

I.L. SCHWARTZ ASSOCIATES, INC.  
CIVIL ENGINEERING AND LAND SURVEYING

June 9, 1998

Gerald Solberg  
145 Vista Del Grande  
San Carlos, CA 94070

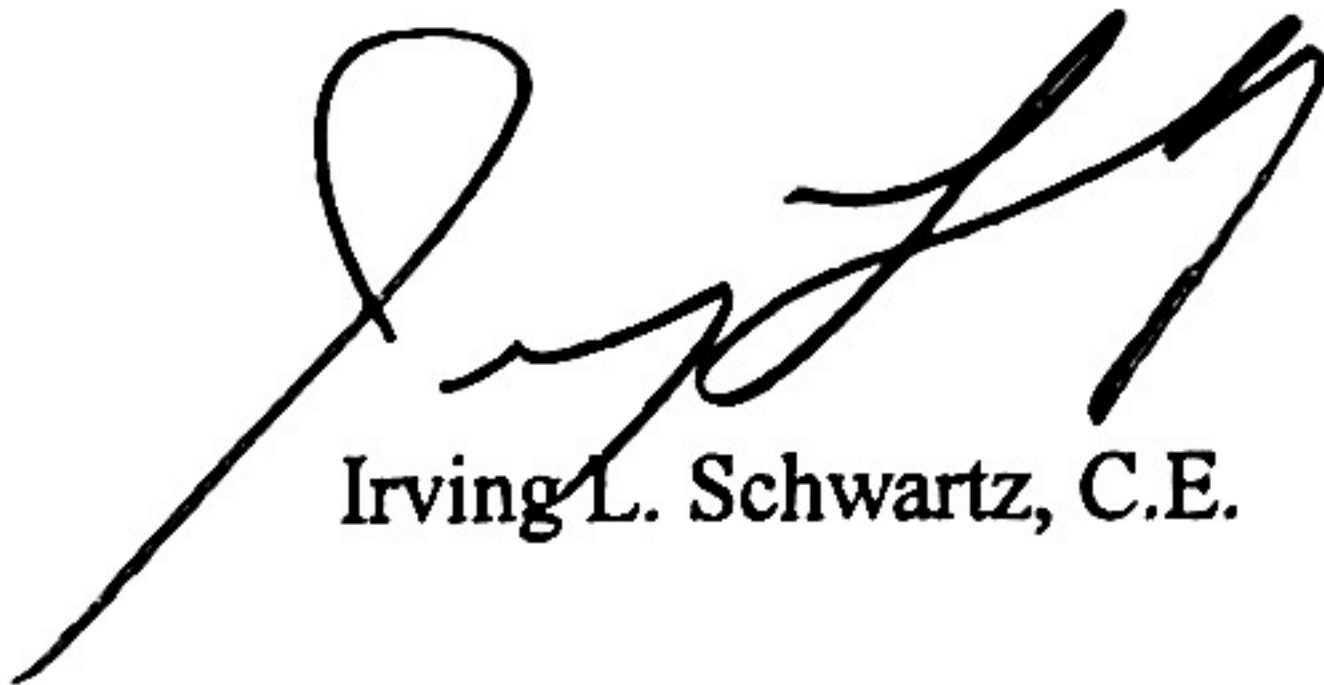
RE: Record of Survey  
Our File No.6707

Dear Gerald:

The purpose of this letter is to inform your that the Record of Survey completed by us was recorded with the County of Marin on April 17, 1998. The County Recorder has recorded the map in Book 1998 of Maps at Page 39.

Attached is a copy of the map for your use. Should you require any additional information, please contact our office.

Sincerely,



Irving L. Schwartz, C.E.

ILS/dlh

GEN\CORRESPO.JOB  
6707ROS.LTR



I.L. SCHWARTZ ASSOCIATES, INC.  
CIVIL ENGINEERING AND LAND SURVEYING

June 20, 1997

Ned J. Ongaro  
District Manager  
Ross Valley Sanitary District  
2000 Larkspur Landing Circle  
Larkspur, CA 94939-1828

Re: Sanitary Sewer Connections  
Pine Mountain Tunnel Road  
Fairfax Area  
Assessor's Parcel No. 197-100-01 & 12  
Our File No. 6707

Dear Ned:

I have been retained by Gerald E. Solberg, the current owner of the above referenced property along the Pine Mountain Tunnel Road to determine the most feasible way to sewer his property in order that he can apply to the County of Marin for a Tentative Subdivision Map to divide the property.

In December of 1995, you reviewed a Lot Line Adjustment Application for this same property, and on December 14, 1995, you sent the attached letter to Christine Gimmler of the Marin County Community Development Agency. As it is not proposed to use onsite sewage disposal systems (septic tanks and drainfields), the purpose of this letter is to provide you with our Preliminary Site Evaluation and Feasibility Study to determine if it would be feasible to extend public sewers to serve any proposed lots, or in the absence of extending public sewers, to provide side sewers to existing or extended public sewer mains, as generally discussed in paragraph number two of your December 14 letter.

**Site Description**

The approximately twenty-four acre site is bounded on the south by the southerly edge of the Marin Municipal Water District Pine Mountain Tunnel Road right of way, and on the north by the rear lot line of numerous small lots fronting Canyon Road in the Town of Fairfax.

The lots abutting the property to the north within the Town of Fairfax are a part of Map No. 1 of the Cascade Estates Subdivision recorded in Book 5 of Maps on page 42. This map includes a ten foot lane which was offered for dedication to the public, connecting the



subject site to Canyon Road. It is located about 250 feet from the easterly boundary of the subject site.

A row of lots approximately 200 to 250 feet deep lie between the southerly boundary of the subject site and Fairfax Bolinas Road. There does not appear to be any easements appurtenant to the subject site within this row of lots.

The subject site slopes downhill from its southerly boundary to its northerly boundary. The difference in elevation is approximately 260 feet. The slope continues in a downhill direction along the ten foot lane to Canyon Road. Similarly, there is an upslope from the southerly boundary of the subject site to Fairfax Bolinas Road with a difference in elevation between Fairfax Bolinas Road and the Pine Mountain Tunnel Road at the southerly boundary of the site between 80 and 120 feet.

### **Existing Sewers**

There appears to be two public sewers in the general vicinity of the subject site. There is a public sewer main in Canyon Road located some distance easterly (possibly 400 to 500 feet) from where the ten foot lane mentioned above intersects Canyon Road. The grade of Canyon Road between the end of the existing public sewer is downhill to the intersection of the ten foot lane with Canyon Road. Additionally, we have been advised that at the point at which the public sewer main ends in Canyon Road, the sewer main is quite shallow due to the adverse grade of the roadway. Any extension of this main would require a pump.

There is an existing public sewer main in Fairfax Bolinas Road along the entire length of the roadway in the vicinity of the subject site.

### **District Criteria**

Section 408 of the District's Sanitary Code establishes criteria for side sewers running across property adjacent to the property being served. The criteria states that: the side sewer shall not cross more than one adjacent property, shall not be more than 100 feet long, and shall connect to the public sewer with a 25 foot minimum section of gravity sewer, and shall connect to the public sewer within 25 feet of the point at which the side sewer exits the property. The criteria goes on to allow the District to make exceptions to the above requirements.

Section 2.09 of your District's Specifications outlines the requirements for the installation of sewer ejector pump systems.

### **Sewering Possibilities**

- 1) **Canyon Road Connection.** In order to sewer the subject site via Canyon Road, side sewers over extremely steep, rough terrain would be required from the proposed



building sites down to and through the ten foot lane to Canyon Road. The ten foot lane is part of a creek and its banks. The shortest potential side sewer if a house were located immediately above the extension of the ten foot lane would be 700 feet. Side sewers to other portions of the property could easily double that length. A public sewer pump station would be required in Canyon Road in the vicinity of the ten foot lane with a pressure main to the end of the existing gravity sewer some distance to the east (possibly 400 to 500 feet away.)

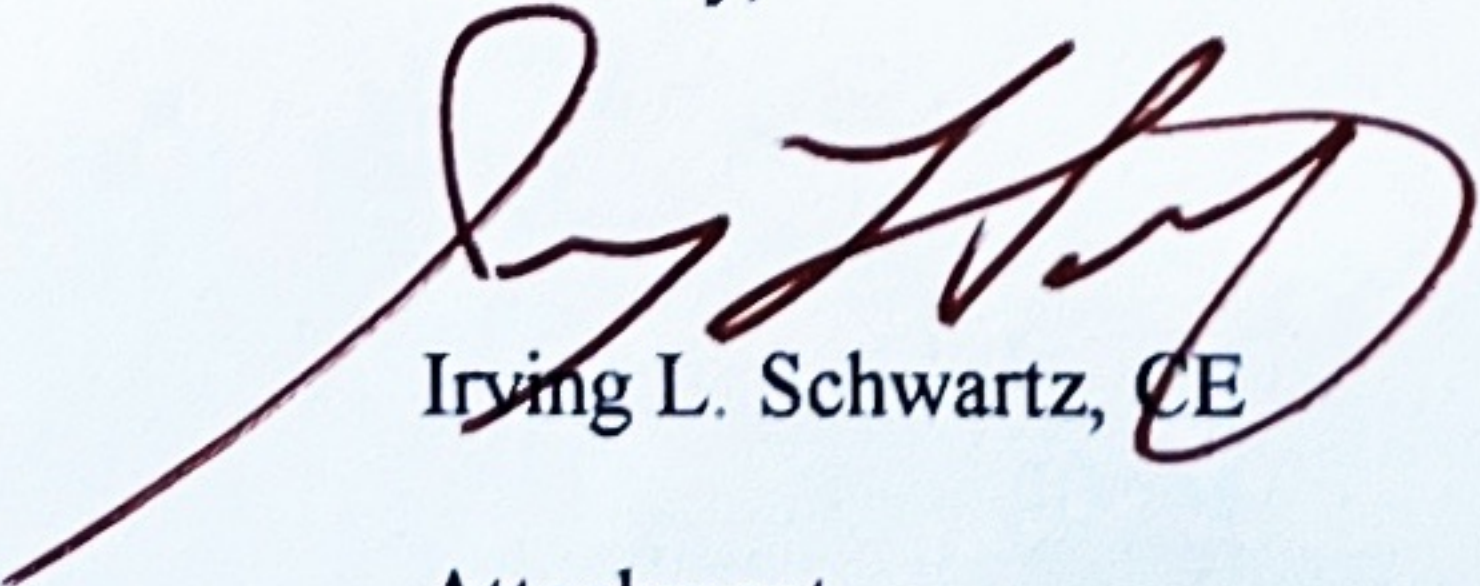
- 2) **Sewering to Fairfax Bolinas Road.** Individual sewer ejector pumps could be installed in proposed residences, and pressurized side sewers constructed to Fairfax Bolinas Road where a short section of gravity side sewer would connect to the existing public sewer mains. This alternative would require the acquisition of easements through the property between the southerly boundary of the subject site and Fairfax Bolinas Road. It appears that the lengths of the pressurized side sewers would range from 400 to 600 feet depending on the location of the proposed residences and a location of easements through the property fronting Fairfax Bolinas Road.

### Summary

Based on the topography of the site, the physical distances between proposed residences and existing sewer facilities, and the nature and extent of sewer facilities that would be required, it appears that the most feasible method of sewerage the property is to use individual sewer ejector pumps, pumping to the existing sewer main in Fairfax Bolinas Road through individual side sewers, as compared to sewerage to Canyon Road through much longer side sewers, necessitating the extension of a public sewer main and the construction of a public sewer pump station.

I would appreciate your review of this information, and would be pleased to meet with you onsite to look at the physical conditions as related to you in this letter in order that we can obtain guidance from the District as to what additional information would be required in order to justify our request to sewer the property to the main in Fairfax Bolinas Road as proposed.

Sincerely,



Irving L. Schwartz, CE

Attachment

cc: Gerald Solberg

COR-JOB  
6707ned



I.L. SCHWARTZ ASSOCIATES, INC.  
CIVIL ENGINEERING AND LAND SURVEYING

June 20, 1997

Gerald E. Solberg  
145 Vista Del Grande  
San Carlos, CA 94070

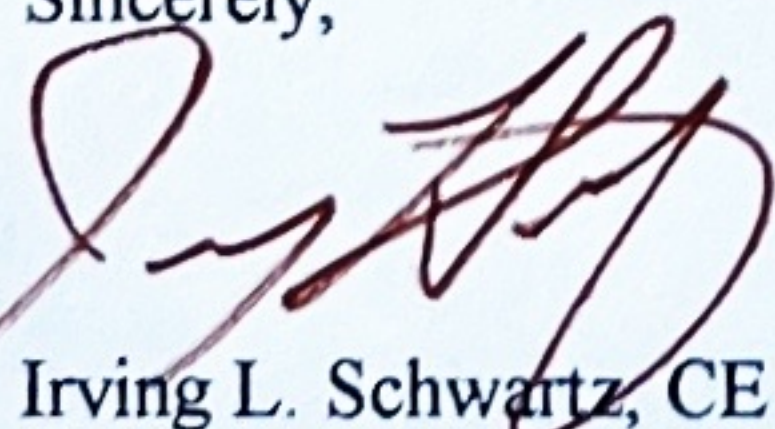
Dear Gerald:

Enclosed is your copy of a letter to Ned Ongaro of the Ross Valley Sanitary District. Regarding the proposal to sewer to the main in Fairfax Bolinas Road, I have obtained the zoning of the property between your property and Fairfax Bolinas Road from the Marin County Community Development Agency. I have been told the property is zoned R-1. Property in this zoning district has a six foot side yard setback, therefore a five or six foot wide easement would not in any way limit any future building construction on the site. However, an easement of that width would cause difficulty in placing more than one or two side sewers, especially when considering the Sanitary District's policy of not wanting any trees to be removed as a part of side sewer construction.

Also enclosed as requested is a Work Order and Agreement to provide surveying work as outlined in your Statement of Survey Work. It should be noted that our Work Order and Agreement does not include Items No. 1 or 3 as they are not necessary at this stage in the development process, and Item No. 9 has not been included, as the density of the trees does not provide the ability to prepare an appropriate map by aerial photogrammetry. In regard to Item No. 8, we will provide detailed topography of the Pine Mountain Tunnel Road area as well as the proposed building site areas. The remainder of the topography will be obtained from information in your files, prepared by David Harp. This information will be blended into the more detailed topography to prepare a complete topographic map suitable for a Tentative Map application.

If you have any questions or desire additional information, please feel free to call on me.

Sincerely,



Irving L. Schwartz, CE

Attachments

COR-JOB  
6707PROP



I.L. SCHWARTZ ASSOCIATES, INC.  
CIVIL ENGINEERING AND LAND SURVEYING

July 30, 1997

Gerald E. Solberg  
145 Vista Del Grande  
San Carlos, CA 94070

RE: Sanitary Sewer Connections  
Pine Mountain Tunnel Road  
Fairfax Area  
Assessor's Parcel No. 197-100-01 & 12  
Our File No. 6707

Dear Mr. Solberg:

On July 29, 1997, I met with Ned Ongaro, District Manager of the Ross Valley Sanitary District at the site.

We first looked at the Canyon Road end of the property. I showed Mr. Ongaro the 10 foot strip providing the connection between your property and Canyon Road which is quite distant from the end of the existing public sanitary sewer main in Canyon Road. It appeared to Mr. Ongaro that the only possible way to sewer the property to Canyon Road would be to extend a sewer line (s) in an easterly direction from your property, across Assessor's Parcel No. 197-100-17 to the unimproved right-of-way known as Sylvan Way, then continue along Sylvan Way to connect to the sanitary sewer in Canyon Road. Mr. Ongaro indicated that while this routing would appear workable on paper, there is a large area of soil instability easterly of your property which would not be appropriate for the installation of a sewer line. Additionally, the sewer line would have to cross very rugged property and in addition would cross property owned by others who may not be interested in granting you an easement. Therefore, Mr. Ongaro concluded that sewerage to the south or Canyon Road is not a practical solution.

We then went to the upper end of the site along Pine Mountain Tunnel Road. Mr. Ongaro stated that he felt the most logical way to sewer the property would be to install an individual sewage ejector pump in each proposed residence and have each of these residences then pump to a common force main that would transport the sewage in one line to the existing sanitary sewer main in the Fairfax-Bolinas Road. A manhole would be constructed at the tie-in to the Fairfax-Bolinas Road sewer main in order to minimize any surge created by pumping into the existing gravity main. This methodology would only require one easement between Pine Mountain Tunnel Road and Fairfax-Bolinas Road.

Mr. Ongaro stated that he would require concurrence with installation of a pressurized sewer main in the Pine Mountain Tunnel Road from the Marin Municipal Water District due to the proximity of their water main. According to Jim Mistrion of the Marin Municipal Water District we would be required to maintain normal clearances as required by state law. Generally, sewer



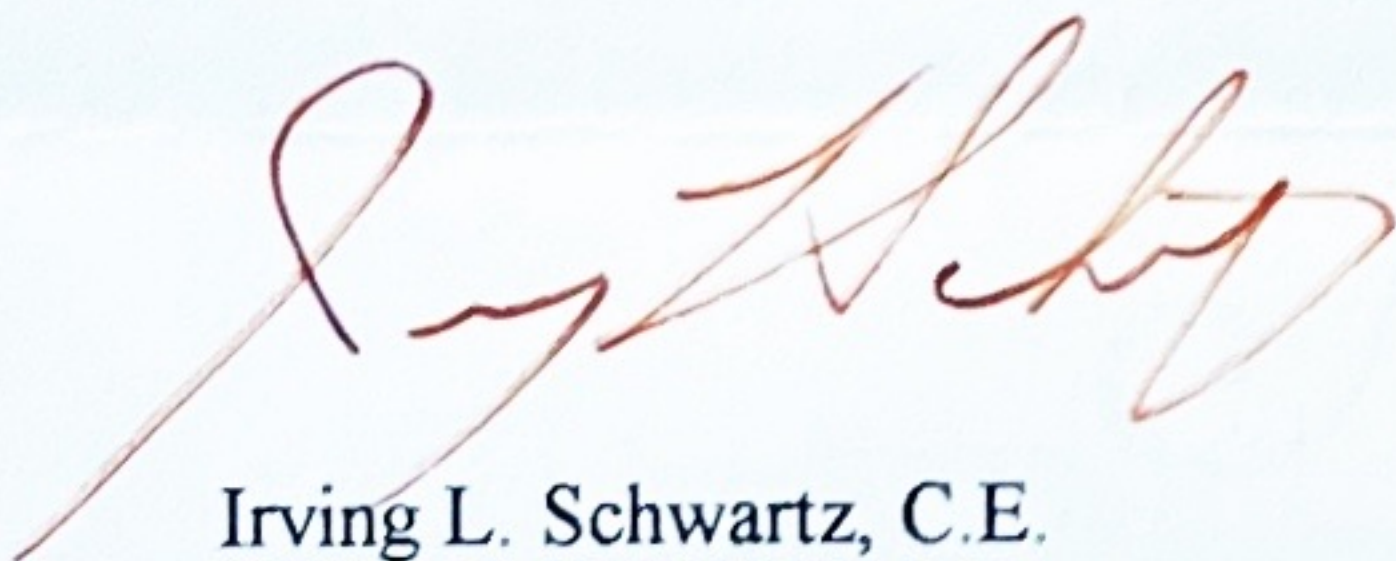
lines parallel the water mains must have a 10 foot clearance and sewer lines perpendicular to water mains must be at least one foot below the water main and be enclosed in a continuous sleeve extending to 10 feet to either side of the water main. It should be noted that the set back requirement for parallel piping can be reduced to 4 feet of separation using special pipe. As the proposed common sewer main would be a pressure main this special pipe would most likely be necessary in any event.

Mr. Ongaro also requires that we have a letter concurring to the grant of the easement between Pine Mountain Tunnel Road and Fairfax-Bolinas Road. Lastly, Mr. Ongaro requests that a relatively complete plan be prepared showing at least schematically the location of the facilities, the location of the easement, the size and types of pipes and pumping equipment and some of the general details regarding the sewage ejector pumping system. With this information, Mr. Ongaro suggests that we apply to his District Board for a variance to allow a common sewer force main with individual sewage ejector pumps. It should be noted that due to the physical location of your property in relationship to the Sanitary District facilities, any type of a sewerage scenario would require a variance from the Sanitary District.

When you are ready to proceed, it appears the first step will be to establish the location of an easement to reach the existing gravity sewer main in Fairfax-Bolinas Road and obtain concurrence that the easement will be granted by the property owner at such time as it is required. With this easement in hand then preparation of the plans as described above could occur followed by obtaining a letter of concurrence from the Water District and then applying to the Sanitary District for a variance.

If you have any questions or desire additional information please feel free to call on me.

Sincerely,



Irving L. Schwartz, C.E.

ILS/dlh

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I.L. SCHWARTZ ASSOCIATES, INC.  
CIVIL ENGINEERING AND LAND SURVEYING



I.L. SCHWARTZ ASSOCIATES, INC.  
CIVIL ENGINEERING AND LAND SURVEYING

March 2, 1998

Gerald E. Solberg  
145 Vista Del Grande  
San Carlos, CA 94070

RE: Fairfax-Bolinas Road Survey  
Our File No. 6707

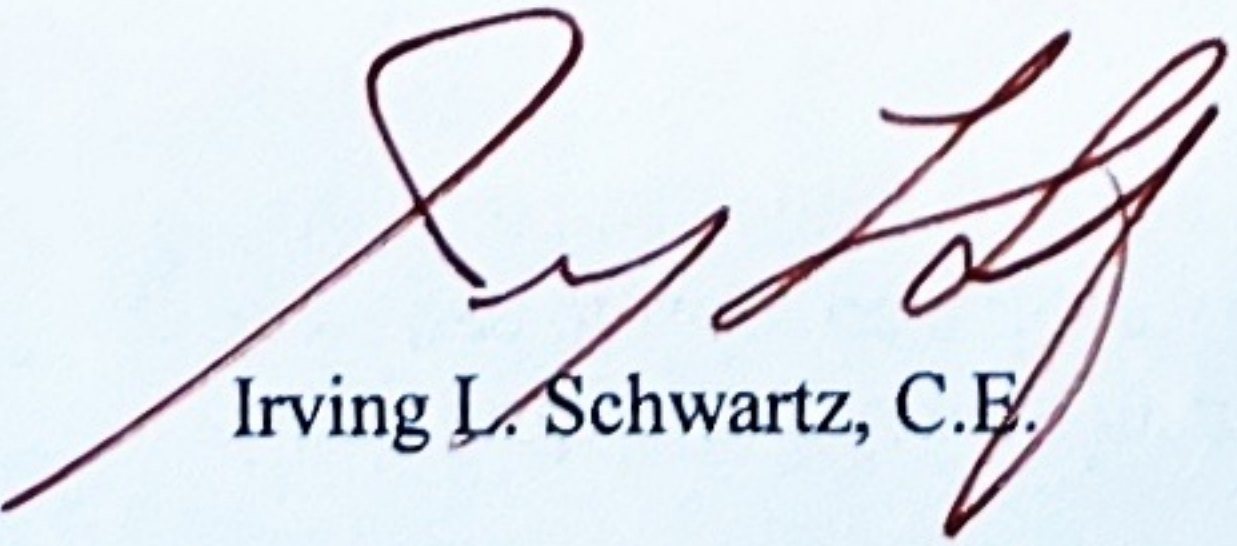
Dear Gerry:

On February 27th I received a phone call from a Mr. Hubbert who owns property located at 900 Bolinas Road, between Mr. Murphy's property and Mr. Hunter's property. The attached Sheet 2 of the Record of Survey shows his ownership. Mr. Hubbert was upset that our surveyor's came inside his fenced yard to set property corners. Mr. Hubbert told me that over the last 50 or so years since he has lived on the property he has had it surveyed a number of times and he believes his fence line, generally coinciding with the top of the bank, is on the property line. He was therefore upset that we came inside his fence line to set the property corners which were set by our survey crew.

Upon further questioning by me, Mr. Hubbert told me that he has had the property surveyed on at least two or three occasions. The two surveyors he mentioned are both now deceased. I asked him if he had copies of the surveys or any other information as we found in our research no surveys of record for his property. I told him that it would be very helpful if I could borrow copies of his surveys to determine if there is an inconsistency between what his surveyors have found and what we have found. At the point that I asked him for some real verification of his claim, he appeared to lose interest in my conversation, thanked me for returning his phone call and stated again that his fence line was his property line.

I thought you would be interested in this call; however, until Mr. Hubbert decides to find and then let me see copies of his surveys, there is nothing further that I can do.

Sincerely,



Irving L. Schwartz, C.E.

ILS/dlh

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