioretention systems?
- Plan how inspections will be handled as part of the construction process.
- Verify soil meets specification prior to delivering and or placing in the facility.
- Prevent over-compaction of native soils in the area of the basin. Delineate the facility area and keep construction traffic off. Protect soils with fencing, plywood, etc.
- Provide erosion control in the contributing drainage areas of the facility. Stabilize upslope areas.
- Facilities should not be used as sediment control facilities.
- Drainage should be directed away from bioretention facilities until upslope areas are stabilized, if possible. The concentration of fines could prevent post-construction infiltration.
- If drainage is to be allowed through the facility during construction, leave or backfill at least 6" above the final grade. Temporarily cover the underdrain with plastic or fabric. Line or mulch the facility.
- Ideally, bioretention facilities should remain outside the limit of disturbance until construction of the bioretention begins to prevent soil compaction by heavy equipment. Protect bioretention areas with silt fence or construction fencing.
- Verify installation of underdrain is correct prior to placing soil.

Soil Mixing and Placement:

- Do not excavate, place soils, or amend soils during wet or saturated conditions.
- Operate equipment adjacent to (not in) the facility.
- If machinery must operate in the facility, use light weight, low ground-contact pressure equipment.

- It may be necessary to rip or scarify the bottom soils to promote greater infiltration or excavate any sediment that may have built up during construction.

- Consider the time of year and site working area when determining whether to mix bioretention soil on-site or to import pre-mixed soil.

- If mixing bioretention media onsite, use an adjacent impervious area or on plastic sheeting.

- Place soil in 12" lifts with machinery adjacent to the facility. If working within the facility, to avoid over-compacting, place first lifts at far end from entrance and place backwards toward entrance.

- Do not place or work bioretention soil if it is saturated or raining

- Allow bioretention soil lifts to settle naturally, boot pack (walk around to firm) lifts to achieve 85% compaction effort. After all lifts are placed, wait a few days to check for settlement, and add additional media as needed.

- An alternative to boot compaction is to settle bioretention soils by lightly watering until soils are just saturated. Allow soil to dry between lifts. It may take a day or more to dry adequately between lifts. Soil cannot be worked when saturated so this method should be used with caution. Allow for extra time to let soils dry between each lift. After all lifts are placed, wait a few days to check for settlement, and add additional media as needed.

- Verify bioretention soil elevations before applying mulch or installing plants.

Other Considerations:

- Protect adjacent trees.

- Protect adjacent infiltration systems including swales, soils and porous pavement from sediment.

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Buck, Jonathan 2010. "Design of Bioretention Areas at Serramonte Library, Daly City." Alameda Countywide Clean Water Program 2010 New Development Workshop. September 29, 2010.

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Regional Biotreatment Soil Guidance
Bay Area Stormwater Management Agencies Association

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INTRODUCTION

Recently the San Francisco Bay Regional Water Quality Control Board issued the Municipal Regional Stormwater Permit. The Bay Area Stormwater Management Agencies Association (BASMAA) engaged WRA to provide guidance and specification for bioretention soils to assist stormwater agencies at the associated municipalities in meeting the requirements of the permit.

The following bibliography provides a summary of existing literature, field and analytical data prepared in conjunction with the preparation of Regional Bioretention Soil Guidance.

1.0 COMPOST

Claassen, V. and Young, T. 2010. Model Guided Specification for Using Compost to Promote Establishment of Vegetation and Improvement in Stormwater Quality. California Department of Transportation (CalTrans). Available online: http://www.dot.ca.gov/hq/LandArch/research/erosion_control.htm

This study establishes parameters for compost use on slopes based on performance criteria including soil type, climate, slope length and steepness, aspect, and location. The research addresses how compost affects water quality and erosion, and if compost improves the establishment of permanent vegetation cover. Results indicate that in many cases, degraded, nutrient-poor soils can be regenerated with yard waste compost amendment with minimal risk of nutrient loss, especially if the composts are incorporated into the slope surface and covered with a mulch layer. Finer and more aged composts leach nitrogen at slightly higher rates than non-aged composts. However, more aged composts are more likely to retain heavy metals. Surface application of compost decreases nutrient loss.

Faucette, L.B. et. al. 2005. "Evaluation of stormwater from compost and conventional erosion control practices in construction activities." Soil and Water Conservation Society. November 2005 vol. 60 no. 6 288-297.

The use of surface applied organic amendments has been shown to reduce runoff and erosion, however, with the exception of animal manure, little research has focused on nutrient loss from these amendments. Four types of compost blankets, hydroseed, silt fence, and a bare soil (control) were applied in field test plots. Treatments were seeded with common bermuda grass. A rainfall simulator applied rainfall at an average rate equivalent to a 50 yr-1hrstorm event (7.75 cm hr1). After three months, the compost generated five times less runoff than hydroseed with silt fence, and after one year, generated 24 percent less runoff. All treatments proved better than the control at reducing solids loss. Materials high in inorganic nitrogen (N) released greater amounts of nitrogen in storm runoff; however, these materials showed reduced N loss over time. Hydroseeding generated significantly higher total phosphorus (P) and dissolved reactive P loads compared to compost in storm runoff during the first storm event.

Stenn, H. 2010. Building Soil: Guidelines and Resources for Implementing Soil Quality and Depth BMP T5.13 in WDOE Stormwater Management Manual for Western Washington. Seattle Public Utilities: Seattle. Available at: http://www.buildingsoil.org/tools/Soil_BMP_Manual.pdf

The guide describes techniques for construction site soil handling, reducing soil compaction, and amending site soils with compost to meet BMP T5.13 "Post Construction Soil Quality and

Depth" in the WA Dept. of Ecology's Stormwater Management Manual for Western Washington. This guide also includes field inspection techniques, WA suppliers of compost and soil testing laboratories, and specification language in APWA and CSI formats.

2.0 SOIL AMENDMENTS

Kooyman, Steve and Wigart, Russ, 2009. Urban Stormwater fine sediment filtration using granular perlite. El Dorado County Department of Transportation.

Perlite can be used as an alternative to fine sand for stormwater filtration to reduce turbidity.

Paul, J. L. et. al. 1971. "Effects of Organic and Inorganic Amendments on the Hydraulic Conductivity of Three Sands Used for Turfgrass Soils" *California Turfgrass Culture*. Volume 21, No. 2. p.9-13. Accessed from University of California Riverside Turf Research Facility: http://ucrturf.ucr.edu/publications/CTC/ctc21_2.pdf

Calcined clay-I (CC-I) : montmorillonite clay is calcined at high temperatures to make porous, mechanically strong particles of mainly very coarse sand-fine gravel texture. Calcined clay-2 (CC-2) : an unspecified mineral is calcined to produce a porous, more or less spherical particle which falls mostly in the textural class of medium sand. Vermiculite (V) : the material was an industrial chemical grade (No. 1) of expanded mineral. While the particle size consisted mainly of very coarse and coarse sand sizes, particles were readily deformed and compressed by compacting forces. In this study, calcined clay acted in the same way as sand. Depending on the gradation of the sand and the particle size of the calcined clay, hydraulic conductivity was either increased or decreased. Vermiculite decreased hydraulic conductivity the most of the amendments studied. In addition, appreciable changes in hydraulic conductivity were not observed until 30-40% of the amendment was added to the sand.

3.0 POLLUTANT REMOVAL

Davis et. al. 2006. "Water Quality Improvement through Bioretention Media: Nitrogen and Phosphorous Removal." *Water Environment Research.* Vol. 78, No. 3: pp.284-293.

High nutrient inputs and eutrophication continue to be one of the highest priority water quality problems. This work provides an in-depth analysis on removal of nutrients from a synthetic stormwater runoff by bioretention. Results have indicated good removal of phosphorus (70 to 85%) and total Kjeldahl nitrogen (55 to 65%). Nitrate reduction was poor (,20%) and, in several cases, nitrate production was noted. Variations in flowrate (intensity) and duration had a moderate affect on nutrient removal. Mass balances demonstrate the importance of water attenuation in the facility in reducing mass nutrient loads. Captured nitrogen can be converted to nitrate between storm events and subsequently washed from the system. Analysis on the fate of nutrients in bioretention suggests that accumulation of phosphorus and nitrogen may be controlled by carefully managing growing and harvesting of vegetation. Water Environ. Res., 78, 284 (2006).

Hsieh, Chi-hsu and Davis, Allen P., 2005. "Evaluation and Optimization of Bioretention Media for Treatment of Urban Storm Water Runoff." *Journal of Environmental Engineering*. November: pp. 1521-1531.

The objective of this study is to provide insight on media characteristics that control bioretention water management behavior. Eighteen bioretention columns and six existing bioretention facilities were evaluated employing synthetic runoff. In columns, the runoff infiltration rate through different media mixtures ranged from 0.28 to 8.15 cm/min at a fixed 15 cm head. For pollutant removals, the results showed excellent removal for oil/grease __96%_. Total lead removal _from 66 to _98%_ decreased when the total suspended solids level in the effluent increased _removed from 29 to _96%_. The removal efficiency of total phosphorus ranged widely _4–99%_, apparently due to preferential flow patterns, and both nitrate and ammonium were moderate to poorly removed, with removals ranging from 1 to 43% and from 2 to 49%, respectively. Two more on-site experiments were conducted during a rainfall event to compare with laboratory investigation. For bioretention design, two media design profiles are proposed; _96% TSS, _96% O/G, _98% lead, _70% TP, _9% nitrate, and _20% ammonium removals are expected with these designs.

Hunt, William F. III, 2003. *Pollutant Removal Evaluation and Hydraulic Characterization for Bioretention Stormwater Treatment Devices.* Pennsylvania State University. Available online: http://www.psparchives.com/publications/our_work/stormwater/lid/bio_docs/bio_docs.htm

Current bioretention designs do not reduce nitrate-nitrogen levels sufficiently, as bioretention is constructed without any zone designed to be saturated. For nitrate-nitrogen to be converted to nitrogen gas, thus enhancing total nitrogen (TN) removal, an anaerobic zone may be necessary. This research determined the effect of an anaerobic layer within bioretention devices on the concentrations and loadings of TN, nitrate-nitrogen (NO3-N), and other nutrient and pollutant species in stormwater runoff including ammonia-nitrogen (NH3-N), total kjeldahl nitrogen (TKN), total phosphorus (TP), ortho-phosphate (Ortho-P), zinc (Zn), iron (Fe), copper (Cu), lead (Pb), and total suspended solids (TSS). Results from the laboratory experiment showed high removal rates for TN (mean efficiencies ranging from 70% to 85%) and NO3-N (over 90%). The presence of an intentional anaerobic zone and the anaerobic zone's thickness did not have a significant impact ($p<0.10$) on the microcosm's nutrient removal abilities. There was a significant impact ($p<0.10$) when comparing hydraulic retention times of 2 and 4 days. The longer retention time had significantly lower TN and NO3-N concentrations.

Hunt, W.F. et al. 2006. "Evaluating Bioretention Hydrology and Nutrient Removal at Three Field Sites in North Carolina." *Journal of Irrigation and Drainage Engineering*. November/December: 600-608.

Three bioretention field sites in North Carolina were examined for pollutant removal abilities and hydrologic performance. The cells varied by fill media type or drainage configuration. The field studies confirmed high annual total nitrogen mass removal rates at two conventionally drained bioretention cells _40% reduction each_. Nitrate-nitrogen mass removal rates varied between 75 and 13%, and calculated annual mass removal of zinc, copper, and lead from one Greensboro cell were 98, 99, and 81%, respectively. All high mass removal rates were due to a substantial decrease in outflow volume. The ratio of volume of water leaving the bioretention cell versus that which entered the cell varied from 0.07 _summer_ to 0.54 _winter_. There was a

significant _p_0.05_ change in the ratio of outflow volume to inflow volume when comparing warm seasons to winter. Cells using a fill soil media with a lower phosphorus index _P-index_, Chapel Hill cell C1 and Greensboro cell G1, had much higher phosphorus removal than Greensboro cell G2, which used a high P-index fill media. Fill media selection is critical for total phosphorus removal, as fill media with a low P-index and relatively high CEC appear to remove phosphorus much more readily.

4.0 BIOFILTER MEDIA DESIGN & SPECIFICATIONS

Burge, K. et. al. 2007. "Finding the Right Bioretention Soil Media" 13th International Conference on Rainwater Cathcment Systems. Available at: http://www.hidro.ufcg.edu.br/twiki/pub/ChuvaNet/13thInternationalConferenceonRainwaterCatchmentSystems/Burge.pdf

This paper describes the soil media characteristics that are critical to the successful functioning of a bioretention system and outlines the methodology behind the development of the Guideline Specifications for Soil Media in Bioretention Systems (FAWB, 2006).

Hinman, Curtis, 2009. Bioretention Soil Mix Review and Recommendations for Western Washington. Puget Sound Partnership. Available online: http://www.psparchives.com/publications/our_work/stormwater/BSMResults-Guidelines%20Final.pdf

The soil mix used in bioretention systems is central for determining flow control and water quality treatment performance. The purpose of this study is to provide bioretention soil mix (BSM) guidelines that: 1) meet performance objectives; 2) include materials readily available in the Puget Sound region; 3) include materials that aggregate and compost suppliers can provide with adequate quality control and consistency; and 4) are affordable. The focus of this study is on the aggregate component of the BSM. Four candidate aggregate samples were collected from various suppliers and locations around Puget Sound. Laboratory analysis was conducted to determine aggregate gradation, as well as the organic matter content, hydraulic conductivity, cation exchange capacity, and available phosphorus of a specified aggregate compost bioretention soil mix. Hydraulic conductivity of bioretention soil mixes is strongly correlated to percent mineral aggregate passing the 200 sieve and that the fines should be less than five and ideally between two and four percent. Organic matter content and associated available phosphorus and nitrogen cycling in these mixes may lead to phosphate and nitrate exported in under-drain effluent. Current research shows variable nitrate and phosphate retention and additional work is needed to study methods to optimize bioretention soil mixes for phosphate and nitrate retention and removal capability.

Jurries, Dennis, 2003. Biofilters (Bioswales, Vegetative Buffers, & Constructed Wetlands) for Storm Water Discharge Pollution Removal. State of Oregon Department of Environmental Quality. Available at: http://www.deq.state.or.us/wq/stormwater/docs/nwr/biofilters.pdf

Compilation of available information on the design and use of biofilters. Clays and organic matter have highest cation exchange capacities. Organic matter has twice the rate of cation exchange capacity as clay.

5.0 HYDRAULIC SIZING CRITERIA

Colwell, S. and Fowler J. 2009. Technical Memorandum re: Updated SPU Bioretention Soil – Modeling Inputs and Water Quality Treatment. Seattle Public Utilities. Available at: http://www.seattle.gov/util/groups/public/@spu/@usm/documents/webcontent/spu02_019972.pdf

This memorandum provides SPU's recommendations and justifications for modeling inputs for the bioretention soil and discusses how it meets Washington State Department of Ecology's (Ecology) requirements for treatment. Infiltration rate is highly variable for designed bioretention soils. A long-term correction factor of infiltration rate is recommended to be 2 for catchment areas containing less than 5000 sf of pollution generating surface or less than 10,000 sf impervious surface.

Herrera Environmental Consultants, 2007 "First Controlled Infiltration Test for High Point Phase I Block-Scale Monitoring Project" Seattle Public Utilities. Courtesy of Tracy Tackett (SPU NDS Program Manager)

Results of field study of infiltration and treatment performance of large-scale bioretention system project in Seattle. Design infiltration rate for the bioretention soil mix was 2" per hour and field tested rate was 4.2" per hour.

Herrera Environmental Consultants, 2007 "Results from Second Controlled Infiltration Test for High Point Phase I Block-Scale Monitoring Project" Seattle Public Utilities. Courtesy of Tracy Tackett (SPU NDS Program Manager)

Results of field study of infiltration and treatment performance of large-scale bioretention system project in Seattle. Design infiltration rate for the bioretention soil mix was 2" per hour and field tested rate was 6.1" per hour. Differences from the first and second test are attributed to rainfall event occurring just prior to test 1.

Mcmullen, Chad, 2007. Technical Memorandum: Bioretention Specification Development. Seattle Public Utilites. Provided courtesy Tracy Tackett of Seattle Public Utilites.

This memorandum provides grain size analysis for hydraulic capacity of several available aggregates in Western Washington. Compaction, organic content and permeability testing was performed on aggregate-compost mixtures. Provides draft bioretention soil specification for SPU.

6.0 BIOFILTER SOIL SPECIFICATIONS

Alameda Countywide Clean Water Program, 2007. "Soil Specifications for Stormwater Treatment Measures," Alameda County.

Alameda's soil specification to help applicants specify soils that will provide suitable growing conditions for appropriate plantings and meet the percolation requirements. Target percolation rate is 5 to 10 inches per hour.

Seattle Public Utilites 2008. "SPU Bioretention Soil Specification" courtesy of Tracy Tackett (SPU NDS Program Manager)

Specification for bioretention soil with infiltration rate of 5 in/hour (to be confirmed with Tracy). Specification geared towards locally available materials to Seattle that can be installed by contractors or homeowners.

7.0 LAB SOIL TEST RESULTS

To be provided with final draft.

8.0 PLANTS

Bornstein, C., Fross, D., and O'Brien, B. 2005. *California Native Plants for the Garden* Cachuma Press: Solvang.

Plant recommendations, plant care, nursery resources.

CalTrans 2001. "Advisory Guide to Plant Species Selection for Erosion Control." Cal Trans, District 5.

Hardcopy format of a geographic information system (GIS) that combines state and district-level climatalogical, geological, topographical, and plant biogeographical data to define ecologically meaningful subdistrict Plant climate Zones. These climate zones form the foundation for rapid access to lists of plant species for revegetation that are both ecologically appropriate for a project site and useful in minimizing erosion, primarily on slopes up to 2:1 H:V.

Harlow, Nora 2004. *Plants and Landscapes for Summer-Dry Climates.* East Bay Municipal Utility District.

Plant recommendations for the Bay Area.

Los Angeles County Public Works 2004. "LA River Masterplan: Landscaping Guidelines and Plant Palettes." County of Los Angeles.

Landscape design guidelines for the LA River corridor. Includes plant list of plants that should never be planted along the river and suggested plant lists, plants by plant communities and info about each plant such as estimated water needs, height, spread, and frequency of occurrence.

San Mateo County 2007. "Appendix B: Plant List and Planting Guidance for Landscape-Based Stormwater Measures" *San Mateo Countywide Water Pollution Prevention Program: C.3 Technical Guidance*. Accessed from: http://www.flowstobay.org/bs_new_development.php

Summary: Guidance for planting techniques and selection of appropriate plant materials for stormwater measures.

SVR Design Company 2006. "High Point Community Site Drainage Technical Standards" Prepared for Seattle Public Utilities. Accessed from: http://www.svrdesign.com/high_pt.html

Suggested plant list for various BMPs.

9.0 BIORETENTION SOILS INSTALLATION

SVR Design Company 2006. "High Point Community Right of Way and Open Space Landscape Maintenance Guidelines" Prepared for Seattle Public Utilities. Accessed from: http://www.svrdesign.com/high_pt.html

Materials recommendations and trouble shooting.

Lancaster, Alice, 2009. "Bioretention: Design and Construction" Presentation at Low Impact Development Workshop. City of San Francisco.

Construction sequencing, prevention of compaction, erosion control, contractor training, and public relations.

Hinman, Curtis, 2009. "Low Impact Development Technical Workshop Series: Bioretention Soil Mixes." Presentation at Low Impact Development Workshop. City of San Francisco.

Construction recommendations specific to installing bioretention soils.

Responses to Conditions of Approval
September 1, 2011

Highlands Estates Project
Conditions of Approval
APPROVED BY BOARD OF SUPERVISORS – 4/27/10

File Number: **PLN 2006-00357**

INDEX OF TERMS

LDIA -REFERS TO LAND DEVELOPMENT IMPROVEMENT AGREEMENT

Owner(s): Chamberlain Group

Project Description: This project involves approximately 99.0 acres of which 87.22 acres is in RMD zoning and 11.78 acres is in R-E/SS107 zoning. The project includes 11 new lots and a Designated Remainder Parcel. Lots 1 thru 8 will be clustered within the RMD existing zoning and Lot 9-11 will remain unchanged as R-E/SS107. The Designated Remainder Parcel will remain in the RMD zone.

Items marked with an asterisk (*) must be completed prior to map recordation.

Items marked with a double asterisk (**) must be completed prior to release of the financial security or as stipulated by the land development agreement, or as specifically stipulated in the condition wording.

Items marked with a triple asterisk (***) must be completed prior to building permit issuance

Items marked with a quadruple asterisk (****) must be competed prior to occupancy.

CONDITION			DESIGN TEAM			
*, **, ***, or ****	COND. #	CONDITION TEXT	Design Team Responsibility	Time Frame	Status	LDIA ADDENDUM A, B OR C
PLANNING:						
Contact Camille Leung at (650) 363-1826 regarding the following conditions						
PLANNING AND BUILDING DEPARTMENT:						
	1	This approval applies only to the proposal, documents and plans described in this report and submitted to and approved by the Board of Supervisors on April 27, 2010. Minor revisions or modifications to these projects in compliance with Condition No. 5 may be made subject to the review and approval of the Community Development Director. The Community Development Director determined that request to reduce the home sizes on Lots 1 through 4 by approximately 1,000 sq. ft. to 2,679 sq. ft. for Lots 1 and 2 and 2,726 sq. ft. for Lots 3 and 4 is a minor modification and approved the request on March 9, 2011. Revisions or modifications not in compliance with Condition No. 5 shall be deemed a major modification and shall be subject to review and approval by the Planning Commission at a public hearing.	N/A	N/A	FOR INFO ONLY	
	2	This subdivision approval is valid for two years, during which time a Final Map shall be filed and recorded. An extension to this time period in accordance with Section 7013.5.c of the Subdivision Regulations may be issued by the Planning and Building Department upon written request and payment of any applicable extension fees (if required).	N/A	N/A	FOR INFO ONLY	

CONDITION			DESIGN TEAM			
* or ** or *** or ****	COND. #	CONDITION TEXT	Design Team Responsibility	Time Frame	Status	LDIA ADDENDUM A, B OR C
	3	The Final Map shall be recorded pursuant to the plans approved by the Board of Supervisors: any deviation from the approved plans shall be reviewed and approved by the Community Development Director. Revisions or modifications not in compliance with parcel size and configuration as approved by the Board of Supervisors and applicable conditions of approval (including but not limited to) Condition Nos. 8, 9 and 11 shall be deemed a major modification and shall be subject to review and approval by the Planning Commission at a public hearing.	N/A	N/A	FOR INFO ONLY	
	4	The property owner shall comply with all mitigation measures as revised and listed below (based on the Mitigation Monitoring and Reporting Program (MMRP) incorporated within the Final EIR and made available to the public on January 4, 2010). When timing has not been specified below, then mitigation timing and monitoring shall be as specified in the MMRP. The applicant shall enter into a contract with the San Mateo County Planning and Building Department for all mitigation monitoring for this project prior to the issuance of any grading permit "hard card" for the project. The fee shall be staff's cost, plus 10 percent, as required in the current Planning Service Fee Schedule. Planning staff may, at their discretion, contract these services to an independent contractor at cost, plus an additional 10 percent for contract administration.	OWNER		MITIGATION MONITORING FEES OWNER/COUNTY ENTER INTO CONTRACT	
	4a	Improvement Measure AES-1a: The Project Applicant shall provide "finished floor verification" to certify that the structures are actually constructed at the height shown on the approved plans. The Project Applicant shall have a licensed land surveyor or engineer establish a baseline elevation datum point in the vicinity of the construction site. Prior to the below floor framing inspection or the pouring of concrete slab for the lowest floors, the land surveyor shall certify that the lowest floor height as constructed is equal to the elevation of that floor specified by the approved plans. Similarly, certifications of the garage slab and the topmost elevation of the roof are required. The application shall provide the certification letter from the licensed land surveyor to the Building Inspection Section.	BKF - CIVIL BKF - SURVEY		FUTURE BUILDING CONDITION	
	4b	Improvement Measure AES-1b: The Project Applicant shall plant a total of eight (8) native trees (minimum 24-gallon each), two directly in front of each home on Lots 5 through 8 to soften and screen views of the new homes from off-site locations. These trees will be in addition to the fourteen (14) required replacement trees (15-gallon size). Of the 14 replacement trees, three (3) trees shall be planted at the back of each of the homes on Cowpens Way and Cobblehill Place (three homes, nine (9) trees total). The applicant shall plant the remaining five (5) trees in the right side yard of Lot 8 in order to provide screening of this residence and other residences on Ticonderoga Drive as viewed from Lakewood Circle. All trees or replacement trees required by this condition shall be maintained in perpetuity by the respective property owner in order to maintain screening of the project.	ARCHITECT		FUTURE BUILDING CONDITION	
	4c	Improvement Measure AES-2: Construction contractors shall minimize the use of on-site storage and when necessary store building materials and equipment away from public view and shall keep activity within the project site and construction equipment laydown areas.	CONSTRUCTION MANAGER		FUTURE BUILDING CONDITION	

CONDITION			DESIGN TEAM			
* or ** or *** or ****	COND. #	CONDITION TEXT	Design Team Responsibility	Time Frame	Status	LDIA ADDENDUM A, B OR C
	4d	Mitigation Measure BIO-2a: No earlier than 30 days prior to the commencement of construction activities, a survey shall be conducted to determine if active woodrat nests (stickhouses) with young are present within the disturbance zone or within 100 feet of the disturbance zone. If active woodrat nests (stickhouses) with young are identified, a fence shall be erected around the nest site adequate to provide the woodrat sufficient foraging habitat at the discretion of a qualified biologist and based on consultation with the CDFG. At the discretion of the monitoring biologist, clearing and construction within the fenced area would be postponed or halted until young have left the nest. The biologist shall serve as a construction monitor during those periods when disturbance activities will occur near active nest areas to ensure that no inadvertent impacts on these nests will occur. If woodrats are observed within the disturbance footprint outside of the breeding period, individuals shall be relocated to a suitable location within the open space by a qualified biologist in possession of a scientific collecting permit. This will be accomplished by dismantling woodrat nests (outside of the breeding period), to allow individuals to relocate to suitable habitat within the adjacent open space. If woodrats are observed within the disturbance footprint outside of the breeding period, individuals shall be relocated to a suitable location within the open space by a qualified biologist in possession of a scientific collecting permit. This will be accomplished by dismantling woodrat nests (outside of the breeding period), to allow individuals to relocate to suitable habitat within the adjacent open space.	BIOLOGIST		FUTURE BUILDING CONDITION	
	4e	Mitigation Measure BI0-2b: No earlier than two weeks prior to commencement of construction activities that would occur during the nesting/breeding season of native bird species potentially nesting/roosting on the site (typically February through August in the project region), a survey for nesting birds shall be conducted by a qualified biologist experienced with the nesting behavior of bird species of the region. The intent of the survey would be to determine if active nests of special-status bird species or other species protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code are present in the construction zone or within 500 feet of the construction zone. The surveys shall be timed such that the last survey is concluded no more than two weeks prior to initiation of construction or tree removal work. If ground disturbance activities are delayed, then an additional pre-construction survey shall be conducted such that no more than two weeks will have elapsed between the last survey and the commencement of ground disturbance activities. If active nests are found in areas that could be directly affected or subject to prolonged construction-related noise, a no-disturbance buffer zone shall be created around active nests during the breeding season or until a qualified biologist determines that all young have fledged. The size of the buffer zones and types of construction activities restricted within them will be determined through consultation with the CDFG, taking into account factors such as the following: • Noise and human disturbance levels at the construction site at the time of the survey and the noise and disturbance expected during the construction activity;	BIOLOGIST		FUTURE BUILDING CONDITION	

CONDITION			DESIGN TEAM			
* or ** or *** or ****	COND. #	CONDITION TEXT	Design Team Responsibility	Time Frame	Status	LDIA ADDENDUM A, B OR C
		• Distance and amount of vegetation or other screening between the construction site and the nest; and • Sensitivity of individual nesting species and behaviors of the nesting birds. Limits of construction to avoid an active nest shall be established in the field with flagging, fencing, or other appropriate barriers and construction personnel shall be instructed on the sensitivity of nest areas. A qualified biologist shall serve as a construction monitor during those periods when construction activities would occur near active nest areas of special-status bird species and all birds covered by the Migratory Bird Act to ensure that no impacts on these nests occur.				
	4f	Mitigation Measure BI0-2c: Prior to the commencement of construction activities during the breeding season of native bat species in California (generally occurs from April 1 through August 31), a focused survey shall be conducted by a qualified bat biologist to determine if active maternity roosts of special-status bats are present within any of the trees proposed for removal. Should an active maternity roost of a special-status bat species be identified, the roost shall not be disturbed until the roost is vacated and juveniles have fledged, as determined by the biologist. Once all young have fledged, then the tree may be removed. Species-appropriate replacement roosting habitat (e.g., bat boxes) shall be provided should the project require the removal of a tree actively used as a maternity roost. The replacement roosting habitat shall be subject to the approval of the CDFG.	BIOLOGIST		FUTURE BUILDING CONDITION	
	4g	Mitigation Measure BI0-2d: Immediately preceding initial ground disturbance activities on Lot 11, a pre-construction clearance survey shall be conducted by a qualified biologist for California red-legged frogs. The survey shall be conducted to determine whether individual California red-legged frogs are present within the disturbance boundary. Should a California red-legged frog be observed during the clearance survey, all construction activities on Lot 11 shall be immediately halted and the USFWS shall be immediately contacted. Under no circumstances shall a California red-legged frog be collected or relocated, unless USFWS personnel or their agents implement the measure. Construction-related activities may resume once the frog has naturally left the lot or has been relocated by a permitted biologist (authorized by the USFWS).	BIOLOGIST		FOR INFO ONLY LOTS 5 THROUGH 11 HAVE NOT RECEIVED AUTHORIZATION TO PROCEED	
	4h	Mitigation Measure BI0-3: Tree replacement shall occur at a minimum 2:1 ratio for all protected trees removed with a circumference of or exceeding 55 inches (17.5 inches diameter at breast height). Therefore, the seven (7) trees proposed for removal shall be replaced with fourteen (14) trees. The replacement of indigenous trees shall be in kind (i.e. live oaks removed shall be replaced by live oaks) and exotic trees to be removed shall be replaced with an appropriate native species on the tree list maintained by the County of San Mateo Planning Department. Replacement trees shall also be maintained for a minimum of three years. To facilitate the successful replacement of trees, a tree replacement plan shall be prepared and shall meet the following standards: • Where possible, the plan shall identify suitable areas for tree replacement to occur such that the existing native woodlands in the open space are enhanced and/or expanded.	OWNER ARCHITECT LANDSCAPE		LOT 1 - 1 TREE BEING REMOVED AND 1 TREE BEING REPLACED PER RESOURCE MANAGEMENT DISTRICT PLN# 041-101-290 LOT 2 - 1 TREE BEING REMOVED AND 1 TREE BEING REPLACED PER RESOURCE MANAGEMENT DISTRICT PLN# 041-101-290 LOT 3 - 5 TREES BEING REMOVED AND 3 TREES BEING REPLACED PER RESOURCE MANAGEMENT DISTRICT PLN# 041-101-290 LOT 4 - NO TREES BEING REMOVED AND 2 TREES BEING REPLACED PER RESOURCE MANAGEMENT DISTRICT PLN# 041-101-290	

CONDITION			DESIGN TEAM			
* or ** or *** or ****	COND. #	CONDITION TEXT	Design Team Responsibility	Time Frame	Status	LDIA ADDENDUM A, B OR C
		• The plan shall specify, at a minimum, the following: — The location of planting sites; — Site preparation and planting procedures; — A schedule and action plan to maintain and monitor the tree replacement sites; — A list of criteria and performance standards by which to measure success of the tree replacement; and — Contingency measures in the event that tree replacement efforts are not successful.			LOTS 5 THROUGH 11 HAVE NOT RECEIVED AUTHORIZATION TO PROCEED	
	4i	Mitigation Measure BI0-5a: Prior to the commencement of construction activities on Lot 11, the outer edge of the willow scrub habitat (facing Lot 11) shall be delineated by a qualified biologist. Temporary fencing shall be installed that clearly identifies the outer edge of the willow habitat and that identifies the willow scrub as an "Environmentally Sensitive Area." Signs shall be installed indicating that the fenced area is "restricted" and that all construction activities, personnel, and operational disturbances are prohibited.	BIOLOGIST		FOR INFO ONLY LOTS 5 THROUGH 11 HAVE NOT RECEIVED AUTHORIZATION TO PROCEED	
	4j	Mitigation Measure BI0-5b: Prior to the issuance of a grading permit, the Project Applicant shall develop an erosion control plan. The plan shall include measures such as silt fencing to prevent project-related erosion and sedimentation from adversely affecting the creek zone and other habitats on and near Lots 1-11. The erosion control plan shall be subject to approval by the County of San Mateo Planning Department.	BKF - CIVIL		SEE SHEET C0.40 OF THE STREET IMPROVEMENT PLANS AND SHEETS C1.50, C2.50, C3.50 AND C4.50 OF THE LOT IMPROVEMENT PLANS FOR EROSION CONTROL PLANS. LOTS 5 THROUGH 11 HAVE NOT RECEIVED AUTHORIZATION TO PROCEED	
	4k	Mitigation Measure BIO-5c: Prior to the issuance of the first building permit for any of the eleven (11) homes, the Project Applicant shall develop a lighting plan. The lighting plan shall require that all lighting be directed and shielded as to minimize light spillage into nearby willow scrub habitat, as well as adjacent oak woodland habitats. The lighting plan shall be subject to approval by the County of San Mateo Planning Department.	ARCHITECT		FOR INFO ONLY LOTS 5 THROUGH 11 HAVE NOT RECEIVED AUTHORIZATION TO PROCEED	
	4l	Mitigation Measure BI0-6: Prior to the commencement of construction on Lot 8, the occurrence of purple needlegrass shall be mapped, including all stands on the lot with 20 percent or greater cover of native grasses and having a diameter greater than 10 feet. The area of purple needlegrass to be lost due to development of the lot shall then be calculated. As part of the proposed project, approximately 92 acres of open space would be maintained as open space under a conservation easement. This open space contains a serpentine grassland (on the slope west of the water tanks) that is dominated by native grasses (including purple needlegrass) and other native plant species. These native grasses, including purple needlegrass, would be permanently protected by the conservation easement. In addition, non-native plant areas adjacent to the serpentine grassland shall be restored to support native grasses over an area twice the acreage (2:1) of the stands of purple needlegrass to be lost on Lot 8.	ARCHITECT		FUTURE BUILDING CONDITION. LOTS 5 THROUGH 11 HAVE NOT RECEIVED AUTHORIZATION TO PROCEED	
	4m	Mitigation Measure GEO-1: A design-level geotechnical investigation of the site shall be performed prior to any project grading including static and seismic slope stability analysis of the areas of the project site to be graded and developed. The specific mitigation measures to be utilized in order to stabilize existing landslides and areas of potential seismically induced landslides shall be presented in the report. The specific mitigation measures shall include some of the following measures or measures comparable to these:				

CONDITION			DESIGN TEAM			
* or ** or *** or ****	COND. #	CONDITION TEXT	Design Team Responsibility	Time Frame	Status	LDIA ADDENDUM A, B OR C
		• Landslide debris on Lots 7 and 8 shall be excavated and replaced with a fully drained conventional buttress fill that is founded in the underlying Franciscan mélange, as recommended by the project geotechnical engineer. (Lots 7-8) • Retaining walls shall be designed to withstand high lateral earth pressure from adjoining natural materials and/or backfill shall be installed at the rear of Lots 5 through 8. In addition, retaining walls shall be built in the front of Lots 5 and 6 to aid in maintaining the slopes behind the lots and the more extensive cut required for Lots 5 and 6. (Lots 5-8) • A surface drainage system shall be installed for each lot to mitigate new landslides developing within the thin veneer of soil mantling the bedrock on the slope below Lots 1 through 4. (Lots 1-4) • Subsurface drainage galleries may be installed to control the flow of groundwater and reduce the potential for slope instabilities from occurring in the future. (All lots) • Over-steepening of slopes shall be avoided. Horizontal benches shall be constructed on all reconstructed slopes at an interval of 25 to 30 feet. New fill shall be compacted to at least 90 percent relative compaction (as determined by ASTM test method D1557). (All lots) • Drilled piers and grade-beam foundations shall be used to support foundations in accordance with recommendations of the project geotechnical engineer. (All lots)	GEOTECH		FUTURE BUILDING CONDITION. LOTS 5 THROUGH 11 HAVE NOT RECEIVED AUTHORIZATION TO PROCEED	
	4n	Mitigation Measure GEO-2a: Materials used to construct the buttress fill should have effective strength parameters equal to or better than the parameters used in the Treadwell and Rollo 2009 study. (Lots 7 and 8)	GEOTECH BKF - CIVIL		FOR INFO ONLY. LOTS 5 THROUGH 11 HAVE NOT RECEIVED AUTHORIZATION TO PROCEED	
	4o	Mitigation Measure GEO-2b: The following mitigation measures shall be implemented to ensure the stability of proposed structures that are located on deep fill soils: • A site-specific, design-level geotechnical investigation shall be completed during the design phase of the proposed project, and prior to approval of new building construction within the site for specific foundation design, slope configuration, and drainage design. (All lots) • The geotechnical investigation shall provide recommendations to prevent water from ponding in pavement areas and adjacent to the foundation of the proposed residences, and to prevent collected water from being discharged freely onto the ground surface adjacent to the residences, site retaining walls, or artificial slopes. The project geotechnical engineer shall identify on site areas downslope of the homes where the collected water may be discharged utilizing properly designed energy dissipaters. (All lots) • Fills used at the project site shall be properly placed with keyways and subsurface drainage, and adequately compacted following the recom-mendations of the final geotechnical report and Geotechnical Engineer, in order to significantly reduce fill settlement. (All lots) • Underground utilities shall be designed and constructed using flexible connection points to allow for differential settlement. (All lots)	GEOTECH		FUTURE BUILDING CONDITION. LOTS 5 THROUGH 11 HAVE NOT RECEIVED AUTHORIZATION TO PROCEED	

CONDITION			DESIGN TEAM			
* or ** or *** or ****	COND. #	CONDITION TEXT	Design Team Responsibility	Time Frame	Status	LDIA ADDENDUM A, B OR C
		• Foundation plans shall be submitted to the County for review prior to issuance of a building permit. All foundation excavations shall be observed during construction by the project Geotechnical Engineer to insure that subsurface conditions encountered are as anticipated. As-built documentation shall be submitted to the County. (All lots) • Drilled pier and grade-beam foundations or other appropriate foundations per the recommendations of the design-level geotechnical investigation shall be developed for lots that are determined to likely experience soil creep. (All lots) All work shall be completed in accordance with requirements of the 2007 California Building Code and the San Mateo County Building Code. (All lots)				
	4p	Improvement Measure GEO-3: In compliance with the NPDES regulations, the Project Applicant shall file a Notice of Intent with the State Water Resources Control Board (SWRCB) prior to the start of grading and prepare a SWPPP. The SWPPP shall include specific best management practices to reduce soil erosion. The SWPPP shall include locations and specifications of recom-mended soil stabilization techniques, such as placement of straw wattles, silt fence, berms, and storm drain inlet protection. The SWPPP shall also depict staging and mobilization areas with access routes to and from the site for heavy equipment. The SWPPP shall include temporary measures to reduce erosion to be implemented during construction, as well as permanent measures. County staff and/or representatives shall review the SWPPP to ensure adequate compliance with State and County standards. County staff and/or representatives shall visit the site during grading and construction to ensure compliance with the SWPPP, as well as note any violations, which shall be corrected immediately. A final inspection shall be completed prior to occupancy.	BKF - CIVIL		GRADING FOR LOTS 1 THROUGH 4 IS LESS THAN 1 ACRE; THEREFORE, A CIVIL NOI AND SWPPP ARE NOT REQUIRED IF GRADING EXCEEDS 1 ACRE, A NOI SHALL BE FILED WITH THE STATE UPON DIRECTION AND FINALIZATION OF CONSTRUCTION SCHEDULE. SWPPP SHALL BE PREPARED UPON DIRECTION OF CONSTRUCTION SCHEDULE.	
	4q	Mitigation Measure GEO-4: The Project Applicant shall be required to use the seismic design criteria listed below to design structures and foundations to withstand expected seismic sources in accordance with the California Building Code (2007) as adopted by the County of San Mateo.				

CONDITION			DESIGN TEAM			
* or ** or *** or ****	COND. #	CONDITION TEXT	Design Team Responsibility	Time Frame	Status	LDIA ADDENDUM A, B OR C
		Site Class: C Soil Profile Name: Very Dense Soil and Soft Rock Occupancy Category: II Seismic Design Category: E Mapped Spectral Response for Short Periods- 0.2 Sec (Se): 2.226 g Mapped Spectral Response for Long Periods- 1 Sec (S1): 1.273 g Site Coefficient - Fa, based on the mapped spectral response for short periods: 1.0 Site Coefficient - Fv, based on the mapped spectral response for long periods: 1.3 Adjusted Maximum Considered EQ Spectral Response for Short Periods (SMS): 2.226 Adjusted Maximum Considered EQ Spectral Response for Long Periods (SM1): 1.655 Design (5-percent damped) Spectral Response Acceleration Parameters at short periods (SDS): 1.484 Design (5-percent damped) Spectral Response Acceleration Parameters at long periods (SD1): 1.103	STRUCTURAL		FUTURE BUILDING CONDITION	
	4r	Mitigation Measure GEO-5: During site grading, soils in each lot shall be observed and tested by the project Geotechnical Engineer to determine if expansive soils are exposed. Should expansive soils be encountered in planned building or pavement locations, the following measures shall be implemented under the direction of the Geotechnical Engineer in order to mitigate the impact of expansive soils: • Expansive soils in foundation areas shall be excavated and replaced with non-expansive fill to the specifications of the geotechnical engineer. • A layer of non-expansive fill soils 12 to 24 inches in thickness shall be placed over the expansive materials and prior to the placement of pavements or foundations. • Moisture conditioning of expansive soil shall be applied to a degree that is several percent above the optimum moisture content or lime treating of the expansive soil. • Foundations shall be constructed to be below the zone of seasonal moisture fluctuation or to be capable of withstanding the effects of seasonal moisture fluctuations. • Specific control of surface drainage and subsurface drainage measures shall be provided. • Low water demand landscaping shall be used.	ARCHITECT GEOTECH BKF - CIVIL		FUTURE BUILDING CONDITION	
	4s	Mitigation Measure AQ-1: The Project Applicant shall require that the following BAAQMD recommended and additional PM_{10} reduction practices be implemented by including them in the contractor construction documents:				

CONDITION			DESIGN TEAM			
* or ** or *** or ****	COND. #	CONDITION TEXT	Design Team Responsibility	Time Frame	Status	LDIA ADDENDUM A, B OR C
		The first phase of construction shall require 30 percent of construction equipment to meet Tier 1 EPA certification standards for clean technology. The remainder of construction equipment (70 percent), which would consist of older technologies, shall be required to use emulsified fuels. • The second phase of construction shall require 30 percent of construction equipment to meet Tier 2 EPA certification standards for clean technology and 50 percent to meet Tier 1 EPA certification standards. The remaining 20 percent of construction equipment, which would consist of older technologies, shall use emulsified fuels. • For all larger vehicles, including cement mixers or other devices that must be delivered by large trucks, vehicles shall be equipped with CARB level three verified control devices. • Water all active construction areas at least twice daily. • Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard. • Pave, apply water three times daily, or apply non-toxic soil stabilizers on all unpaved access roads, parking areas, and staging areas at the construction sites. • Sweep daily (with water sweepers) all paved access roads, parking areas, and staging areas at the construction sites. • Sweep public streets adjacent to construction sites daily (with water sweepers) if visible soil material is carried onto the streets. • Hydroseed or apply non-toxic soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more). • Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.). Limit traffic speeds on unpaved roads to 15 miles per hour. • Limit traffic speeds on unpaved roads to 15 miles per hour. • Install sandbags or other erosion control measures to prevent silt runoff to public roadways. • Replant vegetation in disturbed areas as soon as possible. • Install wheel washers for all exiting trucks or wash off the tires or tracks of all trucks and equipment leaving the construction site. • Install wind breaks at the windward sides of the construction areas. • Suspend excavation and grading activities when wind (as instantaneous gusts) exceeds 25 miles per hour.	ARCHITECT DEVELOPER BKF - CIVIL		SEE CONDITIONS OF APPROVAL CONSTRUCTION NOTES 1 THROUGH 16 ON SEE SHEET C0.20 OF THE STREET IMPROVEMENTS PLANS AND SHEETS C1.20, C2.20, C3.20 AND C4.20 OF THE LOT IMPROVEMENT PLANS.	
	4t	Mitigation Measure NOI-1: The Project Applicant shall require that the following noise reduction practices be implemented by including them in the contractor construction documents:				

CONDITION			DESIGN TEAM			
* or ** or *** or ****	COND. #	CONDITION TEXT	Design Team Responsibility	Time Frame	Status	LDIA ADDENDUM A, B OR C
		• Equipment and trucks used for project grading and construction would utilize the best available noise control techniques (e.g., improved exhaust mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically-attenuating shields or shrouds) in order to minimize construction noise impacts. • Equipment used for project grading and construction would be hydraulically or electrically powered impact tools (e.g., jack hammers and pavement breakers) wherever possible to avoid noise associated with compressed air exhaust from pneumatically-powered tools. Compressed air exhaust silencers would be used on other equipment. Other quieter procedures would be used such as drilling rather than impact equipment whenever feasible. • The grading and construction activity would be kept to the hours of 7:00 AM to 7:00 PM, Monday through Friday. Saturday hours (8:00 AM to 5:00 PM) are permitted upon the discretion of County approval based on input from nearby residents and businesses. Saturday construction (8:00 AM to 5:00 PM) would be allowed once the buildings are fully enclosed. Noise generating grading and construction activities shall not occur at any time on Sundays, Thanksgiving and Christmas. • Residential property owners within 200 feet of planned construction areas shall be notified of the construction schedule in writing, prior to construction; the project sponsor shall designate a "disturbance coordinator" who shall be responsible for responding to any local complaints regarding construction noise; the coordinator (who may be an employee of the developer or general contractor) shall determine the cause of the complaint and shall require that reasonable measures warranted to correct the problem be implemented; a telephone number of the noise disturbance coordinator shall be conspicuously posted at the construction site fence and on the notification sent to neighbors adjacent to the site.	DEVELOPER BKF - CIVIL		SEE CONDITIONS OF APPROVAL NOISE NOTES 1 THROUGH 3 ON SHEET C0.20 OF THE STREET IMPROVEMENT PLANS AND SHEETS C1.20, C2.20, C3.20 AND C4.20 OF THE LOT IMPROVEMENT PLANS.	
	4u	Mitigation Measures HAZMAT-2: As required by the San Mateo County Fire Protection Ordinance Section 3.84.100, individual property owners for Lots 1-4 and 9, 10, and 11 shall be responsible for maintaining a fuel break by removing all hazardous flammable materials or growth from the ground around each home for a distance of to 100 feet from its exterior circumference, for the life of the project. Property owners of lots listed above shall arrange with the property owner of the open space parcel to obtain legal access to the open space parcel for the purpose of vegetation clearance. This would not include the authorization of tree removal for trees protected by the RM zoning regulations or "major removal" of vegetation requiring an RM Permit. For the twelve parcels that constitute the project site the removal of trees or other vegetation providing screening of the eleven residences such that the residences are made significantly more visible from public viewing location(s) shall constitute a "major removal" requiring an RM Permit. This requirement shall be recorded as a deed restriction on Lots 1 through 4, and 9, 10, and 11 when the lots are sold.	FUTURE OWNER / DEVELOPER		FUTURE BUILDING CONDITION. LOTS 5 THROUGH 11 HAVE NOT RECEIVED AUTHORIZATION TO PROCEED	

CONDITION			DESIGN TEAM			
* or ** or *** or ****	COND. #	CONDITION TEXT	Design Team Responsibility	Time Frame	Status	LDIA ADDENDUM A, B OR C
	4v	Mitigation Measure HAZMAT-3: During the design level geotechnical investigation, representative soil samples shall be obtained for each lot proposed on an area underlain or potentially underlain by serpentine bedrock. These samples shall be tested for the presence of naturally occurring asbestos by a state certified testing laboratory in accordance with requirements of the CARB and the BAAQMD and the results shall be provided to the County Planning Department. If naturally occurring asbestos is identified at the site, a site health and safety (H&S) plan including methods for control of airborne dust shall be prepared. This plan shall be reviewed and approved by the County of San Mateo prior to grading in areas underlain by serpentine-bearing soils or bedrock and naturally occurring asbestos. The H&S plan shall strictly control dust-generating excavation and compaction of material containing naturally occurring asbestos. The plan shall also identify site-monitoring activities deemed necessary during construction (e.g., air monitoring). Worker monitoring shall also be performed as appropriate. The plan shall define personal protection methods to be used by construction workers. All worker protection and monitoring shall comply with provisions of the Mining Safety and Health Administration (MSHA) Guidelines, California Division of Occupa-tional Safety and Health (DOSH), and the Federal Occupational Safety and Health Administration (OSHA). If naturally occurring asbestos is found at the site, a Soil Management Plan shall be developed and approved by the County Planning Department to provide detailed descriptions of the control and disposition of soils containing naturally occurring asbestos. Serpentine material placed as fill shall be sufficiently buried in order to prevent erosion by wind or surface water runoff, or exposure to future human activities, such as landscaping or shallow trenches. Additionally, the BAAQMD shall be notified prior to the start of any excavation in areas containing naturally occurring asbestos.	GEOTECH			
	4w	Improvement Measure TRANS-1: The Project Applicant shall prepare and submit a Construction Management Plan that will, among other things, require that all truck movement associated with project construction occur outside the commute peak hours.	FUTURE OWNER / DEVELOPER			
	4x	Mitigation Measure TRANS-2: The Project Applicant shall be required to pay for the installation of advisory traffic signs on Ticonderoga Drive in the vicinity of the proposed homes if determined necessary by the County of San Mateo Department of Public Works.	FUTURE OWNER / DEVELOPER			

CONDITION			DESIGN TEAM			
* or ** or *** or ****	COND. #	CONDITION TEXT	Design Team Responsibility	Time Frame	Status	LDIA ADDENDUM A, B OR C
	4y	Mitigation Measure UTIL-1: The Project Applicant shall mitigate the project-generated increase in sewer flow such that there is a "zero net increase" in flow during wet weather events, by reducing the amount of existing Inflow and Infiltration (INI) into the Crystal Springs County Sanitation District (District) sewer system. This shall be achieved through the construction of improvements to impacted areas of the sewer system, with construction plans subject to District approval. Construction of improvements, as approved by the District, shall be completed prior to the start of the construction of the residences. In addition, as project sewage will be treated by the City of San Mateo's Wastewater Treatment Plant, the Project Applicant shall submit payment of the City of San Mateo Wastewater Treatment Plant Expansion development impact fee to the City of San Mateo. This fee is based on the number of bedrooms in each residential unit and is calculated at the time of the final plans, using the City's fee schedule in effect at the time of the building permit application.	COUNTY DEVELOPER BKF - CIVIL			
The following conditions of approval document points of discussion among the County, the applicant and neighborhood groups:						
	5	This project will be implemented as proposed, mitigated, conditioned, and approved by the Board of Supervisors, regarding parcel size and configuration, home sizes, home locations, architectural design, style and color, materials, height and foundation design. Prior to the issuance of a Certificate of Occupancy for any residence, the applicant shall provide a copy of recorded deed restrictions and photographs to the Current Planning Section staff to demonstrate utilization of the approved colors and materials. Materials and colors shall not be highly reflective.	DEVELOPER			
	6	Colors and Materials: The following language shall be recorded as a deed restriction on the applicable parcels when they are sold: a. Lots 1 through 11: Development shall employ colors and materials which blend in with, rather than contrast with, the surrounding soil and vegetative cover of the open space parcel. All exterior construction materials shall be of deep earth hues such as dark browns, greens, and rusts. The applicant shall utilize roof materials that perform as a "cool roof." Roof colors shall be of a medium tone, subject to the approval of the Community Development Director. Exterior lighting shall be minimized and earth-tone colors of lights used. b. Lots 1, 2, 3, 4 and 11: Homes shall be no more than one-story high on the front curbside. Home design will be compatible with the area's contemporary, mid-20th century modern style. Rear facades of homes on Lots 9 through 11 shall have details to reduce the massing of the structure, specifically architectural articulation to break up the vertical facade, color variation, and brick or stone treatment for retaining walls supporting the residences.	DEVELOPER			

CONDITION			DESIGN TEAM			
* or ** or *** or ****	COND. #	CONDITION TEXT	Design Team Responsibility	Time Frame	Status	LDIA ADDENDUM A, B OR C
	7	Grading and Construction Staging Limits: Grading and construction activities shall be limited to the grading and staging limits presented in the approved Clearing, Construction, and Grading Limits Plan. The property owner shall maintain non-conflicting vegetation in the side and rear yard areas adjoining 2285 Bunker Hill Drive until the foundation is installed. The construction drawings associated with the subdivision improvement plans and the individual site development plans for Lots 1 through 11 shall include a Clearing, Construction and Grading Limits Plan (Limits Plan). The Limits Plan and all associated documents must utilize current topographic data (2009) for all parcels, as mapped by Chris Hundemer at Treadwell and Rollo. The Limits Plan shall depict the fencing and protection of the adjacent open space parcel in conformance with the approved Vesting Tentative Map. This plan shall be subject to review and approval of the County Planning and Building Department and the Department of Public Works. The applicant shall install orange fencing, staked securely at intervals, along all staging limits prior to the issuance of any Grading Permit "hard card."	BKF - CIVIL		SEE SHEETS C1.30, C2.30, C3.30 AND C4.30 OF THE LOT IMPROVEMENT PLANS FOR LOTS 1-4 CLEARING, CONSTRUCTION AND GRADING LIMITS PLANS.	
	8	Development Restriction Over Lot 8: Only a portion of Lot 8 is developable. The rest of the parcel (shown as hatched on Attachment L) is in a "No-Build Zone." The "No-Build Zone" shall be shown on the Final Map for the subdivision. All setbacks shall be measured from the limits of the buildable portion of the parcel (i.e., excluding any "No-Build" areas on the Final Map). For the purpose of calculating the Maximum Building Site Coverage Ratio of 40%, the Building Site Area shall exclude any "No-Build" areas as shown on the Final Map for the subject property.	BKF - CIVIL BKF - SURVEY		LOT 8 HAS NOT RECEIVED AUTHORIZATION TO PROCEED	
	9	Development Restriction Over Lot 11: All areas of Lot 11 are developable as allowed by the County Zoning Regulations, with the exception of a "No-Build Zone" on the right side of the parcel, as illustrated in the approved Clearing, Construction, and Grading Limits Plan. The "No-Build Zone" shall be shown on the Final Map for the subdivision. All setbacks shall be measured from the limits of the buildable portion of the parcel (i.e., excluding any "No-Build" areas on hte Final Map). For the purpose of calculating the Maximum Building Site Coverage Ratio of 40%, the Building Site Area shall exclude any "No-Build" areas as shown on the Final Map for the subject property.	BKF - CIVIL BKF - SURVEY		LOT 11 HAS NOT RECEIVED AUTHORIZATION TO PROCEED	
	10	Storm Drainage Plan: Project implementation shall comply with the approved Storm Drainage Plan.	BKF - CIVIL		SEE STORM DRAINAGE REPORT.	
	11	Conservation Easement: Lot 12, the open-space parcel, will be subject to a conservation easemenet in perpetuity, and to a deed restriction, each in forms to be approved by County Counsel and the County Board of Supervisors. The easement will be noted on the Veseting Tentative Map and on the Final Map. Recordation of the Final Map and conservation easeement shall be handled by the Department of Public Works (DPW) working cooperatively with Planning staff to ensure the proper order and timing of the recordation of both documents. DPW and Planning staff shall ensure that the Final Map is recorded and ensure recordation of the approved conservation easement immediately following (allowing no other document to be recorded on the project parcels between the recordings of the Final Map and the conservation easement).	COUNTY DEVELOPER		LOT 12 HAS NOT RECEIVED AUTHORIZATION TO PROCEED	

CONDITION			DESIGN TEAM			
* or ** or *** or ****	COND. #	CONDITION TEXT	Design Team Responsibility	Time Frame	Status	LDIA ADDENDUM A, B OR C
	12	The Final Map will include a note stating that "any development of the project parcels must comply with the conditions of approval, as approved by the Board of Supervisors on April 27, 2010."	BKF - CIVIL			
Conditions of Approval for Certification of Draft and Final EIR						
	13	Per CEQA Section 15095, the applicant shall provide a copy of the final certified Final EIR to all responsible agencies. The applicant must complete this requirement within fourteen (14) days of the final approval of this project.	OWNER			
	14	The applicant shall coordinate with the project planner to record the Notice of Completion and pay an environmental filing fee of $2,792.25 (or current fee), as required under Fish and Game Code Section 711.4(d), plus a $50 recording fee to the San Mateo County within four (4) working days of the final approval date of this project.	OWNER			
Conditions of Approval for Major Subdivision and Lot Line Adjustment						
	15	The applicant shall record the conservation easement, as approved by the Board of Supervisors, according to the process described in Condition 11.	OWNER			
	16	Prior to the recordation of the Final Map, the property owner shall either produce a deed showing the donation of the land to a park service provider or pay an in-lieu fee, meeting the requirements of Section 7055.3 of the County Subdivision Regulations. A worksheet showing the prescribed calculation appears as Attachment U of the staff report for the January 13, 2010 hearing. As of the date of this report, the in-lieu fee for this subdivision is $236.50. The fee shall be re-calculated at the time of Final Map recording as indicated in the County Subdivision Regulations.	OWNER			
Conditions of Approval for Grading Permit and Tree Removals						
	17	Twelve (12) separate Grading Permit hard cards are required, one for the subdivision improvements and one for each of the eleven homes. "Hard cards" shall be issued according to the following schedule: a. The "hard card" for grading of improvements related to the subdivision (including a sidewalk for Lots 5-8 and all shared access ways) may be issued after the final approval of this project, subject to the approval of the Planning and Building Department's Geotechnical Engineer, Department of Public Works and the Current Planning Section, and subject to the conditions below. b. The "hard card" for grading of improvements related to the residences (the preparation of building sites and yard areas) can only be issued simultaneously or after the issuance of a building permit for the construction of each new residence, subject to the approval of the Planning and Building Department's Geotechnical Engineer, Department of Public Works and the Current Planning Section.	BKF - CIVIL			
	18	Lots 1-4: Prior to issuance of grading permits, BKF shall prepare cross sections through each lot illustrating existing slopes, proposed final slopes, areas of fill placement and the stepping of houses across the slope. No fill placement will be permitted downslope of proposed residences (with the exception of fill as shown on the grading plans as approved by the Board of Supervisors).	BKF - CIVIL		SEE SHEETS C1.40, C2.40, C3.40 AND C4.40 OF THE LOT IMPROVEMENT PLANS FOR CROSS SECTIONS AND GRADING PLANS.	
	19	Per the mitigation measures in the MMRP, tree removals and grading shall proceed as specified:				

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* or ** or *** or ****	COND. #	CONDITION TEXT	Design Team Responsibility	Time Frame	Status	LDIA ADDENDUM A, B OR C
		a. Grading Permit hard card cannot be issued until a design-level geotechnical investigation of the site has been performed and submitted to the Planning and Building Department's Geotechnical Section and evidence of completion of Mitigation Measures GEO-3; TRANS-1; BI0-2a through 2d, 5b and 5c; and HAZMAT-3 has been submitted and approved by the project planner. b. Grading Permit hard card cannot be issued for Lot 8 until evidence of completion of Mitigation Measures BI0-6 has been submitted and approved by the project planner. c. Grading Permit hard card cannot be issued for Lot 11 until evidence of completion of Mitigation Measures BI0-2d and 5a has been submitted and approved by the project planner. d. Trees shall not be removed until evidence of implementation of Mitigation Measure BI0-2c has been submitted and approved by the project planner and the Grading Permit hard card has been issued.	BIOLOGIST GEOTECH			
	20	No grading shall be allowed during the winter season (October 15 to April 15) to avoid potential soil erosion unless approved, in writing, by the Community Development Director. The property owners shall submit a letter to the Current Planning Section, at least two weeks prior to commencement of grading, stating the date when grading will begin.	DEVELOPER			
	21	This permit does not authorize the removal of any additional trees with trunk circumference of more than 55 inches beyond those approved by the Board of Supervisors. Such activity would require application for and issuance of a separate Resource Management (RM) Permit. All trees not approved for removal under this permit shall be protected during grading operations. Prior to the issuance of the Grading Permit hard card, the applicant shall implement the following tree protection plan: The applicant shall establish and maintain tree protection zones throughout the entire length of the project. Tree protection zones shall be delineated using 4-foot tall orange plastic fencing supported by poles pounded into the ground, located as close to the driplines as possible while still allowing room for construction/grading to safely continue. The applicant shall maintain tree protection zones free of equipment and materials storage and shall not clean any equipment within these areas. Should any large roots or large masses of roots need to be cut, the roots shall be inspected by a certified arborist or registered forester prior to cutting. Any root cutting shall be monitored by an arborist or forester and documented. Roots to be cut should be severed cleanly with a saw or toppers. Normal irrigation shall be maintained, but oaks should not need summer irrigation. The above information shall be on-site at all times.	DEVELOPER			
	22	Prior to the issuance of the grading permit "hard card," the applicant shall schedule an erosion control inspection by Current Planning Section staff to demonstrate that the approved erosion control plan has been implemented. The applicant is responsible for ensuring that all contractors minimize the transport and discharge of pollutants from the project site into local drainage systems and water bodies by adhering to the San Mateo Countywide Water Pollution Prevention Program's (SMCWPPP) "General Construction and Site Supervision Guidelines," including:				

CONDITION			DESIGN TEAM			
* or ** or *** or ****	COND. #	CONDITION TEXT	Design Team Responsibility	Time Frame	Status	LDIA ADDENDUM A, B OR C
		a. Stabilizing all denuded areas and maintaining erosion control measures continuously between October 15 and April 15. Stabilizing shall include both proactive measures, such as the placement of straw bales or coir netting, and passive measures, such as minimizing vegetation removal and revegetating disturbed areas with vegetation that is compatible with the surrounding environment. b. Storing, handling, and disposing of construction materials and wastes properly, so as to prevent their contact with stormwater. c. Controlling and preventing the discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, wash water or sediments, and non-stormwater discharges to storm drains and watercourses. d. Using sediment controls or filtration to remove sediment when dewatering site and obtaining all necessary permits. e. Avoiding cleaning, fueling, or maintaining vehicles on-site, except in a designated area where wash water is contained and treated. f. Delineating with field markers clearing limits, setbacks, and drainage courses, per Condition 6. g. Protecting adjacent properties and undisturbed areas from construction impacts using vegetative buffer strips, sediment barriers or filters, dikes, mulching, or other measures as appropriate. h. Performing clearing and earth-moving activities only during dry weather. i. Limiting and timing applications of pesticides and fertilizers to prevent polluted runoff. j. Limiting construction access routes and stabilizing designated access points.	CONSTRUCTION MANAGER DEVELOPER BKF - CIVIL			
	23	While the applicant must adhere to the approved erosion and sediment control plan during grading and construction, it is the responsibility of the civil engineer and/or construction manager to implement the Best Management Practices (BMPs) that are best suited for this project site. If site conditions require additional measures in order to comply with the SMCWPPP and prevent erosion and sediment discharges, said measures shall be installed immediately under the direction of the project engineer. If additional measures are necessary, the erosion and sediment control plan shall be updated to reflect those changes and shall be resubmitted to the Planning and Building Department for review. The County reserves the right to require additional (or entirely different) erosion and sediment control measures during grading and/or construction if the approved plan proves to be inadequate for the unique characteristics of each job site.	DEVELOPER BKF - CIVIL		SEE SHEET C0.50 OF THE STREET IMPROVEMENT PLANS AND SHEETS C1.50, C2.50, C3.50 AND C4.50 OF THE LOT IMPROVEMENT PLANS FOR EROSION CONTROL PLANS.	

CONDITION			DESIGN TEAM			
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	24	Prior to the issuance of a Grading Permit "hard card," the applicant shall submit a schedule of grading operations, subject to review and approval by the Department of Public Works and the Current Planning Section. The submitted schedule shall include a schedule for winterizing the area and details of the off-site haul operations, including, but not limited to: export site(s), size of trucks, haul route(s), time and frequency of haul trips, and dust and debris control measures. Per the City of San Mateo Department of Public Works, use of De Anza Boulevard is prohibited as De Anza Boulevard is not a designated truck route. The submitted schedule shall represent the work in detail and project grading operations through to the landscaping and/or restoration of all distrubed areas. As part of the review of the submitted schedule, the County may place such restrictions on the hauling operation, as it deems necessary. During periods of active grading, the applicant shall submit monthly updates of the schedule to the Department of Public Works and the Current Planning Section.	DEVELOPER			
	25	The applicant shall file a Notice of Intent (NOI) with the State Water Resources Board to obtain coverage under the State General Construction Activity NPDES Permit. A copy of the project's NOI and Stormwater Pollution Prevention Plan (SWPPP) shall be submitted to the Current Planning Section, prior to the issuance of any Grading Permit "hard card."	DEVELOPER BKF - CIVIL		GRADING FOR LOTS 1 THROUGH 4 IS LESS THAN 1 ACRE; THEREFORE, A CIVIL NOI AND SWPPP ARE NOT REQUIRED IF GRADING EXCEEDS 1 ACRE, A NOI SHALL BE FILED WITH THE STATE UPON DIRECTION AND FINALIZATION OF CONSTRUCTION SCHEDULE. SWPPP SHALL BE PREPARED UPON DIRECTION OF CONSTRUCTION SCHEDULE.	
	26	Replacement of vegetation removed in areas within the parcels during grading and construction activities: a. Vegetation removed in areas outside of building footprints, driveways, and construction access areas shall be replaced with drought-tolerant, non-invasive plants, immediately after grading is complete in that area. Prior to the issuance of any building permits, the applicant shall submit photographs demonstrating compliance with this condition to the Current Planning Section, subject to review and approval by the Community Development Director. b. The applicant shall replace all vegetation removed in all areas not covered by construction with drought-tolerant, non-invasive plants, once construction is completed. Prior to the Current Planning Section's final approval of any building permit, the applicant shall submit photographs demonstrating compliance with this condition, subject to review and approval by the Community Development Director.	ARCHITECT DEVELOPER BKF - CIVIL			
	27	The provision of the San Mateo County Grading Regulations shall govern all grading on and adjacent to this site. Per San Mateo County Ordinance Code Section 8605.5, all equipment used in grading operations shall meet spark arrester and fire fighting tool requirements, as specified in the California Public Resources Code.	DEVELOPER			
	28	Upon the start of grading activities and through to the completion of the project, the applicant shall be responsible for ensuring that the following dust control guidelines are implemented:				

CONDITION			DESIGN TEAM			
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		a. All graded surfaces and materials, whether filled, excavated, transported or stockpiled, shall be wetted, protected or contained in such a manner as to prevent any significant nuisance from dust, or spillage upon adjoining water body, property, or streets. Equipment and materials on the site shall be used in such a manner as to avoid excessive dust. A dust control plan may be required at anytime during the course of the project. b. A dust palliative shall be applied to the site when required by the County. The type and rate of application shall be recommended by the soils engineer and approved by the Department of Public Works, the Planning and Building Department's Geotechnical Section, and the Regional Water Quality Control Board.	DEVELOPER GEOTECH BKF - CIVIL		SEE CONDITIONS OF APPROVAL DUST CONTROL NOTES 1 THROUGH 2 ON SHEET C0.20 OF THE STREET IMPROVEMENT PLANS AND SHEETS C1.20, C2.20, C3.20 AND C4.20 OF THE LOT IMPROVEMENT PLANS.	
	29	Final approval of all Grading Permits is required. For final approval of the Grading Permits, the applicant shall ensure the performance of the following activities within thirty (30) days of the completion of grading at the project site: a. The engineer shall submit written certification that all grading has been completed in conformance with the approved plans, conditions of approval/ mitigation measures, and the Grading Regulations, to the Department of Public Works and the Planning and Building Department's Geotechnical Section. b. The geotechnical consultant shall observe and approve all applicable work during construction and sign Section II of the Geotechnical Consultant Approval form, for submittal to the Planning and Building Department's Geotechnical Engineer and Current Planning Section.	DEVELOPER GEOTECH			
Other Planning and Building Department Project Conditions						
	30	The color and materials of the bio-retention planters for all homes shall match the surrounding native landscaping, such that planters will blend with the surrounding environment.	ARCHITECT OWNER BKF - CIVIL			
	31	Building plans for each residence shall demonstrate compliance with the California Water Efficient Landscape Ordinance (AB 1881), prior to the Current Planning Section's approval of the building permit application for each residence.	ARCHITECT OWNER			
	32	The applicant and contractors must be prepared to carry out the requirements of California State law with regard to the discovery of human remains during construction, whether historic or prehistoric. In the event that any human remains are encountered during site disturbance, all ground-disturbing work shall cease immediately and the County coroner shall be notified immediately. If the coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted within 24 hours. A qualified archaeologist, in consultation with the Native American Heritage Commission, shall recommend subsequent measures for disposition of the remains.	DEVELOPER BKF - CIVIL		SEE CONDITIONS OF APPROVAL DISCOVERY OF HUMAN REMAINS NOTE 1 ON SHEET C0.20 OF THE STREET IMPROVEMENT PLANS AND SHEETS C1.20, C2.20, C3.20 AND C4.20 OF THE LOT IMPROVEMENT PLANS.	
	33	The property owner is responsible for the annexation of the project site to County governed special districts that will provide utility or other service. The project applicant is responsible for application and fees to the San Mateo Local Agency Formation Commission.	FUTURE OWNER / DEVELOPER			

CONDITION			DESIGN TEAM			
* or ** or *** or ****	COND. #	CONDITION TEXT	Design Team Responsibility	Time Frame	Status	LDIA ADDENDUM A, B OR C
	34	For Lots 1 through 8 and Lot 11 (lots with the RM Zoning District), all present and future site preparation activity and development shall comply with Section 6319C.2.F (Development Standards) and Section 6319C.2.G (Minimization of Grading). All setbacks shall be measured from the limits of the buildable portion of the parcel (i.e., excluding any "No-Build" areas on the Final Map). For the purpose of calculating the Maximum Building Site Coverage Ratio of 40%, the Building Site Area shall exclude any "No-Build" areas as shown on the Final Map for the subject property. The above statement shall be added as a deed restriction to the respective lots when the lots are sold.	ARCHITECT OWNER			
PLANNING AND BUILDING DEPARTMENT - GEOTECHNICAL SECTION:						
	35	The grading for this project will require submission of a revised geotechnical report that includes detailed recommendations for grading, erosion control, and foundation design and construction.	GEOTECH			
	36	Building permit applications for Lots 7 and 8 will be required to depict as-built subdrain system alignments for the underlying stabilization buttress on the house foundation plans. The intent is to adjust foundation pier layout (as-needed) so that installed subdrain systems are not damaged by foundation construction.	DEVELOPER GEOTECH BKF - CIVIL		LOTS 7 AND 8 HAVE NOT RECEIVED AUTHORIZATION TO PROCEED	
	37	Documentation to be submitted for the Lot 10 building permit shall include proposed construction/design measures to provide stable temporary excavations west of the residence so that the stability of an existing fill prism is not adversely impacted during site grading.	GEOTECH BKF - CIVIL		LOT 10 HAS NOT RECEIVED AUTHORIZATION TO PROCEED	
	38	(All Lots) Prior to issuance of building permits, the Project Geotechnical Consultant shall field inspect (and investigate, as needed) all proposed drainage discharge locations and verify that proposed drainage designs are acceptable from a slope stability/erosion perspective or recommend appropriate modifications.	DEVELOPER GEOTECH			
	39	Lots 9 and 10: Future construction in areas outside of the building envelope may require supplemental geotechnical evaluation. Lot 11: Future building construction within the delineated Geotechnical No-Build Zone on the approved Vesting Tentative Map is prohibited. The above statements shall be added as a deed restriction to the respective lots when the lots are sold. Recorded deed restrictions shall be produced prior to the issuance of a Certificate of Occupancy for any residence on these lots.	GEOTECH			
	40	Lot 11: Grading limits, building footprint and building envelope shall be restricted to those boundaries depicted on Lot 11 Exhibit 1 prepared by BKF dated January 27, 2010. These boundaries shall supersede any conflicting boundaries presented on other recently prepared development documents. Construction staging shall not include grading beyond the grading limits.	BKF - CIVIL		LOT 11 HAS NOT RECEIVED AUTHORIZATION TO PROCEED	
PLANNING AND BUILDING DEPARTMENT - BUILDING INSPECTION SECTION:						
	41	Building permits may be required for all areas of construction. Contact the Building Inspection Section prior to ANY construction for permit requirements.	ARCHITECT OWNER			
	42	All new residences shall comply with the current Green Building Ordinance, applicable at the time of permit application.	ARCHITECT DEVELOPER			

CONDITION			DESIGN TEAM			
* or ** or *** or ****	COND. #	CONDITION TEXT	Design Team Responsibility	Time Frame	Status	LDIA ADDENDUM A, B OR C
	43	Per Section 1404 of the Green Building Ordinance, the applicant is encouraged to incorporate green building features in the construction of the eleven homes, such that the project achieves 75 points or higher or LEED for Homes Certified. Such projects will receive expedited building permit processing.	ARCHITECT			
PACIFIC GAS AND ELECTRIC COMPANY						
	44	Developers will be responsible for the costs associated with the relocation of existing PG&E facilities to accommodate the project.	DEVELOPER			
DEPARTMENT OF PUBLIC WORKS						
Conditions of Approval for Major Subdivision and Lot Line Adjustment						
	45	The applicant shall install a sidewalk along the front of Lots 5 through 8 on Ticonderoga Drive, subject to review and approval by the Department of Public Works (DPW) and the issuance of an encroachment permit by DPW.	BKF - CIVIL		LOTS 5 THROUGH 8 HAVE NOT RECEIVED AUTHORIZATION TO PROCEED	
	46	The applicant shall install a crosswalk and ADA ramp at the intersection of Ticonderoga Drive and Allegheny Way prior to recordation of the Final Map.	BKF - CIVIL		LOTS 5 THROUGH 8 HAVE NOT RECEIVED AUTHORIZATION TO PROCEED	
	47	The applicant shall submit a permanent stormwater management plan in compliance with the County's Drainage Policy (including stormwater detention requirements) and applicable NPDES requirements (particularly Provision C.3) for review and approval by the Department of Public Works, prior to the Current Planning Section's approval of any building permit for residences. Individual operation and maintenance agreements for each residence to include all permanent stormwater treatment measures, as approved by the Community Development Director and the Department of Public Works, shall be executed prior to the Current Planning Section's final approval of any building permit for residences.	OWNER BKF - CIVIL		SEE STORM DRAIN REPORT	
	48	The applicant shall submit a Final Map to the Department of Public Works for review and recording.	BKF - CIVIL BKF - SURVEY			
	49	Prior to recordation of the Final Map, the subdivider shall either construct all improvements required for shared access or enter into a written agreement with the County for future construction of the improvements. Prior to recording the Final Map, the applicant will be required to submit to the Department of Public Works a complete set of improvement plans including all provisions for roadways, driveways, utilities, storm drainage, and stormwater treatment, all in accordance with the County Subdivision Regulations, County Standard Details, County Drainage Policy and NPDES Permit, plus applicable plan review fee. Upon the Department of Public Works' approval of the improvement plans, the applicant may be required to execute a Subdivision Improvement Agreement and post securities with the Department of Public Works, if applicable, as follows: a. Faithful Performance - 100% on the estimated cost of constructing the improvements; b. Labor and Materials - 50% of the estimated cost of constructing the improvements.	DEVELOPER OWNER BKF - CIVIL			
OTHER DEPARTMENT OF PUBLIC WORKS PROJECT CONDITIONS						

CONDITION			DESIGN TEAM			
* or ** or *** or ****	COND. #	CONDITION TEXT	Design Team Responsibility	Time Frame	Status	LDIA ADDENDUM A, B OR C
	50	The access easement on Lot 8 shall meet the access requirements of the Crystal Springs County Sanitation District, prior to the final approval of the Final Map by the Department of Public Works.	BKF - CIVIL		LOT 8 HAS NOT RECEIVED AUTHORIZATION TO PROCEED	
	51	For Lots 7 and 8: A maintenance agreement is required for the stairs, subject to San Mateo County Fire Department and Department of Public Works approval.	COUNTY OWNER			
	52	The applicant shall record documents which address future maintenance responsibilities of any private drainage, stormwater treatment or other common facilities which may be constructed. For example, documents would address maintenance of all shared access easements (i.e., Lots 5 through 8, and Lots 9 and 10), as well as shared maintenance of the bio-retention planter on Lot 8 (for the benefit of Lots 7 and 8) and the storm drainage outfall on Lot 9 (for the benefit of Lots 9 and 10). Prior to recording these documents, they shall be submitted to the Department of Public Works for review and prior to the issuance of a Certificate of Occupancy for the applicable parcel (Lots 5 through 10).	COUNTY OWNER			
	53	"As-Built" plans of all construction required by these conditions shall be prepared and signed by the subdivider's engineer upon completion of all work. The "As-Built" plans shall be accompanied by a written certification from the engineer that all private facilities have been completed in conformance with the approved plans.	BKF - CIVIL			
	54	The applicant shall prepare a plan indicating the proposed method of sewering these properties. This plan should be included on the improvement plans and submitted to the Department of Public Works for review. Upon completion of this review, the applicant or his engineer shall have these approved plans signed by the appropriate County Sewer District.	BKF - CIVIL		SEE SHEETS C0.30 OF THE STREET IMPROVEMENT PLANS FOR SANITARY SEWER CONNECTIONS	
	55	The applicant shall submit, to both the Department of Public Works and the Planning Department, written certification from the appropriate Water District stating that their requirements to provide water service connections to the proposed parcels of this subdivision have been met.	DEVELOPER CAL WATER BKF - CIVIL			
	56	Any potable water system work required by the appropriate district within the County right-of-way shall not be commenced until County requirements for the issuance of an encroachment permit have been met. Plans for such work shall be reviewed by the Department of Public Works prior to the issuance of the permit.	OWNER BKF - CIVIL			
	57	No proposed construction work within the County right-of-way shall begin until County requirements for the issuance of an encroachment permit, including review of the plans, have been met and an encroachment permit issued.	DEVELOPER			
	58	Prior to the issuance of any building permit, the applicant will be required to provide payment of "roadway mitigation fees" based on the square footage (assessable space) of the proposed building per Ordinance No. 3277.	DEVELOPER OWNER			

CONDITION			DESIGN TEAM			
* or ** or *** or ****	COND. #	CONDITION TEXT	Design Team Responsibility	Time Frame	Status	LDIA ADDENDUM A, B OR C
	59	The applicant shall submit a driveway "Plan and Profile" to the Department of Public Works, showing the driveway access to the parcel (garage slab) complying with County standards for driveway slopes (not to exceed 20 percent) and to County standards for driveways (at the property line) being the same elevation as the center of the access roadway. When appropriate, this plan and profile shall be prepared from elevations and alignment shown on the roadway improvement plans. The driveway plan shall also include and show specific provisions and details for both the existing and the proposed drainage patterns and drainage facilities.	BKF - CIVIL		SEE SHEETS C1.40, C2.40, C3.40 AND C4.40 OF THE LOT IMPROVEMENT PLANS FOR DRIVEWAY PLAN AND PROFILES	
	60	Plans, with specific construction details, shall be stamped and signed by the registered civil engineer and submitted to the Department of Public Works for review and approval prior to construction.	BKF - CIVIL			
SAN MATEO COUNTY FIRE DEPARTMENT						
	61	All dead-end roadways shall be terminated by a turnaround bulb of not less than 96 feet in diameter. For Lots 7, 8, 9 and 10: Lots 9 and 10 shall meet Hammerhead T requirements. The Hammerhead T shall provide a lane that is a minimum width of 20 feet throughout with a minimum inside curve radius of 26 feet and a top of T length of 120 feet minimum. Lots 7 and 8 shall mitigate fire engine access with a higher fire sprinkler flow and coverage and non-combustible exterior siding and decking. Alternate methods and material requests may be applied for at the time of building permit application submittal.	BKF - CIVIL		LOTS 7 THROUGH 10 HAVE NOT RECEIVED AUTHORIZATION TO PROCEED	
	62	The required fire flow shall be available from a County Standard 6" Wet Barrel Fire Hydrant; the configuration of the hydrant shall have a minimum of one each 4 1/2" outlet and one each 2 1/2" outlet located not more than 250 feet from the building, measured by way of approved drivable access to the project site.	BKF - CIVIL			
	63	All new public water systems, extensions from a public water system or replacement of any main or line of an existing public water system shall have a minimum diameter of six inches (6"). If the pipes are not linked in grid or if individual legs are over 600 feet in length, then the minimum diameter shall be eight inches (8").	BKF - CIVIL			
	64	When receiving water service for fire protection (hydrants, fire sprinkler systems) from a public or municipal water purveyor, written certification from the water company that hydrants will be installed or that the existing water system is capable of meeting the project conditions is required to be presented to the San Mateo County Fire Department for verification to show that required upgrades to the system will be installed and that existing fire flows will meet the project requirements.	CAL WATER COUNTY BKF - CIVIL			
	65	County Fire Department access shall be to within 150 feet of all exterior portions of structures and to all portions of the exterior walls of the first story of buildings, as measured by an approved access route. Should access to a structure exceed the 150 feet criteria, the applicant may have the option of providing exterior fire resistant construction materials to meet this condition, subject to review and approval by the County Fire Department and Planning and Building Department, prior to the issuance of a building permit.	OWNER BKF - CIVIL			

CONDITION			DESIGN TEAM			
* or ** or *** or ****	COND. #	CONDITION TEXT	Design Team Responsibility	Time Frame	Status	LDIA ADDENDUM A, B OR C
	66	This project is located in a wildland urban interface area. Roofing, attic ventilation, exterior walls, windows, exterior doors, decking, floors and under-floor protection shall be installed to meet CBC Chapter 7A requirments. This requirement shall be met at the building permit phase of each residence.	ARCHITECT OWNER			
	67	A fire flow of 1,000 gpm for two (2) hours with a 20-psi residual operating pressure must be available for a single-family dwelling with up to 3,600 sq. ft. of interior space; 1,300 gpm for a single-family dwelling with up to 4,800 sq. ft.; and 1,500 gpm for a single-family dwelling with up to 6,200 sq. ft. as specified by the 2007 CFC.	CAL WATER BKF - CIVIL			

BKF Engineers
255 Shoreline Drive, Suite 200
Redwood City, CA 94065
650-482-6300, 650-482-6399 Fax

8/30/2011

STREET IMPROVEMENTS AT HIGHLAND ESTATES LOTS 1-4
BUNKER HILL DRIVE
San Mateo County, California
Engineer's Opinion of Probable Construction Cost

9/13/11

Ann-
this is for the Final Map for the Chamberlain Subdivision (Phase I is only 4 homes on Bunker Hill). This addresses INI concerns. Please call BKF if you have Questions (direct Q's to Roland Hagan). Final Map is currently in DPW Mapping Dept.

Thanks!
Camille 650-363-1826

Unit	Unit Price	Amount
.F	$ 1.00	$330
SF	$ 1.00	$1,800
SF	$ 1.00	$700
		$2,830
EA	$ 500.00	$2,000
.F	$ 40.00	$4,400
		$6,400
.F	$ 30.00	$9,900
SF	$ 10.00	$18,000
SF	$ 5.00	$600
SF	$ 5.00	$1,650
		$30,150
.F	$ 50.00	$18,750
A	$ 160.00	$480
.S	$ 2,500.00	$2,500
.S	$ 5,000.00	$5,000
		$26,730
		$66,110
		$9,917
		$76,027

ıent Plans for Highlands Estates - Bunker Hill

Pete Bentley - Chamberlain (9/1/11 submittal)

From: Pete Bentley
To: Camille Leung; Diana Shu
Date: 9/14/2011 8:19 AM
Subject: Chamberlain (9/1/11 submittal)
CC: Jim Eggemeyer

Camille and Diana:

Though Chamberlain's 9/1 submittal from Roland Haga indicated that an asterisk (*) represented certain "prior to" conditions, I did not find any asterisks shown on the submittal. I have now gone through the 67 conditions and listed them as:

1.) Prior to Parcel Map recordation.
2.) Prior to Grading Permit issuance.
3.) Prior to Building Permit issuance.
& 4.) Miscellaneous

In talking with Roland Haga, the Chamberlain Group may believe that the 9/1 submittal would be reviewed as part of the grading permit and building permit issuance on all 4 lots with Diana's review also covering DPW issues within the Bunker Hill right of way. I told him I believe that the "conditions" require "individual submittals" for "each" individual lot. If my belief is correct, this would mean for lots 1-4 -- 4 separate grading plans (PLN #'s) and Geo. reports (1 for each lot) and 4 separate building plans (BLD #'s), including soils reports (1 for each lot).

I would suggest that the 3 of us meet sometime next week to go over and confirm we are all on the same page on items 1, 2, 3, & 4 that I've listed above and to confirm the need for "individual" applications. Once we've met and agreed on issues, I've told Roland, you Camille, would schedule another meeting with the 3 of them.

Let me know what you think of the above.

Pete

Save Paper. Think Before You Print.

January 25, 2011

TO: All Interested Parties

FROM: Camille Leung, Project Planner; Phone 650/363-1826

SUBJECT: Consideration of a proposed Minor Modification to an approved Resource Management (RM) Permit for the development of Lots 1 through 4 on Bunker Hill Drive, associated with an approved Major Subdivision on APNs 041-101-290 and 041-072-030 in the County unincorporated area of San Mateo Highlands, proposed by Ticonderoga Partners, LLC/Chamberlain Group

---

On April 27, 2010, Ticonderoga Partners, LLC/Chamberlain Group received approval from the San Mateo County Board of Supervisors for a County-proposed Zoning Text Amendment, a Rezoning, a Lot Line Adjustment, a Major Subdivision, a Resource Management (RM) Permit, and a Grading Permit, for the development of eleven residential lots on the properties. The approved project includes the creation of a 93.39 acre parcel, which is not the subject of the proposed Minor Modification.

The property owner proposes a Minor Modification to the approved RM permit pertaining to Lots 1 through 4 on Bunker Hill only in order to reduce home sizes on these lots, as specified below:

Lot Number	*Approved House Size (sq. ft.)*	*Proposed House Size under Minor Modification (sq. ft.)*	*Total Size Reduction (sq. ft.)*
1	3,727	**2679**	**-1,048**
2	3,727	**2679**	**-1,048**
3	3,874	**2726**	**-1,148**
4	3,874	**2726**	**-1,148**

It should be noted that, for residences on Lots 1 through 4, the property owner also proposes to reduce the size of the attached garages from 3-car to 2-car garages. Revised floor plans and elevations for residences on Lots 1 through 4 are included in Attachment A of this letter. Revised site plans have not been submitted for the current proposal. For your reference, the approved plans have been included as Attachment B of this letter.

The property owner requests that the revision be considered a "Minor Modification." Condition No. 1 of the Board of Supervisor's approval reads as follows:

> *This approval applies only to the proposal, documents and plans described in this report and submitted to and approved by the Board of Supervisors on April 27, 2010. Minor revisions or modifications to these projects in compliance with Condition No. 5 may be made subject to the review and approval of the Community Development Director. Revisions or modifications not in compliance with Condition No. 5 shall be deemed a major modification and shall be subject to review and approval by the Planning Commission at a public hearing.*

Condition No. 5 reads:

> *This project will be implemented as proposed, mitigated, conditioned, and approved by the Board of Supervisors, regarding parcel size and configuration, **home sizes**, home locations, architectural design, style and color, materials, height and foundation design. Prior to the issuance of a Certificate of Occupancy for any residence, the applicant shall provide photographs to the Current Planning Section staff to demonstrate utilization of the approved colors and materials. Materials and colors shall not be highly reflective.*

Although the revised proposal includes a change in home sizes for residences on Lots 1 through 4, Staff believes that the revision could be considered a "Minor Modification" because: 1) the proposed modification would reduce home sizes and 2) the smaller proposed residences and garages will have a lesser visual impact and involve less grading than the previously approved residences on these lots.

The proposed residences will be required to meet all applicable conditions of approval as adopted by the Board of Supervisors on April 27, 2010, and obtain necessary approvals from County agencies including, but not limited to, the Planning and Building Department, the Department of Public Works, and the San Mateo County Fire Department.

If you have any questions or comments, please contact Camille Leung, Project Planner at 650/363-1826 (e-mail: *cleung@co.sanmateo.ca.us*) **no later than February 7, 2011**. After that date, upon consideration of such comments, the Community Development Director will make a decision regarding this request.

Attachments:

Attachment A: *Revised Floor Plans and Elevations for Residences on Lots 1 through 4*

Attachment B: *Approved plans for Residences on Lots 1 through 4*

THE

CHAMBERLAIN GROUP

January 4, 2011

County of San Mateo
455 County Center
Second Floor
Redwood City, CA 94063

Attn: Jim Eggemeyer
Director, Community Development

Re: Highlands Estates

Dr. Mr. Eggemeyer,

As per our previous conversations and for your approval, please find two copies of our proposed revisions to the house plans that we propose to build on lots 1 thru 4 of the referenced project. We are also including, for comparison, two copies of the elevations and floor plans to the original homes as approved with the Tentative Map.

On lots 1 and 2, we have reduced the building square footage from 3107 to 2679.

On lots 3 and 4, we have reduced the building square footage from 3265 to 2726.

The garages are also smaller with spaces for 2 cars rather than 3.

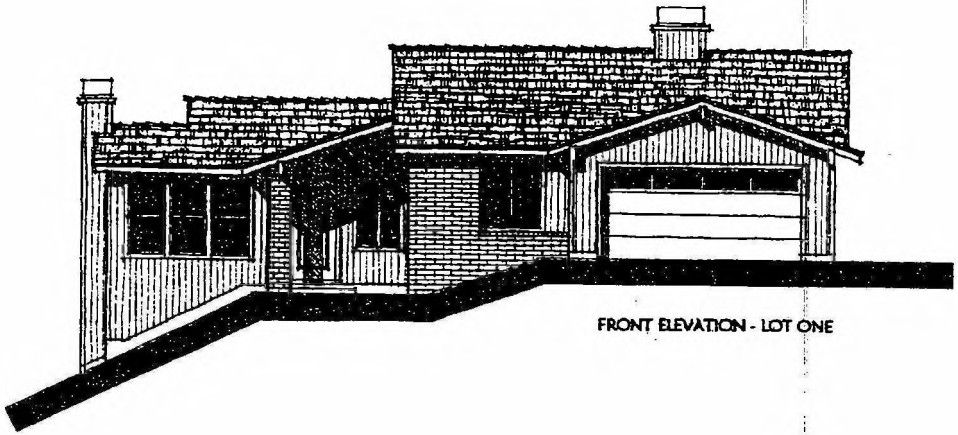
The site plan has not, as yet, been revised to reflect the changes. However, these revisions will significantly reduce the street frontage impact and lot coverage. The houses have been reconfigured to better fit the existing topography which will reduce grading. Driveways will be narrower which will increase the landscaped area.

If you have any questions or need any more information, please so advise and I will respond immediately.

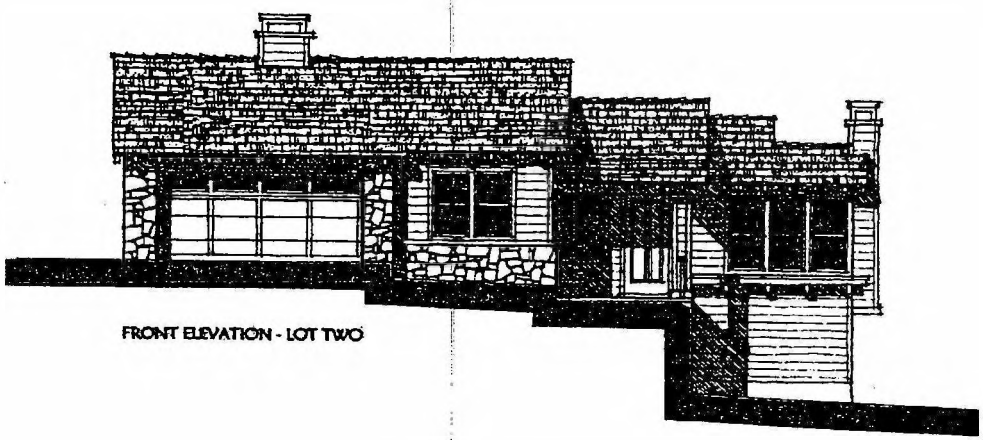
Cordially,

Jack T. Chamberlain

655 SKY WAY, SUITE 230 ■ SAN CARLOS, CA 94070
TELEPHONE: 650/595-5582 ■ FAX: 650-595-5066



FRONT ELEVATION - LOT ONE



FRONT ELEVATION - LOT TWO

CHAMBERLAIN GROUP

HIGHLAND ESTATES - BUNKER HILL

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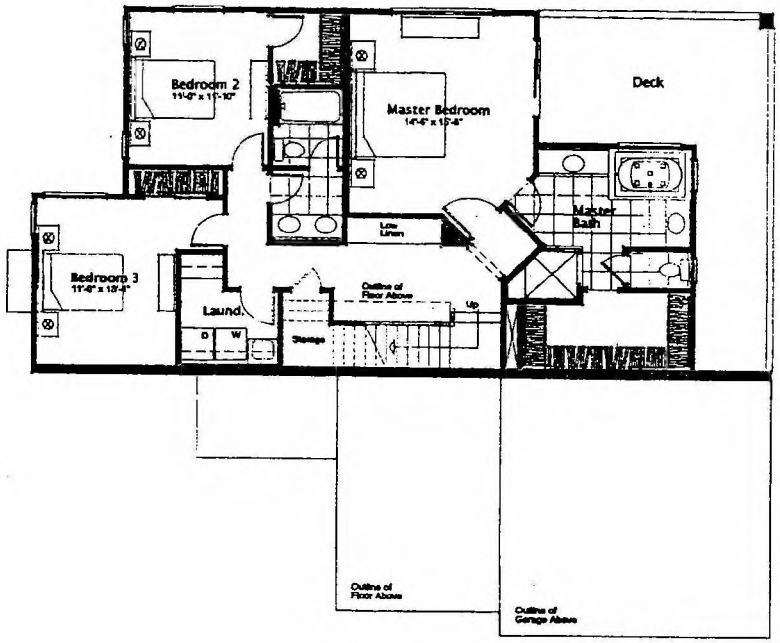
LOTS ONE & TWO

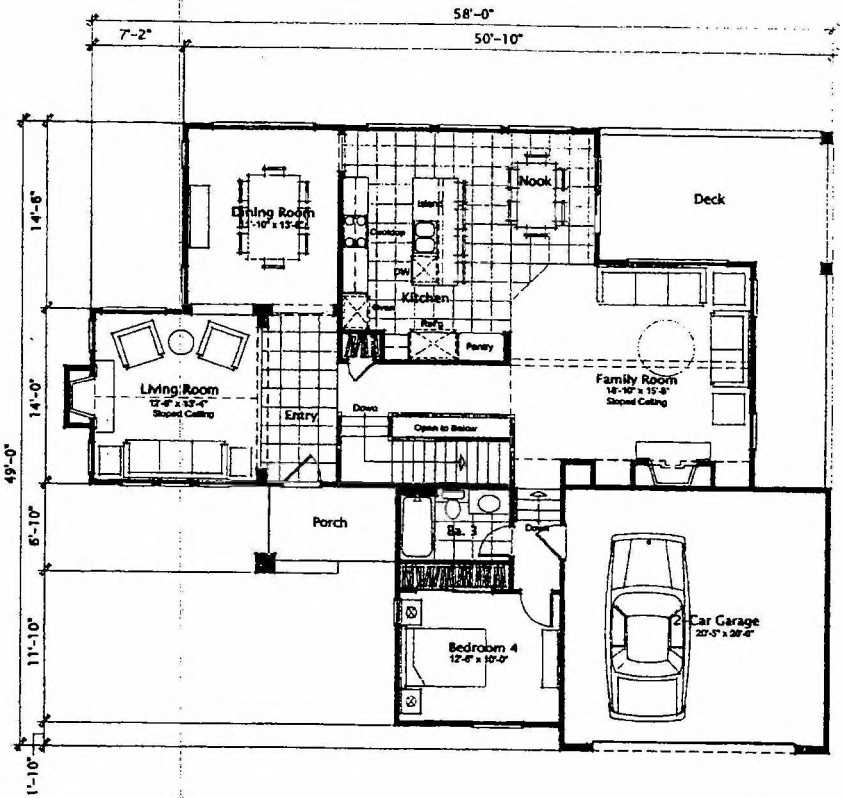
Mark Gross & Associates, Inc.

M&A

1-3-2011



LOWER LEVEL FLOOR PLAN
1252 sq. ft.



MAIN LEVEL FLOOR PLAN
1427 sq. ft.
total: 2679 sq. ft.

CHAMBERLAIN GROUP

HIGHLAND ESTATES - BUNKER HILL

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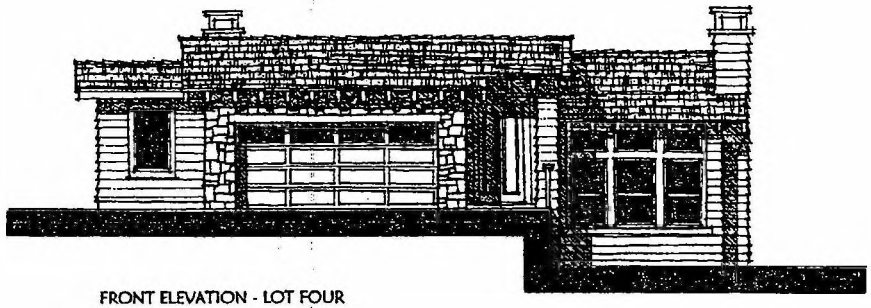
LOTS ONE & TWO

Mark Grose & Associates, Inc.

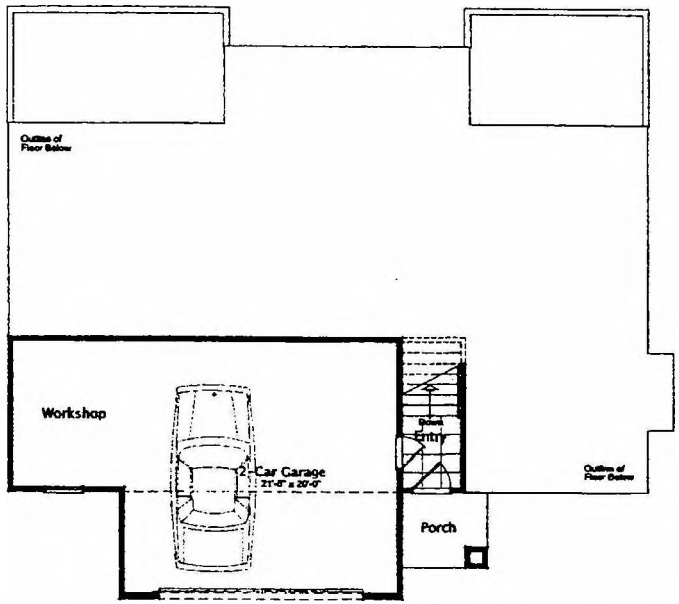
1-3-2011



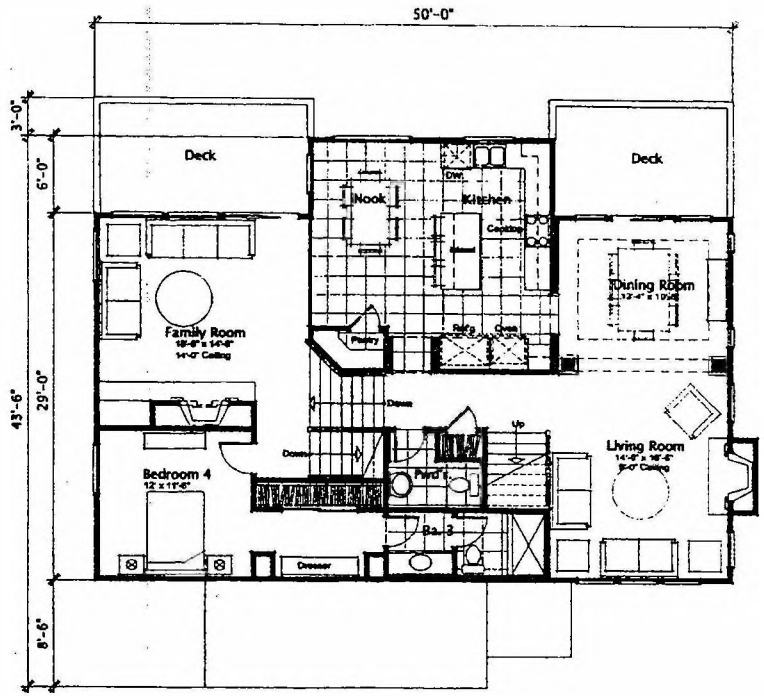
FRONT ELEVATION - LOT THREE



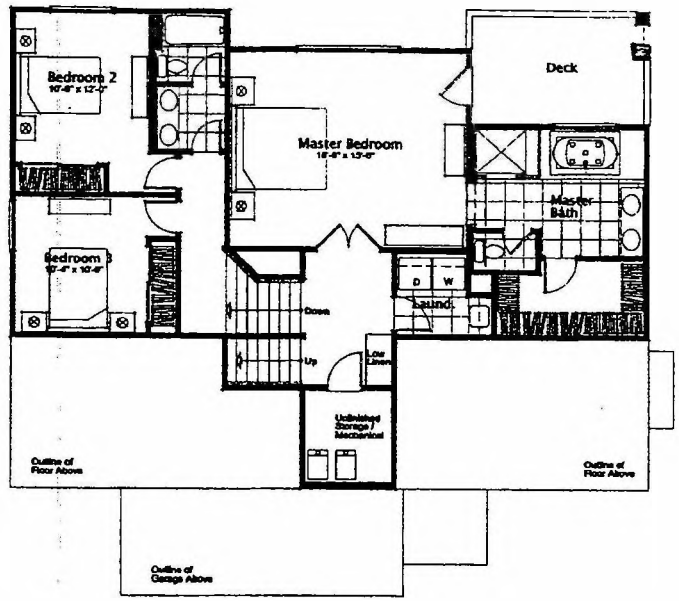
FRONT ELEVATION - LOT FOUR



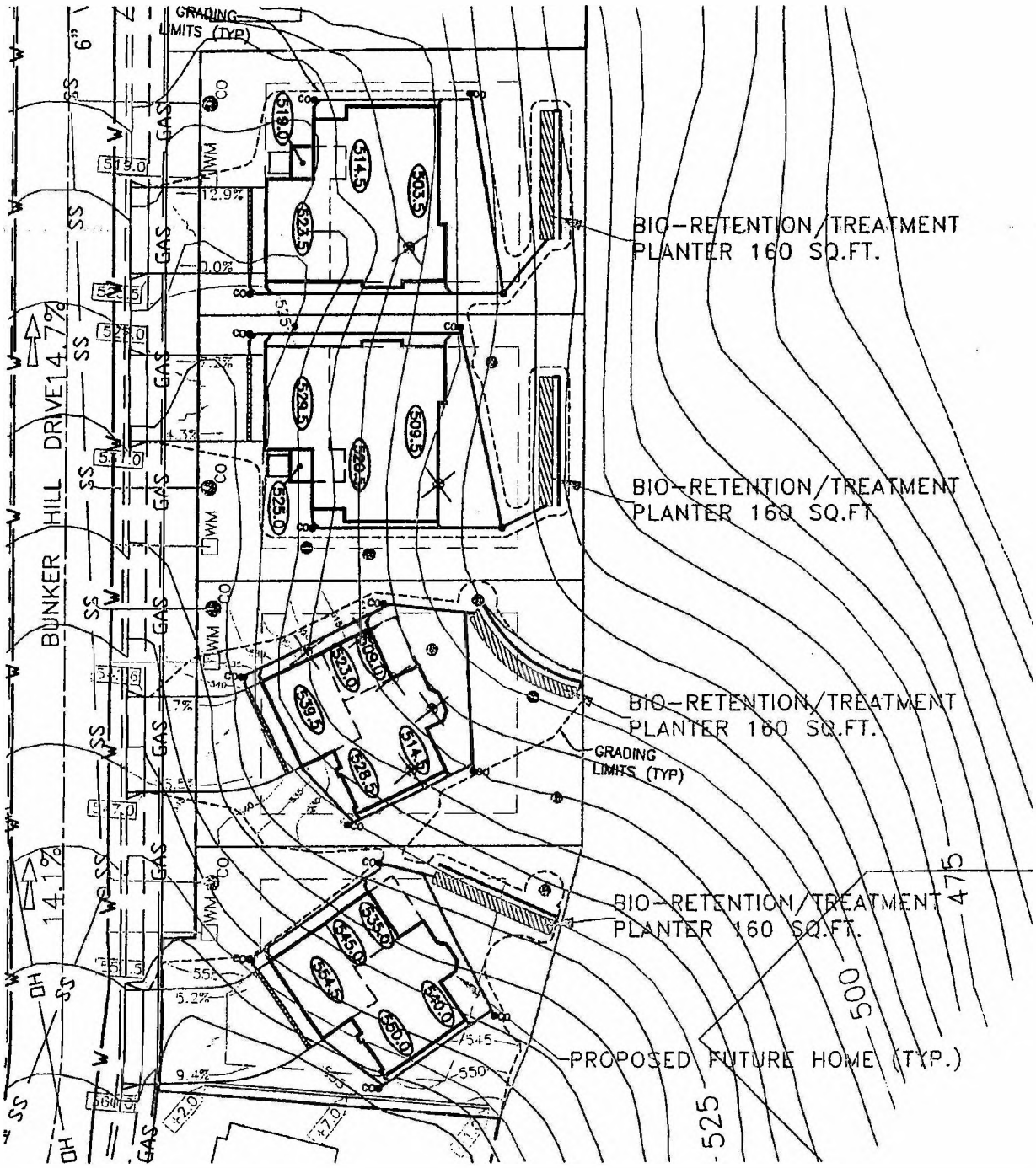
ENTRY LEVEL FLOOR PLAN
64 sq. ft.



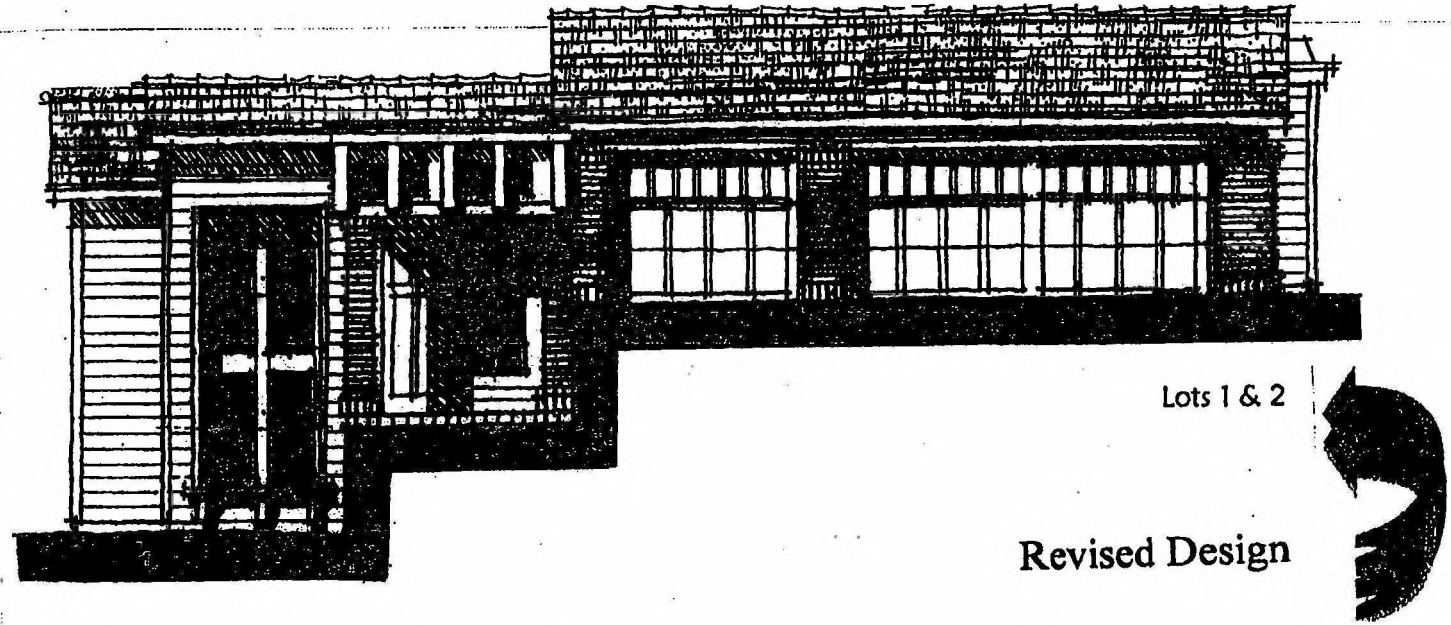
MAIN LEVEL FLOOR PLAN
1486 sq. ft.
total: 2726 sq. ft.



LOWER LEVEL FLOOR PLAN
1176 sq. ft.

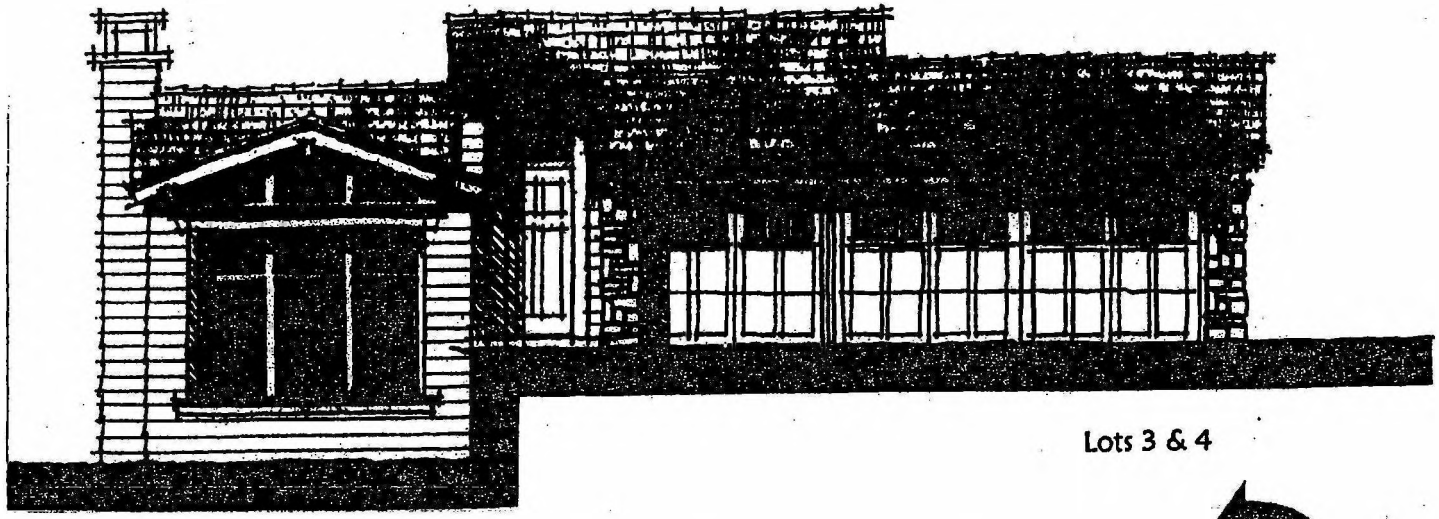


GRADING LIMITS (TYP)
BIO-RETENTION/TREATMENT PLANTER 160 SQ.FT.
BIO-RETENTION/TREATMENT PLANTER 160 SQ.FT.
BIO-RETENTION/TREATMENT PLANTER 160 SQ.FT.
GRADING LIMITS (TYP)
BIO-RETENTION/TREATMENT PLANTER 160 SQ.FT.
PROPOSED FUTURE HOME (TYP.)
BUNKER HILL DRIVE
14.7%
14.1%
12.9%
0.0%
5.2%
9.4%
525
500
475



Lots 1 & 2

Revised Design

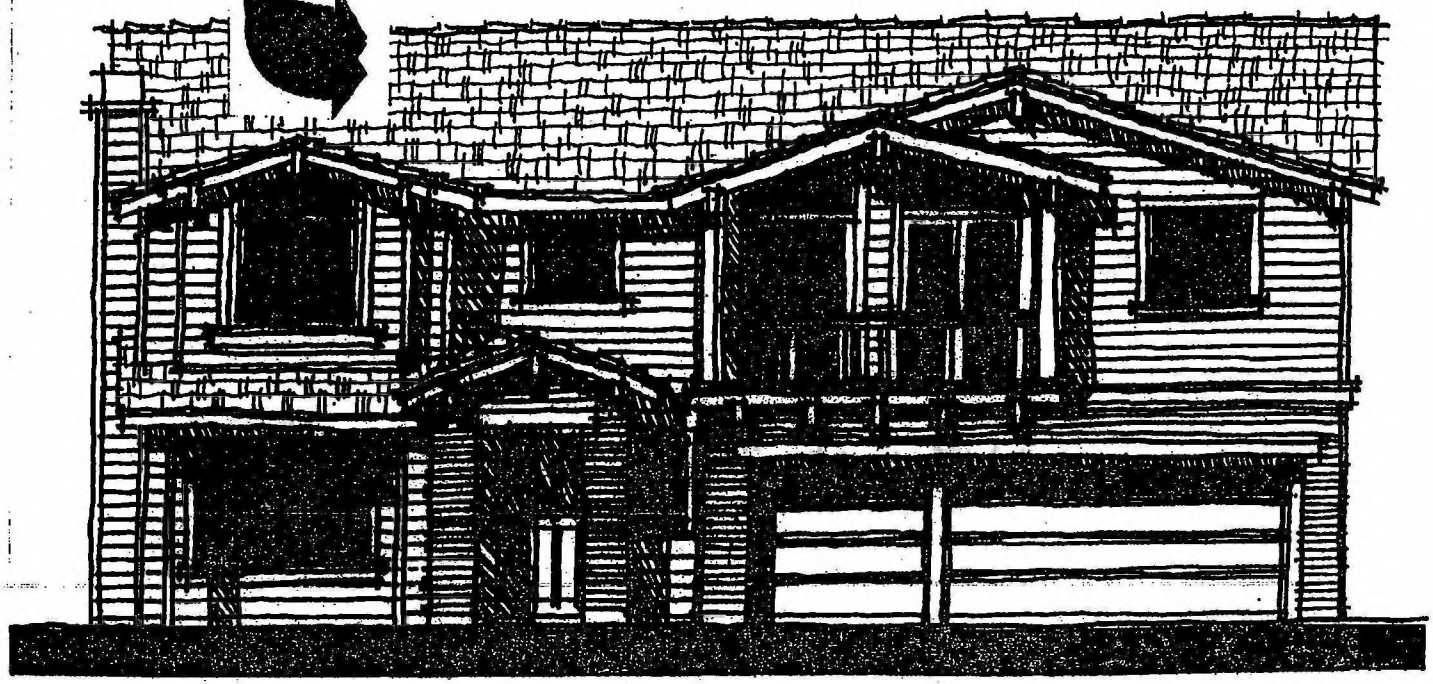


Lots 3 & 4

Original Proposal

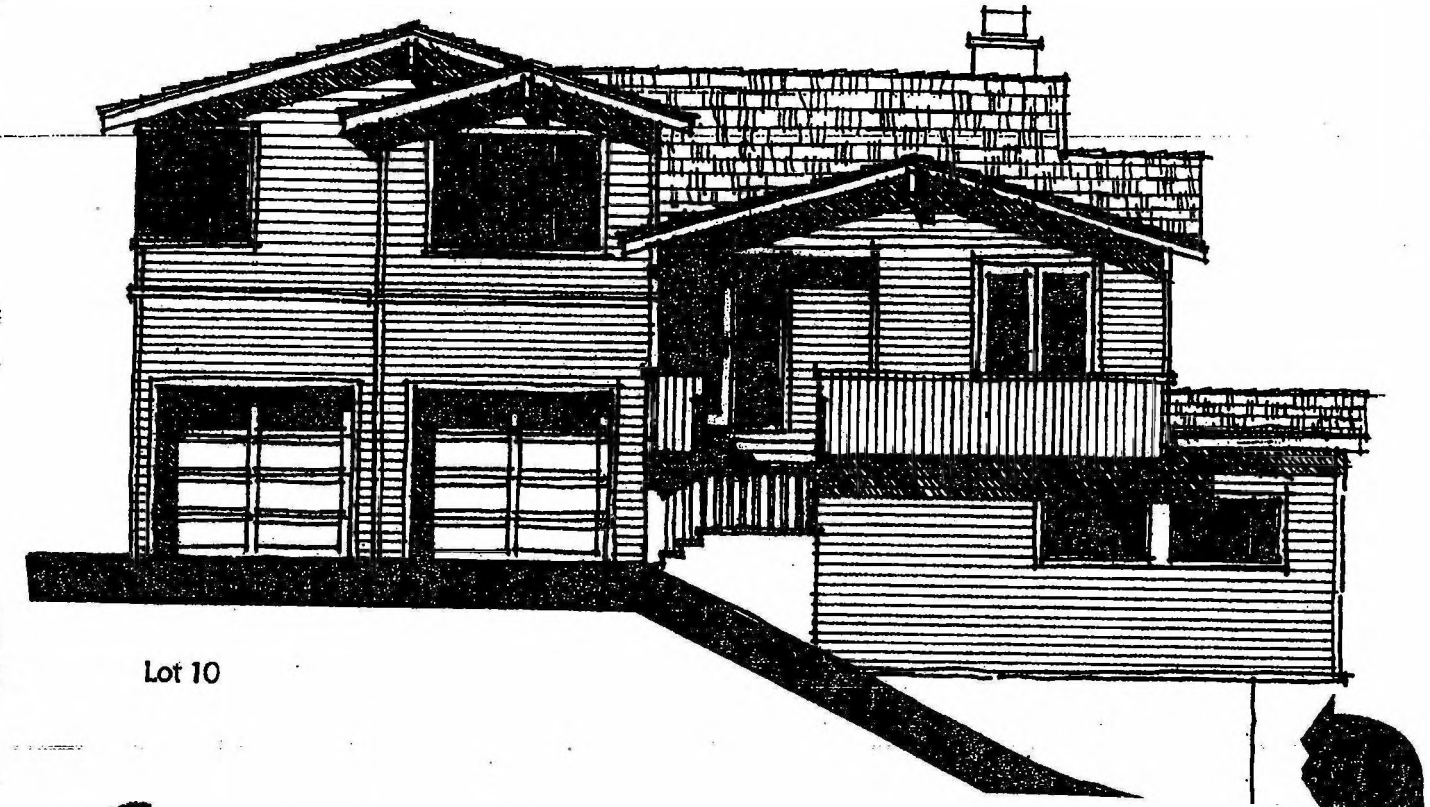
Revised Design

Revised Design



Lots 5, 6, 7, & 8

Original Proposal



Lot 10

Original Proposal

Revised Design

Pete Bentley - Re: Chamberlain (9/1/11 submittal)

From: Camille Leung
To: Diana Shu; Pete Bentley
Date: 9/14/2011 1:09 PM
Subject: Re: Chamberlain (9/1/11 submittal)
CC: Jim Eggemeyer

Hi Pete,

I'm checking with Jay to see if he needs reports, one for each lot, or one report for all lots will suffice. Also, regarding the grading permit hard card, I think Planning can take in one plan submittal for all lots. This is assuming all BLD permits for all the homes have been issued and my understanding that all the lots will be graded at the same time anyway. What do you think?

Camille M. Leung
Planning and Building Department
455 County Center, Second Floor
Redwood City, CA 94063
Phone: (650) 363-1826
Fax: (650) 363-4849

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>>> Pete Bentley 9/14/2011 8:19 AM >>>
Geo. reports (1 for each lot) and 4 separate building plans (BLD #'s), including soils reports (1 for each lot).

Pete Bentley - Re: Chamberlain (9/1/11 submittal)

From: Camille Leung
To: Pete Bentley
Date: 9/14/2011 1:59 PM
Subject: Re: Chamberlain (9/1/11 submittal)

Hi Pete,

Jay says one report, for now, unless Jean wants lot by lot (but that is slim).....

Camille M. Leung
Planning and Building Department
455 County Center, Second Floor
Redwood City, CA 94063
Phone: (650) 363-1826
Fax: (650) 363-4849

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>>> Pete Bentley 9/14/2011 8:19 AM >>>

Camille and Diana:

Though Chamberlain's 9/1 submittal from Roland Haga indicated that an asterisk (*) represented certain "prior to" conditions, I did not find any asterisks shown on the submittal. I have now gone through the 67 conditions and listed them as:

1.) Prior to Parcel Map recordation.
2.) Prior to Grading Permit issuance.
3.) Prior to Building Permit issuance.
& 4.) Miscellaneous

In talking with Roland Haga, the Chamberlain Group may believe that the 9/1 submittal would be reviewed as part of the grading permit and building permit issuance on all 4 lots with Diana's review also covering DPW issues within the Bunker Hill right of way. I told him I believe that the "conditions" require "individual submittals" for "each" individual lot. If my belief is correct, this would mean for lots 1-4 -- 4 separate grading plans (PLN #'s) and Geo. reports (1 for each lot) and 4 separate building plans (BLD #'s), including soils reports (1 for each lot).

I would suggest that the 3 of us meet sometime next week to go over and confirm we are all on the same page on items 1, 2, 3, & 4 that I've listed above and to confirm the need for "individual" applications. Once we've met and agreed on issues, I've told Roland, you Camille, would schedule another meeting with the 3

of them.

Let me know what you think of the above.

Pete

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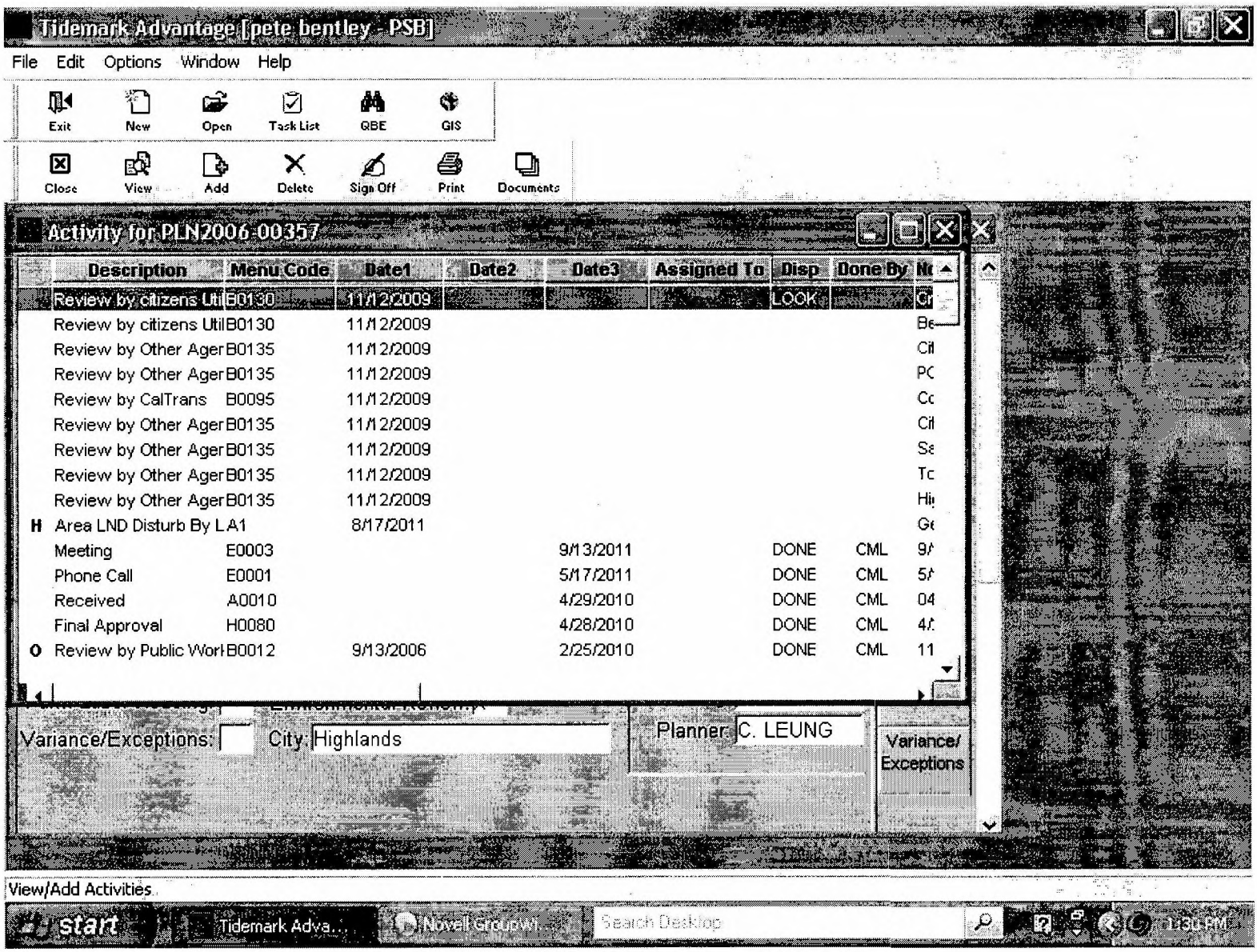
Tidemark Advantage [pete bentley - PSB]
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Activity for PLN2006-00357
Description Menu Code Date1 Date2 Date3 Assigned To Disp Done By
Review by citizens Uti B0130 11/12/2009 LOOK
Review by citizens Util B0130 11/12/2009
Review by Other Ager B0135 11/12/2009
Review by Other Ager B0135 11/12/2009
Review by CalTrans B0095 11/12/2009
Review by Other Ager B0135 11/12/2009
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Review by Other Ager B0135 11/12/2009
Review by Other Ager B0135 11/12/2009
H Area LND Disturb By L A1 8/17/2011
Meeting E0003 9/13/2011 DONE CML
Phone Call E0001 5/17/2011 DONE CML
Received A0010 4/29/2010 DONE CML
Final Approval H0080 4/28/2010 DONE CML
O Review by Public Worl B0012 9/13/2006 2/25/2010 DONE CML
Variance/Exceptions:
City: Highlands
Planner: C. LEUNG
Variance/ Exceptions
View/Add Activities
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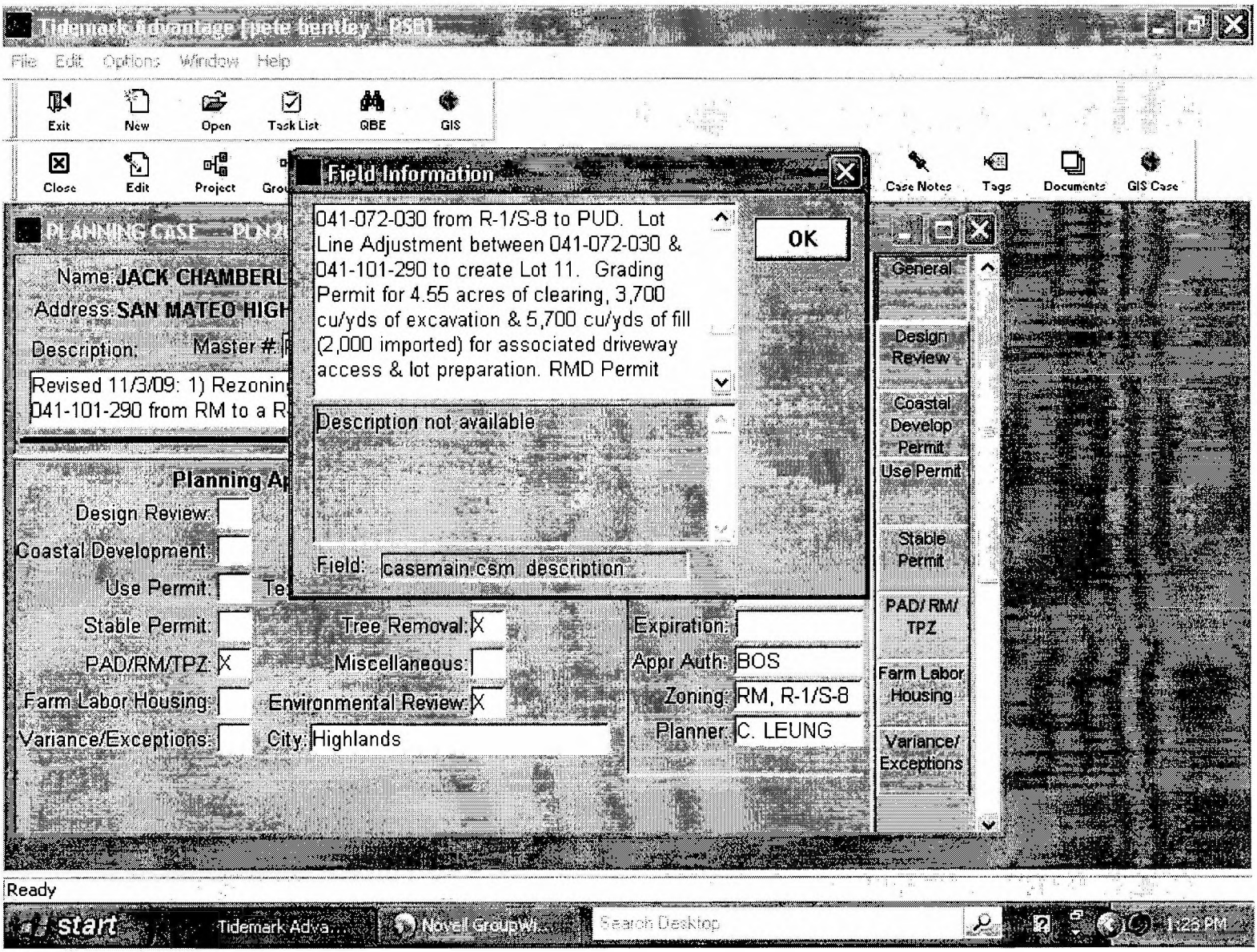
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Field Information
041-072-030 from R-1/S-8 to PUD. Lot Line Adjustment between 041-072-030 & 041-101-290 to create Lot 11. Grading Permit for 4.55 acres of clearing, 3,700 cu/yds of excavation & 5,700 cu/yds of fill (2,000 imported) for associated driveway access & lot preparation. RMD Permit
OK
Description not available
Field: casemain.csm description
PLANNING CASE
Name: JACK CHAMBERL
Address: SAN MATEO HIGH
Description:
Master #:
Revised 11/3/09: 1) Rezonin
041-101-290 from RM to a R
Planning Ap
Design Review:
Coastal Development:
Use Permit:
Stable Permit:
PAD/RM/TPZ: X
Farm Labor Housing:
Variance/Exceptions:
Tree Removal: X
Miscellaneous:
Environmental Review: X
City: Highlands
Expiration:
Appr Auth: BOS
Zoning: RM, R-1/S-8
Planner: C. LEUNG
General
Design Review
Coastal Develop Permit
Use Permit
Stable Permit
PAD/ RM/ TPZ
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Variance/ Exceptions
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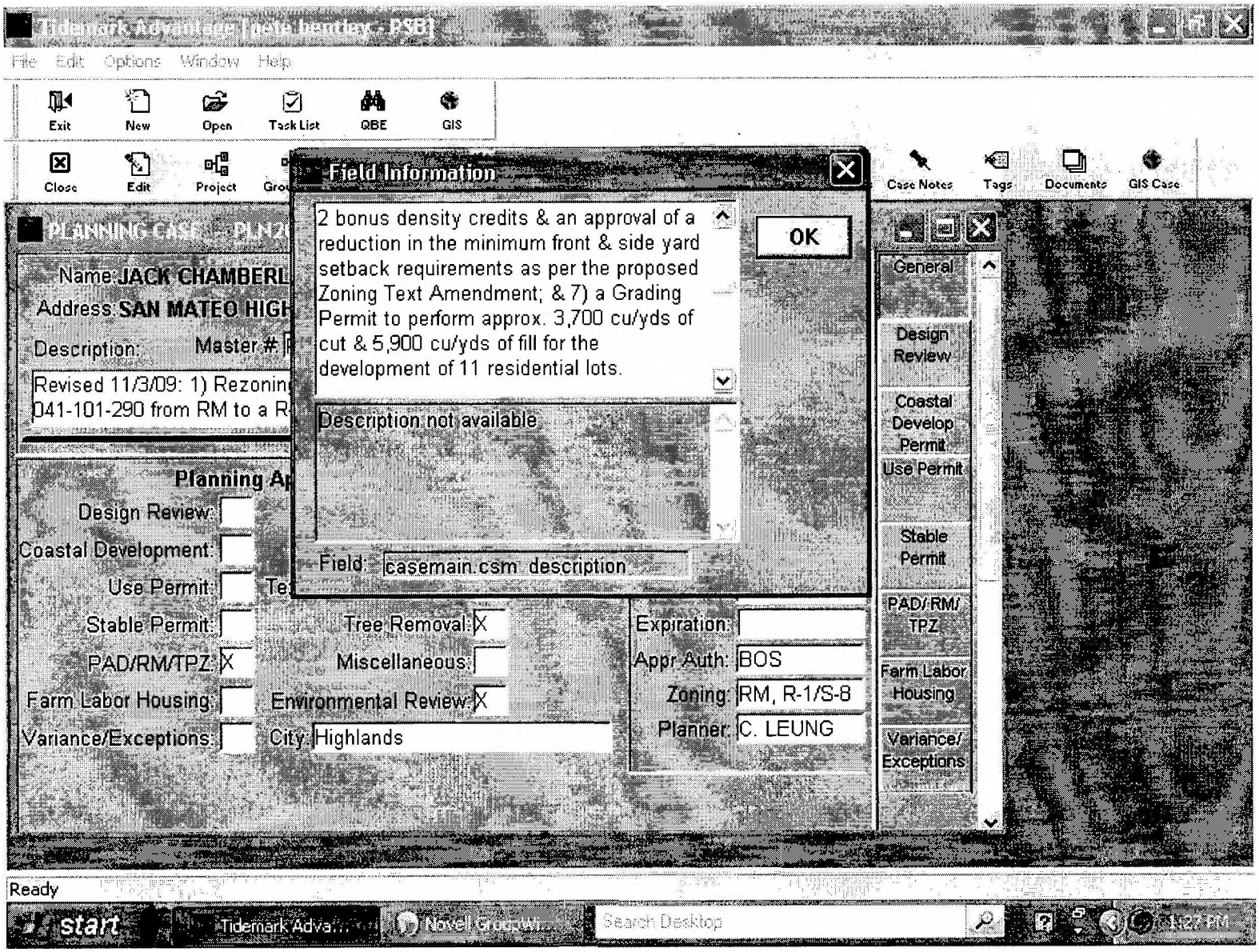
1:28 PM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GIS Case
Field Information
2 bonus density credits & an approval of a reduction in the minimum front & side yard setback requirements as per the proposed Zoning Text Amendment; & 7) a Grading Permit to perform approx. 3,700 cu/yds of cut & 5,900 cu/yds of fill for the development of 11 residential lots.
OK
Description not available
Field: casemain.csm description
Name: JACK CHAMBERL
Address: SAN MATEO HIGH
Description:
Master #:
Revised 11/3/09: 1) Rezonin
041-101-290 from RM to a R
Planning Ap
Design Review:
Coastal Development:
Use Permit:
Stable Permit:
PAD/RM/TPZ: X
Farm Labor Housing:
Variance/Exceptions:
Tree Removal: X
Miscellaneous:
Environmental Review: X
City: Highlands
Expiration:
Appr Auth: BOS
Zoning: RM, R-1/S-8
Planner: C. LEUNG
General
Design Review
Coastal Develop Permit
Use Permit
Stable Permit
PAD/RM/TPZ
Farm Labor Housing
Variance/Exceptions
Ready
start
Search Desktop

From: Camille Leung
To: Sylsnet@aol.com; jtuttlec@aol.com
CC: Pete Bentley
Date: 10/5/2011 5:33 PM
Subject: Conditions of Approval

Hi Jack,

Pete and I have a slight disagreement regarding process. We will meet with Dave on Tuesday (oops, Monday is holiday) to discuss it and find some consensus. Will let you know more on Tuesday. (I have all-day training tomorrow and am off on Friday)

Thanks

Camille M. Leung
Planning and Building Department
455 County Center, Second Floor
Redwood City, CA 94063
Phone: (650) 363-1826
Fax: (650) 363-4849

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Pete Bentley - chamberlain

From: Jean Demouthe
To: Camille Leung
Date: 10/5/2011 2:51 PM
Subject: chamberlain

Dear Camille:

I saw you left me the new geotech report for those lots on Bunker Hill. But we really can't do anything with them until we get grading plans. And building plans.

once we have those, we can go through our regular review process to make sure the plans are based on the conclusions and recommendations in the report. Once that is assured, and their consultant has signed off on the plans, we can sign off so permits can be issued.

the binder with that report is on the shelf above my desk if you need it.

Jean

Save Paper. Think Before You Print.

From: Camille Leung
To: Pete Bentley
CC: Ann Stillman; Diana Shu
Date: 10/12/2011 5:01 PM
Subject: Fwd: Re: Chamberlain Final Map Supporting Documents
Attachments: Chamberlain LOD Minor Mod.pdf

Hi Pete,

I forwarded the stormdrain report to Ann, but I guess it was probably meant for Diana Shu...Can you check with the Chamberlain team regarding the status of their compliance with Condition 4.y (page 20 of PDF). Thanks!

Camille M. Leung
Planning and Building Department
455 County Center, Second Floor
Redwood City, CA 94063
Phone: (650) 363-1826
Fax: (650) 363-4849

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Save Paper.
Think before you print.>>> Ann Stillman 10/12/2011 12:41 PM >>>
Camille,

I have looked at Condition 4.y (page 20 of PDF) on the attached. It appears to me that Condition 4.y (Mitigation Measure UTIL-1) applies to mitigation measures for sanitary sewer, not storm drain. The report that you forwarded to me that was prepared by BKF and applies to the Storm Drain issues.

Do you know where the applicant is in terms of addressing Mitigation Measure UTIL-1 (4.y) for sewers. We had a meeting with a representative of the applicant and an engineer from BKF a while back, but have not heard anything more. I want to ensure that the Sanitary Sewer issues are adequately addressed by the project.

Diana - did you receive a copy of the storm drain report submitted by BKF? Or would you like me to give you the copy that Camille sent to me?

Ann

>>> Camille Leung 9/13/2011 2:56 PM >>>

Hi all,

I am routing over to you Final Map documents for your review. The documents submitted pertain to meeting specific conditions of approval. Here's the final conditions for the project. Final Map is making its way through the DPW Mapping Department.

- Storm Drain Report - Addresses Condition 4.y (page 20 of PDF)
- Geo Report - Addresses Condition 4.m through 4.r (page 13-16 of PDF)

Thanks

Camille M. Leung
Planning and Building Department
455 County Center, Second Floor
Redwood City, CA 94063
Phone: (650) 363-1826
Fax: (650) 363-4849

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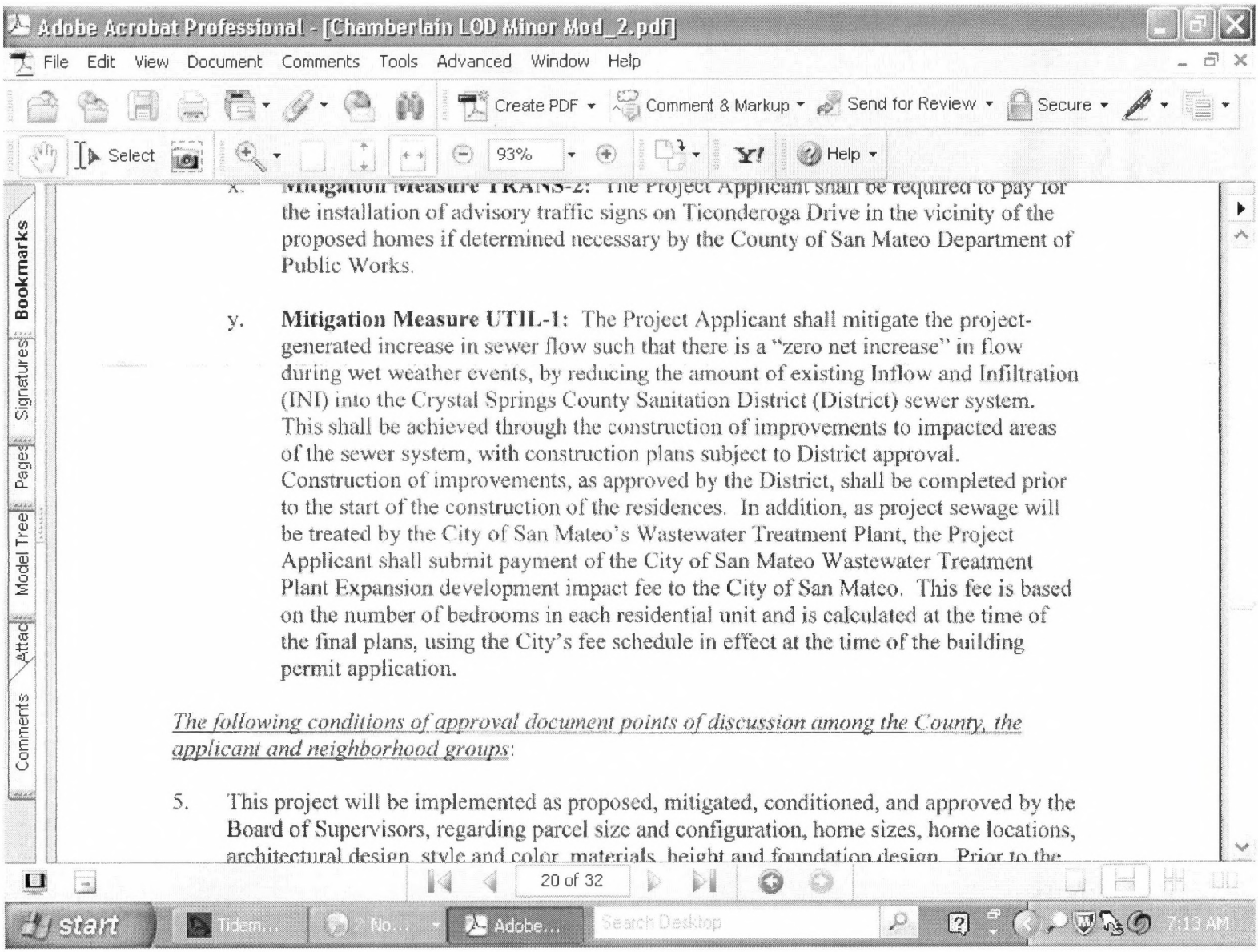
Jack - 595-5584



Needs Written Sign-Off By City Of San Mateo That fee paid.

Needs Written Sign-Off From Co. Sewer Confirming "Zero Net Increase" Mit.

Jess Wants A Geo Report For Each Bld Permit

Thursday, Oct 13, 2011 07:13 AM

From: "Roland Haga" <RHAGA@BKF.com>
To: '"PBentley@co.sanmateo.ca.us"' <PBentley@co.sanmateo.ca.us>
CC: '"JTUTTLEC@aol.com"' <JTUTTLEC@aol.com>, '"Sylvia Nelson (sylsnet@aol.co...
Date: 10/25/2011 4:44 PM
Subject: FW: RE: PLN2006-00357 DPW comments for Bunker Hill Lots 1-4
Attachments: Model Bioretention Soil Media Specifications Report.pdf; June2011.pdf; Appendix_D3_Bioret Area template.pdf

Pete, FYI see email string below.

[cid:NZEUKCHVLBDK.IMAGE.jpeg]

Roland Haga , P.E., LEED(r)AP
Associate/Project Manager

BKF Engineers
Civil Engineers, Land Surveyors, Planners
255 Shoreline Drive, Suite 200 | Redwood City, CA 94065
Tel (650) 482-6300 | Direct (650) 482-6407

www.bkf.com<http://www.bkf.com/>| rhaga@bkf.com<mailto:rhaga@bkf.com>

From: Diana Shu [mailto:dshu@co.sanmateo.ca.us]
Sent: Wednesday, October 12, 2011 6:51 PM
To: Roland Haga
Cc: Camille Leung; Mark Chow; Richard Lee
Subject: Fwd: RE: PLN2006-00357 DPW comments for Bunker Hill Lots 1-4

Hi Roland

Thanks for the detailed explanation.
Please attach your calculations and Table 2 when you submit your revised plans.

I believe Camille has a sample O&M agreement for your client to review.

We will need a Certificate of Compliance for the soil media during installation so please add this to your specifications for this project.

Also:
1) Liliya has a copy of your subdivision plans.
2) Utilities tells me that this project is on the hook for sanitary sewer improvements prior to approval of the subdivision map. Has the applicant submitted proposed sanitary sewer improvements?

Thanks
Diana

[cid:QBFMDITDJUXQ.IMAGE_9.gif]

>>> "Roland Haga" <RHAGA@BKF.com> 10/12/2011 10:28 AM >>>

Diana,

In response to your questions in your email of September 22, 2011 we offer the following responses in red text

General storm water related questions:

1) What is the size of the bio-retention tanks? The bio-retention tanks are sized in the Highland Estates Storm Drainage Report included as part of the information and included on the Table 2 , Lot 1-190 sf, Lot 2-190 sf, Lot 3 - 190 sf and Lot 4 - 220 sf. Generally these are proposed to be 5 feet wide x the length dimension needed to meet area. We will add these dimensions requirements to the lot improvement plans

2) What are the specifications for the soil media, mulch, permeable material and their respective porosities? See attached California Region Water Quality Control Board (RWQCB) requirements for Model Bio-retention soil media specifications and the June 2001 proposed sandy loam bio-retention mix that meets or exceeds 5 inches per hour percolation rate.

3) What are the dimensions of the dissipator? The dimension proposed for the rock dissipater is 10-feet wide by 3-feet deep, We will add these dimensions requirements to the lot improvement plans

1) What are the long term maintenance requirements for these lots... how will the property owner know what to clean, maintain, repair, or replace? It has been our experience that a "Permanent Storm Water Pollution Prevention Measures Maintenance Agreement" has to be entered into between the Agency and Developer regarding the maintenance associated C.3 requirements. These requirements needed to be recorded against the property so that maintenance of C.3 requirements are disclosed to future home buyers in the future. Attached is a example maintenance requirements associated with Bio-retention basin prepared for another project in Redwood City, for reference. Has the County developed their own "Permanent Storm Water Pollution Prevention Measures Maintenance Agreement" yet?

2) What program or equations did he use to calculate the size of the storm water retention units. The basins are based on the conservation estimation of 4% of the impervious area of the lot development. Included in Highland Estates Storm Drainage Report included as part of the information and included on the Table 2.

3) What is the velocity of the water as it discharges into the bio-swale area? The velocity of strom water within each pipe on each lot will varydepending on slope and hydraulic criteria, the intent is to get velocity to near zero at the discharge point into the bio-retention planter, by incorporating rock energy dissipation in the planter as shown on detail 1 on each Lot improvement plan. We are proposing 2'x 3' rock pad of 2" to 4" diameter rock in the bio-retention planter.

Driveway conforms C1.40, 2.40, 3.40, 4.40:
7) Please use Detail D standard curb and gutter, not D1(attached). I believe the existing curb cuts are partial not full driveway ramps in this neighborhood. This may change your driveway conform. Noted plans will be revised.
8) Please consider the cross-slope of the roadway when laying out the driveway, please check both sides

of the driveway profile to ensure that the cars do not bottom out. recommended combined slope should be around 12-15% max 20%. If cross slope is 5% then driveway should be less than 15%, (preferred 7-10%) for a total combined slope of 20% (12-15%). Otherwise, please modify the finish floor elevation. Noted we will review driveway profiles, however, we have checked these driveways and the average centerline slope on each is less that 15% and varying between 3% and 13%. Generally the worst driveway edge condition is around 17% Lot 4 , however the average on this one is 10.9%.

Other:

9) Please place SSCOs below SD Inlets where possible, otherwise add note to plans showing requirements for BMPs around stormwater inlets. Noted will review and incorporate into plans. Noted we review plans and revise if needed.
10) Please maintain a vertical clearance of 1' and a horiz clearance of 10 btwn SS and SD lines. Otherwise pls provide a separation barrier. Noted we review plans and revise if needed.

[cid:NZEUKCHVLBDK.IMAGE.jpeg]

Roland Haga , P.E., LEED(r)AP
Associate/Project Manager

BKF Engineers
Civil Engineers, Land Surveyors, Planners
255 Shoreline Drive, Suite 200 | Redwood City, CA 94065
Tel (650) 482-6300 | Direct (650) 482-6407

www.bkf.com<http://www.bkf.com/>| rhaga@bkf.com<mailto:rhaga@bkf.com>

From: Diana Shu [mailto:dshu@co.sanmateo.ca.us]
Sent: Thursday, September 22, 2011 11:45 AM
To: Roland Haga
Cc: Camille Leung; Richard Lee
Subject: PLN2006-00357 DPW comments for Bunker Hill Lots 1-4

Hi Roland

I am reviewing your plans and have a few questions and comments for your consideration: (9-1-2011 set)

General stormwater related questions:
1) What is the size of the bioretention tanks?
2) What are the specifications for the soil media, mulch, permeable material and their respective porosities?
3) What are the dimensions of the dissipator?
4) What are the long term maintenance requirements for these lots... how will the property owner know what to clean, maintain, repair, or replace?
5) What program or equations did he use to calculate the size of the stormwater retention units?
6) What is the velocity of the water as it discharges into the bioswale area?

Driveway conforms C1.40, 2.40, 3.40, 4.40:
7) Please use Detail D standard curb and gutter, not D1(attached). I believe the existing curb cuts are partial not full driveway ramps in this neighborhood. This may change your driveway conform.
8) Please consider the cross-slope of the roadway when laying out the driveway, please check both sides of the driveway profile to ensure that the cars do not bottom out. recommended combined slope should be around 12-15% max 20%. If cross slope is 5% then driveway should be less than 15%, (preferred

7-10%) for a total combined slope of 20% (12-15%). Otherwise, please modify the finish floor elevation.

Other:

9) Please place SSCOs below SD Inlets where possible, otherwise add note to plans showing requirements for BMPs around stormwater inlets.
10) Please maintain a vertical clearance of 1' and a horiz clearance of 10 btwn SS and SD lines. Otherwise pls provide a separation barrier.

Thanks
Diana

[cid:QBFMDITDJUXQ.IMAGE_9.gif]

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Pete Bentley - Ticonderoga Partners, LLC/Chamberlain Group Conditions of approval (Lots 1-4) APN 041-101-290

From: Martha Poyatos
To: jtuttlec@aol.com
Date: 10/31/2011 5:22 PM
Subject: Ticonderoga Partners, LLC/Chamberlain Group Conditions of approval (Lots 1-4) APN 041-101-290
CC: Ann Stillman; Camille Leung; Jim Porter; Mark Chow; Peggy Jensen; P...

Dear Mr. Chamberlain;

This afternoon we discussed condition of approval 33 which states: *The property owner is responsible for the annexation of the project site to County-governed districts that will provide utility or other service. The project applicant is responsible for application and fees to the San Mateo Local Agency Formation Commission.*

The four proposed parcels are adjacent to, but not within the boundaries of:

County-governed Bel Aire Lighting District
County Service Area 1 (for enhanced Police and Fire)

Given the in-fill location of these parcels, future residents will benefit from the existing lights in the lighting district and the police and fire/emergency response from CalFire and County Sheriff under contract with CSA 1. Annexation to these non-enterprise districts that rely on property tax revenues would therefor be appropriate if annexation includes a transfer of a share of the 1% property tax from the County's general fund property tax share to the districts. In addition, County Service Area No. 1 has a $65.00 per year special tax that would be assessed each parcel upon annexation.

Due to the difference in the Districts' enabling legislation, the lighting district annexation would be processed by the Department of Public Works/Board of Supervisors and the County Service Area 1 annexation would be processed by LAFCo subject to Commission approval at a public hearing.

Requests for annexation to county-governed districts should be made to the Director of Public Works, Jim Porter at 363-4100.

Regarding the Independent Highlands Recreation District, you indicated that annexation would best be processed upon disposition of the open space lands that will be dedicated in approximately three years and the developed parcels could be included at that time. OK But Area Fees Required & If So "Due" when ?? To Whom ??

Who Processes This Annexation ?

The language of condition 33 implies that the condition can be met by submitting applications and fees to the satisfaction of County Public Works and LAFCo. Pete Bentley or Camille Leung will correct me if I am wrong.

In a separate e-mail I will send the steps, fees and forms for the LAFCo annexation process for County Service Area 1.

Sincerely,

Martha Poyatos, Executive Officer
San Mateo LAFCo
455 County Center, 2nd Fl.

From: Martha Poyatos
To: Camille Leung
CC: Lisa Grote
Date: 8/29/2008 1:35 PM
Subject: Correction - Chamberlain Parcels
Attachments: chamberlain290.pdf

Attached is the GIS Assessor's page on the main Chamberlain parcel. I had incorrectly stated in my previous e-mail that the project is not in any of the special districts. Please note the correction that it is in the Crystal Springs county sanitation district, but not in the Highlands Rec, CSA 1, or the lighting district.

Your permit plan note indicated that annexation to Districts is required. Given that the surrounding residential parcels are served by county-governed special districts, the proposed subdivision should be annexed to the districts. However, annexation typically implies that there is a transfer of service responsibility and transfer of property tax from the County to the district receiving the property, but in this case with the exception of fire protection, there isn't really a transfer of service responsibility so there is would not be a transfer of property tax from the county to the receiving districts.

In regard to CSA 1, the CSA has a "zero" sphere designation, so an annexation application should include application to amend sphere to include the territory.

Feel free to call with questions.

Martha
x4224

THE

November 8, 2011

Department of Public Works
County of San Mateo
555 County Center
5th Floor
Redwood City, CA 94063

Attn: James C. Porter, Director

Re: Highlands Estates Project

Dear Mr. Porter,

We are in the process of applying for a Final Map, Grading Permit and Building Permits for four homes to be built on Bunker Hill Drive in San Mateo County. These are the first four homes of eleven that were approved for the 100 acre site. Because of the economy and it's effect on construction financing, we, with the County's approval, are processing this project with multiple Final Maps.

Condition 33 of the Project's approval requires us to the annex to the Enchanted Hills Lighting and Maintenance District, governed by SMCo Public Works, and County Service Area No. 1, governed by the SMCo Board of Supervisors.

We have initiated this process with Martha Poyatos of LAFCO and she asked us to contact Public works for any County Public Works requirements associated with annexation of the subject lots as depicted on Parcel Map 1094,Lots 1 thru 4, into the Enchanted Hills Lighting and Maintenance District.

Please contact us with your requirements, maps, documents, applications or other as needed, and we will respond immediately.

Cordially,

Ticonderoga Partners LLC
Jack T. Chamberlain, Managing Member

CC: Pete Bentley
Martha Poyatos
Ann Stillman

655 SKY WAY, SUITE 230 ■ SAN CARLOS, CA 94070
TELEPHONE: 650/595-5582 ■ FAX: 650-595-5066

RECEIVED
2011 NOV 10 P 4:40
SAN [illegible] COUNTY
PLANNING BUILDING
DEPT

County of San Mateo

Planning & Building Department

455 County Center, 2nd Floor
Redwood City, California 94063
650/363-4161 Fax: 650/363-4849

Mail Drop PLN122
plngbldg@co.sanmateo.ca.us
www.co.sanmateo.ca.us/planning

JAMES
CONTRACT
FOR DENNIS THOMAS
TO BE USED
FOR
CHAMBERLIN
Bunker Hill

November 10, 2011

Dennis Thomas
San Mateo Real Estate & Construction
1777 Boreal Place, Suite 330
San Mateo, CA 94402

Dear Mr. Thomas:

SUBJECT: Submission of Reviewed Project
County File No. PLN 2002-00517

After review and discussion with the Community Development Director, it has been determined that a submission of your revised project will be subject to a "Time and Materials" based method of cost recovery for processing through a final decision.

"Time and Materials" involve applying fully loaded staff hourly cost toward billable hours for any work conducted by this department toward your project. Services include, but are not limited to, the following: meetings with applicant, review and analysis of plans, writing and reviewing of staff reports, management and coordination with contracted environmental consultant, meetings with other reviewing agencies, review of revised Environmental Impact Report (EIR), preparation and attendance of public hearings, and preparation and processing toward any appeals filed. This does not include fees required by other reviewing agencies such as the Department of Public Works, Cal-Fire, San Mateo County Geotechnical Section, and the Environmental Health Division. This also does not include any contracted amount(s) required by a consultant for the publishing of a re-circulated EIR.

To begin, an initial deposit of $5,000 will be required at the time of submittal. Additional funds will be submitted in $5,000 increments prior to the exhaustion of the initial and subsequent deposits. Staff will inform you when remaining deposit funds fall below $1,000. If deposit funds are completely exhausted, processing will immediately cease until additional funds have been submitted. All deposits are subject to a required 4% technology surcharge and 5% legal council surcharge (totaling in $450 for each $5,000 deposit).

To provide an estimate cost of the total overall processing of the project, I have attached a conservative estimate of hours required for staff to process the project, as well as fees from other agencies. This is only to be used as an estimate and is not binding any way.

If you have any questions, please feel free to contact me at 650/363-1853 or Email jcastaneda@smcgov.org.

Regards,

James A. Castañeda, AICP

JAC:pac - JACV0880_WPN.DOC

Enclosure

CALIFORNIA WATER SERVICE COMPANY
341 NORTH DELAWARE STREET • SAN MATEO, CA 94401-1727
(650) 558-7800 • FAX (650) 342-6865

BAYSHORE DISTRICT

November 15, 2011

Ticonderoga Partners LLC
655 Skyway Road, Suite 230
San Carlos, CA 94070

Re: Will Serve Letter, Highland Estates 4 Lots on Bunker Hill Drive, San Mateo.

Dear Ticonderoga Partners LLC,

We have reviewed the preliminary improvement plans for the Highlands Estates 4 lot subdivision located on Bunker Hill Drive in San Mateo. California Water Service Company can provide water service to the 4 lots subdivision in accordance with all rules and regulations in effect and on file with the Public Utilities Commission of the State of California. Those rules may be modified from time to time by the commission in the exercise of its jurisdiction.

Should you have any questions, please call me at (650) 558-7862.

Sincerely,

Leighton Low
Construction Superintendent
California Water Service Company

Pacific Gas and Electric Company
Service Planning Department
Area 1/Peninsula Division

275 Industrial Road
San Carlos, CA 94070

Thursday, December 01, 2011

Ticonderoga Partners, LLC
Jack T. Chamberlain
655 Skyway #230
San Carlos, Ca 94070

Re: Bunker Hill Drive, Lots 1-4, San Mateo Co, CA
PG&E Application #: 105548130

To Whom It May Concern:

PG&E will serve the above referenced property with gas and/or electric service provided The Applicant meets all requirements of the California Public Utilities Commission (CPUC) Gas and Electric Tariffs, PG&E Engineering Standards, PG&E Requirements for Service Manual ("The Greenbook", www.pge.com/greenbook), and pays to PG&E all necessary payments as determined by PG&E and allowed by the CPUC Tariffs.

New gas and electric services must be installed according to PG&E's Gas and Electric Service Requirements Manual (The Greenbook, www.pge.com/greenbook), PG&E Engineering Standards, and the California Public Utilities Commission (CPUC) Gas or Electric Tariffs. PG&E Engineering is scheduled when your information is complete and approved, and is subject to available time, resources, and other priority or previously scheduled work. Contracts and payments due are prepared after Engineering is complete and approved. Construction is scheduled when all documents and any necessary payments have been received and processed by PG&E, your service requirements and locations are complete and have been final inspected by the authority having jurisdiction, and is subject to available time, resources, and previously scheduled, priority, or emergency work. Please discuss this information with your project team. If you have any questions, please call me at (650) 598-7244, or you may email at NLG5@pge.com.

Sincerely,

Natalie Gollob
Sr. Electric Estimator
New Business Rep

Dave Holbrook - Re: Fwd: Highland Estates - Revised Lots 1 through 4 O&M and Offsite Improvement Plans

From: Diana Shu
To: Camille Leung; Dave Holbrook
Date: 12/23/2011 1:28 PM
Subject: Re: Fwd: Highland Estates - Revised Lots 1 through 4 O&M and Offsite Improvement Plans
CC: liliya Latman

Camile
As of 12/19 Liliya was still waiting for minor corrections to the map.

With the new procedures....Liliya will be sending Dave Holbrook the Map Check Letter for all matters outside of public works. So please review, sign and return to Liliya and cc me.

Project Planner will get a copy As will Senior Planner & ultimately sign-off & return to Map Checking. (DPW)

The information below addresses the stormwater agreement only. So you will probably want to incorporate my comments but they won't need that recorded immediately.

I still have a subdivision agreement to work out with Roland and that will need to be recorded prior to the map recordation.

I have asked Chris to void recent memo & resend to Dave & I. 1/4/12 - Thanks for the copies.

As Diana says - Process has changed since 12/23 +/-

Thanks
Diana

Save Paper. Think Before You Print.

>>> Camille Leung 12/23/2011 11:48 AM >>>
Hi Diana,

No, I will wait till I get the referral of the final map from DPW Mapping. Once DPW signs off, Planning gets a referral sheet and at that time was check compliance with the conditions of approval.

This is no longer the process.

When will I get the referral?

Thanks

Camille M. Leung
Planning and Building Department
455 County Center, Second Floor
Redwood City, CA 94063
Phone: (650) 363-1826
Fax: (650) 363-4849

Please help us to serve you better and take a moment to complete our survey, just click on the link below:
http://www.co.sanmateo.ca.us/planning/survey

For Map Checkers Use Only
Map Number: P1094
Owner: Ticonderoga Partners, LLC
Vicinity/Street: Bunker Hill

To: Planning Department
Attention: Project Planner – Pete Bentley
Senior Planner – Dave Holbrook

From: Christopher G Vandrey, PLS-Department of Public Works

Subject:Parcel / Final Map for File No. PLN2006-00357

Date: 01-04-2012

A Parcel / Final Map showing the proposed subdivision of the property covered by the Planning File Number shown above has been submitted to the Public Works office for review and has been found to be technically correct as to the information shown thereon.

Please confirm that all Planning Department conditions, including conditions by other Departments and Agencies, (excluding those of Public Works) have been completed and indicate your approval to record this Map by signing below and returning this letter to my attention at the Department of Public Works.

Christopher G Vandrey, PLS

Project Planner:_____ Date:_____
Pete Bentley

Senior Planner:_____ Date:_____
Dave Holbrook

From: Christopher Vandrey<cvandrey@co.sanmateo.ca.us> (Christopher Vandrey)
To: Dave Holbrook; Pete Bentley
CC: Camille Leung; Lisa Aozasa; liliya Latman
Date: 1/4/2012 8:08 AM
Subject: Request for Condition Check-PLN2006-00357-Bunker Hill
Attachments: P1094-Planning Condition Check-Revised to Change Planners.pdf

Camille and Lisa: Please disregard my email dated 12-28-2011. I was under the impression that this map was your project, I apologize for any confusion. I understand now that this is Pete and Dave's project. Thank you!

Pete and Dave,
A Parcel / Final Map showing the proposed subdivision of the property covered by the Planning File Number shown above has been submitted to the Public Works office for review and has been found to be technically correct as to the information shown thereon.

Please confirm that all Planning Department conditions, including conditions by other Departments and Agencies, (excluding those of Public Works) have been completed and indicate your approval to record this Map by replying to this email or signing the attached letter and returning it to my attention at the Department of Public Works. Thank you.

****

Map Number: P1094
Owner: Ticonderoga Partners, LLC
Vicinity/Street: Bunker Hill

Christopher G Vandrey, PLS
Public Works Department
cvandrey@co.sanmateo.ca.us
(650) 599-1410

From: Camille Leung
To: Martha Poyatos; Matthew Seubert
CC: Pete Bentley
Date: 1/6/2012 12:33 PM
Subject: Re: summary of RM re-zoning in Highlands.
Attachments: Chamberlain LOD Minor Mod.pdf

Hi Martha.

That sounds right. 93.39 acre parcel will be under a conservation easement. (see attached letter of decision)

If you need the conservation easement language, check with Pete :)

Thanks

Camille M. Leung
Planning and Building Department
455 County Center, Second Floor
Redwood City, CA 94063
Phone: (650) 363-1826
Fax: (650) 363-4849

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Save Paper.
Think before you print.>>> Matthew Seubert 1/6/2012 12:27 PM >>>
Martha,

The County changes to the RM in 2007 (Section 6317A) required that developers dedicate a conservation open space easement for land not designated for development at the time of subdivision (it requires a Master Land Division Plan). I can't recall how exactly it affected the Highlands subdivision specifically. Overall, I don't think that it materially affects the development potential of RM land in general (ie. the density credits don't change). What it does preclude is somebody subdividing partially and then leaving a remainder which could be further subdivided at some point in the future. Camille can correct me if I'm wrong. Let me know if you need anything else.

-Matt

>> Martha Poyatos 1/6/2012 10:50 AM >>>
Hi Matt & Camille

I am working on a report on highlands. I need to talk about growth projections. I use ABAG which is 14% which I want to qualify by saying it doesn't reflect recent changes implemented by County on RM, combined with Ticonderoga that limits homes to 11 and the potential of the 25 homes on the Assession heights.

Based on population estimate of 2193 persons and ABAG estimate of 14% growth or 307 persons, the actual projected growth due to RM and projects approved or under review is 36 x 2.78 for 136.

Does that make sense to you and can you provide language on the County's RM action that affected Highlands in terms of new development?

Camille: Also, wasn't a condition of approval of Ticonderoga that x # of acres be dedicated to open space.

thanks.

Martha

From: Camille Leung
To: samnaifeh@sbcglobal.net
CC: Pete Bentley
Date: 1/24/2012 4:57 PM
Subject: Fwd: Final Map for Status PLN2006-00357

Hi Sam,

Pete Bentley is in charge of the Final Map. You can reach him at 650/363-1821.

Thanks!

Camille M. Leung
Planning and Building Department
455 County Center, Second Floor
Redwood City, CA 94063
Phone: (650) 363-1826
Fax: (650) 363-4849

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Save Paper.
Think before you print.>>> "Sam Naifeh" <samnaifeh@sbcglobal.net> 1/24/2012 12:51 PM >>>
Dear Camille
Greetings. Hope all goes well for you.
I am writing to inquire about the status of the final map for PLN2006-0035.
Thanks very much for your help with this information.Sam Naifeh

ROLAND HAGA 650 482 6599
TIM [illegible] 650 697 4891
PETE BENTLEY 650 363 4849

January 24, 2012

Pete Bentley
Planning and Building Department
County of San Mateo
455 County Center, Second Floor
Redwood City, CA 94063

Re: Highlands Estates Project

Dear Mr. Bentley,

At present, we are waiting for a letter from the City of San Mateo approving our sanitary sewer mitigation method which we have worked out with the County's Public Works Department.

Martin Quan, of the City of San Mateo Public Works, who is processing our request, told me last week that he was preparing a memo for review and approval.

We intend to immediately move forward with the project with this document in hand. However, I am becoming concerned with the timing of this, hopefully, the last issue and the County's ability to grant a Final Map before the Tentative Map expires.

I think, just as a precaution, that we should pursue an extension of the Tentative Map. I AGREE April 27, 2010

Therefore, this letter is a request for an extension of the Tentative Map for the Highlands Estates Project. # 881 TRACT

I would be available to meet with you to discuss this request at your convenience..

Cordially,

Jack T. Chamberlain

Pete Bentley - Final Map Recording Status PLN2006-00357

From: "Sam Naifeh" <samnaifeh@sbcglobal.net>
To: "Pete Bentley" <PBentley@smcgov.org>
Date: 1/25/2012 9:32 AM
Subject: Final Map Recording Status PLN2006-00357
CC: "Camille Leung" <cleung@smcgov.org>, "Catherine Palter" <cpalter@stanfor...

Dear Mr. Bentley

Camille Leung referred my question to you.

We would appreciate your providing the status of the recording of the Final Map and related Conservation Easement over Lot 12 for PLN2006-00357.

Thanks very much
Sam Naifeh

ps: And thanks for your help with this, Camille.

--- On **Tue, 1/24/12, Camille Leung <*cleung@smcgov.org*>** wrote:

> From: Camille Leung <cleung@smcgov.org>
> Subject: Fwd: Final Map for Status PLN2006-00357
> To: samnaifeh@sbcglobal.net
> Cc: "Pete Bentley" <PBentley@smcgov.org>
> Date: Tuesday, January 24, 2012, 4:57 PM
>
> Hi Sam,
>
> Pete Bentley is in charge of the Final Map. You can reach him at 650/363-1821.
>
> Thanks!
>
> Camille M. Leung
> Planning and Building Department
> 455 County Center, Second Floor
> Redwood City, CA 94063
> Phone: (650) 363-1826
> Fax: (650) 363-4849
>
> Please help us to serve you better and take a moment to complete our survey, just click on the link below:
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> ---
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reply e-mail and destroy all copies of the original message.

Save Paper.
Think before you print.>>> "Sam Naifeh" <samnaifeh@sbcglobal.net> 1/24/2012 12:51 PM >>>
Dear Camille
Greetings. Hope all goes well for you.
I am writing to inquire about the status of the final map for PLN2006-0035.
Thanks very much for your help with this information.Sam Naifeh

Pete Bentley - Re: Final Map Recording Status PLN2006-00357

From: Pete Bentley
To: Sam Naifeh
Subject: Re: Final Map Recording Status PLN2006-00357
CC: Diana Shu; Jim Eggemeyer

Sam:

Per you below email and request. The Chamberlain Group has submitted, to the Department of Public Works, a "Parcel Map" for checking and eventual recording for the proposed 4 lots on Bunker Hill. Public Works has reviewed the map and "found it to be technically correct as to the information shown thereon." Public Works Map checking has notified Planning (myself) and also Public Works Roads (Diana Shu) of the map readiness. Individually, I am responsible for confirming that all necessary "conditions of approval" relative to the recording of the Parcel Map for lots 1-4 (excluding those of Public Works) have been met or satisfied. Diana is responsible for confirming "that only DPW conditions, relative to recording the Parcel Map" for lots 1-4 have been met.

I am waiting on the Chamberlain Group to provide documentation on a couple of items before I'm able to tell DPW Mapping that the Planning Division does not object to the Parcel Map recordation. You will need to contact Diana directly for the status of her sign-off.

I am not aware of any pending plans for the "Conservation Easement". Until Lots 5 thru 11 are created via recording of additional Parcel Maps or a Final Map, the "proposed" boundaries of the easement, as shown on previously submitted maps, do not exist thus preventing recordation of the proposed easement.

Any further questions give me a call (363-1821) or send an email.

Pete Bentley

>>> "Sam Naifeh" <samnaifeh@sbcglobal.net> 1/25/2012 9:32 AM >>>

Dear Mr. Bentley

Camille Leung referred my question to you.

We would appreciate your providing the status of the recording of the Final Map and related Conservation Easement over Lot 12 for PLN2006-00357.

Thanks very much
Sam Naifeh

ps: And thanks for your help with this, Camille.

--- On **Tue, 1/24/12, Camille Leung <*cleung@smcgov.org*>** wrote:

> From: Camille Leung <cleung@smcgov.org>
> Subject: Fwd: Final Map for Status PLN2006-00357
> To: samnaifeh@sbcglobal.net
> Cc: "Pete Bentley" <PBentley@smcgov.org>
> Date: Tuesday, January 24, 2012, 4:57 PM

Hi Sam,

Pete Bentley is in charge of the Final Map. You can reach him at 650/363-1821.

Thanks!

Camille M. Leung
Planning and Building Department
455 County Center, Second Floor
Redwood City, CA 94063
Phone: (650) 363-1826
Fax: (650) 363-4849

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Save Paper.
Think before you print.>>> "Sam Naifeh" <samnaifeh@sbcglobal.net> 1/24/2012 12:51 PM >>>
Dear Camille
Greetings. Hope all goes well for you.
I am writing to inquire about the status of the final map for PLN2006-0035.
Thanks very much for your help with this information.Sam Naifeh

Pete Bentley - Condition Check-PLN2006-00357-Bunker Hill

From: Christopher Vandrey
To: Pete Bentley
Date: 1/27/2012 8:31 AM
Subject: Condition Check-PLN2006-00357-Bunker Hill
CC: Brian Lee; Diana Shu; liliya Latman

Pete,
Good morning. I reviewed the conditions that we spoke about over the phone (4u and 12) and talked about it with Brian Lee. Our thoughts are that the conditions can be stated on the map in the Owners Statement. If I may make a recommendation; let BKF propose the language and send it to us via email. We can come to a consensus and send back the final language via email. When the conditions have been OK'd by everyone, I'll request a mylar with the additional language in the Owners Statement. Have a great weekend!

Christopher G Vandrey, PLS
Public Works Department
cvandrey@co.sanmateo.ca.us
(650) 599-1410

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CALLED ROLAN
2/1/12
& LEFT MESSAGE
TO WORK WITH
CRIS ON UNBACK
TO PUT A PARCEL
MAP.

From: Camille Leung
To: Pete Bentley
CC: Diana Shu; Jim Eggemeyer; Tim Fox
Date: 1/30/2012 8:28 AM
Subject: FW: Re: Final Map Recording Status PLN2006-00357

Hi Pete,

Can Roland describe the meets and bounds of the easement over the remainder parcel, plus give us easement language, so we can record it right after the Parcel Map for Lots 1-4? Politically, it needs to happen this way. This was the understanding with the community. Let me know if you need to discuss.

Camille M. Leung
Planning and Building Department
455 County Center, Second Floor
Redwood City, CA 94063
Phone: (650) 363-1826
Fax: (650) 363-4849

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Save Paper.
Think before you print.>>> "Palter, Catherine" <cpalter@stanford.edu> 1/29/2012 6:34 PM >>>
Pete and Camille:
Sam forwarded to me Pete's email concerning the Chamberlain project, in which Pete stated that the Conservation Easement (over Lot 12) would not be recorded until the remainder of the lots (Lots 5-11) are created. However, County law requires that the conservation easement be imposed now, at the time of the first land division (Lots 1-4) of the parcel. Section 6173A of the zoning ordinance expressly requires this. I discussed this issue directly with County Counsel John Nibbelin on February 14, 2011. In that conversation County Counsel stated:

6173
Repealed in 6175

* * The first phase of the Final Map will consist of Lots 1-4 and the open space parcel, which will receive a conservation easement at the time of the first Final Map and

* * The Final Map for Lots 5-11 will occur later in time and will still be required to comply with the April 27, 2010 conditions of approval for the project

In addition, Condition 11 of the project's conditions of approval has specifics about the timing of the easement that involves both Public Works and County Planning. These cannot be ignored.

Please confirm that the conservation easement will be granted with this first land division, as County law requires and as County Counsel indicated.

Pete Bentley - Fwd: Sanitary Sewer Study for Highland Estates

From: <JTUTTLEC@aol.com>
To: <PBentley@smcgov.org>
Date: 1/31/2012 10:08 AM
Subject: Fwd: Sanitary Sewer Study for Highland Estates

From: quan@cityofsanmateo.org
To: RHAGA@BKF.com
CC: JTUTTLEC@aol.com
Sent: 1/26/2012 3:59:13 P.M. Pacific Standard Time
Subj: RE: Sanitary Sewer Study for Highland Estates

Condition "4y"

Hi Roland,

Please forward this to Jack as I do not have his email address.

After review of the study, the City has some concerns with the mitigation measure. We have done I/I testing and reduction before and found the effects to be minimal at best.

The report that you have used in the study is outdated. There is a May 2010 RMC study that was conducted for the City of San Mateo/Town of Hillsborough/CSCSD that should be used. The report is "Sewer System Flow Monitoring and Hydraulic Modeling." I've uploaded the study on the City's ftp site, it's located in the "Model files Final August 2011 RMC."

To fully mitigate the additional flow from the eleven homes, a better approach would be to use existing data or obtain new flow data to determine where the highest concentration of I/I is coming from the system and either replace or upsize these segments that would equal to the flow generated by the eleven homes. There are too many variables and assumptions that are being made to replace the 400' 10" pipe.

FTP Site:

ftp.cityofsanmateo.org

Username: cityftp

Password: sanmateo

Thank you,

- Martin Quan

Associate Civil Engineer

330 W. 20th Avenue

San Mateo, CA 94403

650-522-7330

650-522-7301 (fax)

From: Roland Haga [mailto:RHAGA@BKF.com]
Sent: Friday, January 13, 2012 11:14 AM
To: Martin Quan
Cc: Roland Haga; 'JTUTTLEC@aol.com'
Subject: Sanitary Sewer Study for Highland Estates

Martin,

In accordance with our conversation, due to the size of the PDF of the Sanitary Sewer Study I am forwarding a link to our BKF FTP site to download this information.

The PDF of the Sanitary Sewer Study for Highland Estates, dated November 14, 1996 (Revised April 21, 2009), has been posted onto the BKF ftp site for your use.

Below is the address and login information for the BKF FTP site. Please copy and paste this link into Windows Explorer (not Internet Explorer) otherwise you will not be able to download all the files at once.

ftp://ftp.bkf.com/Redwood_City/Highland_Estates/

username: bkfftp

password: bkf-files

Please let me know if you have any difficulty in downloading the files. Note that this information will only remain a few working days on our FTP site.

Roland Haga, PE, LEED®AP
Associate/Project Manager

Roland Haga, PE, LEED AP
BKF Engineers
Associate/Project Manager
(650) 482-6300 General
(650) 482-6407 Direct Work
(650) 482-6399 Fax
rhaga@bkf.com Email
255 Shoreline Drive, Suite 200
Redwood City, CA 94065
United States of America

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From: Camille Leung
To: RHAGA@BKF.com; Sylsnet@aol.com; jtuttlec@aol.com
CC: Christopher Vandrey; Diana Shu; Jim Eggemeyer; Pete Bentley
Date: 1/31/2012 10:32 AM
Subject: Re: Final Map Recording Status PLN2006-00357
Attachments: O&M Template Changes_Dec 2011.doc

Hi Jack, Sylvia and Roland,

Please review the attached agreement template. If you have changes, please use "tracked changes". DPW and County Counsel will review your changes to see if County can accept. Once all parties agree, you will sign, Jim will sign, and you will need to record the documents.

There must be one agreement executed per property. Each Agreement must be finaled prior to the Building permit final for each house.

Thanks

Camille M. Leung
Planning and Building Department
455 County Center, Second Floor
Redwood City, CA 94063
Phone: (650) 363-1826
Fax: (650) 363-4849

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2/1/12
Does Not Need To Be Done Now. No "BLD" Permits Have Been Issued Yet. This Subject Is ± 1 year From Now.

Save Paper.
Think before you print.

Camille M. Leung
Planning and Building Department
455 County Center, Second Floor
Redwood City, CA 94063
Phone: (650) 363-1826
Fax: (650) 363-4849

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Save Paper.
Think before you print.>>> Diana Shu 1/30/2012 6:25 PM >>>
Hi Pete and Chris

I just spoke to Mark Chow regarding the sewer improvements and I understand that Roland is in the process of preparing sewer improvement plans and an estimate for us.

This information will need to go into the Subdivision Agreement which I will send to the applicant for review and execution.

Meanwhile, I believe Camille has the Stormwater Agreement for just these 4 lots which need to be executed.

After which, I will send the conditions letter to Chris for the DPW portion.

Diana

>>> "Sam Naifeh" <samnaifeh@sbcglobal.net> 1/27/2012 10:52 AM >>>

Dear Mr. Bentley

Thanks again for your email.

We need to come in to get two copies of the document you refer to as the "Parcel Map" which you mentioned that Mr. Chamberlain submitted and to review the current file as well all correspondence regarding the submission. Please include all the Public Works documents for review as well if they are not part of the file.

Monday morning will be best. If you are not in the office, please arrange for me to meet with Camille Leung or someone from Planning who would be available to assist with my review the files.

In addition, if you have a high quality scan of the map and the other submission materials, please send that on at this time.

Sam Naifeh

--- On **Thu, 1/26/12, Pete Bentley <pbentley@smcgov.org>** wrote:

From: Pete Bentley <pbentley@smcgov.org>
Subject: Re: Final Map Recording Status PLN2006-00357

To: "Sam Naifeh" <samnaifeh@sbcglobal.net>
Cc: "Diana Shu" <dshu@co.sanmateo.ca.us>, "Jim Eggemeyer" <JEggemeyer@smcgov.org>
Date: Thursday, January 26, 2012, 11:52 AM

Sam:

Per you below email and request. The Chamberlain Group has submitted, to the Department of Public Works, a "Parcel Map" for checking and eventual recording for the proposed 4 lots on Bunker Hill. Public Works has reviewed the map and "found it to be technically correct as to the information shown thereon." Public Works Map checking has notified Planning (myself) and also Public Works Roads (Diana Shu) of the map readiness. Individually, I am responsible for confirming that all necessary "conditions of approval" relative to the recording of the Parcel Map for lots 1-4 (excluding those of Public Works) have been met or satisfied. Diana is responsible for confirming "that only DPW conditions, relative to recording the Parcel Map" for lots 1-4 have been met.

I am waiting on the Chamberlain Group to provide documentation on a couple of items before I'm able to tell DPW Mapping that the Planning Division does not object to the Parcel Map recordation. You will need to contact Diana directly for the status of her sign-off.

I am not aware of any pending plans for the "Conservation Easement". Until Lots 5 thru 11 are created via recording of additional Parcel Maps or a Final Map, the "proposed" boundaries of the easement, as shown on previously submitted maps, do not exist thus preventing recordation of the proposed easement.

Any further questions give me a call (363-1821) or send an email.

Pete Bentley

>>> "Sam Naifeh" <samnaifeh@sbcglobal.net> 1/25/2012 9:32 AM >>>

Dear Mr. Bentley

Camille Leung referred my question to you.

We would appreciate your providing the status of the recording of the Final Map and related Conservation Easement over Lot 12 for PLN2006-00357.

Thanks very much
Sam Naifeh

ps: And thanks for your help with this, Camille.

--- On **Tue, 1/24/12, Camille Leung <*cleung@smcgov.org*>** wrote:

From: Camille Leung <cleung@smcgov.org>
Subject: Fwd: Final Map for Status PLN2006-00357
To: samnaifeh@sbcglobal.net
Cc: "Pete Bentley" <PBentley@smcgov.org>

Date: Tuesday, January 24, 2012, 4:57 PM

Hi Sam,

Pete Bentley is in charge of the Final Map. You can reach him at 650/363-1821.

Thanks!

Camille M. Leung
Planning and Building Department
455 County Center, Second Floor
Redwood City, CA 94063
Phone: (650) 363-1826
Fax: (650) 363-4849

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Save Paper.
Think before you print.>>> "Sam Naifeh" <samnaifeh@sbcglobal.net> 1/24/2012 12:51 PM >>>
Dear Camille
Greetings. Hope all goes well for you.
I am writing to inquire about the status of the final map for PLN2006-0035.
Thanks very much for your help with this information.Sam Naifeh

From: Camille Leung
To: RHAGA@BKF.com; Sylsnet@aol.com; jtuttlec@aol.com
CC: Christopher Vandrey; Diana Shu; Jim Eggemeyer; Pete Bentley
Date: 1/31/2012 10:32 AM
Subject: Re: Final Map Recording Status PLN2006-00357
Attachments: O&M Template Changes_Dec 2011.doc

Hi Jack, Sylvia and Roland,

Please review the attached agreement template. If you have changes, please use "tracked changes". DPW and County Counsel will review your changes to see if County can accept. Once all parties agree, you will sign, Jim will sign, and you will need to record the documents.

There must be one agreement executed per property. Each Agreement must be finaled prior to the Building permit final for each house.

Thanks

Camille M. Leung
Planning and Building Department
455 County Center, Second Floor
Redwood City, CA 94063
Phone: (650) 363-1826
Fax: (650) 363-4849

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455 County Center, Second Floor
Redwood City, CA 94063
Phone: (650) 363-1826
Fax: (650) 363-4849

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Save Paper.
Think before you print.>>> Diana Shu 1/30/2012 6:25 PM >>>
Hi Pete and Chris

I just spoke to Mark Chow regarding the sewer improvements and I understand that Roland is in the process of preparing sewer improvement plans and an estimate for us.

This information will need to go into the Subdivision Agreement which I will send to the applicant for review and execution.

Meanwhile, I believe Camille has the Stormwater Agreement for just these 4 lots which need to be executed.

After which, I will send the conditions letter to Chris for the DPW portion.

Diana

>>> "Sam Naifeh" <samnaifeh@sbcglobal.net> 1/27/2012 10:52 AM >>>

Dear Mr. Bentley

Thanks again for your email.

We need to come in to get two copies of the document you refer to as the "Parcel Map" which you mentioned that Mr. Chamberlain submitted and to review the current file as well all correspondence regarding the submission. Please include all the Public Works documents for review as well if they are not part of the file.

Monday morning will be best. If you are not in the office, please arrange for me to meet with Camille Leung or someone from Planning who would be available to assist with my review the files.

In addition, if you have a high quality scan of the map and the other submission materials, please send that on at this time.

Sam Naifeh

--- On **Thu, 1/26/12, Pete Bentley <*pbentley@smcgov.org*>** wrote:

From: Pete Bentley <pbentley@smcgov.org>
Subject: Re: Final Map Recording Status PLN2006-00357

Pete Bentley - Re: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357

From: Pete Bentley
To: Sam Naifeh
Subject: Re: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357

Let me know if this is the right resolution.
Pete

>>> "Sam Naifeh" <samnaifeh@sbcglobal.net> 2/1/2012 9:06 AM >>>
Dear Pete

Thank you for your email.

Yes, sending a scan is a good idea. A scan might well work depending on what resolution the map has.

Sam

--- On **Wed, 2/1/12, Pete Bentley *<pbentley@smcgov.org>*** wrote:

> From: Pete Bentley <pbentley@smcgov.org>
> Subject: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357
> To: "Sam Naifeh" <samnaifeh@sbcglobal.net>
> Date: Wednesday, February 1, 2012, 8:40 AM
>
> Sam:
>
> Per your 1/27/12 email, DPW map checking forwarded a reduced copy (8 1/2" x 11") of the proposed Parcel Map to me. I can forward a copy to you by "fax" or by "scanning" and e-mailing it to you.
> Let me know your preference.
>
> Pete
>
> Save Paper. Think Before You Print.

From: "Palter, Catherine" <cpalter@stanford.edu>
To: "Pete Bentley" <pbentley@smcgov.org>
Date: 2/1/2012 11:26 AM
Subject: RE: Re: Final Map Recording Status PLN2006-00357
Attachments: Conservation Easement ORDINANCE .doc

Pete:
I'm sorry – I did make a typo. It is 6317A, and I've attached it.
Thanks,
Catherine

From: Pete Bentley [mailto:pbentley@smcgov.org]
Sent: Wednesday, February 01, 2012 11:04 AM
To: Palter, Catherine
Subject: FW: Re: Final Map Recording Status PLN2006-00357

Catherine:

Thank you for your comments. I do have 1 question. Your first paragraph references "Section 6173"A" of the Zoning Regulations. I wonder if the "A" might be in error or a typo. I have researched our Zoning books and also the County web site and find "no" Section 6173A. Section 6170 begins on page 7.1 in Chapter 7 titled "R-2" Districts. I do find in this chapter that Sections 6172, 6173, & 6174 were repealed by Ordinance No. 1483 on October 10, 1961.

Pete

[cid:image001.gif@01CCE0D4.3B7454F0]

2/2/12

JIM - FYI WHEN YOU/WE TALK TO CC. I DONT SEE ANY "LAW THAT SAYS CONSERVATION EASEMENT IS TO BE DONE NOW @ PARCEL MAP. MAYBE CC CAN GIVE SPECIFIC DIRECTION. PETE

ford.edu<mailto:cpalter@stanford.edu>> 1/29/2012 6:34 PM >>>

icerning the Chamberlain project, in which Pete stated that the would not be recorded until the remainder of the lots (Lots 5-11) uires that the conservation easement be imposed now, at the time e parcel. Section 6173A of the zoning ordinance expressly irectly with County Counsel John Nibbelin on February 14, 2011. ated

?

SEE JIM - FIND NOTHING TO SAY MUST BE RECORDED WITH MAP RECORDATION. ONLY REQUIRES granting (THIS WAS DONE ON TENTATIVE MAP.)

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ks a ...

Please confirm that the conservation easem ... County law requires and as County Counsel indicated.

Thank you,
Catherine

Pete Bentley - FW: Re: Final Map Recording Status PLN2006-00357

From: Pete Bentley
To: Catherine Palter
Subject: FW: Re: Final Map Recording Status PLN2006-00357

Catherine:

Thank you for your comments. I do have 1 question. Your first paragraph references "Section 6173"A" of the Zoning Regulations. I wonder if the "A" might be in error or a typo. I have researched our Zoning books and also the County web site and find "no" Section 6173A. Section 6170 begins on page 7.1 in Chapter 7 titled "R-2" Districts. I do find in this chapter that Sections 6172, 6173, & 6174 were repealed by Ordinance No. 1483 on October 10, 1961.

Pete

>>> "Palter, Catherine" <cpalter@stanford.edu> 1/29/2012 6:34 PM >>>
Pete and Camille:
Sam forwarded to me Pete's email concerning the Chamberlain project, in which Pete stated that the Conservation Easement (over Lot 12) would not be recorded until the remainder of the lots (Lots 5-11) are created. However, County law requires that the conservation easement be imposed now, at the time of the first land division (Lots 1-4) of the parcel. Section 6173A of the zoning ordinance expressly requires this. I discussed this issue directly with County Counsel John Nibbelin on February 14, 2011. In that conversation County Counsel stated:

* The first phase of the Final Map will consist of Lots 1-4 and the open space parcel, which will receive a conservation easement at the time of the first Final Map and
* The Final Map for Lots 5-11 will occur later in time and will still be required to comply with the April 27, 2010 conditions of approval for the project

In addition, Condition 11 of the project's conditions of approval has specifics about the timing of the easement that involves both Public Works and County Planning. These cannot be ignored.

Please confirm that the conservation easement will be granted with this first land division, as County law requires and as County Counsel indicated.

Thank you,
Catherine

--- On **Thu, 1/26/12, Pete Bentley** <*pbentley@smcgov.org*> wrote:

From: Pete Bentley <pbentley@smcgov.org>
Subject: Re: Final Map Recording Status PLN2006-00357
To: "Sam Naifeh" <samnaifeh@sbcglobal.net>
Cc: "Diana Shu" <dshu@co.sanmateo.ca.us>, "Jim Eggemeyer" <JEggemeyer@smcgov.org>
Date: Thursday, January 26, 2012, 11:52 AM

Sam:

Per you below email and request. The Chamberlain Group has submitted, to the Department of Public Works, a "Parcel Map" for checking and eventual recording for the proposed 4 lots on Bunker Hill. Public Works has reviewed the map and "found it to be technically correct as to the information shown thereon." Public Works Map checking has notified Planning (myself) and also Public Works Roads (Diana Shu) of the map readiness. Individually, I am responsible for confirming that all necessary "conditions of approval" relative to the recording of the Parcel Map for lots 1-4 (excluding those of Public Works) have been met or satisfied. Diana is responsible for confirming "that only DPW conditions, relative to recording the Parcel Map" for lots 1-4 have been met.

I am waiting on the Chamberlain Group to provide documentation on a couple of items before I'm able to tell DPW Mapping that the Planning Division does not object to the Parcel Map recordation. You will need to contact Diana directly for the status of her sign-off.

I am not aware of any pending plans for the "Conservation Easement". Until Lots 5 thru 11 are created via recording of additional Parcel Maps or a Final Map, the "proposed" boundaries of the easement, as shown on previously submitted maps, do not exist thus preventing recordation of the proposed easement.

Any further questions give me a call (363-1821) or send an email.

Pete Bentley

Save Paper. Think Before You Print.

>>> "Sam Naifeh" <samnaifeh@sbcglobal.net> 1/25/2012 9:32 AM >>>

Dear Mr. Bentley

Camille Leung referred my question to you.

We would appreciate your providing the status of the recording of the Final Map and related Conservation Easement over Lot 12 for PLN2006-00357.

Thanks very much
Sam Naifeh

ps: And thanks for your help with this, Camille.

--- On **Tue, 1/24/12, Camille Leung <*cleung@smcgov.org*>** wrote:

From: Camille Leung <cleung@smcgov.org>
Subject: Fwd: Final Map for Status PLN2006-00357
To: samnaifeh@sbcglobal.net
Cc: "Pete Bentley" <PBentley@smcgov.org>
Date: Tuesday, January 24, 2012, 4:57 PM

Hi Sam,

Pete Bentley is in charge of the Final Map. You can reach him at 650/363-1821.

Thanks!

Camille M. Leung
Planning and Building Department
455 County Center, Second Floor
Redwood City, CA 94063
Phone: (650) 363-1826
Fax: (650) 363-4849

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Save Paper.
Think before you print.>>> "Sam Naifeh" <samnaifeh@sbcglobal.net> 1/24/2012 12:51 PM >>>
Dear Camille
Greetings. Hope all goes well for you.
I am writing to inquire about the status of the final map for PLN2006-0035.
Thanks very much for your help with this information.Sam Naifeh

Pete Bentley - Re: Highlands Estates Parcel Map

From: Christopher Vandrey
To: Pete Bentley
Date: 2/7/2012 2:00 PM
Subject: Re: Highlands Estates Parcel Map
CC: liliya Latman

Hi Pete,
The language in his note 1 appears to be consistent with the conditions of approval. His recommendation of recording a separate document is fine with me - how about you? His proposed note 2 is verbatim from the conditions of approval so I am satisfied. Let me know if you have any concerns or comments.

-Chris

Save Paper. Think Before You Print.

>>> "Roland Haga" <RHAGA@BKF.com> 2/1/2012 5:52 PM >>>
Pete and Chris,

In accordance with your request, I propose the following language ,however, I proposed that this document be recorded as a separate instrument against each lot proposed with the title company against each of the lots 1,2,3 and 4 at the time the Parcel Map records. Then the title on each of the lots would reflect the deed restriction (below) recorded against each lot independently of the Parcel Map. This would be consistent with Section 66445 (g) and 66434.2 (if by local ordinance) of the Subdivision Map Act. Generally on and after January 1, 1987, 66445 (g) of the Subdivision Map Act , "no additional survey and map requirements shall be on a Parcel Map that does not affect record title interests".

DEED RESTRICTION NOTE: Lots 1, 2, 3 and 4 shown on this Parcel Map No. are subject to the following Deed Restrictions:

1. As required by the San Mateo County Fire Protection Ordinance, Section 3.84.100, individual property owners for Lots 1-4 and 9, 10, and 11 shall be responsible for maintaining a fuel break by removing all hazardous flammable materials or growth from the ground around each home for a distance of up to 100 feet from its exterior circumference, for the life of the project. Property owners of lots listed above shall arrange with the property owner of the open space parcel to obtain legal access to the open space parcel for the purpose of vegetation clearance. This would not include the authorization of tree removal for trees protected by the RM zoning regulations or "major removal" of vegetation requiring an RM Permit. For the twelve parcels that constitute the project site, the removal of trees or other vegetation providing screening of the eleven residences such that the residences are made significantly more visible from public viewing location(s) shall constitute a "major removal" requiring an RM Permit. This requirement shall be recorded as a deed restriction on Lots 1 through 4, when the lots are sold.

2. The Final Map will include a note stating that "any development of the project parcels must comply with the conditions of approval, as approved by the San Mateo County Board of Supervisors on April 27, 2010." San Mateo County File no. PLN 2006-00357.

Upon your review, please forward any language revisions and /or revisions and if you agree with recording the above deed restrictions on a separate instrument recorded against each lot.

Roland Haga

Roland Haga, PE, LEED®AP
Associate/Project Manager

Roland Haga, PE, LEED AP
BKF Engineers
Associate/Project Manager
(650) 482-6300 General
(650) 482-6407 Direct Work
(650) 482-6399 Fax
rhaga@bkf.com Email
255 Shoreline Drive, Suite 200
Redwood City, CA 94065
United States of America

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From: "Roland Haga" <RHAGA@BKF.com>
To: "'PBentley@co.sanmateo.ca.us'" <PBentley@co.sanmateo.ca.us>, "'Christoph...
CC: "'JTUTTLEC@aol.com'" <JTUTTLEC@aol.com>, "'Sylvia Nelson (sylsnet@aol.co...
Date: 2/1/2012 5:51 PM
Subject: Highlands Estates Parcel Map
Attachments: Roland Haga PE LEED AP.vcf

Pete and Chris,

In accordance with your request, I propose the following language ,however, I proposed that this document be recorded as a separate instrument against each lot proposed with the title company against each of the lots 1,2,3 and 4 at the time the Parcel Map records. Then the title on each of the lots would reflect the deed restriction (below) recorded against each lot independently of the Parcel Map. This would be consistent with Section 66445 (g) and 66434.2 (if by local ordinance) of the Subdivision Map Act. Generally on and after January 1, 1987, 66445 (g) of the Subdivision Map Act , "no additional survey and map requirements shall be on a Parcel Map that does not affect record title interests".

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or Parcel Map

2. ~~The Final Map will include a note stating that~~ "Any development of the project parcels must comply with the conditions of approval, as approved by the San Mateo County Board of Supervisors on April 27, 2010." San Mateo County File no. PLN 2006-00357.
Upon your review, please forward any language revisions and /or revisions and if you agree with recording the above deed restrictions on a separate instrument recorded against each lot.

Roland Haga

Roland Haga, PE, LEED(r)AP
Associate/Project Manager

[cid:image001.jpg@01CCE104.E89F3B10]

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Pete Bentley - Chamberlain - "Conservation easement"

From: Pete Bentley
To: Jim Eggemeyer
Subject: Chamberlain - "Conservation easement"

Jim:

Any word yet from Tim Fox on a possible get together to talk about "Parcel Map"/"Final Map" recording and the dedication of the conservation easement?

I just got another email from Sam Naifeh requesting further info on the Parcel Map.

Pete

Pete Bentley - RE: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357

From: Pete Bentley
To: Catherine Palter
Subject: RE: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357
CC: Jim Eggemeyer

2/9

Catherine:

We may be talking "apples" and "oranges" here. Perhaps to clarify the Parcel Map "review" process, I should refer you back to by Jan. 26, email response to Sam. In that email I state that the "Chamberlain" Group submitted to Public Works a Parcel Map for "checking and eventual recording". I also state that the Parcel map was "found to be technically correct as to the information shown thereon" by Public Works Map Checking.

Your email to me on Jan. 29, though specific to the "conservation easement", does confirm that Sam forwarded a copy of my Jan. 26 email to you.

My note to Sam also states that I am responsible for confirming certain "conditions of approval" and Diana Shu is responsible for confirming those conditions relative to Public Works. This described process, in my review of your Feb. 8 email, appears to specifically address your concern regarding Planning and Public Works "working together". Public Works Map Checking will "not" record the Parcel Map until they have received "written notice", individually, from both myself and Diana that "conditions of approval" applicable to Lots 1-4 along with any other "conditions" which would be applicable to Lots 1-4, at this time, have been met.

Lastly, regarding the conservation easement, in house discussions are taking place. No definite decision has been made yet. I will notify you when a definite decision has been made.

Pete

>> "Palter, Catherine" <cpalter@stanford.edu> 2/8/2012 2:53 PM >>>
Pete:
It appears from your note below that Planning does not get involved until Public Works review of the parcel map application is completed. However, in this case, because of the RM regulations and the Conditions of Approval, it seems that it would be most efficient for Planning and Public Works to work together on this parcel map application. There are also conditions of approval concerning the recording of the lots.

Can you confirm now that the conservation easement will be recorded at the same time as these first four lots?

Thank you,
Catherine

From: Sam Naifeh [mailto:samnaifeh@sbcglobal.net]
Sent: Wednesday, February 08, 2012 9:30 AM
To: Pete Bentley<pbentley@smcgov.org>
Cc: Jim Eggemeyer; Palter, Catherine; Cary Wiest
Subject: Re: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357

Dear Pete

Looks like you misunderstood my note below.

To clarify what is noted in my email, I cannot answer your question on the adequacy of the scan of the "Parcel Map" without the associated correspondence which you say is in the hands of Public Works.

You state that you do not have the 'Parcel Map and all associated correspondence (submitted) "directly" to the Public Works Map Checking Section.'

Please forward my request to the contact person in Public Works who is responsible for PLN2006-00357 and copy me on the email forwarded so that I am able to follow up appropriately.

Thank you
Sam

--- On **Wed, 2/8/12, Pete Bentley<pbentley@smcgov.org> <*pbentley@smcgov.org*>** wrote:

From: Pete Bentley<pbentley@smcgov.org> <pbentley@smcgov.org>
Subject: Re: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357
To: "Sam Naifeh" <samnaifeh@sbcglobal.net>
Cc: "Jim Eggemeyer" <JEggemeyer@smcgov.org>
Date: Wednesday, February 8, 2012, 7:56 AM

Sam:

I'm glad the Parcel map scan was adequate. I have checked the recent email communications and I can't find any wherein I asked you a question. I did ask Catherine a question on her identifying a Zoning Regulation that I couldn't locate. Catherine has answered that question.

As I stated in my Jan. 26, 2012 email to you, the Chamberlain Group submitted the Parcel Map and all associated correspondence "directly" to the Public Works Map Checking Section. Planning does not receive any documents until the Parcel map is ready to record. They do all the necessary review and, if necessary, request additional information relative to the eventual recording of the map. I have no idea of what "correspondence" is included in this submittal process. You would need to contact them directly to review documents associated with this Parcel Map.

Pete

Save Paper. Think Before You Print.

>>> "Sam Naifeh" <samnaifeh@sbcglobal.net> 2/7/2012 8:35 PM >>>
Dear Pete

Thank you for sending a scan of the "Parcel Map" In order to respond to your question, we need scans of the applicant's correspondence that accompanied the map. You mentioned

that you were checking out compliance with the conditions of approval. Please send the scan of the VTM for PLN2006-00357.

Sam

Pete Bentley - Re: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357

From: Pete Bentley
To: Sam Naifeh
Subject: Re: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357

2/9

Sam:

You are right. I don't understand your comment on the adequacy of the scan of the Parcel Map. Either the scan you received was clear and readable or not. If it wasn't, I can put a copy of the proposed Parcel Map for lots 1-4 in the mail to you.

Again, I repeat that whatever associated correspondence that came with the Parcel Map submittal is not provided to Planning. We have "no" involvement in the Map checking process. We only confirm that all applicable "conditions of approval" relative to the parcels (lots 1-4, in this case) shown on the map have been met.

I have contacted Public Works Map Checking, by phone, as you requested and let them know you would be requesting additional information from the parcel map checking submittal. Your contact people by email are Cris Vandrey (LLS) and/or Lilia Latman. Cris' email is: cvandrey@co.sanmateo.ca.us and Lilia's is llatman@co.sanmateo.ca.us.

Pete

>>> "Sam Naifeh" <samnaifeh@sbcglobal.net> 2/8/2012 9:29 AM >>>
Dear Pete

Looks like you misunderstood my note below.

To clarify what is noted in my email, I cannot answer your question on the adequacy of the scan of the "Parcel Map" without the associated correspondence which you say is in the hands of Public Works.

You state that you do not have the 'Parcel Map and all associated correspondence (submitted) "directly" to the Public Works Map Checking Section.'

Please forward my request to the contact person in Public Works who is responsible for PLN2006-00357 and copy me on the email forwarded so that I am able to follow up appropriately.

Thank you
Sam

--- On **Wed, 2/8/12, Pete Bentley<pbentley@smcgov.org>** ***<pbentley@smcgov.org>*** wrote:

From: Pete Bentley<pbentley@smcgov.org> <pbentley@smcgov.org>
Subject: Re: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357
To: "Sam Naifeh" <samnaifeh@sbcglobal.net>
Cc: "Jim Eggemeyer" <JEggemeyer@smcgov.org>
Date: Wednesday, February 8, 2012, 7:56 AM

Sam:

I'm glad the Parcel map scan was adequate. I have checked the recent email communications and I can't find any wherein I asked you a question. I did ask Catherine a question on her identifying a Zoning Regulation that I couldn't locate. Catherine has answered that question.

As I stated in my Jan. 26, 2012 email to you, the Chamberlain Group submitted the Parcel Map and all associated correspondence "directly" to the Public Works Map Checking Section. Planning does not receive any documents until the Parcel map is ready to record. They do all the necessary review and, if necessary, request additional information relative to the eventual recording of the map. I have no idea of what "correspondence" is included in this submittal process. You would need to contact them directly to review documents associated with this Parcel Map.

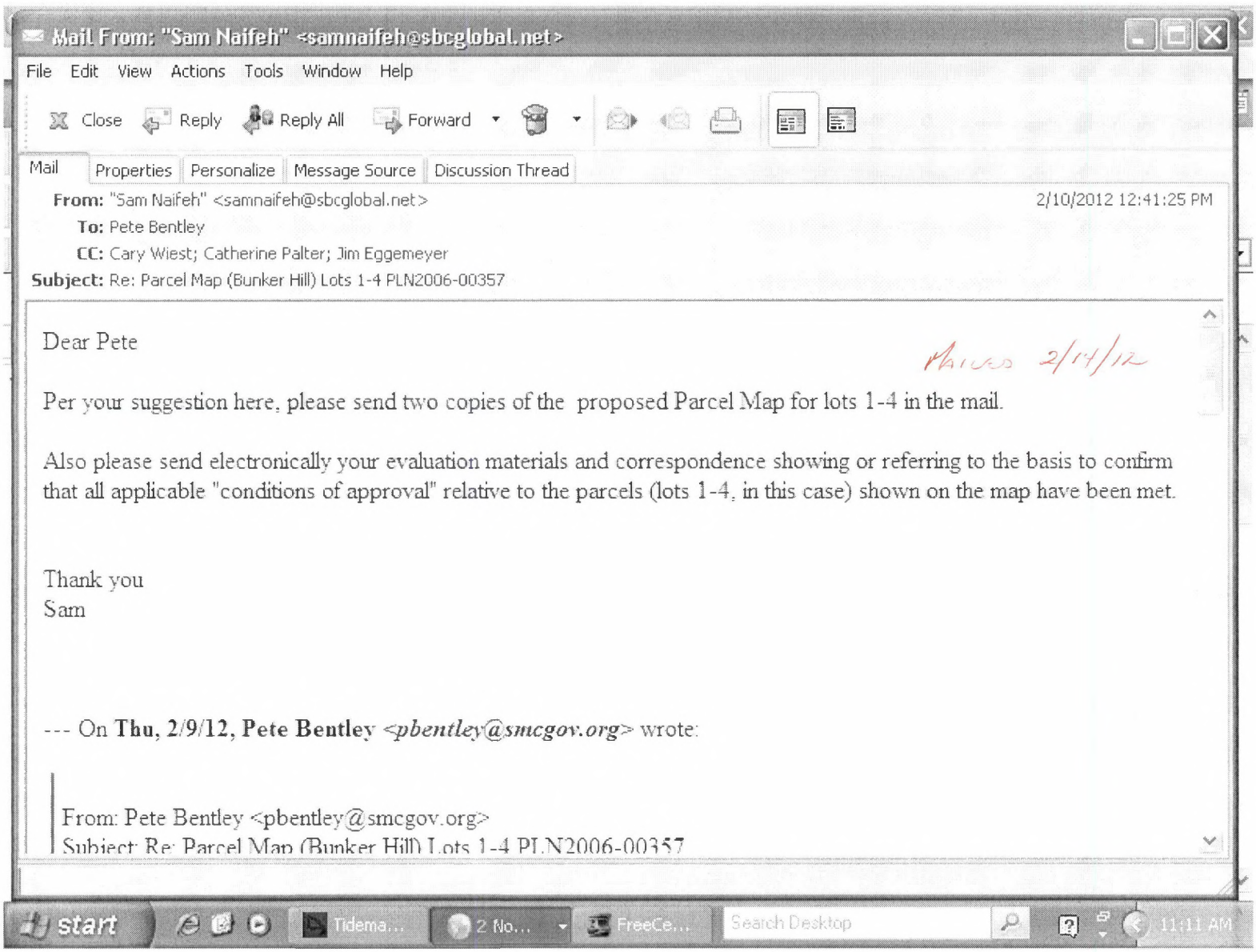
Pete

Save Paper. Think Before You Print.

>>> "Sam Naifeh" <samnaifeh@sbcglobal.net> 2/7/2012 8:35 PM >>>
Dear Pete

Thank you for sending a scan of the "Parcel Map" In order to respond to your question, we need scans of the applicant's correspondence that accompanied the map. You mentioned that you were checking out compliance with the conditions of approval. Please send the scan of the VTM for PLN2006-00357.

Sam


Mail From: "Sam Naifeh" <samnaifeh@sbcglobal.net>
File Edit View Actions Tools Window Help
Close Reply Reply All Forward
Mail Properties Personalize Message Source Discussion Thread
From: "Sam Naifeh" <samnaifeh@sbcglobal.net>
2/10/2012 12:41:25 PM
To: Pete Bentley
CC: Cary Wiest; Catherine Palter; Jim Eggemeyer
Subject: Re: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357
Dear Pete
Per your suggestion here, please send two copies of the proposed Parcel Map for lots 1-4 in the mail.
Also please send electronically your evaluation materials and correspondence showing or referring to the basis to confirm that all applicable "conditions of approval" relative to the parcels (lots 1-4, in this case) shown on the map have been met.
Thank you
Sam
--- On Thu, 2/9/12, Pete Bentley <pbentley@smcgov.org> wrote:
From: Pete Bentley <pbentley@smcgov.org>
Subject: Re: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357
start
Tidema...
2 No...
FreeCe...
Search Desktop
11:11 AM

Pete Bentley - FW: Sanitary Sewer Study for Highland Estates

From: "Roland Haga" <RHAGA@BKF.com>
To: "'Pete Bentley (PBentley@co.sanmateo.ca.us)'" <PBentley@co.sanmateo.ca.u...
Date: 2/16/2012 10:46 AM
Subject: FW: Sanitary Sewer Study for Highland Estates
CC: "Roland Haga" <RHAGA@BKF.com>, "Ed Boscacci" <EBOSCACCI@BKF.com>

Pete and Jack,

Below is the latest form Martin Quan at the City oF San Mateo. Looks like they will sign off to the County allowing for the first phase (4 homes) to be constructed with the mitigation measure executed.

Roland Haga

Roland Haga , P.E., LEED®AP
Associate/Project Manager

BKF ENGINEERS
CIVIL ENGINEERS, LAND SURVEYORS, PLANNERS
255 Shoreline Drive, Suite 200 | Redwood City, CA 94065
Tel (650) 482-6300 | Direct (650) 482-6407

www.bkf.com | rhaga@bkf.com

ENGINEERS
SURVEYORS
PLANNERS

From: Martin Quan [mailto:quan@cityofsanmateo.org]
Sent: Wednesday, February 15, 2012 5:17 PM
To: Roland Haga
Cc: Ed Boscacci; 'JTUTTLEC@aol.com'
Subject: RE: Sanitary Sewer Study for Highland Estates

Hi Roland,

I spoke with the City Engineer, and the City can provide a memo to the County allowing for the first phase (4 homes) to be constructed with the mitigation measure executed. However, we will condition that a monitoring program be in place to determine the true effects of line that is replaced. If the flows are not decreased by the stated/assumed amounts, then we will not allow the remaining 7 homes to be constructed until additional mitigation measures are in place.

- Martin Quan
Associate Civil Engineer
330 W. 20th Avenue
San Mateo, CA 94403
650-522-7330
650-522-7301 (fax)

From: Roland Haga [mailto:RHAGA@BKF.com]
Sent: Tuesday, February 07, 2012 3:29 PM
To: Martin Quan

Cc: Ed Boscacci; 'JTUTTLEC@aol.com'; Roland Haga
Subject: RE: Sanitary Sewer Study for Highland Estates

Martin,

In accordance with our telephone conversation last Thursday February 3, 2102 . The attached PDF is a Technical Memorandum you requested based upon conversations of project history, phasing and review and recommendations regarding BKF 's review of other information reported in the RMC 2010 Report prepared for City of San Mateo, Crystal Springs Sanitation District and Town of Hillsborough in regards to BKF Sewer Study for Highland Estates project in 2009.

Upon your review of the attached memo please call should you have any additional questions. Otherwise we hope that this information will provided you the information for you to prepare letter of approval from the City of San Mateo regarding the Highland Estates project and their mitigation measures regarding the sanitary sewer connection to the Crystal Springs Sanitation District in unincorporated San Mateo County.

Best regards,
Roland Haga

Roland Haga , P.E., LEED®AP
Associate/Project Manager

BKF ENGINEERS
CIVIL ENGINEERS, LAND SURVEYORS, PLANNERS
255 Shoreline Drive, Suite 200 | Redwood City, CA 94065
Tel (650) 482-6300 | Direct (650) 482-6407

www.bkf.com | rhaga@bkf.com

From: Roland Haga
Sent: Thursday, February 02, 2012 9:43 AM
To: 'Martin Quan'
Cc: Ed Boscacci; Roland Haga; 'JTUTTLEC@aol.com'
Subject: RE: Sanitary Sewer Study for Highland Estates

Martin,

I have asked Ed Boscacci, BKF, to review the information you have provided last week regarding update reports and how they interrelate with the Sanitary Sewer Study for Highland Estates, dated November 14, 1996 (Revised April 21, 2009),and the proposed mitigation measures included in the report.

Do you time today for a conference call with Ed Boscacci and I, to go over the information you provided in regards to our mitigation proposed in the Sanitary Sewer Study for Highland Estates. I do not believe the conference call will take very long, can you email times when you might be available and we will call you.

Let us know, look forward to hearing from you.

Roland Haga

Roland Haga , P.E., LEED®AP
Associate/Project Manager

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255 Shoreline Drive, Suite 200 | Redwood City, CA 94065
Tel (650) 482-6300 | Direct (650) 482-6407

www.bkf.com | rhaga@bkf.com

From: Martin Quan [mailto:quan@cityofsanmateo.org]
Sent: Thursday, January 26, 2012 5:56 PM
To: Roland Haga
Subject: RE: Sanitary Sewer Study for Highland Estates

- Martin Quan
Associate Civil Engineer
330 W. 20th Avenue
San Mateo, CA 94403
650-522-7330
650-522-7301 (fax)

From: Roland Haga [mailto:RHAGA@BKF.com]
Sent: Thursday, January 26, 2012 4:23 PM
To: Martin Quan
Cc: Roland Haga
Subject: RE: Sanitary Sewer Study for Highland Estates

Martin,

The first document on the ftp site 9mb is corrupt and cannot be download. Could you check that out and put another copy of the ftp site. The other two smaller documents transferred fine.

Roland Haga

Roland Haga , P.E., LEED®AP
Associate/Project Manager

BKF ENGINEERS
CIVIL ENGINEERS, LAND SURVEYORS, PLANNERS
255 Shoreline Drive, Suite 200 | Redwood City, CA 94065
Tel (650) 482-6300 | Direct (650) 482-6407

www.bkf.com | rhaga@bkf.com

From: Martin Quan [mailto:quan@cityofsanmateo.org]
Sent: Thursday, January 26, 2012 3:59 PM
To: Roland Haga
Cc: 'JTUTTLEC@aol.com'

Subject: RE: Sanitary Sewer Study for Highland Estates

Hi Roland,

Please forward this to Jack as I do not have his email address.

After review of the study, the City has some concerns with the mitigation measure. We have done I/I testing and reduction before and found the effects to be minimal at best.

The report that you have used in the study is outdated. There is a May 2010 RMC study that was conducted for the City of San Mateo/Town of Hillsborough/CSCSD that should be used. The report is "Sewer System Flow Monitoring and Hydraulic Modeling." I've uploaded the study on the City's ftp site, it's located in the "Model files Final August 2011 RMC."

To fully mitigate the additional flow from the eleven homes, a better approach would be to use existing data or obtain new flow data to determine where the highest concentration of I/I is coming from the system and either replace or upsize these segments that would equal to the flow generated by the eleven homes. There are too many variables and assumptions that are being made to replace the 400' 10" pipe.

FTP Site:
ftp.cityofsanmateo.org

Username: [redacted]
Password: [redacted]

Thank you,
- Martin Quan
Associate Civil Engineer
330 W. 20th Avenue
San Mateo, CA 94403
650-522-7330
650-522-7301 (fax)

From: Roland Haga [mailto:RHAGA@BKF.com]
Sent: Friday, January 13, 2012 11:14 AM
To: Martin Quan
Cc: Roland Haga; 'JTUTTLEC@aol.com'
Subject: Sanitary Sewer Study for Highland Estates

Martin,

In accordance with our conversation, due to the size of the PDF of the Sanitary Sewer Study I am forwarding a link to our BKF FTP site to download this information.

The PDF of the Sanitary Sewer Study for Highland Estates, dated November 14, 1996 (Revised April 21, 2009), has been posted onto the BKF ftp site for your use.

Below is the address and login information for the BKF FTP site. Please copy and paste this link into Windows Explorer (not Internet Explorer) otherwise you will not be able to download all the files at once.

ftp://ftp.bkf.com/Redwood_City/Highland_Estates/

username: bkfftp

password: bkf-files

Please let me know if you have any difficulty in downloading the files. Note that this information will only remain a few working days on our FTP site.

Roland Haga, PE, LEED®AP
Associate/Project Manager

Roland Haga, PE, LEED AP
BKF Engineers
Associate/Project Manager
(650) 482-6300 General
(650) 482-6407 Direct Work
(650) 482-6399 Fax
rhaga@bkf.com Email
255 Shoreline Drive, Suite 200
Redwood City, CA 94065
United States of America

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Pete Bentley - Ticonderoga LLP

From: Martha Poyatos
To: Pete Bentley
Date: 2/16/2012 11:30 AM
Subject: Ticonderoga LLP

Please be advised that the applicant has submitted to LAFCo fees and the annexation application for annexation of the proposed parcels to CSA 1.

Martha Poyatos, Executive Officer
San Mateo LAFCo
455 County Center, 2nd Fl.
Redwood City, CA 94063
650/363-4224
650/363-4849 (fax)

Save Paper. Think Before You Print.

Pete Bentley - Re: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357

From: Pete Bentley
To: Sam Naifeh
Subject: Re: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357

Sam:

Per your request, I have attached a copy of the Planning "conditions of approval" applicable to the recording of the Parcel Map for lots 1-4. All of those referenced are in the process of being met and I would expect confirmation sometime next week.

In house discussions continue with County Counsel regarding the recording of the conservation easement.

I'm sure you are aware that there are over 70 conditions of approval and/or recommendations attached to the project approval. Many of these are applicable "prior to" issuance of the Grading Permits, "prior to" issuance of the Building Permits, etc.

I remind you that you need to contact Public Works on the status of their approval of their conditions applicable to recording of the Parcel Map.

Pete

>>> "Sam Naifeh" <samnaifeh@sbcglobal.net> 2/10/2012 12:41 PM >>>
Dear Pete

Per your suggestion here, please send two copies of the proposed Parcel Map for lots 1-4 in the mail.

Also please send electronically your evaluation materials and correspondence showing or referring to the basis to confirm that all applicable "conditions of approval" relative to the parcels (lots 1-4, in this case) shown on the map have been met.

Thank you
Sam

--- On **Thu, 2/9/12, Pete Bentley *<pbentley@smcgov.org>*** wrote:

> From: Pete Bentley <pbentley@smcgov.org>
> Subject: Re: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357
> To: "Sam Naifeh" <samnaifeh@sbcglobal.net>
> Date: Thursday, February 9, 2012, 9:54 AM

Sam:

You are right. I don't understand your comment on the adequacy of the scan of the Parcel Map. Either the scan you received was clear and readable or not. If it wasn't, I can put a copy of the proposed Parcel Map for lots 1-4 in the mail to you.

Again, I repeat that whatever associated correspondence that came with the Parcel Map submittal is not provided to Planning. We have "no" involvement in the Map checking process. We only confirm that all applicable "conditions of approval" relative to the parcels (lots 1-4, in this case) shown on the map have been met.

I have contacted Public Works Map Checking, by phone, as you requested and let them know you would be requesting additional information from the parcel map checking submittal. Your contact people by email are Cris Vandrey (LLS) and/or Lilia Latman. Cris' email is: cvandrey@co.sanmateo.ca.us and Lilia's is llatman@co.sanmateo.ca.us.

Pete

Save Paper. Think Before You Print.

>>> "Sam Naifeh" <samnaifeh@sbcglobal.net> 2/8/2012 9:29 AM >>>
Dear Pete

Looks like you misunderstood my note below.

To clarify what is noted in my email, I cannot answer your question on the adequacy of the scan of the "Parcel Map" without the associated correspondence which you say is in the hands of Public Works.

You state that you do not have the 'Parcel Map and all associated correspondence (submitted) "directly" to the Public Works Map Checking Section.'

Please forward my request to the contact person in Public Works who is responsible for PLN2006-00357 and copy me on the email forwarded so that I am able to follow up appropriately.

Thank you
Sam

--- On **Wed, 2/8/12, Pete Bentley<pbentley@smcgov.org>** ***<pbentley@smcgov.org>*** wrote:

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Subject: Re: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357
To: "Sam Naifeh" <samnaifeh@sbcglobal.net>
Cc: "Jim Eggemeyer" <JEggemeyer@smcgov.org>
Date: Wednesday, February 8, 2012, 7:56 AM

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As I stated in my Jan. 26, 2012 email to you, the Chamberlain Group submitted the Parcel Map and all associated correspondence "directly" to the Public Works Map Checking Section. Planning does not receive any documents until the Parcel map is ready to record. They do all the necessary review and, if necessary, request additional information relative to the eventual recording of the map. I have no idea of what "correspondence" is included in this submittal process. You would need to contact them directly to review documents associated with this Parcel Map.

Pete

Save Paper. Think Before You Print.

>>> "Sam Naifeh" <samnaifeh@sbcglobal.net> 2/7/2012 8:35 PM >>>
Dear Pete

Thank you for sending a scan of the "Parcel Map" In order to respond to your question, we need scans of the applicant's correspondence that accompanied the map. You mentioned that you were checking out compliance with the conditions of approval. Please send the scan of the VTM for PLN2006-00357.

Sam

4. y. **Mitigation Measure UTIL-1:** The Project Applicant shall mitigate the project-generated increase in sewer flow such that there is a "zero net increase" in flow during wet weather events, by reducing the amount of existing Inflow and Infiltration (INI) into the Crystal Springs County Sanitation District (District) sewer system. This shall be achieved through the construction of improvements to impacted areas of the sewer system, with construction plans subject to District approval. Construction of improvements, as approved by the District, shall be completed prior to the start of the construction of the residences. In addition, as project sewage will be treated by the City of San Mateo's Wastewater Treatment Plant, the Project Applicant shall submit payment of the City of San Mateo Wastewater Treatment Plant Expansion development impact fee to the City of San Mateo. This fee is based on the number of bedrooms in each residential unit and is calculated at the time of the final plans, using the City's fee schedule in effect at the time of the building permit application.

12. The Final Map will include a note stating that "any development of the project parcels must comply with the conditions of approval, as approved by the Board of Supervisors on April 27, 2010."

33. The property owner is responsible for the annexation of the project site to County governed special districts that will provide utility or other service. The project applicant is responsible for application and fees to the San Mateo Local Agency Formation Commission.

55. The applicant shall submit, to both the Department of Public Works and the Planning Department, written certification from the appropriate Water District stating that their requirements to provide water service connections to the proposed parcels of this subdivision have been met.

E-Mailed To San 2/16/12

Pete Bentley - Ticonderoga Partners, LLC/Chamberlain Group Conditions of approval (Lots 1-4) APN 041-101-290

From: Martha Poyatos
To: jtuttlec@aol.com
Date: 10/31/2011 5:22 PM
Subject: Ticonderoga Partners, LLC/Chamberlain Group Conditions of approval (Lots 1-4) APN 041-101-290
CC: Ann Stillman; Camille Leung; Jim Porter; Mark Chow; Peggy Jensen; P...

Dear Mr. Chamberlain;

This afternoon we discussed condition of approval 33 which states: *The property owner is responsible for the annexation of the project site to County-governed districts that will provide utility or other service. The project applicant is responsible for application and fees to the San Mateo Local Agency Formation Commission.*

The four proposed parcels are adjacent to, but not within the boundaries of:

County-governed Bel Aire Lighting District
County Service Area 1 (for enhanced Police and Fire)

Given the in-fill location of these parcels, future residents will benefit from the existing lights in the lighting district and the police and fire/emergency response from CalFire and County Sheriff under contract with CSA 1. Annexation to these non-enterprise districts that rely on property tax revenues would therefor be appropriate if annexation includes a transfer of a share of the 1% property tax from the County's general fund property tax share to the districts. In addition, County Service Area No. 1 has a $65.00 per year special tax that would be assessed each parcel upon annexation.

Due to the difference in the Districts' enabling legislation, the lighting district annexation would be processed by the Department of Public Works/Board of Supervisors and the County Service Area 1 annexation would be processed by LAFCo subject to Commission approval at a public hearing.

Requests for annexation to county-governed districts should be made to the Director of Public Works, Jim Porter at 363-4100.

Regarding the Independent Highlands Recreation District, you indicated that annexation would best be processed upon disposition of the open space lands that will be dedicated in approximately three years and the developed parcels could be included at that time.

The language of condition 33 implies that the condition can be met by submitting applications and fees to the satisfaction of County Public Works and LAFCo. Pete Bentley or Camille Leung will correct me if I am wrong.

In a separate e-mail I will send the steps, fees and forms for the LAFCo annexation process for County Service Area 1.

Sincerely,

Martha Poyatos, Executive Officer
San Mateo LAFCo
455 County Center, 2nd Fl.

Pete Bentley - Re: Highlands Estates Subdivision - Sewer Mitigation

From: Pete Bentley
To: Mark Chow
Subject: Re: Highlands Estates Subdivision - Sewer Mitigation

Mark:

Thanks for the update. I'll pass the info on to Jack Chamberlain. If you would, let me know when you receive improvement plans and are satisfied that the mitigation measure is met keeping in mind that only 4 homes are being proposed at this time.

Pete

>>> Mark Chow 2/16/2012 7:08 PM >>>
Pete,

I received your voice mail regarding the status of the Crystal Springs County Sanitation District's requirements for the developer to mitigate the additional sewage to be generated by the proposed 11 homes.

Ann and I did meet with Mr. Chamberlain and Roland Hagar of BKF Engineers late last year and identified a number of sewer line segments along Ticonderoga Drive that the developer could replace to meet the mitigation requirements for all 11 homes. On Friday, 2/10/12, I had a telephone conversation with Roland to remind him that we have not received any plans for review. Roland said that he sent over some documents to Mr. Chamberlain for his approval before submitting to us but had not received feedback. He was going to forward the plans to us once it is approved by Mr. Chamberlain.

As of today, I have not received any submittals from Mr. Chamberlain or BKF Engineers.

Mark

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From: <JTUTTLEC@aol.com>
To: <pbentley@smcgov.org>
Date: 2/22/2012 3:37 PM
Subject: Fwd: Highland Estates Off-site Sanitary Sewer Mitigation
Attachments: Constructioncostestimate_20120222.pdf; LimitofWorkExhibitforHighlandEstatesSSRehabilitation.pdf

---

From: RHAGA@BKF.com
To: mchow@co.sanmateo.ca.us
CC: JTUTTLEC@aol.com, RHAGA@BKF.com, YMoradzadeh@BKF.com, sylsnet@aol.com
Sent: 2/22/2012 3:25:00 P.M. Pacific Standard Time
Subj: Highland Estates Off-site Sanitary Sewer Mitigation

Mark,
Per our conversation this morning with Jack Chamberlain , the Highland Estates, attached is the PDF of the Construction Cost Estimate and Limit of Work Exhibit associated with the Sanitary Sewer Rehabilitation on Ticonderoga Drive. This work includes 1085 LF of Sanitary Sewer Rehabilitation and reconstruction of four (4) Brick manholes, and it exceeds the required for mitigation measures proposed in the Sanitary Sewer Study for Highland Estates, Revised April 21, 2009 and project conditions of approval (COA).
The attached PDF of the Construction Cost Estimate and Limit of Work Exhibit does not include the portion of the overall sanitary sewer which exceeds form Cobblehill Place to Ticonderoga in a 10-foot Wide Easement. This portion of includes a VCP main from Cobblehill Place to a mid point where the main transitions to a Mortar lined Ductile Iron Pipe
Please review and upon your approval, BKF will prepared construction specification and exhibits for County review and approval. We hope that you can agree to the attached proposal 1085 LF of Sanitary Sewer Rehabilitation and reconstruction of four (4) Brick manholes, and provided Pete Bentley with a written confirmation regarding the understanding that this work will be done upon approval of plans by you, and that the worked shall completed prior to occupancy of the first four homes on Lots 1, 2,3 and 4.
I know Jack Chamberlain is looking forward to completing this process and getting the Parcel Map and anything you can get to Pete Bentley to get this process completed would be much appreciated
Should you have any questions, please call me at (650) 482-6407.
Roland Haga
Roland Haga, PE, LEED®AP
Associate/Project Manager

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authorized to intercept, read, print, retain, copy, forward, or disseminate this communication. If you have received this communication in error, please reply to the sender or call 650-482-6300, and then please delete this message from your inbox as well as any copies. Thank you, BKF

Pete Bentley - Highlands Estates Subdivision - Sewer Mitigation

From: Mark Chow
To: Pete Bentley
Date: 2/22/2012 7:02 PM
Subject: Highlands Estates Subdivision - Sewer Mitigation
CC: RHAGA@BKF.com; Stillman, Ann

Pete,

The Crystal Springs County Sanitation District (District) has discussed with the applicant of the project, Ticonderoga Partners LLC/Chamberlain Group, regarding the measures to be completed in order to mitigate increases in sewage anticipated from the proposed development. The applicant has agreed to perform the following which would satisfy the District's portion of Mitigation Measure UTIL-1 of the Highlands Estates Administrative Final Environmental Impact Report:

1. Rehabilitate approximately 1,085 linear feet of existing 6" diameter sanitary sewer line on Ticonderoga Drive between Allegheny Way and Polhemus Road per District requirements.
2. Reconstruct all existing brick manholes along the 1,085 linear feet of sewer line with concrete manholes per District requirements.
3. Submit engineering plans and specifications for the above work to the District for review and approval prior to construction.
4. Reimburse the District for all costs associated with the review and approval of the plans and specifications and construction inspections.
5. Complete the above work prior to the start of the construction of the residences.

It should be noted that Mitigation Measure UTIL-1 includes the requirement for payment by the applicant to the City of San Mateo for the Wastewater Treatment Plant Expansion development impact fee.

Please let me know if you have any questions.

Mark

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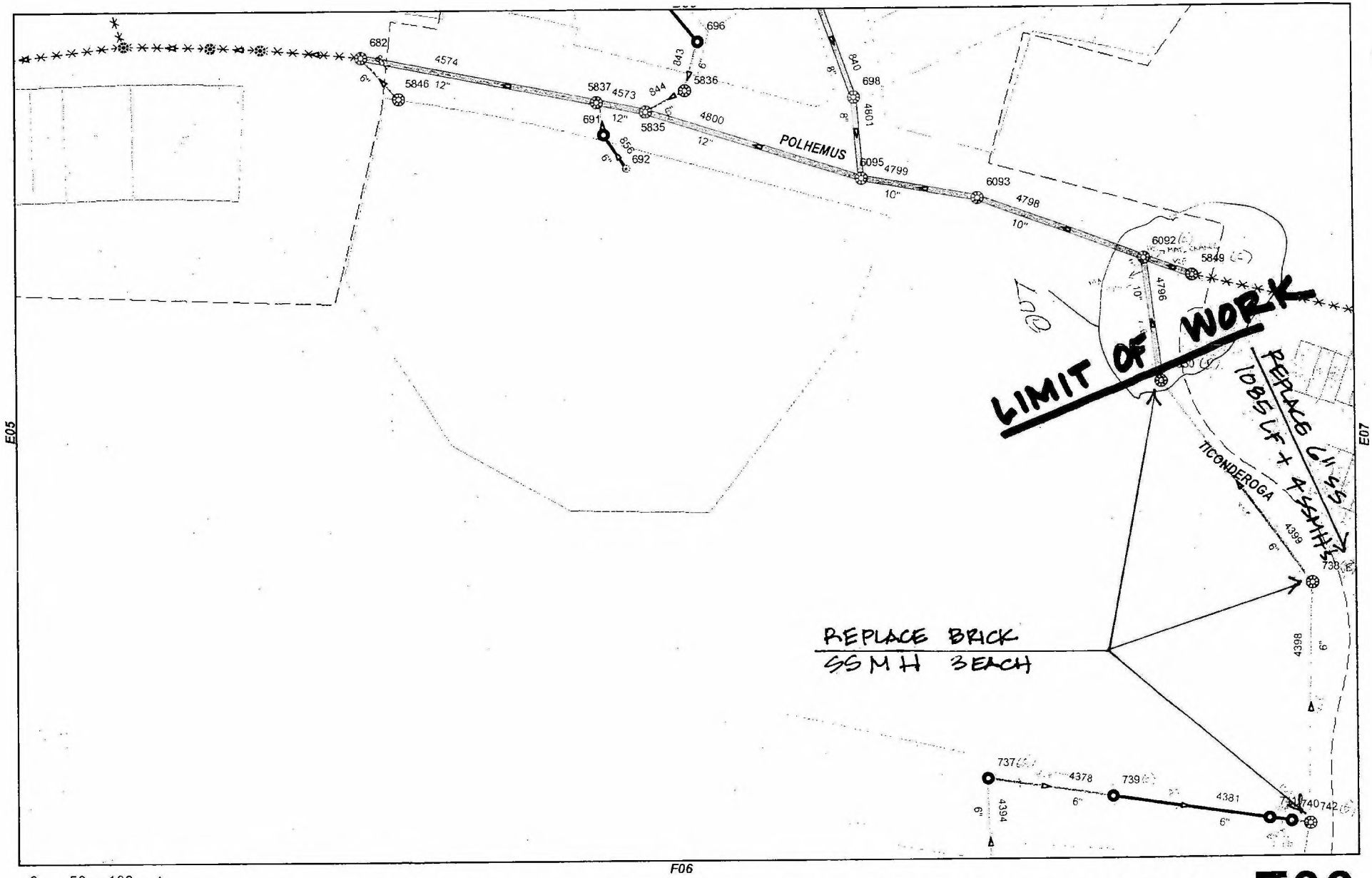
Construction Cost Estimate
Highlands Estates Sanitary Sewer Lines Reconstruction
February 22, 2012

Bid Item	Description	Estimated Quantity	Unit	Unit Price	Total Price
1	Mobilization and demobilization	1	LS	5,000	5,000
2	Trench safety	1	LS	2,000	2,000
3	Pipeburst existing 6" VCP sanitary sewer main with 6" HDPE in Street	1,085	LF	80	86,800
4	Replace existing sanitary sewer manhole in Street	4	EA	3,500	14,000
	Subtotal				107,800
	Contingency @ 10%				10,780
	Total Estimated Construction Cost				118,580

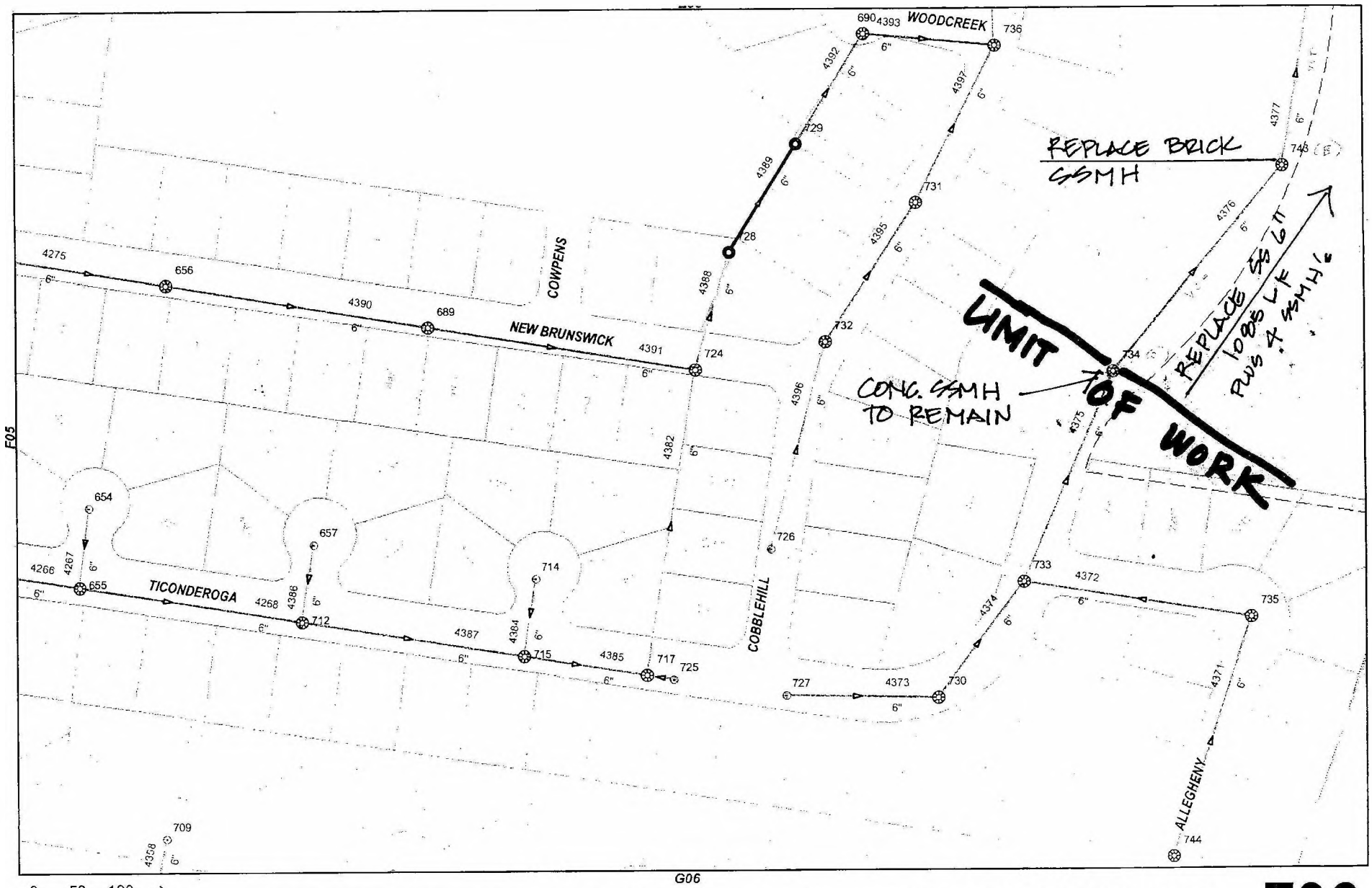
PROPOSED MITIGATION PER SANITARY SEWER STUDY FOR HIGHLANDS ESTATES
940 LF OR APPROXIMATELY $8,500 PER LOT
WITH 11 LOTS = RANGE OF $93,500 TO $110,000

$93,500 < $118,580



CSCSD CCTV PIPELINE AND MANHOLE INSPECTION PROJECT

E06



CSCSD CCTV PIPELINE AND MANHOLE INSPECTION PROJECT

F06

DEPARTMENT OF PUBLIC WORKS
Larry A. Patterson, P. E., Director

330 West 20th Avenue
San Mateo, California 94403-1388
Telephone (650) 522-7300
FAX: (650) 522-7301
www.cityofsanmateo.org

VIA FACSIMILE: (650) 595-5066

February 22, 2012

Mr. Jack Chamberlain
Chamberlain Group
655 Skyway, Suite 230
San Carlos, CA 94070

Re: ***Highlands Estates – Sanitary Sewer Study and Mitigation Measure***

Dear Mr. Chamberlain:

You have requested the City to review the Sanitary Sewer Study for the construction of eleven (11) new homes in the Highland Estates. Upon review and request for more information, the City understands that you will only construct four (4) new homes at this time and implement the mitigation measure for the proposed total of 11 homes. The City has no objection to the Sanitary Sewer Study (Study), dated April 21, 2009, with the exception that upon completion of the construction of the four (4) new homes, a requirement will be imposed to implement a flow monitoring program for the replaced 400' sanitary sewer line on Polhemus Road to evaluate its effectiveness. The monitoring report shall span two years or prior to the construction of the remaining seven (7) homes.

If the replaced line does not show an equivalent decrease in infiltration and inflow (I/I) as outlined in the Study, the developer may not construct the remaining 7 homes until a mitigation measure is put into place to address the net increase in flow from the development of the eleven (11) homes.

If you have any questions regarding the City's position, please contact me at (650) 522-7308.

Sincerely,

Susanna Chan, P.E.
Deputy Director of Public Works

c: Martin Quan, Associate Engineer
Cathi Zammit, Senior Engineer
Chron/File

RECEIVED
FEB 2 1 2012
San Mateo County
Planning and Building Department

Q:\pw\PWENG\QUAN\Memos\HighlandEstatesDevelopment.doc

DEPARTMENT OF PUBLIC WORKS
Larry A. Patterson, P. E., Director

330 West 20th Avenue
San Mateo, California 94403-1388
Telephone (650) 522-7300
FAX: (650) 522-7301
www.cityofsanmateo.org

VIA FACSIMILE: (650) 595-5066

February 22, 2012

Mr. Jack Chamberlain
Chamberlain Group
655 Skyway, Suite 230
San Carlos, CA 94070

Re: ***Highlands Estates – Sanitary Sewer Study and Mitigation Measure***

Dear Mr. Chamberlain:

You have requested the City to review the Sanitary Sewer Study for the construction of eleven (11) new homes in the Highland Estates. Upon review and request for more information, the City understands that you will only construct four (4) new homes at this time and implement the mitigation measure for the proposed total of 11 homes. The City has no objection to the Sanitary Sewer Study (Study), dated April 21, 2009, with the exception that upon completion of the construction of the four (4) new homes, a requirement will be imposed to implement a flow monitoring program for the replaced 400' sanitary sewer line on Polhemus Road to evaluate its effectiveness. The monitoring report shall span two years or prior to the construction of the remaining seven (7) homes.

If the replaced line does not show an equivalent decrease in infiltration and inflow (I/I) as outlined in the Study, the developer may not construct the remaining 7 homes until a mitigation measure is put into place to address the net increase in flow from the development of the eleven (11) homes.

If you have any questions regarding the City's position, please contact me at (650) 522-7308.

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Susanna Chan, P.E.
Deputy Director of Public Works

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Cathi Zammit, Senior Engineer
Chron/File

RECEIVED
FEB 2 1 2012
San Mateo County
Planning and Building Department

Q:\pw\PWENG\QUAN\Memos\HighlandEstatesDevelopment.doc

Pete Bentley - Fwd: Re: DPW docs related to Parcel Map P-1094 (1 of 3)

From: Christopher Vandrey
To: Pete Bentley
Date: 2/24/2012 7:56 AM
Subject: Fwd: Re: DPW docs related to Parcel Map P-1094 (1 of 3)

Pete,
Just forwarding an email from Sam to you. Everything went well.

-Chris

Save Paper. Think Before You Print.

>>> "Sam Naifeh" <samnaifeh@sbcglobal.net> 2/23/2012 10:55 PM >>>
Dear Armando

It was a pleasure meeting Chris and you today.

We appreciate your scanning these documents and sending them.

Will follow up.

Thanks very much for your help
Sam

--- On **Thu, 2/23/12, Armando Carlos <*acarlos@smcgov.org*>** wrote:

> From: Armando Carlos <acarlos@smcgov.org>
> Subject: DPW docs related to Parcel Map P-1094 (1 of 3)
> To: "Sam Naifeh" <samnaifeh@sbcglobal.net>
> Cc: "Christopher Vandrey" <cvandrey@smcgov.org>
> Date: Thursday, February 23, 2012, 12:00 PM
>
> Mr. Naifeh,
>
> Here is the first of 3 emails regarding the documents we scanned for you.
>
> Please let us know if you have any further questions.
>
> Thank you
>
> Save Paper. Think Before You Print.

Pete Bentley - Re: Parcel/ Final Map for File No. PLN2006-00357

From: Christopher Vandrey
To: Sam Naifeh
Date: 2/27/2012 1:35 PM
Subject: Re: Parcel/ Final Map for File No. PLN2006-00357
CC: Pete Bentley

Sam,
Good afternoon. I went line by line in my response. Please let me know if I skipped anything.

"It appears that DPW is making referral of the final map in addition to the Parcel Map we discussed. I would appreciate a copy of the final map and supporting documents that DPW is to refer to Planning as noted in the email stream." There are two types of subdivision maps that can be filed: Final Maps and Parcel Maps. Final Maps typically create 5 or more lots and Parcel Maps create 4 or fewer. The subdivider is choosing to subdivide only the first 4 lots so a Parcel Map is the correct map to be filed. The reason there is any mention of a Final Map is the common mistake that the terms "Final Map" and "Parcel Map" are synonymous. There is only a parcel map in this case.

"Engineers Opinion of Probable Construction Cost for the Street Improvements at Highland Estates Lots 1-4, Bunker Hill Drive, San Mateo County, California dated September 7, 2011" is not in the subdivision map file. It sounds like a construction bond requirement which is not associated with the subdivision map. I can check with Planning or Public Works if you would like.

Geotechnical Report prepared by Cornerstone Earth Group dated July 22,2011 Design-Level Geotechnical Investigation, Highland Estates Lots 1 through 4, Bunker Hill Drive, San Mateo County, California" is not in the subdivision map file. I can check with Planning or Public Works if you would like.

"Please send DPW analysis of construction cost along with any relevant evaluation of street improvements on Bunker Hill Drive including geotechnical and geotechnical related considerations." These are not in the subdivision map file. I can check with Planning or Public Works if you would like.

It looks like Liliya sent Dave Holbrook the Map Check Letter. Would much appreciate a copy of the Map Check Letter. The Map Check letter is the letter dated 12-28-2011 from the Map Checking group (Liliya and I) to Public Works (Diana Shu) and Planning (Dave Holbrook & Pete Bentley) to verify that the conditions of approval have been met. They are two-hole punched on top and have my signature on them.

-Christopher G Vandrey, PLS

Save Paper. Think Before You Print.

>>> "Sam Naifeh" <samnaifeh@sbcglobal.net> 2/27/2012 11:28 AM >>>
Good morning, Chris

Hope all is going well for you today.

It appears that DPW is making referral of the final map in addition to the Parcel Map we discussed. I would appreciate a copy of the final map and supporting documents that DPW is to refer to Planning as noted in the email stream.

We would also appreciate a copy of the:

<!--[if !supportLists]-->1. <!--[endif]-->Engineer's Opinion of Probable Construction Cost for the Street Improvements at Highland Estates Lots 1-4, Bunker Hill Drive, San Mateo County, California dated September 7, 2011. A scan would work at this point.

<!--[if !supportLists]-->2. <!--[endif]-->Geotechnical Report prepared by Cornerstone Earth Group dated July 22,2011 "Design-Level Geotechnical Investigation, Highland Estates Lots 1 through 4, Bunker Hill Drive, San Mateo County, California"

Please send DPW analysis of construction cost along with any relevant evaluation of street improvements on Bunker Hill Drive including geotechnical and geotechnical related considerations.

It looks like Liliya sent Dave Holbrook the Map Check Letter. Would much appreciate a copy of the Map Check Letter.

Thanks again for your time and help with the documents on PLN2006-00357

Sam

Pete Bentley - Fwd: Re: Parcel/ Final Map for File No. PLN2006-00357

From: Pete Bentley
To: Christopher Vandrey; Diana Shu
Date: 2/28/2012 1:22 PM
Subject: Fwd: Re: Parcel/ Final Map for File No. PLN2006-00357
CC: Jay Mazzetta; Mark Chow

Diana:

What do these items below have to do with the recording of the Parcel Map?
The Sewer Section has reviewed their "condition" for the recording of the Parcel Map (4-y -- Mitigation Measure UTIL-1) and has forwarded such conformation to me.

Pete

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>>> Diana Shu 2/28/2012 11:22 AM >>>
Chris
Items 1 and 3 are the same. I'm still waiting on the sewer improvement plans and associated costs for those. Sam has emailed me also. So I will email him directly.

Item 2 he can get from Jay Mazzetta or Pete.

Thanks
Diana

Diana Shu
dshu@smcgov.org
650-599-1414

Save Paper. Think Before You Print.

>>> Christopher Vandrey 2/28/2012 10:43 AM >>>
Diana,
Good morning. Just a little background: The proposed subdivision in the Bunker Hill vicinity (P1094) is being investigated by a community group in the same area. I provided Sam Naifeh with several items that were in the subdivision file. Sam is interested in the following three items and I do not have them in my map file. Can you help?

"Engineers Opinion of Probable Construction Cost for the Street Improvements at Highland Estates Lots 1-4, Bunker Hill Drive, San Mateo County, California dated September 7, 2011" is not in the subdivision map file.

It sounds like a construction bond requirement which is not associated with the subdivision map. I can check with Planning or Public Works if you would like.

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"Please send DPW analysis of construction cost along with any relevant evaluation of street improvements on Bunker Hill Drive including geotechnical and geotechnical related considerations." These are not in the subdivision map file. I can check with Planning or Public Works if you would like.

His email address is shown below, please share with him anything that you have. Thank you!

-Chris

Save Paper. Think Before You Print.

>>> "Sam Naifeh" <samnaifeh@sbcglobal.net> 2/28/2012 9:15 AM >>>
Greetings, Chris

Thanks for your email.I appreciate your confirmation relating to the Map Check Letter. It sounded like another letter was to come from your colleague in DPW.

Yes, please follow up on the two documents you suggested checking out with DPW and Planning. We would like copies of each and to know the administrative disposition on them.

Appreciate your observation on Parcel Map and Final Map.

With gratitude
Sam

--- On **Mon, 2/27/12, Christopher Vandrey *<cvandrey@smcgov.org>*** wrote:

> From: Christopher Vandrey <cvandrey@smcgov.org>
> Subject: Re: Parcel/ Final Map for File No. PLN2006-00357
> To: "Sam Naifeh" <samnaifeh@sbcglobal.net>
> Cc: "Pete Bentley" <PBentley@smcgov.org>
> Date: Monday, February 27, 2012, 1:35 PM
>
> Sam,
> Good afternoon. I went line by line in my response. Please let me know if I skipped anything.
>
> "It appears that DPW is making referral of the final map in addition to the Parcel Map we discussed. I would appreciate a copy of the final map and supporting documents that DPW is to refer to Planning as noted in the email stream." There are two types

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-Christopher G Vandrey, PLS

Save Paper. Think Before You Print.

>>> "Sam Naifeh" <samnaifeh@sbcglobal.net> 2/27/2012 11:28 AM >>>
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Please send DPW analysis of construction cost along with any relevant evaluation of street improvements on Bunker Hill Drive including geotechnical and geotechnical related considerations.

It looks like Liliya sent Dave Holbrook the Map Check Letter. Would much appreciate a copy of the Map Check Letter.

Thanks again for your time and help with the documents on PLN2006-00357

Sam

Pete Bentley - Fwd: Record Request for File No. PLN2006-00357

From: Jim Eggemeyer
To: Pete Bentley
Date: 3/1/2012 5:01 PM
Subject: Fwd: Record Request for File No. PLN2006-00357

Pete, Saw the following and thought you should be in the loop on what's going around in emails.

jke

Save Paper. Think Before You Print.

>>> "Sam Naifeh" <samnaifeh@sbcglobal.net> 3/1/2012 3:19 PM >>>
Dear Ms. Shu

We appreciate the information you sent on the status of the subdivision agreement.

We request four records:

1. Current draft of the subdivision agreement (final draft not yet completed; so current draft will work)
2. Portable document format (pdf) copies of; 1) the proposed Storm Water Treatment Measures and Maintenance agreements, including exhibits A, B and C, between the Developer and San Mateo County For Lots I through 4; and 2) a copy of the proposed Off-site Improvements plans for Bunkerhill Drive associated with Lots 1 through 4. (These were sent to you as pdf attachments)
3. Engineers Opinion of Probable Construction Cost for the Street Improvements at Highland Estates Lots 1-4, Bunker Hill Drive, San Mateo County, California dated September 7, 2011"
4. Geotechnical Report prepared by Cornerstone Earth Group dated July 22,2011 Design-Level Geotechnical Investigation, Highland Estates Lots 1 through 4, Bunker Hill Drive, San Mateo County, California

Mr. Chris Vandrey previously referred our request for record items 3 and 4 on the above records list to you.

Thanks very much.
Sam Naifeh

--- On **Wed, 2/29/12, Diana Shu <*dshu@smcgov.org*>** wrote:

> From: Diana Shu <dshu@smcgov.org>
> Subject: Re: Subdivision Agreement for File No. PLN2006-00357
> To: "Sam Naifeh" <samnaifeh@sbcglobal.net>
> Cc: "Alan Palter" <alan.palter@varian.com>, "Cary Wiest" <wiestandassoc@sbcglobal.net>, "Catherine Palter" <cpalter@stanford.edu>, "Jim Eggemeyer" <JEggemeyer@smcgov.org>
> Date: Wednesday, February 29, 2012, 6:09 PM
>
> Hi Mr. Naifeh
>
> Thank you for your request. However, we are still working out the details on the subdivision agreement. So I do not have a final document for you at this time.

For your information, the agreement is primarily to ensure the county that the subdivider will make the necessary public improvements required by this project. The agreement requires the subdivider to bond for certain improvements such as sewer, stormwater drainage, sidewalks, etc.

I believe copies of the latest building plans are available at the 455 County Center 2nd Flr. I do not have any electronic copies at this time.

If you have any questions, please let me know.
Diana

Diana Shu
dshu@smcgov.org
650-599-1414

Save Paper. Think Before You Print.

>>> "Sam Naifeh" <samnaifeh@sbcglobal.net> 2/28/2012 9:27 AM >>>
TO: Diana Shu

FROM: Sam Naifeh

We understand that you are working on a subdivision agreement with the developer's representatives.

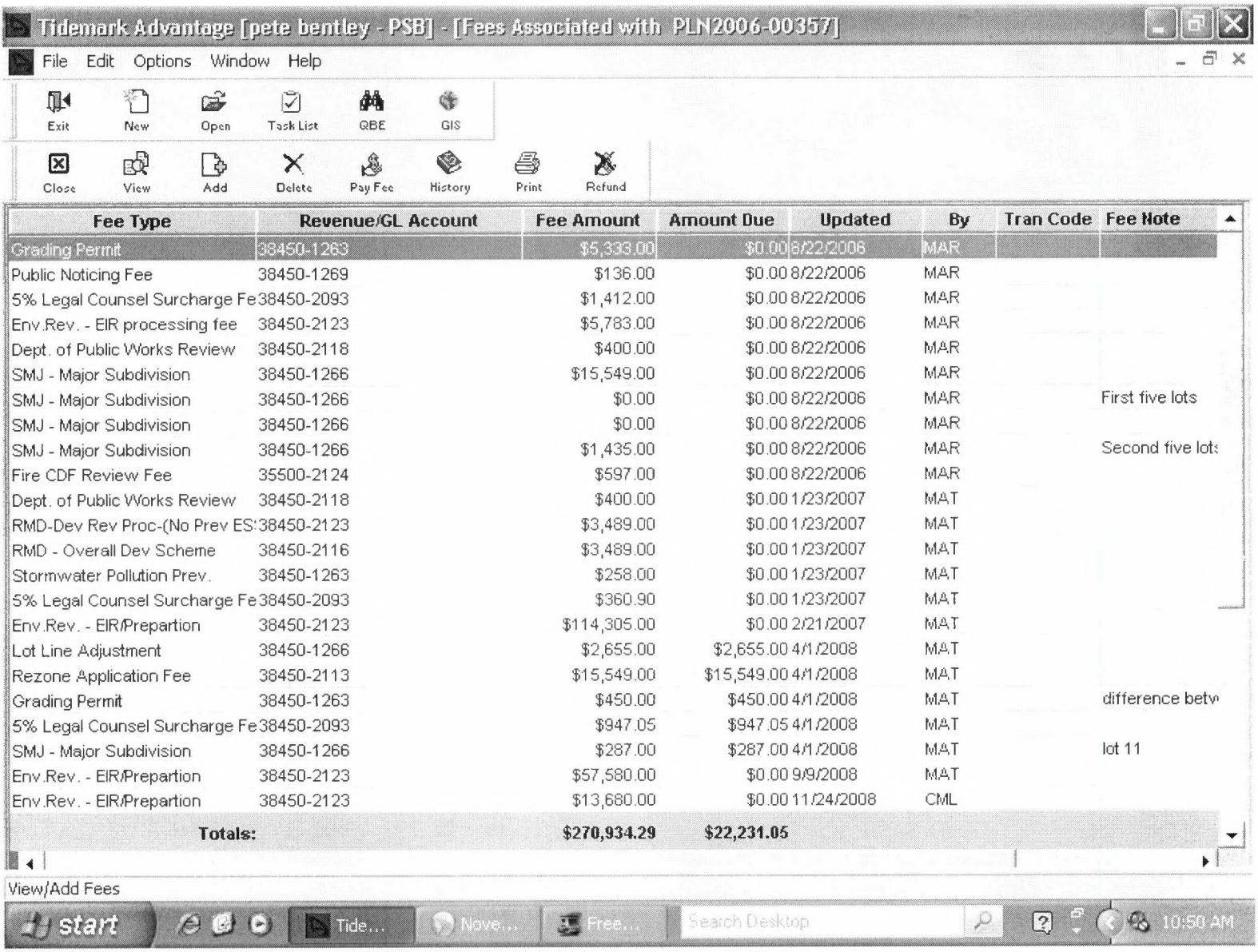
A. Please confirm whether and when the subdivision agreement is recorded.

B. We have two record requests:

1. Please send, preferably in digital form, a copy of the current draft of that agreement and related correspondence
2. Please forward PDF copies of; 1) the proposed Storm Water Treatment Measures and Maintenance agreements, including exhibits A, B and C, between the Developer and San Mateo County For Lots I through 4; and 2) a copy of the proposed Off-site Improvements plans for Bunkerhill Drive associated with Lots 1 through 4.

Thanks very much

PRINT SCREEN INFO



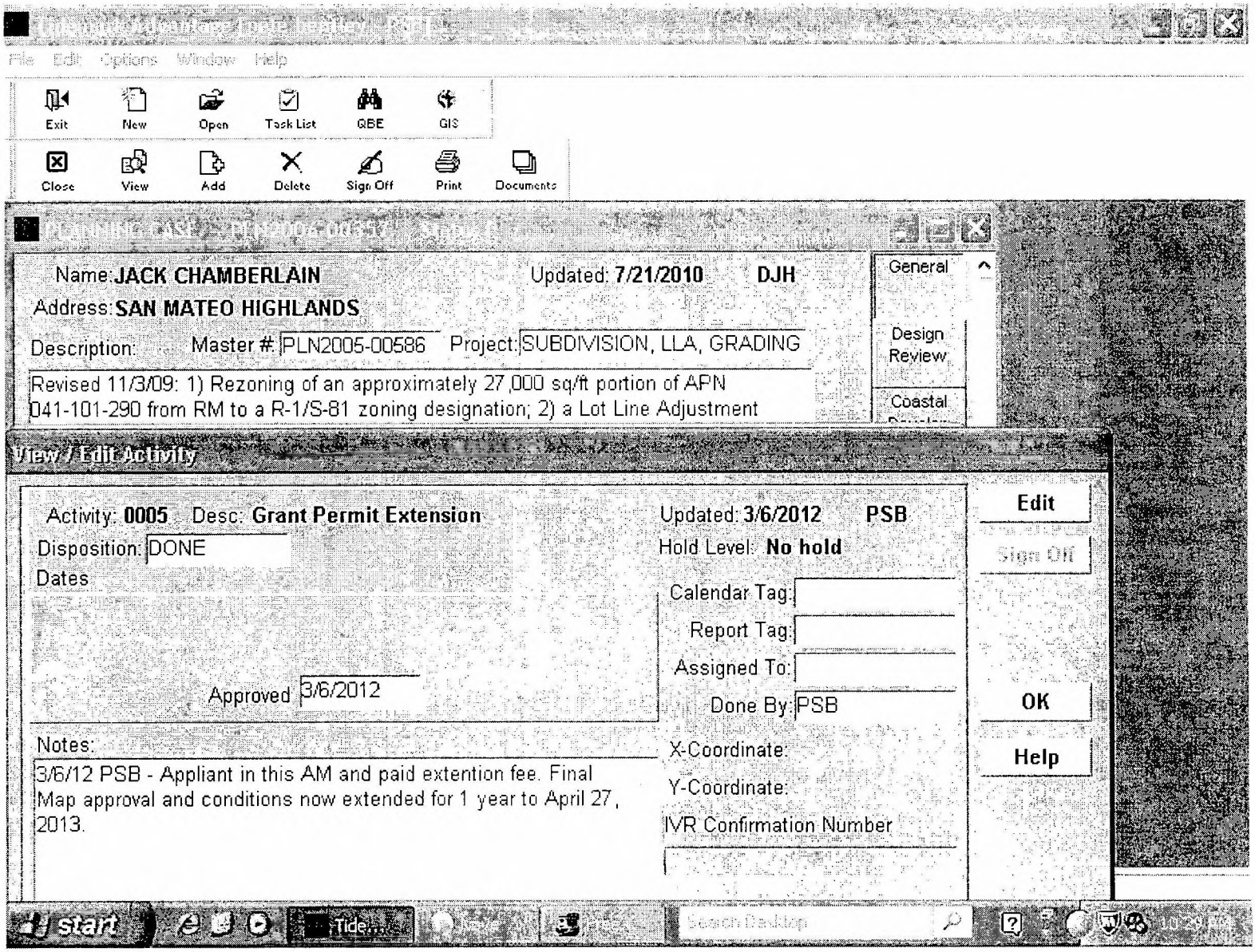
Fee Type	Revenue/GL Account	Fee Amount	Amount Due	Updated	By	Tran Code	Fee Note
Grading Permit	38450-1263	$5,333.00	$0.00	8/22/2006	MAR		
Public Noticing Fee	38450-1269	$136.00	$0.00	8/22/2006	MAR		
5% Legal Counsel Surcharge Fe	38450-2093	$1,412.00	$0.00	8/22/2006	MAR		
Env.Rev. - EIR processing fee	38450-2123	$5,783.00	$0.00	8/22/2006	MAR		
Dept. of Public Works Review	38450-2118	$400.00	$0.00	8/22/2006	MAR		
SMJ - Major Subdivision	38450-1266	$15,549.00	$0.00	8/22/2006	MAR		
SMJ - Major Subdivision	38450-1266	$0.00	$0.00	8/22/2006	MAR		First five lots
SMJ - Major Subdivision	38450-1266	$0.00	$0.00	8/22/2006	MAR		
SMJ - Major Subdivision	38450-1266	$1,435.00	$0.00	8/22/2006	MAR		Second five lots
Fire CDF Review Fee	35500-2124	$597.00	$0.00	8/22/2006	MAR		
Dept. of Public Works Review	38450-2118	$400.00	$0.00	1/23/2007	MAT		
RMD-Dev Rev Proc-(No Prev ES	38450-2123	$3,489.00	$0.00	1/23/2007	MAT		
RMD - Overall Dev Scheme	38450-2116	$3,489.00	$0.00	1/23/2007	MAT		
Stormwater Pollution Prev.	38450-1263	$258.00	$0.00	1/23/2007	MAT		
5% Legal Counsel Surcharge Fe	38450-2093	$360.90	$0.00	1/23/2007	MAT		
Env.Rev. - EIR/Prepartion	38450-2123	$114,305.00	$0.00	2/21/2007	MAT		
Lot Line Adjustment	38450-1266	$2,655.00	$2,655.00	4/1/2008	MAT		
Rezone Application Fee	38450-2113	$15,549.00	$15,549.00	4/1/2008	MAT		
Grading Permit	38450-1263	$450.00	$450.00	4/1/2008	MAT		difference betv
5% Legal Counsel Surcharge Fe	38450-2093	$947.05	$947.05	4/1/2008	MAT		
SMJ - Major Subdivision	38450-1266	$287.00	$287.00	4/1/2008	MAT		lot 11
Env.Rev. - EIR/Prepartion	38450-2123	$57,580.00	$0.00	9/9/2008	MAT		
Env.Rev. - EIR/Prepartion	38450-2123	$13,680.00	$0.00	11/24/2008	CML		
Totals:		**$270,934.29**	**$22,231.05**				

County of San Mateo
Planning & Building Department
455 County Center, 2nd Floor
Redwood City, California 94063
650/363-4161 Fax: 650/363-4849
Mail Drop PLN122
plngbldg@co.sanmateo.ca.us
www.co.sanmateo.ca.us/planning

Case #: PLN2006-00357

Fee Type	Description	Revenue Account Number	Created By	Date	Amount Due
GRDP	Grading Permit	38450-1263	DPA	8/22/2006	5,333.00
PUBN	Public Noticing Fee	38450-1269	DPA	8/22/2006	136.00
LCSF	5% Legal Counsel Surcharge Fee	38450-2093	DPA	8/22/2006	1,412.00
EPRC	Env.Rev. - EIR processing fee	38450-2123	DPA	8/22/2006	5,783.00
DPW1	Dept. of Public Works Review	38450-2118	DPA	8/22/2006	400.00
MSDV	SMJ - Major Subdivision	38450-1266	DPA	8/22/2006	15,549.00
MSDV	SMJ - Major Subdivision	38450-1266	DPA	8/22/2006	0.00
MSDV	SMJ - Major Subdivision	38450-1266	DPA	8/22/2006	0.00
MSDV	SMJ - Major Subdivision	38450-1266	DPA	8/22/2006	1,435.00
FIRE	Fire CDF Review Fee	35500-2124	DPA	8/22/2006	597.00
DPW1	Dept. of Public Works Review	38450-2118	MAT	1/23/2007	400.00
ESIN	RMD-Dev Rev Proc-(No Prev ESS	38450-2123	MAT	1/23/2007	3,489.00
ODSP	RMD - Overall Dev Scheme	38450-2116	MAT	1/23/2007	3,489.00
STWP	Stormwater Pollution Prev.	38450-1263	MAT	1/23/2007	258.00
LCSF	5% Legal Counsel Surcharge Fee	38450-2093	MAT	1/23/2007	360.90
EPRP	Env.Rev. - EIR/Prepartion	38450-2123	MAT	2/21/2007	114,305.00
LADJ	Lot Line Adjustment	38450-1266	MAT	4/1/2008	2,655.00
REZN	Rezone Application Fee	38450-2113	MAT	4/1/2008	15,549.00
GRDP	Grading Permit	38450-1263	MAT	4/1/2008	450.00
LCSF	5% Legal Counsel Surcharge Fee	38450-2093	MAT	4/1/2008	947.05
MSDV	SMJ - Major Subdivision	38450-1266	MAT	4/1/2008	287.00
EPRP	Env.Rev. - EIR/Prepartion	38450-2123	MAT	8/18/2008	57,580.00
EPRP	Env.Rev. - EIR/Prepartion	38450-2123	CML	11/24/2008	13,680.00
GEOV	Geotech.Review-Geologist Rev.	38450-2114	JFD	12/18/2008	381.00
EPRP	Env.Rev. - EIR/Prepartion	38450-2123	CML	3/20/2009	23,022.50
PUBN	Public Noticing Fee	38450-1269	DJH	6/15/2009	136.00
PUBN	Public Noticing Fee	38450-1269	DJH	6/15/2009	136.00
GEOV	Geotech.Review-Geologist Rev.	38430-2114	JFD	10/28/2009	709.00
APPL	Appeal Fee	38450-2116	ACC	12/17/2009	451.00
LCSF	5% Legal Counsel Surcharge Fee	16111-2093	ACC	12/17/2009	22.55
GEOV	Geotech.Review-Geologist Rev.	38430-2114	JFD	1/20/2010	763.00
GEOV	Geotech.Review-Geologist Rev.	38430-2114	JFD	4/27/2010	218.00
EXTN	Permit Extension Fee	38430-1262	ACC	3/6/2012	881.00
LCSF	5% Legal Counsel Surcharge Fee	16111-2093	ACC	3/6/2012	44.05
ITTA	4% IT Surcharge	38100-2215	ACC	3/6/2012	35.24
GPUS	General Plan Update Surcharge	38320-2113	ACC	3/6/2012	40.00
				Total Due:	**$63,311.05**

Just From "Checkout" "Print"


File Edit Options Window Help
Exit
New
Open
Task List
QBE
GIS
Close
View
Add
Delete
Sign Off
Print
Documents
Name: JACK CHAMBERLAIN
Updated: 7/21/2010 DJH
Address: SAN MATEO HIGHLANDS
Description:
Master #: PLN2005-00586
Project: SUBDIVISION, LLA, GRADING
Revised 11/3/09: 1) Rezoning of an approximately 27,000 sq/ft portion of APN 041-101-290 from RM to a R-1/S-81 zoning designation; 2) a Lot Line Adjustment
General
Design Review
Coastal
View / Edit Activity
Activity: 0005 Desc: Grant Permit Extension
Updated: 3/6/2012 PSB
Disposition: DONE
Hold Level: No hold
Dates
Calendar Tag:
Report Tag:
Assigned To:
Approved 3/6/2012
Done By: PSB
Notes:
3/6/12 PSB - Appliant in this AM and paid extention fee. Final Map approval and conditions now extended for 1 year to April 27, 2013.
X-Coordinate:
Y-Coordinate:
IVR Confirmation Number
Edit
Sign Off
OK
Help
start

County of San Mateo
Planning & Building Department
455 County Center, 2nd Floor
Redwood City, California 94063
650/363-4161 Fax: 650/363-4849
Mail Drop PLN122
plngbldg@co.sanmateo.ca.us
www.co.sanmateo.ca.us/planning

Payment Receipt

Check Number # :1117

Receipt # : 00000000000000058091

Name : JACK CHAMBERLAIN
Address : SAN MATEO HIGHLANDS

Parcel#: 041101290

Case # Number	Account Number	Description	Date Paid	Amount Due	Amount Paid
PLN2006-00357	38430-1262	Permit Extension Fee	3/6/2012	881.00	881.00
	16111-2093	5% Legal Counsel Surcharge Fee	3/6/2012	44.05	44.05
	38100-2215	4% IT Surcharge	3/6/2012	35.24	35.24
	38320-2113	General Plan Update Surcharge	3/6/2012	40.00	40.00
			Total Paid:		**$1,000.29**

Pete Bentley - Re: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357

From: Pete Bentley
To: cpalter@stanford.edu
Subject: Re: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357
CC: Jim Eggemeyer

Catherine:

As you can see from below, John has returned but only intermittently till mid-April.
Jim and I have met and discussed John's return, our need to meet with him, and the "conservation easement". As Jim has previously stated, Planning will not authorize the recording of the Parcel Map for Lots 1-4 on Bunker Hill until we have discussed the processing of the "conservation easement" with John.

Pete

>>> "John Nibbelin" <jnibbelin@co.sanmateo.ca.us> 3/6/2012 10:40 AM >>>
I'll be in the office starting tomorrow for the next week and a half, and then in and out intermittently through the first couple weeks of April. This matter is towards the top of my list of things to address. Cordially,

Joh

Sent from my iPad

On Mar 6, 2012, at 11:37 AM, "Palter, Catherine" <cpalter@stanford.edu> wrote:

Pete and Jim:

Please let us know the status of the planning office evaluation of the proposed subdivision and confirm that it will wait until we can talk to John Nibbelin about the required conservation easement when he returns to the office. What is John's schedule for returning?

Thank you,

Catherine

From: Palter, Catherine
Sent: Tuesday, February 21, 2012 8:08 AM
To: 'pbentley@smcgov.org'
Cc: Jim Eggemeyer (JEggemeyer@co.sanmateo.ca.us); John Nibbelin (jnibbelin@co.sanmateo.ca.us); Tim Fox (tfox@co.sanmateo.ca.us); Lennie Roberts (lennie@darwin.ptvy.ca.us); Sam Naifeh (samnaifeh@sbcglobal.net); Cary Wiest (wiestandassoc@sbcglobal.net); Alan Palter (Alan.Palter@Varian.com)
Subject: FW: Re: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357

Pete:

In order for Public Works to approve the application for the parcel map for lots 1-4, the Planning Office must verify that the proposed parcel map is in compliance with the project Conditions of Approval AND the zoning requirements. This parcel is zoned RM and must comply with the RM requirements, including Section 6317A of Chapter 20 requiring a conservation easement at the time of land division. An

amendment of this Section of the zoning ordinance was initiated by Mark Church and approved by the Board of Supervisors to make sure that the conservation easement requirement was applied to RM parcels county-wide, rather than just on the coastal part of the County. This project is a perfect example of the Supervisors concern when they recently approved this zoning ordinance change.

http://www.co.sanmateo.ca.us/Attachments/planning/PDFs/Regulations/Jker1086_wfr.pdf

Planning cannot give its approval for the parcel map recordation until the application complies with the RM zoning Section 6317A and Condition of Approval 11. I have spoken with Jim Eggemeyer, who indicated that County Planning consideration of this issue will wait until John Nibbelin returns to the office next month. Jim also confirmed that the parcel map would not be approved by Planning until those discussions could be held with County Counsel's office (and that the parcel map cannot be issued by Public Works without Planning Office approval).

I have attached the last version of the Conservation Easement (with tracked changes) that we have, which was approved at the April 27, 2010 Board of Supervisors hearing. At that hearing, Mike Murphy indicated that there were just a few typographical errors to correct, so his office has the final version that is to be used for Lot 12.

Please confirm that Planning will not approve the recording of Lots 1-4 prior to resolution of this issue with John Nibbelin.

Thank you,
Catherine

--- On **Thu, 2/16/12, Pete Bentley** ***<pbentley@smcgov.org>*** wrote:

From: Pete Bentley <pbentley@smcgov.org>
Subject: Re: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357
To: "Sam Naifeh" <samnaifeh@sbcglobal.net>
Date: Thursday, February 16, 2012, 11:49 AM

Sam:

Per your request, I have attached a copy of the Planning "conditions of approval" applicable to the recording of the Parcel Map for lots 1-4. All of those referenced are in the process of being met and I would expect confirmation sometime next week.

In house discussions continue with County Counsel regarding the recording of the conservation easement.

I'm sure you are aware that there are over 70 conditions of approval and/or recommendations attached to the project approval. Many of these are applicable "prior to" issuance of the Grading Permits, "prior to" issuance of the Building Permits, etc.

I remind you that you need to contact Public Works on the status of their approval of their conditions applicable to recording of the Parcel Map.

Pete

<image001.gif>

>>> "Sam Naifeh" <samnaifeh@sbcglobal.net> 2/10/2012 12:41 PM >>>

Dear Pete

Per your suggestion here, please send two copies of the proposed Parcel Map for lots 1-4 in the mail.

Also please send electronically your evaluation materials and correspondence showing or referring to the basis to confirm that all applicable "conditions of approval" relative to the parcels (lots 1-4, in this case) shown on the map have been met.

Thank you

Sam

--- On **Thu, 2/9/12, Pete Bentley *<pbentley@smcgov.org>*** wrote:

From: Pete Bentley <pbentley@smcgov.org>
Subject: Re: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357
To: "Sam Naifeh" <samnaifeh@sbcglobal.net>
Date: Thursday, February 9, 2012, 9:54 AM

Sam:

You are right. I don't understand your comment on the adequacy of the scan of the Parcel Map. Either the scan you received was clear and readable or not. If it wasn't, I can put a copy of the proposed Parcel Map for lots 1-4 in the mail to you.

Again, I repeat that whatever associated correspondence that came with the Parcel Map submittal is not provided to Planning. We have "no" involvement in the Map checking process. We only confirm that all applicable "conditions of approval" relative to the parcels (lots 1-4, in this case) shown on the map have been met.

I have contacted Public Works Map Checking, by phone, as you requested and let them know you would be requesting additional information from the parcel map checking submittal. Your contact people by email are Cris Vandrey (LLS) and/or Lilia Latman. Cris' email is: cvandrey@co.sanmateo.ca.us and Lilia's is llatman@co.sanmateo.ca.us.

Pete

<image001.gif>

>>> "Sam Naifeh" <samnaifeh@sbcglobal.net> 2/8/2012 9:29 AM >>>

Dear Pete

Looks like you misunderstood my note below.

To clarify what is noted in my email, I cannot answer your question on the adequacy of the scan of the "Parcel Map" without the associated correspondence which you say is in the hands of Public Works.

You state that you do not have the 'Parcel Map and all associated correspondence (submitted) "directly" to the Public Works Map Checking Section.'

Please forward my request to the contact person in Public Works who is responsible for PLN2006-00357 and copy me on the email forwarded so that I am able to follow up appropriately.

Thank you

Sam

--- On **Wed, 2/8/12, Pete Bentley<pbentley@smcgov.org>** ***<pbentley@smcgov.org>*** wrote:

From: Pete Bentley<pbentley@smcgov.org> <pbentley@smcgov.org>
Subject: Re: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357
To: "Sam Naifeh" <samnaifeh@sbcglobal.net>
Cc: "Jim Eggemeyer" <JEggemeyer@smcgov.org>
Date: Wednesday, February 8, 2012, 7:56 AM

Sam:

I'm glad the Parcel map scan was adequate. I have checked the recent email communications and I can't find any wherein I asked you a question. I did ask Catherine a question on her identifying a Zoning Regulation that I couldn't locate. Catherine has answered that question.

As I stated in my Jan. 26, 2012 email to you, the Chamberlain Group submitted the Parcel Map and all associated correspondence "directly" to the Public Works Map Checking Section. Planning does not receive any documents until the Parcel map is ready to record. They do all the necessary review and, if necessary, request additional information relative to the eventual recording of the map. I have no idea of what "correspondence" is included in this submittal process. You would need to contact them directly to review documents associated with this Parcel Map.

Pete

<image001.gif>

>>> "Sam Naifeh" <samnaifeh@sbcglobal.net> 2/7/2012 8:35 PM >>>

Dear Pete

Thank you for sending a scan of the "Parcel Map" In order to respond to your question, we need scans of the applicant's correspondence that accompanied the map. You mentioned that you were checking out compliance with the conditions of approval. Please send the scan of the VTM for PLN2006-00357.

Sam

Pete Bentley - Re: Record Request for File No. PLN2006-00357

From: Jim Eggemeyer
To: Brian Wong; Diana Shu
Date: 3/7/2012 3:25 PM
Subject: Re: Record Request for File No. PLN2006-00357
CC: John Nibbelin; Pete Bentley

Everyone needs to check in with Pete B. please, so as not to be duplicating efforts and that everyone is on the same page.

Thanks.
jke

Save Paper. Think Before You Print.

>>> Brian Wong 3/7/2012 3:12 PM >>>
Jim and Diana,

I spoke to John Nibbelin today (he's back now) and he will be looking at Mr. Naifeh's request.

John, deadline to respond to this as a PRA request is this coming Monday, March 12.

Brian

Brian J. Wong
Deputy County Counsel
San Mateo County Counsel
Tel: 650-363-1960
Fax: 650-363-4034
bwong@smcgov.org

Please note that as of October 3, 2011, my email address has changed from bwong@co.sanmateo.ca.us to bwong@smcgov.org.

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>>> Diana Shu 3/7/2012 2:49 PM >>>
Hi Jim

I do not know who Sam Naifeh is but

I have the following documents regarding their request:
Item 1) I am still working on the agreement ...waiting on a final sewer plan for the upgrades they require
Item 2) I have a hard copy which they can review or I can drop off at the counter for them to review there.
Item 3) I have a hard copy which they can review or I can drop off at the counter for them to review there.
Item 4) I do not have a copy...maybe Jay has it.

I am reluctant to release any draft agreements, just on Principle, unless you are ok with it in this case.
How do you want me to handle this request?

Thanks
Diana

Diana Shu
dshu@smcgov.org
650-599-1414

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>>> "Sam Naifeh" <samnaifeh@sbcglobal.net> 3/1/2012 3:19 PM >>>
Dear Ms. Shu

We appreciate the information you sent on the status of the subdivision agreement.

We request four records:

1. Current draft of the subdivision agreement (final draft not yet completed; so current draft will work)
2. Portable document format (pdf) copies of; 1) the proposed Storm Water Treatment Measures and Maintenance agreements, including exhibits A, B and C, between the Developer and San Mateo County For Lots I through 4; and 2) a copy of the proposed Off-site Improvements plans for Bunkerhill Drive associated with Lots 1 through 4. (These were sent to you as pdf attachments)
3. Engineers Opinion of Probable Construction Cost for the Street Improvements at Highland Estates Lots 1-4, Bunker Hill Drive, San Mateo County, California dated September 7, 2011"
4. Geotechnical Report prepared by Cornerstone Earth Group dated July 22,2011 Design-Level Geotechnical Investigation, Highland Estates Lots 1 through 4, Bunker Hill Drive, San Mateo County, California

Mr. Chris Vandrey previously referred our request for record items 3 and 4 on the above records list to you.

Thanks very much.
Sam Naifeh

--- On **Wed, 2/29/12, Diana Shu <*dshu@smcgov.org*>** wrote:

> From: Diana Shu <dshu@smcgov.org>
> Subject: Re: Subdivision Agreement for File No. PLN2006-00357
> To: "Sam Naifeh" <samnaifeh@sbcglobal.net>
> Cc: "Alan Palter" <alan.palter@varian.com>, "Cary Wiest" <wiestandassoc@sbcglobal.net>, "Catherine Palter" <cpalter@stanford.edu>, "Jim Eggemeyer" <JEggemeyer@smcgov.org>
> Date: Wednesday, February 29, 2012, 6:09 PM
>
> Hi Mr. Naifeh

Thank you for your request. However, we are still working out the details on the subdivision agreement. So I do not have a final document for you at this time.

For your information, the agreement is primarily to ensure the county that the subdivider will make the necessary public improvements required by this project. The agreement requires the subdivider to bond for certain improvements such as sewer, stormwater drainage, sidewalks, etc.

I believe copies of the latest building plans are available at the 455 County Center 2nd Flr. I do not have any electronic copies at this time.

If you have any questions, please let me know.
Diana

Diana Shu
dshu@smcgov.org
650-599-1414

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>>> "Sam Naifeh" <samnaifeh@sbcglobal.net> 2/28/2012 9:27 AM >>>
TO: Diana Shu

FROM: Sam Naifeh

We understand that you are working on a subdivision agreement with the developer's representatives.

A. Please confirm whether and when the subdivision agreement is recorded.

B. We have two record requests:

1. Please send, preferably in digital form, a copy of the current draft of that agreement and related correspondence
2. Please forward PDF copies of; 1) the proposed Storm Water Treatment Measures and Maintenance agreements, including exhibits A, B and C, between the Developer and San Mateo County For Lots I through 4; and 2) a copy of the proposed Off-site Improvements plans for Bunkerhill Drive associated with Lots 1 through 4.

Thanks very much

Pete Bentley - Re: Bunker Hill

From: Pete Bentley
To: Diana Shu
Subject: Re: Bunker Hill

Diana:

I understand most of what you've said below.
I assume the "report" and "spread sheet" you reference is that "draft" Street Improvement binder you left on my desk??? What "counter" did you leave it on for Sam to look at and when did you leave it there??? What "draft agreement" are you talking about that Tim Fox is aware of ???. What "agreement on the open space" are you referring to ???. Do you mean the "conservation easement" ???.

Pete

>>> Diana Shu 3/14/2012 11:13 AM >>>
Hi Pete

In response to your question regarding the report.
I left a copy of the report and spreadsheet for Sam to review at the counter.
I do not have a copy to share with him.

I have not contacted him as Jim E suggested that all questions for Bunkerhill be directed to you to coordinate. So that we do not have a duplication of efforts.

Tim Fox is ok that I am not sharing a draft of an agreement that the applicant has not yet seen. But I don't think they are looking for this agreement anyway. I believe they are actually looking for the agreement on the open space which I do not have.

If this was a Public Records Request, then it should have been so stated, but any case, we have already responded to him within the 10 day window, so he should be ok to come in to review the documents anytime after that.

Thanks
Diana

Diana Shu
dshu@smcgov.org
650-599-1414

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Pete Bentley - Re: Bunker Hill

From: Diana Shu
To: Pete Bentley
Date: 3/14/2012 12:06 PM
Subject: Re: Bunker Hill

Pete
I think we chatted about this last week.

Sam had 4 items on his list:

The report and spreadsheet is the draft binder on your desk. items 2 and 3
The draft agreement was what Sam wanted to see but I do not have to give him. item 1
The Geotech report I do not have. item 4

Diana

Diana Shu
dshu@smcgov.org
650-599-1414

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>>> Pete Bentley 3/14/2012 11:55 AM >>>

Diana:

I understand most of what you've said below.
I assume the "report" and "spread sheet" you reference is that "draft" Street Improvement binder you left on my desk??? What "counter" did you leave it on for Sam to look at and when did you leave it there??? What "draft agreement" are you talking about that Tim Fox is aware of ???. What "agreement on the open space" are you referring to ???. Do you mean the "conservation easement" ???.

Pete

Save Paper. Think Before You Print.

>>> Diana Shu 3/14/2012 11:13 AM >>>
Hi Pete

In response to your question regarding the report.

I left a copy of the report and spreadsheet for Sam to review at the counter.
I do not have a copy to share with him.

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If this was a Public Records Request, then it should have been so stated, but any case, we have already responded to him within the 10 day window, so he should be ok to come in to review the documents anytime after that.

Thanks
Diana

Diana Shu
dshu@smcgov.org
650-599-1414

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From: Camille Leung
To: Pete Bentley
CC: Dave Holbrook; Jim Eggemeyer
Date: 3/15/2012 10:52 AM
Subject: Re: Chamberlain Mitigation Monitoring

Dave,

For Chamberlain project, disturbance for Lots 1-4 (these are the only lots being developed at this time) is less than 1 acre (38,627 sq. ft). So no State Construction General Permit requirements apply. Unlike Edgewood Project, no Qualified Stomwater Practitioner (QSP) certification is required for the consultant. Main issues for Chamberlain monitoring is BIO and general erosion. Great if we can find a firm that does both.

I can review RFP for Edgewood and make some changes. Can you email me final template for Edgewood?

Thanks

Camille M. Leung
Planning and Building Department
455 County Center, Second Floor
Redwood City, CA 94063
Phone: (650) 363-1826
Fax: (650) 363-4849

Please help us to serve you better and take a moment to complete our survey, just click on the link below:
http://www.co.sanmateo.ca.us/planning/survey

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Save Paper.
Think before you print.>>> Pete Bentley 3/15/2012 9:57 AM >>>

Camille:

I just talked to Dave H. regarding the need and process necessary to bring someone on board to handle the "Mitigation Monitoring" and "Reporting Program" (MMRP) required by "Condition #4" and the Final EIR for Chamberlain's 4 lots on Bunker Hill. Condition #4 requires a "contact" be entered into "prior to the issuance of any grading permit "hard card" for the project.

Dave said an RFP need be prepared and sent out to potential applicant's. As you are the Planner for this part of the project, Dave suggests starting this process at this time, as apparently it is not an overnight hiring.

Dave is currently preparing an RFP for the "Edgewood Canyon" project recently approved by the Planning Commission. You probably should talk to him as to what's involved in preparing the RFP and who they should be sent to.

Chamberlain has indicated to me a desire to start grading in June.

Pete

Camille –
What do you think of this?
Dave

March 21, 2012

«Name»
«Address»
«City»

Dear Sir or Madam:

SUBJECT: Request for Proposals – Implementation of "Edgewood Canyon Estates" EIR Project Mitigation Monitoring Program

The San Mateo County Current Planning Section is soliciting proposals to oversee and ensure compliance with a Mitigation Monitoring Program in conjunction with the recently certified Supplemental Environmental Impact Report (SEIR) for the "Edgewood Canyon Estates" Subdivision Map Amendment, which included a reduction of parcels in the final map from six to two and associated grading at a site located off Edgewood Road, east of Interstate 280 in the Palomar Park area of unincorporated San Mateo County (Attachment A). The applicant/owner is Edgewood Canyon Partners, LLC.

A. BACKGROUND

On January 25, 2012, the Planning Commission (PC) approved an amendment to a previously approved and recorded (but never improved or developed) six-lot subdivision. The approval amended the original subdivision's Final Map for a previously approved and recorded six-lot residential subdivision into a two-lot residential subdivision of one 7,176-acre lot and one 5,713-acre lot. The amendment also allowed an increase in associated grading from 19,000 cubic yards of earthwork to 75,565 cubic yards of grading (consisting of predominantly fill for site leveling, roads and additional site preparation (Attachment B). The revised project required a SEIR to address the project's revised elements and impacts, primarily due to the increased grading amounts. The PC's project approval included Condition No. 12 (See attached decision letter, Attachment C) that stated:

The applicant shall enter into a contract with the San Mateo County Planning and Building Department for all mitigation monitoring for this project. The fee shall be staff's cost, plus 10 percent required in the Current Planning Service Fee Schedule. Planning staff may, at their discretion, contract these services to an independent contractor at cost, plus an additional 10 percent for contract administration.

County staff has opted to contract out to an independent contractor for the above-cited mitigation monitoring services as stated.

1. Project Site Location and Setting

The project site is located east of Interstate 280 and west of Alameda de las Pulgas (off Edgewood Road) in the unincorporated Palomar Park area of San Mateo County. The property is a flat-bottomed canyon, open to the south and surrounded by steep slopes on the west, north, and east that generally range in slope from 20% to 50% (with some portions exceeding 50%). The steeper portions of the site have not previously been developed and are mostly covered with native oak woodland. The project site is surrounded by low-density residential development. An unpaved road leads into the site from Edgewood Road, crossing the Hetch-Hetchy right-of-way on property owned by the City and County of San Francisco.

The project site has a General Plan Designation of Medium Low-Density Residential (2.4-6.0 dwelling units/acre) and is zoned R-1/S-101/DR (Single-Family Residential/ Palomar Park/Design Review).

B. SERVICES TO BE PROVIDED

The consultant shall review and ensure implementation of the mitigation measures stipulated in the SEIR's Mitigation Monitoring Program Procedures (Attachment D), to the satisfaction of the Community Development Director. These mitigation measures also appear as Conditions 16 through 96 of the Planning Commission's February 24, 2012 decision letter, with the exception that Conditions 27, 29 and 30 may be excised out since they pertain to the future development of the two lots with residences and associated septic drainfields and drainage specifically relative to such development, which is not a relevant task under the Mitigation Monitoring Program. The consultant shall coordinate, as necessary, with the applicant, owner, project contractors and/or Planning staff to track the progress and completion of all such measures. Beyond that as stipulated in the SEIR Mitigation Monitoring Program Procedures, the consultant shall provide, in writing, a letter indicating when all mitigation measures have been completed. With regard to monitoring the applicant's compliance with and implementation of the State approved Stormwater Pollution Prevention Program (SWPPP), the consultant shall be expected to visit the site at least once a week for the duration of all grading and construction activities associated with this project.

C. CONTRACTOR QUALIFICATIONS/CONTRACT REQUIREMENTS

1. Contractor Qualifications

Qualified firms must have knowledge of CEQA, experience in implementation of a mitigation monitoring program (be it associated with a certified Negative Declaration

or EIR), must be licensed by the California Stormwater Quality Association as a Qualified SWPPP Practitioner, and shall be (or have on staff) a licensed biologist.

2. **Contract Requirements**

Consultants should be aware that a contract for services resulting from their proposal will include all provisions contained in Attachment E. The consultant must indicate in its proposal whether it will agree to these terms, or if not, the consultant must provide an explanation and proposed alternative language.

D. REQUIRED PROPOSAL DOCUMENTATION

The proposal shall include:

1. Firm qualifications, including environmental documents prepared for projects in San Mateo County and experience and references for work on similar projects in Northern California.

2. Documentation from the proposer's insurance carrier confirming that the proposer has the following coverage:

• General Liability Insurance	$1,000,000
• Professional Liability Insurance	$1,000,000
• Motor Vehicle Liability Insurance	$1,000,000
• Workers' Compensation	Statutory Coverage

3. List of specific staff to be assigned and their backgrounds.

4. References from similar work.

5. Scope of work.

6. Completion of Equal Benefits Compliance Declaration Form (see Attachment F).

7. Total estimated cost for implementation of the Mitigation Monitoring Program, including a schedule of hourly billing rates.

E. PROCEDURES FOR SUBMITTING PROPOSALS

1. Notice of Request for Proposals (RFP) will be published and sent to firms who have expressed an interest in providing environmental review services.

2. All questions regarding the Request for Proposals shall be addressed to David Holbrook, Senior Planner, by U. S. Mail, phone, fax or e-mail. The mailing address is 455 County Center, Second Floor, Redwood City, CA 94063. Mr. Holbrook can be reached by phone at 650/363-1837 or by fax at 650/363-4849. Questions submitted by e-mail can be sent to dholbrook@smcgov.org.

3. The proposer shall submit in a sealed envelope one (1) original and three (3) complete copies of the proposal addressed to David Holbrook, Senior Planner, 455 County Center, Second Floor, Redwood City, CA 94063.

4. Proposals must be typed and double-spaced. Each package must begin with a complete table of contents showing page numbers, and all pages in the package shall be numbered consecutively.

5. All costs of proposal preparation shall be borne by the proposer.

6. Sealed proposals must be received no later than 5:00 p.m. on March 26, 2012, at Planning and Building Department, 455 County Center, Second Floor, Redwood City, CA 94063.

7. All responses to this Request for Proposals become the property of the County of San Mateo, Planning and Building Department. Government Code Sections 6250 et seq., the "Public Record Act" define public records as any writing containing information relating to the conduct of the public business. The Public Record Act provides that public records shall be disclosed upon written request, and that any citizen has a right to inspect any public record, unless the document is exempted from the disclosure.

   The County of San Mateo cannot represent or guarantee that any information submitted in response to the Request for Proposals will be confidential. If the County receives a request for any document submitted in response to a Request for Proposals, it will not assert any privileges that may exist on behalf of the person or business submitting the proposal. It is the responsibility of the person or business entity submitting the proposal to assert any applicable privileges or reasons why the document should not be produced.

8. Failure to comply with any and all parts of this Request for Proposals may be cause for the proposal being eliminated from consideration.

9. The County reserves the right to reject all proposals and not to award any contract pursuant to this RFP.

F. SELECTION CRITERIA AND TIMELINE

1. Selection Criteria

The selection criteria will include in part: (1) experience of the firm and specific staff assigned to complete the work, including description of experience with similar projects; (2) references from similar projects; (3) consultant's proposed methodology, work plan and timeline to complete the scope of work; (4) proposed cost to complete the work; (5) demonstration of ability to complete the scope of work within the proposed timeline; and (6) level of expertise or special qualifications to support the specific project. When the combination of price, quality and terms and conditions are substantially equal, the County shall give preference to local firms.

2. Timeline for RFP/Process

County Issues Request for Proposals	March 21, 2012
Proposals Due – 5:00 p.m.	April 4, 2012
Notification to Firms Selected for Interview	April 13, 2012
Interviews	April 16-20, 2012
Notification to Top Proposer	April 25, 2012
Complete Negotiations with Top Proposer	April 30, 2012
Consulting Work Begins (Approximate date)	May 7-11, 2012

G. PROCEDURES FOR EVALUATING AND SELECTING PROPOSALS

1. The Planning and Building Department shall, upon receipt of proposals, review all proposals to determine whether they are responsive and responsible.

2. All proposals submitted late, or which do not meet the requirements of the Request for Proposals, may not be considered.

3. All proposals received will be evaluated by an RFP review committee comprised of Current Planning Section representatives to ensure that the approach, interpretations and alternatives comply with the requirements of this RFP.

4. A short list of consultants will be invited to attend interviews, tentatively scheduled for the week of April 16-20, or shortly thereafter. Based on the interviews, evaluations of the RFP review committee, review of submittals and reference checks, the Community Development Director will select a recommended consultant. The recommendation will be subject to negotiation of a final contract acceptable to the County. The Community Development Director will notify all applicants if they have been selected or not.

5. In the event that an applicant wishes to appeal the recommendation of the Community Development Director, the applicant will have five (5) calendar days from the date of the County's letter of rejection to submit a written appeal, addressed directly to Acting County Manager John Maltbie at 400 County Center, Redwood City, CA 94063. The written appeal should specifically address any perceived irregularities in the process and/or the Community Development Director's recommendation, and provide concrete examples of same. The Community Development Director will have the opportunity to review the written appeal, and to present to the County Manager the reason for his recommendation. The decision of the County Manager is final, as to whether reconsideration of a firm's proposal is warranted.

6. Upon conclusion of the appeal period or any appeal process, the recommended consultant and a proposed contract will be submitted to the County Board of Supervisors for its consideration and approval. The Board of Supervisors may, at its sole discretion, approve, disapprove, or request a modification to the proposed agreement.

Thank you for your time and interest in this RFP. If you have further questions, please contact Dave Holbrook, Project Planner, at dholbrook@smcgov.org or 650/363-1837.

Sincerely,

Jim Eggemeyer
Community Development Director

JE:DH:pac – DJHW0159_WPN.DOCX

Attachments:
A. Location/Vicinity Map
B. Project Plans
C. Planning Commission Decision Letter, dated February 24, 2012
D. Mitigation Monitoring Program Procedures; Excerpt from SEIR
E. Sample Contract (Up to $100,000)
F. Equal Benefits Forms

SAN MATEO
LAFCo
LOCAL AGENCY FORMATION COMMISSION
455 COUNTY CENTER, 2ND FLOOR • REDWOOD CITY, CA 94063-1663 • PHONE (650) 363-4224 • FAX (650) 363-4849

March 22, 2012

Jack T. Chamberlain
Tinconderoga Partners LLC
655 Skyway, #230
San Carlos, CA 94070

Subject: LAFCo File No. 11-07—Minor Sphere Amendment and Annexation of a portion of APN 041-101-290 Known as Proposed Lots 1-4 of the Ticonderoga LLC/Chamberlain Group to County Service Area 1.

Dear Mr. Chamberlain;

At yesterday's LAFCo hearing the Commission approved the above noted annexation, conditioned upon a recorded parcel map and submittal of a map and legal description that meet the requirements of the State Board of Equalization. LAFCo must wait 30 days to record the annexation and can't do so until these conditions are met. Annexation is not complete until I record the Certificate of Completion, Commission resolution and the map and legal description. Once recorded, I will forward copies to you and the County of San Mateo Planning and Building Department.

Sincerely,

Martha Poyatos
Executive Officer

C: Pete Bentley, SMC Planning & Building
Peggy Jensen, Deputy County Manager

From: Camille Leung
To: jtuttlec@aol.com
CC: Pete Bentley
Date: 3/26/2012 5:23 PM
Subject: Lots 1-4

Hi Jack,

When are Building plans going to be submitted? Is start of grading still estimated for June? I will need to prepare an RFP for monitoring and will need to know when exactly to start hiring a consultant.

Thanks!

Camille M. Leung
Planning and Building Department
455 County Center, Second Floor
Redwood City, CA 94063
Phone: (650) 363-1826
Fax: (650) 363-4849

Please help us to serve you better and take a moment to complete our survey, just click on the link below:
http://www.co.sanmateo.ca.us/planning/survey

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Save Paper.
Think before you print.

From: John Nibbelin
To: Catherine Palter
CC: Alan Palter (Alan.Palter@Varian.com); Cary Wiest (wiestandassoc@sbcglob...
Date: 4/3/2012 4:20 PM
Subject: RE: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357

Catherine,

I'm back in and am now looking at this. Will be in touch soon. Best regards,

John

John D. Nibbelin
Chief Deputy County Counsel
Telephone: 650-363-4757
jnibbelin@co.sanmateo.ca.us

Save Paper.
Think before you print.

>>> "Palter, Catherine" <cpalter@stanford.edu> 3/29/2012 9:21 PM >>>
Hi John:
I just wanted to check in to see if you've had time to turn to this matter.
Thank you,
Catherine

From: John Nibbelin [mailto:jnibbelin@co.sanmateo.ca.us]
Sent: Tuesday, March 06, 2012 10:40 AM
To: Palter, Catherine
Cc: pbentley@smcgov.org; Jim Eggemeyer (JEggemeyer@co.sanmateo.ca.us); Tim Fox (tfox@co.sanmateo.ca.us); Lennie Roberts (lennie@darwin.ptvy.ca.us); Sam Naifeh (samnaifeh@sbcglobal.net); Cary Wiest (wiestandassoc@sbcglobal.net); Alan Palter (Alan.Palter@Varian.com)
Subject: Re: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357

I'll be in the office starting tomorrow for the next week and a half, and then in and out intermittently through the first couple weeks of April. This matter is towards the top of my list of things to address.
Cordially,

Joh

Sent from my iPad

On Mar 6, 2012, at 11:37 AM, "Palter, Catherine" <cpalter@stanford.edu<mailto:cpalter@stanford.edu>> wrote:
Pete and Jim:
Please let us know the status of the planning office evaluation of the proposed subdivision and confirm that it will wait until we can talk to John Nibbelin about the required conservation easement when he returns to the office. What is John's schedule for returning?
Thank you,
Catherine

From: Palter, Catherine
Sent: Tuesday, February 21, 2012 8:08 AM
To: 'pbentley@smcgov.org<mailto:pbentley@smcgov.org>'
Cc: Jim Eggemeyer (JEggemeyer@co.sanmateo.ca.us<mailto:JEggemeyer@co.sanmateo.ca.us>); John Nibbelin (jnibbelin@co.sanmateo.ca.us<mailto:jnibbelin@co.sanmateo.ca.us>); Tim Fox (tfox@co.sanmateo.ca.us<mailto:tfox@co.sanmateo.ca.us>); Lennie Roberts (lennie@darwin.ptvy.ca.us<mailto:lennie@darwin.ptvy.ca.us>); Sam Naifeh (samnaifeh@sbcglobal.net<mailto:samnaifeh@sbcglobal.net>); Cary Wiest (wiestandassoc@sbcglobal.net<mailto:wiestandassoc@sbcglobal.net>); Alan Palter (Alan.Palter@Varian.com<mailto:Alan.Palter@Varian.com>)
Subject: FW: Re: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357

Pete:
In order for Public Works to approve the application for the parcel map for lots 1-4, the Planning Office must verify that the proposed parcel map is in compliance with the project Conditions of Approval AND the zoning requirements. This parcel is zoned RM and must comply with the RM requirements, including Section 6317A of Chapter 20 requiring a conservation easement at the time of land division. An amendment of this Section of the zoning ordinance was initiated by Mark Church and approved by the Board of Supervisors to make sure that the conservation easement requirement was applied to RM parcels county-wide, rather than just on the coastal part of the County. This project is a perfect example of the Supervisors concern when they recently approved this zoning ordinance change.

http://www.co.sanmateo.ca.us/Attachments/planning/PDFs/Regulations/Jker1086_wfr.pdf

Planning cannot give its approval for the parcel map recordation until the application complies with the RM zoning Section 6317A and Condition of Approval 11. I have spoken with Jim Eggemeyer, who indicated that County Planning consideration of this issue will wait until John Nibbelin returns to the office next month. Jim also confirmed that the parcel map would not be approved by Planning until those discussions could be held with County Counsel's office (and that the parcel map cannot be issued by Public Works without Planning Office approval).

I have attached the last version of the Conservation Easement (with tracked changes) that we have, which was approved at the April 27, 2010 Board of Supervisors hearing. At that hearing, Mike Murphy indicated that there were just a few typographical errors to correct, so his office has the final version that is to be used for Lot 12.

Please confirm that Planning will not approve the recording of Lots 1-4 prior to resolution of this issue with John Nibbelin.

Thank you,
Catherine

--- On Thu, 2/16/12, Pete Bentley <pbentley@smcgov.org<mailto:pbentley@smcgov.org>> wrote:

From: Pete Bentley <pbentley@smcgov.org<mailto:pbentley@smcgov.org>>
Subject: Re: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357
To: "Sam Naifeh" <samnaifeh@sbcglobal.net<mailto:samnaifeh@sbcglobal.net>>
Date: Thursday, February 16, 2012, 11:49 AM

Sam:

Per your request, I have attached a copy of the Planning "conditions of approval" applicable to the recording of the Parcel Map for lots 1-4. All of those referenced are in the process of being met and I would expect confirmation sometime next week.

In house discussions continue with County Counsel regarding the recording of the conservation easement.

I'm sure you are aware that there are over 70 conditions of approval and/or recommendations attached to the project approval. Many of these are applicable "prior to" issuance of the Grading Permits, "prior to" issuance of the Building Permits, etc.

I remind you that you need to contact Public Works on the status of their approval of their conditions applicable to recording of the Parcel Map.

Pete

<image001.gif>

>>> "Sam Naifeh" <samnaifeh@sbcglobal.net<mailto:samnaifeh@sbcglobal.net>> 2/10/2012 12:41 PM >>>
Dear Pete

Per your suggestion here, please send two copies of the proposed Parcel Map for lots 1-4 in the mail.

Also please send electronically your evaluation materials and correspondence showing or referring to the basis to confirm that all applicable "conditions of approval" relative to the parcels (lots 1-4, in this case) shown on the map have been met.

Thank you
Sam

--- On Thu, 2/9/12, Pete Bentley <pbentley@smcgov.org<mailto:pbentley@smcgov.org>> wrote:

From: Pete Bentley <pbentley@smcgov.org<mailto:pbentley@smcgov.org>>
Subject: Re: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357
To: "Sam Naifeh" <samnaifeh@sbcglobal.net<mailto:samnaifeh@sbcglobal.net>>
Date: Thursday, February 9, 2012, 9:54 AM

Sam:

You are right. I don't understand your comment on the adequacy of the scan of the Parcel Map. Either the scan you received was clear and readable or not. If it wasn't, I can put a copy of the proposed Parcel Map for lots 1-4 in the mail to you.

Again, I repeat that whatever associated correspondence that came with the Parcel Map submittal is not provided to Planning. We have "no" involvement in the Map checking process. We only confirm that all applicable "conditions of approval" relative to the parcels (lots 1-4, in this case) shown on the map have been met.

I have contacted Public Works Map Checking, by phone, as you requested and let them know you would be requesting additional information from the parcel map checking submittal. Your contact people by email are Cris Vandrey (LLS) and/or Lilia Latman. Cris' email is:

cvandrey@co.sanmateo.ca.us<mailto:cvandrey@co.sanmateo.ca.us> and Lilia's is llatman@co.sanmateo.ca.us<mailto:llatman@co.sanmateo.ca.us>.

Pete

<image001.gif>

>>> "Sam Naifeh" <samnaifeh@sbcglobal.net<mailto:samnaifeh@sbcglobal.net>> 2/8/2012 9:29 AM >>>
Dear Pete

Looks like you misunderstood my note below.

To clarify what is noted in my email, I cannot answer your question on the adequacy of the scan of the "Parcel Map" without the associated correspondence which you say is in the hands of Public Works.

You state that you do not have the 'Parcel Map and all associated correspondence (submitted) "directly" to the Public Works Map Checking Section.'

Please forward my request to the contact person in Public Works who is responsible for PLN2006-00357 and copy me on the email forwarded so that I am able to follow up appropriately.

Thank you
Sam

--- On Wed, 2/8/12, Pete Bentley<pbentley@smcgov.org<mailto:pbentley@smcgov.org>>
<pbentley@smcgov.org<mailto:pbentley@smcgov.org>> wrote:

From: Pete Bentley<pbentley@smcgov.org<mailto:pbentley@smcgov.org>>
<pbentley@smcgov.org<mailto:pbentley@smcgov.org>>
Subject: Re: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357
To: "Sam Naifeh" <samnaifeh@sbcglobal.net<mailto:samnaifeh@sbcglobal.net>>
Cc: "Jim Eggemeyer" <JEggemeyer@smcgov.org<mailto:JEggemeyer@smcgov.org>>
Date: Wednesday, February 8, 2012, 7:56 AM

Sam:

I'm glad the Parcel map scan was adequate. I have checked the recent email communications and I can't find any wherein I asked you a question. I did ask Catherine a question on her identifying a Zoning Regulation that I couldn't locate. Catherine has answered that question.

As I stated in my Jan. 26, 2012 email to you, the Chamberlain Group submitted the Parcel Map and all associated correspondence "directly" to the Public Works Map Checking Section. Planning does not receive any documents until the Parcel map is ready to record. They do all the necessary review and, if necessary, request additional information relative to the eventual recording of the map. I have no idea of what "correspondence" is included in this submittal process. You would need to contact them directly to review documents associated with this Parcel Map.

Pete

<image001.gif>

>>> "Sam Naifeh" <samnaifeh@sbcglobal.net<mailto:samnaifeh@sbcglobal.net>> 2/7/2012 8:35 PM >>>

Dear Pete

Thank you for sending a scan of the "Parcel Map" In order to respond to your question, we need scans of the applicant's correspondence that accompanied the map. You mentioned that you were checking out compliance with the conditions of approval. Please send the scan of the VTM for PLN2006-00357.

Sam

From: "Roland Haga" <RHAGA@BKF.com>
To: "'Mark Chow'" <mchow@smcgov.org>
CC: "'Pete Bentley (PBentley@co.sanmateo.ca.us)'" <PBentley@co.sanmateo.ca.u...
Date: 4/4/2012 10:41 AM
Subject: Plan Check Submittal Package SS Improvment Plans / Highland Estates/ Off-site Sewer Mitigation associated with COA 4y
Attachments: PRPLAN.PDF; SS Rehabilitation Specifications.doc

Mark,

The attached plans and specifications are hereby submitted to you and the San Mateo County Crystal Springs Sanitation District Engineering Department for plan check and review.

Attached are PDF and word copies of the plans and specifications associated with the Highland Estates off-site sanitary sewer migration measures associated with COA 4Y. should you need additional hard copies , please let us know.

Upon you review of the attached plans and specification, please contact us should you have questions please contact me or Yousef Moradzadeh at (650) 482-6300.

Sincerely,

Roland Haga

Roland Haga, PE, LEED(r)AP
Associate/Project Manager

[cid:image001.jpg@01CD124F.9AC76E90]

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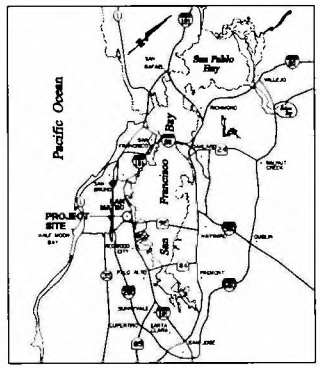
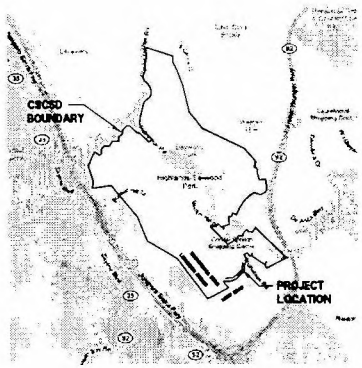
SANITARY SEWER REHABILITATION FOR

HIGHLAND ESTATES - TICONDEROGA DRIVE

COUNTY OF SAN MATEO, CALIFORNIA



VICINITY MAP
NTS



LOCATION MAP
NTS

SHEET INDEX

SHEET NO	DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES, ABBREVIATIONS AND LEGEND
3	UTILITY PLAN
4	DETAILS

ENGINEER'S STATEMENT

THESE IMPROVEMENT PLANS HAVE BEEN PREPARED BY ME OR UNDER MY DIRECTION IN ACCORDANCE WITH STANDARD ENGINEERING PRACTICE.

YOUSEF MORADZADEH, DATE
PROJECT MANAGER
BKF ENGINEERS

FOR PLAN REVIEW - 03/26/2012
NOT FOR CONSTRUCTION

BKF
255 SHORELINE DRIVE, SUITE 200
REDWOOD CITY, CA 94065
PHONE: (650) 482-6300
FAX: (650) 482-6399

HIGHLAND ESTATES
TICONDEROGA DRIVE SANITARY SEWER REHABILITATION
COVER SHEET
CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

Date	03/26/12	No.	Revisions
Scale	NTS		
Design	CT		
Drawn	CT		
Approved	YM		
Job No	900188-14		

Sheet Number: 1 OF

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GENERAL NOTES

1. THE FOLLOWING NOTES ARE ESTABLISHED MERELY TO GUIDE THE CONTRACTOR AS TO THE GENERAL ITEMS OF WORK INVOLVED AND ARE NOT INTENDED TO COVER COMPLETE SCOPE OF WORK. CONTRACTOR SHALL COMPLETE ALL WORK AS PER CONTRACT DOCUMENTS.
2. THE REPLACEMENT SEWER MAIN SHALL BE CONSTRUCTED AT THE SAME ALIGNMENT AND GRADE OF THE EXISTING SEWER MAIN BY PIPE BURSTING METHOD.
3. CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (USA) 1-800-227-2600 OR 1-800-642-2444 AT LEAST ONE WEEK IN ADVANCE OF STARTING EXCAVATION TO PROVIDE FOR MARKING OF UTILITIES.
4. UNDERGROUND UTILITIES ARE NOT SHOWN ON THE PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE POSITION OF AND PROVIDE PROTECTION FOR SUCH UTILITIES AND STRUCTURES.
5. ALL MATERIALS, WORK APPURTENANCES SHALL CONFORM WITH THESE PLANS, THE PROJECT SPECIFICATIONS AND THE LATEST ADOPTED VERSION OF SAN MATEO COUNTY STANDARDS DETAILS.
6. THE CONTRACTOR SHALL AT ALL TIMES COMPLY WITH THE RULES AND REGULATIONS ESTABLISHED BY CAL-OSHA AND OTHER AGENCIES HAVING JURISDICTION OVER THE WORK.
7. THE CONTRACTOR SHALL PROVIDE UNINTERRUPTED SANITARY SEWER SERVICE THROUGHOUT THE LENGTH OF THE PROJECT.
8. PRIOR TO EXCAVATION, PIPE BURSTING OR OTHER METHODS OF PIPELINE CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS SHOWN, INCLUDING THE LENGTH OF MANHOLE TO MANHOLE REACHES AND DISTANCES TO SEWER LATERALS.
9. EXISTING FLOWS MUST BE MAINTAINED BY CONTRACTOR AT ALL TIMES DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY RESIDENTS AND/OR BUSINESSES OF ANY INTERRUPTIONS OF SEWER SERVICES PRIOR TO ANY WORK ON EXISTING SEWER PIPES. SEWAGE FLOWS SHALL BE MAINTAINED BY PUMPING OR TEMPORARY CROSS CONNECTION FROM EXISTING MAIN TO NEW MAIN.
10. CONTRACTOR SHALL PROVIDE PUMPS OR OTHER MEANS TO PREVENT SEWER WASTES BACKUP INTO RESIDENTIAL HOUSES AND DUE TO HIS/HER WORK ON THE EXISTING SEWERS. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP AND DAMAGES CAUSED BY HIS/HER NEGLIGENCE.
11. ALL EXISTING IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO LANDSCAPING, FENCES, DRIVEWAYS, CURB, GUTTER, SIDEWALK, CULVERTS, DRAINS, AND MONUMENTS, SHALL BE RESTORED TO THE CONDITION IN WHICH THEY WERE, OR BETTER, BEFORE THE EXCAVATION WAS MADE. SEPARATE PAYMENT FOR RESTORATION OF EXISTING IMPROVEMENTS TO THEIR ORIGINAL CONDITION WILL NOT BE MADE. COMPENSATION FOR THIS TASK SHALL BE CONSIDERED AS INCLUDED IN THE VARIOUS CONTRACT ITEMS OF WORK INVOLVED. NOT ALL EXISTING IMPROVEMENTS ARE SHOWN. CONTRACTOR SHALL INSPECT THE SITE IN ORDER TO SATISFY THEMSELF OF THE ACTUAL CONDITIONS OF THE WORK.
12. THE CONTRACTOR SHALL CONTACT THE DISTRICT AT 363-4100 TWO (2) WORKING DAYS IN ADVANCE OF BEGINNING ANY SANITARY SEWER WORK. THE CONTRACTOR SHALL THEREAFTER KEEP THE INSPECTOR FOR THE DISTRICT INFORMED OF HIS SCHEDULE FOR SANITARY SEWER WORK.
13. ALL SANITARY SEWER WORK CONSTRUCTED WITHOUT INSPECTION BY THE DISTRICT SHALL BE REMOVED AND RECONSTRUCTED WITH INSPECTION.

ABBREVIATIONS

CSCSD	CRYSTAL SPRINGS COUNTY SANITATION DISTRICT
(E), EX	EXISTING
HDPE	HIGH DENSITY POLYETHYLENE
LF	LINEAL FEET
(P), PR	PROPOSED
SS	SANITARY SEWER
SSMH	SANITARY SEWER MANHOLE
TYP	TYPICAL
VCP	VITRIFIED CLAY PIPE

LEGEND

CRYSTAL SPRINGS COUNTY SANITATION DISTRICT BOUNDARY

EXISTING — NEW — SANITARY SEWER MAIN

SSMH

FOR PLAN REVIEW – 03/26/2012
NOT FOR CONSTRUCTION

BKF
255 SHORELINE DRIVE, SUITE 200
REDWOOD CITY, CA 94065
PHONE: (650) 482-6300
FAX: (650) 482-6399
Engineers | Surveyors | Planners

HIGHLAND ESTATES
TICONDEROGA DRIVE SANITARY SEWER REHABILITATION
NOTES, ABBREVIATIONS AND LEGEND

CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

No.	Revisions

Date 03/26/12
Scale N.T.S.
Design CT
Drawn CT
Approved TM
JOB NO. 20098-14

Sheet Number: 2 of 2

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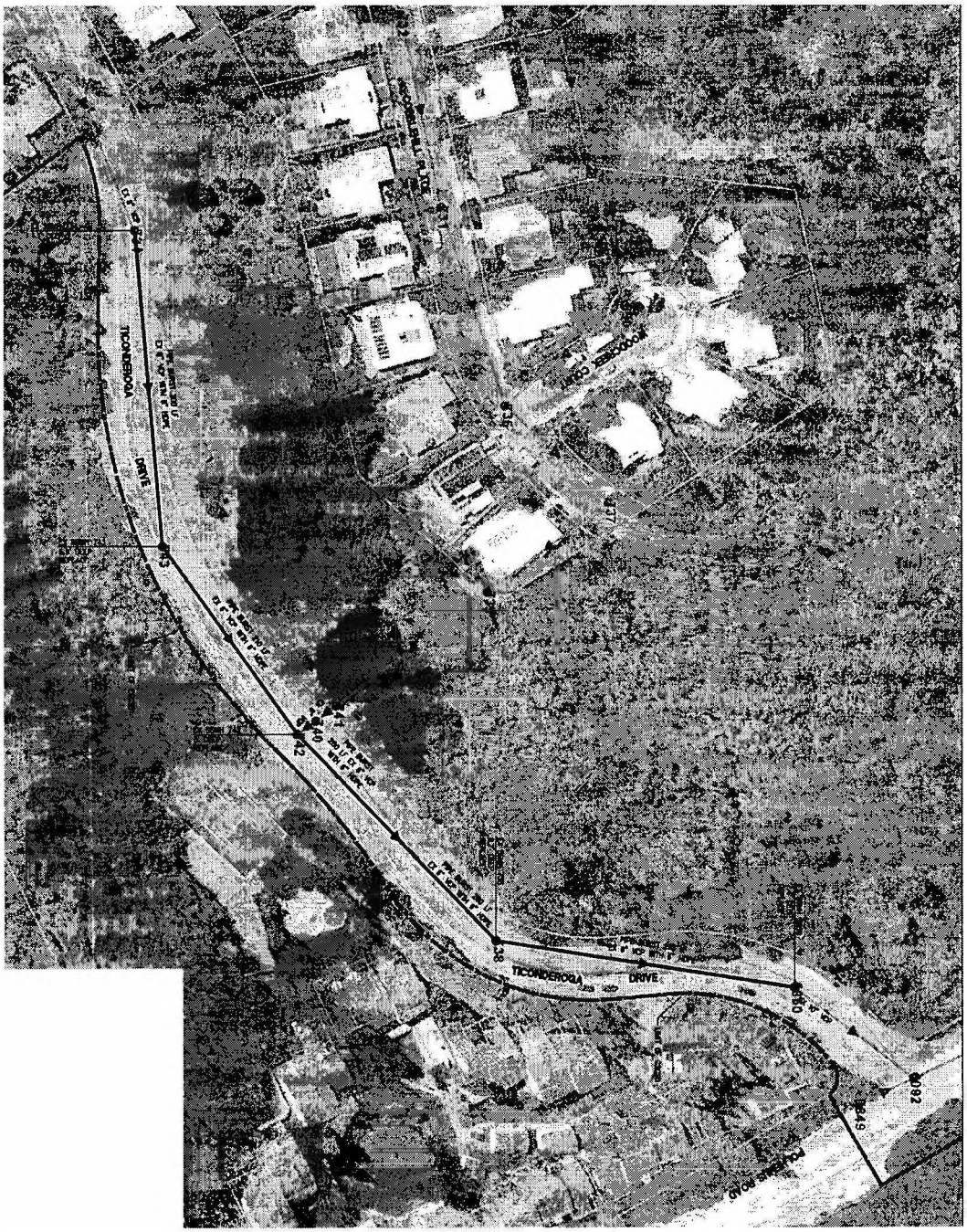
TICONDEROGA DRIVE
TICONDEROGA DRIVE
MCNEARS POINT
MCNEARS POINT
CT 8" SDR 35 PVC @ 5.0%
CT 8" SDR 35 PVC @ 5.0%
CT 8" SDR 35 PVC @ 5.0%

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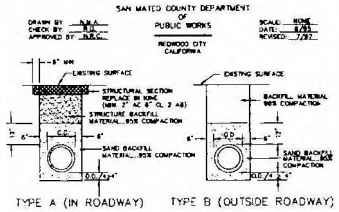


NOTES.

1. SAND:- MATERIAL FREE FROM ORGANIC MATTER AND CLAY WITH A SIEVE GRADATION BY WEIGHT AS FOLLOWS

SIEVE SIZE	% PASSING SIEVE
No. 4	100
No. 200	0-5

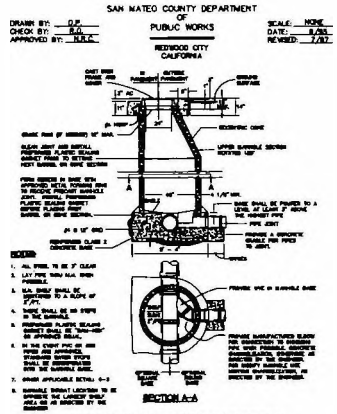
2. STRUCTURE BACKFILL MATERIAL:- MATERIAL WITH SAND EQUIVALENT NOT LESS THAN 20 AND SIEVE GRADATION BY WEIGHT AS FOLLOWS

SIEVE SIZE	% PASSING SIEVE
3"	100
No. 4	35-100
No. 30	20-100

3. BACKFILL MATERIAL:- MATERIAL FROM EXCAVATION, FREE FROM STONES OR LUMPS EXCEEDING 3 INCHES (GREATEST DIMENSION, ORGANIC MATTER, OR OTHER UNSATISFACTORY MATERIAL

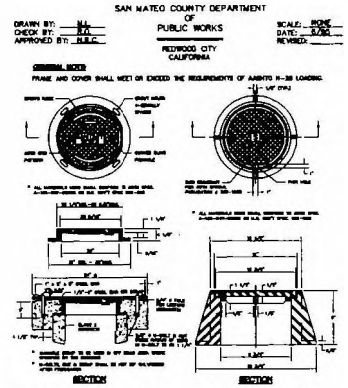
STANDARD TRENCH BACKFILL AND BEDDING DETAIL FOR PVC SEWER PIPE

C-7



SANITARY SEWER MANHOLE DETAIL

C-1



SANITARY SEWER MANHOLE COVER FRAME AND STRAP DETAIL

SANITARY SEWER FLUSHING INLET COVER

C-2

FOR PLAN REVIEW - 03/26/2012
NOT FOR CONSTRUCTION

BKF
255 SHORELINE DRIVE, SUITE 200
REDWOOD CITY, CA 94065
PHONE: (650) 482-6300
FAX: (650) 482-6399
Environmental | Surveying | Planning

HIGHLAND ESTATES
TICONDEROGA DRIVE SANITARY SEWER REHABILITATION
DETAILS
CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

No.	Revisions

Date 03/26/12
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Job No 950188-14

Sheet Number:
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OF

DRAWING NAME: C:\Temp\AcPublish_3336\PRPLAN.dwg
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COUNTY OF SAN MATEO

STATE OF CALIFORNIA

CONTRACT DOCUMENTS

AND

SPECIFICATIONS

FOR

HIGHLANDS ESTATES SUBDIVISION

SANITARY SEWER REHABILITATION PROJET

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Project Plans

SPECIAL PROVISIONS

&

SPECIFICATIONS

SECTION 5.
CONTROL OF WORK

Attention is directed to the provisions of Section 5, "Control of Work," of the Standard Specifications except as herein provided, and to Section 2-1, "Plans and Specifications," of these Special Provisions.

5-1. Differing Site Conditions

This section shall be used in lieu of Section 5-1.116, "Differing Site Conditions," of the Standard Specifications. Section 5-1.116 of the Standard Specifications shall not apply.

The following shall apply to digging trenches or other excavations that extend deeper than four feet (4') below the surface:

A. The Contractor shall promptly, and before the following conditions are disturbed, notify the Engineer, in writing, of any:

(1) Material that the Contractor believes may be material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, II, or III disposal site in accordance with provisions of existing law.

(2) Subsurface or latent physical conditions at the site differing from those indicated.

(3) Unknown physical conditions at the site of any unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the contract.

B. The Engineer shall promptly investigate the conditions, and if he finds that the conditions do materially differ, or do involve hazardous waste, and cause a decrease or increase in the Contractor's cost of, or the time required for, performance of any part of the work, shall issue a change order, excluding loss of anticipated profits, under the procedures described in the contract. No contract adjustment that results in a benefit to the Contractor will be allowed unless the Contractor has provided the required written notice.

C. In the event that a dispute arises between the Engineer and the Contractor whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the contractor's cost of, or time required for, performance of any part of the work, the Contractor shall not be excused from any scheduled completion date provided for by the contract, but shall proceed with all work to be performed under the contract. The Contractor shall retain any and all rights provided either by contract or by law that pertain to the resolution of disputes and protests between the contracting parties.

D. In the event conditions materially differ from those indicated, the Contractor shall have no claim for construction delays, unless said conditions are determined by the Engineer to impact the controlling item of work.

END OF SECTION

SECTION 6.
CONTROL OF MATERIALS

Attention is directed to Section 6, "Control of Materials," of the Standard Specifications and these Special Provisions.

The Contractor shall furnish all materials required to complete the work under this Contract.

6-1. Certificates of Compliance

Certificates of Compliance, conforming to the provisions in Section 6-1.07, "Certificates of Compliance," of the Standard Specifications shall be furnished for all manufactured products, unless otherwise waived by the Engineer.

6-2. Materials Testing

Any costs to the County for testing layers which fail the compaction requirements may be deducted from any progress payment due to the Contractor when, in the opinion of the Engineer, such failure results from the Contractor's lack of diligence in pursuing compaction effort. In the event that a test fails, any testing after the first shall be at the Contractor's expense.

END OF SECTION

SECTION 10.
CONSTRUCTION WASTE MANAGEMENT

The County has established that this Project shall minimize the creation of construction and demolition waste on the job site. Factors that contribute to waste such as over packaging, improper storage, ordering error, poor planning, breakage, mishandling, and contamination, shall be minimized. For any waste that is generated, as many of the waste materials as economically feasible shall be reused, salvaged, or recycled. Waste disposal in landfills shall be minimized.

The Contract lump sum price paid for this item, "Construction Waste Management," shall include full compensation for furnishing all labor, equipment and incidentals, including the provision of required documentation of proper materials disposal and the development of a Waste Management Plan, all as described herein, and no separate payment will be made therefore.

No partial payment will be made for this Contract item of work until all work required, as specified herein, is completed to the satisfaction of the County, and all necessary documentation provided.

10-1. Diversion Goals

One hundred percent (100%) of inert wastes, and at least fifty percent (50%) of the remaining construction and demolition debris shall be diverted from landfills.

Inert wastes, such as concrete, brick, rock, asphalt, and soil not intended for on-site use, shall be taken to a facility that will reuse or recycle them.

Other mixed construction & demolition (C&D) wastes shall be taken to a facility with a C&D sorting program, as listed in the Construction and Demolition Debris Recycling Guide referenced below, if additional recycling is needed in order to meet the requirements set forth in this Section. If debris box service is used, the debris boxes must be taken to a C&D sorting facility if materials are not separated on-site for recycling.

The Contractor has the option of separating on-site for recycling non-inert materials, such as cardboard, paper, wood, metals, green waste, new gypsum wallboard, tile, porcelain fixtures, and other easily recycled materials, and directing them to

recycling facilities and taking the remaining mixed waste (but no more than 50% by weight or yardage) to a facility for disposal. If waste is taken for disposal, documentation must be provided to show that 50% of C&D wastes (in addition to 100% of inert wastes) have been diverted.

10-2. References and Resources

A Construction and Demolition Debris Recycling Guide is available online at **http://www.recycleworks.org/publication.html.** For more information or resources, contact the County of San Mateo's recycling hotline at (888) 442-2666 or call (650) 363-4100 and ask for the RecycleWorks main contact for Waste Management Plans. The Contractor's attention is directed to **Appendix A** for the County of San Mateo Waste Management Plan Form and the Waste Management Daily Transport Report.

10-3. Waste Management Plan and Daily Transport Report

The Contractor is required to complete a Waste Management Daily Transport Report, listing details of the material transported on that particular day, which is to be signed by both the Contractor's representative and the County inspector on the job site.

A Waste Management Plan shall be submitted to the Waste Management and Environmental Services Section (RecycleWorks) of the Department of Public Works, 555 County Center – 5th Floor, for approval within FIVE (5) WORKING DAYS after pre-construction conference. The Waste Management Plan shall include a description of how the contractor will meet the requirements of this contract and shall include a list of disposal and recycling facilities where waste materials will be taken, a description of what will be taken to each facility (inert wastes, metals, wood, glass, plastics, mixed waste, etc.), a description of the means of transportation of recyclable materials (whether materials will be site-separated and self hauled to designated centers, or whether mixed materials will be collected by a waste hauler and designated center, or whether mixed materials will be collected by a waste hauler and removed from the site), and an estimated amount (weight, yardage, etc.). Approval will be granted if the plan shows:

- One hundred percent (100%) of inert wastes being reused or recycled AND at least fifty percent (50%) of C&D wastes being reused or recycled; OR
- All waste that is not separated on-site for recycling is sent to a mixed C& D sorting facility for recycling.

10-4. Waste Management Plan Implementation

A. Plan Distribution:

The contractor shall provide copies of the approved Waste Management Plan to the project superintendent and each subcontractor.

B. Instruction:

The contractor shall provide on-site instruction of appropriate separation, handling, and recycling, salvage, reuse, and return methods to be used by all parties at the appropriate stages of the Project.

C. Meetings:

The contractor shall conduct monthly Construction Waste Management meetings or at least one meeting for projects with length of less than twenty (20) working days. Meetings shall include subcontractors affected by the Waste Management Plan. At a minimum, waste management goals and issues shall be discussed at regularly scheduled project meetings.

D. Separation Facilities:

The contractor shall designate a specific area or areas to facilitate separation of materials for potential reuse, salvage, recycling, and return. Recycling and waste bin areas are to be kept neat and clean and clearly marked in order to avoid co-mingling of materials. Bins set within the County Right of Way shall be subject to approval by the County. All bins used shall be protected during non-working hours from off site contamination.

E. Materials Handling Procedures:

Materials to be recycled shall be protected from contamination, and shall be handled, stored and transported in a manner that meets the requirements set by the designated facilities for acceptance.

F. Hazardous Wastes:

Hazardous wastes shall be separated, stored, and disposed of according to State and local regulations. Unless specified in other section, the County is not aware of any hazardous wastes within the project site. Notify the Engineer if hazardous waste is encountered.

G. Reporting:

As a condition of final approval and retention release, submit documentation to the Waste Management and Environmental Services Section (RecycleWorks) of the Department of Public Works that demonstrates compliance with the approved Waste Management Plan. Projects that establish monthly progress payments shall also require monthly reporting on the Waste Management Plan. Such reports shall be submitted prior to the monthly cutoff for progress payments and shall include, at a minimum, a summary of waste materials recycled, salvaged and disposed of for the Project. Submitted with this summary will be documentation (receipts/scale tickets, waybills) showing the quantities and types of materials diverted and disposed. The documentation shall coincide with the Waste Management Daily Transport Reports (in Appendix A) that were signed by both the Contractor and the County inspector. A Notice of Completion will not be filed for the project and retention released until all reports as required for the project are submitted and approved.

The above-mentioned summary and documentation shall contain the following information:

(1) For each material recycled and salvaged from the Project, include the amount (in cubic yards or tons, or in the case of salvaged items, state quantities by number, type and size of items) and the destination (i.e., recycling facility, used building materials yard or other local users).

(2) For each material landfilled or incinerated from the Project, include the amount (in cubic yards or tons) of material and the identity of the landfill, incinerator and/or transfer station. All projects are subject to inspection.

(3) Documentation shall consist of photocopies of receipts and weight tags or other records of measurement or equivalent documentation from recycling companies, deconstruction contractors, and landfill and disposal companies. The contractor shall sign the completed Waste Management Plan to certify its accuracy as part of the documentation of compliance.

It is unlawful for any person to submit documentation to the County for an

approved Waste Management Plan that said person knows to contain any false statements, including but not limited to false statements regarding weight and/or yardage of materials recycled or diverted, or to submit any false or fraudulent receipt or weight tag or other record of measurement.

END OF SECTION

SECTION 15.
REMOVAL

15-1 GENERAL

The work shall consist of furnishing all labor, materials, equipment, and supervision to perform all work necessary to remove existing brick or concrete sanitary sewer manholes identified on the Plans, in accordance with these Special Provisions.

15-2 REMOVE EXISTING SEWER MANHOLE

The existing sanitary sewer brick or concrete manholes shall be removed as shown on the Plans, these Specifications and as directed by the Engineer.

15-3 MEASUREMENT AND PAYMENT

Remove Existing Sanitary Sewer Manhole

Comment [EG1]: The plans just say "EX SSMH XXXX, X.X' DEEP, REPLACE"

Full compensation for furnishing all labor, materials, tools, equipment, and incidental necessary for doing all the work involved in "Remove Existing Sanitary Sewer Manhole," shall be considered as included in the unit prices paid for the various Contract items of work, and no additional compensation will be allowed therefore.

END OF SECTION

SECTION 16

CLEARING AND GRUBBING

Clearing and grubbing shall conform to the provisions of Sections 15, "Existing Highway Facilities," and 16, "Clearing and Grubbing," of the Standard Specifications, these Special Provisions, the Plans and the directions of the Engineer.

Areas within the limits of work, as shown on the Plans, or as directed by the Engineer, shall be cleared as necessary for the construction of improvements and related work. The areas to be cleared and grubbed will not necessarily extend to all right-of-way lines. The exact limits for clearing and grubbing shall be approved by the Engineer in advance of commencing any work.

Construction easements, as shown on the Plans, shall be cleared only as necessary for the construction of improvements and related work, or as directed by the Engineer.

Existing trees and shrubs within the limits of work shall be removed, unless otherwise specified in these Special Provisions or directed by the Engineer

All existing vegetation, fencing, driveways, and walks outside the areas to be cleared and grubbed, shall be protected from injury and damage resulting from the Contractor's operations.

Removal of any concrete improvements (sidewalks, curbs) driveway drainage pipes, roadside signs, fences, trees, shrubs and hedges shall be as shown on the Plans, as required for the construction, and as directed by the Engineer.

The Contractor shall not remove fences, trees, shrubs, hedges, mailboxes or any other landscaping or improvements prior to receiving written approval from Engineer.

Existing improvements, such as fences and mailboxes, that need to be relocated or removed, as determined by the Engineer for construction purposes, shall be accomplished only after the property owners have been given an opportunity to perform this task themselves. If the property owners do not perform this task, then the Engineer may direct the Contractor to perform this operation. Existing improvements removed shall become the property of the Contractor and shall be hauled away by the Contractor, unless arranged with the property owners to deposit the fence material on their property at a location designated by the property owner.

Removing, salvaging and/or relocating fences shall conform to the provisions of Section 15-2, "Miscellaneous Highway Facilities," and Section 80, "Fences," of the Standard Specifications and these Special Provisions. Underdrain pipes that are within the grading conform limits, shall be cutoff or adjusted to be flush with the final grade, as directed by the Engineer.

Fences and other debris to be removed and disposed of outside the highway right of way shall be in accordance with the provisions in Section 7-15, "Disposal of Material Outside the Highway Right of Way," of these Special Provisions.

Comment [EG2]: Is this paragraph needed if it's somewhat repeated two paragraphs below.

Concrete removal shall conform to the provisions of Section 15, "Existing Highway Facilities," of the Standard Specifications and these Special Provisions and shall be removed as shown on the Plans and as directed by the Engineer and in accordance with Section 15-3, "Removing Concrete," of the Standard Specifications.

All materials removed shall become the property of the Contractor and shall be disposed of in accordance with Section 7-15, "Disposal of Material Outside the Highway Right of Way," of these Special Provisions.

Where conforms are made to existing concrete and no joints exist between concrete to be removed and concrete to remain, the concrete shall be cut in a neat line to a minimum depth of 0.17 feet with a power driven saw before concrete is removed.

Nothing herein shall be construed as relieving the Contractor of his responsibility for final cleanup of the highway, as provided in Section 4-1.02, "Final Cleaning Up," of the Standard Specifications.

The Contractor's attention is directed to Section 10, "Construction Waste Management," of these Special Provisions.

Currently certified, local recyclers include, but are not limited to, the following:

(1) Ox Mountain Sanitary Landfill
12310 San Mateo Road
Half Moon Bay, CA 94019
(650) 726-4718
(Reinforced Concrete and Rebar Only)

(2) Bell Marine/Harbor Sand and Gravel
775 Seaport Blvd.
Redwood City, CA 94063
(650) 367-7124

(3) Granite Rock
195 Seaport
(650) 482-3840

Redwood City, CA 94063

(4) SRDC (650) 367-7324
199 Seaport
Redwood City, CA 94063

The Contractor is advised that all trees designated for removal which are less than ten inches (10") in diameter, as well as stumps of any diameter, shall be considered as included under the Contract lump sum price paid for "Clearing and Grubbing," and no additional compensation will be allowed therefore.

The Contractor is encouraged to review the project site in order to assess the trees and root balls that will require removal. The Contractor's attention is directed to the following table:

Comment [EG3]: What table?

Remove Trees

Designated trees shall be removed in accordance with Section 16, "Clearing and Grubbing," of the Standard Specifications, the Plans, these Special Provisions, and the directions of the Engineer.

No trees shall be removed without the prior written approval of the Engineer. Voids left by removed tree and roots shall be backfilled immediately upon completion of tree removal, in conformance with Section 19, "Earthwork," of the Standard Specifications, the Standard Trench Backfill and Bedding Details as shown on the Plans, and the directions of the Engineer.

Said removed tree and roots shall become the property of the Contractor and shall be disposed of outside the highway right of way in conformance with Section 7-15, "Disposal of Material Outside the Highway Right of Way," of these Special Provisions. The Contractor shall take care not to damage existing facilities that are to remain. Any damage to such facilities caused by the Contractor's operations, as determined by the Engineer, shall be repaired to the satisfaction of the Engineer, all at the Contractor's expense, and no additional compensation will be allowed therefore.

Prior to excavation and removal of tree root systems, the Contractor shall verify the locations of existing utilities or other obstacles within the vicinity of the tree. The Contractor is advised that active water and gas lines are located in the area. The locations of existing water and gas facilities, as based on data provided by the utility

companies, are shown the Plan Sheets at their approximate locations, and no assurance is given as to the actual horizontal and vertical locations of these or other unknown facilities that may exist within the line of work. **The Contractor shall call the Underground Service Alert Notification Center at (800) 642-2444 or (800) 227-2600 a minimum of two (2) working days in advance of any excavation or trenching work.**

Comment [EG4]: Facilities are not shown

Comment [EG5]: General Note No. 3 on Plan Sheet No. 3 says one week

MEASUREMENT AND PAYMENT

Full compensation for furnishing all labor, materials, tools, equipment, and incidental necessary for doing all the work involved in "Clearing and Grubbing," shall be considered as included in the unit prices paid for the various Contract items of work, and no additional compensation will be allowed therefore.

END OF SECTION

SECTION 17

DEVELOP AND APPLY WATER

Develop and apply water shall conform to the provisions of Section 10, "Dust Control," Section 17, "Watering," and Section 18, "Dust Palliative," of the Standard Specifications, these Special Provisions and the directions of the Engineer. The provisions of Section 10-1.04 and Section 18-1.05, "Payment," shall not apply to this item. Payment for this item, "Develop and Apply Water," shall be made on a lump sum basis.

In addition to all other water supply requirements for the construction work, the Contractor's attention is directed to the importance of dust control. The Contractor shall provide dust control at all times, including Saturdays, Sundays and holidays, as ordered by the Engineer. The Contractor shall diligently control dust resulting from the Contractor's operations and from public traffic passing through the work by the application of water and/or dust palliative. Whenever the Contractor appears to be negligent in controlling dust, as determined by the Engineer, the Engineer may direct attention to the existence of a dust hazard and instruct the Contractor to immediately alleviate said hazard.

For the purpose of progress payments, payment for this item shall be based on the pro rata share of the work completed. When, in the opinion of the Engineer, the Contractor has been inattentive to a dust hazard, any portion of the progress payment for this item, "Develop and Apply Water," may be withheld until the dust hazard has been corrected.

MEASUREMENT AND PAYMENT

The Contract lump sum price paid for this item, "Develop and Apply Water," shall include full compensation for furnishing all labor, materials (including dust palliative binder and water), tools, equipment and incidentals necessary for doing all work involved in developing and applying all water and/or dust palliative required for the work, and for controlling dust resulting from the Contractor's operations, public traffic, wind or other conditions at all times (including Saturdays, Sundays, holidays) and when ordered by the Engineer, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer, and no additional or separate payment shall be made therefore.

END OF SECTION

SECTION 19
EARTHWORK

19-1 GENERAL

Earthwork includes all labor, equipment, and materials to clear, grub, excavate, backfill, shape and dispose of excess earth material.

19-2 EXCAVATION REQUIREMENTS

Pursuant to State law regulations, all open excavations greater than five feet in depth shall be constructed with bracing, sheeting, shoring or other equivalent method designed for the protection of life and limb. The Contractor must at all times comply with the requirements of the construction safety orders of the Division of Industrial Safety, Uniform Building Code, Cal-OSHA, and other governing codes and restrictions.

The above-stipulated requirements shall be considered the minimum to be provided. It shall be the Contractor's responsibility to provide the additional strength required to support the sides of the excavation against loads which may exceed those employed to derive the criteria set forth in the Industrial Safety Orders. The Contractor shall be solely responsible for any and all liabilities which may arise from his failure to provide adequate shoring, bracing or sheeting as necessary to support the excavation under any and all of the conditions of loading which may exist or which may arise during construction of the project.

The Contractor shall assign a project safety supervisor who shall, by training and experience, be fully qualified to supervise the installation, maintenance and removal of sheeting, shoring and bracing. The project safety supervisor shall have full authority over the work in all job safety matters and shall be present at all times when work is in progress in excavations and trenches greater than five feet in depth.

19-3 CONSTRUCTION

A. General Requirements

1. Earthwork

Earthwork shall conform to the provisions of Section 19 -"Earthwork", Section 10 - "Dust Control" and Section 16 - "Clearing and Grubbing" of the

Standard Specifications and these Special Provisions.

2. Contractor's Operations

The Contractor shall perform his work in such a manner as not to harm the undisturbed condition of the underlying or adjacent soils or damage or prevent the proper placement of fill. When in the opinion of the Engineer, natural soils or fill are damaged or disturbed by the operations of the Contractor, thereby precluding the utilization of the site as planned, the Contractor shall correct such damage or disturbance. Corrections shall be as directed by the Engineer and may include, but not be limited to, the removing of natural and fill foundation soils both laterally and vertically and replacing with compacted fill to the required grades or the construction of alternative methods of support. The cost of any such repair, rehabilitation or modification shall be borne by the Contractor.

3. Construction Observation

The Engineer will observe all subgrades, the stripping of topsoil from the site and the placing and compaction of all fill and other earthwork related operations specified in these Specifications. The Engineer shall be notified at least two (2) working days in advance of the beginning of operations, which require his attention, and fills shall not be made nor materials used without his specific approval. The Contractor shall allow time for field survey measurements of any subgrade required for any purpose. All fills for which specific standards or density are required, must be tested and approved by the Engineer before they will be accepted. Jetting and/or flooding for compaction shall not be allowed. All backfill including trench backfill shall be compacted immediately after placement.

4. Percent Compaction

Percent compaction is the in-place dry density of the fill expressed as a percentage of the maximum dry density of the fill material determined by the Engineer in accordance with the Test Method of AASHO T180.

5. Earthwork Balance

The trench excavations on this project may not be suitable to complete the

trench backfill as indicated on the Plans.

On portions of the trench sections, as shown on the Plan Detail Sheet, native material may be used as backfill material where approved by the Engineer, provided the following minimum requirements are met:

a. Materials with minimum sand equivalent of 30.
b. Materials free from broken pavement, stones or lumps exceeding 3 inches in greatest dimension.
c. Materials free of organic matter.
d. Materials with no excessive moisture that would impact compaction requirements.

The Engineer shall be the sole judge with respect to acceptability of native materials for backfill.

All unsuitable materials from excavation shall be disposed of as described in Section 100-24- "Cleaning Up". Contractor shall import any required backfill and no additional compensation shall be allowed therefore.

6. Blasting

Blasting will not be allowed on this project.

7. Surface Drainage

All portions of the work shall be kept free of standing water at all times until the work specified is complete. The Contractor shall maintain uniform grades, construct ditches and/or provide and operate pumps as necessary to prevent flooding, erosion, softening of compacted surfaces and formation of mud in trenches and excavations. If ditches are required, they shall be constructed and maintained in a neat uniform shape. Contractor shall not under any circumstances conduct or pump water or allow water to be directed or flow toward other facilities or improvements on the site without approval of the Engineer. The Contractor shall construct stilling basins as required to prevent silt and mud from entering the public storm drain and sanitary sewer systems and surface water, as directed by the Engineer.

The Contractor shall provide surface drainage as described herein and in addition, shall roll the surface of the fill to seal it prior to each rainfall.

8. Grading Tolerance

Final grade shall conform to the lines and grades shown on the Plans.

9. Removal of Obstructions

Unless otherwise noted, the Contractor shall remove all brush, logs, stumps, and roots, heavy sods, heavy growth grass, and all decayed and vegetable matter that interfere directly with the work. Removal of the trees, fences and any other structures will require Engineer's written approval. The Contractor shall also remove all rock, stones in excess of six inches, broken concrete and pavement, debris and all obstructions of any kind or character, whether natural or artificial, encountered in the work.

Material that is removed as hereinbefore specified, and is not to be incorporated in the work, shall be disposed of by and at the Contractor's expense in accordance with Section 7-1.13 of the Standard Specifications, and in a manner acceptable to the Engineer.

10. Excess Excavated Material

Where the bottom of the trench at sub grade is found to be spongy and soft or includes organic material, the Contractor shall excavate and remove such undesirable materials to the width of the trench and depth of at least six (6) inches or as required and directed by the Engineer so as providing a firm foundation for the pipe. The over-excavation shall be replaced with granular material and compacted to a minimum of ninety-five percent (95%) Standard Proctor per ASTM D 698. Excess excavated material shall be disposed of by the Contractor in a manner acceptable to the Engineer.

19-4 EXCAVATION DEWATERING

The Contractor shall take whatever measures necessary, as determined by the Engineer, and shall furnish, install and operate pumps or other devices as may be necessary to remove seepage, storm water or sewage that may be found or accumulate in the excavations during the progress of the work. Once seepage or ground water conditions in excavated areas are encountered, no further trenching will be allowed until suitable dewatering procedures are in operation.

The Contractor shall keep all excavations free from water at all times during

construction and until the County gives permission to cease pumping. The Contractor shall also keep all excavations free from the accumulation of water or sewage at all times, as may be required by the County for inspection or other purposes.

19-5 POTHOLING

Should there be a need for potholing; Contractor shall pothole at the locations as will be determined by the Engineer. The Contractor shall furnish, labors, tools and equipments to pothole, and backfill the holes to the original ground elevation.

19-6 MEASUREMENT AND PAYMENT

A. Excavation and Backfill

Full compensation for furnishing all labor, materials, tools, equipment, and incidental necessary for doing all the work involved in "Excavation and Backfill," shall be considered as included in the unit prices paid for the various Contract items of work, and no additional compensation will be allowed therefore.

B. Excavation Dewatering

Full compensation for all labor, materials, tools, equipment, and incidental necessary for doing all the work involved in "Excavation Dewatering," shall be considered as included in the unit prices paid for the various Contract items of work, and no additional compensation will be made therefore.

C. Potholing

Full compensation for furnishing all labor, materials, tools, equipment, and incidental necessary for doing all the work involved in "potholing," shall be considered as included in the unit prices paid for the various Contract items of work, and no additional compensation will be allowed therefore

END OF SECTION

SECTION 20
EROSION AND SEDIMENT CONTROL

The provisions of Section 20, "Erosion Control and Highway Planting," of the Standard Specifications are superseded by these Special Provisions.

The Contractor is advised that failure to fully comply with the provisions of this Section and/or Section 11-1, "Water Pollution Control," of these Special Provisions, and all requirements listed in the National Pollutant Discharge Elimination System (NPDES) General Permit, San Francisco Bay Region Municipal Regional Stormwater NPDES Permit, and any resource agency permits obtained for the project, where applicable, except where amended in writing and signed by the Director of Public Works or his duly authorized representative, shall constitute substantial non-compliance with the requirements of the Clean Water Act, the NPDES permit program and the Contract.

The County shall provide periodic site monitoring to ensure that the work complies with the requirements specified herein and in any resource agency permits. The County will provide the Contractor with copies of the monitoring reports. Should the work be found to be non-compliant, a follow up site monitoring visit will be conducted to ensure the items have been corrected. The costs associated with any compliance monitoring required beyond a single follow up site monitoring visit shall be deducted from the final payment for all of the Contract work.

20-1. Temporary Silt Fence

No excavation or backfill work shall commence until temporary silt fence has been placed as directed by the Engineer.

Temporary silt fence shall be installed on contour a minimum of two (2) feet to the downslope side of any excavation or backfill. Temporary silt fence shall be installed with the supporting posts on the downslope side of the fence structure. Silt fence lines shall be unbroken, with silt fencing pieces wound together to form a contiguous structure. Attention is directed to Section 20-2, "Temporary Erosion Controls," of these Special Provisions for additional requirements.

Comment [EG6]: Where?

The Engineer may deem it necessary and require parallel silt fencing to contain the full limits of excavation and backfill. Parallel silt fence shall be placed on contour and shall overlap the horizontal projection of the primary silt fence by not less than eight

(8) linear feet.

No silt fencing shall be placed in or across any flowing stream.

Inspection and Maintenance

Silt fencing shall be inspected and any necessary repairs made by the Contractor at his expense daily prior to any excavation or backfill. The Contractor shall remove any soil, rock and/or debris contained by the silt fence once they have reached a depth of half (½) the above-ground height of the silt fence.

Any soil, rock and/or debris that are stockpiled shall be protected against wind, rainfall and runoff at all times. Plastic sheeting may be used to cover soils (including aggregate base), and shall be securely anchored by sandbags or other suitable means. At no time will any stockpiled materials be allowed to erode into any watercourse or onto any roadway or other tributary surface.

Removal and Disposal

Temporary silt fence and any soil, rock or debris shall be completely removed by the Contractor at the conclusion of the work. Temporary silt fence and any soils, rock or debris shall be disposed of outside the highway right of way in accordance with the provisions of Section 7-15, "Disposal of Material Outside the Highway Right-of-Way," of these Special Provisions, by the Contractor at his expense. Soil, rock or debris shall not be scattered or "flaked" on any slope. The Contractor shall specify in writing the method of removal and disposal for the Engineer's approval not less than 2 working days prior to removing silt fence.

Payment

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary for doing all work involved on "Temporary Silt Fence" shall be considered as included in the unit prices paid for the various Contract items of work, and no additional compensation will be allowed therefore.

20-2. Temporary Erosion Control

The Contractor shall be required to adhere to the provisions of Section 11-1, "Water Pollution Control," Section 17, "Develop and Apply Water," and this Section of these Special Provisions, and the directions of the Engineer throughout the work.

Temporary erosion controls may consist of straw logs, straw mulch, silt fencing,

temporary berms, or any combination of these or other means acceptable to the Engineer to prevent polluted runoff and/or wind erosion. The use of any type of hay or any straw containing oat or weed seed is expressly forbidden. The Contractor is encouraged to review the Best Management Practices (BMPs) included in the County of San Mateo Maintenance Standards for installation and maintenance recommendations.

Temporary erosion controls shall be applied, maintained and removed by the Contractor as specified herein and as directed by the Engineer. The Contractor shall not commence any excavation, backfilling, grading or stockpiling operations until sufficient quantities and types of temporary erosion control materials have been delivered to the work site as determined by the Engineer.

Temporary erosion controls shall be installed at the conclusion of the workweek to the satisfaction of the Engineer. The Engineer shall also require the installation of temporary erosion controls at the conclusion of any work day when rain and/or wind is occurring or forecast.

The Contractor is advised that he may be required to respond to the work site after hours and/or on weekends or holidays to mitigate potential erosion or sedimentation and/or to repair damaged silt fencing and other erosion controls. Provisions for the Contractor's Required Response are included in Section 11-1, "Water Pollution Control," of these Special Provisions.

Staging Areas

The Contractor shall contain runoff that may potentially leave any staging area to within the staging area by any suitable means approved by the Engineer.

Staging area BMPs shall be maintained throughout the duration of the work. Staging area BMPs shall be completely removed and disposed of outside the highway right of way in accordance with the provisions of Section 7-15, "Disposal of Material Outside the Highway Right-of-Way" of these Special Provisions, by the Contractor at his expense at the conclusion of the work. Attention is directed to Section 11-1, "Water Pollution Control," of these Special Provisions for provisions relating to tracking of mud from staging areas.

Staging Area Finish

The Contractor shall finish all staging areas as specified herein and as directed by

the Engineer.

All stockpiles, debris and exclusion fencing shall be completely removed and disposed of outside the highway right of way by the Contractor at the conclusion of construction operations. Staging area surfaces shall be smoothed and contoured to drain in the same manner as prior to their use. The smoothed and contoured surface shall be covered with not less than six (6) inches and not more than twelve (12) inches of three-inch (3") un-compacted drain rock unless other material is approved in advance in writing by the Engineer. Any adjacent areas disturbed by the Contractor's operations shall be smoothed and mulched as specified below.

Loose soil and/or rock resulting from any grading work required to restore the pre-construction condition shall not be scattered or "flaked" on any slope.

Full compensation for conformance with this Section shall be considered as included in the Contract unit price paid for Mobilization, and no additional compensation will be allowed therefore.

Mulch

The Contractor shall mulch all finished soil surfaces at the conclusion of the work and as part of any winterization as shown on the Plans, as specified herein and as directed by the Engineer.

Mulch shall consist of a uniform application of rice straw to a depth of not less than two (2) inches. Straw bales and flakes shall be broken apart and loosely spread prior to crimping. Mulch shall be manually crimped into the soil surface using rakes, pitchforks or other appropriate means. Mulch shall not be track-walked using heavy equipment.

The Contractor may propose in writing an alternate type of straw mulch. Any type of proposed straw shall be certified by the manufacturer as weed-free and seed-free. The Contractor may also propose to use locally collected redwood duff (fallen dried redwood leaves, seeds and seed pods, small twigs, etc.) in addition to or instead of rice straw. Written proposals for alternate straw or redwood duff shall include identification of the source of the material, including written permission from the property owner to collect redwood duff, if applicable. Proposals to use alternate types of straw or redwood duff will be submitted to the Engineer for his approval not less than three (3) working days in

advance of placing mulch. The Engineer reserves the right to reject alternate proposals and require the use of rice straw mulch.

The Contractor shall avoid mulching over newly-planted trees/plants. Mulch shall not be applied below the ordinary high water line of any water body.

Measurement and Payment

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary for doing all work involved on "Mulching", shall be considered as included in the unit prices paid for the various contract items of work, and no additional compensation will be allowed therefore.

Winterization

Should the Contractor fail to complete the work within the specified number of working days with any time extensions allowed by the Engineer and the permitting agencies, the Contractor shall be required to winterize the sites and any staging areas at his expense as specified herein and as directed by the Engineer.

Winterization shall include, at a minimum, removal or securing, at the Engineer's option, of any stockpiled materials; removing equipment from the vicinity; restoring staging areas for winter use by the County's Road Maintenance Division as specified under "Staging Area Finish" above; covering any vertical excavation faces with plastic sheeting secured with sandbags and not extending below the ordinary high water line; mulching all other excavations with rice straw as specified under "Mulch" above; and ensuring positive drainage through the work sites.

Measurement and Payment

Full payment for conformance with this Special Provision shall be considered as included in the Contract price paid for "Water Pollution Control", and no additional compensation will be allowed therefore.

END OF SECTION

SECTION 100

SPECIAL CONDITIONS

100-1 PROJECT LOCATION

The work under this contract will be performed at the locations as shown on the Plans in Appendix C of theses Special Provisions.

100-2 SCOPE OF WORK

Work includes, but is not limited to, the following major items of work:

A. Rehabilitation of approximately 1085 LF of existing 6-inch VCP sanitary sewer main with 6-inch HDPE by pipe-bursting method.

B. Replacement of 4 existing sanitary sewer manholes

All to be done in an efficient and safe manner, complete in place, as required by the plans, these specifications and safety laws.

100-3 INSPECTION OF WORK SITES

Bidders are required to inspect the sites of the work in order to satisfy themselves by personal examination or by such means, as they may prefer, of the location of the proposed work and of the actual conditions of the site of work. If, during the course of his examination, a bidder finds facts or conditions, which appear confusing to him, he may apply to the County for additional information and explanation before submitting his bid. However, no such supplemental information requested or furnished shall vary the terms of the specifications or the Contractor's sole responsibility to satisfy himself as to the conditions of the work to be performed.

100-4 SUBSURFACE CONDITIONS DATA

There has not been any investigation of subsurface soil conditions.

Lack of this information is not intended to be and shall not be construed to be a waiver of the provisions of Section 100-3, "Inspection of Work Sites" and will not relieve the bidder or Contractor from any risk, or from properly examining the sites and making such additional investigations as he may elect, or from properly fulfilling all the terms of the Contract Documents.

100-5 PRE-CONSTRUCTION CONFERENCE

After award of the Contract and prior to the issuance of the Notice to Proceed, the various parties with an interest in the project including the contracting partner, subcontractors, and public officials shall meet to discuss and coordinate the required construction activities and determine when construction can proceed. The conference will take place at a time and location designated by the County.

100-6 EXISTING ALIGNMENT OF SEWERS

The alignments of the existing sewers noted on the drawings are represented by joining the manholes shown on the aerial maps. No topographic surveys or pot-holing was done over the existing sewers, and as such the horizontal and vertical alignments of the sewers may vary. The Contractor is to exercise extreme care in excavation such that existing utilities are not disrupted.

100-7 SURVEYS

Project survey and staking services shall be provided by the Contractor.

Comment [EG7]: How is this to be paid?

Measurement and Payment

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary for doing all work involved on "Surveys", shall be considered as included in the unit prices paid for the various contract items of work, and no additional compensation will be allowed therefore.

100-8 CONTRACTOR COORDINATION

The Contractor shall coordinate his work in the project area with other contractors and public utility agencies so as to minimize delays in the completion of the contract.

100-9 EXISTING UTILITIES

The locations of existing utilities, whether above ground or underground, are not indicated on the Plans.

The Contractor shall notify the Underground Services Alert Agency and notify the underground utility companies of his intention to work in the vicinity of their facilities and shall enlist their help to pinpoint the exact location, both in plan and elevation, of their utility. The Contractor, at no increase in cost to the County, shall perform any special construction techniques required in order to avoid existing

utilities.

Existing aboveground utilities, including but not limited to power transmission and distribution, telegraph, telephone and traffic control systems shall be maintained by the Contractor with the least possible interference with the use of such facilities at no increase in cost to the County.

The right is reserved by Owners of utilities and franchises to enter upon any street, road, right-of-way or easement for the purpose of maintaining their property and for making necessary repairs or changes as result of the work.

100-10 CONSTRUCTION UTILITIES

The Contractor shall provide all water required for construction purposes. He shall also provide power as required for the work.

Full compensation for providing water, power and other construction utilities for the whole project shall be considered as included in the various contract unit prices and no separate payment will be made therefore.

100-11 SHOP DRAWING AND SAMPLE SUBMITTALS

1. The Contractor shall furnish all drawings, specifications, descriptive data, certificates, samples, tests, methods, schedules and manufacturer's instructions as specifically required in the specifications and all other information as may reasonably be required to demonstrate fully that the materials and equipment to be furnished and the methods of work comply with the provisions and intent of the specifications and drawings. If the information shows any deviation from the contract requirements, the Contractor shall, by a statement in writing accompanying the information, advise the Engineer of the deviation and state the reason therefore. It shall be the Contractor's responsibility to ensure there is no conflict with other submittals and to notify the Engineer in any case where his submittal may concern work by another contractor or the County.
2. Samples are physical examples furnished by the Contractor to illustrate the quality of materials, equipment or workmanship, and to establish standards by which the work will be judged.

100-12 REVIEW OF CONTRACTOR'S SUBMITTALS

1. The Contractor must review all shop drawings and samples prior to submittal to the Engineer. The Engineer will review and approve shop drawings and samples within

ten (10) working days, but only for conformance with the design concept of the work and with the information given in the Contract Documents. The Engineer's approval of a separate item shall not indicate approval of an assembly in which the item functions. Complete and accurate shop drawings must be submitted for review time to begin. Incomplete or illegible submittals, as determined by the Engineer will be returned without comment.

2. The Contractor shall make any corrections required by the Engineer and shall resubmit the required number of corrected copies of shop drawings or new samples until approved. The Contractor shall bring to the Engineer's attention, through written correspondence revisions other than the corrections requested by the Engineer on previous submissions. For the trench shoring system, the Contractor shall submit to the Engineer the design and calculations for the system proposed. Said design and calculations shall be performed and stamped by a Civil or Structural Engineer, registered in the State of California.
3. The Contractor shall review, stamp with his approval and submit within ten (10) working days, and in orderly sequence, so as to cause no delay in the work or in the work of any other contractor, all shop drawings and samples required by the Contract Documents or subsequently by the Engineer as covered by Field Conditions or Change Orders. Shop drawings and samples shall be properly identified as specified, or as the Engineer may require. At the time of submission, the Contractor shall inform the Engineer in writing of any deviation in the shop drawings or samples from the requirements of the Contract Documents.
4. By approving and submitting shop drawings and samples, the Contractor thereby represents that he has determined and verified all field measurements, field construction criteria, materials, catalog numbers and similar data, or will do so, and that he has checked and coordinated each shop drawing and sample with the requirements of the work and of the Contract Documents.

100-13 EFFECT OF ACCEPTANCE OF CONTRACTOR'S SUBMITTALS

1. The Engineer's approval of shop drawings or samples shall not relieve the Contractor of responsibility for any deviation from the requirements of the Contract Documents unless the Contractor has informed the Engineer in writing of such deviation at the

time of submission and the Engineer has given written approval to the specific deviation, nor shall the Engineer's approval relieve the Contractor from responsibility for errors or omissions in the shop drawings or samples.

2. **No portion of the work requiring a shop drawing or sample submission shall commence until the Engineer has approved the submission in writing. All such portions of the work shall be in accordance with approved shop drawings and samples.**

100-14 NUMBER OF COPIES OF CONTRACTOR'S SUBMITTALS

The contactor shall submit five (5) copies of review drawings or information regarding materials and equipment. The Engineer, after taking appropriate action, will return two (2) marked copies to the Contractor.

100-15 PUBLIC CONVENIENCE

Throughout the performance of the work, the Contractor shall take all necessary measures to maintain the sewage flow from the adjacent houses and through the main sewer.

If, during short periods of time, the sewage flow is to be interrupted for connection purposes or other delicate operations, the Contractor must contact and notify the residents of the property of the schedule of interruptions of sewage flow. Short periods of time are defined to not exceed 4 hours. Interruption longer than this will not be allowed without advance written approval of the Engineer. The Contractor shall provide written notification to such parties of interruption to sewage flow not less than two (2) working days prior to disruption and no more than five (5) working days prior to disruption.

The Contractor shall not open more trenches in advance of pipe laying than is necessary to expedite the work. No trench shall be open at the end of the working day.

Throughout the performance of the work, or in connection with this contract, the Contractor shall construct and adequately maintain suitable and safe crossings over trenches; driveway access and such detours as are necessary to care for vehicle and public pedestrian traffic. In no case, shall access to any driveway be impacted more than 8 hours.

100-16 STORAGE OF MATERIAL

The Contractor is advised that areas within project right of way may be used for parking equipment and storing materials. The Contractor may park equipment or store materials only at locations where he has obtained permission from the adjacent property owner (including the County for areas within the road right of way). The Contractor shall not store materials at any site more than five (5) working days, before they are to be used. All unused materials shall be removed within five (5) working days after they are no longer needed. All stored materials shall be kept at least 15 feet from fire hydrants; five (5) feet from mailboxes and 20 feet from storm drain inlets.

100-17 CONSTRUCTION NOISE CONTROL

The Contractor shall take all necessary precautions to minimize construction noise. All plant and equipment shall be fitted with suitable noise reduction devices such as mufflers, inlet and exhaust silencers, and engine covers, which shall be maintained in good working order.

The Engineer shall decide on the adequacy of provision and maintenance of noise reduction equipment. When so instructed in writing by the Engineer, the Contractor shall immediately withdraw any item of plant or equipment from service and carry out all necessary additions, replacements or repairs to the noise reduction equipment to the satisfaction of the Engineer.

100-18 BYPASSING DURING CONSTRUCTION

Bypassing of untreated or partially treated wastewater to surface waters or drainage courses will not be permitted during construction. Bypassing of untreated wastewater to surface waters and drainage courses will result in assessment of any and all costs incurred by the County for the remedial actions. The Contractor shall comply with all State and Federal regulations.

The Contractor shall begin clean up efforts immediately if untreated or partially treated wastewater enters a natural water or drainage course. In addition, the Contractor will be required to notify the Engineer and, subsequently, the California Regional Water Quality Control Board at 510-622-2300 and be prepared, at that time,

to fully describe the nature of the spill and the clean up efforts that are being undertaken to mitigate the spill.

Notification and response procedures shall be consistent with the California State Water Resources Control Board's Statewide General Waste Discharge Requirements for Sanitary Sewer Systems adopted on May 2, 2006 and amendments issued on February 20, 2008, which are included in Appendix B of these Specifications.

100-19 RESTORATION OF STRUCTURES AND SURFACES

1. General

Whenever any of the work is accomplished on or through property other than the road right of way, the Contractor shall furnish the County, before its final acceptance of the work, a written release from the property owner, or proper authority acting for the property owner of the property affected, stating that the restoration of structures and surfaces has been satisfactorily accomplished.

All removal and restoration costs shall be borne by the Contractor. Material removed and not to be incorporated in the contract work shall become property of the Contractor and shall be disposed of outside of the public right of way in accordance with Section 7-15 of these Special Provisions at no additional cost to the County and/or affected property owner.

2. Cultivated Areas, Fences and Other Surface Improvements

All cultivated areas, either landscaping, natural vegetation areas, irrigation lines, concrete sidewalk, gutters, decorative pavers, or other surface improvements which are damaged by actions of the Contractor, shall be restored to same or better condition as their original condition to the satisfaction of the Engineer. It is expected that the Contractor will and can determine the existence of such improvements by a site visit. Accordingly there shall be no additional payments whatsoever for the required restoration of any such improvements.

3. Existing Stakes and Marks

All sections, section subdivision, plat, U.S.E.D., U.S.C.& G.S., U.S.G.S., and any other official monuments or benchmarks shall be carefully preserved or replaced. Before a monument is disturbed, its location and elevation shall be referenced to at

least four short ties (set iron pipes) and two copies of the field notes showing the ties shall be presented to the Engineer. A Surveyor registered in the State of California shall reset the monuments after construction is complete. In cases where construction interferes with monument replacement and new concrete monuments are required, two copies of the field notes showing the new locations, ties and elevations shall be furnished to the Engineer. Replaced or reset monuments shall be of acceptable type and quality and shall be located so as to clear existing utilities or any other interference. They shall be placed in a manner consistent with good and recognized engineering and surveying practices and in accordance with the County's standard drawings, and the State of California regulations. Replacement or resetting of the monuments shall be at no extra cost to the County. Compensation for this task shall be included in the unit cost per linear foot for sanitary sewer pipe.

100-20 PROTECTION OF EXISTING INSTALLATIONS

The Contractor is advised that he will be required to correct or replace, without delay, any and all damage to existing structures, utilities and equipment resulting from his operation. Compensation for this task shall be included in the unit cost per linear foot for sanitary sewer pipe.

100-21 PROJECT RECORD DRAWINGS

Contractor shall maintain up to date record drawings during the course of work and prior to final acceptance of the project, Contractor shall submit a complete set of "as -built" record drawings. All reference dimensions, corrections to existing data shown on the plans and revisions to the constructed improvements, shall be shown on the record drawings.

Contractor is responsible for maintaining an accurate set of "as-built" drawings during the course of construction. "As built" drawings shall be reviewed as part of each progress payment. Payments will not be approved if such drawings are not marked with up to date record information as of the date of the progress payment submission.

100-22 CLEANING UP

The Contractor shall not allow the site of the work to become littered with trash and waste material, but shall maintain the same in a neat and orderly condition

throughout the construction period. On or before the acceptance of the work, the Contractor shall carefully clean out all pits, chambers or conduits, shall tear down and remove all temporary structures built by him and shall remove rubbish of all kinds from any of the grounds which he occupied and leave them in an acceptable condition to the satisfaction of the Engineer.

Excess dirt or soil material and waste materials, including rubbish of any kind shall become the property of the Contractor and shall be disposed of outside of the public right of way in accordance with Section 7-15 of these Special Provisions. The Contractor shall pay for all disposal costs without any increase in the Contractor's bid price.

END OF SECTION

SECTION 101
SANITARY SEWER REHABILITATION
PIPE BURSTING METHOD

101-1 GENERAL

1. Scope

The work shall consist of furnishing all labor, materials, equipment, and supervision to perform all work necessary to replace certain sanitary sewer lines identified on the Plans, and in accordance with these Special Provisions. The required method of replacement is pipe-bursting utilizing hydraulically pulled bursting devices. The pipe bursting work shall consist of, but not necessarily be limited to, performing the following tasks:

a. Sewage flow bypassing during the pipe bursting operations.
b. Disconnection and reconnection of all existing laterals.
c. Existing pipe bursting and new pipe pulling.
d. Sag repair.
e. Testing.

2. Sewage Bypassing

The Contractor shall be responsible for maintaining all flows within the system. He shall bypass the flows around those sections of pipe to be replaced.

Plugging an existing upstream manhole if necessary and pumping the sewage into a downstream manhole or adjacent system shall comprise the bypass. The pump and bypass lines shall be of adequate capacity and size to handle the flow. The Engineer shall approve all bypassing systems. Approval of the bypass system by the Engineer shall in no way be construed as relieving the Contractor of any responsibility under this contract as related to protection of the interests of the County and the general public. Contractor shall be equipped with tools and materials to contain, clean up and dispose of any sewage contamination during bypass operations that meet requirements of all regulating agencies.

Under no circumstances will the dumping of raw sewage on the roads, storm drains or any location other than an approved sewer, be allowed.

101-2 MATERIAL

High Density Polyethylene Pipe

High density polyethylene (HDPE) pipe and fittings shall be Driscoplex 4100, SDR 17 or approved equal, consisting of virgin high molecular weight polyethylene, specified under ASTM D3350 as having a cell classification of PE345434C and soft white or gray interior surface (black color will not be allowed). Pipe shall have a manning "n" factor of 0.009 for gravity flow. Manhole adapter rings shall conform to recommendations of manufacturer of the HDPE pipe supplied.

Comment [EG8]: Does this pipe still exist or do we need to update this with Drisoplex 4100 or approved equal?

101-3 EXECUTION

1. Fitting And Joint

Pipe shall be butt welded in accordance with ASTM D 2657-67. The joints shall be leak proof thermal butt joints. All fusing shall be done using tools recommended by the pipe supplier and approved by the Engineer. The fusing machine shall have hydraulic pressure control for fusing two pipe ends together. The ends of pipe shall be electrically heated and thermostatically controlled and shall contain a temperature gauge for monitoring temperature. The heating plate shall be subject to periodic inspection using a temperature stick to assure even heating.

The tensile strength of yield of the butt fusion joints shall not be less than the pipe. The Contractor shall test a specimen of pipe cut across the butt fusion joints in accordance with ASTM D638.

Any material may be rejected for failure to meet any of the requirements of these Special Provisions. The acceptance of any deviation from these Special Provisions shall be subject to the approval of the Engineer.

Joints between pipe sections shall be smooth on the inside and internal projection beads shall not be greater than 3/16 of an inch (5 mm).

The internal bead shall be removed with a tool specifically designed for that purpose during the fusing process.

A copy of the required butt fusion parameters listed below shall be kept at the job site so that the temperature and pressures of the jointing process are known and can be checked on site:

a. The temperature at the surface of the heating plate (the fusion temperature);
b. The pressure used to push the pipe against the heating plate;
c. The time when the pipe ends are in contact with the heating plate but no pressure is being applied (soak time);
d. The pressure used to push the pipe ends together after heating (the fusion pressure);
e. The time of application of this butt fusion pressure (fusion cooling time);
f. Allowable bead height and width range;
g. Where couplings are required, 12" long coupling shall be used.

2. Method of Pipe Bursting

The method of pipe bursting shall be limited to hydraulically pulling a cone or hydraulically powered device or tool commonly known as a "mole" through the existing sewer pipes that are proposed for replacement. The mole is to be inserted in the sewer section to be replaced and shall be pulled by a pulling machine or a pulling winch located in a pulling manhole located along the alignment of the sewer section under consideration away from the mole insertion location. The mole shall pull behind the new sewer pipe to be placed along the same horizontal and vertical alignments of the existing sewer.

101-4 PIPE BURSTING EQUIPMENT

1. Bursting Unit

The bursting unit or mole shall be made of steel and of a diameter that is adequate for forcing its way throughout the existing pipe bursting it as it progresses. The mole shall be equipped with proper attachments and/or ribs that allow for a steady pull in and bursting of the existing sewers without excessive displacement of the soils around the existing sewer and especially for shallow lines. The backside of the mole shall be of adequate size to allow for the proper pulling of the new sewer along the same vertical and horizontal alignments of the existing sewers.

a. The design and shape of the mole shall be such that the existing pipe will be broken into many small fragments.

b. The method of connection of the inserted pipe to the mole shall be so that stresses transmitted to the inserted pipe are not damaging to the pipe nor will they exceed the tensile capacity of the pipe.

c. Provisions shall be made in the equipment to remotely start and stop the mole should it become necessary to temporarily cease moling operations.

d. Measures shall be taken to ensure that the pipe does not become separated from the mole.

2. Winches or Pulling Unit

The winch or pulling unit shall be operated to provide constant pull to the bursting unit in order that it may operate in an efficient manner with a minimum of recoil. It shall ensure directional stability in keeping the moling unit in line.

a. The winch shall be of the constant load type but shall be fitted with a direct reading load gauge to measure the winching load. It shall also be fitted with a device to automatically disengage when loading exceeds a preset maximum load.

b. Contractor shall supply sufficient cable in one continuous length so that the pull may be continuous between winching points.

c. The winch cable and cable drum shall be provided with safety cage and supports.

d. The Contractor shall also provide a system of guide pulleys and bracing at each manhole to minimize contact of cable with the existing sewer between manholes.

e. A nose cone shall be fixed to the first pipe or the head of the mole and shall be fitted with a swivel attachment to reduce the twist transmission between the winch cable and nose cone.

f. Supports to the trench sheet in the insertion trench shall remain completely separate for the pipe support system and shall be so designed that neither the pipe nor the winch cable shall be in contact with them at any time

g. Proper clearance shall be provided below the existing pipe to allow for the proper use of winch.

101-5 TREATMENT OF PIPE

1. At Intermediate Manholes

When the pipe passes through an intermediate manhole, it shall be cut in an approved manner so that 2" of pipe protrudes into the manhole or a top window cut out using the pipe as a trough. The invert of the manhole shall be broken out to a depth of 1-1/2" and rebenched using granolithic concrete. When the HDPE pipe is run through the manholes, the channel is formed by cutting out the top of the pipe using a small compressed air disc cutter. The repair of the base of the manhole is then completed by rebenching to the HDPE channel using granolithic concrete.

2. At Upstream and Downstream Manholes

At the upstream and downstream ends of the pipe, the pipe shall be cut in an approved manner so that 2" of pipe protrudes into the manhole. The invert of the manhole shall be suitably prepared such that a smooth transition shall be made from the existing pipe work to the new pipe. To construct a water tight seal of the HDPE pipe in the manholes at the entry and exit points, by installing manhole adapter rings, the ends of the pipe shall be surrounded by concrete, which forms part of the manhole base. There are additional methods for this operation, which may be employed such as mechanical anchoring system.

3. Pipe Insertion

a. The installation forces on the pipe shall be kept to a minimum.

b. Where a continuous length of pipeline is butt fused prior to insertion, the length of insertion pit shall be defined below:

1. The bottom of the pit shall be horizontal and its length shall not be less than 12 times the diameter of the pipe to be inserted.
2. The rear sloping face of the pit shall be not less than 27 times the diameter of the pipe.
3. The radius of curvature of the inserted pipe shall not be less than 27 times the diameter of the pipe, or as recommended by the HDPE pipe manufacturer.

c. Where a device is employed to exert force on the rear of the inserted pipe lengths, the force applied to the inserted pipe shall be evenly distributed around the wall of the pipe.

d. Maximum force to be within stress limits of the pipe.

e. Where lengths of pipe are jointed and a device is employed to exert force to the rear of the inserted pipe lengths, precautions shall be taken by the Contractor to ensure that no buckling, crushing or twisting of the pipe occurs.

f. Where lengths of polyethylene pipe are pushed, there is no relaxation time required to allow pipe to return to its original length.

101-6 INSERTION AND PULLING PITS

The size, location and method of excavation of all pits on site shall be determined prior to start of construction. The excavations are supported using trench sheets and speed shoring, or equivalent. The end of the launching pit on which the pusher forces are exerted is supported using 12"x12" timbers to allow these forces to be dissipated into the surrounding soil.

101-7 EXCAVATIONS AND BACKFILL

Trenches for sanitary sewer lateral connections shall be prepared and back filled in accordance with sound engineering practices and according to ASTM D2774 and D2321.

In considering locations for access pits, the Contractor shall consider the size of the sewer, locations of obstructions and services, pulling distances, traffic conditions, and locations of utilities and sewer laterals. When possible, intermediate access excavations can coincide with building service connection excavations or critical obstructions in the sewer. The locations of the excavation points should be such as to minimize disruption.

Insertion pits shall provide a minimum bending radius of 27 times the outside diameter of the HDPE pipe or greater and a maximum 4:1 back slope (one way insertion only) and a pit floor length of 12 times the pipe diameter. Pit width shall be 2 feet wider than the outside diameter of the pipe, and shall have a back slope of 1:1. The slopes given are maximum and may have to be lessened depending on soil type, water table, whether or not sheeting is used, and other working conditions. A roller or

rub shoe shall be installed at pipe entry to prevent pipe shatter as the pipe enters the existing line.

At all points where the new sewer pipe has been exposed, such as access shafts, service connections, outside of manholes, etc., the Contractor shall use the bedding and back fill materials and compaction requirements as shown on the Plans.

Where an unstable or running soil condition occurs, such as in excavations below ground water, bedding material shall be used according to the trench section detail specified in the Plans and Specifications. It may be necessary to increase the trench width to obtain the desired lateral support for the pipe.

101-8 MANHOLE CONNECTION

101-08.1 GENERAL

102.08.1.1 WORK INCLUDED

Connection of new sewer line to existing or new manholes.

101-08.2 EXECUTION:

1. Protect downstream sewer line from construction debris.
2. Prepare manhole opening for insertion of HDPE pipe.
3. Insert pipe; trim flush with interior manhole wall; place manhole adapters and grouting seal connection.
4. Remove construction debris from manhole, fill excavated area and restore surface area.

101-9 CONNECTION OF SEWER LATERALS

101-09.1 GENERAL

101.09.1.1 WORK INCLUDED

1. Location of existing laterals
2. Excavation and exposure of connection
3. Disconnection and permanent reconnection
4. Plugging of inactive laterals
5. Restoration of excavated area

101-09.2 PRODUCTS

101.09.2.1 CONNECTION

Polyethylene wye (SDR-17) or branch saddle fused on connection per manufacturer's recommendations for trenchless replacement.

101-09.3 EXECUTION

101.09.3.1 METHOD

All lateral connections to the existing main shall be located by the Contractor, disconnected and then permanently reconnected to the new HDPE pipe after a drilled hole has been properly prepared according to manufacturer's recommendations. Reconnection of laterals shall be accomplished from the ground surface by excavating a small opening approximately 4'X5' by depth and dropping in speed shoring so the connections can be made safely. The finished connection shall be made flush with the new sewer and shall provide a smooth transition to the existing lateral network. The existing lateral line shall be tied in with minimum number of bands or fittings and be connected to a section of structurally sound pipe.

101.09.3.2 INSTALLATION

All in- service "live" laterals, which are to be connected to HDPE main, shall be connected using wye connections or branch saddles constructed of the same material as the new sewer pipe and installed in accordance with the manufacturer's written instructions. The lateral connection shall be watertight and shall have the same structural integrity as the new sewer pipe.

Standard length of lateral reconnection shall be five (5) feet including angled fittings, tapping product, transition coupling, new lateral pipe, connections to the mainline pipe, and connections to the existing lateral pipe and will be measured from the centerline of the sewer main and paid for under the bid items for "Reconnect existing sanitary sewer lateral to new sewer main in street" and "Recomment existing sanitary sewer lateral to new sewer main in easement." Any variations from this five-foot length, to match field conditions, shall be approved by the Engineer and will be measured and paid for

under the bid item for "Replace Existing Sanitary Sewer Lateral in Easement."

Replacement of laterals may require removal and replacement of concrete sidewalk, driveway, curb, and gutter. Concrete work shall conform to Section 107, "Restoration of Paved Surfaces," of these Special Provisions.

101.09.3.3 PLUGGING OF INACTIVE LATERALS

All inactive laterals, as determined by the Engineer, shall be plugged with concrete at the edge of the trench with Class 3 concrete, to a minimum of one-foot length. Contractor shall provide assistance to Engineer, when requested, in determining inactive laterals.

101-10 SEWAGE BYPASSING

The Contractor shall be responsible for maintaining all flows within the system. He shall bypass the flows around those sections of pipe to be replaced. Certain individual services and laterals within the project areas may also require bypassing during the pipe bursting operations as determined by the Engineer.

The bypass shall be made by plugging an existing upstream manhole if necessary and pumping the sewage into a downstream manhole or adjacent system. The pump and bypass lines shall be of adequate capacity and size to handle the flow. The bypassing systems proposed to be used by the Contractor shall be subject to the approval of the Engineer. Approval of the bypass system by the Engineer shall in no way be construed as relieving the Contractor of any responsibility under this contract as related to protection of the interests of the County and the general public.

At the end of each working day, a temporary tie-in shall be made between the replaced section of pipe and the existing system. The bypass plug will either be removed or the pumps will be manned on a 24-hour basis.

Under no circumstances will the dumping of raw sewage on private property, in public streets and storm drain systems or any location other than an

approved sanitary sewer main, be allowed.

The Contractor shall provide at least one back-up pump in case of failure of the primary pump. The back-up pump shall be onsite and available prior to the start of any sewage bypassing operations.

101-11 TELEVISION INSPECTION

A television inspection shall be made of all sanitary sewer mains after completion of construction and cleaning of the pipeline. A video in DVD format shall be made of the inspection and delivered along with a typed log of the inspection to the Engineer for review and acceptance.

Submitted DVDs shall include a continuous on-screen display, which contains, as a minimum, the date of the filming, identification of the line and segment (reach) of the line being viewed, and readout, in feet, showing the distance to the entry point. Video equipment shall include a television camera in color format specifically designed and constructed for operation in connection with sewer inspection and for operation in sewers under 100% humidity conditions. Lighting and camera quality shall produce a clear, in-focus picture of the entire periphery of the pipe for a minimum distance of six (6) feet. The camera shall be moved through the line, preferably in the direction of the sewage flow, at a moderate rate, stopping at joints, lateral connections and when necessary to permit proper documentation of the sewer's condition. In no case shall the television camera be operated at a speed greater than 30 feet per minute. Manual winches, power winches, TV cable, and powered rewinds or other devices that do not obstruct the camera view or interfere with proper documentation of the sewer conditions shall be used to move the camera through the sewer line.

If, in the opinion of the Engineer, the submitted DVDs are of poor quality, the Engineer may reject the DVDs and require the TV inspection to be repeated and new DVDs submitted to the Engineer for review and acceptance. All DVDs shall become the property of the County.

Sags in the pipe will not be permitted. Any segment of pipe with sag shall be repaired in accordance with the Plans, these Specifications and as directed by

the Engineer.

101-12 CLEANUP

Upon completion of all work, Contractor shall remove all surplus materials and rubbish, shall repair all damages caused by his workers and shall leave the premises in a clean and orderly condition.

101-13 MEASUREMENT AND PAYMENT

a. Sewer Main

Linear Foot Item of Pipe Bursting of existing 6" and/or 8" VCP and installing 6" and/or 8" HDPE in Street or Easement will be measured for payment along the longitudinal axis of the pipe, as laid by the linear foot. The measurement will be from the center of manholes, or where the sewer does not terminate in a manhole, it shall be measured to the end of the pipe as constructed.

Payment will include compensation for furnishing all labor, materials, equipment, and supervision to perform all work necessary to replace certain sanitary sewer lines, as shown on the plans and in accordance with these specifications. The required method of replacement is pipe bursting. The pipe bursting work shall consist of, but not necessarily be limited to, bypassing of sewage flow during the whole operation, bursting of the existing VCP pipe and pulling of the new HDPE pipe, connection of HDPE main to manholes, television inspection before and after pipe bursting. Bid unit price also includes compensation for dewatering, pit excavation, point or sag repairs, backfill, aggregate base, compaction, and disposal of material, surface restoration, complete in place.

b. Replace Existing Sewer Lateral

The Contract unit price paid per linear foot for replacing existing sanitary sewer lateral in easement or street shall include all labor, materials, tools, and equipment for removal and disposal of existing lateral pipe, installation of new lateral pipe, connections of new lateral pipe to new (reconnected) sewer lateral pipe and existing sewer lateral pipe, and surface restoration, complete in place.

c. Reconnect Existing Sanitary Sewer Lateral to New Sewer Main

The Contract unit price for reconnection of existing live sewer lateral to new sanitary sewer pipe in Street or Easement shall include all labor, materials, tools, and

equipment for connection of existing sewer lateral to new HDPE main. Payment will include compensation for plugging inactive laterals, providing assistance to Engineer in determining inactive laterals, excavation, fusing new polyethylene wye or branch saddles, backfill, compaction, complete in place. Payment will be made at the contract unit price per each for "Reconnect existing sanitary sewer lateral to new sewer main in Street" and "Reconnect existing sanitary sewer lateral to new sewer main in Easement."

No adjustment of the contract unit price per each and per linear foot will be made for any increase or decrease in the quantity of Reconnect existing sanitary sewer lateral to new sewer main and Replace existing sanitary sewer lateral required. The provisions in Sections 4-1.03B, "Increased and Decreased Quantities," of the Standard Specifications shall not apply to the items of Connect existing sanitary sewer lateral to new sewer main and Replace existing sanitary sewer lateral.

END OF SECTION

SECTION 104

MANHOLE CONSTRUCTION

104.1 GENERAL

Sanitary sewer manholes shall conform to the provisions of the Standard Specifications, these Special Provisions, the Plans, and as directed by the Engineer. All manholes shall be class 2 concrete and shall conform in size, shape and details to those shown on the Plans. Pipe openings shall be built into the manholes as shown. The outer ends of all openings shall be sealed with a precast concrete plug made watertight with mastic compound or elastometric gasket. All pipes shall be connected to new manholes with manhole adapter rings. The rings shall conform to recommendations of manufacturer of polyethylene pipes. Precast concrete manholes shall conform in all respects to the specifications indicated on the Plans and submittal information shall be presented to the Engineer for approval prior to construction. Manholes shall be constructed as shown on the Plans. Foundations for new manholes shall be poured against a base, which is firm and dry.

Existing manhole frames and covers in good condition shall be salvaged and reused. The Contractor shall furnish and replace frames and covers at his own expense if damaged by actions of the contractor.

Pipe connections to existing or new manholes shall be made in such a manner that the finished work will conform to the applicable requirements specified and indicated for new manholes, including all necessary concrete work, cutting and shaping of the manhole base. Concrete mortar shaping within any manhole shall be as specified in the Standard Specifications. Backfill for manholes shall meet the same requirement as those requirements for trench backfill shown on the Plans.

104-2 MANHOLE TESTING

After completion of manhole installation, manhole shall be tested for leakage. The Contractor shall furnish all labor, tools and equipment necessary to perform the tests and conduct any work incidental thereto. The Contractor at his own expense shall correct any excess leakage and repair any damage to the pipe and its appurtenances or

to any manhole resulting from or caused by these tests.

For manhole testing, the Contractor at his own discretion may use either water or vacuum testing method.

104-2.1 WATER TESTING

Each manhole shall be tested by inserting inflatable plugs in all sewer inlets and outlets of the manhole, and filling the manhole with water to a point six inches below the base of the manhole frame.

The manhole shall be filled at least one hour in advance of the official test period to allow time for absorption. The loss of water may be determined by measuring additions of water required to maintain the specified water level, but the level shall not be allowed to fall more than 25% of the manhole depth.

Each manhole shall be tested for a minimum of fifteen (15) minutes.

The allowable leakage shall be determined by the following formula:

Em = 0.0002 x L x square root H

Where Em = amount of allowable leakage in gallons per minute

L = depth of manhole from top to bottom (feet)

H = head of water in feet, as measured from the sewer line invert or from prevailing ground water against outside of manhole barrel. The lesser height governs.

As an alternative to the above procedure, the Contractor may fill the manhole with water prior to backfill and repair all visible leaks provided there is no ground water above the manhole base. Any visible leaks into or out of a manhole shall be repaired.

104-2.2 VACUUM TESTING

Vacuum test procedures and requirements shall be as follows:

1. After completion of the manhole barrels but prior to backfilling, sealing of liner seams and installing grade rings, all openings in the manhole are sealed with plugs and a rubber ring "donut" type plug inserted inside the opening of the cone.
2. A small vacuum pump is attached to a hose connected to the plug and 4 psi (8 inches Hg) of vacuum applied.
3. The vacuum is permitted to stabilize at 3.5 psi (7 inches Hg) for one (1) minute;

then the test is begun.

4. The manhole must maintain vacuum such that no greater than 0.50 Psi (1 inch Hg) of vacuum is lost during the specified test period. The specified test period is as follows:

Manhole depth (feet)	Test period (minutes)
0-5	4.5
5-10	5.5

5. Manholes that fail the test shall be corrected as required and retested.
6. A vacuum regulator shall be provided on the vacuum pump such that no greater than 10 psi (20 inches Hg) can be applied to the manhole during the test. All manholes that do not meet the leakage test, or are unsatisfactory from visual inspection, shall be repaired to the satisfaction of the Engineer.
   Where the actual leakage in a manhole exceeds the allowable, Contractor shall discover the cause, remedy it and retest the manhole before the manhole is accepted. If the leakage is less than allowable and leaks are observed, such leaks shall be repaired.

104-3 MEASUREMENT AND PAYMENT

The Contract unit price paid per each for these items, "Replace Existing Sanitary Sewer Manhole in Street," and, "Replace Existing Sanitary Sewer Manhole in Easement," shall include, but not be limited to, full compensation for furnishing all labor, tools, materials, and incidentals necessary for doing all work involved in installation of sanitary sewer manhole, as shown on the Plans, as specified in these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefore.

END OF SECTION

SECTION 106

TRENCH SAFETY, TRENCHING AND TRENCH BACKFILL

106-1. Trench Safety

Attention is directed to Section 5-1.02A, "Trench Excavation Safety Plans," and Section 7-1.01E, "Trench Safety," of the Standard Specifications, and these Special Provisions.

The Contract lump sum price paid for this item, "Trench Safety," shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals necessary for doing all work involved in performing trench safety, including, but not limited to, preparing a detailed Trench Excavation Safety Plan, and providing, constructing, installing and maintaining shoring and bracing, as shown on the Trench Excavation Safety Plan, as specified in these Special Provisions, and as directed by the Engineer, and no additional compensation will be allowed therefore.

106-2. Trenching and Trench Backfill

Full compensation for conforming to the following subsections of this Section 105-2, "Trenching and Trench Backfill," of these Special Provisions shall be considered as included in the unit prices paid for the various Contract items of work, and no additional compensation will be allowed therefore.

The Contractor is advised that no testing on native soil has been performed, and the County makes no guarantee as to the suitability of native material for use as trench backfill. Therefore:

(1) All existing trench excavation material determined to be unsuitable for trench backfill by the Engineer shall become the property of the Contractor and shall be disposed of outside the highway right of way in accordance with the provisions of Section 7-15, "Disposal of Material Outside the Highway Right of Way," of these Special Provisions and in conformance with local agency requirements; and

(2) All existing structure excavation material determined to be suitable for trench backfill material by the Engineer may be used in conformance with the Plans and these Special Provisions, and the directions of the Engineer.

(3) Lift Stations and Manhole Safety:

The Contractor shall comply with all applicable occupational safety and health (OSHA) standards, rules, regulations and orders established by Federal and State Agencies.

The atmospheric condition in manholes shall be tested for possible oxygen deficiency and the presence of poisonous, toxic or explosive gases before entering. Sufficient ventilation shall be provided to ensure the safety of workers working in the manhole. The Contractor is required to provide all safety equipment for manhole entry and appropriate attire is required for those who are working in the manhole.

The minimum crew shall be three (3) workers, or two (2) workers and a safety winch: the worker who will go into the hole, the lifeline attendant, and an assistant (or safety winch) on the surface.

Specific attention is directed to OSHA safety rules, regulations and precautions to be taken by the Contractor before entering sanitary sewer manholes, and other sanitation structures with respect to physical and chemical hazards that may be present.

106-3. Trench Dewatering:

The Contractor shall take measures as may be required and shall furnish, install, and operate such pumps or other devices as may be necessary to remove groundwater seepage, storm water or sewage that may be found or accumulate in the excavations during the progress of the work. Once seepage or ground water conditions in the trench are encountered, no further trenching will be allowed until suitable dewatering procedures are in operation. The Contractor shall keep all excavations free from water at all times during the construction of the work and until the County gives permission to cease pumping. The Contractor shall keep completed work free from accumulation of water and sewage and shall free it entirely at such times as may be required by the County for inspection or other

purposes. The Contractor's attention is directed to Section 11-1, "Water Pollution Control," of these Special Provisions.

Every effort shall be made to keep the trench dry at all times. As a minimum requirement, water shall not be allowed to accumulate in the trenches unless sufficient backfill has been placed to prevent pipe floatation.

106-4. Shoring, Sheeting and Bracing:

The Contractor's attention is directed to Section 105-1, "Trench Safety," of these Special Provisions.

Where sheet piling, shoring, sheeting, bracing or other supports are necessary, they shall be furnished, placed, maintained and, except as shown or specified otherwise, removed by the Contractor.

The design, planning, installation and removal, if required, of all sheeting, shoring, sheet piling, lagging and bracing shall be accomplished in such a manner as to maintain the required excavation or trench section and to maintain the undisturbed state of the soils below and adjacent to the excavation.

The use of horizontal strutting below a pipe barrel or the use of the pipe as support for trench bracing will not be permitted.

When the construction sequence of structures, pipe laying, etc. requires the transfer of bracing, shoring or other means of support to complete portions of any structure, pipe laying, etc., the Contractor shall secure written acceptance from the County prior to the installation of such bracing.

California Labor Code Section 6705 and all applicable Construction Safety Orders and shoring system standards with respect to excavation and construction shall be strictly observed at all times.

106-5. Compaction:

Where the term "compaction" is used herein, it is defined as a relative compaction and refers to the in-place dry density of the fill expressed by the Test Method of ASTM D698 and of modified proctor ASTM D2049 of AASHTO T180. All compacted materials may be tested by the County. The County pays for first test only. All subsequent tests of failed sections shall be paid for by the Contractor until the desired compaction is reached, and no additional

compensation will be allowed therefore. The Contractor shall notify the County when compacted materials are ready to be tested, one (1) working day prior to testing.

The Contractor shall adjust the water content of the fill material to an amount that will enable the specified degree of compaction to be attained in each lift. Each lift shall be thoroughly mixed before compaction to ensure a uniform distribution of water content. Jetting will not be allowed.

106-6. Pipeline Backfill:

1. Bedding

Unless otherwise indicated, all pipes shall have a minimum of four inches (4") of bedding material below the barrel of the pipe. Bedding shall be placed and compacted as specified for initial trench backfill, and shall be shaped around the barrel of the pipe. Bedding material shall be as designated on the Plans. The size of gradation shall fall within the limits designated on the Plans.

Where, in the opinion of the Engineer, stabilization of the undisturbed foundation below the bedding, or over-excavation beyond the depth shown is required because of soft, spongy or unstable condition, additional bedding ordered by the Engineer shall be placed in the trench bottom. The quantity and placement of such material will be paid for as extra work, except if the over-excavation is noted at specified locations in the Contract documents.

2. Initial Backfill

After the pipe has been properly laid and inspected, bedding material shall be placed from pipe horizontal centerline to a level not less than twelve inches (12") over the pipe unless otherwise shown. The backfill material shall be hand-placed in horizontal layers not exceeding eight inches (8") in loose depth and compacted by power-operated tampers, rollers or vibratory equipment to a dry density equal to ninety-five percent (95%) of maximum.

Each layer shall be compacted to the specified density prior to placing subsequent layers. Compaction by flooding or jetting methods will not be permitted. No further backfilling will be permitted until the initial backfill has

been accepted by the County.

3. Subsequent Trench Backfill

Backfill shall be structural backfill material, as designated on the Plans and specified in these Special Provisions, placed in horizontal layers not exceeding twelve inches (12") in loose depth. Fill material shall have a moisture content such that the required degree of compaction may be obtained. Each layer shall be compacted by power-operated tampers, rollers, or other suitable equipment to a dry density equal to the surrounding material but not less than ninety-five percent (95%) relative compaction. Each layer shall be compacted to the specified density prior to placing subsequent layers.

END OF SECTION

SECTION 107
RESTORATION OF PAVED SURFACES

107-1 GENERAL

Restoration of paved surfaces shall include all labor, materials, tools, equipment, and incidentals necessary for doing all work required to restore surfaces over trenches, and excavations around manholes and lift stations, and lateral connection to original conditions, complete in-place, as specified in these Special Provisions, as shown on the Plans, and as directed by the Engineer.

107-2 MATERIALS

Aggregate base (Class 2), asphalt concrete (Type B), and asphaltic emulsion (prime coat and paint binder) shall be placed where shown on the Plans and as directed by the Engineer. Reference is made to Section 26, "Aggregate Base (Class 2)," Section 39, "Asphalt Concrete (Type B, ½", Maximum, Medium Grading)," and Section 94, "Asphaltic Emulsion (Prime Coat and Paint Binder)," of these Special Provisions.

Comment [EG9]: Where?

The completed asphalt concrete surfacing shall be thoroughly compacted, smooth, and free from ruts, humps, depressions, or irregularities. Any ridges, indentations or other objectionable marks left in the surface of the asphalt concrete, as determined by the Engineer, by blading or other equipment shall be eliminated by rolling or other means. The use of any equipment that leaves ridges, indentations, or other objectionable marks in the surface of the asphalt concrete shall discontinue, and the Contractor shall furnish acceptable equipment, all at the Contractor's sole expense

107-3 QUALITY CONTROL

When a straightedge twelve-foot (12') long is laid on the finished surface and parallel with the centerline of the pipe, the surface shall not vary more than one-one hundredths of a foot (0.01') from the lower edge of the straightedge. The transverse slope of the finished surface shall be uniform to a degree such that no depressions greater than two-one hundredths of a foot (0.02) are present when tested with a straightedge twelve feet (12') long laid in a direction transverse to the centerline of the pipe and extending from edge to edge of a twelve-foot (12') traffic lane.

Any settlement or damage to existing surfaces adjacent to the Contractor's work, which, in the Engineer's opinion was caused by the Contractor's operations, shall be repaired by properly cutting, digging out and replacing the damaged surface, all at the Contractor's expense.

A drop-off of more than fifteen-one hundredths of a foot (0.15') will not be allowed at any time within pavement open to public traffic. If asphalt concrete has not been placed to the level of existing pavement before pavement is to be opened to public traffic, a temporary asphalt concrete taper shall be constructed. Asphalt concrete for temporary tapers shall be placed to the level of the existing pavement and tapered on a 30:1 slope or flatter to the level of the ground and plugged areas. Tapers shall be removed prior to placement of final asphalt concrete surfacing

107-4 COMPACTION TESTS

The subgrade of the roadway along pipeline trenches and over insertion and pulling pits shall be a true surface varying not more than five hundredths of a foot (0.05') above or below the grade established on the Plans for the construction of the roadway base along the trenches. The subgrade, as shown on the Details on the Plans, shall be compacted to ninety-five percent (95%) of relative density, per ASTM specifications.

Following compaction, the Contractor shall notify the Engineer that he desires to have density tests made at certain locations. The Engineer will designate the exact locations to be tested, and an independent soil laboratory hired by the County will conduct the testing. The County will pay for this testing only. If tests fail to meet the requirements of the Specifications, the Contractor shall recompact those areas failing to comply with the compaction requirements. Following recompaction, the Contractor shall request that the areas be retested. The cost for recompaction and retesting, as well as any subsequent recompaction and retesting, if necessary, shall be at the Contractor's expense, and no additional compensation will be allowed therefore.

107-5 CORRECTION OF RESTORED PAVEMENT DURING WARRANTY PERIOD

The Contractor shall repair any restored paved surfaces during the warranty period where the surface settles more than the tolerance allowed. Such repair shall be done by removing the existing pavement and base material as needed to ensure proper re-compaction and to provide for the placement of no less than the thickness

of the asphalt concrete shown on the Plans and Details.

107-6 CULTIVATED AREAS, FENCES, AND OTHER SURFACE IMPROVEMENTS

All cultivated areas, either landscape, natural vegetation areas, fences, curb, gutter, sidewalk, valley gutter, decorative pavers, and other surface improvements which are removed or damaged by the construction activities, shall be restored as nearly as possible to their original condition to the satisfaction of the Engineer. It is expected that the Contractor will and can determine the existence of such improvements by a site visit. Accordingly there shall be no additional payments whatsoever for the required restoration of any such improvements.

Comment [EG10]: Does this section include any existing pavers like the ones on the driveway at Timberlane?

Comment [EG11]: This leaves the work to being subjectively evaluated and could cause conflict during construction.

107-7 MEASUREMENT AND PAYMENT

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals necessary for doing all work involved on "Restoration of Paved Surfaces" shall be considered as included in the unit prices paid for the various Contract items of work, and no additional compensation will be allowed therefore.

END OF SECTION

From: "Palter, Catherine" <cpalter@stanford.edu>
To: "John Nibbelin" <jnibbelin@smcgov.org>
CC: "Lennie Roberts (lennie@darwin.ptvy.ca.us)" <lennie@darwin.ptvy.ca.us>, ...
Date: 4/19/2012 10:15 AM
Subject: RE: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357

Hi John:
Just checking in to see how your review is going.
Thanks,
Catherine

-----Original Message-----
From: John Nibbelin [mailto:jnibbelin@smcgov.org]
Sent: Tuesday, April 03, 2012 4:20 PM
To: Palter, Catherine
Cc: Lennie Roberts (lennie@darwin.ptvy.ca.us); Sam Naifeh (samnaifeh@sbcglobal.net); Cary Wiest (wiestandassoc@sbcglobal.net); Jim Eggemeyer; Pete Bentley; Tim Fox; Alan Palter (Alan.Palter@Varian.com)
Subject: RE: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357

Catherine,

I'm back in and am now looking at this. Will be in touch soon. Best regards,

John

John D. Nibbelin
Chief Deputy County Counsel
Telephone: 650-363-4757
jnibbelin@co.sanmateo.ca.us

Save Paper.
Think before you print.

>>> "Palter, Catherine" <cpalter@stanford.edu> 3/29/2012 9:21 PM >>>
Hi John:
I just wanted to check in to see if you've had time to turn to this matter.
Thank you,
Catherine

From: John Nibbelin [mailto:jnibbelin@co.sanmateo.ca.us]
Sent: Tuesday, March 06, 2012 10:40 AM
To: Palter, Catherine
Cc: pbentley@smcgov.org; Jim Eggemeyer (JEggemeyer@co.sanmateo.ca.us); Tim Fox (tfox@co.sanmateo.ca.us); Lennie Roberts (lennie@darwin.ptvy.ca.us); Sam Naifeh (samnaifeh@sbcglobal.net); Cary Wiest (wiestandassoc@sbcglobal.net); Alan Palter (Alan.Palter@Varian.com)
Subject: Re: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357

I'll be in the office starting tomorrow for the next week and a half, and then in and out intermittently through the first couple weeks of April. This matter is towards the top of my list of things to address.
Cordially,

Joh

Sent from my iPad

On Mar 6, 2012, at 11:37 AM, "Palter, Catherine" <cpalter@stanford.edu<mailto:cpalter@stanford.edu>> wrote:
Pete and Jim:
Please let us know the status of the planning office evaluation of the proposed subdivision and confirm that it will wait until we can talk to John Nibbelin about the required conservation easement when he returns to the office. What is John's schedule for returning?
Thank you,
Catherine

From: Palter, Catherine
Sent: Tuesday, February 21, 2012 8:08 AM
To: 'pbentley@smcgov.org<mailto:pbentley@smcgov.org>'
Cc: Jim Eggemeyer (JEggemeyer@co.sanmateo.ca.us<mailto:JEggemeyer@co.sanmateo.ca.us>); John Nibbelin (jnibbelin@co.sanmateo.ca.us<mailto:jnibbelin@co.sanmateo.ca.us>); Tim Fox (tfox@co.sanmateo.ca.us<mailto:tfox@co.sanmateo.ca.us>); Lennie Roberts (lennie@darwin.ptvy.ca.us<mailto:lennie@darwin.ptvy.ca.us>); Sam Naifeh (samnaifeh@sbcglobal.net<mailto:samnaifeh@sbcglobal.net>); Cary Wiest (wiestandassoc@sbcglobal.net<mailto:wiestandassoc@sbcglobal.net>); Alan Palter (Alan.Palter@Varian.com<mailto:Alan.Palter@Varian.com>)
Subject: FW: Re: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357

Pete:
In order for Public Works to approve the application for the parcel map for lots 1-4, the Planning Office must verify that the proposed parcel map is in compliance with the project Conditions of Approval AND the zoning requirements. This parcel is zoned RM and must comply with the RM requirements, including Section 6317A of Chapter 20 requiring a conservation easement at the time of land division. An amendment of this Section of the zoning ordinance was initiated by Mark Church and approved by the Board of Supervisors to make sure that the conservation easement requirement was applied to RM parcels county-wide, rather than just on the coastal part of the County. This project is a perfect example of the Supervisors concern when they recently approved this zoning ordinance change.

http://www.co.sanmateo.ca.us/Attachments/planning/PDFs/Regulations/Jker1086_wfr.pdf

Planning cannot give its approval for the parcel map recordation until the application complies with the RM zoning Section 6317A and Condition of Approval 11. I have spoken with Jim Eggemeyer, who indicated that County Planning consideration of this issue will wait until John Nibbelin returns to the office next month. Jim also confirmed that the parcel map would not be approved by Planning until those discussions could be held with County Counsel's office (and that the parcel map cannot be issued by

Public Works without Planning Office approval).

I have attached the last version of the Conservation Easement (with tracked changes) that we have, which was approved at the April 27, 2010 Board of Supervisors hearing. At that hearing, Mike Murphy indicated that there were just a few typographical errors to correct, so his office has the final version that is to be used for Lot 12.

Please confirm that Planning will not approve the recording of Lots 1-4 prior to resolution of this issue with John Nibbelin.

Thank you,
Catherine

--- On Thu, 2/16/12, Pete Bentley
<pbentley@smcgov.org<mailto:pbentley@smcgov.org>> wrote:

From: Pete Bentley <pbentley@smcgov.org<mailto:pbentley@smcgov.org>>
Subject: Re: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357
To: "Sam Naifeh"
<samnaifeh@sbcglobal.net<mailto:samnaifeh@sbcglobal.net>>
Date: Thursday, February 16, 2012, 11:49 AM

Sam:

Per your request, I have attached a copy of the Planning "conditions of approval" applicable to the recording of the Parcel Map for lots 1-4. All of those referenced are in the process of being met and I would expect confirmation sometime next week.

In house discussions continue with County Counsel regarding the recording of the conservation easement.

I'm sure you are aware that there are over 70 conditions of approval and/or recommendations attached to the project approval. Many of these are applicable "prior to" issuance of the Grading Permits, "prior to" issuance of the Building Permits, etc.

I remind you that you need to contact Public Works on the status of their approval of their conditions applicable to recording of the Parcel Map.

Pete

<image001.gif>

>>> "Sam Naifeh"
<samnaifeh@sbcglobal.net<mailto:samnaifeh@sbcglobal.net>>
2/10/2012 12:41 PM >>>
Dear Pete

Per your suggestion here, please send two copies of the proposed Parcel Map for lots 1-4 in the mail.

Also please send electronically your evaluation materials and correspondence showing or referring to the basis to confirm that all applicable "conditions of approval" relative to the parcels (lots 1-4, in this case) shown on the map have been met.

Thank you

Sam

--- On Thu, 2/9/12, Pete Bentley
<pbentley@smcgov.org<mailto:pbentley@smcgov.org>> wrote:

From: Pete Bentley <pbentley@smcgov.org<mailto:pbentley@smcgov.org>>
Subject: Re: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357
To: "Sam Naifeh"
<samnaifeh@sbcglobal.net<mailto:samnaifeh@sbcglobal.net>>
Date: Thursday, February 9, 2012, 9:54 AM

Sam:

You are right. I don't understand your comment on the adequacy of the scan of the Parcel Map. Either the scan you received was clear and readable or not. If it wasn't, I can put a copy of the proposed Parcel Map for lots 1-4 in the mail to you.

Again, I repeat that whatever associated correspondence that came with the Parcel Map submittal is not provided to Planning. We have "no" involvement in the Map checking process. We only confirm that all applicable "conditions of approval" relative to the parcels (lots 1-4, in this case) shown on the map have been met.

I have contacted Public Works Map Checking, by phone, as you requested and let them know you would be requesting additional information from the parcel map checking submittal. Your contact people by email are Cris Vandrey (LLS) and/or Lilia Latman. Cris' email is:
cvandrey@co.sanmateo.ca.us<mailto:cvandrey@co.sanmateo.ca.us> and Lilia's is
llatman@co.sanmateo.ca.us<mailto:llatman@co.sanmateo.ca.us>.

Pete

<image001.gif>

>>> "Sam Naifeh"
<samnaifeh@sbcglobal.net<mailto:samnaifeh@sbcglobal.net>>
2/8/2012 9:29 AM >>>
Dear Pete

Looks like you misunderstood my note below.

To clarify what is noted in my email, I cannot answer your question on the adequacy of the scan of the "Parcel Map" without the associated correspondence which you say is in the hands of Public Works.

You state that you do not have the 'Parcel Map and all associated correspondence (submitted) "directly" to the Public Works Map Checking Section.'

Please forward my request to the contact person in Public Works who is responsible for PLN2006-00357 and copy me on the email forwarded so that I am able to follow up appropriately.

Thank you
Sam

--- On Wed, 2/8/12, Pete
Bentley<pbentley@smcgov.org<mailto:pbentley@smcgov.org>>
<pbentley@smcgov.org<mailto:pbentley@smcgov.org>> wrote:

From: Pete Bentley<pbentley@smcgov.org<mailto:pbentley@smcgov.org>>
<pbentley@smcgov.org<mailto:pbentley@smcgov.org>>
Subject: Re: Parcel Map (Bunker Hill) Lots 1-4 PLN2006-00357
To: "Sam Naifeh"
<samnaifeh@sbcglobal.net<mailto:samnaifeh@sbcglobal.net>>
Cc: "Jim Eggemeyer"
<JEggemeyer@smcgov.org<mailto:JEggemeyer@smcgov.org>>
Date: Wednesday, February 8, 2012, 7:56 AM

Sam:

I'm glad the Parcel map scan was adequate. I have checked the recent email communications and I can't find any wherein I asked you a question. I did ask Catherine a question on her identifying a Zoning Regulation that I couldn't locate. Catherine has answered that question.

As I stated in my Jan. 26, 2012 email to you, the Chamberlain Group submitted the Parcel Map and all associated correspondence "directly" to the Public Works Map Checking Section. Planning does not receive any documents until the Parcel map is ready to record. They do all the necessary review and, if necessary, request additional information relative to the eventual recording of the map. I have no idea of what "correspondence" is included in this submittal process. You would need to contact them directly to review documents associated with this Parcel Map.

Pete

<image001.gif>

>>> "Sam Naifeh"
<samnaifeh@sbcglobal.net<mailto:samnaifeh@sbcglobal.net>>
2/7/2012 8:35 PM >>>

Dear Pete

Thank you for sending a scan of the "Parcel Map" In order to respond
to your question, we need scans of the applicant's correspondence that accompanied the map. You mentioned that you were checking out
compliance with the conditions of approval. Please send the scan of
the VTM for PLN2006-00357.

Sam

LAW OFFICES OF DAVID J. BYERS
870 MITTEN ROAD
BURLINGAME, CALIFORNIA 94010-1304
TEL: (650) 697-4890
FAX: (650) 697-4895
dbyers@landuselaw.net

David J. Byers

OF COUNSEL
Patrick M. K. Richardson

April 24, 2012

- Have John Reviewed Verbage & Description of Easement ?? & Deed Restriction Verbage.

John D. Nibbelin, Esq.
Chief Deputy County Counsel
San Mateo County
400 County Center, 6th Floor
Redwood City, CA 94063

Re : Conservation Easement for San Mateo Highlands Project

Dear John:

As you know, this office represents Ticonderoga Partners LLC, the applicant for Highlands Project. On April 27, 2010 the San Mateo Board of Supervisors approved a tentative subdivision map for this Project. Included in the approval was condition no. 11 which states:

> *"11. Conservation Easement: Lot 12, the open-space parcel, will be subject to a conservation easement in perpetuity, and to a deed restriction, each in forms to be approved by County Counsel and the County Board of Supervisors. The easement will be noted on the Vesting Tentative Map and on the Final Map. Recordation of the Final Map and conservation easement shall be handled by the Department of Public Works (DPW) working cooperatively with Planning staff to ensure that the Final Map is recorded and ensure recordation of the approved conservation easement immediately following (allowing no other documents to be recorded on the project parcels between the recordings of the Final Map and the conservation easement)."*

The tentative map provided for 11 building sites. Due to the economy, my client is unable to proceed with building all 11 sites at one time. My client requested that the County approve 4 building sites, pursuant to Government Code § 66456.1. The County determined that my client can file several parcel maps in lieu of one final map.

The tentative map envisioned that the conservation easement would be recorded after the final map was recorded. The property description for the land burdened with the conservation easement would have been described as Lot 12 on the final map. Now that my client is recording multiple parcel maps, we no longer have a property description which is necessary to record the conservation easement.

MARIN OFFICE
843 DEL GANADO RD., SAN RAFAEL, CA 94903-2309
TEL.: (415) 492-0535; FAX.: (415) 492-0364

My client recognizes that the approval process for this project was controversial and wants to clearly demonstrate to the County that the conservation easement will be granted when all 11 lots are finally approved under the Subdivision Map Act. However, there is no property description available at the present time which is necessary to such a recordation. Moreover, under Government Code § 66477.3 the acceptance of a grant of a conservation easement would not become effective until the recordation of the final map.

I propose the following as a solution to this concern. This solution will guarantee that the County has a conservation easement that can be recorded at the appropriate time.

Attached to this letter are three draft documents: (1) An irrevocable escrow instruction, (2) A signature page from the proposed conservation easement and (3) A place holder property description exhibit.

The escrow instruction guarantees that upon the genesis of an actual property description that can be recorded which will occur after the final approval of the eleventh lot, the County can record a valid conservation easement. This is consistent with the requirements of the Subdivision Map Act and will give both the applicant and the County certainty that the conditions of the tentative map will be satisfied.

I am available to answer any questions. I am willing to assist you in the modification of any documents. My client has secured financing for the construction of 4 houses and is anxious to get the parcel map recorded which has been reviewed by the County Public Works Department. I can meet with you any time on May 2nd or May 3rd.

Sincerely,

LAW OFFICES OF DAVID J. BYERS

David J. Byers

DAVID J. BYERS, ESQ.

cc: Jack Chamberlain

MARIN OFFICE
843 DEL GANADO RD., SAN RAFAEL, CA 94903-2309
TEL.: (415) 492-0535; FAX.: (415) 492-0364

IRREVOCABLE ESCROW INSTRUCTION

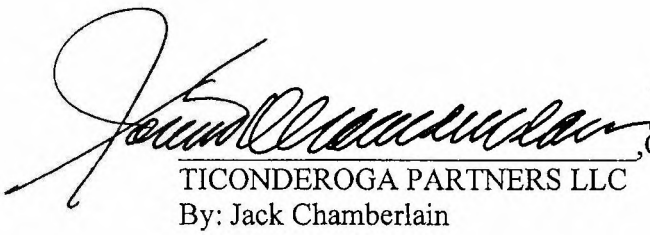
I, Jack Chamberlain, Manager of Ticonderoga Partners LLC, in consideration of the County of Mateo approval of a Vesting Tentative Map for the San Mateo Highlands Project provide the following irrevocable escrow instruction:

1. Upon the recordation in the Office of the San Mateo County Recorder of either a final map or a parcel map which creates the eleventh lot in the Vesting Tentative Map, the County of San Mateo is instructed that it may record the Grant of Conservation Easement which was the condition of approval no. 11 regarding the Vesting Tentative Map.

2. In the event that the eleventh lot is not created as a final approved lot, five years from the date of this document the County of San Mateo may record the Conservation Easement.

Date: 4-25-2012

JACK CHAMBERLAIN
Manager, Ticonderoga Partners LLC



, GRANTOR
TICONDEROGA PARTNERS LLC
By: Jack Chamberlain

EXHIBIT A

Lot No. 12 as described in the Vesting Tentative Map approved by the County of San Mateo Board of Supervisors on April 27, 2010.

From: Camille Leung
To: JTUTTLEC@aol.com
CC: Pete Bentley
Date: 5/2/2012 9:22 AM
Subject: Re: Lots 1-4

Hi Jack,

What is status of Final Map? Building Permit Application? I plan to time the RFP for mitigation monitoring with the Building Permit application.

Thanks

Camille M. Leung
Planning and Building Department
455 County Center, Second Floor
Redwood City, CA 94063
Phone: (650) 363-1826
Fax: (650) 363-4849

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Save Paper.
Think before you print.>>> <JTUTTLEC@aol.com> 4/11/2012 11:10 AM >>>
Hi Camille,

Not yet, Dave is reviewing the Conservation Easement document right now. As soon as he is finished, it goes back to Pete and Jim. Roland Haga and I have a meeting with Public Works on Monday to address any loose ends on their Final Map requirements.

Cordially,

Jack

In a message dated 4/11/2012 9:44:59 A.M. Pacific Daylight Time, cleung@smcgov.org writes:

Hi Jack,

Any news? Please give us 1 month notice (prior to Grading Permit/Building Permit issuance) so we can put out the RFP and hire a contractor to monitor construction. Also, neighborhood asked to be notified. Still thinking

about the best way to provide notification.

Thanks!

Camille M. Leung
Planning and Building Department
455 County Center, Second Floor
Redwood City, CA 94063
Phone: (650) 363-1826
Fax: (650) 363-4849

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Think before you print.>>> <JTUTTLEC@aol.com> 3/27/2012 11:03 AM >>>
Camille,

I still am trying to find out when we will have a final map for the project.

As far as I know now, June still works.

Will update you in the next couple of weeks.

Jack

In a message dated 3/26/2012 5:23:17 P.M. Pacific Daylight Time, cleung@smcgov.org writes:

Hi Jack,

When are Building plans going to be submitted? Is start of grading still estimated for June? I will need to prepare an RFP for monitoring and will
need to know when exactly to start hiring a consultant.

Thanks!

Camille M. Leung

Planning and Building Department
455 County Center, Second Floor
Redwood City, CA 94063
Phone: (650) 363-1826
Fax: (650) 363-4849

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Pete Bentley - RFP for Chamberlain @ Bunker Hill

From: Pete Bentley
To: Camille Leung
Subject: RFP for Chamberlain @ Bunker Hill
CC: Dave Holbrook

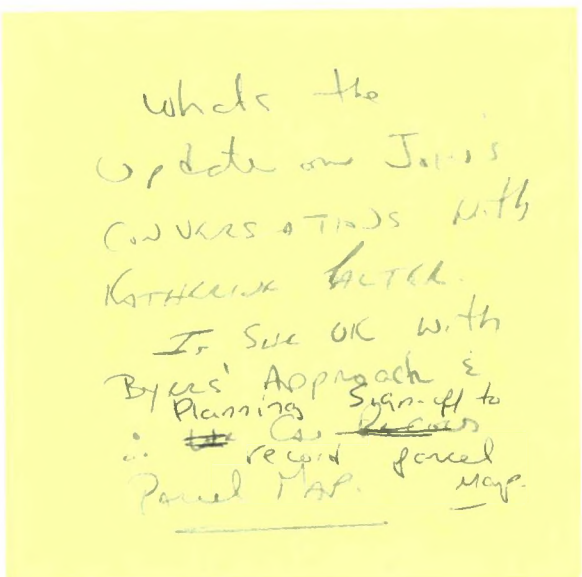
Camille:

What's the status of the RFP for "Mitigation Monitoring" for Chamberlain at Bunker Hill????

Pete

From: John Nibbelin
To: PBentley@smcgov.org
Date: 5/2/2012 2:33 PM
Subject: John Nibbelin accepted Chamberlain - Conservation Easement; (16 May 2012 11:00) Pacific Daylight Time

John Nibbelin accepted Chamberlain - Conservation Easement; (16 May 2012 11:00) Pacific Daylight Time



From: Rosario Fernandez
To: Jim Eggemeyer; John Nibbelin; Pete Bentley
CC: Rosario Fernandez
Date: 5/16/2012
Time: 11:00 AM - 12:00 PM
Subject: Chamberlain Conservation Easement
Place: 455-Room 201

Rosario Fernandez
Planning Commission Secretary
Planning & Building Department
455 County Center, 2nd Floor
Redwood City, CA 94063
(650) 363-1859
rfernandez@smcgov.org

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Pete Bentley - Re: Fwd: Highlands

From: Pete Bentley
To: John Nibbelin
Subject: Re: Fwd: Highlands

John:

Since Jim had me schedule the meeting, how's chances of me getting a copy of Dave's correspondence. Thanks,

Pete

>>> John Nibbelin 5/10/2012 12:31 PM >>>
I think so. I believe Pete Bentley will also be there. It's set for next Wednesday at 11.

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>>> Camille Leung 5/10/2012 11:11 AM >>>
Not aware of the meeting...Should I go?

Camille M. Leung
Planning and Building Department
455 County Center, Second Floor
Redwood City, CA 94063
Phone: (650) 363-1826
Fax: (650) 363-4849

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Think before you print.>>> John Nibbelin 5/10/2012 10:04 AM >>>
ATTORNEY-CLIENT COMMUNICATION
PRIVILEGED AND CONFIDENTIAL

Jim and Camille,

In preparation for our upcoming meeting re the Highlands, I'm forwarding you the attached correspondence

that I received from Dave Byers. Looking forward to working through this. Best,

John

John D. Nibbelin
Chief Deputy County Counsel
Telephone: 650-363-4757
jnibbelin@co.sanmateo.ca.us

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>>> Subidra Waran 5/10/2012 9:16 AM >>>
Please see attached.

sw

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Pete Bentley - Re: Fwd: Highlands

From: Pete Bentley
To: Camille Leung
Subject: Re: Fwd: Highlands

No appointment, just a meeting Jim asked me to schedule with John. Jim wants John to update him and me on the status of the conservation easement relative to the recording of the Parcel Map. The meeting will be Wednesday, May 16 @ 11:00 AM in room 101.

>>> Camille Leung 5/10/2012 5:10 PM >>>
Hi Pete,

Can you forward me appointment? I will hopefully just be a resource. Thanks

Camille M. Leung
Planning and Building Department
455 County Center, Second Floor
Redwood City, CA 94063
Phone: (650) 363-1826
Fax: (650) 363-4849

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5/16/12 Summer 2012

4. **n. Mitigation Measure BIO-6:** Prior to the commencement of construction on Lot 8, the occurrence of purple needlegrass shall be mapped, including all stands on the lot with 20 percent or greater cover of native grasses and having a diameter greater than 10 feet. The area of purple needlegrass to be lost due to development of the lot shall then be calculated.

As part of the proposed project, approximately 92 acres of open space would be maintained as open space under a conservation easement. This open space contains a serpentine grassland (on the slope west of the water tanks) that is dominated by native grasses (including purple needlegrass) and other native plant species. These native grasses, including purple needlegrass, would be permanently protected by the conservation easement. In addition, non-native plant areas adjacent to the serpentine grassland shall be restored to support native grasses over an area twice the acreage (2:1) of the stands of purple needlegrass to be lost on Lot 8.

11. Conservation Easement: Lot 12, the open-space parcel, will be subject to a conservation easement in perpetuity, and to a deed restriction, each in forms to be approved by County Counsel and the County Board of Supervisors. The easement will be noted on the Vesting Tentative Map and on the Final Map. Recordation of the Final Map and conservation easement shall be handled by the Department of Public Works (DPW) working cooperatively with Planning staff to ensure the proper order and timing of the recordation of both documents. DPW and Planning staff shall ensure that the Final Map is recorded and ensure recordation of the approved conservation easement immediately following (allowing no other documents to be recorded on the project parcels between the recordings of the Final Map and the conservation easement).

② Palter (Easement) + Map
wants legal description for Lot 12 → Survey Req'd
Closure (Meets + bounds) w/ good accuracy.

→ Needs to not conflict w/ 5-11 Lots. (Next year)

→ Later Amend Map of Lot 12

① Chris at DPW.

Meeting w/ Chamberlain, Palter, JKE, Pete B, CML, JN
(Byers)

In 5 years, if only 1-4, how to ensure $$ for lot 12: 5/31/11 100%??

record lot 12 by reference: ~~Done by~~ "Final Map" ? Can T-Map be recorded?
(remainder parcel no need to survey)

Bond for Survey (40K → 100K)

sell map for $$

Noel Chamberlain → part of LLC ??
not P/O ...

but he can give personal guarantee recordation of the conser. easement

* Chamberlain: Until such time as the Agreement agreeing to the terms as would be laid out in the conser. easement

Colegal Opinion that the terms of the Agreement will be enforced.

how does anyone donate land? MROSD

Path forward:
→ Palter mtg
→ peggy / CMO / BOS
→ county decision.

Pete Bentley - Fwd: Re: Planning Question - Subdivision Maps

From: Pete Bentley
To: Christopher Vandrey
Subject: Fwd: Re: Planning Question - Subdivision Maps

Chris:

Thanks for the email and follow up to my question. I forwarded the email to County Counsel for their review and input. I will keep you posted on their comments as our meetings continue.

Pete

>>> Christopher Vandrey 5/23/2012 3:53 PM >>>
Pete,
Good afternoon. This is Brian Lee's response to the subdivision question we spoke about last week. Would a face to face be helpful in this situation? We can arrange a time if you would like.

-Chris

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>>> Brian Lee 5/22/2012 8:20 AM >>>
External boundary of the subdivision cannot be changed but internal lot boundaries can if affecting four or less lots once the Final Map is filed. Lot Line Adjustment can be done for four or less lots. If addition area outside of the subdivision adjacent to the open space lot is available, it can be merged with the approved open space lot. The open space lot line common to adjacent lots can also be increased through Lot Line Adjustment. The open space lot can also be reduced or changed to other use through the Planning process. I think we need more information to have a definitive answer.

Brian

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>>> On 05/22/12 at 7:03 AM, Christopher Vandrey <cvandrey@smcgov.org> wrote:

> Brian,
> Good morning. I got a call from Pete Bentley last week about a subdivision map that is creating 12 lots. 11 of which are residential and 1 is open space (very large lot). The boundary lines of the open space cannot be determined for reasons that I do not know. His question was: Can a subdivision map be filed knowing that the boundary might change in the future?
>
> I do not have any experience with this. All of the maps that I've done had the boundary resolved before the map was filed. Have you ever experienced this? Thanks!
>
> -Chris
>
> Save Paper. Think Before You Print.

From: Subidra Waran
To: Pete Bentley
Date: 5/31/2012
Time: 10:00 AM - 11:00 AM
Subject: Highlands Easement
Place: ~~CC - Conference Room~~ 201 455 County Court

Hi Pete - somehow I forgot to include you in this meeting.

Subidra

Save Paper.
Think before you print.

Should Chris Vanore But Included ??

From: John Nibbelin
To: Camille Leung; dbyers@landuselaw.com; Jim Eggemeyer; Pete Bentley; S...
Date: 5/19/2012 5:34 PM
Subject: Meeting re Highlands Conservation Easement

Subidra,

Could I ask for you to work with Jim Eggemeyer, Camille Leung, Pete Bentley, and Dave Byers to identify two or three hour long slots for us to meet and discuss the conservation easement recordation for the Highlands Project? Would like to have this set for the soonest possible time. Once we identify a couple/few possible time slots, I intend to call Ms. Catherine Palter to determine whether any of the times identified will work for her to participate in a meeting. Messrs. Bentley and Eggemeyer and Ms. Leung are on Groupwise and Mr. Byers will, perhaps/hopefully, send you information on who you should coordinate with re his schedule. As always, thanks for your help.

John

John D. Nibbelin
Chief Deputy County Counsel
Telephone: 650-363-4757
jnibbelin@co.sanmateo.ca.us

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Chamberlain 5/31/12

JOHN -
CAMILLE -
J.M -
PETE -
DAVE BYERS -

- EXPOSING TO SURVEY EASEMENT -
- INCLUDING LOCATING EXISTING ENCROACHMENT.

SMC "FULLY" CONSENTS TO RECEIVE EASEMENT -

- OTHER HOUSES BUILT NEXT YEAR -

BOND FOR SURVEY -

WILL NOT BE BUILT OUT IN 5 YEARS -

LOT 12 RECORDED ON "TENTATIVE MAP"

NOEL CHAMBERLAIN - BUILDER/BOND -

CHAMBERLAIN - AGREES TO MEET OBLIGATIONS -
ENFORCEABLE AGREEMENT PROVIDED -

Pete Bentley - Re: Tuesday June 5th - Meeting Time

From: Pete Bentley
To: Christopher Vandrey
Subject: Re: Tuesday June 5th - Meeting Time

Chris:

Thanks for the e-mail. Not working on Monday's or Friday's plus our Email over here "crashing" this AM and just now is up and finally working, I went over to see you at 8:15 this morning. However, my trip was not wasted as Brian Lee was there. He answered my questions, confirmed my position and thinking, and I was on my way back to the 2nd floor.

Hopefully, in passing on Brian's response to staff here and County Counsel, "that a "Record of Survey" can NOT be used to create "new" parcels, we might be a little closer to recording a 4-lot Parcel Map.

Pete

>>> Christopher Vandrey 6/1/2012 12:06 PM >>>
Pete,
I just realized that I double booked myself for Tuesday morning. I need to be over on the coast side to monitor some work. I apologize and I hope Tuesday afternoon will work for you. I can make a 2:30 or 3:00 meeting.

-Chris

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Pete Bentley - Re: Fwd: Conservation Easement Baseline Documentation template

From: Pete Bentley
To: Camille Leung; John Nibbelin
Subject: Re: Fwd: Conservation Easement Baseline Documentation template
CC: Jim Eggemeyer

Under options, If you have a "private" agreement between County and Chamberlain (option 1-1) to accept terms of the conservation easement, including "guaranteed" transfer to the County at the end of 5 years - WHY is there a need for a 2nd option (1-2) "Bond". Bond for "what"???

Why can't John just meet with Catherine Palter to let her know what Chamberlain has proposed, get her thoughts, and let her know what the County's thoughts are. I don't think there are a whole lot more options out there that can be discussed. I'm ready to let DPW Map Checking know that "Planning" conditions, relative to recording the Parcel Map for Lots 1-4, have been met if Chamberlain's proposal is accepted by the County.

Pete

>>> Camille Leung 6/5/2012 11:28 AM >>>
Hi John,

From Pete's discussion with DPW, it turns out that surveying a property that is not already a parcel for the purpose of a legal description for a new subdivision/conservation easement is NOT an option. In other words, even if Chamberlain had $100,000 for surveying or even if we were to survey the cut-outs (parcels) vs. the body to reduce the price of the survey, the survey method of establishing the boundaries of a future parcel does not work. This eliminates the possibility of recording the conservation easement between recordation of Parcel Maps.... It needs to wait until it can be described as the remainder from lots already created.

So, in your conversation with Catherine Palter, the options are much narrower:

1. Record Parcel Map for Lots 1-4 now. Assurance of easement through 1) Record private agreement between County and Chamberlain to accept terms of conservation easement or 2) bond. Record Map for the rest of the 7 lots. Record conservation easement after (but within agreed upon timeframe).

2. Record the Final Map as approved (not a real option for Chamberlain who can't get financing for all 11 lots). Record conservation easement immediately after.

Meeting with Catherine Palter may be more of a heads up, versus choosing among options.....

Pete, please feel free to correct any of the statements above, as necessary.

Thanks

Camille M. Leung
Planning and Building Department

455 County Center, Second Floor
Redwood City, CA 94063
Phone: (650) 363-1826
Fax: (650) 363-4849

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Save Paper.
Think before you print.>>> Camille Leung 5/31/2012 2:42 PM >>>
Hi John,

Got some good info ideas from MROSD. Pete's looking into it. In a nutshell, instead of surveying the entire Lot 12, they could possibly survey the perimeters of the proposed lots 5 - 11 and record a record of survey. Legal description for the conservation easement could reference original parcel description, making exceptions of the area of parcel map for lots 1-4, and areas as described in record of survey, WHICH essentially allows Lot 12 to be referenced as a remainder.... AND would reduce surveying costs by alot. So we will see what Pete finds out from the DPW mapping section.

MROSD reminded me that the terms of the County accepting the conservation easement should include the provision of documentation that allows/eases County monitoring of compliance with such easement. She forwarded me what MROSD usually requires for easement monitoring from Land Grantors (industry standard of sorts)....

Thanks!

Camille M. Leung
Planning and Building Department
455 County Center, Second Floor
Redwood City, CA 94063
Phone: (650) 363-1826
Fax: (650) 363-4849

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6/7/12

Conservation Easement

DB, JN, JKE

Haga, Bentley, Steve Johnson

Property as described in grant deed, less 11 lots in VTA as app by BOS, excepting any easements (access), and as further finalized by any future final map or parcel map. (to the extent that such map is filed).

Haga to provide w. week. (description)
→ Byers
→ Steve Johnson

Only need to update Catherine Palker.

Porter Gulch (HRD)
They wanted land to extend pkg lot.
Byers told Porter, OK if HRD absorbs cost of transfer

CCO (Mike Murphy) says transfer of land to County is not subject to a subdivision map/LLA, Porter to confirm.

6/18/12

LR, CP, AP, SN, JN, JKE, CML

John N. → we can file prop. description for lot 12

→ consev. easement.

Byers –

Send Finalize conservation easement.

within next 30 days → record parcel map + conservation easement

~~BLD~~ Cases NOS.

→ ~~sent~~ to Catherine once apps come in.

→

From: John Nibbelin
To: David Byers
CC: Camille Leung; Jim Eggemeyer; Pete Bentley
Date: 6/21/2012 3:55 PM
Subject: Re: FW: Easement Property description
Attachments: BKF Job No 19950168 Conservation Easment revised 6.20.2012 JDN Edits.docx

Dave,

Per our meeting of today, some proposed revisions to the property description re the Highlands Conservation Easement.

John D. Nibbelin
Chief Deputy County Counsel
Telephone: 650-363-4757
jnibbelin@co.sanmateo.ca.us

Save Paper.
Think before you print.

>>> "David Byers" <DByers@landuselaw.net> 6/21/2012 10:12 AM >>>
John, Here is the final property description. Dave

David J. Byers, Esq.
LAW OFFICES OF DAVID J. BYERS
870 Mitten Road
Burlingame, CA 94010-1304
Telephone No. (650) 697-4890
Facsimile No. (650) 697-4895
Email: dbyers@landuselaw.net

From: Roland Haga [mailto:RHAGA@BKF.com]
Sent: Wednesday, June 20, 2012 4:17 PM
To: David Byers
Cc: 'JTUTTLEC@aol.com'; Roland Haga
Subject: RE: Easement Property description

David,

Attached is a Word copy (for potential last second editing) and a PDF copy of the revised Exhibit A you request.

Please review , I assume this is what you were looking for.

Roland

[cid:image001.jpg@01CC6F02.024D4D60]

Roland Haga , P.E., LEED(r)AP
Associate/Project Manager

BKF Engineers
Civil Engineers, Land Surveyors, Planners
255 Shoreline Drive, Suite 200 | Redwood City, CA 94065
Tel (650) 482-6300 | Direct (650) 482-6407

www.bkf.com<http://www.bkf.com/>| rhaga@bkf.com<mailto:rhaga@bkf.com>

From: David Byers [mailto:DByers@landuselaw.net]<mailto:[mailto:DByers@landuselaw.net]>
Sent: Wednesday, June 20, 2012 12:18 PM
To: Roland Haga
Cc: 'JTUTTLEC@aol.com'
Subject: RE: Easement Property description

Roland, I am meeting with John Nibbelin tomorrow at 3pm. There are some changes that need to be made to the actual conservation easement because of the new procedure we are using. I plan on walking out of that meeting with a recordable document. I will give to Jack who will sign it, get it notarized and recorded. I need a property description without the BKF job no. that says Exhibit A on the bottom for recordation. Thanks, Dave

From: Roland Haga [mailto:RHAGA@BKF.com]
Sent: Monday, June 18, 2012 3:40 PM
To: Roland Haga; David Byers
Cc: 'JTUTTLEC@aol.com'; 'SJohnson@ortc.com'
Subject: RE: Easement Property description

Everyone,

Some of you may not have the latest version of Word, therefore I have attached a PDF version of the written portion as attached.

Roland Haga

[cid:image001.jpg@01CC6F02.024D4D60]

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From: Roland Haga
Sent: Monday, June 18, 2012 3:16 PM
To: 'David Byers'
Cc: 'JTUTTLEC@aol.com'; 'SJohnson@ortc.com'; Roland Haga
Subject: RE: Easement Property description

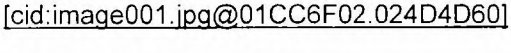
Dave,

Attached is BKF proposed language regarding the Proposed Remainder Parcel and Conservation Easement Area and a PDF copy of Exhibit B referring to the Proposed Remainder Parcel and exception areas as referenced in proposed description.

Upon your review, please contact me should you have any questions.

Best regards,

Roland Haga



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From: David Byers [mailto:DByers@landuselaw.net]
Sent: Monday, June 18, 2012 1:51 PM
To: Roland Haga; 'JTUTTLEC@aol.com'; 'SJohnson@ortc.com'
Subject: RE:Easement Property description

Roland,
What is the satus of the property easement description language? Dave

David J. Byers, Esq.
LAW OFFICES OF DAVID J. BYERS
870 Mitten Road
Burlingame, CA 94010-1304
Telephone No. (650) 697-4890
Facsimile No. (650) 697-4895
Email: dbyers@landuselaw.net<mailto:dbyers@landuselaw.net>

From: Roland Haga [mailto:RHAGA@BKF.com]
Sent: Thursday, June 07, 2012 10:04 AM
To: 'JTUTTLEC@aol.com'; David Byers; 'SJohnson@ortc.com'
Cc: Roland Haga
Subject: Highland Estates Conference Call 11 am 6/7/12

Jack, Dave and Steve,

For the Highland Estates Conference Call at 11 am 6/7/12:

Toll Free 1-866-951-1151
Conference Room 9837928

I'll be the moderator and available at 11 am.

Look forwarding to speaking to everyone.

Best regards,
Roland Haga

Pete Bentley - RE: Emailing: Conservation Easement Property Description Exhibit A, Ticonderoga Partners Conservation Easement June 26 2012

From: "Palter, Catherine" <cpalter@stanford.edu>
To: "Camille Leung" <cleung@smcgov.org>, "Lennie Roberts" <lennie@darwin.ptv...
Date: 6/27/2012 10:22 AM
Subject: RE: Emailing: Conservation Easement Property Description Exhibit A, Ticonderoga Partners Conservation Easement June 26 2012

Camille:
Thank you for providing these documents. We would like to see the other documents that Exhibit A refers to, to make sure that we understand that exhibit and the property description.

We routed these documents around immediately, but we may need more time to have the appropriate people review them. Please don't record the document until we have completed our review of Exhibit A and the revised Conservation Easement.

Thanks,
Catherine

From: Camille Leung [mailto:cleung@smcgov.org]
Sent: Tuesday, June 26, 2012 11:30 AM
To: Palter, Catherine; Lennie Roberts
Subject: Emailing: Conservation Easement Property Description Exhibit A, Ticonderoga Partners Conservation Easement June 26 2012

Hi Catherine and Lennie,

For your reference, here is the latest draft of the conservation easement and property description, as agreed upon by County Counsel and the applicant's counsel. It is substantively the same document we were looking at a couple of years ago. The County plans to record the document by the end of the week.

Thanks

Your message is ready to be sent with the following file or link attachments:

Conservation Easement Property Description Exhibit A
Ticonderoga Partners Conservation Easement June 26 2012

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of

file attachments. Check your e-mail security settings to determine how attachments are handled.

Camille M. Leung
Planning and Building Department
455 County Center, Second Floor
Redwood City, CA 94063
Phone: (650) 363-1826
Fax: (650) 363-4849

Please help us to serve you better and take a moment to complete our survey, just click on the link below:

http://www.co.sanmateo.ca.us/planning/survey

Confidentiality Notice: This e-mail message, including any attachments, is for the sole use of intended recipient(s) and may contain confidential and protected information. Any unauthorized review, use, disclosure or distribution is prohibited. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

Save Paper. Think Before You Print.

Pete Bentley - Fwd: RE: Emailing: Conservation Easement Property Description Exhibit A, Ticonderoga Partners Conservation Easement June 26 2012

From: Pete Bentley
To: Camille Leung; Jim Eggemeyer; John Nibbelin
Subject: Fwd: RE: Emailing: Conservation Easement Property Description Exhibit A, Ticonderoga Partners Conservation Easement June 26 2012

John:

I agree that sharing with the Highlands group was a "courtesy" ONLY.
However, I believe we should have a copy of both referenced exhibits ("Exhibit A & B") for the County's review prior to us recording the documents.
A reminder that the County will record the document not the Highlands representatives, though they should be provided with a copy of the Exhibits.

Pete

>>> John Nibbelin 6/27/2012 12:13 PM >>>
Thanks, Camille, for the catch on this. Should be "easement," rather than "casement."

John D. Nibbelin
Chief Deputy County Counsel
Telephone: 650-363-4757
jnibbelin@co.sanmateo.ca.us

Save Paper.
Think before you print.

>>> Camille Leung 6/27/2012 12:03 PM >>>
All - Yes I agree. But its tough finally telling them that this is where we stop consulting them.... Flack to follow for sure..... We just need to say it nicely....Do you want to reply to Catherine? Or do you want me to?

John - Please send referenced document and check word on Page 11

Camille M. Leung
Planning and Building Department
455 County Center, Second Floor
Redwood City, CA 94063
Phone: (650) 363-1826
Fax: (650) 363-4849

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Save Paper.
Think before you print.>>> John Nibbelin 6/27/2012 11:58 AM >>>
I don't think we want to wait any further re filing, especially for a review of the conservation easement. It's the same document that we worked through 2 year ago. My thought was that we shared it as a courtesy. Your thoughts?

John D. Nibbelin
Chief Deputy County Counsel
Telephone: 650-363-4757
jnibbelin@co.sanmateo.ca.us

Save Paper.
Think before you print.

>>> Camille Leung 6/27/2012 10:25 AM >>>
Hi John,

Do you have referenced documents? While it would be good to provide them, I think we are proceeding without her ok? Or not?

Camille M. Leung
Planning and Building Department
455 County Center, Second Floor
Redwood City, CA 94063
Phone: (650) 363-1826
Fax: (650) 363-4849

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Pete Bentley - Fwd: RE: Emailing: Conservation Easement Property Description Exhibit A, Ticonderoga Partners Conservation Easement June 26 2012

From: Pete Bentley
To: Camille Leung; Jim Eggemeyer; John Nibbelin
Subject: Fwd: RE: Emailing: Conservation Easement Property Description Exhibit A, Ticonderoga Partners Conservation Easement June 26 2012

Sounds good. Let's do it.

>>> John Nibbelin 6/27/2012 1:39 PM >>>
Pete,

Let's ask Dave Byers and Jack Chamberlain to provide us with what they believe are the final versions of the exhibits. I sent Dave B my proposed edits to Exhibit A the other day, and he can send us Exhibit B, as well. Thanks.

John

John D. Nibbelin
Chief Deputy County Counsel
Telephone: 650-363-4757
jnibbelin@co.sanmateo.ca.us

Save Paper.
Think before you print.

>>> Pete Bentley 6/27/2012 1:27 PM >>>
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I agree that sharing with the Highlands group was a "courtesy" ONLY.
However, I believe we should have a copy of both referenced exhibits ("Exhibit A & B") for the County's review prior to us recording the documents.
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Pete

>>> John Nibbelin 6/27/2012 12:13 PM >>>
Thanks, Camille, for the catch on this. Should be "easement," rather than "casement."

John D. Nibbelin
Chief Deputy County Counsel
Telephone: 650-363-4757
jnibbelin@co.sanmateo.ca.us

Save Paper.
Think before you print.

7/19/12

~~Probably~~ Needs
To Get A "New"
Notary Page For
Title To Sign.

VOID
Per John N. 10/24/12

S.M. Co. Real
Property

Christin
Hollender
599-1388

10/24/12

Per John N.
CC:
Disregard old
signed one -
Use New One
& Have Title Sign
& Notarize.

Recorded at the Request of, and When Recorded Return to: Camille Leung, Project Planner Planning and Building Department 455 County Center, 2nd Floor Mail Drop PLN122 Redwood City, CA 94063 **Exempt from Fees Pursuant to Government Code Section 27383**	For Clerk Use Only ORIGINAL

County of San Mateo
Planning and Building Department

GRANT OF CONSERVATION EASEMENT

This GRANT DEED OF CONSERVATION EASEMENT is made on June 28, 2012, by TICONDEROGA PARTNERS, LLC, having an address at 655 Skyway Road, Suite 230, San Carlos, CA 94070 ("Grantor") in favor of the COUNTY OF SAN MATEO having an address at County Government Center, 400 County Center, Redwood City, CA 94063 ("Grantee" or "County").

RECITALS

WHEREAS, Section 6317.A (Conservation Open Space Easement) of the San Mateo County Zoning Regulations (Zoning Regulations) requires, after any land division of lands zoned Resource Management (RM), that the applicant for the land division grant to the County (and that the County accept) a conservation easement, containing a covenant running with the land in perpetuity, which limits the use of the land covered by the easement to uses consistent with open space as defined in the California Open Space Lands Act of 1972 in January 1, 1980; and

WHEREAS, Grantor is the owner of lands located in the County of San Mateo, which lands are included within a subdivision commonly referred to as the Highland Estates Subdivision, the Vesting Tentative Map for which was approved by the San Mateo County Board of Supervisors on April 27, 2010; and

WHEREAS, Grantor wishes to grant to Grantee a conservation easement over the property described in the attached Exhibit A, which is incorporated herein by reference (the "Subject Property"), in fulfillment of the requirements of Section 6317.A of the Zoning Regulations.

NOW, THEREFORE, in consideration of the mutual covenants, terms, restrictions and conditions hereinafter set forth, Grantor hereby grants and conveys to Grantee and its

successors, a conservation easement, in gross and in perpetuity, on the terms, and subject to the limitations set forth herein.

Description of Property

1. Grantor is the sole owner of the Subject Property, located in the County of San Mateo, State of California and the Subject Property is the subject of this grant. The Subject Property is delineated on the Highlands Estates Vesting Tentative Map and listed and described on Exhibit A, which is attached to and made a part of this grant by reference.

Conservation Values

2. The Subject Property possesses natural, scenic, open space, habitat preservation, and recreational values. In particular,

    a. The preservation of the Subject Property as open space is consistent with the General Plan of the County; and

    b. The preservation of the Subject Property as open space is in the best interest of the County and specifically because:

        (1) The land is essentially unimproved and if retained in its natural state has scenic value to the public and this instrument contains appropriate covenants to that end; and

        (2) It is in the public interest that the Subject Property be retained as Open Space because such land will add to the amenities of living in neighboring urbanized areas.

Intention of Grantor

3. It is the intention of Grantor to grant to Grantee a conservation easement on, over, across, and under the Subject Property pursuant to the Open Space Easement Act of 1974, appearing at Chapter 6.6 (commencing with Section 51070) of Part 1, Division 1, Title 5 of the California Government Code, and in fulfillment of the requirements of Section 6317.A of the San Mateo County Zoning Regulations whereby Grantor relinquishes certain rights and enters into certain covenants concerning the Subject Property, as more particularly set forth below. It is further the intention of the Grantor that this grant meet all of the requirements of Section 170(h)(1) of the United States Internal Revenue Code.

Purpose of Easement

4. The purpose of this grant of an open space easement in the Subject Property is to preserve the natural and scenic character of the Subject Property for public use and enjoyment, subject to the restrictions set forth herein, and to prevent any use of the Subject Property that will impair or interfere with the conservation values of the

Subject Property. Grantor intends that this Conservation Easement will confine the use of the Subject Property to activities that are consistent with such purposes.

Description of Grantee

5. Grantee is a political subdivision of the State of California, and is the entity designated under Section 6317.A of the San Mateo County Zoning Regulations to accept easements granted pursuant to that section.

Acceptance by Grantee

6. By accepting this grant, Grantee agrees to honor the intentions of Grantor to act in a manner consistent with the purposes of this grant, and to preserve and protect in perpetuity the conservation values of the Subject Property. Grantee shall accept this grant in satisfaction of Condition 11 to the approval by the Board of Supervisors on April 27, 2010 and other related conditions of approval regarding a conservation easement. The effective date of this grant shall be the date that this grant of easement is recorded. In the event that any Parcel Map or the Final Subdivision Map is invalidated as a result of a legal challenge, this easement shall cease to have any effect and the Grantee shall reconvey to Grantor all rights it may hold by virtue of this easement and shall promptly record a quitclaim of all such rights. This grant satisfies the requirements in the County's Resource Management Zoning District for a density bonus under County Ordinance Section 6318 and for a subdivision under the Resource Management Zoning District.

Grant of Easement

7. In consideration of the above and the mutual covenants, terms, conditions, and restrictions contained in this grant deed, and pursuant to the laws of California and in particular to the Open Space Easement Act of 1974 and Section 6317.A of the San Mateo County Zoning Regulations, Grantor voluntarily grants to Grantee a conservation easement in gross in the Subject Property in perpetuity subject to the terms of this grant deed.

Covenants

8. The Subject Property shall be used by Grantor and Grantor's successors in interest only for those purposes that will maintain the existing open space character of the Subject Property. Any uses of the Subject Property shall further be limited to uses consistent with open space as defined in the California Open Space Lands Act of 1972, on January 1, 1980, as set forth in Government Code Section 65560.

   Without limiting the generality of the foregoing, Grantor and Grantor's successors in interest hereby covenant that they will refrain, in perpetuity, from doing, causing, or permitting any of the following acts with respect to the Subject Property:

   a. Using or permitting the use of the Subject Property for any purpose except as is consistent with the stated purposes, terms, conditions, restrictions, and covenants of this easement, with the provisions of the Open Space Easement

Act of 1974, and with the findings of the Board of Supervisors of the County of San Mateo pursuant to California Government Code Section 51084.

b. Constructing improvements on the Subject Property. However, Grantor may construct and maintain existing utility, road and access easements or any such easements authorized or reserved by the Vesting Tentative Subdivision Map approved by the Board of Supervisors of the County of San Mateo on April 27, 2010, provided that any such construction and maintenance shall be carried out consistently with the conservation values that this Conservation Easement was intended to protect. This section is not intended to approve or otherwise legalize existing improvements constructed by any third person on the Subject Property, nor is to be construed as requiring that Grantor remove any such improvements that exist as of the effective date of this easement.

c. Constructing, placing, or maintaining a parking lot, storage area, or dump site for the storage or disposal of anything that is not indigenous or natural to the Subject Property. Further, this section shall not be construed to authorize a dump site for the permanent disposal of any materials associated with normal construction activities associated with the construction of the eleven authorized houses or for any other materials whatsoever.

d. Surfacing the Subject Property, in whole or in part, with any asphalt, stone, concrete, or other material that does not constitute natural cover for the land, except as is necessary to construct utility and road improvements within the limits of utility and road easements authorized or reserved pursuant to b., above, or paving of a bicycle and/or pedestrian trail if the Subject Property comes to be used as a passive use park, as referenced in Section 14.b. of this easement.

e. Mining, extracting, severing, or removing any natural resource found or located on, above, or below the Subject Property, or otherwise engaging in any activity that will alter the unique physical and scenic characteristics of the Subject Property.

f. Cutting or removing timber or trees found or located on the Subject Property, except as may be required for fire prevention (but only as consistent with Section 9.b. below), thinning, elimination of diseased growth, or similar preventive measures in a manner compatible with the purposes of this grant.

g. Cutting, uprooting, or removing natural growth found or located on the Subject Property, except as may be required for fire prevention (but only as consistent with Section 9.b. below), thinning, elimination of diseased growth, or similar preventive measures in a manner compatible with the purposes of this grant. Nothing in this Conservation Easement shall exempt Grantor from compliance with any regulations and/or permit requirements governing the removal of trees.

h. Dividing or subdividing the Subject Property.

i. Subject to those rights reserved in Paragraph 9, below, excavating, grading, or placing any sand, soil, rock, gravel, or any material on the Subject Property,

except with prior written permission of Grantee, provided that the excavation, grading, or placing of material on the Subject Property is consistent with the purposes of this grant. Notwithstanding the foregoing sentence, during any time in which the Subject Property is owned by a public agency, including but not limited to the Highlands Recreation District, the Grantor may excavate, grade, or place sand, soil, rock, gravel or other material on the Subject property if, on written advice of Grantor's counsel, such action is necessary in order to comply with legal requirements and/or to address a risk of liability related to the condition of the Subject Property. Any such actions authorized by the immediately preceding sentence must be undertaken consistently with the maintenance of RM values, to the full extent possible.

j. There shall be no storage of vehicles, boats, firewood, building materials or equipment on the Subject Property, nor shall there be any sheds or modular office buildings permitted on the Subject Property. The provisions of this subsection 8.j. shall not apply in the area described in subsection 8.o. during any time in which the Subject Property is owned by a public agency, including but not limited to the Highlands Recreation District.

k. There shall be no industrial, commercial, residential, or institutional activity permitted on the Subject Property.

l. Unseasonable watering; use of fertilizers, pesticides, biocides, herbicides, or other agricultural chemicals except to enhance RM values (such as trail maintenance or establishment of native plantings); weed abatement activities except to enhance RM Zone values (such as removal of non-native invasive species); incompatible fire protection activities; and any other activities and uses which may impair or interfere with the purposes of the Conservation Easement.

m. Use of off-road vehicles and use of any other motorized vehicles except on existing roadways.

n. Planting or introduction of non-native or exotic plant or animal species.

o. Notwithstanding the covenants in this section, it shall not be a breach of this easement for there to be constructed an extension of the Highlands Recreation District's Lexington Avenue parking lot that exists as of the effective date of this easement into adjacent land along Lexington Avenue, provided that any such extension of the parking lot extend only into the adjacent lot area that is approximately at the grade of the parking lot and otherwise serves the purposes of this easement. Moreover, in the event that the Highlands Recreation District comes to own the Subject Property, this easement shall not restrict that district from using such extension, for related recreational purposes.

p. During any time in which the Subject Property is owned by a public agency, including but not limited to the Highlands Recreation District, and with respect to any activity that is otherwise permitted under the terms of this easement, this Section 8 shall not restrict Grantor from undertaking any such activity in any manner necessary in order to comply with the Americans With Disabilities Act,

Section 504 of the Rehabilitation Act of 1973 or any analogous state or federal laws.

Reservation of Rights

9. Grantor reserves the right to all uses and occupancy of, and ingress and egress to and from, the Subject Property in any manner consistent with the stated purposes, terms, conditions, restrictions, and covenants of this grant. Those uses include the following specific enumerated rights:

    a. The right to remove hazardous substances, rubbish, diseased plants or trees and to correct dangerous conditions on the Subject Property.

    b. The right to remove understory vegetation which, according to the County Fire Marshal, constitutes a fire hazard to the neighboring parcels. Nothing in this subsection of this Conservation Easement shall exempt the Grantor from compliance with regulations and/or permit requirements regarding the removal of trees.

    c. The right to repair underground utility lines.

    d. The right to post signs to deter trespass or to prevent, pursuant to Civil Code Section 1008, the creation of prescriptive easements, which signs shall be of no greater size than the minimum specified by law.

Grantee's Approval

10. Whenever this grant deed requires Grantor to obtain the prior written approval or permission of the Grantee, the Grantor will notify the Grantee not less than fifteen (15) business days in advance of the date that Grantor intends to undertake the activity. The notice must describe the nature, scope, design, location, timetable, and any other material aspect of the proposed activity in sufficient detail to permit Grantee to make an informed judgment as to the consistency of the activity with the purpose of this grant. The Grantee shall grant or deny approval in writing within ten (10) business days of receipt of Grantor's notice. Grantee may deny approval only on a reasonable determination that the proposed action would be inconsistent with the purpose of this grant. The provisions of this Section 10 shall not apply during any time in which the Subject Property is owned by a public agency, including but not limited to the Highlands Recreation District.

Right to Prevent Prohibited Use

11. Grantor grants to Grantee and Grantee's successors and assigns, for the duration of this grant, the right, but not the obligation, to prevent or prohibit any activity that is inconsistent with the stated purposes, terms, conditions, restrictions, or covenants of this grant and the right to enter the Subject Property for the purpose of removing any building, structure, improvement, or any material whatsoever constructed, placed, stored, deposited, or maintained on the Subject Property contrary to the stated purposes of this grant or to any term, condition, restriction, or covenant of this grant.

By this grant, Grantor retains all rights to enforce the easement and any rights as an owner not inconsistent with this grant.

Enforcement

12. a. The purposes, terms, conditions, restrictions, and covenants in this grant may be specifically enforced or enjoined by proceedings in the Superior Court of the State of California, consistent with the terms of Section 51086 of the California Government Code.

12. b. It is understood and agreed that the enforcement proceedings provided in this section are not exclusive and that any action to enforce the terms and provisions of the Grant of Open Space Easement shall be at the discretion of Grantee and may be brought at law or in equity. Any forbearance on the part of Grantee to exercise its rights hereunder in the event of any breach hereof by Grantor, or by Grantor's heirs, successors, personal representatives or assigns shall not be deemed or construed to be a waiver of Grantee's rights hereunder in the event of any subsequent breach.

12. c. In any action by Grantee to enjoin any violation of this easement, Grantor agrees that Grantee shall have no obligation to prove either actual damages or the inadequacy of otherwise available legal remedies. Grantor agrees that Grantee's remedies at law for any violation of this easement are inadequate and that Grantee shall be entitled to the injunctive relief described in this section, both prohibitive and mandatory, in addition to such other relief to which Grantee may be entitled, including specific performance of this Conservation Easement, without the necessity of proving either actual damages or the inadequacy of otherwise available legal remedies. Grantee's remedies described in this section shall be cumulative and shall be in addition to all remedies now or hereafter existing at law or in equity. The failure of the Grantee to discover a violation or to take immediate action shall not bar Grantee from taking action at a later time. The provisions of this Section 12.c. shall not apply during any time in which the Subject Property is owned by a public agency, including but not limited to the Highlands Recreation District.

Acts Beyond Grantor's Control

13. Nothing contained in this instrument may be construed to entitle Grantee to bring any action against Grantor for any injury to or change in the Subject Property resulting from causes that are beyond Grantor's control, including, but not limited to, third party actions, trespass, fire, flood, storm, earth movement, or any prudent or reasonable action undertaken by Grantor in an emergency situation to prevent or mitigate damage or injury to the Subject Property resulting from such causes, provided that the emergency situation does not result from, or is not related to, actions undertaken by the Grantor. Nothing herein shall relieve Grantor of the obligation to apply for and obtain any required permits or approvals for any such actions.

No Authorization for Public Trespass

14. a. The granting of this Conservation Easement by this instrument and the acceptance of the easement by the Grantee do not, in themselves, authorize, and are not to be construed as authorizing, the public or any member of the public to enter, trespass on, or use all or any portion of the Subject Property, or as granting to the public or any member of the public any tangible rights in or to the Subject Property. It is understood that the purpose of this grant is solely to restrict the use of the Subject Property, so that it may be kept as near as possible in its natural state.

14. b. It is the intention of Grantor and Grantee that should the fee simple interest in the Subject Property be transferred to a public agency or qualified non-profit entity or the County of San Mateo, passive recreational uses that preserve the natural open space character of the land may be allowed, including, but not limited to, nature walks, day hiking, picnicking, bird watching and photography. Any such future use would be subject to the approval of such subsequent owner.

Condemnation

15. As against the County of San Mateo, in its capacity as Grantee, the purposes of this Conservation Easement are presumed to be the highest and most necessary use of the Subject Property as defined at Section 1240.680 of the California Code of Civil Procedure notwithstanding Sections 1240.690 and 1240.700 of that Code. If an action in eminent domain for condemnation of any interest in the Subject Property is filed, or if the Subject Property is acquired for a public improvement by a public agency or person, these restrictions will be null and void as to the interest in the Subject Property actually condemned or acquired. However, all conditions, restrictions, and covenants of this grant will be in effect during the pendency of such an action; if such an action is abandoned before the recordation of a final order of condemnation, any portion of the Subject Property that is not actually acquired for public use will once again be subject to all of the terms, conditions, restrictions, and covenants of this grant. Grantor will be entitled to the amount of compensation as if the Subject Property had not been burdened by the conservation easement, consistent with Section 51095 of the California Government Code. Nothing in this section shall preclude consideration of zoning as reflected in the approved Final Subdivision Map.

Abandonment

16. The easement granted by this instrument may not be abandoned, in whole or in part, and Sections 51093 and 51094 of the California Government Code shall be inapplicable to this Conservation Easement.

Taxes and Assessments

17. Grantor or Grantor's successor or assigns shall pay or cause to be paid all real property taxes and other assessments (general and special), fees, and charges of whatever description levied or assessed against the Subject Property. Grantee agrees to cooperate with Grantor in documenting the existence and property tax-

19b or New
Pg. 16
included under
19.a or pg. 9

related effect of the easement for the Assessor of San Mateo County. The provisions of this Section 17 shall not apply during any time in which the Subject Property is owned by a public agency, including but not limited to the Highlands Recreation District.

Maintenance

18. The Grantee shall not be obligated to maintain, improve or otherwise expend any funds in connection with the use or enjoyment of Subject Property or any interest created by this Grant of Easement.

Liability and Indemnification

19. a. Grantor retains all responsibility and shall bear all costs and liabilities of any kind related to the ownership, operation, upkeep, and maintenance of the Subject Property. Grantor agrees that the Grantee shall not have any duty or responsibility for the operation, upkeep, or maintenance of the Subject Property, or the protection of Grantor, the public or any other third parties from risks related to the condition of the Subject Property. Grantor shall remain solely responsible for obtaining any applicable governmental permits and approvals required for any activity or use by Grantor permitted by this easement, including permits and approvals required from Grantee acting in its regulatory capacity and any activity or use shall be undertaken in accordance with all applicable federal, state, local, and administrative agency laws, statutes, ordinances, rules, regulations, orders, and requirements. Acceptance of this Grant of Open Space Easement by Grantee is subject to the express condition that the Grantee and its officers, agents, members and employees are to be free from all liability and claim for damage by reason of any injury to any person or persons, including Grantor, or property of any kind whatsoever and to whomsoever belonging, including Grantor, resulting from any pre-existing condition(s) on the Subject Property, and any acts or omissions of the Grantor or Grantor's predecessors or successors in interest related to the Subject Property. Grantor, on its behalf and on behalf of its successors in interest, hereby covenants and agrees to indemnify and hold harmless the Grantee, and its directors, officers, employees, agents, contractors, and representatives, and their respective heirs, personal representatives, successors, and assigns (each, an "Indemnified Party") from and against any and all liabilities, penalties, costs, losses, damages, expenses (including, without limitation, reasonable attorney(s) fees and other litigation expenses), causes of actions, claims, demands, orders, liens, or judgments (each, a "Claim") on account of or arising out of any pre-existing condition(s) on the Subject Property and any acts or omissions of the Grantor or Grantor's predecessors or successors in interest related to the Subject Property, except that this indemnification obligation shall be inapplicable to any Claim determined to result solely from the negligence of Grantee or any of its agents.

If any action or proceeding is brought against any of the Indemnified Parties by reason of any such Claim, Grantor and its successors in interest shall, at the election of and upon written notice of any such Indemnified Party, defend such action or proceeding by counsel reasonably acceptable to the Grantee's

Indemnified Party or reimburse such Indemnified Party for all charges incurred for services of any government attorney (including, but not limited, for example, to attorneys of the Office of the County Counsel) in defending the action or proceeding. Grantee agrees that, in the defense of any such Claim, it will vigorously assert all existing and applicable immunities and defenses.

b. The Grantee shall have no right of control over, nor duties and responsibilities with respect to, the Subject Property, which would subject the Grantee to liability occurring on the land, by virtue of the fact that the right of Grantee to enter the land is strictly limited to preventing uses inconsistent with the interests granted, and does not include the right or obligation to enter the land for the purposes of correcting any dangerous condition as defined by California Government Code Section 830.

c. Grantor agrees to maintain bodily injury and property damage liability insurance as shall protect it from claims related to conditions on the Subject Property and to name the Indemnified Parties as additional insureds on such policies.

d. The provisions of subsections 19.a. and 19.c. of this Section 19 shall not apply during any time in which the Subject Property is owned by a public agency, including but not limited to the Highlands Recreation District.

Amendment

20. This Conservation Easement may not be amended in whole or in part as to any term, condition, restriction, or covenant without the prior written consent of the Grantor and Grantee. During all times that the County of San Mateo remains owner of this easement, any non-clerical amendment to this easement that is proposed shall be presented at a duly-noticed public meeting of the San Mateo County Planning Commission for a recommendation of the Planning Commission before the proposed amendment is presented to the San Mateo County Board of Supervisors for action.

    In the event that another public agency besides the County of San Mateo becomes the owner of this easement, that public agency shall convene a public hearing before its governing board to consider any proposed amendments to this easement before the governing board approves any such proposed amendments. Notwithstanding the foregoing, in no event shall any amendment to this Conservation Easement be permitted which violates the California Open Space Lands Act or which contradicts the perpetual nature of this easement.

Binding on Successors and Assigns

21. This grant, and each and every term, condition, restriction, and covenant of this grant, is intended for the benefit of the public and is enforceable pursuant to the provisions of the Open Space Easement Act of 1974. This grant binds Grantor and Grantor's successors and assigns and constitutes a servitude on the Subject Property that runs with the land.

Liberal Construction

22. This easement is to be liberally construed in favor of the grant in order to effectuate the purposes of the easement and the policy and purpose of the Open Space Act of 1974. If any provision in this grant is found to be ambiguous, an interpretation consistent with the purpose of this easement that would render the provision valid will be adopted over any interpretation that would render it invalid.

Severability

23. If any provision of this grant is found to be invalid, or if the application of this easement to any person or circumstance is disallowed or found to be invalid, the remainder of the provisions of the grant, or the application of the grant to persons or circumstances other than those to which its application was disallowed or found invalid, will not be affected and will remain in full force and effect.

Controlling Law

24. This grant of easement is to be interpreted, enforced, and performed in accordance with the laws of the State of California.

Entire Agreement

25. This grant sets forth the entire agreement of the parties with respect to the conservation easement and supersedes all previous conversations, negotiations, understandings, settlements, or agreements related to the conservation easement.

Captions

26. The captions in this grant have been inserted solely for the purpose of convenience of reference and are not to be construed as part of this instrument and do not affect the construction or interpretation of the grant.

Enforceable Restriction

27. This easement is intended to constitute an enforceable restriction pursuant to the provisions of California Constitution, Article XIII, Section 8, and Sections 402.1 and 421 through 423.3 of the California Revenue and Taxation Code.

Counterparts

28. The parties may execute this instrument in two or more counterparts, which shall, collectively, be signed by all parties. Each counterpart shall be deemed an original instrument as against any party who has signed it. In the event of any disparity between the counterparts produced, the recorded counterpart controls.

Recording

29. Grantee shall record this Conservation Easement in the Office of the County Recorder of the County of San Mateo and may re-record it at any time that Grantee deems it necessary in order to preserve its rights in this easement.

Merger

30. It is the intent of the Grantor and the Grantee that the doctrine of merger not operate to extinguish this Conservation Easement if the same person or entity comes to own both the easement and the Subject Property. If, despite this stated intention, the doctrine of merger is determined to have extinguished this Conservation Easement, then a replacement conservation easement or restrictive covenant containing the same material protections embodied in this Conservation Easement shall be prepared and recorded against the Subject Property.

IN WITNESS WHEREOF, Grantor has executed this Conservation Easement Deed the day and year first written above.

Dated: 6-28-12

,GRANTOR
TICONDEROGA PARTNERS, LLC
By: Jack Chamberlain

CALIFORNIA ALL-PURPOSE ACKNOWLEDGEMENT

File No: ()

APN No:

STATE OF California)SS
COUNTY OF San Mateo)

On 6/28/12 before me, Sheri Cookson , Notary Public, personally appeared Jack Chamberlain

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Sheri Cookson

SHERI COOKSON
Commission # 1827993
Notary Public - California
San Mateo County
My Comm. Expires Dec 23, 2012

This area for official notarial seal.

OPTIONAL SECTION
CAPACITY CLAIMED BY SIGNER

Though statute does not require the Notary to fill in the data below, doing so may prove invaluable to persons relying on the documents.

- ☐ INDIVIDUAL
- ☐ CORPORATE OFFICER(S) TITLE(S)
- ☐ PARTNER(S) ☐ LIMITED ☐ GENERAL
- ☐ ATTORNEY-IN-FACT
- ☐ TRUSTEE(S)
- ☐ GUARDIAN/CONSERVATOR
- ☐ OTHER

SIGNER IS REPRESENTING:

Name of Person or Entity Name of Person or Entity

OPTIONAL SECTION

Though the data requested here is not required by law, it could prevent fraudulent reattachment of this form.

THIS CERTIFICATE MUST BE ATTACHED TO THE DOCUMENT DESCRIBED BELOW

TITLE OR TYPE OF DOCUMENT: _____

NUMBER OF PAGES _____ DATE OF DOCUMENT _____

SIGNER(S) OTHER THAN NAMED ABOVE _____

Reproduced by First American Title Company 11/2007

Exhibit "A"

Highland Estates

Proposed Remainder Parcel and Conservation Easement Area

Parcel 1 of Document No. 92-093032, as recorded in the Office of the San Mateo County recorder; excepting therefrom Lots 1 through 11 and the proposed Access Easement for the Benefit of Adjacent Parcel (Doc.#92-093032, as recorded in the Office of the San Mateo County recorder, Legal Description, Exhibit "A", Parcel 2) and as shown in attached Exhibit "B", and referenced on the Highland Estates Vesting Tentative Map prepared by BKF Engineers, dated February 2, 2010 and approved by the San Mateo County Board of Supervisors on April 27, 2010, County File No. 2006-00357, and as may be further defined by the future Recorded Parcel Maps and Final Maps related to said Highland Estates Subdivision.

ACCEPTANCE OF CONSERVATION EASEMENT

Pursuant to the provisions of the Open Space Easement Act of 1974, appearing at Chapter 6.6 of Part 1, Division 1, Title 5 of the California Government Code (commencing with Section 51070), the County of San Mateo accepts this grant of a conservation easement.

Dated: _____

_____
COUNTY OF SAN MATEO

By: _____
Jim Eggemeyer
Community Development Director

CML:fc – CMLW0422_WFF.DOCX

State of California)

County of San Mateo)

On 7/5/2012, before me, T. Pena,
a Notary Public, personally appeared JIM EGGEMEYER, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

T. PENA
Commission # 1821955
Notary Public - California
San Mateo County
My Comm. Expires Nov 9, 2012

Signature T Pena

FINAL COPY

ORIGINAL TO JACK FOR SIGNATURE

FINAL VERSION

Recorded at the Request of, and When Recorded Return to: Camille Leung, Project Planner Planning and Building Department 455 County Center, 2nd Floor Mail Drop PLN122 Redwood City, CA 94063 **Exempt from Fees Pursuant to Government Code Section 27383**	For Clerk Use Only

County of San Mateo
Planning and Building Department

GRANT OF CONSERVATION EASEMENT

This GRANT DEED OF CONSERVATION EASEMENT is made on June ____, 2012, by TICONDEROGA PARTNERS, LLC, having an address at 655 Skyway Road, Suite 230, San Carlos, CA 94070 ("Grantor") in favor of the COUNTY OF SAN MATEO having an address at County Government Center, 400 County Center, Redwood City, CA 94063 ("Grantee" or "County").

RECITALS

WHEREAS, Section 6317.A (Conservation Open Space Easement) of the San Mateo County Zoning Regulations (Zoning Regulations) requires, after any land division of lands zoned Resource Management (RM), that the applicant for the land division grant to the County (and that the County accept) a conservation easement, containing a covenant running with the land in perpetuity, which limits the use of the land covered by the easement to uses consistent with open space as defined in the California Open Space Lands Act of 1972 in January 1, 1980; and

WHEREAS, Grantor is the owner of lands located in the County of San Mateo, which lands are included within a subdivision commonly referred to as the Highland Estates Subdivision, the Vesting Tentative Map for which was approved by the San Mateo County Board of Supervisors on April 27, 2010; and

WHEREAS, Grantor wishes to grant to Grantee a conservation easement over the property described in the attached Exhibit A, which is incorporated herein by reference (the "Subject Property"), in fulfillment of the requirements of Section 6317.A of the Zoning Regulations.

NOW, THEREFORE, in consideration of the mutual covenants, terms, restrictions and conditions hereinafter set forth, Grantor hereby grants and conveys to Grantee and its

successors, a conservation easement, in gross and in perpetuity, on the terms, and subject to the limitations set forth herein.

Description of Property

1. Grantor is the sole owner of the Subject Property, located in the County of San Mateo, State of California and the Subject Property is the subject of this grant. The Subject Property is delineated on the Highlands Estates Vesting Tentative Map and listed and described on Exhibit A, which is attached to and made a part of this grant by reference.

Conservation Values

2. The Subject Property possesses natural, scenic, open space, habitat preservation, and recreational values. In particular,

    a. The preservation of the Subject Property as open space is consistent with the General Plan of the County; and

    b. The preservation of the Subject Property as open space is in the best interest of the County and specifically because:

        (1) The land is essentially unimproved and if retained in its natural state has scenic value to the public and this instrument contains appropriate covenants to that end; and

        (2) It is in the public interest that the Subject Property be retained as Open Space because such land will add to the amenities of living in neighboring urbanized areas.

Intention of Grantor

3. It is the intention of Grantor to grant to Grantee a conservation easement on, over, across, and under the Subject Property pursuant to the Open Space Easement Act of 1974, appearing at Chapter 6.6 (commencing with Section 51070) of Part 1, Division 1, Title 5 of the California Government Code, and in fulfillment of the requirements of Section 6317.A of the San Mateo County Zoning Regulations whereby Grantor relinquishes certain rights and enters into certain covenants concerning the Subject Property, as more particularly set forth below. It is further the intention of the Grantor that this grant meet all of the requirements of Section 170(h)(1) of the United States Internal Revenue Code.

Purpose of Easement

4. The purpose of this grant of an open space easement in the Subject Property is to preserve the natural and scenic character of the Subject Property for public use and enjoyment, subject to the restrictions set forth herein, and to prevent any use of the Subject Property that will impair or interfere with the conservation values of the

Subject Property. Grantor intends that this Conservation Easement will confine the use of the Subject Property to activities that are consistent with such purposes.

Description of Grantee

5. Grantee is a political subdivision of the State of California, and is the entity designated under Section 6317.A of the San Mateo County Zoning Regulations to accept easements granted pursuant to that section.

Acceptance by Grantee

6. By accepting this grant, Grantee agrees to honor the intentions of Grantor to act in a manner consistent with the purposes of this grant, and to preserve and protect in perpetuity the conservation values of the Subject Property. Grantee shall accept this grant in satisfaction of Condition 11 to the approval by the Board of Supervisors on April 27, 2010 and other related conditions of approval regarding a conservation easement. The effective date of this grant shall be the date that this grant of easement is recorded. In the event that any Parcel Map or the Final Subdivision Map is invalidated as a result of a legal challenge, this easement shall cease to have any effect and the Grantee shall reconvey to Grantor all rights it may hold by virtue of this easement and shall promptly record a quitclaim of all such rights. This grant satisfies the requirements in the County's Resource Management Zoning District for a density bonus under County Ordinance Section 6318 and for a subdivision under the Resource Management Zoning District.

Grant of Easement

7. In consideration of the above and the mutual covenants, terms, conditions, and restrictions contained in this grant deed, and pursuant to the laws of California and in particular to the Open Space Easement Act of 1974 and Section 6317.A of the San Mateo County Zoning Regulations, Grantor voluntarily grants to Grantee a conservation easement in gross in the Subject Property in perpetuity subject to the terms of this grant deed.

Covenants

8. The Subject Property shall be used by Grantor and Grantor's successors in interest only for those purposes that will maintain the existing open space character of the Subject Property. Any uses of the Subject Property shall further be limited to uses consistent with open space as defined in the California Open Space Lands Act of 1972, on January 1, 1980, as set forth in Government Code Section 65560.

   Without limiting the generality of the foregoing, Grantor and Grantor's successors in interest hereby covenant that they will refrain, in perpetuity, from doing, causing, or permitting any of the following acts with respect to the Subject Property:

   a. Using or permitting the use of the Subject Property for any purpose except as is consistent with the stated purposes, terms, conditions, restrictions, and covenants of this easement, with the provisions of the Open Space Easement

Act of 1974, and with the findings of the Board of Supervisors of the County of San Mateo pursuant to California Government Code Section 51084.

b. Constructing improvements on the Subject Property. However, Grantor may construct and maintain existing utility, road and access easements or any such easements authorized or reserved by the Vesting Tentative Subdivision Map approved by the Board of Supervisors of the County of San Mateo on April 27, 2010, provided that any such construction and maintenance shall be carried out consistently with the conservation values that this Conservation Easement was intended to protect. This section is not intended to approve or otherwise legalize existing improvements constructed by any third person on the Subject Property, nor is to be construed as requiring that Grantor remove any such improvements that exist as of the effective date of this easement.

c. Constructing, placing, or maintaining a parking lot, storage area, or dump site for the storage or disposal of anything that is not indigenous or natural to the Subject Property. Further, this section shall not be construed to authorize a dump site for the permanent disposal of any materials associated with normal construction activities associated with the construction of the eleven authorized houses or for any other materials whatsoever.

d. Surfacing the Subject Property, in whole or in part, with any asphalt, stone, concrete, or other material that does not constitute natural cover for the land, except as is necessary to construct utility and road improvements within the limits of utility and road easements authorized or reserved pursuant to b., above, or paving of a bicycle and/or pedestrian trail if the Subject Property comes to be used as a passive use park, as referenced in Section 14.b. of this easement.

e. Mining, extracting, severing, or removing any natural resource found or located on, above, or below the Subject Property, or otherwise engaging in any activity that will alter the unique physical and scenic characteristics of the Subject Property.

f. Cutting or removing timber or trees found or located on the Subject Property, except as may be required for fire prevention (but only as consistent with Section 9.b. below), thinning, elimination of diseased growth, or similar preventive measures in a manner compatible with the purposes of this grant.

g. Cutting, uprooting, or removing natural growth found or located on the Subject Property, except as may be required for fire prevention (but only as consistent with Section 9.b. below), thinning, elimination of diseased growth, or similar preventive measures in a manner compatible with the purposes of this grant. Nothing in this Conservation Easement shall exempt Grantor from compliance with any regulations and/or permit requirements governing the removal of trees.

h. Dividing or subdividing the Subject Property.

i. Subject to those rights reserved in Paragraph 9, below, excavating, grading, or placing any sand, soil, rock, gravel, or any material on the Subject Property,

except with prior written permission of Grantee, provided that the excavation, grading, or placing of material on the Subject Property is consistent with the purposes of this grant. Notwithstanding the foregoing sentence, during any time in which the Subject Property is owned by a public agency, including but not limited to the Highlands Recreation District, the Grantor may excavate, grade, or place sand, soil, rock, gravel or other material on the Subject property if, on written advice of Grantor's counsel, such action is necessary in order to comply with legal requirements and/or to address a risk of liability related to the condition of the Subject Property. Any such actions authorized by the immediately preceding sentence must be undertaken consistently with the maintenance of RM values, to the full extent possible.

j. There shall be no storage of vehicles, boats, firewood, building materials or equipment on the Subject Property, nor shall there be any sheds or modular office buildings permitted on the Subject Property. The provisions of this subsection 8.j. shall not apply in the area described in subsection 8.o. during any time in which the Subject Property is owned by a public agency, including but not limited to the Highlands Recreation District.

k. There shall be no industrial, commercial, residential, or institutional activity permitted on the Subject Property.

l. Unseasonable watering; use of fertilizers, pesticides, biocides, herbicides, or other agricultural chemicals except to enhance RM values (such as trail maintenance or establishment of native plantings); weed abatement activities except to enhance RM Zone values (such as removal of non-native invasive species); incompatible fire protection activities; and any other activities and uses which may impair or interfere with the purposes of the Conservation Easement.

m. Use of off-road vehicles and use of any other motorized vehicles except on existing roadways.

n. Planting or introduction of non-native or exotic plant or animal species.

o. Notwithstanding the covenants in this section, it shall not be a breach of this easement for there to be constructed an extension of the Highlands Recreation District's Lexington Avenue parking lot that exists as of the effective date of this easement into adjacent land along Lexington Avenue, provided that any such extension of the parking lot extend only into the adjacent lot area that is approximately at the grade of the parking lot and otherwise serves the purposes of this easement. Moreover, in the event that the Highlands Recreation District comes to own the Subject Property, this easement shall not restrict that district from using such extension, for related recreational purposes.

p. During any time in which the Subject Property is owned by a public agency, including but not limited to the Highlands Recreation District, and with respect to any activity that is otherwise permitted under the terms of this easement, this Section 8 shall not restrict Grantor from undertaking any such activity in any manner necessary in order to comply with the Americans With Disabilities Act,

Section 504 of the Rehabilitation Act of 1973 or any analogous state or federal laws.

Reservation of Rights

9. Grantor reserves the right to all uses and occupancy of, and ingress and egress to and from, the Subject Property in any manner consistent with the stated purposes, terms, conditions, restrictions, and covenants of this grant. Those uses include the following specific enumerated rights:

   a. The right to remove hazardous substances, rubbish, diseased plants or trees and to correct dangerous conditions on the Subject Property.

   b. The right to remove understory vegetation which, according to the County Fire Marshal, constitutes a fire hazard to the neighboring parcels. Nothing in this subsection of this Conservation Easement shall exempt the Grantor from compliance with regulations and/or permit requirements regarding the removal of trees.

   c. The right to repair underground utility lines.

   d. The right to post signs to deter trespass or to prevent, pursuant to Civil Code Section 1008, the creation of prescriptive easements, which signs shall be of no greater size than the minimum specified by law.

Grantee's Approval

10. Whenever this grant deed requires Grantor to obtain the prior written approval or permission of the Grantee, the Grantor will notify the Grantee not less than fifteen (15) business days in advance of the date that Grantor intends to undertake the activity. The notice must describe the nature, scope, design, location, timetable, and any other material aspect of the proposed activity in sufficient detail to permit Grantee to make an informed judgment as to the consistency of the activity with the purpose of this grant. The Grantee shall grant or deny approval in writing within ten (10) business days of receipt of Grantor's notice. Grantee may deny approval only on a reasonable determination that the proposed action would be inconsistent with the purpose of this grant. The provisions of this Section 10 shall not apply during any time in which the Subject Property is owned by a public agency, including but not limited to the Highlands Recreation District.

Right to Prevent Prohibited Use

11. Grantor grants to Grantee and Grantee's successors and assigns, for the duration of this grant, the right, but not the obligation, to prevent or prohibit any activity that is inconsistent with the stated purposes, terms, conditions, restrictions, or covenants of this grant and the right to enter the Subject Property for the purpose of removing any building, structure, improvement, or any material whatsoever constructed, placed, stored, deposited, or maintained on the Subject Property contrary to the stated purposes of this grant or to any term, condition, restriction, or covenant of this grant.

By this grant, Grantor retains all rights to enforce the easement and any rights as an owner not inconsistent with this grant.

Enforcement

12. a. The purposes, terms, conditions, restrictions, and covenants in this grant may be specifically enforced or enjoined by proceedings in the Superior Court of the State of California, consistent with the terms of Section 51086 of the California Government Code.

12. b. It is understood and agreed that the enforcement proceedings provided in this section are not exclusive and that any action to enforce the terms and provisions of the Grant of Open Space Easement shall be at the discretion of Grantee and may be brought at law or in equity. Any forbearance on the part of Grantee to exercise its rights hereunder in the event of any breach hereof by Grantor, or by Grantor's heirs, successors, personal representatives or assigns shall not be deemed or construed to be a waiver of Grantee's rights hereunder in the event of any subsequent breach.

12. c. In any action by Grantee to enjoin any violation of this easement, Grantor agrees that Grantee shall have no obligation to prove either actual damages or the inadequacy of otherwise available legal remedies. Grantor agrees that Grantee's remedies at law for any violation of this easement are inadequate and that Grantee shall be entitled to the injunctive relief described in this section, both prohibitive and mandatory, in addition to such other relief to which Grantee may be entitled, including specific performance of this Conservation Easement, without the necessity of proving either actual damages or the inadequacy of otherwise available legal remedies. Grantee's remedies described in this section shall be cumulative and shall be in addition to all remedies now or hereafter existing at law or in equity. The failure of the Grantee to discover a violation or to take immediate action shall not bar Grantee from taking action at a later time. The provisions of this Section 12.c. shall not apply during any time in which the Subject Property is owned by a public agency, including but not limited to the Highlands Recreation District.

Acts Beyond Grantor's Control

13. Nothing contained in this instrument may be construed to entitle Grantee to bring any action against Grantor for any injury to or change in the Subject Property resulting from causes that are beyond Grantor's control, including, but not limited to, third party actions, trespass, fire, flood, storm, earth movement, or any prudent or reasonable action undertaken by Grantor in an emergency situation to prevent or mitigate damage or injury to the Subject Property resulting from such causes, provided that the emergency situation does not result from, or is not related to, actions undertaken by the Grantor. Nothing herein shall relieve Grantor of the obligation to apply for and obtain any required permits or approvals for any such actions.

No Authorization for Public Trespass

14. a. The granting of this Conservation Easement by this instrument and the acceptance of the easement by the Grantee do not, in themselves, authorize, and are not to be construed as authorizing, the public or any member of the public to enter, trespass on, or use all or any portion of the Subject Property, or as granting to the public or any member of the public any tangible rights in or to the Subject Property. It is understood that the purpose of this grant is solely to restrict the use of the Subject Property, so that it may be kept as near as possible in its natural state.

14. b. It is the intention of Grantor and Grantee that should the fee simple interest in the Subject Property be transferred to a public agency or qualified non-profit entity or the County of San Mateo, passive recreational uses that preserve the natural open space character of the land may be allowed, including, but not limited to, nature walks, day hiking, picnicking, bird watching and photography. Any such future use would be subject to the approval of such subsequent owner.

Condemnation

15. As against the County of San Mateo, in its capacity as Grantee, the purposes of this Conservation Easement are presumed to be the highest and most necessary use of the Subject Property as defined at Section 1240.680 of the California Code of Civil Procedure notwithstanding Sections 1240.690 and 1240.700 of that Code. If an action in eminent domain for condemnation of any interest in the Subject Property is filed, or if the Subject Property is acquired for a public improvement by a public agency or person, these restrictions will be null and void as to the interest in the Subject Property actually condemned or acquired. However, all conditions, restrictions, and covenants of this grant will be in effect during the pendency of such an action; if such an action is abandoned before the recordation of a final order of condemnation, any portion of the Subject Property that is not actually acquired for public use will once again be subject to all of the terms, conditions, restrictions, and covenants of this grant. Grantor will be entitled to the amount of compensation as if the Subject Property had not been burdened by the conservation easement, consistent with Section 51095 of the California Government Code. Nothing in this section shall preclude consideration of zoning as reflected in the approved Final Subdivision Map.

Abandonment

16. The easement granted by this instrument may not be abandoned, in whole or in part, and Sections 51093 and 51094 of the California Government Code shall be inapplicable to this Conservation Easement.

Taxes and Assessments

17. Grantor or Grantor's successor or assigns shall pay or cause to be paid all real property taxes and other assessments (general and special), fees, and charges of whatever description levied or assessed against the Subject Property. Grantee agrees to cooperate with Grantor in documenting the existence and property tax-

related effect of the easement for the Assessor of San Mateo County. The provisions of this Section 17 shall not apply during any time in which the Subject Property is owned by a public agency, including but not limited to the Highlands Recreation District.

Maintenance

18. The Grantee shall not be obligated to maintain, improve or otherwise expend any funds in connection with the use or enjoyment of Subject Property or any interest created by this Grant of Easement.

Liability and Indemnification

19. a. Grantor retains all responsibility and shall bear all costs and liabilities of any kind related to the ownership, operation, upkeep, and maintenance of the Subject Property. Grantor agrees that the Grantee shall not have any duty or responsibility for the operation, upkeep, or maintenance of the Subject Property, or the protection of Grantor, the public or any other third parties from risks related to the condition of the Subject Property. Grantor shall remain solely responsible for obtaining any applicable governmental permits and approvals required for any activity or use by Grantor permitted by this easement, including permits and approvals required from Grantee acting in its regulatory capacity and any activity or use shall be undertaken in accordance with all applicable federal, state, local, and administrative agency laws, statutes, ordinances, rules, regulations, orders, and requirements. Acceptance of this Grant of Open Space Easement by Grantee is subject to the express condition that the Grantee and its officers, agents, members and employees are to be free from all liability and claim for damage by reason of any injury to any person or persons, including Grantor, or property of any kind whatsoever and to whomsoever belonging, including Grantor, resulting from any pre-existing condition(s) on the Subject Property, and any acts or omissions of the Grantor or Grantor's predecessors or successors in interest related to the Subject Property. Grantor, on its behalf and on behalf of its successors in interest, hereby covenants and agrees to indemnify and hold harmless the Grantee, and its directors, officers, employees, agents, contractors, and representatives, and their respective heirs, personal representatives, successors, and assigns (each, an "Indemnified Party") from and against any and all liabilities, penalties, costs, losses, damages, expenses (including, without limitation, reasonable attorney(s) fees and other litigation expenses), causes of actions, claims, demands, orders, liens, or judgments (each, a "Claim") on account of or arising out of any pre-existing condition(s) on the Subject Property and any acts or omissions of the Grantor or Grantor's predecessors or successors in interest related to the Subject Property, except that this indemnification obligation shall be inapplicable to any Claim determined to result solely from the negligence of Grantee or any of its agents.

If any action or proceeding is brought against any of the Indemnified Parties by reason of any such Claim, Grantor and its successors in interest shall, at the election of and upon written notice of any such Indemnified Party, defend such action or proceeding by counsel reasonably acceptable to the Grantee's

Indemnified Party or reimburse such Indemnified Party for all charges incurred for services of any government attorney (including, but not limited, for example, to attorneys of the Office of the County Counsel) in defending the action or proceeding. Grantee agrees that, in the defense of any such Claim, it will vigorously assert all existing and applicable immunities and defenses.

b. The Grantee shall have no right of control over, nor duties and responsibilities with respect to, the Subject Property, which would subject the Grantee to liability occurring on the land, by virtue of the fact that the right of Grantee to enter the land is strictly limited to preventing uses inconsistent with the interests granted, and does not include the right or obligation to enter the land for the purposes of correcting any dangerous condition as defined by California Government Code Section 830.

c. Grantor agrees to maintain bodily injury and property damage liability insurance as shall protect it from claims related to conditions on the Subject Property and to name the Indemnified Parties as additional insureds on such policies.

d. The provisions of subsections 19.a. and 19.c. of this Section 19 shall not apply during any time in which the Subject Property is owned by a public agency, including but not limited to the Highlands Recreation District.

Amendment

20. This Conservation Easement may not be amended in whole or in part as to any term, condition, restriction, or covenant without the prior written consent of the Grantor and Grantee. During all times that the County of San Mateo remains owner of this easement, any non-clerical amendment to this easement that is proposed shall be presented at a duly-noticed public meeting of the San Mateo County Planning Commission for a recommendation of the Planning Commission before the proposed amendment is presented to the San Mateo County Board of Supervisors for action.

    In the event that another public agency besides the County of San Mateo becomes the owner of this easement, that public agency shall convene a public hearing before its governing board to consider any proposed amendments to this easement before the governing board approves any such proposed amendments. Notwithstanding the foregoing, in no event shall any amendment to this Conservation Easement be permitted which violates the California Open Space Lands Act or which contradicts the perpetual nature of this easement.

Binding on Successors and Assigns

21. This grant, and each and every term, condition, restriction, and covenant of this grant, is intended for the benefit of the public and is enforceable pursuant to the provisions of the Open Space Easement Act of 1974. This grant binds Grantor and Grantor's successors and assigns and constitutes a servitude on the Subject Property that runs with the land.

Liberal Construction

22. This easement is to be liberally construed in favor of the grant in order to effectuate the purposes of the easement and the policy and purpose of the Open Space Act of 1974. If any provision in this grant is found to be ambiguous, an interpretation consistent with the purpose of this easement that would render the provision valid will be adopted over any interpretation that would render it invalid.

Severability

23. If any provision of this grant is found to be invalid, or if the application of this easement to any person or circumstance is disallowed or found to be invalid, the remainder of the provisions of the grant, or the application of the grant to persons or circumstances other than those to which its application was disallowed or found invalid, will not be affected and will remain in full force and effect.

Controlling Law

24. This grant of easement is to be interpreted, enforced, and performed in accordance with the laws of the State of California.

Entire Agreement

25. This grant sets forth the entire agreement of the parties with respect to the conservation easement and supersedes all previous conversations, negotiations, understandings, settlements, or agreements related to the conservation easement.

Captions

26. The captions in this grant have been inserted solely for the purpose of convenience of reference and are not to be construed as part of this instrument and do not affect the construction or interpretation of the grant.

Enforceable Restriction

27. This easement is intended to constitute an enforceable restriction pursuant to the provisions of California Constitution, Article XIII, Section 8, and Sections 402.1 and 421 through 423.3 of the California Revenue and Taxation Code.

Counterparts

28. The parties may execute this instrument in two or more counterparts, which shall, collectively, be signed by all parties. Each counterpart shall be deemed an original instrument as against any party who has signed it. In the event of any disparity between the counterparts produced, the recorded counterpart controls.

Recording

29. Grantee shall record this Conservation Easement in the Office of the County Recorder of the County of San Mateo and may re-record it at any time that Grantee deems it necessary in order to preserve its rights in this easement.

Merger

30. It is the intent of the Grantor and the Grantee that the doctrine of merger not operate to extinguish this Conservation Easement if the same person or entity comes to own both the easement and the Subject Property. If, despite this stated intention, the doctrine of merger is determined to have extinguished this Conservation Easement, then a replacement conservation easement or restrictive covenant containing the same material protections embodied in this Conservation Easement shall be prepared and recorded against the Subject Property.

IN WITNESS WHEREOF, Grantor has executed this Conservation Easement Deed the day and year first written above.

Dated: _____

_____,GRANTOR
TICONDEROGA PARTNERS, LLC
By: Jack Chamberlain

ACCEPTANCE OF CONSERVATION EASEMENT

Pursuant to the provisions of the Open Space Easement Act of 1974, appearing at Chapter 6.6 of Part 1, Division 1, Title 5 of the California Government Code (commencing with Section 51070), the County of San Mateo accepts this grant of a conservation easement.

Dated: _____

_____
COUNTY OF SAN MATEO

By: _____

CML:fc – CMLW0422_WFF.DOCX

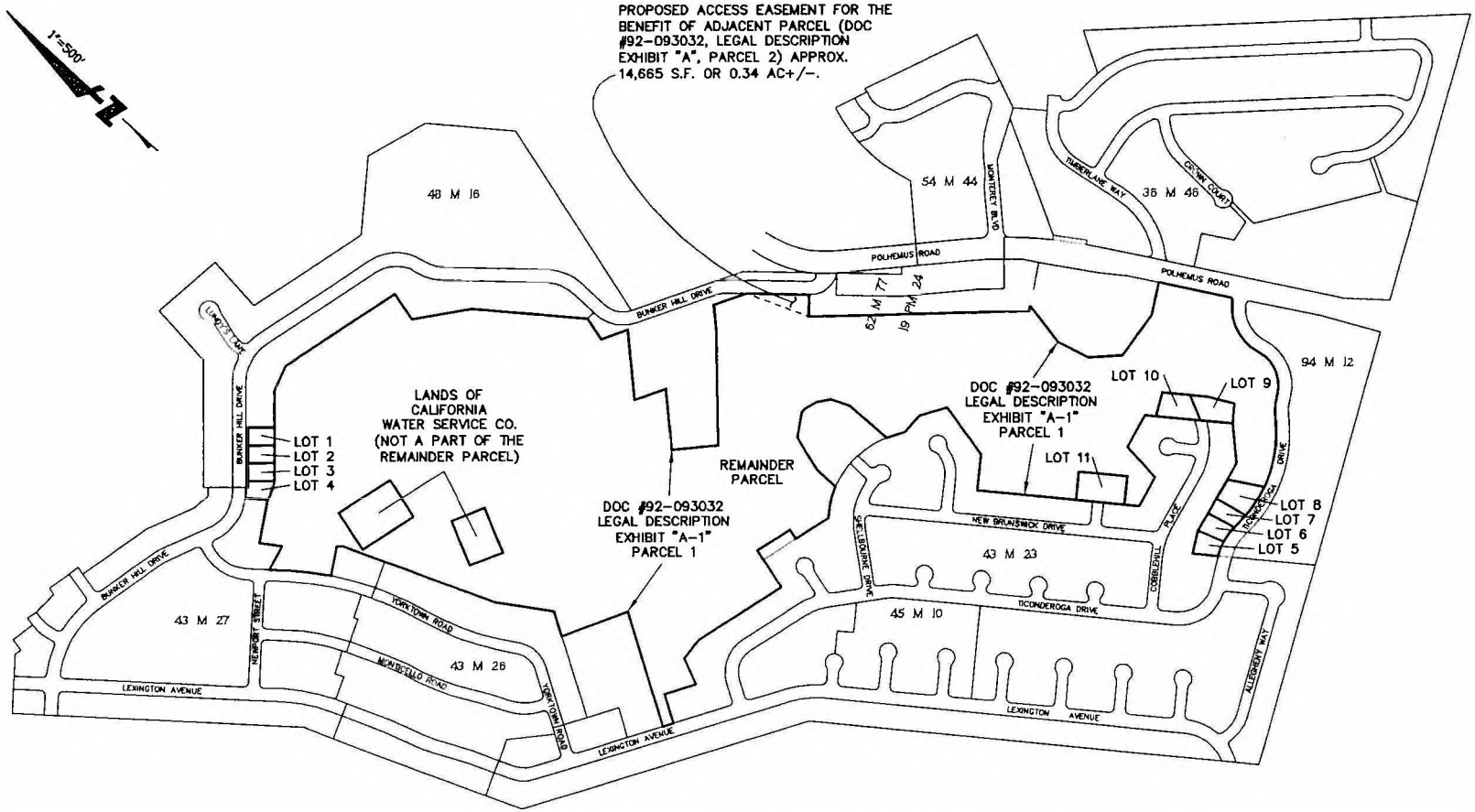
Exhibit "A"

Highland Estates

Proposed Remainder Parcel and Conservation Easement Area

Parcel 1 of Document No. 92-093032, as recorded in the Office of the San Mateo County recorder; excepting therefrom Lots 1 through 11 and the proposed Access Easement for the Benefit of Adjacent Parcel (Doc.#92-093032, as recorded in the Office of the San Mateo County recorder, Legal Description, Exhibit "A", Parcel 2) and as shown in attached Exhibit "B", and referenced on the Highland Estates Vesting Tentative Map prepared by BKF Engineers, dated February 2, 2010 and approved by the San Mateo County Board of Supervisors on April 27, 2010, County File No. 2006-00357, and as may be further defined by the future Recorded Parcel Maps and Final Maps related to said Highland Estates Subdivision.

© BKF ENGINEERS



NOTE:

LOTS 1 THROUGH 11 ARE PROPOSED FUTURE LOTS AS SHOWN ON THE "HIGHLAND ESTATES VESTING TENTATIVE MAP", PREPARED BY BKF ENGINEERS, DATED FEBRUARY 2, 2010, AND APPROVED BY SAN MATEO COUNTY BOARD OF SUPERVISORS, APRIL 27, 2010, COUNTY FILE NO. 2006-00357.

BKF
235 SHORELINE DR
SUITE 200
REDWOOD CITY, CA 94065
650-482-6300
650-482-6399 (FAX)

EXHIBIT 'B'
PROPOSED REMAINDER PARCEL
HIGHLAND ESTATES
UNINCORPORATED SAN MATEO COUNTY CALIFORNIA

Drawing Number:
1 of 1

Pete Bentley - Parcel Map Recording - Clerk of the Board

From: Christopher Vandrey
To: Pete Bentley
Date: 6/28/2012 1:10 PM
Subject: Parcel Map Recording - Clerk of the Board

Pete,
I had it wrong-once we take the map to the clerk of the board, we don't see it again until after it's been recorded. I think your original plan to provide some special instructions on the recording sequence is a good idea. Sorry for the bad info, but all other maps taken to the Recorder by Public Works. Hope it not too late.

-Chris

Save Paper. Think Before You Print.

Make up Separate Request To Clerk of Boards Requesting they record "Conservation Easement" immediate after they record the Parcel Map — Or Give Option of returning the signed Mylar To DPW for ~~Reco~~ DPW To Record.

From: John Nibbelin
To: Camille Leung; Jim Eggemeyer
CC: Beiers, John; Dave Pine
Date: 7/6/2012 2:07 PM
Subject: Re: Fwd: RE: Emailing: Conservation Easement Property Description Exhibit A, Ticonderoga Partners Conservation Easement June 26 2012

Jim and Camille,

For your situational awareness. Best,

John

John D. Nibbelin
Chief Deputy County Counsel
Telephone: 650-363-4757
jnibbelin@co.sanmateo.ca.us

Save Paper.
Think before you print.

>>> "P Goltz" <portorgoltz@yahoo.com> 7/6/2012 1:54 PM >>>
John,
Thank you for providing me with the most current documents. I've passed these along to the General Manager at the District (Brigitte Shearer, who was recently appointed filling the vacancy created when Margaret Glomstad left the District).
As I mentioned a discussion of the conservation easement is on the agenda for the District Board's next meeting and as we discussed, you've agreed to hold off recording the easement until the District Board has met to consider the easement. I understand that County desires to have this easement recording as soon as possible, but I would ask that you hold off until the District has had a chance to discuss the easement, in its current iteration, consider the essential elements and agree to the obligations that will likely burden the District.
On behalf of the District, I appreciate your willingness to allow the District this time to review and consider the easement and the obligations contained therein. I will be in contact with you on Wednesday and we can discuss any of the Board's concerns.
Best,
Portor Goltz, Attorney at Law

CONFIDENTIALITY NOTICE: This e-mail transmission, and any documents, files or previous e-mail messages attached to it may contain confidential information that is legally privileged. If you are not the intended recipient, or a person responsible for delivering it to the intended recipient, you are hereby notified that any disclosure, copying, distribution or use of any of the information contained in or attached to this transmission is STRICTLY PROHIBITED. If you have received this transmission in error, please immediately notify the sender. Please destroy the original transmission and its attachments without reading or saving in any manner.

--- On Fri, 7/6/12, John Nibbelin <jnibbelin@smcgov.org> wrote:

> From: John Nibbelin <jnibbelin@smcgov.org>
> Subject: Fwd: RE: Emailing: Conservation Easement Property Description Exhibit A, Ticonderoga

Partners Conservation Easement June 26 2012
> To: portorgoltz@yahoo.com
> Cc: "Camille Leung" <CLeung@smcgov.org>, "Jim Eggemeyer" <JEggemeyer@smcgov.org>
> Date: Friday, July 6, 2012, 10:56 AM
> Portor,
>
> Good speaking with you today and I appreciate you contacting
> me on behalf of the Highlands Recreation District to discuss
> the conservation easement. I understand that, at its
> meeting on the evening of July 10th, the District will
> discuss the conservation easement re the Highlands project
> and that you have reached out to Jack Chamberlain and Dave
> Byers re initiating discussions regarding whether the
> District will take ownership of the property that would be
> the subject of the easement. Given these
> circumstances, I agree that it makes sense for the County to
> hold off til after the District's meeting next week to file
> the conservation easement. I request that you circle
> back with me as soon as possible after the District Board's
> meeting to provide any feedback.
>
> For your reference, I have attached a copy of the easement
> that we propose to file, along with a copy marked to show
> changes from the version that was finalized back in
> 2010. I'll send you a copy of the property description
> in a separate email.
>
> Best to you and yours.
>
> John
>
>
>
> John D. Nibbelin
> Chief Deputy County Counsel
> Telephone: 650-363-4757
> jnibbelin@co.sanmateo.ca.us
>
>
> Save Paper.
> Think before you print.
>
> >>> John Nibbelin 6/28/2012 7:17 AM >>>
> Catherine, following up on Camille's email, I want to
> emphasize that the County has already engaged in an
> extremely comprehensive consultative process in arriving at
> the terms of the conservation easement and we had agreed to
> provide you with a copy of what we intended to file as a
> courtesy, not because we believe that there's further need
> to consult on the easement's terms.
>
> As Camille notes, the changes to the easement from the terms
> that were finalized two years ago are very minor and for
> your reference, I have attached a copy of the document
> marked to show the differences between the 2010 draft and
> the version that we intend to record. As you can see,

> they address stylistic and formatting matters and the fact
> that the developer is filing a parcel map at this time,
> rather than a subdivision map.
>
> Cordially,
>
> John
>
> John D. Nibbelin
> Chief Deputy County Counsel
> Telephone: 650-363-4757
> jnibbelin@co.sanmateo.ca.us
>
>
>
> Save Paper.
> Think before you print.
>
> >>> "Palter, Catherine" <cpalter@stanford.edu>
> 6/27/2012 10:04 PM >>>
> Camille:
> This is not an acceptable approach. The County, the
> applicant, and the community all agreed to the contents of
> the Conservation Easement in 2010. Now, without any
> involvement of the community, the applicant and the County
> are changing the previously approved 2010 Conservation
> Easement and the applicant and the County have developed and
> reviewed a new property description. The community
> needs an opportunity to review and approve the changes that
> resulted from the applicant proceeding in a previously
> unanticipated manner.
>
> We raised this issue with the County in January and have
> been persistent in seeing it resolved. Any schedule
> delay to date is not a result of our actions. We are
> as anxious as everyone involved to see this through to
> resolution and, hopefully, the changes that you and the
> applicant have developed are fine. However, this is an
> agreement that will be in place in perpetuity and we should
> all make sure that it is done correctly.
>
> Please confirm that you will not record this easement until
> the appropriate community people have has a chance to review
> the changes in the Conservation Easement and the new
> property description in Exhibit A.
>
> Sincerely,
> Catherine
>
>
> -----Original Message-----
> From: Camille Leung [mailto:cleung@smcgov.org]
>
> Sent: Wednesday, June 27, 2012 4:05 PM
> To: Lennie Roberts; Palter, Catherine
> Subject: RE: Emailing: Conservation Easement Property

> Description Exhibit A, Ticonderoga Partners Conservation
> Easement June 26 2012
>
> Hi Catherine,
>
> Please see Exhibit B attached. Please note that a copy
> of the Conservation Easement was provided to you for
> reference only, as a courtesy. The document is
> substantively the same as 2 years ago. We expect the
> document to be recorded this week.
>
> Thanks
>
> Camille M. Leung
> Planning and Building Department
> 455 County Center, Second Floor
> Redwood City, CA 94063
> Phone: (650) 363-1826
> Fax: (650) 363-4849
>
>
> Please help us to serve you better and take a moment to
> complete our survey, just click on the link below:
> http://www.co.sanmateo.ca.us/planning/survey
> ----------
> Confidentiality Notice: This e-mail message, including any
> attachments, is for the sole use of intended recipient(s)
> and may contain confidential and protected information. Any
> unauthorized review, use, disclosure or distribution is
> prohibited. If you are not the intended recipient, please
> contact the sender by reply e-mail and destroy all copies of
> the original message.
>
>
>
>
>
>
> Save Paper.
> Think before you print.>>> "Palter, Catherine"
> <cpalter@stanford.edu>
> 6/27/2012 10:21 AM >>>
> Camille:
> Thank you for providing these documents. We would like
> to see the other documents that Exhibit A refers to, to make
> sure that we understand that exhibit and the property
> description.
>
> We routed these documents around immediately, but we may
> need more time to have the appropriate people review
> them. Please don't record the document until we have
> completed our review of Exhibit A and the revised
> Conservation Easement.
>
> Thanks,
> Catherine

>
>
> From: Camille Leung [mailto:cleung@smcgov.org]
>
> Sent: Tuesday, June 26, 2012 11:30 AM
> To: Palter, Catherine; Lennie Roberts
> Subject: Emailing: Conservation Easement Property
> Description Exhibit A, Ticonderoga Partners Conservation
> Easement June 26 2012
>
> Hi Catherine and Lennie,
>
> For your reference, here is the latest draft of the
> conservation easement and property description, as agreed
> upon by County Counsel and the applicant's counsel. It
> is substantively the same document we were looking at a
> couple of years ago. The County plans to record the
> document by the end of the week.
>
> Thanks
>
>
>
> Your message is ready to be sent with the following file or
> link attachments:
>
> Conservation Easement Property Description Exhibit A
> Ticonderoga Partners Conservation Easement June 26 2012
>
>
> Note: To protect against computer viruses, e-mail programs
> may prevent sending or receiving certain types of file
> attachments. Check your e-mail security settings to
> determine how attachments are handled.
>
>
> Camille M. Leung
> Planning and Building Department
> 455 County Center, Second Floor
> Redwood City, CA 94063
> Phone: (650) 363-1826
> Fax: (650) 363-4849
>
> Please help us to serve you better and take a moment to
> complete our survey, just click on the link below:
> http://www.co.sanmateo.ca.us/planning/survey
> ---
> Confidentiality Notice: This e-mail message, including any
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> unauthorized review, use, disclosure or distribution is
> prohibited. If you are not the intended recipient, please
> contact the sender by reply e-mail and destroy all copies of
> the original message.
> [cid:image001.gif@01CD5441.416C5AC0]
>

>
>

From: Mark Chow
To: Diana Shu; Roland Haga
CC: 'JTUTTLEC@aol.com'; Pete Bentley; Stillman, Ann
Date: 7/9/2012 5:49 PM
Subject: Re: Highland Estates Off-site Sanitary Sewer Mitigation and Lot 1 thru 4 Off-site Street Improvments
Attachments: Re: Highlands Estates 4 homes

At my meeting with Jack Chamberlain and Roland on April 16, 2012, it was conveyed to Jack and Roland that a $15,000-$20,000 deposit be made to the Department of Public Works before staff can start reviewing the sanitary sewer rehabilitation plans and documents associated with the proposed annexation of the parcels to the Bel Aire Lighting and Maintenance District. To my knowledge, the deposit has not been made.

Please also see the attached email.

Mark

>>> On 7/3/2012 at 9:19 AM, "Roland Haga" <RHAGA@BKF.com> wrote:

Diana,

Per your request attached are PDF copies the plans associated with the Opinion of the Probable Construction Costs associated with the off-site Sanitary Sewer Rehabilitation and Minor Site improvements associated with frontage improvements along Bunker Hill Drive fronting lots 1 through 4.

Upon your review please contact me should you have questions.

Roland Haga

Roland Haga , P.E., LEED®AP
Associate/Project Manager

BKF Engineers
Civil Engineers, Land Surveyors, Planners
255 Shoreline Drive, Suite 200 | Redwood City, CA 94065
Tel (650) 482-6300 | Direct (650) 482-6407

www.bkf.com| rhaga@bkf.com

From: Diana Shu<dshu@smcgov.org> [mailto:dshu@smcgov.org]
Sent: Monday, July 02, 2012 6:53 PM
To: Roland Haga
Subject: Re: FW: Highland Estates Off-site Sanitary Sewer Mitigation

Roland

Can you send me the details and the plans for all the construction work that is will be part of the bond agreement?

PDF copies of the plans and details with just the bid items highlighted plus associated details. I want to attach it to the agreement.

Thanks

Diana

Diana Shu

dshu@smcgov.org

650-599-1414

>>> "Roland Haga" <RHAGA@BKF.com> 7/2/2012 12:04 PM >>>

Diana,

Per our conversation this morning regarding the Highland Estates Project with Jack Chamberlain. Attached please find the PDF copies of the Opinion of the Probable Construction costs associated with the Off-site Sanitary Sewer migration improvements dated 2/22/12 along with the Limit of work associated with SS Rehabilitation. I have also attached the latest PDF copy of the Opinion of the Probable Construction costs associated with the Off-site improvements on Bunker Hill Drive directly related to the frontage of Lots 1 through 4.

Upon your review , should you have any questions, please contact me.

Best regards,
Roland Haga

Roland Haga , P.E., LEED®AP

Associate/Project Manager

BKF Engineers
Civil Engineers, Land Surveyors, Planners
255 Shoreline Drive, Suite 200 | Redwood City, CA 94065
Tel (650) 482-6300 | Direct (650) 482-6407

www.bkf.com| rhaga@bkf.com

From: Roland Haga
Sent: Wednesday, February 22, 2012 3:27 PM
To: 'mchow@co.sanmateo.ca.us'
Cc: 'JTUTTLEC@aol.com'; Roland Haga; Yousef Moradzadeh; 'Sylvia Nelson (sylsnet@aol.com)'
Subject: Highland Estates Off-site Sanitary Sewer Mitigation

Mark,

Per our conversation this morning with Jack Chamberlain , the Highland Estates, attached is the PDF of the Construction Cost Estimate and Limit of Work Exhibit associated with the Sanitary Sewer Rehabilitation on Ticonderoga Drive. This work includes 1085 LF of Sanitary Sewer Rehabilitation and reconstruction of four (4) Brick manholes, and it exceeds the required for mitigation measures proposed in the Sanitary Sewer Study for Highland Estates, Revised April 21, 2009 and project conditions of approval (COA).

The attached PDF of the Construction Cost Estimate and Limit of Work Exhibit does not include the portion of the overall sanitary sewer which exceeds form Cobblehill Place to Ticonderoga in a 10-foot Wide Easement. This portion of includes a VCP main from Cobblehill Place to a mid point where the main transitions to a Mortar lined Ductile Iron Pipe

Please review and upon your approval, BKF will prepared construction specification and exhibits for County review and approval. We hope that you can agree to the attached proposal 1085 LF of Sanitary Sewer Rehabilitation and reconstruction of four (4) Brick manholes, and provided Pete Bentley with a written confirmation regarding the understanding that this work will be done upon approval of plans by you, and that the worked shall completed prior to occupancy of the first four homes on Lots 1, 2,3 and 4.

I know Jack Chamberlain is looking forward to completing this process and getting the Parcel Map and anything you can get to Pete Bentley to get this process completed would be much appreciated

Should you have any questions, please call me at (650) 482-6407.

Roland Haga

Roland Haga, PE, LEED®AP
Associate/Project Manager

This 19(e) Same as Signed 19(d)

AND This 19(e) reference to 19(b) & 19(d.) D. Sheet Can signed

This 19(c) Is Same As Signed 19(b)

This 19(d) Is Same As Signed 19(b)

Conservation easement NOT In Caps here

"E" in "easement" Capitalized here but not in signed Form.

Covenants listed here @ 8. (1)(2) etc — Listed as "a", "b", "c" etc in Signed Doc.

Items here labelled (1)(2) etc.

Signed Copy is (a.)(b.)(c) etc

From: Pete Bentley
To: Christopher Vandrey
CC: Jim Eggemeyer; Rosario Fernandez
Date: 7/19/2012 10:03 AM
Subject: Parcel Map Recording - Chamberlain (Bunker Hill)

Chris:

After today, I will be gone on vacation for 3 weeks and will return on Monday, August 13. County Counsel still hasn't given Jim Eggemeyer the "OK" to sign and record the "conservation easement". I have given Jim the "approved" description of the easement which has already been signed and notarized by Chamberlain. I have to think, within the next 3 weeks, this OK will be given. I also haven't heard anything from you or Diana that DPW has signed off on the Public Works conditions relative to the Parcel Map recording. This, too, I assume will be done within the next 3 weeks.

When Diana signs off, please let Jim know when the Parcel Map is forwarded for signature by the Clerk of the Board and is returned for recording at the Recorders. Jim can then have the "conservation easement" recorded (again assuming CC approval) and Chamberlain can move forward with development of Lots 1-4.

Thanks,
Pete

ON HOLD UNTIL I HEAR FROM JOHN N.

RETURNING STILL ON HOLD PENDING THE COUNTY OBTAINING TITLE INSURANCE

Jim

19b here was included under 19(a) on Signed Copy

From: Rosario Fernandez
To: Pete Bentley
Date: 7/13/2012 3:38 PM
Subject: Chamberlain issue

Hi Pete:

This Bob Gutierrez wants to meet with Jim and Jack Chamberlain. Can you please call him at 650-345-6080 and see what you can help me with his questions?

thanks

Rosario

Rosario Fernandez
Planning Commission Secretary
Planning & Building Department
455 County Center, 2nd Floor
Redwood City, CA 94063
(650) 363-1859
rfernandez@smcgov.org

Save Paper.
Think before you print.

Talked T. Bob A.M. 7/16 – Says Rec District Wants To Grant Conservation Easement To Allow Construction Of A Parking Lot. Bob Among Others – Says "No Way" & Would File "Appeal" to Board If Language Changed.

Bob - [redacted]
Called At 8:40 - Left Message
On Recorder

Jack Chamberlain's Home Phone # → [redacted] (Home)

Pete Bentley - Parcel Map Recording - Chamberlain (Bunker Hill)

From: Pete Bentley
To: Christopher Vandrey
Subject: Parcel Map Recording - Chamberlain (Bunker Hill)
CC: Jim Eggemeyer; Rosario Fernandez

Chris:

After today, I will be gone on vacation for 3 weeks and will return on Monday, August 13. County Counsel still hasn't given Jim Eggemeyer the "OK" to sign and record the "conservation easement". I have given Jim the "approved" description of the easement which has already been signed and notarized by Chamberlain. I have to think, within the next 3 weeks, this OK will be given. I also haven't heard anything from you or Diana that DPW has signed off on the Public Works conditions relative to the Parcel Map recording. This, too, I assume will be done within the next 3 weeks.

When Diana signs off, please let Jim know when the Parcel Map is forwarded for signature by the Clerk of the Board and is returned for recording at the Recorders. Jim can then have the "conservation easement" recorded (again assuming CC approval) and Chamberlain can move forward with development of Lots 1-4.

Thanks,
Pete

Save Paper. Think Before You Print.

For Map Checkers Use Only
Map Number: P1094
Owner: Ticonderoga Partners, LLC
Vicinity/Street: Bunker Hill

HAND DELIVERED TO CHRIS 7/2/12

To: Planning Department
Attention: Project Planner – Pete Bentley
Senior Planner – Dave Holbrook

From: Christopher G Vandrey, PLS-Department of Public Works

Subject:Parcel / Final Map for File No. PLN2006-00357

Date: 01-04-2012

A Parcel / Final Map showing the proposed subdivision of the property covered by the Planning File Number shown above has been submitted to the Public Works office for review and has been found to be technically correct as to the information shown thereon.

Please confirm that all Planning Department conditions, including conditions by other Departments and Agencies, (excluding those of Public Works) have been completed and indicate your approval to record this Map by signing below and returning this letter to my attention at the Department of Public Works.

C G Vandrey
Christopher G Vandrey, PLS

Project Planner: Pete Bentley Date: 6/28/12
Pete Bentley

Senior Planner: Dave Holbrook Date: 6/28/12
Dave Holbrook

Recorded at the Request of, and When Recorded Return to: Camille Leung, Project Planner Planning and Building Department 455 County Center, 2nd Floor Mail Drop PLN122 Redwood City, CA 94063 **Exempt from Fees Pursuant to Government Code Section 27383**	For Clerk Use Only

County of San Mateo
Planning and Building Department

GRANT OF CONSERVATION EASEMENT

This GRANT DEED OF CONSERVATION EASEMENT is made on June 28, 2012, by TICONDEROGA PARTNERS, LLC, having an address at 655 Skyway Road, Suite 230, San Carlos, CA 94070 ("Grantor") in favor of the COUNTY OF SAN MATEO having an address at County Government Center, 400 County Center, Redwood City, CA 94063 ("Grantee" or "County").

RECITALS

WHEREAS, Section 6317.A (Conservation Open Space Easement) of the San Mateo County Zoning Regulations (Zoning Regulations) requires, after any land division of lands zoned Resource Management (RM), that the applicant for the land division grant to the County (and that the County accept) a conservation easement, containing a covenant running with the land in perpetuity, which limits the use of the land covered by the easement to uses consistent with open space as defined in the California Open Space Lands Act of 1972 in January 1, 1980; and

WHEREAS, Grantor is the owner of lands located in the County of San Mateo, which lands are included within a subdivision commonly referred to as the Highland Estates Subdivision, the Vesting Tentative Map for which was approved by the San Mateo County Board of Supervisors on April 27, 2010; and

WHEREAS, Grantor wishes to grant to Grantee a conservation easement over the property described in the attached Exhibit A, which is incorporated herein by reference (the "Subject Property"), in fulfillment of the requirements of Section 6317.A of the Zoning Regulations.

NOW, THEREFORE, in consideration of the mutual covenants, terms, restrictions and conditions hereinafter set forth, Grantor hereby grants and conveys to Grantee and its

successors, a conservation easement, in gross and in perpetuity, on the terms, and subject to the limitations set forth herein.

Description of Property

1. Grantor is the sole owner of the Subject Property, located in the County of San Mateo, State of California and the Subject Property is the subject of this grant. The Subject Property is delineated on the Highlands Estates Vesting Tentative Map and listed and described on Exhibit A, which is attached to and made a part of this grant by reference.

Conservation Values

2. The Subject Property possesses natural, scenic, open space, habitat preservation, and recreational values. In particular,

    a. The preservation of the Subject Property as open space is consistent with the General Plan of the County; and

    b. The preservation of the Subject Property as open space is in the best interest of the County and specifically because:

        (1) The land is essentially unimproved and if retained in its natural state has scenic value to the public and this instrument contains appropriate covenants to that end; and

        (2) It is in the public interest that the Subject Property be retained as Open Space because such land will add to the amenities of living in neighboring urbanized areas.

Intention of Grantor

3. It is the intention of Grantor to grant to Grantee a conservation easement on, over, across, and under the Subject Property pursuant to the Open Space Easement Act of 1974, appearing at Chapter 6.6 (commencing with Section 51070) of Part 1, Division 1, Title 5 of the California Government Code, and in fulfillment of the requirements of Section 6317.A of the San Mateo County Zoning Regulations whereby Grantor relinquishes certain rights and enters into certain covenants concerning the Subject Property, as more particularly set forth below. It is further the intention of the Grantor that this grant meet all of the requirements of Section 170(h)(1) of the United States Internal Revenue Code.

Purpose of Easement

4. The purpose of this grant of an open space easement in the Subject Property is to preserve the natural and scenic character of the Subject Property for public use and enjoyment, subject to the restrictions set forth herein, and to prevent any use of the Subject Property that will impair or interfere with the conservation values of the

Subject Property. Grantor intends that this Conservation Easement will confine the use of the Subject Property to activities that are consistent with such purposes.

Description of Grantee

5. Grantee is a political subdivision of the State of California, and is the entity designated under Section 6317.A of the San Mateo County Zoning Regulations to accept easements granted pursuant to that section.

Acceptance by Grantee

6. By accepting this grant, Grantee agrees to honor the intentions of Grantor to act in a manner consistent with the purposes of this grant, and to preserve and protect in perpetuity the conservation values of the Subject Property. Grantee shall accept this grant in satisfaction of Condition 11 to the approval by the Board of Supervisors on April 27, 2010 and other related conditions of approval regarding a conservation easement. The effective date of this grant shall be the date that this grant of easement is recorded. In the event that any Parcel Map or the Final Subdivision Map is invalidated as a result of a legal challenge, this easement shall cease to have any effect and the Grantee shall reconvey to Grantor all rights it may hold by virtue of this easement and shall promptly record a quitclaim of all such rights. This grant satisfies the requirements in the County's Resource Management Zoning District for a density bonus under County Ordinance Section 6318 and for a subdivision under the Resource Management Zoning District.

Grant of Easement

7. In consideration of the above and the mutual covenants, terms, conditions, and restrictions contained in this grant deed, and pursuant to the laws of California and in particular to the Open Space Easement Act of 1974 and Section 6317.A of the San Mateo County Zoning Regulations, Grantor voluntarily grants to Grantee a conservation easement in gross in the Subject Property in perpetuity subject to the terms of this grant deed.

Covenants

8. The Subject Property shall be used by Grantor and Grantor's successors in interest only for those purposes that will maintain the existing open space character of the Subject Property. Any uses of the Subject Property shall further be limited to uses consistent with open space as defined in the California Open Space Lands Act of 1972, on January 1, 1980, as set forth in Government Code Section 65560.

   Without limiting the generality of the foregoing, Grantor and Grantor's successors in interest hereby covenant that they will refrain, in perpetuity, from doing, causing, or permitting any of the following acts with respect to the Subject Property:

   a. Using or permitting the use of the Subject Property for any purpose except as is consistent with the stated purposes, terms, conditions, restrictions, and covenants of this easement, with the provisions of the Open Space Easement

Act of 1974, and with the findings of the Board of Supervisors of the County of San Mateo pursuant to California Government Code Section 51084.

b. Constructing improvements on the Subject Property. However, Grantor may construct and maintain existing utility, road and access easements or any such easements authorized or reserved by the Vesting Tentative Subdivision Map approved by the Board of Supervisors of the County of San Mateo on April 27, 2010, provided that any such construction and maintenance shall be carried out consistently with the conservation values that this Conservation Easement was intended to protect. This section is not intended to approve or otherwise legalize existing improvements constructed by any third person on the Subject Property, nor is to be construed as requiring that Grantor remove any such improvements that exist as of the effective date of this easement.

c. Constructing, placing, or maintaining a parking lot, storage area, or dump site for the storage or disposal of anything that is not indigenous or natural to the Subject Property. Further, this section shall not be construed to authorize a dump site for the permanent disposal of any materials associated with normal construction activities associated with the construction of the eleven authorized houses or for any other materials whatsoever.

d. Surfacing the Subject Property, in whole or in part, with any asphalt, stone, concrete, or other material that does not constitute natural cover for the land, except as is necessary to construct utility and road improvements within the limits of utility and road easements authorized or reserved pursuant to b., above, or paving of a bicycle and/or pedestrian trail if the Subject Property comes to be used as a passive use park, as referenced in Section 14.b. of this easement.

e. Mining, extracting, severing, or removing any natural resource found or located on, above, or below the Subject Property, or otherwise engaging in any activity that will alter the unique physical and scenic characteristics of the Subject Property.

f. Cutting or removing timber or trees found or located on the Subject Property, except as may be required for fire prevention (but only as consistent with Section 9.b. below), thinning, elimination of diseased growth, or similar preventive measures in a manner compatible with the purposes of this grant.

g. Cutting, uprooting, or removing natural growth found or located on the Subject Property, except as may be required for fire prevention (but only as consistent with Section 9.b. below), thinning, elimination of diseased growth, or similar preventive measures in a manner compatible with the purposes of this grant. Nothing in this Conservation Easement shall exempt Grantor from compliance with any regulations and/or permit requirements governing the removal of trees.

h. Dividing or subdividing the Subject Property.

i. Subject to those rights reserved in Paragraph 9, below, excavating, grading, or placing any sand, soil, rock, gravel, or any material on the Subject Property,

except with prior written permission of Grantee, provided that the excavation, grading, or placing of material on the Subject Property is consistent with the purposes of this grant. Notwithstanding the foregoing sentence, during any time in which the Subject Property is owned by a public agency, including but not limited to the Highlands Recreation District, the Grantor may excavate, grade, or place sand, soil, rock, gravel or other material on the Subject property if, on written advice of Grantor's counsel, such action is necessary in order to comply with legal requirements and/or to address a risk of liability related to the condition of the Subject Property. Any such actions authorized by the immediately preceding sentence must be undertaken consistently with the maintenance of RM values, to the full extent possible.

j. There shall be no storage of vehicles, boats, firewood, building materials or equipment on the Subject Property, nor shall there be any sheds or modular office buildings permitted on the Subject Property. The provisions of this subsection 8.j. shall not apply in the area described in subsection 8.o. during any time in which the Subject Property is owned by a public agency, including but not limited to the Highlands Recreation District.

k. There shall be no industrial, commercial, residential, or institutional activity permitted on the Subject Property.

l. Unseasonable watering; use of fertilizers, pesticides, biocides, herbicides, or other agricultural chemicals except to enhance RM values (such as trail maintenance or establishment of native plantings); weed abatement activities except to enhance RM Zone values (such as removal of non-native invasive species); incompatible fire protection activities; and any other activities and uses which may impair or interfere with the purposes of the Conservation Easement.

m. Use of off-road vehicles and use of any other motorized vehicles except on existing roadways.

n. Planting or introduction of non-native or exotic plant or animal species.

o. Notwithstanding the covenants in this section, it shall not be a breach of this easement for there to be constructed an extension of the Highlands Recreation District's Lexington Avenue parking lot that exists as of the effective date of this easement into adjacent land along Lexington Avenue, provided that any such extension of the parking lot extend only into the adjacent lot area that is approximately at the grade of the parking lot and otherwise serves the purposes of this easement. Moreover, in the event that the Highlands Recreation District comes to own the Subject Property, this easement shall not restrict that district from using such extension, for related recreational purposes.

p. During any time in which the Subject Property is owned by a public agency, including but not limited to the Highlands Recreation District, and with respect to any activity that is otherwise permitted under the terms of this easement, this Section 8 shall not restrict Grantor from undertaking any such activity in any manner necessary in order to comply with the Americans With Disabilities Act,

Section 504 of the Rehabilitation Act of 1973 or any analogous state or federal laws.

Reservation of Rights

9. Grantor reserves the right to all uses and occupancy of, and ingress and egress to and from, the Subject Property in any manner consistent with the stated purposes, terms, conditions, restrictions, and covenants of this grant. Those uses include the following specific enumerated rights:

    a. The right to remove hazardous substances, rubbish, diseased plants or trees and to correct dangerous conditions on the Subject Property.

    b. The right to remove understory vegetation which, according to the County Fire Marshal, constitutes a fire hazard to the neighboring parcels. Nothing in this subsection of this Conservation Easement shall exempt the Grantor from compliance with regulations and/or permit requirements regarding the removal of trees.

    c. The right to repair underground utility lines.

    d. The right to post signs to deter trespass or to prevent, pursuant to Civil Code Section 1008, the creation of prescriptive easements, which signs shall be of no greater size than the minimum specified by law.

Grantee's Approval

10. Whenever this grant deed requires Grantor to obtain the prior written approval or permission of the Grantee, the Grantor will notify the Grantee not less than fifteen (15) business days in advance of the date that Grantor intends to undertake the activity. The notice must describe the nature, scope, design, location, timetable, and any other material aspect of the proposed activity in sufficient detail to permit Grantee to make an informed judgment as to the consistency of the activity with the purpose of this grant. The Grantee shall grant or deny approval in writing within ten (10) business days of receipt of Grantor's notice. Grantee may deny approval only on a reasonable determination that the proposed action would be inconsistent with the purpose of this grant. The provisions of this Section 10 shall not apply during any time in which the Subject Property is owned by a public agency, including but not limited to the Highlands Recreation District.

Right to Prevent Prohibited Use

11. Grantor grants to Grantee and Grantee's successors and assigns, for the duration of this grant, the right, but not the obligation, to prevent or prohibit any activity that is inconsistent with the stated purposes, terms, conditions, restrictions, or covenants of this grant and the right to enter the Subject Property for the purpose of removing any building, structure, improvement, or any material whatsoever constructed, placed, stored, deposited, or maintained on the Subject Property contrary to the stated purposes of this grant or to any term, condition, restriction, or covenant of this grant.

By this grant, Grantor retains all rights to enforce the easement and any rights as an owner not inconsistent with this grant.

Enforcement

12. a. The purposes, terms, conditions, restrictions, and covenants in this grant may be specifically enforced or enjoined by proceedings in the Superior Court of the State of California, consistent with the terms of Section 51086 of the California Government Code.

12. b. It is understood and agreed that the enforcement proceedings provided in this section are not exclusive and that any action to enforce the terms and provisions of the Grant of Open Space Easement shall be at the discretion of Grantee and may be brought at law or in equity. Any forbearance on the part of Grantee to exercise its rights hereunder in the event of any breach hereof by Grantor, or by Grantor's heirs, successors, personal representatives or assigns shall not be deemed or construed to be a waiver of Grantee's rights hereunder in the event of any subsequent breach.

12. c. In any action by Grantee to enjoin any violation of this easement, Grantor agrees that Grantee shall have no obligation to prove either actual damages or the inadequacy of otherwise available legal remedies. Grantor agrees that Grantee's remedies at law for any violation of this easement are inadequate and that Grantee shall be entitled to the injunctive relief described in this section, both prohibitive and mandatory, in addition to such other relief to which Grantee may be entitled, including specific performance of this Conservation Easement, without the necessity of proving either actual damages or the inadequacy of otherwise available legal remedies. Grantee's remedies described in this section shall be cumulative and shall be in addition to all remedies now or hereafter existing at law or in equity. The failure of the Grantee to discover a violation or to take immediate action shall not bar Grantee from taking action at a later time. The provisions of this Section 12.c. shall not apply during any time in which the Subject Property is owned by a public agency, including but not limited to the Highlands Recreation District.

Acts Beyond Grantor's Control

13. Nothing contained in this instrument may be construed to entitle Grantee to bring any action against Grantor for any injury to or change in the Subject Property resulting from causes that are beyond Grantor's control, including, but not limited to, third party actions, trespass, fire, flood, storm, earth movement, or any prudent or reasonable action undertaken by Grantor in an emergency situation to prevent or mitigate damage or injury to the Subject Property resulting from such causes, provided that the emergency situation does not result from, or is not related to, actions undertaken by the Grantor. Nothing herein shall relieve Grantor of the obligation to apply for and obtain any required permits or approvals for any such actions.

No Authorization for Public Trespass

14. a. The granting of this Conservation Easement by this instrument and the acceptance of the easement by the Grantee do not, in themselves, authorize, and are not to be construed as authorizing, the public or any member of the public to enter, trespass on, or use all or any portion of the Subject Property, or as granting to the public or any member of the public any tangible rights in or to the Subject Property. It is understood that the purpose of this grant is solely to restrict the use of the Subject Property, so that it may be kept as near as possible in its natural state.

14. b. It is the intention of Grantor and Grantee that should the fee simple interest in the Subject Property be transferred to a public agency or qualified non-profit entity or the County of San Mateo, passive recreational uses that preserve the natural open space character of the land may be allowed, including, but not limited to, nature walks, day hiking, picnicking, bird watching and photography. Any such future use would be subject to the approval of such subsequent owner.

Condemnation

15. As against the County of San Mateo, in its capacity as Grantee, the purposes of this Conservation Easement are presumed to be the highest and most necessary use of the Subject Property as defined at Section 1240.680 of the California Code of Civil Procedure notwithstanding Sections 1240.690 and 1240.700 of that Code. If an action in eminent domain for condemnation of any interest in the Subject Property is filed, or if the Subject Property is acquired for a public improvement by a public agency or person, these restrictions will be null and void as to the interest in the Subject Property actually condemned or acquired. However, all conditions, restrictions, and covenants of this grant will be in effect during the pendency of such an action; if such an action is abandoned before the recordation of a final order of condemnation, any portion of the Subject Property that is not actually acquired for public use will once again be subject to all of the terms, conditions, restrictions, and covenants of this grant. Grantor will be entitled to the amount of compensation as if the Subject Property had not been burdened by the conservation easement, consistent with Section 51095 of the California Government Code. Nothing in this section shall preclude consideration of zoning as reflected in the approved Final Subdivision Map.

Abandonment

16. The easement granted by this instrument may not be abandoned, in whole or in part, and Sections 51093 and 51094 of the California Government Code shall be inapplicable to this Conservation Easement.

Taxes and Assessments

17. Grantor or Grantor's successor or assigns shall pay or cause to be paid all real property taxes and other assessments (general and special), fees, and charges of whatever description levied or assessed against the Subject Property. Grantee agrees to cooperate with Grantor in documenting the existence and property tax-

related effect of the easement for the Assessor of San Mateo County. The provisions of this Section 17 shall not apply during any time in which the Subject Property is owned by a public agency, including but not limited to the Highlands Recreation District.

Maintenance

18. The Grantee shall not be obligated to maintain, improve or otherwise expend any funds in connection with the use or enjoyment of Subject Property or any interest created by this Grant of Easement.

Liability and Indemnification

19. a. Grantor retains all responsibility and shall bear all costs and liabilities of any kind related to the ownership, operation, upkeep, and maintenance of the Subject Property. Grantor agrees that the Grantee shall not have any duty or responsibility for the operation, upkeep, or maintenance of the Subject Property, or the protection of Grantor, the public or any other third parties from risks related to the condition of the Subject Property. Grantor shall remain solely responsible for obtaining any applicable governmental permits and approvals required for any activity or use by Grantor permitted by this easement, including permits and approvals required from Grantee acting in its regulatory capacity and any activity or use shall be undertaken in accordance with all applicable federal, state, local, and administrative agency laws, statutes, ordinances, rules, regulations, orders, and requirements. Acceptance of this Grant of Open Space Easement by Grantee is subject to the express condition that the Grantee and its officers, agents, members and employees are to be free from all liability and claim for damage by reason of any injury to any person or persons, including Grantor, or property of any kind whatsoever and to whomsoever belonging, including Grantor, resulting from any pre-existing condition(s) on the Subject Property, and any acts or omissions of the Grantor or Grantor's predecessors or successors in interest related to the Subject Property. Grantor, on its behalf and on behalf of its successors in interest, hereby covenants and agrees to indemnify and hold harmless the Grantee, and its directors, officers, employees, agents, contractors, and representatives, and their respective heirs, personal representatives, successors, and assigns (each, an "Indemnified Party") from and against any and all liabilities, penalties, costs, losses, damages, expenses (including, without limitation, reasonable attorney(s) fees and other litigation expenses), causes of actions, claims, demands, orders, liens, or judgments (each, a "Claim") on account of or arising out of any pre-existing condition(s) on the Subject Property and any acts or omissions of the Grantor or Grantor's predecessors or successors in interest related to the Subject Property, except that this indemnification obligation shall be inapplicable to any Claim determined to result solely from the negligence of Grantee or any of its agents.

If any action or proceeding is brought against any of the Indemnified Parties by reason of any such Claim, Grantor and its successors in interest shall, at the election of and upon written notice of any such Indemnified Party, defend such action or proceeding by counsel reasonably acceptable to the Grantee's

Indemnified Party or reimburse such Indemnified Party for all charges incurred for services of any government attorney (including, but not limited, for example, to attorneys of the Office of the County Counsel) in defending the action or proceeding. Grantee agrees that, in the defense of any such Claim, it will vigorously assert all existing and applicable immunities and defenses.

b. The Grantee shall have no right of control over, nor duties and responsibilities with respect to, the Subject Property, which would subject the Grantee to liability occurring on the land, by virtue of the fact that the right of Grantee to enter the land is strictly limited to preventing uses inconsistent with the interests granted, and does not include the right or obligation to enter the land for the purposes of correcting any dangerous condition as defined by California Government Code Section 830.

c. Grantor agrees to maintain bodily injury and property damage liability insurance as shall protect it from claims related to conditions on the Subject Property and to name the Indemnified Parties as additional insureds on such policies.

d. The provisions of subsections 19.a. and 19.c. of this Section 19 shall not apply during any time in which the Subject Property is owned by a public agency, including but not limited to the Highlands Recreation District.

Amendment

20. This Conservation Easement may not be amended in whole or in part as to any term, condition, restriction, or covenant without the prior written consent of the Grantor and Grantee. During all times that the County of San Mateo remains owner of this easement, any non-clerical amendment to this easement that is proposed shall be presented at a duly-noticed public meeting of the San Mateo County Planning Commission for a recommendation of the Planning Commission before the proposed amendment is presented to the San Mateo County Board of Supervisors for action.

    In the event that another public agency besides the County of San Mateo becomes the owner of this easement, that public agency shall convene a public hearing before its governing board to consider any proposed amendments to this easement before the governing board approves any such proposed amendments. Notwithstanding the foregoing, in no event shall any amendment to this Conservation Easement be permitted which violates the California Open Space Lands Act or which contradicts the perpetual nature of this easement.

Binding on Successors and Assigns

21. This grant, and each and every term, condition, restriction, and covenant of this grant, is intended for the benefit of the public and is enforceable pursuant to the provisions of the Open Space Easement Act of 1974. This grant binds Grantor and Grantor's successors and assigns and constitutes a servitude on the Subject Property that runs with the land.

Liberal Construction

22. This easement is to be liberally construed in favor of the grant in order to effectuate the purposes of the easement and the policy and purpose of the Open Space Act of 1974. If any provision in this grant is found to be ambiguous, an interpretation consistent with the purpose of this easement that would render the provision valid will be adopted over any interpretation that would render it invalid.

Severability

23. If any provision of this grant is found to be invalid, or if the application of this easement to any person or circumstance is disallowed or found to be invalid, the remainder of the provisions of the grant, or the application of the grant to persons or circumstances other than those to which its application was disallowed or found invalid, will not be affected and will remain in full force and effect.

Controlling Law

24. This grant of easement is to be interpreted, enforced, and performed in accordance with the laws of the State of California.

Entire Agreement

25. This grant sets forth the entire agreement of the parties with respect to the conservation easement and supersedes all previous conversations, negotiations, understandings, settlements, or agreements related to the conservation easement.

Captions

26. The captions in this grant have been inserted solely for the purpose of convenience of reference and are not to be construed as part of this instrument and do not affect the construction or interpretation of the grant.

Enforceable Restriction

27. This easement is intended to constitute an enforceable restriction pursuant to the provisions of California Constitution, Article XIII, Section 8, and Sections 402.1 and 421 through 423.3 of the California Revenue and Taxation Code.

Counterparts

28. The parties may execute this instrument in two or more counterparts, which shall, collectively, be signed by all parties. Each counterpart shall be deemed an original instrument as against any party who has signed it. In the event of any disparity between the counterparts produced, the recorded counterpart controls.

Recording

29. Grantee shall record this Conservation Easement in the Office of the County Recorder of the County of San Mateo and may re-record it at any time that Grantee deems it necessary in order to preserve its rights in this easement.

Merger

30. It is the intent of the Grantor and the Grantee that the doctrine of merger not operate to extinguish this Conservation Easement if the same person or entity comes to own both the easement and the Subject Property. If, despite this stated intention, the doctrine of merger is determined to have extinguished this Conservation Easement, then a replacement conservation easement or restrictive covenant containing the same material protections embodied in this Conservation Easement shall be prepared and recorded against the Subject Property.

IN WITNESS WHEREOF, Grantor has executed this Conservation Easement Deed the day and year first written above.

Dated: 6-28-12

_____, GRANTOR
TICONDEROGA PARTNERS, LLC
By: Jack Chamberlain

CALIFORNIA ALL-PURPOSE ACKNOWLEDGEMENT

File No: ()

APN No:

STATE OF California)SS
COUNTY OF San Mateo)

On 6/28/12 before me, Sheri Cookson , Notary Public, personally appeared Jack Chamberlain

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Sheri Cookson

SHERI COOKSON
Commission # 1827993
Notary Public - California
San Mateo County
My Comm. Expires Dec 23, 2012

This area for official notarial seal.

OPTIONAL SECTION
CAPACITY CLAIMED BY SIGNER

Though statute does not require the Notary to fill in the data below, doing so may prove invaluable to persons relying on the documents.

- ☐ INDIVIDUAL
- ☐ CORPORATE OFFICER(S) TITLE(S)
- ☐ PARTNER(S) ☐ LIMITED ☐ GENERAL
- ☐ ATTORNEY-IN-FACT
- ☐ TRUSTEE(S)
- ☐ GUARDIAN/CONSERVATOR
- ☐ OTHER

SIGNER IS REPRESENTING:

Name of Person or Entity Name of Person or Entity

OPTIONAL SECTION

Though the data requested here is not required by law, it could prevent fraudulent reattachment of this form.

THIS CERTIFICATE MUST BE ATTACHED TO THE DOCUMENT DESCRIBED BELOW

TITLE OR TYPE OF DOCUMENT: _____

NUMBER OF PAGES _____ DATE OF DOCUMENT _____

SIGNER(S) OTHER THAN NAMED ABOVE _____

Reproduced by First American Title Company 11/2007

ACCEPTANCE OF CONSERVATION EASEMENT

Pursuant to the provisions of the Open Space Easement Act of 1974, appearing at Chapter 6.6 of Part 1, Division 1, Title 5 of the California Government Code (commencing with Section 51070), the County of San Mateo accepts this grant of a conservation easement.

Dated: _____

_____
COUNTY OF SAN MATEO

By: _____

CML:fc – CMLW0422_WFF.DOCX

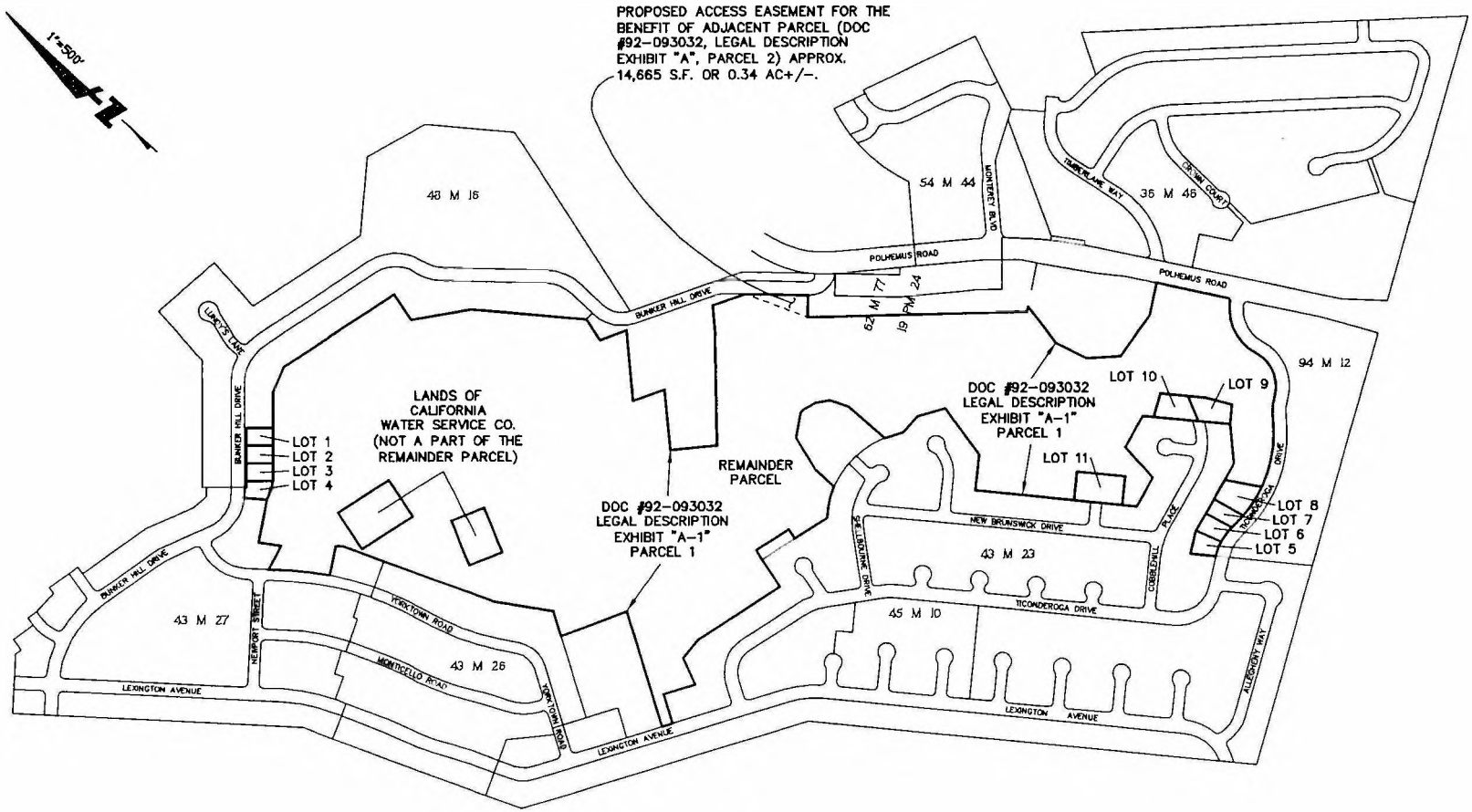
Exhibit "A"

Highland Estates

Proposed Remainder Parcel and Conservation Easement Area

Parcel 1 of Document No. 92-093032, as recorded in the Office of the San Mateo County recorder; excepting therefrom Lots 1 through 11 and the proposed Access Easement for the Benefit of Adjacent Parcel (Doc.#92-093032, as recorded in the Office of the San Mateo County recorder, Legal Description, Exhibit "A", Parcel 2) and as shown in attached Exhibit "B", and referenced on the Highland Estates Vesting Tentative Map prepared by BKF Engineers, dated February 2, 2010 and approved by the San Mateo County Board of Supervisors on April 27, 2010, County File No. 2006-00357, and as may be further defined by the future Recorded Parcel Maps and Final Maps related to said Highland Estates Subdivision.

© BKF ENGINEERS



NOTE:

LOTS 1 THROUGH 11 ARE PROPOSED FUTURE LOTS AS SHOWN ON THE "HIGHLAND ESTATES VESTING TENTATIVE MAP", PREPARED BY BKF ENGINEERS, DATED FEBRUARY 2, 2010, AND APPROVED BY SAN MATEO COUNTY BOARD OF SUPERVISORS, APRIL 27, 2010, COUNTY FILE NO. 2006-00357.

BKF
255 SHORELINE DR
SUITE 200
REDWOOD CITY, CA 94065
650-482-6300
650-482-6399 (FAX)

EXHIBIT "B"
PROPOSED REMAINDER PARCEL
HIGHLAND ESTATES
SAN MATEO COUNTY
UNINCORPORATED CALIFORNIA

Drawing Number:
1 OF 1

DRAWING NAME: J:\Sur85\950188\Mapping\Plats\2012-06-12 Plat.dwg
PLOT TIME: 06-18-12
PLOTTED BY: mark

ACCEPTANCE OF CONSERVATION EASEMENT

Pursuant to the provisions of the Open Space Easement Act of 1974, appearing at Chapter 6.6 of Part 1, Division 1, Title 5 of the California Government Code (commencing with Section 51070), the County of San Mateo accepts this grant of a conservation easement.

Dated: _____

_____
COUNTY OF SAN MATEO

By: _____
Jim Eggemeyer
Community Development Director

CML:fc – CMLW0422_WFF.DOCX

State of California)

County of San Mateo)

On _____, before me, _____, a Notary Public, personally appeared JIM EGGEMEYER, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____

From: <JTUTTLEC@aol.com>
To: <pbentley@smcgov.org>
Date: 9/20/2012 2:25 PM
Subject: Fwd: Bunker Hill Agreement
Attachments: 3-CaliforniaAll-PurposeAcknowledgment.pdf; 1-agreementcoversheet.doc; 2-SubdivisionAgreementTEMPLATE.doc; 3.LetterofCreditForm.doc

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From: dshu@smcgov.org
CC: bwong@smcgov.org, jlococo@smcgov.org, JNibbelin@smcgov.org
Sent: 9/20/2012 1:42:30 P.M. Pacific Daylight Time
Subj: Bunker Hill Agreement

Hi Jack, Dave, and Kathy

Sorry it has taken us so long to get this done.
Attached please find draft copies of the agreement for this project. .

Please take a look and redline anything that looks out of place then return to me.

cover sheet for recording
Letter of Credit
Attachment A - Subdivision Agreement
Attachment B - Letter (Notifying County of Release of Funds)
Notary forms

Thanks
Diana

Diana Shu
dshu@smcgov.org (mailto:dshu@smcgov.org)
650-599-1414

RECORDING REQUESTED BY

Ticonderoga Partners, LLC
Owner
655 Skyway, Suite 230
San Carlos, CA 94070

WHEN RECORDED MAIL TO:

County of San Mateo
Department of Public Works
555 County Center, 5th Floor
Redwood City, CA 94063

Attn: Diana Shu (PONY: DPW-177)

This space for Recorder's Use Only

Street Improvements At Highlands Estates Lots 1-4

MINOR SUBDIVISION OF

APN 041-101-290

PLN 2006-00357

Title of Document

AGREEMENT

THIS AGREEMENT, made and entered into this _____ day of _____, **2012**, by and between the COUNTY OF SAN MATEO, a political subdivision of the State of California, hereinafter called "County" and TICONDEROGA PARTNERS, LLC, hereinafter called "Developer."

W I T N E S S E T H:

WHEREAS, Developer has applied for and received approval of a Subdivision known as

THE HIGHLAND ESTATES

BUNKER HILL ESTATES LOTS 1-4

BUNKER HILL ROAD, APN 041-101-290

PLN 2006-00357

subject to Developer meeting all the conditions of Development as approved by the Board of Supervisors for the Subdivision on March 9, 2011, including the construction of certain offsite improvements which will benefit the public; and

WHEREAS, Developer has had plans and specifications for said improvements prepared and said plans and specifications are entitled "Street Improvement Plans, Bunker Hill Drive, Lots 1-4" prepared by BKF Engineers dated September 1, 2011, and hereinafter referred to as "Street Plans"; and

WHEREAS, Developer has had plans and specifications for said sewer

improvements prepared and said plans and specifications are entitled "Sanitary Sewer Rehabilitation for Highland Estates – Ticonderoga Drive" prepared by BKF Engineers dated March 26, 2012, and hereinafter referred to as "Sewer Plans"; and

WHEREAS, Section 7033 of the Subdivision Regulations requires that a written agreement be entered into by the Developer with the County and that said agreement shall specify the terms and conditions in conformance with Section 7033 of the Subdivision Regulations.

NOW, THEREFORE, IN CONSIDERATION OF THE COUNTY'S APPROVALS AND THE PUBLIC BENEFITS THAT WILL RESULT, THE PARTIES AGREE AS FOLLOWS:

A. Developer Agrees:

1. Developer, at his own proper cost and expense, shall do all the work and furnish all the labor, materials, equipment and utilities necessary to perform and complete in a good workmanlike and substantial manner, and to the satisfaction of the Director of Public Works, all work as shown on the Street and Sewer Plans, which Street and Sewer Plans are incorporated by reference herein as part of this agreement. Said work shall be completed on or before December 31, 2013, at an estimated cost to the Developer of **Two Hundred Thousand Dollars ($200,000),** which estimated total includes the costs of engineering and contingencies.

2. In addition, Developer, at his own cost and expense, shall maintain the improvements in good condition and repair, and guarantee the same against any defects in material and workmanship for a warranty period of one year from the date of final acceptance by the County.

3. In addition, Developer shall pay the County the cost of inspecting the

improvements as required in Section 7035.2 of the Subdivision Regulations.

4. In addition, Developer shall furnish to the County, in accordance with Chapter 5 of the Subdivision Map Act, the following security to guarantee compliance with the terms of conditional approval set by the San Mateo County Board of Supervisors on April 27, 2010. All such security shall be in a form that is acceptable to the Director of Public Works, and shall include and meet the conditions specified below. Said security shall be in accordance with the Subdivision Regulations, and shall be filed prior to final map approval:

A. Performance Security: Performance of the required work shall be secured by a "Faithful Performance" Security in the sum of one hundred percent (100%) of the total estimated cost of the improvements, including engineering and contingencies, said sum being in the amount of **Two Hundred Thousand Dollars ($200,000),** County shall release said security upon the performance of the act or final completion and acceptance of the required work by the County

B. Payment Security: Security to guarantee payment to the contractor, his or her subcontractors and to persons furnishing labor, materials or equipment to them for the improvements or performance of work required ("Payment Security") shall be made in the sum of fifty percent (50%) of the estimated cost of the improvements, said sum being in the amount of **One Hundred Thousand Dollars ($100,000).**

C. Warranty Security: Security for the guarantee and warranty of the work ("Warranty Security") shall be made for a period of one year following the completion and acceptance thereof against any defective work or labor done, or defective materials, and shall be furnished in the sum of fifty percent (50%) of said total estimated cost of the improvements, said sum being in the amount of **One Hundred Thousand Dollars ($100,000),** Warranty Security

will be provided by the Developer upon final acceptance of said work by the County and prior to release of the Performance and Payment Securities.

5. The Developer shall ensure that construction will not adversely affect adjacent properties.

6. The Developer shall ensure that survey monuments shown on the Tentative Map interior to the subdivision are placed prior to recording of the final map or, if the engineer or surveyor has certified on the map that interior monuments shall be set on or before a specified later date, shall provide security in an amount determined by the Director of Public Works to be sufficient to guarantee the setting of the monuments or reimbursement to the County for the cost of setting the monuments if the Developer should fail to perform.

7. The Developer shall defend, save harmless and indemnify the County, its officers, agents, employees, invitees, and contractors, and each of them, from and against any and all losses incurred in connection with any improvements constructed on-site or off-site of the subdivision and any other terms, conditions or improvements required as part of the subdivision approval and which result from the acts or omissions of the Developer, its officers, employees, agents and/or subcontractors. This duty to defend, hold harmless and indemnify shall apply to any and all demands, claims for injuries or damage to persons and/or property, legal or administrative proceedings, losses, costs, penalties, fines, liens, judgments, damages and liabilities of any kind, or any other loss or cost, including but not limited to, the concurrent active or passive negligence of County, its officers, agents, employees, or servants resulting from the performance of any work required of Contractor or payments made pursuant to this Agreement, provided that this shall not apply to injuries or damage for which the County has been found in a court of competent jurisdiction to be solely liable by reason of its own negligence or willful misconduct.

The duty of the Developer to indemnify and save harmless, as set forth herein, shall

include the duty to defend as set forth in Section 2778 of the California Civil Code.

8. The County will retain the right to modify the plans and specifications when necessary to protect the public health and safety, and the right to require the Developer to pay for such modifications.

9. Upon any failure by Developer to complete or maintain the improvements or to correct any defects, the County may perform any necessary construction, maintenance or corrective work and recover the full cost and expense from the Developer, including interest from the date of notice of the cost and expense until paid.

10. The County shall promptly notify Developer of any claim, action or proceeding arising out of the subdivision and will cooperate fully in the defense.

11. The Developer shall cause this Agreement to be recorded in the Office of the County Recorder at Developer's expense, which shall constitute notice to all successors and assigns of the title to the real property of the obligation set forth, and also shall constitute a lien in an amount to fully reimburse the County, including interest as above, subject to foreclosure in event of default in payment. The Developer shall provide a copy of the recorded Agreement to the County prior to final map approval.

12. In the event of litigation occasioned by any default of the Developer, Developer agrees to pay all costs involved, including reasonable attorney's fees, and that the same will become a part of the lien against the real property.

13. The terms "Developer," "Subdivider," and "Owner" shall include not only the Developer, subdivider and the present owner(s) of the real property, but also heirs, successors, executors, administrators and assigns, it being the intent of the parties that the

obligations undertaken shall run with the real property and constitute a lien against it.

14. This Agreement, together with the Street and Sewer Plans, Specifications, Conditions of Approval and the Payment Security, Performance Security, and Warranty Security form the Agreement, and said documents by this reference become as fully a part of the Agreement as if hereto attached or herein set forth in full. The Standard Specifications of the County of San Mateo, State of California, which, except as specifically noted in the County Agreement documents and specifications, are identical with the Standard Specifications of the State of California, Department of Transportation, dated July 2010, and are on file with the County Manager/Clerk of the Board of Supervisors, County of San Mateo, are incorporated herein by reference as a part of the Agreement documents and shall apply to this project except where the terms of this Agreement or other Agreement documents are inconsistent therewith, in which case the provisions of this Agreement shall prevail.

15. Merger Clause: This Agreement, including the Exhibit(s) attached hereto and incorporated herein by reference, constitutes the sole Agreement of the parties hereto and correctly states the rights, duties, and obligations of each party as of this document's date. Any prior agreement, promises, negotiations, or representations between the parties not expressly stated in this document are not binding. All subsequent modifications shall be in writing and signed by the parties.

16. Controlling Law: The validity of this Agreement and of its terms or provisions, as well as the rights and duties of the parties hereunder, the interpretation, and performance of this Agreement shall be governed by the laws of the State of California, and any and all claims or lawsuits related to this agreement or the work performed hereunder shall be venued in the Superior Court of the County of San Mateo.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be executed by his duly authorized representatives on day and year first above written.

"County" COUNTY OF SAN MATEO

BY _____

James Porter
Director of Public Works

"Developer" TICONDEROGA PARTNERS, LLC

_____

Jack Chamberlain
TICONDEROGA PARTNERS, LLC

Attach
California All Purpose Acknowledgements
For all signatories

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California

County of _____ }

On _____ (Date) before me, _____ (Here Insert Name and Title of the Officer),

personally appeared _____ (Name(s) of Signer(s))

_____,

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature: _____ (Signature of Notary Public)

Place Notary Seal and/or Stamp Above

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____

☐ Corporate Officer — Title(s): _____

☐ Individual

☐ Partner — ☐ Limited ☐ General

☐ Attorney in Fact

☐ Trustee

☐ Guardian or Conservator

☐ Other: _____

Signer Is Representing: _____

RIGHT THUMBPRINT OF SIGNER

Top of thumb here

Signer's Name: _____

☐ Corporate Officer — Title(s): _____

☐ Individual

☐ Partner — ☐ Limited ☐ General

☐ Attorney in Fact

☐ Trustee

☐ Guardian or Conservator

☐ Other: _____

Signer Is Representing: _____

RIGHT THUMBPRINT OF SIGNER

Top of thumb here

©2008 National Notary Association • 9350 De Soto Ave., P.O. Box 2402 • Chatsworth, CA 91313-2402 • www.NationalNotary.org Item #5907 Reorder: Call Toll-Free 1-800-876-6827

First National Bank of Northern California
(letterhead)

IRREVOCABLE LETTER OF CREDIT
As Security for Subdivision Agreement
(Combined Performance, Payment and Warranty Securities)

This is an irrevocable letter of credit issued by FIRST NATIONAL BANK OF NORTHERN CALIFORNIA (ISSUER) which is intended to: secure the performance of an agreement to a certain project known as BUNKER HILL ESTATES LOTS 1-4 dated _____, attached hereto as Attachment A and incorporated herein by reference, between TICONDEROGA PARTNERS, LLC (DEVELOPER) and the County of San Mateo (COUNTY) for the construction of certain improvements (IMPROVEMENTS) on said project.

This letter of credit is in an amount of THREE HUNDRED THOUSAND DOLLARS AND NO CENTS, ($300,000) representing $150% of the estimated costs of the IMPROVEMENTS. This letter of credit shall remain in full force and effect until one year after the County has accepted said IMPROVEMENTS required under the agreement. The COUNTY shall be deemed to have accepted the IMPROVEMENTS upon the COUNTY's issuance of the final permit for the project described in the attached and incorporated agreement.

Upon presentation of a written statement to the ISSUER, signed by the COUNTY'S Director of Public Works that DEVELOPER has failed to satisfactorily complete and pay for the IMPROVEMENTS; or that a claim has been filed and is payable pursuant to the provisions of Title 2 (commencing with Section 8160) of Part 6 of Division 4 of the California Civil Code; or that DEVELOPER has failed to satisfy the guarantee of work performed, ISSUER shall pay to COUNTY an amount not to exceed THREE HUNDRED THOUSAND DOLLARS AND NO CENTS, ($300,000) representing 150% of the estimated costs of the IMPROVEMENTS.

Upon acceptance of the improvements by COUNTY the amount of the letter of credit shall be reduced to TWO HUNDRED THOUSAND DOLLARS AND NO CENTS, ($200,000) representing 100% of the estimated costs of the IMPROVEMENTS which shall serve as security for any claims filed pursuant to Title 2 (commencing with Section 8160) of Part 6 of Division 4 of the California Civil Code (the PAYMENT SECURITY) and as security for DEVELOPER's guarantee and warranty against any defective work or labor done, or defective materials (the WARRANTY SECURITY).

After one-hundred-twenty (120) days have run from the date of acceptance of the improvements by COUNTY, the amount available under the terms of this letter shall be reduced to ONE

HUNDRED THOUSAND DOLLARS AND NO CENTS, ($100,000) representing 50% of the estimated costs of the IMPROVEMENTS which shall continue to serve as security for DEVELOPER's guarantee and warranty against any defective work or labor done, or defective materials (the WARRANTY SECURITY).

Thereafter, the amount of ONE HUNDRED THOUSAND DOLLARS AND NO CENTS, ($100,000) representing 50% of the estimated costs of the IMPROVEMENTS shall be available under the terms of the letter for payment for a period of 1 year after acceptance of the improvements by COUNTY. After 1 year has run from the date of acceptance of the improvements by COUNTY, the ISSUER's obligations under this letter of credit shall terminate provided that it has provided notice to the COUNTY's Director of Public Works in writing 30 days in advance of the termination dates noted above. See Attachment B for form of notification.

ISSUER hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the agreement between DEVELOPER and COUNTY or the specifications accompanying the same shall in any manner affect ISSUER'S obligation hereunder, and ISSUER hereby waives notice of any such change, extension, alteration or addition.

COUNTY does hereby indemnify and hold harmless ISSUER from and against any claim or liability arising out of ISSUER'S disbursement of funds to COUNTY hereunder.

COUNTY as beneficiary hereunder may assign its rights to any successor in interest.

[Signatures commence on the following page.]

Financial Institution

_____

Print

I swear under penalty of perjury that I have authority to bind the above-named financial institution to the terms of this letter of credit.

By: _____

Print

_____

Signature

Developer/Principal

_____

The undersigned hereby agrees to all the terms and conditions set forth.

By: Jack Chamberlain: Ticonderoga Partners, LLC

_____

Signature

County of San Mateo, Public Works

_____

The undersigned hereby agrees to all the terms and conditions set forth.

By: Jim Porter, Director of Public Works

_____

Signature

Attach California All Purpose Acknowledgements for all Signatories

Attachment B

Date:

From: First National Bank of Northern California

To: Director of Public Works and Parks, County of San Mateo

NOTICE TO RELEASE SUBDIVISION AGREEMENT LETTER OF CREDIT FOR BUNKER HILL ESTATES LOTS 1-4; APN 041-101-290; PLN 2006-00357

Pursuant to the Letter of Credit and agreement, attached herein, we are notifying you that we will be terminating this agreement on _____(date).

Signed_____

First National Bank of Northern California

Attached copy of Letter of Credit with Agreement

CC: Deputy Director of Road Services

Recording Fees

Make check payable to **San Mateo County Recorder**

Document	**Rate/sheet**	**Sheets**	**Total**
Recording page	$15	1	15
Agreement	$3		
Exhibit A attachments	$3		
Notary Acknowledgment Forms	$3	2	$6
Total			**$**

County of San Mateo
Department of Public Works and Parks
Utilities-Flood Control-Watershed Protection

Highland Estates
Sewer Rehabiliation & Streetlighting District Annexation

To: Ticonderoga Partners LLC, 655 Skyway, Suite 230, San Carlos, CA 94070

From: Mark Chow, Principal Civil Engineer, Utilities-Flood Control-Watershed Protection Section

cc: Roland Haga, BKF Engineers, 255 Shoreline Drive, Suite 200, Redwood City, CA 94065

Date: September 28, 2012

Subject: Sanitary Sewer Rehabilitation (Ticonderoga Drive) and Streetlighting District Annexation, 1st Submittal

Reason for Review: Sanitary Sewer Rehabilitation and Geographic Description and Map Required for a Change of Jurisdictional Boundary

Plan Identification: Sewer Rehabilitation; Highland Estates- Ticonderoga Drive, San Mateo Highlands; BKF Engineers; Plans Dated 03/26/2012 and Geographic Description and Map Dated 11/08/2011

Reviewer: America Sanchez

Submittal/Review No.: 1

The Crystal Springs County Sanitation District (Sewer District) and the Bel Aire Lighting and Maintenance District (Lighting District) have reviewed the sanitary sewer rehabilitation plans and the geographic description and map required for the State Board of Equalization to annex the parcels along Bunker Hill Drive to the Lighting District. The Sewer District and the Lighting District are providing their comments in this memo.

All comments must be addressed and incorporated into a modified, complete set of plans for re-submittal. Subsequent re-submittals will be returned without review comments if the Sewer District determines that all previous comments have not been addressed. Your careful attention to our comments and providing re-submittals that adequately address our comments will assist in completing the review process in a timely fashion.

Sewer District

1. No inspections shall occur on Fridays, weekends or holidays unless special arrangements are made with the Sewer District. **This note shall be added to General Note #12 on Sheet 2 of the plans.**

2. Certificates of Compliance, conforming to the provisions in Section 6-1.07, "Certificates of Compliance," of the County Standard Specficiations shall be

furnished to the Sewer District for all manufactured products, unless otherwise waived by the Sewer District. **This note shall be added to the plans.**

3. A video inspection of the rehabilitated sewer main shall be performed by the applicant or contractor and submitted to the Sewer District for review. The video inspection shall be performed in accordance with the requirements described in the Special Provisions for Closed Circuit Television Inspection of Sanitary Sewer Mains (a copy can be obtained from our website at www.co.sanmateo.ca.us/sewers). The Sewer District will review the video inspection to determine whether the work performed is acceptable. All unacceptable work shall be corrected to the Sewer District's satisfaction at the applicant's expense. **This note shall be added to the plans.**

4. Care must be taken to protect the existing Sewer District facilities. Any damages to the Sewer District facilities during the replacement of the sewer main shall be repaired by the applicant per the Sewer District standard details and at the applicant's expense. The Sewer District must be notified of any damages to the sanitary sewer facilities and any repairs must be inspected by a Sewer District representative. **This note shall be added to the plans.**

5. The contractor must remove and dispose of all construction debris in the manholes after the sewer main and manholes are replaced. Care must be taken to prevent construction debris from entering the sewer system during the installation of the new sewer main and manholes. If the Sewer District discovers that construction debris has entered the sewer system, the applicant will be responsible to clean and televise the downstream portions of the sewer mains to the Sewer District's satisfaction. Sanitary sewer service shall be maintained at all times. The contractor shall use whatever means necessary (e.g. pumps, etc.) to maintain this service during construction. **This note shall be added to the plans.**

6. The signature block for the District Engineer must be shown on all sheets of the submitted plans as follows:

   Crystal Springs County Sanitation District

   _____

   Mark Y. Chow Date
   Principal Civil Engineer, County of San Mateo Department of Public Works and Parks
   P.E. C59429 Exp. 12/31/2013

   (Provide Room for Stamp)

7. Project Specifications must be prepared and submitted with the Project Plans for the Sewer District's review and approval. The following Sections from the County of San Mateo Department of Public Works and Parks Boilerplate Standards and Special Provisions must be included in the Project Specifications:

- Section 2-1, "Specifications and Plans"
- Section 7-6, "Highway Construction Equipment"
- Section 7-7, "Project Appearance"
- Section 7-8, "Preservation of Property"
- Section 7-9, "Air Pollution Control"
- Section 7-10, "Obstructions"
- Section 7-11, "Sound Control"
- Section 7-12, "Public Convenience"
- Section 7-13, "Public Safety"
- Section 7-15, "Disposal of Material Outside the Highway Right Of Way"
- Section 11, "Mobilization. This section shall include Water Pollution Control"
- Section 12, "Maintaning Traffic"
- Section 15, "Existing Highway Facilities"
- Sanitary Sewer Monitoring and Reporting Requirements
- Bypassing During Construction
- Restoration of Structures and Surfaces
- Project Record Drawings
- Cleaning Up
- Sanitary Sewer Rehabilitation – Pipe Bursting Method
- Manhole Construction
- Trench Safety, Trenching and Trench Backfill
- Restoration of Paved Surfaces

Lighting District

1. The Geographic Description and Map must conform to the requirements set forth in the State Board of Equalization, Change of Jurisdictional Boundary document (see attached). Please reference the attached document to revise the Geographic Description and Map accordingly.

2. Please add 'Exhibit "A"' to the map title block.

3. Please see the attached Geographic Description and Map with Lighting District comments for additional reference.

If you have any questions regarding this review or any of its contents, please contact staff at (650) 363-4100.

Attachments: Marked-up Plans, Geographic Description and Map
State Board of Equalization Change of Jurisdictional Boundary General Requirements

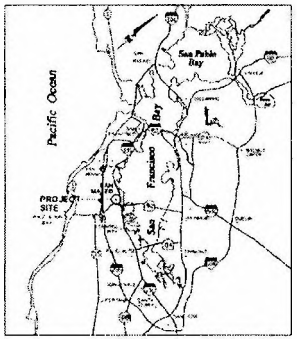
© BKF ENGINEERS

SANITARY SEWER REHABILITATION FOR

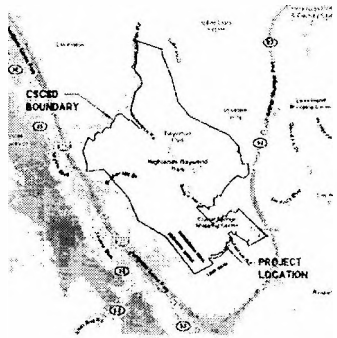
CRYSTAL SPRINGS COUNTY SANITATION DISTRICT

HIGHLAND ESTATES - TICONDEROGA DRIVE

COUNTY OF SAN MATEO, CALIFORNIA



VICINITY MAP
NTS



LOCATION MAP
NTS

SHEET INDEX

SHEET NO	DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES, ABBREVIATIONS AND LEGEND
3	UTILITY PLAN
4	DETAILS

CRYSTAL SPRINGS COUNTY SANITATION DISTRICT

ENGINEER'S STATEMENT

THESE IMPROVEMENT PLANS HAVE BEEN PREPARED BY ME OR UNDER MY DIRECTION IN ACCORDANCE WITH STANDARD ENGINEERING PRACTICE.

YOUSSEF MORADGHAMOR, 23329
PROJECT MANAGER
BKF ENGINEERS

Need 7 sets.
Prompt CWEA report, Drawing of Sec. with sign of Tech. marked Hwy
PE comments by [illegible]

FOR PLAN REVIEW - 03/26/2012
NOT FOR CONSTRUCTION

BKF
255 SHORELINE DRIVE, SUITE 200
REDWOOD SHORES, CA 94065
PHONE: (650) 482-6300
FAX: (650) 482-6399
Surveying / Engineering / Planning

HIGHLAND ESTATES
TICONDEROGA DRIVE SANITARY SEWER REHABILITATION
COVER SHEET
CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

No.	Revisions

Date 03/26/12
Scale NTS
Design CT
Drawn MJ
Checked MJ
Job No. 20080-04

Sheet Number:
1
of

DRAWING NAME: C:\Temp\AcPublish_2336\PRPLAN.dwg
PLOT DATE: 03-26-12 PLOTTED BY: Irwin

GENERAL NOTES

1. THE FOLLOWING NOTES ARE ESTABLISHED MERELY TO GUIDE THE CONTRACTOR AS TO THE GENERAL ITEMS OF WORK INVOLVED AND ARE NOT INTENDED TO COVER COMPLETE SCOPE OF WORK. CONTRACTOR SHALL COMPLETE ALL WORK AS PER CONTRACT DOCUMENTS.
2. THE REPLACEMENT SEWER MAIN SHALL BE CONSTRUCTED AT THE SAME ALIGNMENT AND GRADE OF THE EXISTING SEWER MAIN BY TYPE I BURSTING METHOD.
3. CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (USA) 1-800-227-2600 OR 1-800-642-2444 AT LEAST ONE WEEK IN ADVANCE OF STARTING EXCAVATION TO PROVIDE FOR MARKING OF UTILITIES.
4. UNDERGROUND UTILITIES ARE NOT SHOWN ON THE PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE POSITION OF AND PROVIDE PROTECTION FOR SUCH UTILITIES AND STRUCTURES.
5. ALL MATERIALS, WORK APPURTENANCES SHALL CONFORM WITH THESE PLANS, THE PROJECT SPECIFICATIONS AND THE LATEST ADOPTED VERSION OF SAN MATEO COUNTY STANDARDS DETAILS.
6. THE CONTRACTOR SHALL AT ALL TIMES COMPLY WITH THE RULES AND REGULATIONS ESTABLISHED BY CAL-OSHA AND OTHER AGENCIES HAVING JURISDICTION OVER THE WORK.
7. THE CONTRACTOR SHALL PROVIDE UNINTERRUPTED SANITARY SEWER SERVICE THROUGHOUT THE LENGTH OF THE PROJECT.
8. **PRIOR** TO EXCAVATION, PIPE BURSTING OR OTHER METHODS OF PIPELINE CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS SHOWN, INCLUDING THE LENGTH OF MANHOLE TO MANHOLE REACHES AND DISTANCES TO SEWER LATERALS.
9. EXISTING FLOWS MUST BE MAINTAINED BY CONTRACTOR AT ALL TIMES DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY RESIDENTS AND/OR BUSINESSES OF ANY INTERRUPTIONS OF SEWER SERVICES PRIOR TO ANY WORK ON EXISTING SEWER PIPES. SEWAGE FLOWS SHALL BE MAINTAINED BY PUMPING OR TEMPORARY CROSS CONNECTION FROM EXISTING MAIN TO NEW MAIN.
10. CONTRACTOR SHALL PROVIDE PUMPS OR OTHER MEANS TO PREVENT SEWER WASTES BACKUP INTO RESIDENTIAL FIXTURES AND FAIL TO RELEASE WORK ON THE EXISTING SEWERS. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP AND DAMAGES CAUSED BY HIS/HER NEGLIGENCE.
11. ALL EXISTING IMPROVEMENTS, PROGRAMS BUT NOT LIMITED TO LANDSCAPING, FENCES, DRIVEWAYS, CURBS, GUTTER, SIDEWALK, CULVERTS, DRAINS, AND MONUMENTS, SHALL BE RESTORED TO THE CONDITION IN WHICH THEY WERE, OR BETTER, BEFORE THE EXCAVATION WAS MADE. SEPARATE PAYMENT FOR RESTORATION OF EXISTING IMPROVEMENTS TO THEIR ORIGINAL CONDITION WILL NOT BE MADE. COMPENSATION FOR THIS TASK SHALL BE CONSIDERED AS INCLUDED IN THE VARIOUS CONTRACT ITEMS OF WORK INVOLVED. NOT ALL EXISTING IMPROVEMENTS ARE SHOWN. CONTRACTOR SHALL INSPECT THE SITE IN ORDER TO SATISFY HIMSELF OF THE ACTUAL CONDITIONS OF THE WORK.
12. THE CONTRACTOR SHALL CONTACT THE DISTRICT AT 363-4100 TWO (2) WORKING DAYS IN ADVANCE OF BEGINNING ANY SANITARY SEWER WORK. THE CONTRACTOR SHALL THEREAFTER NOTIFY THE INSPECTOR FOR THE DISTRICT INFORMED OF HIS SCHEDULE FOR SANITARY SEWER WORK.
13. ALL SANITARY SEWER WORK CONSTRUCTED WITHOUT INSPECTION BY THE DISTRICT SHALL BE REMOVED AND RECONSTRUCTED WITH INSPECTION.

ABBREVIATIONS

CSCSD	CRYSTAL SPRINGS COUNTY SANITATION DISTRICT
(E.) EX	EXISTING
HDPE	HIGH DENSITY POLYETHYLENE
LF	LINEAL FEET
(P.) PR	PROPOSED
SS	SANITARY SEWER
SSMH	SANITARY SEWER MANHOLE
TYP	TYPICAL
VCP	VITRIFIED CLAY PIPE

LEGEND



FOR PLAN REVIEW – 03/26/2012
NOT FOR CONSTRUCTION

BKF ENGINEERS
255 SHORELINE DRIVE, SUITE 200
REDWOOD CITY, CA 94065
PHONE: (650) 482-6300
FAX: (650) 482-6399

HIGHLAND ESTATES
TICONDEROGA DRIVE SANITARY SEWER REHABILITATION
NOTES, ABBREVIATIONS AND LEGEND
CITY OF SAN MATEO — SAN MATEO COUNTY — CALIFORNIA

Date	03/26/12
Design	MS
Drawn	CT
Checked	CT
Approved	TM
Job No.	20120114

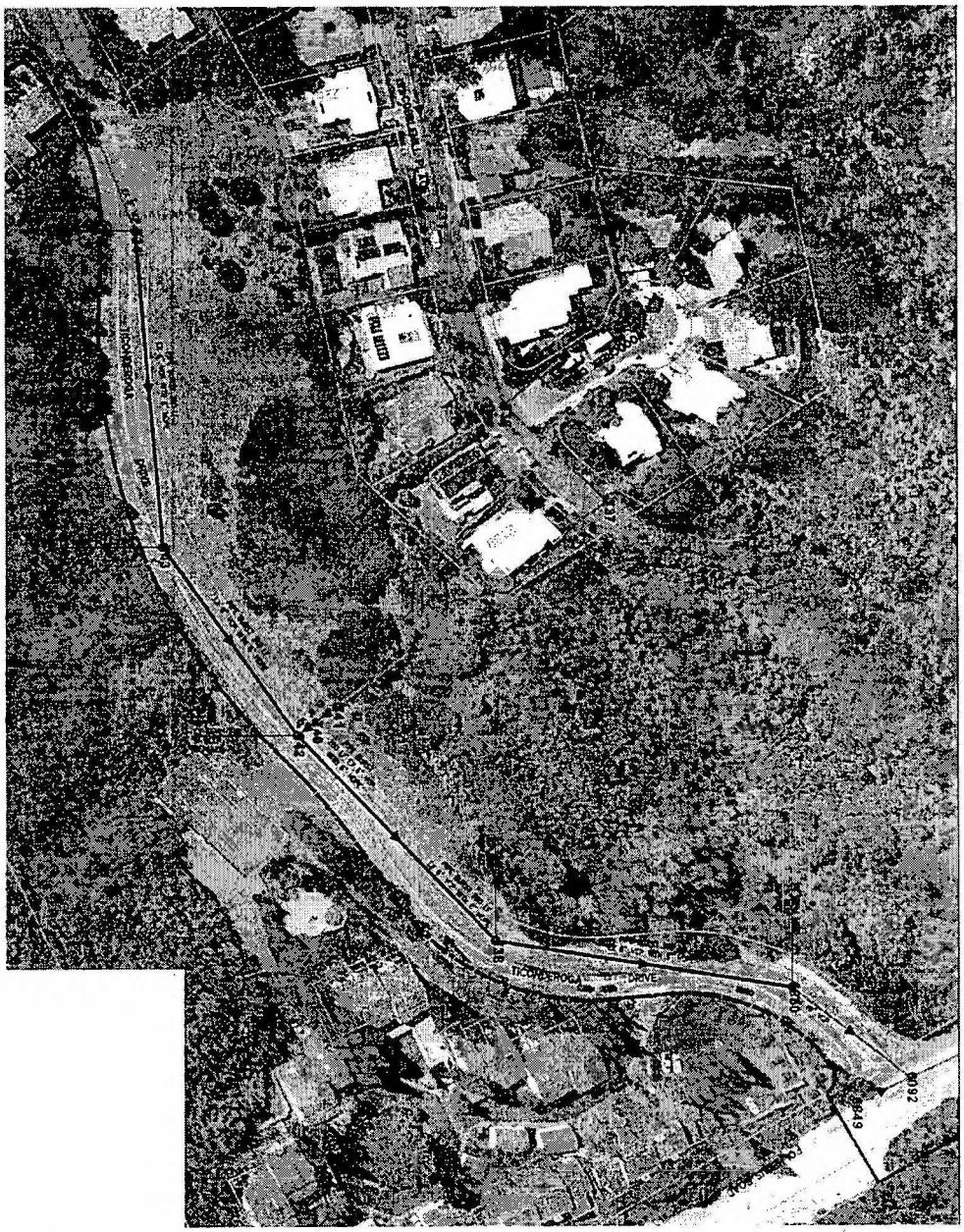
Revisions

No.	
1	
2	
3	
4	
5	

Sheet Number: 2 OF

DRAWING NAME: C:\...\20120114 GENERAL NOTES.dwg
PLOT DATE: 03/26/12 PLOTTED BY: Tom

DRAWING NAME: C:\Temp\AcPublish_3336\PRPLAN.dwg
PLOT DATE: 03-26-12 PLOTTED BY: Iran



GRAPHIC SCALE
50 0 50 100

LEGEND:
SPECIAL SEWER CREEK CROSSING DISTRICT BOUNDARY
SANITARY SEWER MAIN
MH
SMH

NOTES:
1. SEE SHEET 3 FOR ADDITIONAL AND GENERAL NOTES.
2. CONTRACTOR TO VERIFY EXACT LOCATION, LENGTH AND DEPTH OF SEWER LATERALS SHOWN ON THESE PLANS.
3. THESE PLANS SHOW THE LOCATION OF SEWER LATERALS AS DETERMINED BY CCTV INSPECTION. CONTRACTOR SHALL VERIFY LOCATION OF SEWER LATERALS IN THE FIELD PRIOR TO CONSTRUCTION. NOT ALL LATERALS MAY BE SHOWN ON THESE PLANS.

FOR PLAN REVIEW - 03/26/2012
NOT FOR CONSTRUCTION

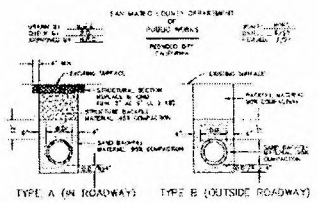
Sheet Number	Date	No.	Revisions
3 of 3	Date 03/26/12		
	Scale 1"=50'		
	Design CT		
	Drawn CT		
	Approved YM		
	Job No 13018-14		

HIGHLAND ESTATES
TICONDEROGA DRIVE SANITARY SEWER REHABILITATION
UTILITY PLAN

CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

BKF ENGINEERS / SURVEYORS / PLANNERS
255 SHORELINE DRIVE, SUITE 200
REDWOOD CITY, CA 94065
PHONE (650) 482-6300
FAX (650) 482-6399

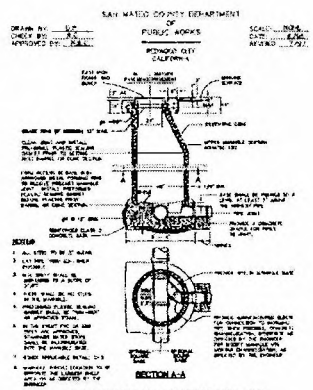
© BKF ENGINEERS



NOTES:

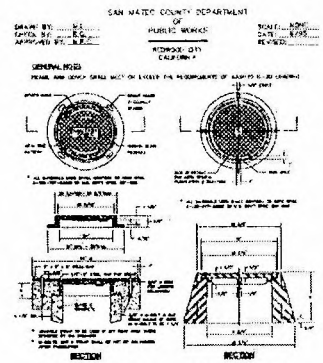
STANDARD TRENCH BACKFILL AND BEDDING DETAIL FOR PVC SEWER PIPE

C-7



SANITARY SEWER MANHOLE DETAIL

C-1



SANITARY SEWER MANHOLE COVER FRAME AND STRAP DETAIL

SANITARY SEWER FLUSHING INLET COVER

C-7

FOR PLAN REVIEW - 03/26/2012
NOT FOR CONSTRUCTION

BKF ENGINEERS
255 SHORELINE DRIVE, SUITE 200
REDWOOD CITY, CA 94065
PHONE: (650) 482-4900
FAX: (650) 482-6399
BKF ENGINEERS | SURVEYORS | PLANNERS

HIGHLAND ESTATES
TICONDEROGA DRIVE SANITARY SEWER REHABILITATION
DETAILS
CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

Revisions

No.	

Date 03/26/12
Scale NTS
Design
Drawn
Approved
Job No. 100944

Sheet Number
4
OF

BKF
ENGINEERS
SURVEYORS
PLANNERS

GEOGRAPHIC DESCRIPTION

All that real property situate in an unincorporated area of the County of San Mateo, State of California, being a portion of the lands as described in that certain Grant Deed filed for record on March 14, 2008, as Document Number 2008-027480 in the Office of the Recorder for the County of San Mateo, State of California, being more particularly described as follows:

BEGINNING at the southwesterly terminus of the course labeled "53. NORTH 47°00'00" EAST 275.00 FEET" as shown on said document, said point also being the southerly corner of Lot A as said lot is shown on that certain map entitled "TRACT NO. 762, THE HIGHLANDS UNIT NO. 8", filed for record on December 18, 1957 in Volume 48 of Maps at Pages 16 and 17, San Mateo County Records;

Thence, along the northwesterly line of the lands described in said document, (1) North 47°00'00" East 275.00 feet;

Thence, continuing along said northwesterly line, (2) South 43°00'00" East 120.00 feet;

Thence, leaving said northwesterly line (3) South 47°00'00" West 246.30 feet;

Thence, (4) South 61°35'41" West 63.74 feet;

Thence, (5) South 70°57'45" West 25.09 feet to a point on said northwesterly line;

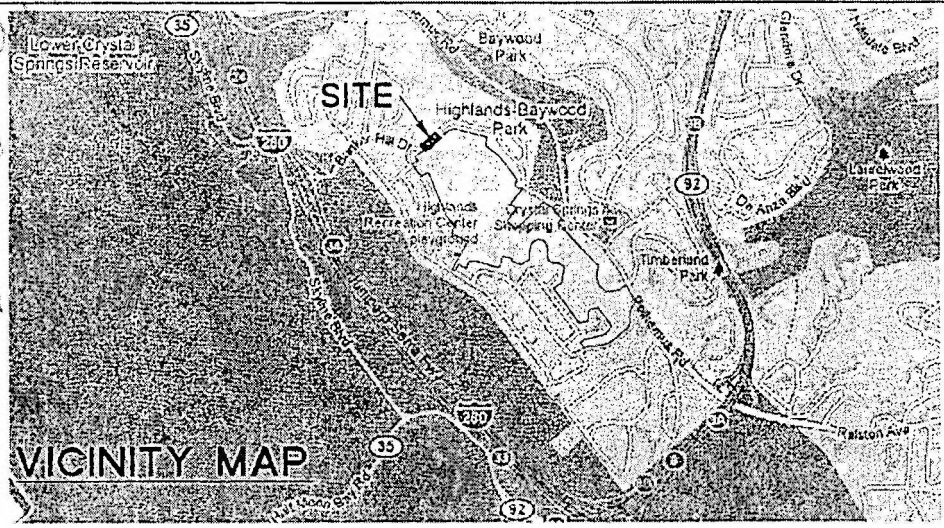
Thence, continuing along said northwesterly line, (6) North 38°03'00" West 105.00 feet to the beginning of a non-tangent curve, concave to the northwest, from which point a radial line bears North 38°03'00" West;

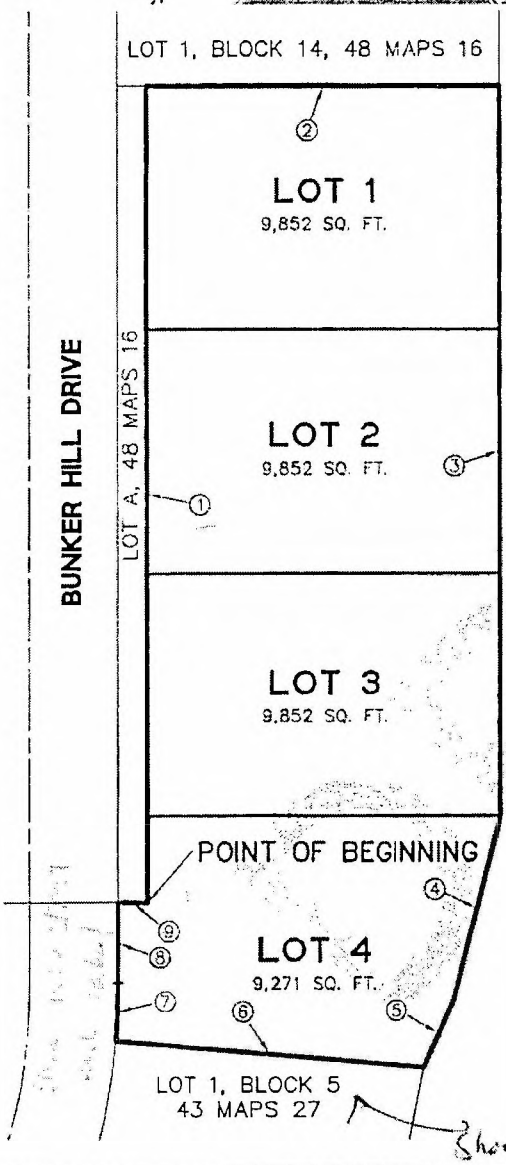
Thence, continuing along said northwesterly line, (7) northeasterly along said curve with a radius of 230.00 feet, through a central angle of 04°57'00", along an arc length of 19.87 feet;

Thence, continuing along said northwesterly line, (8) North 47°00'00" East 27.00 feet;

Thence, continuing along said northwesterly line, (9) South 43°00'00" East 10.00 feet to the POINT OF BEGINNING and containing an area of 38,827 square feet, more or less.

For assessment purposes only. This description of land is not a legal property description as defined in the Subdivision Map Act and may not be used as the basis for an offer for sale of the land described.





COURSES:

1.	N47°00'00"E	275.00'
2.	S43°00'00"E	120.00'
3.	S47°00'00"W	246.30'
4.	S61°35'41"W	63.74'
5.	S70°57'45"W	25.09'
6.	N38°03'00"W(R)	105.00'
7.	R=230.00', Δ=04°57'00",	L=19.87'
8.	N47°00'00"E	27.00'
9.	S43°00'00"E	10.00'

0.89 ACRES

This is the legend for the proposed annexation

EXISTING DISTRICT BOUNDARY

Show legendary district boundaries

DESIGNATED REMAINDER (UNSURVEYED)
DOC #92-093032

NOTE:
LOTS 1 THROUGH 4 ARE FROM PROPOSED PARCEL MAP NO. 1094 (NOT YET RECORDED).

Exhibit "A"

DISCLAIMER:
"FOR ASSESSMENT PURPOSES ONLY. THIS DESCRIPTION OF LAND IS NOT A LEGAL PROPERTY DESCRIPTION AS DEFINED IN THE SUBDIVISION MAP ACT AND MAY NOT BE USED AS THE BASIS FOR AN OFFER FOR SALE OF THE LAND DESCRIBED."

60 0 30 60 120

SCALE: 1" = 60'

Show near existing district area

BKF ENGINEERS / SURVEYORS / PLANNERS
255 SHORELINE DR
SUITE 200
REDWOOD CITY, CA 94065
650-482-6300
650-482-6399 (FAX)

Subject PROPOSED ANNEXATION

Job No. 19950168
By CRM Date 11/8/11 Chkd. CRC
SHEET 1 OF 1

STATE BOARD OF EQUALIZATION

CHANGE OF JURISDICTIONAL BOUNDARY

REQUIREMENTS FOR STATEMENTS, GEOGRAPHIC DESCRIPTIONS, MAPS AND FEES
SECTIONS 54900 THROUGH 54903, GOVERNMENT CODE

AUGUST 1, 2005

GENERAL REQUIREMENTS

The Tax-Rate Area System is administered by the State Board of Equalization (Board) and used by counties for the proper allocation of property tax revenues between counties, cities, and special tax districts. The requirements and fees described herein apply to all statements filed pursuant to sections 54900 through 54903 of the Government Code.[1] This document is provided as a guideline for the proper submission of geographic descriptions, maps and fees. Copies of this document, the *Statement of Boundary Change* (Form BOE-400-TA), sample map, sample geographic description, and other information are available on the Board's website at www.boe.ca.gov and can be accessed by selecting the Taxes & Fees tab, clicking on Property Tax, and then choosing Special Revenue District Boundaries.

In regard to a jurisdictional boundary change filing, please note the following:

1. The final date to file with the Board for a change of jurisdictional boundary for all special revenue districts is **on or before December 1** of the year immediately preceding the year in which the assessments or taxes are to be levied (*GC § 54902*).
2. **All fees shall accompany the filing.** Make checks payable to the "Board of Equalization." Please reference: Tax Area Services Section, MIC: 59.
3. Mail the completed filing to:

US Postal Delivery	*FedEx or UPS Delivery*
State Board of Equalization Tax Area Services Section P.O. Box 942879 Sacramento, CA 94279-0059	State Board of Equalization Tax Area Services Section 450 N Street, MIC: 59 Sacramento, CA 95814

Inquiries concerning these requirements should be directed to the Tax Area Services Section at 916-274-3250, or by fax at 916-285-0130.

[1] All references are to the Government Code unless otherwise specified.

DOCUMENTS REQUIRED TO FILE A CHANGE OF JURISDICTIONAL BOUNDARY

Please submit Items 1 through 9 as a single package:

1. Statement of Boundary Change (Form BOE-400-TA)
2. Certified copy of election results
3. Certificate of Completion (if applicable)
4. Resolution(s)
5. Written geographic description of the project area
6. Maps and supporting documents
7. List of assessor's parcel numbers of the project area
8. Letter of tax-rate area assignment (if applicable)
9. Fees

INCOMPLETE FILING PACKAGES will delay processing and may result in the boundary change being held until the following assessment roll year.

The following information is provided to assist you in filing your jurisdictional boundary change. Fees charged for processing jurisdictional boundary changes are listed on Page 6, and definitions and special fee provisions are provided on Page 7.

Statement of Boundary Change

Filings must be submitted on Form BOE-400-TA, *Statement of Boundary Change*. This form is available on the Board's website at *http://www.boe.ca.gov/proptaxes/pdf/400ta.pdf*.

Certified Copy of Election Results

A certified copy of the election results authorizing the change and the resulting assessment must be submitted, pursuant to Article XIII C, Section 2 of the State Constitution (commonly referred to as Proposition 218).

Certificate of Completion

A certificate of completion must be included for all filings submitted through the Local Agency Formation Commission. All documents must be recorded before submittal. (Conformed documents are acceptable.)

Resolution(s)

The resolution(s) with signatures from the tax levying authority shall be submitted with the filing. Resolution(s) shall have a resolution number, the title of the project, and a detailed description of the content of the boundary change.

Written Geographic Description(s) of the Project Area(s)

Descriptions of the territory that are filed with the Board's Tax Area Services Section (TASS) are used to establish geodetic position and are not intended to establish property ownership in a court of law.[2] Subdivision maps, tract maps, recorded survey maps, survey monuments, and deeds are not on file with the Board. Boundary descriptions that merely cite recorded documents or refer to assessor's parcel numbers will not be accepted. Any supporting documents may be used as reference only and cannot be used as a substitution. Written geographic descriptions shall conform to the following specifications:

1. Every written geographic description (a document separate from the maps) must stand on its own without the necessity of reference to any extraneous document; a description that relies solely on the use of secondary references will not be accepted. The TASS cartographic staff must be able to plot the boundaries from the written description alone.
2. The written description shall be of the project area only. If a complete description of the special district is filed, the project area shall be clearly identified in a separate document.
3. The geographic description shall:
   a. State the township and range, section number(s) or rancho(s)
   b. Have a **point of beginning** (POB) referenced to a known major geographic position (e.g., section corners, intersection of street centerlines, or the intersection of street centerline and an existing district boundary at the time of filing). A description will be rejected if the POB refers only to a tract map, a subdivision map or a recorded survey map. It is preferable that the POB be the point of departure from an existing district boundary (when applicable).
   c. Be expressed as a specific parcel description in sectionalized land (e.g., "The SW 1/4 of Section 22, T1N, R1W") or by bearings and distances. When the description is by bearings and distances, **all courses shall be numbered and listed individually** in a consistent clockwise direction. The description shall not be written in a narrative format. All courses required to close the traverse of the project area must be stated. All curves must be described by direction of concavity. Delta, arc length, chord, and radius shall be listed, including radial bearings for all points of non-tangency.

Following are examples of unacceptable and acceptable descriptions:

Unacceptable (*This description refers only to extraneous documents and does not stand alone.)*

"From the point of beginning, northerly to the southwest corner of that certain property recorded in Book 12, Page 15 of Recorded Deeds, thence easterly to the southeast corner of that certain property recorded in Book 12, Page 16 of Recorded Deeds...."

Acceptable (*This is the same description with the courses numbered and the bearings and distances added.)*

"From the point of beginning:

Course 1. North 1° 18'56" West a distance of 150' to the southwest corner of that certain property recorded in Book 12, Page 15 of Recorded Deeds, thence,

Course 2. North 85° 7'56" West a distance of 75' to the southeast corner of that certain property recorded in Book 12, Page 16 of Recorded Deeds, thence...."

[2] The Board's Tax Area Service Section is not involved in issues relating to property ownership.

4. The written description shall state the acreage for each separate single area (see Definitions and Special Fee Provisions for the definition of a single area) and a combined total acreage of the project area.

   Example: *"Area A containing 2.50 acres, Area B containing 1.75 acres: Total computed acreage containing 4.25 acres more or less."*

5. All information stated on the description must match with the map(s), such as the name of the short title, the point of beginning, the course numbers, all the bearings and distances, and the acreage(s).

Map(s)

It is strongly recommended that all maps submitted to the Board be filed in electronic/digital form. Digital information will not be shared without the permission of the applicant.

Maps submitted as part of the jurisdictional boundary change filing shall conform to the following specifications:

Map Documents:

1. All maps shall be professionally and accurately drawn or copied. Rough sketches or pictorial drawings will not be accepted. Assessor's parcel maps will not be accepted as a substitute for the project map.
2. Original or copies of the same size project map must be submitted. Reduced maps are not acceptable and will be rejected.
3. A vicinity map shall be included. The vicinity map shall show the location of the project area in relationship to a larger geographic area that includes major streets and highways or other physical features.
4. Any portion of an existing district boundary in close proximity to the project area shall be shown and identified.
5. Every map must clearly show all existing streets, roads and highways with their current names that are within and adjacent to the project area. Additionally, every map shall indicate each township and range, section lines and numbers, or ranchos that are in proximity of the project area.
6. Every map shall bear a scale and a north arrow. The **point of beginning** shall be clearly shown and match the written geographic description.
7. The boundaries of the project area shall be distinctively delineated on each map without masking any essential geographic or political features. The boundaries of the project area must be the most predominant line on the map. Boundary lines that are delineated by a line that exceeds 1.5 millimeter in width shall be rejected. The use of graphic tape or broad tip marking pens to delineate the boundary is not acceptable.
8. All dimensions needed to plot the boundaries must be given on the map of the project area. Each map shall have **numbered courses matching the written geographic description.** Index tables may be utilized.
9. All parcels within the project area that touch the new boundary shall be clearly labeled with the assessor's parcel number. Interior parcels that do not touch the boundary need not be identified on the map.

10. If the project area has an interior island(s) of exclusion or the boundary has a peninsula of exclusion (or inclusion), that area(s) should be shown in an enlarged drawing. This drawing should be of sufficient size and scale to allow TASS to plot the boundary without difficulty.

11. When it is necessary to use more than one map sheet to show the boundaries of the project area, the sheet size should be uniform. A small key map giving the relationship of the several sheets shall be furnished. Match lines between adjoining sheets must be used. While the geography on adjoining sheets may overlap, the project boundaries must stop at the match lines. TASS has standardized the D size (24" x 36") map sheet, but will accept larger or smaller map sizes depending on the size and complexity of the individual single area(s).

Digital Maps:

Maps that are filed electronically shall conform to the same requirements as described in this section under map documents (Items 1 through 11 above). Additional items for digital maps are as follows:

Required files – The disk or CD shall contain only the following files:

a. Map/drawing file(s) using AutoCAD.dwg format in vector format:

- Plotting: The map drawing file shall have the same appropriate borders, legends, title blocks, signature block and any necessary information that is required for a manually drawn map.
- Scale: The drawing shall be at real-world scale.
- Layers: A listing of the layers and their definitions shall be included in the "read_me" file.
- File Format: File shall be in vector format only. Raster files, raster-vector hybrid, .pdf. tiff, .pcx, .eps, .gif, .jpeg or any other image formats will not be accepted.
- Compressed Files: Files shall be uncompressed; compressed files will not be accepted.

b. A text file labeled "read_me" listing:

- The name, address, and phone number of the agency/special district
- County name and city or district name
- Project/short title of the action
- Name, address and phone number of office that prepared the map file
- List of files on the disk or CD
- Map projection and datum
- Layer definitions
- Sheet size
- Plotting scale
- Date of creation

c. Labels: The disk or CD must have a label that identifies:

- The agency and/or special district submitting the map
- Name of the project/short title
- County name(s)
- Date of creation

List of Assessor's Parcel Numbers for the Project Area

A list of all affected assessor's parcel numbers must be submitted as part of the jurisdictional boundary change filing.

Letter of Tax-Rate Area Assignment

The jurisdictional boundary change filing must include a letter of the tax-rate area (TRA) assignment on consolidated counties only. This TRA assignment letter is provided by the county auditor's office. The current list of consolidated counties can be found on the Board's website.

Fees

All fees are required to be submitted at the time of filing. Please use the following schedule to calculate the fees. Make checks payable to the "Board of Equalization." Please reference: Tax Area Services Section, MIC: 59.

Single Area Transactions

Acreage per Single Area	Mapping Fee
Less than 1 acre	$300
1.00 – 5.99	$350
6.00 – 10.99	$500
11.00 – 20.99	$800
21.00 – 50.99	$1,200
51.00 – 100.99	$1,500
101.00 – 500.99	$2,000
501.00 – 1,000.99	$2,500
1,001.00 – 2,000.99	$3,000
2,001.00 and above	$3,500

Special Fee Provisions

The following transactions may supersede or combine with the fees for single area transactions:

Additional county, per transaction	$300
Consolidation per resolution or ordinance	$300
Entire district transaction	$300
Coterminous transaction	$300
District dissolution or name change	$0

Example: *A district is formed coterminous with a city boundary and contains 2 areas of exclusion of 4 and 7 acres.*

Coterminous transaction	*$300*	*(Entire city)*
Single Area #1	*$350*	*(4 acres)*
Single Area #2	*$500*	*(7 acres)*
Total Fee	***$1,150***	

IMPORTANT NOTE: If you have questions regarding filing requirements and fees, please contact the Tax Area Services Section at 916-274-3250, or by fax at 916-285-0130.

Definitions and Special Fee Provisions

1. A *single area* means any separate geographical area regardless of ownership. A lot, subdivision or section could each be a single area. A geographical area that is divided into two or more parcels by a roadway, railroad right-of-way, river or stream is considered a single area. Geographic areas that are non-contiguous are not considered a single area.
2. Two areas are *contiguous* when the two polygons that define the areas share a common line segment.

3. A *concurrent transaction* is defined as:

   a) Any combination of formation, annexation or detachment of a single area under one resolution or ordinance, each independent action must be dependent on the other action(s) in order to complete concurrent transaction, e.g., a reorganization.

   b) When there are more than one resolution or ordinance that is required to complete the action, each single area must have identical boundaries, identical actions, and the multiple resolutions or ordinances shall be inter-dependent for completion.

   The fee shall be according to the fee schedule provided on Page 6. There is no additional cost for the number of transactions involved.

   Multiple formations, annexations, or detachments of a single area under one resolution or ordinance that are not inter-dependent, must be filed separately and fees paid accordingly.

4. *Coterminous transaction*: If an annexed or detached territory comprises an entire city, district, or zone without affecting the existence of that city, district or zone, the total processing fee is $300. Such a transaction is completely coterminous. However, if a coterminous transaction involves areas of exclusion, each area of exclusion shall constitute a single area transaction and all fees and requirements pertaining to single area transactions apply.

5. The fee schedule assumes that an action is confined to a single county. If more than one county is involved, add $300 for each additional county.

6. *Multiple area filings* for special revenue districts shall be calculated as a separate fee for each single area. A separate fee must be computed for each ordinance or resolution.

7. Payment of the fee for the formation of a city or district may be deferred until that city or district receives its first revenue (section 54902.5).

8. *Entire District transaction*: When the action involves the whole district and the district's boundary is not altered by the action, it is considered an entire district transaction, e.g., annexation of a county service area countywide, annexation of a zone of improvement to the entire district.

9. *Zones* include temporary zones in highway lighting districts, zones of improvement, zones of benefit, improvement districts, or any other sub-units of a county, city or parent district.

CHECKLIST *(This checklist is for your convenience only. Please, do not submit it with your filing.)*

Did you include the following items?

- ☐ Statement of Boundary Change *(Form BOE-400-TA)*
- ☐ Certified copy of election results *(Proposition 218)*
- ☐ Certificate of Completion *(if applicable)*
- ☐ Copy of the Resolution(s)

- ☐ Written geographic description:
  - ☐ Can the geographic description stand alone?
  - ☐ Is the description of the project area only?
  - ☐ Does it include the township & range, section number(s) or rancho?
  - ☐ Is there a point of beginning?
  - ☐ Are the courses numbered to follow a clockwise direction from the point of beginning?
  - ☐ Is the total acreage included?
  - ☐ Does the information on the description match with the map(s)?

- ☐ Map(s):
  - ☐ Is the map accurately drawn to professional standards?
  - ☐ Is it the original size copy?
  - ☐ Is a vicinity map included?
  - ☐ Are existing boundaries shown and identified?
  - ☐ Are existing streets, roads, and highways referenced with their current names?
  - ☐ Does it include the township & range, section number(s), or rancho?
  - ☐ Does it have a north arrow and scale bar?
  - ☐ Is the Point of Beginning clearly shown?
  - ☐ Is the boundary made apparent without masking adjacent background features?
  - ☐ Are all courses numbered to follow the written description?
  - ☐ Is each parcel that touches the new boundary and is within the project area labeled with an APN?
  - ☐ Is an enlarge drawing included to show smaller areas of exclusion or inclusion, if applicable?
  - ☐ Is there a key map for multiple sheets?
  - ☐ Does the electronic filing conform to TASS standards?

- ☐ List of assessor's parcel numbers
- ☐ Letter of tax-rate area assignment from the county auditor *(consolidated counties only)*
- ☐ Fee. *Make checks payable to the "Board of Equalization" with reference to Tax Area Services Section, MIC:59.*

Mail completed package to:

US Postal Delivery

State Board of Equalization
Tax Area Services Section
P.O. Box 942879
Sacramento, CA 94279-0059

FedEx or UPS Delivery

State Board of Equalization
Tax Area Services Section
450 N Street, MIC: 59
Sacramento, CA 95814

From: John Nibbelin
To: Brian Wong; Diana Shu; jtuttlec@aol.com; Pete Bentley; Subidra Waran
CC: Jim Eggemeyer; Jim Porter
Date: 10/1/2012 10:07 AM
Subject: Meeting re Letter of Credit for Highlands Project

Subidra,

I received a call from Jack Chamberlain requesting that we set up an hour or so block of time to meet and discuss outstanding issues re the letter of credit for the San Mateo Highlands project. We discussed the possibility of Wednesday afternoon at 3 or 3:30. The attendees I thik we need there are me, Mr. Chamberlain (who is copied on this email at jtuttlec@aol.com), Diana Shu, Brian Wong, and Pete Bentley. I understand that Mr. Chamberlain will bring counsel with him to the meeting. Could you check the availability of County staff for such a meeting and, if this works, please confirm the meeting. We could use the County Counsel conference room or the Library. Thanks!

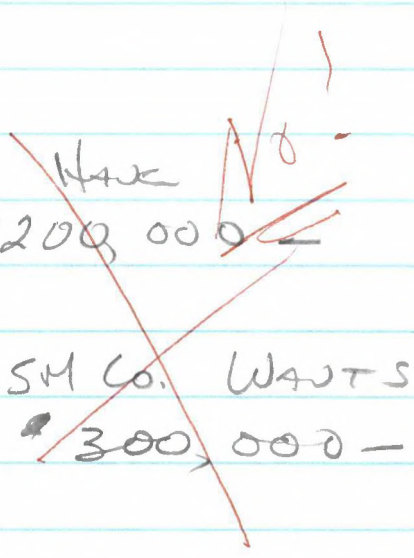
John

John D. Nibbelin
Chief Deputy County Counsel
Telephone: 650-363-4757
jnibbelin@co.sanmateo.ca.us

Save Paper.
Think before you print.

10/3/12

Talk
Sylvia
John N.
Brian W.
Diana
Me -



Bond - $200,000

Construction Loan - $200,000

Total $400,000 Why??

100% Material
50% Labor & Material
10% 1 Year Warranty

From Bank Set Aside Letter

From: John Nibbelin
To: Pete Bentley
Date: 10/17/2012 8:07 AM
Subject: Fwd: Title Insurance Policy re Conservation Easement
Attachments: Ticonderoga Partners Conservation Easement August 15 2012.doc; Conservation Easement Property Description Exhibit A Rev.docx

Pete,

Further our conversation of this am, attached is what I sent to Steve Johnson. Best,

John

John D. Nibbelin
Chief Deputy County Counsel
Telephone: 650-363-4757
jnibbelin@co.sanmateo.ca.us

Save Paper.
Think before you print.

>>> John Nibbelin 8/20/2012 11:33 AM >>>
Steve,

I am employed as an attorney in the office of the County Counsel in San Mateo County. I believe that John Briscoe and Dave Byers have both been in touch with you re the property description for a conservation easement in favor of the County that will burden property owned by Jack Chamberlain in connection with development that he is doing in the San Mateo Highlands. I understood from John Briscoe that you had stated that Old Republic would be willing to write a $2 million title insurance policy for a premium of $1800. This is something that the County would like to pursue with you. I've attached a copy of the conservation easement and property description for your reference, and I wold request that you contact me so we can discuss next steps. Many thanks.

John

John D. Nibbelin
Chief Deputy County Counsel
Telephone: 650-363-4757
jnibbelin@co.sanmateo.ca.us

Save Paper.
Think before you print.

From: Mark Chow
To: JTUTTLEC@aol.com; RHAGA@BKF.com
CC: America Sanchez; Ann Stillman; Ed Garcia; Julie Young; Pete Bentley
Date: 11/8/2012 6:57 PM
Subject: Highland Estates Off-site Sanitary Sewer Mitigation and Lot 1 thru 4 Streetlighting District Annexation - Submittal #2 Comments
Attachments: Highland States-Ticonderoga Drive 2nd Submittal.pdf

Jack/Roland,

We have completed our review of the revised documents for the sanitary sewer rehabilitation project on Ticonderoga Drive and the annexation of the 4 lots on Bunker Hill Drive to the Bel Aire Lighting and Maintenance District. Our comments on the plans and maps are as shown on the attached PDF file. The hardcopies (except the marked-up specifications) are being sent in the mail. A link to download the marked-up specifications in Word format will be e-mailed to Roland separately via YouSendIt.com due to its size and the limitations of the County's e-mail system.

Please let us know if you have any questions.

Mark Chow, P.E.
Principal Civil Engineer
County of San Mateo
Department of Public Works and Parks
555 County Center, 5th Floor
Redwood City, CA 94063
Tel. (650) 599-1489
Fax. (650) 361-8220
e-mail: mchow@smcgov.org

County of San Mateo
Department of Public Works and Parks
Utilities-Flood Control-Watershed Protection

Highland Estates
Sewer Rehabiliation & Streetlighting District Annexation

To: Ticonderoga Partners LLC, 655 Skyway, Suite 230, San Carlos, CA 94070

From: MC Mark Chow, Principal Civil Engineer, Utilities-Flood Control-Watershed Protection Section

cc: Roland Haga, BKF Engineers, 255 Shoreline Drive, Suite 200, Redwood City, CA 94065

Date: November 8, 2012

Subject: Sanitary Sewer Rehabilitation (Ticonderoga Drive) and Streetlighting District Annexation, 2nd Submittal

Reason for Review: Sanitary Sewer Rehabilitation and Geographic Description and Map Required for a Change of Jurisdictional Boundary

Plan Identification: Sewer Rehabilitation; Highland Estates- Ticonderoga Drive, San Mateo Highlands; BKF Engineers; Plans Dated 10/10/2012 and Geographic Description and Map Dated 10/15/2012

Reviewer: America Sanchez

Submittal/Review No.: 2

The Crystal Springs County Sanitation District (Sewer District) and the Bel Aire Lighting and Maintenance District (Lighting District) have reviewed the sanitary sewer rehabilitation plans and the geographic description and map required for the State Board of Equalization to annex the parcels along Bunker Hill Drive to the Lighting District. The Sewer District and the Lighting District are providing their comments in this memo.

All comments must be addressed and incorporated into a modified, complete set of plans for re-submittal. Subsequent re-submittals will be returned without review comments if the Sewer District and Lighting District determine that all previous comments have not been addressed. Your careful attention to our comments and providing re-submittals that adequately address our comments will assist in completing the review process in a timely fashion.

Sewer District

1. The Project Specifications submitted via electronic mail have been reviewed using track changes. Please make the appropriate revisions and re-submit them for the Sewer District's review and approval.

2. Other miscellaneous comments are shown on the plans.

Lighting District

1. Per Item No. 9 under Map Documents of the State Board of Equalization, Change of Jurisdictional Boundary document , the map must show adjacent parcels that touch the new boundary and their assessor's parcel numbers.

If you have any questions regarding this review or any of its contents, please contact staff at (650) 363-4100.

Attachments: Marked-up Plans, Geographic Description and Map
Marked up Project Specifications (electronic format only)

BkF

ENGINEERS
SURVEYORS
PLANNERS

EXHIBIT "A"

PROPOSED ANNEXATION OF THE LANDS OF TICONDEROGA PARTNERS, LLC TO THE BEL-AIRE LIGHTING AND MAINTENANCE DISTRICT HIGHLAND ESTATES, SAN MATEO (APN: 041-101-290)

All that real property situate in an unincorporated area of the County of San Mateo, State of California, being a portion of the lands as described in that certain Grant Deed filed for record on March 14, 2008, as Document Number 2008-027480 in the Office of the Recorder for the County of San Mateo, State of California, being more particularly described as follows:

BEGINNING at the southwesterly terminus of the course labeled "53. NORTH 47°00'00" EAST 275.00 FEET" as shown on said document, said point also being the southerly corner of Lot A as said lot is shown on that certain map entitled "TRACT NO. 762, THE HIGHLANDS UNIT NO. 8", filed for record on December 18, 1957 in Volume 48 of Maps at Pages 16 and 17, San Mateo County Records;

(1) Thence along the northwesterly line of the lands described in said document, North 47°00'00" East 275.00 feet;

(2) Thence continuing along said northwesterly line, South 43°00'00" East 120.00 feet;

(3) Thence leaving said northwesterly line, South 47°00'00" West 246.30 feet;

(4) Thence South 61°35'41" West 63.74 feet;

(5) Thence South 70°57'45" West 25.09 feet to a point on said northwesterly line;

(6) Thence, continuing along said northwesterly line, North 38°03'00" West 105.00 feet to the beginning of a non-tangent curve, concave to the northwest, from which point a radial line bears North 38°03'00" West;

(7) Thence continuing along said northwesterly line, northeasterly along said curve with a radius of 230.00 feet, through a central angle of 04°57'00", along an arc length of 19.87 feet;

(8) Thence continuing along said northwesterly line, North 47°00'00" East 27.00 feet;

(9) Thence continuing along said northwesterly line, South 43°00'00" East 10.00 feet to the POINT OF BEGINNING

Containing an area of 0.89 acres, more or less.

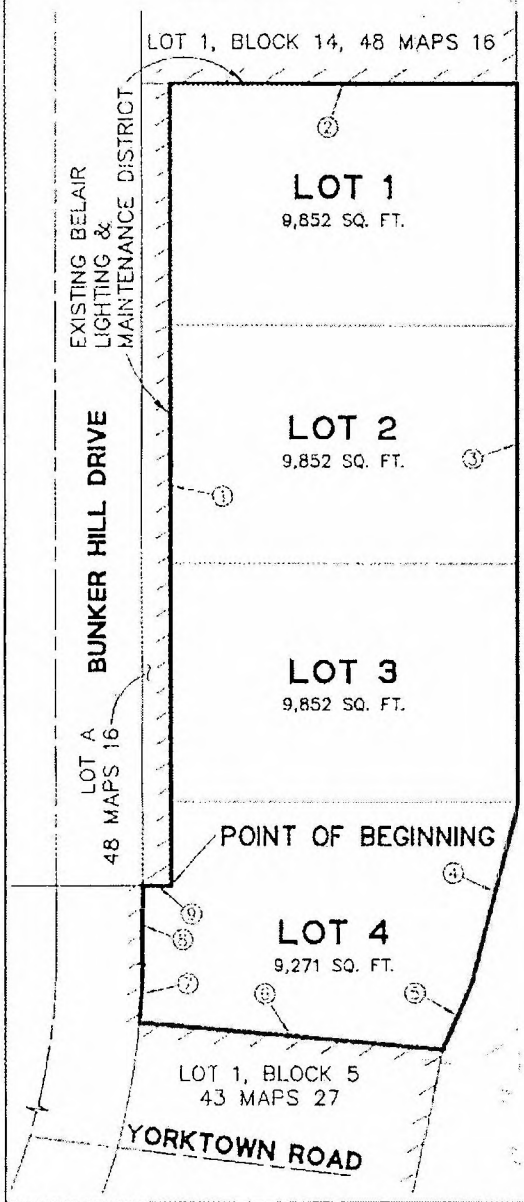
For assessment purposes only. This description of land is not a legal property description as defined in the Subdivision Map Act and may not be used as the basis for an offer for sale of the land described.

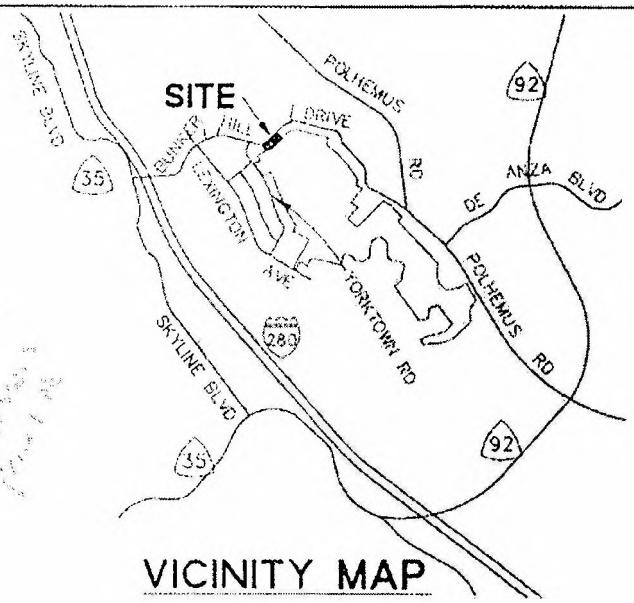
EXHIBIT "A"

COURSES:

1.	N47°00'00"E	275.00'
2.	S43°00'00"E	120.00'
3.	S47°00'00"W	246.30'
4.	S61°35'41"W	63.74'
5.	S70°57'45"W	25.09'
6.	N38°03'00"W(R)	105.00'
7.	R=230.00', Δ=04°57'00",	L=19.87'
8.	N47°00'00"E	27.00'
9.	S43°00'00"E	10.00'

0.89 ACRES





VICINITY MAP

1"=60'

LEGEND

EXISTING BEL-AIRE LIGHTING AND MAINTENANCE DISTRICT BOUNDARY

PROPOSED ANNEXATION

DESIGNATED REMAINDER (UNSURVEYED)
DOC #92-093032

NOTE:
LOTS 1 THROUGH 4 ARE FROM PROPOSED PARCEL MAP NO. 1094 (NOT YET RECORDED).

DISCLAIMER:
"FOR ANNEXATION PURPOSES ONLY. THIS DESCRIPTION OF LAND IS NOT A LEGAL PROPERTY DESCRIPTION AS DEFINED IN THE SUBDIVISION MAP ACT AND MAY NOT BE USED AS THE BASIS FOR AN OFFER FOR SALE OF THE LAND DESCRIBED."

60 0 30 60 120

SCALE: 1" = 60'

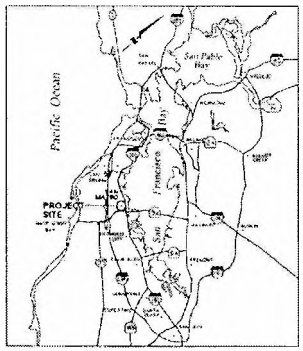
BkF
ENGINEERS / SURVEYORS / PLANNERS
255 SHORELINE DR
SUITE 200
REDWOOD CITY, CA 94065
650-482-6300
650-482-6399 (FAX)

Subject EXHIBIT "A"-PROPOSED ANNEXATION
BEL-AIRE LIGHTING & MAINTENANCE DISTRICT
Job No. 19950168
By CRM Date 10/15/12 Chkd. CRC
SHEET 2 OF 2

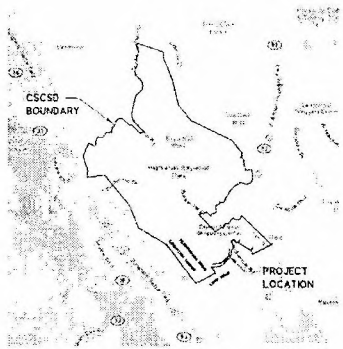
SANITARY SEWER REHABILITATION FOR
CRYSTAL SPRINGS COUNTY SANITATION DISTRICT

HIGHLAND ESTATES - TICONDEROGA DRIVE

COUNTY OF SAN MATEO, CALIFORNIA



VICINITY MAP
NTS



LOCATION MAP
NTS

SHEET INDEX

SHEET NO	DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES, ABBREVIATIONS AND LEGEND
3	UTILITY PLAN
4	DETAILS

ENGINEER'S STATEMENT

THESE IMPROVEMENT PLANS HAVE BEEN PREPARED BY ME OR UNDER MY DIRECTION IN ACCORDANCE WITH STANDARD ENGINEERING PRACTICE.

YOUSEF MORADZADEH, PROJECT MANAGER
BKF ENGINEERS
DATE

CRYSTAL SPRINGS COUNTY SANITATION DISTRICT

MARK Y. CHEW
PRINCIPAL CIVIL ENGINEER
COUNTY OF SAN MATEO DEPARTMENT OF PUBLIC WORKS AND PARKS
P.E. C56429 EXP. 12/31/2013
DATE

BID SET - 10/10/2012

BKF
ENGINEERS | SURVEYORS | PLANNERS

HIGHLAND ESTATES
TICONDEROGA DRIVE SANITARY SEWER REHABILITATION
COVER SHEET
CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

Revisions	
No.	
Date	10/10/12
Scale	NTS
Design	CT
Drawn	CT
Approved	YM
Job No.	2009-14

Sheet Number: 1 OF

GENERAL NOTES

1. THE FOLLOWING NOTES ARE ESTABLISHED MERELY TO GUIDE THE CONTRACTOR AS TO THE GENERAL ITEMS OF WORK INVOLVED AND ARE NOT INTENDED TO DEFINE CONTRACT SCOPE OF WORK. CONTRACTOR SHALL CONFORM TO ALL WORK AS PER CONTRACT DOCUMENTS.

2. ALL REPLACEMENT SEWER MAIN SHALL BE CONSTRUCTED AT THE SAME ALIGNMENT AND GRADE OF THE EXISTING SEWER MAIN BY OPEN TRENCH METHOD.

3. CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (USA) 1-800-227-2600 OR 1-(800)-642-2444 AT LEAST TWO WEEK IN ADVANCE OF STARTING EXCAVATION TO PROVIDE FOR MARKING OF UTILITIES.

4. UNDERGROUND UTILITIES ARE NOT SHOWN ON THE PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF AND PROVIDE PROTECTION FOR SUCH UTILITIES AND STRUCTURES.

5. ALL MATERIALS, WORK APPURTENANCES SHALL CONFORM WITH THESE PLANS, THE PROJECT SPECIFICATIONS AND THE LATEST ADOPTED VERSION OF SAN MATEO COUNTY STANDARDS DETAILS.

6. THE CONTRACTOR SHALL AT ALL TIMES COMPLY WITH THE RULES AND REGULATIONS ESTABLISHED BY CAL-OSHA AND OTHER AGENCIES HAVING JURISDICTION OVER THE WORK.

7. THE CONTRACTOR SHALL PREVENT UNINTERRUPTED SANITARY SEWER FLOWS THROUGHOUT THE LENGTH OF THE PROJECT.

8. PRIOR TO EXCAVATION, PIPE BURSTING OR OTHER METHODS OF PERFORM CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS SHOWN, INCLUDING THE LENGTH OF MANHOLE TO MANHOLE REACHES AND DISTANCES TO SEWER LATERALS.

9. EXISTING FLOWS MUST BE MAINTAINED BY CONTRACTOR AT ALL TIMES DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY RESIDENTS AND/OR BUSINESSES OF ANY INTERRUPTIONS OF SEWER SERVICES PRIOR TO ANY WORK ON EXISTING SEWER PIPES. SEWAGE FLOWS SHALL BE MAINTAINED BY PUMPING OR BY-PASSING AROUND CONNECTION FROM EXISTING MAIN TO NEW MAIN.

10. CONTRACTOR SHALL PROVIDE PUMPS OR OTHER MEANS TO PREVENT SEWER WATERS BACKUP INTO RESIDENTIAL PREMISES AND SHALL BE HELD TO HOLD HARMLESS FOR ANY DAMAGE CAUSED BY SUCH BACKUP. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP AND DAMAGES CAUSED BY HIS/HER NEGLIGENCE.

11. ALL EXISTING IMPROVEMENTS, INCLUDING BUT NOT LIMITED TO LANDSCAPING, FENCES, DRIVEWAYS, CURB, GUTTER, SIDEWALK, PAVEMENT, DRAINS, AND MONUMENTS, SHALL BE RESTORED TO THE CONDITION IN WHICH THEY WERE, OR BETTER, BEFORE THE EXCAVATION WAS MADE. SEPARATE PAYMENT FOR RESTORATION OR LEVELING IMPROVEMENTS TO THEIR ORIGINAL CONDITION WILL NOT BE MADE. COMPENSATION FOR THIS TASK SHALL BE CONSIDERED AS INCLUDED IN THE VARIOUS CONTRACT ITEMS OF WORK INVOLVED. JUST ALL EXISTING IMPROVEMENTS ARE SHOWN, CONTRACTOR SHALL INSPECT THE SITE IN ORDER TO SATISFY HIMSELF OF THE ACTUAL CONDITIONS OF THE WORK.

12. THE CONTRACTOR SHALL CONTACT THE DISTRICT AT (650) 4100 (24) WORKING DAYS IN ADVANCE OF BEGINNING ANY SANITARY SEWER WORK. THE CONTRACTOR SHALL THEREAFTER KEEP THE INSPECTOR FOR THE DISTRICT INFORMED OF HIS SCHEDULE FOR SANITARY SEWER WORK. NO INSPECTIONS SHALL OCCUR ON HOLIDAYS, WEEKENDS OR WEEKDAYS UNLESS SPECIAL ARRANGEMENTS ARE MADE WITH THE SEWER DISTRICT.

13. ALL SANITARY SEWER WORK CONSTRUCTED WITHOUT INSPECTION BY THE DISTRICT SHALL BE REMOVED AND RECONSTRUCTED WITH INSPECTION.

14. CERTIFICATES OF COMPLIANCE, CONFORMING TO THE PROVISIONS IN SECTION 6-1.07, "CERTIFICATES OF COMPLIANCE," OF THE COUNTY STANDARD SPECIFICATIONS SHALL BE FURNISHED TO THE SEWER DISTRICT FOR ALL MANUFACTURED PRODUCTS, UNLESS OTHERWISE WAIVED BY THE SEWER DISTRICT.

15. A VIDEO INSPECTION OF THE REHABILITATED SEWER MAIN SHALL BE PERFORMED BY THE APPLICANT'S CONTRACTOR AND SUBMITTED TO THE SEWER DISTRICT FOR REVIEW. THE VIDEO INSPECTION SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS DESCRIBED IN THE SPECIAL PROVISIONS FOR CLOSED CIRCUIT TELEVISION INSPECTION OF SANITARY SEWER MAINS (A COPY CAN BE OBTAINED FROM OUR WEBSITE WWW.CO.SANMATEO.CA.US/SEWER/). THE SEWER DISTRICT WILL REVIEW THE VIDEO INSPECTION TO DETERMINE WHETHER THE WORK PERFORMED IS ACCEPTABLE. ALL UNACCEPTABLE WORK SHALL BE CORRECTED TO THE SEWER DISTRICT'S SATISFACTION AT THE APPLICANT'S EXPENSE.

16. CARE MUST BE TAKEN TO PROTECT THE EXISTING SEWER DISTRICT FACILITIES. ANY DAMAGES TO THE SEWER DISTRICT FACILITIES DURING THE REHABILITATION OF THE SEWER MAIN SHALL BE REPAIRED BY THE APPLICANT PER THE SEWER DISTRICT STANDARD DETAILS AND AT THE APPLICANT'S EXPENSE. THE SEWER DISTRICT MUST BE NOTIFIED OF ANY DAMAGES TO THE SANITARY SEWER FACILITIES AND ANY REPAIRS MUST BE INSPECTED BY A SEWER DISTRICT REPRESENTATIVE.

17. THE CONTRACTOR MUST REMOVE AND DISPOSE OF ALL CONSTRUCTION DEBRIS IN THE MANHOLES AFTER THE SEWER MAIN ARE MANHOLES ARE REPLACED. CARE MUST BE TAKEN TO PREVENT CONSTRUCTION DEBRIS FROM ENTERING THE SEWER SYSTEM DURING THE INSTALLATION OF THE NEW SEWER MAIN AND MANHOLES. IF THE SEWER DISTRICT DISCOVERS THAT CONSTRUCTION DEBRIS HAS ENTERED THE SEWER SYSTEM, THE APPLICANT WILL BE RESPONSIBLE TO CLEAN AND, IF NECESSARY, THE DOWNSTREAM PORTIONS OF THE SEWER MAINS TO THE SEWER DISTRICT'S SATISFACTION. SANITARY SEWER SERVICE SHALL BE MAINTAINED AT ALL TIMES. THE CONTRACTOR SHALL USE WHATEVER MEANS NECESSARY (E.G. PUMPS, ETC.) TO MAINTAIN THIS SERVICE DURING CONSTRUCTION.

ABBREVIATIONS

CSDSD	CRYSTAL SPRINGS COUNTY SANITATION DISTRICT
(E), EX	EXISTING
HDPE	HIGH DENSITY POLYETHYLENE
LF	LINEAR FEET
(P), PP	PROPOSED
SS	SANITARY SEWER
SSMH	SANITARY SEWER MANHOLE
TYP	TYPICAL
VCP	VITRIFIED CLAY PIPE

LEGEND

EXISTING SEWER MAIN (CSDSD)	
PROPOSED SEWER MAIN (CSDSD)	
EXISTING SEWER MAIN	
PROPOSED SEWER MAIN	
EXISTING MANHOLE	
PROPOSED MANHOLE	

CRYSTAL SPRINGS COUNTY SANITATION DISTRICT

MARK Y. CHOW
PRINCIPAL CIVIL ENGINEER
COUNTY OF SAN MATEO DEPARTMENT OF PUBLIC WORKS AND PARKS
R.E. 038429 EXP. 12/31/2013

DATE

BID SET – 10/10/2012

BKF ENGINEERS
2235 SHORELINE DRIVE, SUITE 200
MOUNTAIN VIEW, CA 94043
PHONE: (650) 482-6300
FAX: (650) 482-6399
ENGINEERS | SURVEYORS | PLANNERS

HIGHLAND ESTATES
TICONDEROGA DRIVE SANITARY SEWER REHABILITATION
NOTES, ABBREVIATIONS AND LEGEND
CITY OF SAN MATEO, SAN MATEO COUNTY, CALIFORNIA

No	Revisions	Date

Date 10/10/12
Scale N/A
Design CH
Drawn CH
Approved TM
Job No 2639-14

Sheet Number
2
of

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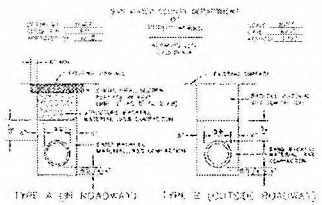
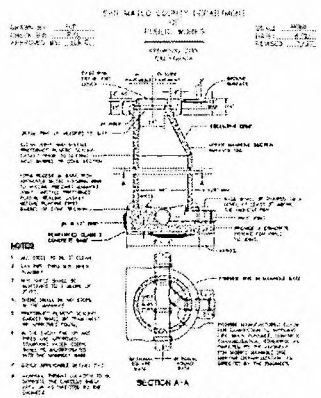
PLOT DATE: 10/10/2012
PLOTTED BY: Kirsten



NOTES:

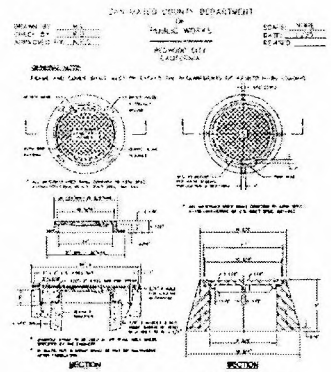
STANDARD TRENCH BACKFILL AND BEDDING DETAIL FOR PVC SEWER PIPE

C-2



SANITARY SEWER MANHOLE DETAIL

C-1



SANITARY SEWER MANHOLE COVER, FRAME AND STRAP DETAIL

SANITARY SEWER FLUSHING INLET COVER

C-2

CRYSTAL SPRINGS COUNTY SANITATION DISTRICT

MARK Y. CHOW
PRINCIPAL CIVIL ENGINEER
COUNTY OF SAN MATEO DEPARTMENT OF PUBLIC WORKS AND PARKS
P.E. 12/9428 EXP. 12/31/2013

DATE

BID SET - 10/10/2012

BKF
ENGINEERS / SURVEYORS / PLANNERS

HIGHLAND ESTATES
TICONDEROGA DRIVE SANITARY SEWER REHABILITATION
DETAILS
CITY OF SAN MATEO SAN MATEO COUNTY CALIFORNIA

Revisions

No.	Date
	10/10/12
	NTS
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	TM
	10/10/12

Sheet Number
4
OF

Pete Bentley - Ticonderoga sewer main repair work

From: "noel chamberlain" <noel@nexgenbuilders.com>
To: <mchow@smcgov.org>
Date: 11/13/2012 10:09 AM
Subject: Ticonderoga sewer main repair work
CC: <PBentley@co.sanmateo.ca.us>, <JTUTTLEC@aol.com>

Mark,

My name is Noel Chamberlain and I am working with my father, Jack Chamberlain, on the Ticonderoga pipe bursting project. We had a meeting with Pete Bentley and Jim Eggemeyer last week. At our meeting, it was determined that in order to record the Highlands final map, we need to complete the Ticonderoga sewer work. In order to start the sewer work we will need to pull an encroachment permit from the County of San Mateo Department of Public Works which needs to include costs for the sewer departments inspection fees. Have you had a chance to put together the sewer inspection fee costs?

At your convenience, could you please call me at (650) 444-3089 to discuss the status of the project? We have put the project out to and are ready to let the pipe bursting and manhole replacement porting of the project.

Thanks,
Noel Chamberlain
NEXGEN Builders, Inc.
225 Demeter Street
East Palo Alto, CA 94303
(650) 322-5800 Ext. 205

From: Richard Lee
To: noel@nexgenbuilders.com
CC: Diana Shu; Hector Carlos; Mark Marelich; Pete Bentley
Date: 11/13/2012 12:10 PM
Subject: Sewer Main Work on Ticonderoga Dr. for Subdivision Condition
Attachments: Fee ordinance.pdf; E Permit Application with instruction.pdf

Hi Noel,

I was told by Pete B. that you are looking to obtain an encroachment permit ASAP so that your subdivision could be recorded after sewer main work is completed. I believe County Sewer Section has not signed off the plans.

Attached are the permit application and fee ordinance.

Please forward an application, the complete set of latest plans (pdf OK), and traffic control plans.

I would forward the plans to my road inspector for his approval.

This application is considered a major encroachment permit application. I would need a $3,000 check to cover for a major encroachment fee of $1,639 and deposit of $1,361, payable to County of San Mateo. For a major encroachment permit, County would initially charge against the fee. When the charge is over the fee amount, additional charges would be applied against the deposit. Any remaining deposit would be returned to the applicant. Likewise, County would ask for additional fund, if needed. You may mail the check to my attention or drop it off at the mailing address listed on the application. I work next to Pete B.

Any question, please contact me.

Thanks.

Richard Lee
Dept. of Public Works
San Mateo County
(650) 363-1852
Email: rlee@smcgov.org

Pete Bentley - RE: Sewer Main Work on Ticonderoga Dr. for Subdivision Condition

From: "noel chamberlain" <noel@nexgenbuilders.com>
To: "'Richard Lee'" <rlee@smcgov.org>
Date: 11/13/2012 1:07 PM
Subject: RE: Sewer Main Work on Ticonderoga Dr. for Subdivision Condition
CC: "'Diana Shu'" <dshu@smcgov.org>, "'Hector Carlos'" <hcarlos@smcgov.org>,...

Richard

This is perfect and thank you very much for jumping on this for us. I will complete the application, collect the plans, and drop them off, as well as a check, at your office.

Thanks again,

Noel

From: Richard Lee [mailto:rlee@smcgov.org]
Sent: Tuesday, November 13, 2012 12:11 PM
To: noel@nexgenbuilders.com
Cc: Diana Shu; Hector Carlos; Mark Marelich; Pete Bentley
Subject: Sewer Main Work on Ticonderoga Dr. for Subdivision Condition

Hi Noel,

I was told by Pete B. that you are looking to obtain an encroachment permit ASAP so that your subdivision could be recorded after sewer main work is completed. I believe County Sewer Section has not signed off the plans.

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Any question, please contact me.

Thanks.

Richard Lee
Dept. of Public Works
San Mateo County
(650) 363-1852
Email: rlee@smcgov.org

Save Paper. Think Before You Print.