

**Piedmont City Council
Audit Sub-Committee Report on the
Piedmont Hills Underground Assessment District Project**

By John Chiang, Vice Mayor and Audit Sub-Committee Member

Introduction:

The Audit Sub-Committee of the Piedmont City Council was formed on March 1, 2010, with the appointment of its members, for the purpose of investigating the Piedmont Hills Underground Assessment District (PHUAD) project and the cost overrun, which necessitated the expenditure of over \$2 million from the City of Piedmont's general fund. As part of the City Council's effort to understand the financial and construction related problems of the Piedmont Hills Underground Assessment District, an Audit Sub-Committee was formed and is comprised of Mayor Dean Barbieri, Vice Mayor John Chiang, and the interim appointment of Judge Ken Kawaichi (Ret.). The Audit Sub-Committee was charged with conducting a full investigation of the bidding, contracting and construction management of the district.

It should be noted that the City of Piedmont is currently engaged in litigation regarding the project, and it would not be appropriate to discuss various topics, legal theories, and factual disputes, as that could jeopardize the attorney-client privilege between the City, City Council and its attorneys or the work product doctrine.

Because of the restrictions and requirements of the Brown Act, the Audit Sub-Committee members could not discuss any conclusions or conduct any deliberations except in open public meetings. Once the Audit Sub-Committee members' reports have been discussed in public, including recommendations, the reports will be consolidated and combined into one preliminary report.

Meetings:

There has been a total of four public meetings held-to-date, as follows:

March 31, 2010
May 13, 2010
July 8, 2010
July 21, 2010

The next meeting, to discuss the preliminary findings and recommendations, is tentatively scheduled for January 26, 2011.

Scope of Evaluation Process:

The following evaluation scope was discussed and approved at the Audit Sub-Committee's March 31, 2010 meeting (the assignments, subsequently made, are noted).

1. Review of existing City Council policy for underground utility assessment districts (20B projects)
 - a. Steering Committee functions & obligations (*Kawaichi*)
 - b. Piedmont staff role (*Barbieri*)
 - c. Engineer of Work - Development of plans, bid specifications and cost estimates (*Kawaichi*)
 - (1) Rock clause and standard provisions
 - (2) How is the engineer's work validated or verified?
 - d. Legal obligations of the city and financial exposure under current law (*Kawaichi*)
 - e. Construction – coordination, inspection and change orders and the role of the City Engineer (*Chiang*)
 - f. Payments and commitments upon issuance of bonds (*Chiang*)
 - g. Past experience with undergrounding projects (*Barbieri*)
2. Application of City policy to the Piedmont Hills Underground Assessment District
 - a. Explanation of the engineering process for the district (why were multiple firms involved)? (*Kawaichi*)
 - b. Timeline of expenditures including the development of “rock” issue (*Chiang*)
 - c. Available alternatives at the time rock was discovered – using hindsight and realistically, could the City have done anything differently? (*Chiang*)
 - d. When did the city seek legal counsel? Did the city receive advice regarding the use of General Fund monies? (notification of the City Council and notification of the public) (*Barbieri*)
3. Recommendations for the future
 - a. How to limit financial exposure of the City from beginning stages through construction
 - b. What should be done in-house and what should be contracted?
 - c. Process of early identification of problems and the reporting obligations
 - d. Frequency and distribution of progress reports
 - e. Applicability of these recommendations to other capital projects

Observations and Findings:

1.e. Construction – coordination, inspection, change orders, and the role of the City Engineer-

The following summarizes my discussions with the following individuals as to the roles and responsibilities of individuals involved with the PHUAD construction project.

- Ann Swift, City Clerk
- Larry Rosenberg, Director of Public Works
- Geoff Grote, City Administrator
- John Wanger, City Engineer (Coastland)

The following parties were involved with the project:

- Harris & Associates (Harris) – City Engineer prior to July 1, 2009
 - Robert Gray Associates (Robert Gray) – “Engineer of Work” (bid specs and field inspection contracts)
 - Larry Fisher – subcontractor – field inspector (last day was February 12, 2010)
 - Coastland Civil Engineering (Coastland) – City Engineer from July 1, 2009
 - John Wanger, Russ Harlan, Marcus Freeman
 - Russ was the Project Manager and field inspection services were provided by Marcus Freeman of Coastland, starting February 15, 2010, upon the departure of Larry Fisher
 - Valley Utility Services (Valley) – Construction Contractor
 - Ann Swift, City Clerk
 - Larry Rosenberg, Director of Public Works
 - Geoff Grote, City Administrator
 - George Peyton, City Attorney
 - Mark Bischel, Finance Director
 - Sam Sperry, Bond Counsel
1. Robert Gray Associates did the composite design and bid documents for the PHUAD project.
 2. The construction contract with Valley Utility Services was dated June 15, 2009.
 3. The project inspection services contract with Robert Gray Associates was dated June 15, 2009.
 4. The start date of the construction was July 13, 2009, which included the mobilization of equipment.

Composite Design and Bid Specs-

Harris prepared the base maps which were used by Robert Gray. Harris asserts that the base maps were not to be relied upon by Robert Gray. Robert Gray used the bid specs from the Central Piedmont Underground Utility District that were done by Harris, including the specs book. It is uncertain as to whether Harris did or did not review Robert Gray’s work before it was finalized. The RFP and bid specs calling for unit pricing is the norm for utility undergrounding and similar types of projects in right of ways.

Construction, Field Inspections, Progress Billings, Meetings-

The field inspection was done Larry Fisher, as a subcontractor for Robert Gray. Larry Fisher was out in the field each construction day to observe and verify the work that was done by Valley, in addition to dealing with homeowner issues. Russ Harlan, from Coastland – in its capacity as City Engineer, was serving as the Project Manager. Normally, the firm providing the Project Manager services also does the field

inspection work. Coastland worked with this hybrid arrangement as directed by Larry Rosenberg and Ann Swift.

As the City of Piedmont received the Pay Estimates or progress billings (generally bi-weekly) from Valley, Russ Harlan as the Project Manager would review the backup documentation, which included time sheets for all the labor and line item summaries (following the bid specifications details) which included the materials purchased for the job. Russ Harlan would verbally verify the work being billed with Larry Fisher, the field inspector. Larry Fisher did not do or provide written documentation of his daily inspections. When Coastland took over the field inspection services, upon Larry Fisher departure, their field inspector (Marcus Freeman) did complete daily reports and logs of his observations, which was very helpful in reconciling to the progress billings from Valley.

Each progress billing from Valley included the original contract amount plus any approved change orders to date, reduced by retentions. Once Russ Harlan verified and was satisfied with the progress billing and its accuracy, John Wanger would sign-off, in addition to Larry Rosenberg, as the Director of Public Works, before it was submitted to Mark Bischel, Finance Director, for processing the request for the release of funds from Union Bank for the payment of the progress billing.

There were typically daily morning meetings by Larry Fisher with Ann Swift and Larry Rosenberg as to construction and homeowner issues.

There were weekly or at least bi-weekly meetings comprised of the following participants:

- Russ Harlan, Project Manager
- John Wanger, as necessary
- Ann Swift, City Clerk
- Larry Rosenberg, Director of Public Works
- Larry Fisher, Field Inspector
- Patrick Benedict, Valley
- PG&E, Comcast, AT&T representatives, as necessary (the utility company representatives were primarily concerned about scheduling and timing)

Ann Swift, Russ Harlan, Larry Fisher, and Patrick Benedict were at all the meetings, and Larry Rosenberg was at many of the meetings. Ann was handling many of the administrative functions, including communications with the homeowners, the District steering committee members, Larry Fisher as to any homeowner and PG&E issues and scheduling matters, billing questions between Russ Harlan and Valley, etc. Many of these administrative functions were handled by Larry Rosenberg in prior undergrounding utility districts. The lines of responsibility and who was doing what was somewhat blurred with this undergrounding utility project. The physical construction issues, such as the wash-out on Crest Road, were handled by Larry Rosenberg.

It should be noted that the day-to-day construction interface and financial aspects of the PHUAD project were re-assigned in January 2010, by Geoff Grote, to Chester Nakahara and Mark Bischel, from Ann Swift and Larry Rosenberg. Also, Larry Rosenberg was out on medical leave in the December 2009/January 2010 timeframe.

The question is whether there should have been one in-house active Project Manager or Team Leader responsible for overseeing all the aspects of this major project, including the construction, financial and administrative aspects, after the contractors were chosen and the field work started.

Change Orders, Forced Account Work, including Rock

Change order numbers 1 to 25 (through the end of January 2010) were reviewed and summarized by category (see attached Exhibit A), along with a cumulative revised total contract amount. The change orders fell into one of three categories – Rock excavation and installation of conduits, installing conduits by Bore method, and utility company changes. The totals by category are as follows:

Rock	\$2,228,091
Boring	\$ 225,783
Other	\$ 116,055

Early on, Valley asked if they could use the boring method, which is more efficient and where they could, rather than trench digging and repaving, since the cost is also slightly less per linear feet, for which the City was in agreement. The trench sections which were bored were handled as change orders with credits issued against the base contract amount.

Valley first hit rock the week of July 21st when installing splice boxes at Sotelo Avenue. Valley suggested to the City that the cost per cubic yard pricing of \$2,190 would be cost prohibitive and suggested using the forced account provision which has a pricing of time and materials plus 15%. The City agreed. All the trench sections where there was rock excavation work and installation of conduits were handled as change orders. Valley also agreed to issue credits against the base contract amount for these trench sections to avoid a double billing (although technically Valley could per the provisions of the bid documents). John Wanger did a computation of comparing the cost savings of using the Forced Account approach versus the charge per cubic yard for the trench sections with rock, which is significant, and is summarized further in this report.

The “Other” change orders were primarily changes made by the utility companies as to materials or design and requirements changes, for which they are responsible for payment.

The change orders were discussed during field work and were produced after the work was done (particularly those dealing with rock excavation) and when the progress billings were produced. Russ Harlan also prepared change order summaries for new and

cumulative to date change orders, revised contract totals, known or estimated credits, and the estimated amount of remaining contingency reserve dollars.

The City Engineer, John Wanger of Coastland, was becoming increasingly concerned with the continuous amount of rock work, which wasn't subsiding, and was continuing to reduce the contingency reserve during the month of August 2009. John Wanger had expressed major concerns during the first half of October 2009.

There were rock free trench sections after the initial discovery of rock when installing the splice boxes during the week of July 13th. However, rock was later encountered again in later trench sections in August on Sotelo and Crest Roads. By mid-September 2009, most of the contingency reserves were exhausted (see Exhibit A), and there were efforts made to look at each of the major line items to rebalance and determine where there were favorable cost under-runs and other potential savings to replenish the contingency reserve balance. In the September/October 2009 timeframe, City management thought that there was approximately \$350,000 of cost savings that could be used to supplement the contingency reserve amount. There was also the challenge of trying to determine and calculate any remaining credits or offsets that have yet to be applied in future progress billings. Certainly in the November 2009 timeframe, it was clear that the estimated \$350,000 in cost savings were not enough and there were additional change orders on a persistent rock problem.

Questions have been raised as to whether the project should have been stopped, delayed, postponed, whether geotechnical borings should have been obtained and re-evaluate the situation, etc. There was certainly much more rock than was anticipated. Management was dealing with the rock issue day-by-day and week-by-week in moving the project along, since no one knew the amount of rock. There are many ramifications and moving parts impacted with any delays. There are also many contractual obligations and liabilities with delays. No one anticipated that the quantities or linear footage in the bid specs were materially underestimated (off by more than 15%), which was not discovered until January 2010 when Valley ran out of conduit. As it turned out, the late January 2010 "Not to Exceed" agreed upon amount with Valley to complete the project was the best way to proceed with a cap on the costs.

Certainly, City Management could and should have brought forth the project financial problems earlier to evaluate the options. I completed a financial analysis of the various options and alternatives, including the what-if assumptions that the problems were brought forth to the City Council as early as in the August 2009 timeframe (see Exhibit E). However, it's the opinion of Bond Counsel that once the project was started, the least costly alternative to the City is to finish the project.

1.f. Payments and commitments upon issuance of bonds

The term sheet and sources and uses of the bond proceeds are summarized in the attached Exhibit B for the following two bond series.

Series 2009-A	\$3,200,000
Series 2009-B	\$ 205,000

Issuer:

The Series 2009-A and 2009-B bonds were issued by the City of Piedmont pursuant to the provisions of the Improvement Bond Act of 1915 (Division 10 of the California Streets and Highway Code) for the purpose of financing the undergrounding of utility lines and appurtenances within the City's Piedmont Hills Underground Assessment District.

Interest:

Interest on the Bonds is payable March 2, 2010, and thereafter semiannually on March 2 and September 2 of each year.

Assessments:

The Bonds are issued upon and equally secured by the unpaid Assessments against the property in the District, together with interest thereon, and the unpaid assessments, together with interest thereon, constitute a trust fund for the redemption and payment of the principal of the Bonds and the interest thereon. The Bonds are further secured by the monies in the Redemption Fund and the Reserve Fund created pursuant to the Fiscal Agent Agreement. Principal and interest, and redemption premiums, if any, on the Bonds are payable exclusively out of the Redemption Fund.

The security and source of payment for the Series 2009-A 2009-B bonds are the same, without any priority as to either series.

The Assessments and each installment thereof, and any interest and penalties thereon, constitute a lien against the parcels of land on which the Assessments are levied until the same are paid. Such lien is subordinate to all fixed special assessments liens previously imposed upon the same property, but has priority over all existing and future private liens and over all fixed special assessment liens which may thereafter be created against the property. Such lien is co-equal to and independent of the lien for general property taxes.

The following wording is extracted from the offering memorandum materials:

“The Bonds are not payable from or secured by the general fund of the City. The Bonds are not secured by the general taxing power of the City, the County, or the State or any political subdivision of the State, and neither the City, the County, the State nor any political subdivision of the State has pledged its full faith and credit for the payment thereof.

The City's legal responsibilities with respect to delinquent installments are limited to advancing the amount thereof solely from any available moneys in the Reserve

Fund and to undertaking judicial foreclosure proceedings to recover such delinquencies. This duty of the City to advance funds continues during the period of delinquency only to the extent of funds available from the Reserve Fund, until reinstatement, redemption, or sale of the delinquent property. In accordance with Section 8769(b) of the 1915 Act, the City has determined that it will not be obligated to advance funds from its treasury to cure any deficiency in the Redemption Fund.”

Although the unpaid Assessments constitute fixed liens on the parcels assessed, they do not constitute the personal indebtedness of the owners of the parcels. Furthermore, there can be no assurance as to the ability or the willingness of the owners to pay the unpaid Assessments. In addition, there can be no assurance that the present owners will continue to own their parcel in the District.

Reserve Fund

The City will direct the Fiscal Agent to establish a Reserve Fund in the amount of \$131,361.25 (representing ½ of the maximum annual debt service of the Bonds) from Bond proceeds, which amount will be transferred to the Redemption Fund in the event of such delinquencies. The Reserve Fund will be maintained from available Assessment payments, in an amount equal to the Reserve Requirement. If there are additional delinquencies after depletion of funds in the Reserve Fund, the City is not obligated to transfer into the Assessment Fund the amount of such delinquencies out of any other available monies of the City.

Property subject to the Assessment

Property in the District subject to unpaid Assessments is comprised of 108 single family home properties owned by various homeowners. This does not include parcels in the District which elected to prepay assessments prior to the issuance of the bonds. The District was formed at the request of certain owners of property in the District to finance the undergrounding of existing overhead utility facilities.

Redemptions:

The Bonds are subject to optional and mandatory redemptions. Transfers of property ownership and other similar circumstances could result in prepayment of all or part of the assessments. Such prepayments would result in redemption of a portion of the Bonds prior to their stated maturities.

The following wording is clearly spelled out in the offering memorandum or official statement:

“THE BONDS ARE LIMITED OBLIGATION IMPROVEMENT BONDS AND ARE SECURED SOLEY BY THE SPECIAL ASSESSMENTS AND THE AMOUNTS IN THE REDEMPTION FUND AND THE RESERVE FUND. THE BONDS ARE NOT SECURED BY THE GENERAL TAXING POWER OF THE CITY OF PIEDMONT,

THE COUNTY OF ALAMEDA (THE "COUNTY"), OR THE STATE OF CALIFORNIA (THE "STATE") OR ANY POLITICAL SUBDIVISION OF THE STATE. NEITHER THE FAITH AND CREDIT NOR THE TAXING POWER OF THE CITY, THE COUNTY, THE STATE OR ANY POLITICAL SUBDIVISION THEREOF IS PLEDGED TO THE PAYMENT OF THE BONDS. THE INFORMATION SET FORTH IN THIS OFFICIAL STATEMENT, INCLUDING INFORMATION UNDER THE HEADING "SPECIAL RISK FACTORS" SHOULD BE READ IN ITS ENTIRETY."

Covenant to Commence Superior Court Foreclosure

The City covenants for the benefit of the owners of the Bonds that it will determine or cause to be determined, no later than September 1st of each year, whether or not any owners of property within the Assessment District are delinquent in the payment of an installment on account of an Unpaid Assessment and , if such delinquencies exist, the City will order and cause to be commenced no later than November 1st of that same year and thereafter diligently prosecute or cause to be prosecuted, an action in the superior court to foreclose on the lien of any Assessments or installment thereof not paid when due.

However, the City shall not be required to order the commencement of foreclosure proceedings if (i) the total Assessment delinquency in the Assessment District of such Fiscal Year is less than 5% of the total amount of installments billed in such Fiscal Year on account of Unpaid Assessments, and (ii) the Reserve Fund remains at the Reserve Requirement. Notwithstanding the foregoing, if the City determines that any single property owner in the Assessment District is delinquent in excess of \$5,000 in the payment of installments on account of Unpaid Assessments, then it will diligently institute, prosecute and pursue foreclosure proceedings against all parcels then owned by the property owner which are delinquent.

Enforceability of Remedies

The remedies available to the Fiscal Agent, the City, or the Owners of the Bonds upon any nonpayment of assessment installments are in many respects dependent upon judicial actions, which are often subject to discretion and delay. Under existing constitutional and statutory law and judicial decisions, including specifically Title 11 of the United States Code (the federal bankruptcy code) and relevant banking and insurance law, the remedies provided in the 1915 Act and the 1913 Act may not be readily available or may be limited.

Limited Obligation of the City Upon Delinquency

If a delinquency occurs in the payment of any assessment installment, the City has a duty only to cause the transfer into the Redemption Fund of the amount of the delinquency out of the Reserve Fund and to undertake judicial foreclosure proceedings to recover such

delinquencies. This duty of the City is continuing during the period of delinquency, until reinstatement, redemption, or sale of the delinquent property. There is no assurance that funds will be available for this purpose and if, during the period of delinquency, there are insufficient funds in the Reserve Fund, a delay may occur in payments to the owners of the Bonds. If there are additional delinquencies after exhaustion of funds in the Reserve Fund, the City is not obligated to transfer into the applicable Redemption Fund the amount of such delinquency out of any other available moneys of the City.

Practical matters as to when the City might be liable for actions that it may take:

(Per discussion with Sam Sperry of Meyers Nave Riback Silver & Wilson)

If the City of Piedmont had taken adverse action of stopping and not completing the project, the City would be subject to the following legal exposures:

1. The Bondholders could file a class action suit against the City of Piedmont for taking adverse actions and negatively impacting the security of the Bondholders and a diminution of value of the bonds. The Bondholders could also claim a breach of contract and sue for damages.
2. The homeowners who did not prepay their special assessments would have legitimate reasons for not paying the special assessment portion of their property tax bill because they did not receive a finished project.
3. The City would likely fail in seeking judicial foreclosure approval because it did not deliver a finished project to the homeowners in return for the special assessments.
4. The homeowners in the Special Assessment District who have prepaid could also file an action against the City of Piedmont for not delivering a finished project – i.e., paying for something that they did not receive, and seek a refund of their prepayment amounts.
5. The ultimate costs and expense of the litigation could easily exceed the costs to complete the project with using the City's general and other reserve funds or monies.

2.b. Timeline of expenditures including the development of "rock" issue

As previously discussed, I completed a timeline and analysis of the expenditures and payments through change order #025, by reviewing the billings and description of the work done (see attached Exhibit A). As noted earlier, rock was first discovered during the last half of July 2009 with the installation of splice boxes. Valley brought this to the attention of the Public Works Director and both parties agreed to use the In-Force Account provision of the construction contract, rather than the \$2,190 per cubic yard pricing provided in the accepted bid, which would have been far more expensive, plus offering a credit as an offset for the work that otherwise would have been done under the base bid (for non-rock trenching).

John Wanger of Coastland also pointed out that Valley was fair with offering the offsetting credit since under the contract, they did not have to offer the credit. The contract language specifically states the following, regarding Rock Excavation:

“Rock Excavation shall be paid by the cubic yard, which price shall include full compensation shall include all labor, materials and incidentals required to perform all work described under Rock Excavation. This unit price will be paid in excess of normal excavation paid under various other items in the Bid Schedule required for the project. This bid item is revocable if no rock excavation is required, or if Rock Excavation is anticipated and is defined as being paid for under other items.”

Please refer to attached Exhibit C, which provides a cash flow analysis of the expenditures through the end of January 2010, by vendor. Aside from Valley’s contract, the next largest cash outlay was made on August 7, 2009 of \$1,627,744 to PG&E as an upfront payment for their contract for the undergrounding project. This payment is required by PG&E before it approves the final plans in order for construction to begin. As of January 31, 2010, approximately \$5.132 million had been spent, for which the largest components were the payments to PG&E of \$1.627 million and \$3.195 million to Valley.

The following is a summary of the billings for rock work, as change orders, before any base contract credits, to understand the timing of the rock work:

Change Order #	Period of work	Billing Amount	Construction Mgr Signoff Date	Public Works Director Approval Date
002	7/13/09 to 7/16/09	53,527	7/24/2009	7/30/2009
004	7/20/09 to 7/30/09	158,690	8/10/2009	8/11/2009
006	8/3/09 to 8/14/09	229,475	8/27/2009	8/28/2009
008	8/17/09 to 8/28/09	251,135	9/8/2009	9/14/2009
011	8/31/09 to 9/11/09	219,640	9/22/2009	9/25/2009
013	9/14/09 to 9/25/09	192,035	10/6/2009	10/7/2009

Regarding the in-force account and costs associated with the rock work, Coastland went through the as-built plans and records, and has determined that there was a total of approximately 2,690.8 cubic yards of rock removed on the project (see Exhibit D). The total amount paid for rock work on a forced account basis (based on the rock work shown in the change orders for the job) totaled \$2,655,828.68. If Valley would have used the \$2,190 per cubic yard pricing as indicated in the bid contract documents, the City would have ended up paying \$5,892,852, or 2.22 times more. The equivalent pricing, based on the actual billing for the rock excavation, is \$987 per cubic yard.

The total as-built trenching was 15,770 linear feet (which is comprised of 13,706 per the original plans plus 2,064 in additional linear footage that were not included in the bid specs). The linear footage of trench that required rock excavation was 9,539,

representing 60.5% of the total linear footage, far exceeding any reasonable expectation. The 2,064 of additional linear footage is 15.1% of the total linear footage.

Since there was no quantity in the bid specs for rock excavation, I did a sensitivity analysis of trying to determine an approximate break-point of where Valley would not have been the low bid, by using varying quantities of rock excavation. The break-point is at approximately 400 cubic yards for the bids between Valley and Tenneyson Electric to be equivalent (see Exhibit D).

The total paid to Valley, after the base bid credits, was approximately \$3.454 million, which includes the 2,064 of additional linear footage not in the bid specs. It would be time consuming, with estimated assumptions, as to what the other original bids would have been with the additional linear footage, to compare against Valley's actual total.

2.c. Available alternatives at the time rock was discovered – using hindsight and realistically, could the City have done anything differently?

In order to do an analysis as to available alternatives, using hindsight, I used three timeframes: July 31, 2009, November 30, 2009, and January 31, 2010.

The above timeframes were selected for the following reasons:

- July 31, 2009 – earliest discovery of rock
- November 30, 2009 – contingency reserves exhausted and discussion of litigation
- January 31, 2010 – timing of the need for a second appropriation due to plan errors and more rock

I did an analysis of the estimated costs to terminate the project at the above stages, in addition to suspending the project in an attempt to obtain additional sources of funding. I considered the following factors:

1. Cash balances, adjusted for unpaid bills
2. Estimated retention payments due
3. Total of the Series A and B bonds
4. Prepayment penalty – assuming a 102 call price
5. Return of homeowner prepayments
6. Return of private lateral prepayments
7. Legal defense costs – bondholders, homeowners, contractors
8. Balance owed contractors for unbilled services
9. Costs of de-mobilization
10. Refunds from PG&E of the contract amount, net of engineering, inspections, and other services already provided

For the suspension scenarios, I included the costs of de-mobilization and anticipated higher re-bid amount from PG&E due to plan errors. The estimate and net appropriation approved in January 2010 was \$1,060,000. This compares favorably to the termination or suspension scenarios, requiring estimated appropriations. Please note that my analysis is based on my interpretations and estimates, and that there may be more ways to quantify the impact of the various scenarios. Please refer to Exhibit E for my analysis. The results are summarized as follows:

July 31, 2009 - terminate	\$1,629,440
November 30, 2009 – terminate	\$4,650,495
January 31, 2010 – terminate	\$5,100,989

Suspension - incremental \$1,841,424 costs over completing the project

Suspension raises a number of hard to quantify issues:

1. Homeowners are not obligated nor can they be forced to pay more.
2. Getting an after the fact geotechnical inspection and report would delay the project.
3. Even with a geotechnical report, the City couldn't simply push Valley aside without incurring extra costs.
4. Re-bidding would most likely require a new RFP since the conditions have changed (can't simply choose from original bidders).
5. PG&E cost estimates for their bid was low for both engineering and construction, giving them an opportunity to re-bid.
6. If there was a re-ballot to try to get homeowners to pay an additional assessment, the outcome is uncertain.
7. Legal exposures – bondholders, homeowners who have prepaid, and contractor for lost profits, delays and penalties

Formation of Private Utility Undergrounding Assessment Districts – Preliminary Research of Other Cities Policies and Approaches

I have done some preliminary research as to how other cities have handled the formation of private utility undergrounding assessment districts. I have extracted the following information from searching the internet.

City of Sausalito-

One of the more successful cities has been the City of Sausalito. Their approach is atypical, where only a small group of homeowners (e.g., 10 homes) are involved. There is a construction contract executed with each homeowner and the City charges 15% to manage the project. There are no bonds issued and each is privately funded. The homeowners do take advantage of the credits available from the utility company for overhead materials and exclusion from CIAC taxes. Bond financing may be used for a

main trench and utilizing 20A funds. The investment range is \$50,000 to \$100,000, with a typical range of \$40,000 to \$50,000.

The first petition submitted for a proposed district must be signed by property owners representing at least 60% of the land area in the proposed district. After the development of firm bids, property owners representing at least 60% of the land area in the proposed district must sign the second petition. The City Council will schedule a public hearing and at the conclusion, the City Council will make a decision regarding the formation of the district. The Council's decision will be final and conclusive.

Town of Tiburon-

They have the same process as adopted by Piedmont. However, the District is formed by a majority vote of the District membership with majority approval by the Town Council.

City of Solana Beach-

Rule 20A funds may be used to "seed" or "front" preliminary engineering costs for Rule 20B projects, and reimbursed upon successful completion of a Rule 20B district. Initially, the City Council requires a 70% showing of support of property owners benefiting from the assessment district before any "seed" or "front" money will be appropriated.

Once the preliminary costs are determined, the Neighborhood Coordinator will circulate a second petition within the proposed district, and at least 60% of the property owners must be in favor. If the 60% is achieved, staff will require a \$20,000 deposit to retain an assessment engineer. The City Council conducts a public hearing at which the City Council considers objections, if any, to the proposed assessment. The Assessment ballots are weighted on the basis of the dollar amount assessed to each parcel for which the ballot is submitted. If a majority of the weighted assessments ballots returned are in favor, the City Council, in its discretion, may adopt a resolution to approve the district.

City of Belvedere-

The City of Belvedere follows a similar process as Piedmont. An undergrounding assessment district will have an "Engineer of Record" who decides how much each property is assessed. The City of Belvedere does not charge the property owners in an assessment district for administrative and professional services related to management of the project. This will typically amount to a 15 – 20% cost savings. In other communities these costs are typically borne by the property owners.

The average assessment for districts completed over the past 6 years has ranged from \$20,000 to \$36,000. Property owners are also responsible for the cost of undergrounding their utilities from their homes to the street. The cost range has been from \$2,000 to \$15,000. A formal petition from at least 60% of the property owners in a proposed district must be presented to the Council for their consideration.

City of San Rafael-

If 60% of a neighborhood wants undergrounding wiring, the city will design and implement it. The city forms an assessment district and the neighbors in effect hire the city as their agent. Properties are assessed by the benefit each parcel receives, not by parcel area or assessed value, and is determined by the engineer of record. Once everyone has a clear idea of the cost, at least 60% of the group needs to sign a formal petition drawn up by the engineer that is submitted to the City Council. If approved by a majority of the City Council, the neighborhood group takes a final vote as to whether or not to go forward – the motion needs to pass a simple majority. Once passed, all owners within the district must participate, whether they voted for it or not. The project is then turned over to the city engineer, and the city proceeds to bond itself to pay for it.

Recommendations:

Based on my observations, discussions and findings, I have the following recommendations, and lessons learned, from this project.

1. An outside experienced Project Manager should be hired for complex construction projects, for which there is no internal expertise.
2. The roles and responsibilities for management of capital projects should rest with one person, which should be the Director of Public Works or whomever the City Administrator designates, and not a management by committee approach.
3. The City Management should consider implementing an Enterprise Risk Management (ERM) program or risk-based approach to managing the City. The risk management process involves identifying and proactively addressing risks and opportunities, assessing them in terms of the likelihood and magnitude of impact, and determining a responsive strategy and monitoring progress. This concept can be applied not only to major construction projects, but also the ongoing operations of the City.
4. The private undergrounding utility assessment district structure needs to be redesigned to not put the City financially at risk.
5. The City should consider the establishment of a minimum approval percentage threshold for the second ballot, with either preliminary estimates or final bids, before the final vote is taken by the City Council as to whether the district should be formed.
6. Consideration should be given to the establishment of a dollar threshold for major capital projects as to the frequency of status reports to the City Council, to include billings to date, estimates to complete, percentage completion and any anticipated cost overruns.
7. The Finance Director should work with the Public Works Director, or assigned Project Manager, to be involved with the financial aspects of all capital projects, including status reports.
8. The City should consider establishing a review process, when multiple professional services are being provided by the same vendor, as to potential consequences.
9. The City Administrator should work more closely with his direct reports, and especially when it relates to significant construction projects, so that he is informed of major issues that should be brought to the attention of the City Council.

City of Piedmont																				Exhibit A			
Piedmont Hills Undergrounding Utility District																							
Summary of Change Orders and Progress Billings, including																							
Inforce Account Work for Rock																							
CO #	CO Date	Constr Mgr. Signoff Date	CO - Period of Work (Approx per time sheets)	Rock	Boring	Other	\$ Amount	Contract Amt. to Date	Location or Description	Estimated Contract Deductions	Revised Contract Amt	Contract Contingency	Remaining Contingency	3rd Party Reimbursemts	Remaining Contingency	Piedmont Pymt Req No.	Valley Progress Pymt No.	Pymt Req Approval Date	Period Ending	Pymt Request Amt. Bef Reten	Includes CO Numbers	Contract Sum to Date	
Original Contract								1,515,294.50		-	1,515,294.50	543,527.00	543,527.00	-	543,527.00								
001	07/21/09	07/23/09				68,318.18	68,318.18	1,583,612.68	Comcast conduit and enclosures														
002	07/21/09	07/24/09	7/13/09 to 7/16/09	53,527.78			53,527.78	1,637,140.46	Excavate rock and install splice boxes at locations 86, 88, 90, 163	17,541.00	1,619,599.46	543,527.00	439,222.04	68,313.18	507,535.22	1	1	07/30/09	07/17/09	223,037.96	1 to 2	1,637,140.46	
003	07/30/09	08/10/09				5,032.42	5,032.42	1,642,172.88	Transformer enclosure, boxes and conduit changes from PG&E														
004	08/05/09	08/10/09	7/20/09 to 7/30/09	158,690.71			158,690.71	1,800,863.59	Excavate rock and install conduits and vaults - Sotelo, Crest														
005	07/21/09	08/10/09	7/20/09 to 7/30/09		90,167.94		90,167.94	1,891,031.53	Install conduits by bore method 1.070 LF (Trench Sections D, D1, D2, D3)	167,805.70	1,723,225.83	543,527.00	335,595.67	68,313.18	403,908.85	5	2	08/11/09	07/30/09	283,601.07	1 to 5	1,891,031.53	
006	08/26/09	08/27/09	8/3/09 to 8/14/09	229,474.53			229,474.53	2,120,506.06	Excavate rock and install vaults, splice boxes, conduits - Sotelo, Crest and others														
007	08/26/09	08/27/09	8/3/09 to 8/14/09		103,311.44		103,311.44	2,223,817.50	Install conduits by bore method 1,284 LF	255,196.00	1,968,621.50	543,527.00	90,200.00	68,313.18	158,513.18	7	3	08/28/09	08/14/09	387,945.97	1 to 7	2,223,817.50	
008	09/01/09	09/08/09	8/17/09 to 8/28/09	251,134.81			251,134.81	2,474,952.31	Excavate rock and install conduits and vaults - Sotelo, Crest														
009	09/01/09	09/08/09	8/17/09 to 8/28/09		77,295.36		77,295.36	2,552,247.67	Install conduits by bore method 936 LF (Trench Sections D1, D2, D3, P2)														
010	09/01/09	09/14/09	8/3/09 to 8/14/09		(61,360.37)		(61,360.37)	2,490,887.30	Credit for quantities erroneously reported on CO #7 (781 LF overstated)	567,186.40	1,923,700.90	543,527.00	135,120.60	68,313.18	203,433.78	8	4	09/14/09	08/28/09	334,038.80	1 to 10	2,490,887.30	
011	09/18/09	09/22/09	8/31/09 to 9/11/09	219,639.69			219,639.69	2,710,526.99	Excavate rock and install conduits and vaults - Sotelo, Crest, Hampton														
012	09/18/09	09/22/09	8/31/09 to 9/11/09		16,368.33		16,368.33	2,726,895.32	Install conduits by bore method 193 LF (Trench Section D1)	635,558.20	2,091,337.12	543,527.00	(32,515.62)	68,313.18	35,797.56	9	5	09/25/09	09/11/09	254,849.02	1 to 12	2,726,895.32	
013	09/29/09	10/06/09	9/14/09 to 9/25/09	192,035.24			192,035.24	2,918,930.56	Excavate rock and install conduits - Hampton, Sotelo, and LaSalle														
014	10/01/09	10/06/09				8,738.52	8,738.52	2,927,669.08	Furnish and install add'l 4,242 LF of Comcast conduit	635,648.20	2,292,020.88	543,527.00	(233,199.38)	77,051.70	(156,147.68)	12	6	10/07/09	09/25/09	282,587.96	1 to 14	2,927,669.08	
015	09/29/09	10/13/09	9/28/09 to 10/9/09	186,563.33			186,563.33	3,114,232.41	Excavate rock and install conduits - Sotelo and St. James														
016	10/30/09	11/02/09	10/12/09 to 10/16/09	17,264.63			17,264.63	3,131,497.04	Excavate rock and install conduits - St. James	682,354.16	2,449,142.88	543,527.00	(390,321.38)	77,051.70	(313,269.68)	13	7	10/13/09	10/09/09	228,403.93	1 to 15	3,114,232.41	
017	11/12/09	11/17/09	10/28/09 to 11/6/09	83,310.71			83,310.71	3,214,807.75	Excavate rock and install conduits - Crest														
018	12/07/09	12/14/09	11/9/09 to 11/20/09	88,664.38			88,664.38	3,303,472.13	Excavate rock and install conduits - Crest														
019	12/07/09	12/14/09				6,619.00	6,619.00	3,310,091.13	Changes in electrical reqmts due to unforeseen conditions														
020	12/07/09	12/14/09				(2,276.95)	(2,276.95)	3,307,814.18	Credit due to City for corrections to prior billings	682,354.76	2,625,459.42	543,527.00	(566,637.92)	77,051.70	(489,586.22)	20	10	12/17/09	11/20/09	112,069.03	1 to 20	3,307,814.18	
021	12/20/09	12/23/09	11/23/09 to 12/4/09	207,710.75			207,710.75	3,515,524.93	Excavate rock and install conduits - Crest, St. James, Sotelo, LaSalle														
022	12/31/09	01/08/10	12/8/09 to 12/18/09	229,198.85			229,198.85	3,744,723.78	Excavate rock and install conduits - Crest, St. James, Sotelo, LaSalle														
023	01/11/10	01/13/10	12/23/09 to 12/30/09	101,758.97			101,758.97	3,846,482.75	Excavate rock and install conduits - Crest, St. James, Sotelo, LaSalle	682,354.76	3,164,127.99	543,527.00	(1,105,306.49)	77,051.70	(1,028,254.79)	26	12	01/08/10	12/18/09	229,198.85	1 to 22	3,744,723.78	
024	01/27/10	01/28/10	1/4/10 to 1/15/10	209,116.63			209,116.63	4,055,599.38	Excavate rock and install conduits - Crest, St. James, Sotelo, LaSalle														
025	01/27/10	02/01/10	1/4/10 to 1/15/10			29,624.15	29,624.15	4,085,223.53	Relocate Vaults to Street and provide traffic rated vaults	695,745.80	3,389,477.73	543,527.00	(1,330,656.23)	77,051.70	(1,253,604.53)	27	13	01/13/10	12/30/09	115,098.87	1 to 23	3,846,482.75	
026																							
027				2,228,091.01	225,782.70	116,055.32																	
028																							
029																							
030																							
031																							
032																							

**City of Piedmont
Piedmont Hills Undergrounding Assessment District
Bond Issuance**

Exhibit B

Sale and Closing

Authorization:

6/8/09 cutoff for prepays with 7% discount

Authorization amount: \$3,452,586.75

Maximum interest rate: 8%

Maximum term: 2034 (25 years)

Fiscal Agent: Union Bank

Per Final Engineer's Report (filed 5/4/09):

Total costs	3,814,212.00
15% contingency	543,527.00
PG&E contribution	(306,589.00)
Comcast contribution	<u>(171,435.00)</u>
	3,879,715.00
Total incidentals	<u>105,335.00</u>
	3,985,050.00
Financing costs	<u>299,950.00</u>
	<u><u>4,285,000.00</u></u>

	Gross Amt	Net Amt
Series 2009-A	3,200,000.00	3,132,498.75
Series 2009-B	<u>205,000.00</u>	<u>201,822.60</u>
	<u><u>3,405,000.00</u></u>	<u><u>3,334,321.35</u></u>

Improvement Fund	3,107,197.55
Costs of Issuance	95,262.55
Bond Reserves - A	123,979.58
Bond Reserves - B	<u>7,881.67</u>
	<u><u>3,334,321.35</u></u>

Actual Sale Date: 07/01/09

City of Piedmont
Piedmont Hills Undergrounding Assessment District
Cash Flow Analysis
21-Jul-10

Exhibit C

Cash Inflow:		Seed money	Homeowner Contrib	Valley	Robt Gray	AT&T	PG&E	Robt Gray or Coastland	Other
	Seed money from homeowners	250,671.00	250,671.00						
07/09/09	Bond proceeds	3,107,197.55							
	Prepayments from homeowners	1,243,059.45							
	Dividend income	108.43							
12/12/09	City of Piedmont appropriation	1,004,832.00							
02/06/10	City of Piedmont appropriation	1,060,000.00							
	Comcast	246,522.00							
	Contributions from homeowners	101,000.00	101,000.00						
		<u>7,013,390.43</u>	<u>250,671.00</u>						

Cash Outflow:

Inv Date	Pymt Dte	Req#	Design and Engineering Costs									
			Design and Engineering Costs	229,093.18	229,093.18							
07/20/09	07/30/09	1	Valley Utility Services	200,734.16		200,734.16						
07/27/09	08/03/09	2	Robert Gray Associates	9,144.69			9,144.69					
05/04/09	08/07/09	3	AT&T	12,924.00			12,924.00					
06/15/09	08/07/09	4	PG&E	1,627,774.00				1,627,774.00				
08/03/09	08/11/09	5	Valley Utility Services	255,240.97		255,240.97						
08/26/09	08/28/09	6	Robert Gray Associates	9,144.69			9,144.69					
09/03/09	08/28/09	7	Valley Utility Services	349,151.38		349,151.38						
09/04/09	09/15/09	8	Valley Utility Services	300,634.92		300,634.92						
09/11/09	09/25/09	9	Valley Utility Services	229,364.12		229,364.12						
08/26/09	09/25/09	10	Robert Gray Associates	1,086.66			1,086.66					
09/28/09	10/05/09	11	Robert Gray Associates	12,894.50			12,894.50					
09/25/09	10/07/09	12	Valley Utility Services	254,329.17		254,329.17						
10/12/09	10/14/09	13	Valley Utility Services	205,563.54		205,563.54						
10/12/09	10/22/09	14	Valley Utility Services	191,164.50		191,164.50						
09/30/09	10/22/09	15	ILS Associates Inc	5,027.48					5,027.48			
10/27/09	11/05/09	16	Robert Gray Associates	9,643.75			9,643.75					
10/29/09	11/05/09	17	Valley Utility Services	29,754.00		29,754.00						
10/24/09	11/05/09	18	Valley Utility Services	49,239.75		49,239.75						
11/08/09	11/18/09	19	Valley Utility Services	108,573.22		108,573.22						
11/22/09	12/17/09	20	Valley Utility Services	100,862.13		100,862.13						
11/25/09	12/21/09	21	Robert Gray Associates	5,105.15			5,105.15					
12/06/09	12/23/09	22	Valley Utility Services	186,939.67		186,939.67						
11/10/09	12/23/09	23	Valley Utility Services	123,886.80		123,886.80						
12/28/09	12/28/09	24	Robert Gray Associates	7,098.40			7,098.40					
01/08/10	01/11/10	25	Valley Utility Services	7,897.50		7,897.50						
12/20/09	01/11/10	26	Valley Utility Services	206,278.96		206,278.96						
01/03/10	01/21/10	27	Valley Utility Services	103,588.98		103,588.98						
	to be paid	28	Valley Utility Services	252,610.45		252,610.45						
	to be paid	29	Valley Utility Services	28,611.00		28,611.00						
	to be paid	30	Robert Gray Associates	7,946.50			7,946.50					
	to be paid	31	Valley Utility Services	11,095.00		11,095.00						
			Repymt of seed money	250,671.00	250,671.00							
			Est retention payment	388,749.00		388,749.00						
			Est remaining inspection costs	46,053.00				46,053.00				
			Est contingency	18,501.00					18,501.00			
			Individual service connections	50,000.00		50,000.00						
			Est remaining costs - Valley	1,127,013.25		1,127,013.25						
			Rounding difference	(0.04)								
				<u>7,013,390.43</u>	<u>229,093.18</u>	<u>250,671.00</u>	<u>4,761,282.47</u>	<u>62,064.34</u>	<u>12,924.00</u>	<u>1,627,774.00</u>	<u>46,053.00</u>	<u>23,520.48</u>
Net				-	21,577.82	(149,671.00)						

**Piedmont Hills Undergrounding Utility District
 Analysis of Impact of Rock Excavation - Comparison of Bids
 Per Final As-Built Plans
 As of July 21, 2010**

Exhibit D
 Page 1 of 2

	Base Bid	Rock - CY	\$ Per CY	Rock Excavation Cost	Total, Including Rock Excavation	Base Bid Credits	Total Net
Valley Utility	1,515,394.50	2,690.80	2,190.00	5,892,852.00	7,408,246.50		
Valley Utility - with Inforce	1,515,394.50			2,655,828.68	4,171,223.18	(716,810.10)	3,454,413.08
Ranger Pipelines	1,945,179.00	2,690.80	250.00	672,700.00	2,617,879.00		
Synergy Project	1,896,112.42	2,690.80	150.00	403,620.00	2,299,732.42		
Smith Denison	2,011,724.00	2,690.80	350.00	941,780.00	2,953,504.00		
St. Francis Electric	2,594,979.00	2,690.80	1,000.00	2,690,800.00	5,285,779.00		
Underground Construction	2,344,514.00	2,690.80	275.00	739,970.00	3,084,484.00		
Tenneyson Electric	1,735,789.00	2,690.80	425.00	1,143,590.00	2,879,379.00		

Valley Utility - original bid	5,892,852.00
Valley Utility - with Inforce	2,655,828.68
Favorable differential	<u>3,237,023.32</u>

Differential factor 2.22

Valley Utility - equivalent \$ Per CY using Inforce \$ 987.00

Notes:

1. The above billed amounts for Valley Utility includes the additional linear footage (2,064 LF) that were not included in the bid specs.
2. The other bidders amounts were not adjusted for the increased quantities of trench digging and conduit, requiring significant work.
3. It's not practical or too many assumptions would be necessary to back out the add'l linear footage and subtract rock work in add'l LF.

	As Built	Plan	Trench-Plan	% LF Shortage
Trench	15,770.00	13,706.00	2,064.00	15.1%
Rock	9,539.00			
% Rock	60.5%			

Piedmont Hills Undergrounding Utility District
Analysis of Impact of Rock Excavation - Comparison of Bids
Per Final As-Built Plans
As of July 21, 2010

Exhibit D
Page 2 of 2

	Base Bid	Rock - CY	\$ Per CY	Rock Excavation Cost	Total, Including Rock Excavation		
Valley Utility	1,515,394.50	15.00	2,190.00	32,850.00	1,548,244.50		
Ranger Pipelines	1,945,179.00	15.00	250.00	3,750.00	1,948,929.00		
Synergy Project	1,896,112.42	15.00	150.00	2,250.00	1,898,362.42		
Smith Denison	2,011,724.00	15.00	350.00	5,250.00	2,016,974.00		
St. Francis Electric	2,594,979.00	15.00	1,000.00	15,000.00	2,609,979.00		
Underground Construction	2,344,514.00	15.00	275.00	4,125.00	2,348,639.00		
Tenneyson Electric	1,735,789.00	15.00	425.00	6,375.00	1,742,164.00		
Valley Utility	1,515,394.50	100.00	2,190.00	219,000.00	1,734,394.50		
Ranger Pipelines	1,945,179.00	100.00	250.00	25,000.00	1,970,179.00		
Synergy Project	1,896,112.42	100.00	150.00	15,000.00	1,911,112.42		
Smith Denison	2,011,724.00	100.00	350.00	35,000.00	2,046,724.00		
St. Francis Electric	2,594,979.00	100.00	1,000.00	100,000.00	2,694,979.00		
Underground Construction	2,344,514.00	100.00	275.00	27,500.00	2,372,014.00		
Tenneyson Electric	1,735,789.00	100.00	425.00	42,500.00	1,778,289.00		
Valley Utility	1,515,394.50	200.00	2,190.00	438,000.00	1,953,394.50		
Ranger Pipelines	1,945,179.00	200.00	250.00	50,000.00	1,995,179.00		
Synergy Project	1,896,112.42	200.00	150.00	30,000.00	1,926,112.42		
Smith Denison	2,011,724.00	200.00	350.00	70,000.00	2,081,724.00		
St. Francis Electric	2,594,979.00	200.00	1,000.00	200,000.00	2,794,979.00		
Underground Construction	2,344,514.00	200.00	275.00	55,000.00	2,399,514.00		
Tenneyson Electric	1,735,789.00	200.00	425.00	85,000.00	1,820,789.00		
Valley Utility	1,515,394.50	400.00	2,190.00	876,000.00	2,391,394.50	987.00	1,910,194.50
Ranger Pipelines	1,945,179.00	400.00	250.00	100,000.00	2,045,179.00		
Synergy Project	1,896,112.42	400.00	150.00	60,000.00	1,956,112.42		
Smith Denison	2,011,724.00	400.00	350.00	140,000.00	2,151,724.00		
St. Francis Electric	2,594,979.00	400.00	1,000.00	400,000.00	2,994,979.00		
Underground Construction	2,344,514.00	400.00	275.00	110,000.00	2,454,514.00		
Tenneyson Electric	1,735,789.00	400.00	425.00	170,000.00	1,905,789.00		

**City of Piedmont
Piedmont Hills Undergrounding Utility District
Alternatives/Options Related to Rock
21-Jul-10**

Exhibit E

	Terminate			Complete a/o 1/31/10	Suspend (1)		
	a/o 7/31/09	a/o 11/30/09	a/o 1/31/10		a/o 7/31/09	a/o 11/30/09	a/o 1/31/10
Cash Balance, adj for unpaid bills	4,161,955.97	255,690.48	222,794.21	222,794.21			
Contributions from homeowners				101,000.00			
Comcast receipt				246,522.00			
Est retention payment	(22,303.80)	(248,959.22)	(388,749.00)	(388,749.00)			
Est remaining inspec costs				(46,053.00)			
Est contingency				(18,501.00)			
Indiv service connec remaining				(50,000.00)			
Valley remaining costs				(1,127,013.21)			
Total for Bonds							
Series A	(3,200,000.00)	(3,200,000.00)	(3,200,000.00)				
Series B	(205,000.00)	(205,000.00)	(205,000.00)				
Prepymt penalty - assume 102 call price	(68,100.00)	(68,100.00)	(68,100.00)				
Interest expense	?	?	?				
Prepymts from homeowners	(1,243,059.45)	(1,243,059.45)	(1,243,059.45)				
Private lateral payments	-	(175,000.00)	(350,000.00)				
Legal defense							
Bondholders	(250,000.00)	(250,000.00)	(250,000.00)				
Homeowners	(250,000.00)	(250,000.00)	(250,000.00)				
Balance owed - unbilled							
Valley Utility	(283,601.07)	(207,710.75)	(246,518.00)				
Robert Gray			(14,000.00)				
PG&E	(1,627,774.00)						
AT&T	(12,924.00)						
Valley - Lost profits/penalty							
Valley - penalty for delays							
De-mobilization	(62,997.00)	(442,720.00)	(442,720.00)		(641,424.00)	(641,424.00)	(641,424.00)
Legal defense - Valley	(250,000.00)	(250,000.00)	(250,000.00)				
Refunds from:							
PG&E	1,627,774.00	1,627,774.00	1,627,774.00	-			
PG&E - engineering, inspec	(250,000.00)	(300,000.00)	(350,000.00)				
PG&E - applicant facil contrib	306,589.00	306,589.00	306,589.00				
PG&E - potential re-bid							
					(1,200,000.00)	(1,200,000.00)	(1,200,000.00)
					(1,841,424.00)	(1,841,424.00)	(1,841,424.00)
					Incremental costs over completing the project		
Net appropriation needed	<u>(1,629,440.35)</u>	<u>(4,650,495.94)</u>	<u>(5,100,989.24)</u>	<u>(1,060,000.00)</u>			

Notes:

1. Suspension raises a number of hard to quantify issues:
 - Homeowners are not obligated nor can they be forced to pay more.
 - Getting an after the fact geotech inspection and report would delay the project by 1 to 2 weeks
 - Even with the geotech report, we couldn't simply push Valley aside without incurring extra costs
 - Re-bidding would most likely require a new RFP since the conditions have changed (i.e., can't choose from orig bidders).
 - PG&E cost estimates for their bid was low for both the engineering and the construction by \$1.2 million - an exposure
 - If there was a re-ballot to try to get homeowners to pay an additional assessment, uncertain as to outcome
 - Legal exposures:
 1. Bondholders
 2. Homeowners who have prepaid
 3. Homeowners who have already completed laterals by their own contractors
 4. Valley - lost of profits, delays, penalties