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10:18 am, May 02, 2008

Alameda County Environmental Health

April 30, 2008

Mr. Jerry Wickham
Alameda County Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577

SUBJECT:

PREFERENTIAL PATHWAY SURVEY REPORT CERTIFICATION

ACEHS File # RO0002509 Thanh's Autobody Repair

901 77th Avenue Oakland, California

Dear Mr. Wickham:

You will find enclosed one copy of the following document prepared by P&D Environmental, Inc.

• Preferential Pathway Survey Report dated April 17, 2008 (document 0330.R2).

I declare, under penalty of perjury, that the information and/or recommendations contained in the above-mentioned document for the subject site is true and correct to the best of my knowledge.

Should you have any questions, please do not hesitate to contact me at (408) 354-9777.

Sincerely,

Cupertino Capital

Daniel Shaw

Enclosure

0330.L10

P&D ENVIRONMENTAL, INC.

55 Santa Clara Ave, Suite 240 Oakland, CA 94610 (510) 658-6916

April 17, 2008 Report 0330.R2

Mr. Michael Parsons Cupertino Capital 15700 Winchester Boulevard Los Gatos, CA 95030

SUBJECT: PREFERENTIAL PATHWAY SURVEY REPORT

ACEHS File #RO0002509 Thanh's Autobody Repair

901 77th Avenue Oakland, California

Dear Mr. Parsons:

P&D Environmental, Inc. (P&D) is pleased to present this report documenting the results of a preferential pathway study and well survey for the subject site. This report is written in response to a request from Mr. Jerry Wickham of the Alameda County Department of Environmental Health (ACEH) in his letter dated April 21, 2006. A Site Location Map is attached as Figure 1, and a Site Plan showing borehole and well locations and gasoline concentrations in shallow groundwater in the vicinity of the site is attached as Figure 2. A map showing underground utility locations in the site vicinity is attached as Figure 3, and cross sections showing utility trench depths relative to the historic range of water table elevations are presented in Figures 4 and 5.

BACKGROUND

On July 25, 2002 one 1,000-gallon capacity gasoline Underground Storage Tank (UST) was removed from the subject site. The removal of the tank is documented in the Underground Storage Tank Removal – Final Report dated August 6, 2002 prepared by AEI Consultants (AEI). Although groundwater was not encountered in the UST pit, the results of soil samples collected from the UST pit showed elevated concentrations of petroleum hydrocarbons. In a letter dated January 27, 2003 Mr. Ariu Levi of the ACEH provided Notice of Responsibility for investigation and cleanup of the subject site to Mr. Daniel Shaw of D&D Ventures, LLC (D&D), the primary responsible party for the site. Following conversations with Mr. Gholami to develop a scope of work to move the case towards closure, P&D submitted a January 26, 2004 Subsurface Investigation Work Plan (B1 Through B7) (document 0330.W1) and associated addendum dated February 3, 2004. The work plan and addendum were approved in a letter from Mr. Gholami dated February 20, 2004.

Subsurface investigations have subsequently been performed and documented as follows.

 AEI's April 26, 2004 Groundwater Investigation report addressed to D&D Ventures, LLC.

- P&D's Subsurface Investigation Report (Boreholes B8 through B14 and Monitoring Wells MW1 through MW3) (document 0330.R1), dated March 22, 2006.
- P&D's Subsurface Investigation Report (Boreholes B15 and B16) (document 0330.R2), dated April 14, 2008.

Mr. Jerry Wickham of the ACDEH provided comments on the March 2006 report in a letter dated April 21, 2006 and requested a work plan containing historic site use information, historic UST system information (including dispensers and piping), identification of methods for evaluation of potential vapor intrusion, a description of methods for collection of groundwater samples recommended in the March 2006 report, identification of potential preferential pathways, a detailed well survey within a 2,000-foot radius of the site, and the implementation of a quarterly groundwater monitoring program for the three groundwater monitoring wells.

PREFERENTIAL PATHWAY SURVEY

Utility maps were obtained from the City of Oakland, the East Bay Municipal Utility District (EBMUD), Pacific Gas & Electric Company (PG&E), and AT&T California. The underground utility locations in the site vicinity are shown in Figure 3, and cross sections showing utility trench depths relative to the historic range of water table elevations are shown in Figures 4 and 5. The underground utilities evaluated in the vicinity of the site included storm drain, sanitary sewer, water supply, electrical, and telephone. Each is discussed below.

The measured depth to the bottom of the storm drain and sanitary sewer pipes at manholes (from the manhole rim) described in this report were verified in the field by P&D personnel. No curbs are present to define street widths for Hawley Street and 77th Avenue with the exception of a 2-inch high curb located on the southwest side of Hawley Street. The street edge was defined on the northwest side of 77th Avenue by the "curb side" edge of the storm drain inlet located at the intersection of Hawley Street and 77th Avenue. The street edge was defined on the northeast side of Hawley Street and on the southeast side of 77th Avenue by the types of asphalt ground cover present. The widths of Hawley Street and 77th Avenue were measured to be 35 and 30 feet, respectively, which agrees with the street widths shown on the utility location maps provided by EBMUD and PG&E. The measured distance from the building to the street edge on Hawley Street and 77th Avenue is 19 and 14 feet, respectively.

Storm Drain Pipes

Storm drain pipes in the site vicinity are owned and operated by the City of Oakland (City). A utility map obtained from the City showing storm drain pipe diameters and flow directions in the site vicinity is attached as Appendix A. Review of Appendix A and Figure 3 shows that a 21-inch-diameter storm drain pipe is located along Hawley Street on the side of the street closest to the subject site, and that this pipe connects to a 60-inch diameter storm drain pipe located beneath 77th Avenue on the opposite side of the street from the subject site. The measured depth to the bottom of

the storm drain in the manhole from the manhole rim located approximately 460 feet northwest of 77th Avenue at the intersection of 75th Avenue and Hawley Street is 4.5 feet. The measured depth to the bottom of the storm drain in the manhole from the manhole rim located on the south side of 77th Avenue at the intersection of Hawley Street and 77th Avenue is 7.0 feet. The flow direction is to the southeast along Hawley Street, and to the southwest along 77th Avenue. Water was observed to be flowing in the storm drain located in 77th Avenue at a depth of approximately 5.8 feet below the ground surface at the time that the manhole depth was measured.

The construction practices for the storm drain pipe trenches are unknown.

Sanitary Sewer Pipes

Sanitary sewer pipes in the site vicinity are owned and operated by the City. The utility map in Appendix A obtained from the City showing storm drain pipe information also shows sanitary sewer pipe diameters and flow directions in the site vicinity. Review of Appendix A and Figure 3 shows that 8-inch sanitary sewer pipes are located in the centers of both 77th Avenue and Hawley Street. These pipes are connected at the intersection of Hawley Street and 7th Avenue. The flow direction is to the southeast along Hawley Street, and to the southwest along 77th Avenue. Manholes for the sanitary sewer located in the middle of Hawley Street are located in the middle of the intersections of Hawley Street and 75th Avenue, 76th Avenue and 77th Avenue. The horizontal distance between each of the manholes is approximately 245 feet, and the measured depth to the bottom of the sanitary sewer pipe from the manhole rim in each of the manholes is approximately 5.5, 7.0 and 8.5 feet, respectively.

An additional sanitary sewer pipe is also located on the southwest side of 77th Avenue. The sanitary sewer pipe is 10-inches in diameter, flows to the southwest, and does not intersect the sanitary sewer pipe located in the center of 77th Avenue in the vicinity of the subject site. The measured depth to the bottom of the sanitary sewer in the manhole from the manhole rim located on the southeast side of the intersection of Hawley Street and 77th Avenue is 8.0 feet. Groundwater was observed to be entering the manhole through joints in the concrete walls of the manhole at depths of approximately 6.0 to 7.0 feet below the ground surface at the time that the manhole depth was measured.

The construction practices for the sanitary sewer pipe trenches are unknown.

Water Supply Pipes

Water supply pipes in the site vicinity are owned and operated by the East Bay Municipal Utility District (EBMUD). P&D personnel spoke with Mr. Pat Clinton of EBMUD on April 25, 2005, regarding standard trench details. Mr. Clinton stated that the depth of burial for EBMUD water supply pipes is typically 3 feet below the surface for main pipes, and 2 to 3 feet below the surface for laterals. Backfill is typically 3 inches of sand placed below the pipe, and 3 to 6 inches of sand placed above the pipe. If the pipe is located in the street, aggregate baserock is used as fill from the

top of the sand to the bottom of the concrete or asphalt driving surface.

Mr. Bonifacio Rivera of EBMUD provided a plan view map of the EBMUD water supply pipes in the site vicinity which is attached as Appendix B. Review of Appendix B and Figure 3 shows that water supply pipes are located in Hawley Street 12 feet from the northeast edge of the street, and in 77th Avenue 19 feet from the northwest side of the street. The pipe diameters are unknown. The measured depths of the water supply pipes were not verified in the field, and a default depth of burial of 3 feet was assumed for all water supply pipes in the cross sections (Figures 4 and 5).

Natural Gas Pipes

Natural gas pipes in the site vicinity are owned and operated by PG&E. A utility map obtained from PG&E showing the horizontal locations of natural gas pipes in the site vicinity is attached as Appendix C.

On March 17, 2005, P&D contacted Mr. Jim Navarra of PG&E for information about depths and trench construction practices for the natural gas pipes. Mr. Navarra stated that PG&E natural gas pipes are typically buried in trenches two to three feet in total depth, and that two to four inches of sand fill is typically placed beneath the pipes. Mr. Navarra also stated that onsite backfill is used if it passes their soil testing requirements. Otherwise 12 inches of imported material is used for backfill on top of the pipes. He stated that it is impossible to know specific trench details without digging at the site.

Review of Appendix C and Figure 3 shows that a 2-inch-diameter steel natural gas pipe is located in Hawley Street 9 feet from the northeast edge of the street, with a lateral crossing Hawley Street to the southwest at a distance of approximately 85 feet to the northwest of the intersection of Hawley Street and 77th Avenue. In addition, a 4-inch diameter steel natural gas pipe is located in 77th Avenue 12 feet from the northwest side of the street. The measured depths of the natural gas pipes were not verified in the field, and a default depth of burial of 3 feet was assumed for all natural gas pipes in the cross sections (Figures 4 and 5).

Electrical Wires

Electrical wires in the site vicinity are owned and operated by PG&E. A utility map was obtained from PG&E showing the horizontal locations of electrical wires in the site. On September 2, 2005, P&D contacted Mr. Sumeet Singh of PG&E about depths and trench construction practices for electrical wires. Mr. Singh stated that PG&E electrical wires are typically buried under 30 inches of sand backfill. On April 25, 2005, P&D spoke with Mr. Russell Lew of SBC. Mr. Lew stated that SBC telephone and PG&E electrical wires are generally buried in the same trench when they are not located above ground on utility poles. According to Mr. Lew, the electrical wires are buried a minimum of 12 inches below the telephone wires.

On April 4, 2008, P&D personnel contacted Mr. Jerry Cabral of PG&E about depths of burial and trench construction practices for the electrical wires in the vicinity of the subject site. Mr. Cabral stated that the PG&E utility map previously provided shows electrical wires in the site vicinity that are entirely above ground. Mr. Cabral also stated that it is likely that telephone and cable TV lines share joint poles with PG&E electric wires.

Visual inspection of the site by P&D personnel showed that the electrical wires are located above ground on utility poles. For this reason the electrical wires are not shown on the site vicinity map (Figure 3) or cross sections (Figures 4 and 5) as a buried utility.

Telephone Wires

Telephone wires in the site vicinity are owned and operated by AT&T California (AT&T). A utility map obtained from AT&T showing the horizontal locations of telephone wires in the site vicinity is attached as Appendix D.

On April 25, 2005, P&D spoke with Mr. Russell Lew of SBC Communications (SBC was later bought by AT&T). Mr. Lew stated that telephone wires and cables are housed in plastic schedule 40 conduit. Mr. Lew also stated that SBC telephone and PG&E electrical wires are generally buried in the same trench. Mr. Lew additionally stated that burial with PG&E electrical wires is promoted by PG&E, so that SBC telephone lines can help to protect PG&E electrical wires. According to Mr. Lew, the electrical wires are buried a minimum of 12 inches below the telephone wires.

On December 18, 2006, P&D personnel spoke with Ms. Pauline Williams of AT&T. Ms. Williams stated that trenches for telephone wires are typically 24 inches in total depth for telephone only trenches, and 36 inches in total depth for joint trenches. She stated that these trenches typically have between one to three inches of sand bedding, and 12 inches of sand above the utility.

Visual inspection of the site by P&D personnel showed that the electrical wires are located above ground on utility poles. Review of Appendix D and Figure 3 shows that telephone wire conduit is located in 77th Avenue 7.5 feet from the northwest side of the street. The measured depth of the conduit for the telephone wires was not verified in the field, and a default depth of burial of 2 feet was assumed for all telephone wire conduit trench in the cross sections (Figures 4 and 5) based on the presence of overhead electrical wires.

HYDROGEOLOGY

The historic measured depth to groundwater in wells MW1, MW2 and MW3 (see Figure 2) is summarized in Table 1. The measured depth to water has historically ranged from 4.80 to 5.95 feet. Review of Table 1 shows that the historic calculated groundwater flow direction and gradient in

the vicinity of the site based on the information in Table 1 is summarized in Table 2. Review of Table 2 shows that the calculated groundwater flow direction at the site has ranged from S18°W to S29°W and that the gradient has ranged from 0.011 to 0.015. The range of historic groundwater flow directions is shown on Figure 2. The range of the historic measured depth to groundwater is shown on the cross sections in Figures 4 and 5.

Arroyo Viejo is a channelized creek shown on Figure 1 to the northeast of East 14th Street. Flow in the creek is southwesterly, towards San Francisco Bay. At East 14th Street (located 3,000 feet northeast of the subject site) the creek is channelized below the ground surface. To the northeast of East 14th Street the creek is located between 77th Avenue and 78th Avenue. However, based on the orientation of the creek on the northeast side of East 14th Street and the location of 77th Avenue on the southwest side of East 14th Street the creek appears to be located beneath 77th Avenue on the southwest side of East 14th Street.

San Francisco Bay is located approximately 5,500 feet to the west of the subject site, and approximately 6,200 feet to the southwest of the subject site. A drainage feature that appears to be the outfall to an unknown creek is located on the southwest side of San Leandro Boulevard, approximately 1,100 feet west of the subject site. Similarly, a drainage feature that appears to be the outfall to an unknown creek is located on the southwest side of San Leandro Boulevard, approximately 1,800 feet south of the subject site. The location of the outfall for Arroyo Viejo was not determined during this investigation.

DISCUSSION AND RECOMMENDATIONS

Comparison of the utility trench depths shown in Figures 4 and 5 with the historic measured depth to water shows that the storm drain and sanitary sewer trenches extend below the water table. No other utility trenches were determined to extend below the water table. Review of Table 1 shows that the measured depth to groundwater in the three groundwater monitoring wells located at or near the site has ranged from 4.80 to 5.95 feet. Comparison of Figures 2 and 3 shows that petroleum impacted groundwater is intersected by both storm drain and sanitary sewer trenches. No petroleum hydrocarbon odors were detected in any of the manholes at the time that the manhole depths were measured.

The observation of water seeping into the manhole for one of the sanitary sewers located in 77th Avenue at depths below the water table indicates that groundwater is entering the sanitary sewer. Based on the large diameter (60 inches) and the box-like construction of the storm drain located beneath and parallel to 77th Avenue, the storm drain appears to be also an underground channelized segment of Arroyo Viejo. The water observed in the storm drain at the time of storm drain manhole depth measurement appears to be water associated with Arroyo Viejo.

The groundwater flow direction at the site (see Figure 2) may be affected by the preferential movement of groundwater in the storm drain and sanitary sewer trenches located in 77th Avenue.

Petroleum-impacted groundwater could also be moving preferentially in the storm drain and sanitary sewer trenches located in 77th Avenue, and to a lesser degree in Hawley Street. The predominant direction of any preferential flow would be southwesterly beneath 77th Avenue based on the flow direction and associated sloping in the utility trenches and the historic groundwater flow direction at the subject site.

Recommendations for feasibility evaluation of dual phase groundwater and soil vapor extraction in the area shown on Figure 2 where petroleum hydrocarbon concentrations exceed groundwater Environmental Screening Levels are provided in P&D's Subsurface Investigation Report (Boreholes B15 and B16) dated April 14, 2007 (document 0330.R3).

LIMITATIONS

This report was prepared solely for the use of Cupertino Capital. The content and conclusions provided by P&D in this assessment are based on information collected during our investigation, which may include, but not be limited to, visual site inspections; interviews with the site owner, regulatory agencies and other pertinent individuals; review of available public documents; subsurface exploration and our professional judgment based on said information at the time of preparation of this document. Any subsurface sample results and observations presented herein are considered to be representative of the area of investigation; however, geological conditions may vary between borings and may not necessarily apply to the general site as a whole. If future subsurface or other conditions are revealed which vary from these findings, the newly revealed conditions must be evaluated and may invalidate the findings of this report.

This report is issued with the understanding that it is the responsibility of the owner, or his representative, to ensure that the information contained herein is brought to the attention of the appropriate regulatory agencies, where required by law. Additionally, it is the sole responsibility of the owner to properly dispose of any hazardous materials or hazardous wastes left onsite, in accordance with existing laws and regulations.

This report has been prepared in accordance with generally accepted practices using standards of care and diligence normally practiced by recognized consulting firms performing services of a similar nature. P&D is not responsible for the accuracy or completeness of information provided by other individuals or entities that is used in this report. This report presents our professional judgment based upon data and findings identified in this report and interpretation of such data based upon our experience and background, and no warranty, either express or implied, is made. The conclusions presented are based upon the current regulatory climate and may require revision if future regulatory changes occur.

Should you have any questions, please do not hesitate to contact us at (510) 658-6916.

Sincerely,

P&D Environmental, Inc.

Paul H. King

Professional Geologist # 5901

Expires: 12/31/09



Attachments:

Table 1 – Groundwater Level Monitoring Data For Wells MW1, MW2, and MW3

Table 2 - Calculated Groundwater Flow Direction and Gradient for Wells MW1, MW2 and MW3

Figure 1 – Site Location Map

Figure 2 – TPH-G in Concentrations in Groundwater at 15- or 20-Foot Depth

Figure 3 – Site Vicinity Map Showing Locations of Utility Trench Locations and Cross Sections

Figure 4 – Cross Section A-A' Showing Utility Trench Locations and Depths

Figure 5 – Cross Section B-B' Showing Utility Trench Locations and Depths

Appendix A - City of Oakland Storm Drain and Sanitary Sewer Utility Map

Appendix B - EBMUD Water Supply Utility Map

Appendix C - PG&E Natural Gas Utility Map

Appendix D - SBC/AT&T Telephone Utility Map

PHK/efo 0330.R2

TABLES

TABLE 1 GROUNDWATER LEVEL MONITORING DATA FOR WELLS MW1, MW2, AND MW3

Well No.	Date Monitored	Top of Casing Elevation (ft.)	Depth to Water (ft.)	Water Table Elevation (ft.)
MW1	8/9/06	58.34	5.77	52.57
	3/8/06		5.36	52.98
	12/7/05		5.62	52.72
	11/30/05		5.85	52.49
	11/21/05*		5.95	52.39
MW2	8/9/06	58.49	5.04	53.45
	3/8/06		4.21	54.28
	12/7/05		4.90	53.59
	11/30/05*		4.96	53.53
	11/21/05*		NA	NA
MW3	8/9/06	57.74	4.88	52.86
	3/8/06		4.17	53.57
	12/7/05		4.80	52.94
	11/30/05*		4.86	52.88
	11/21/05*		5.62	52.12

NOTES:

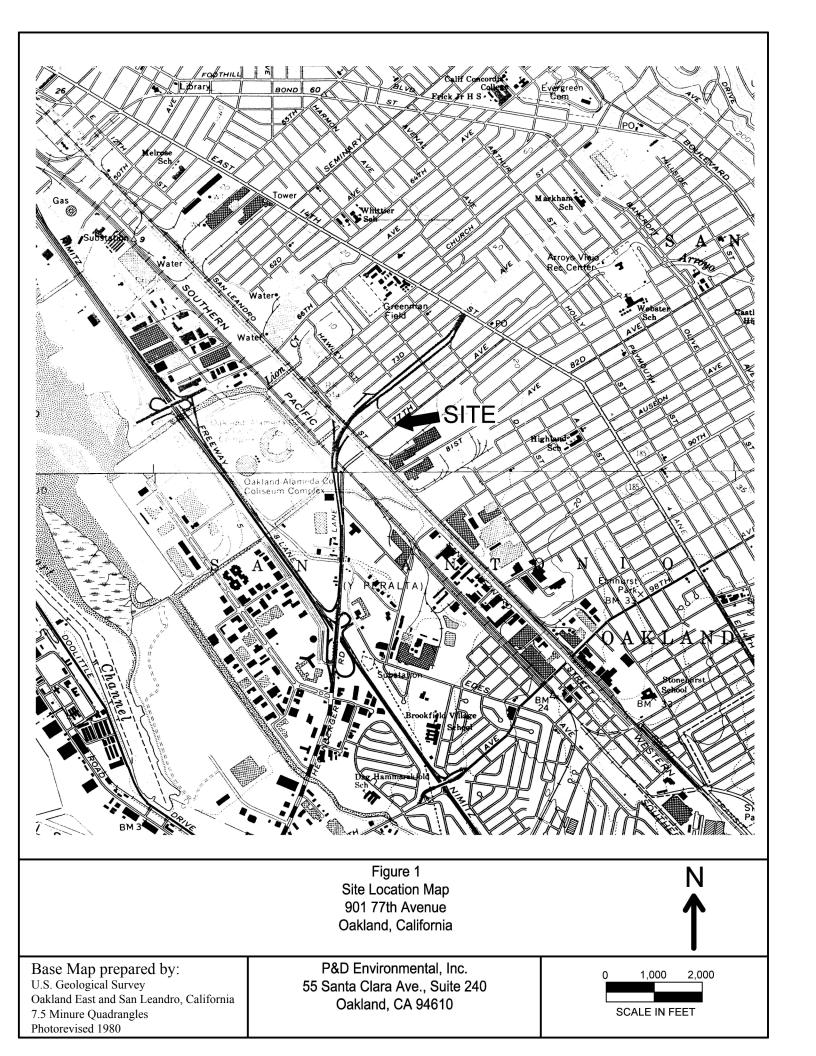
NA = Not Available

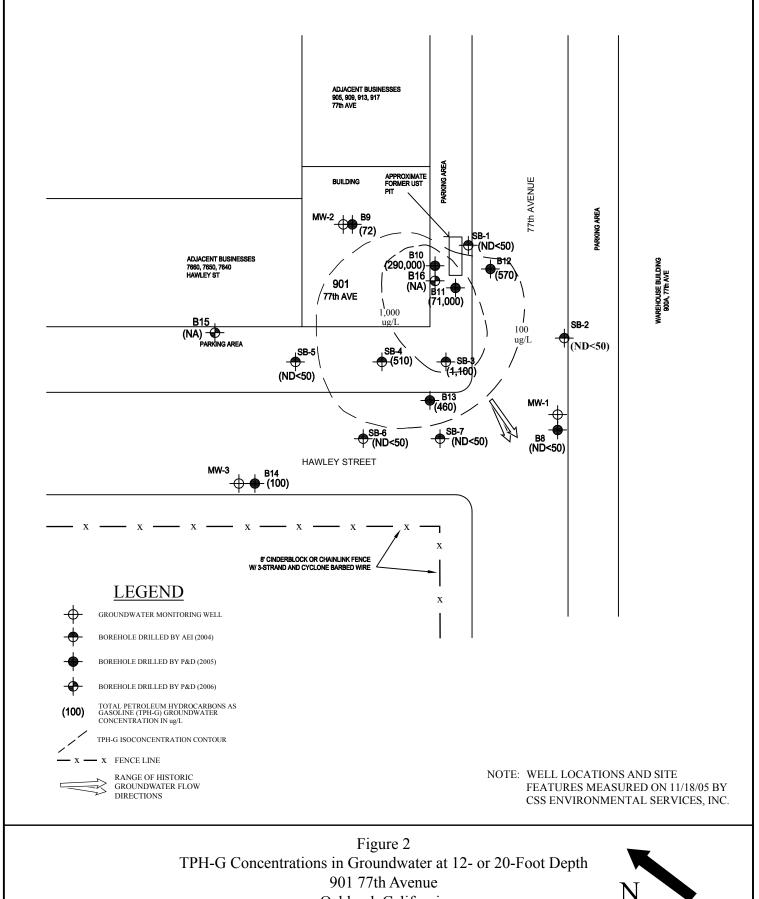
^{* =} Prior to Well Development

TABLE 2 CALCULATED GROUNDWATER FLOW DIRECTION AND GRADIENT FOR WELLS MW1, MW2, AND MW3

Date Monitored	Flow Direction	Gradient
8/9/06	$S24^{o}W$	0.011
3/8/06	$S18^{\circ}W$	0.015
12/7/05	S29°W	0.011
11/30/05	S22°W	0.012

FIGURES





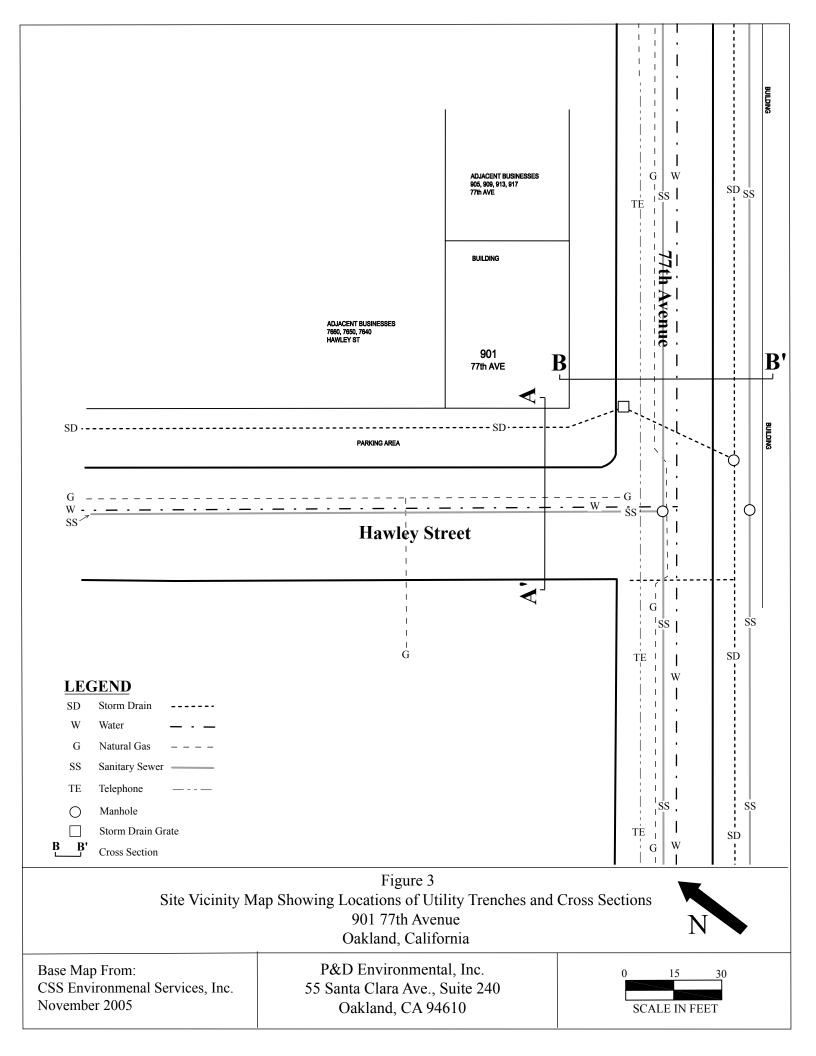
Oakland, California

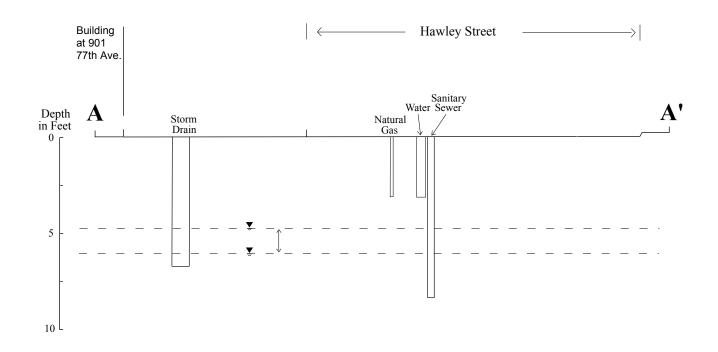


Base Map From: CSS Environmental Services, Inc. November, 2005

P&D Environmental, Inc. 55 Santa Clara Ave., Suite 240 Oakland, California









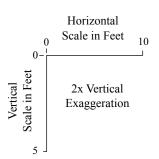
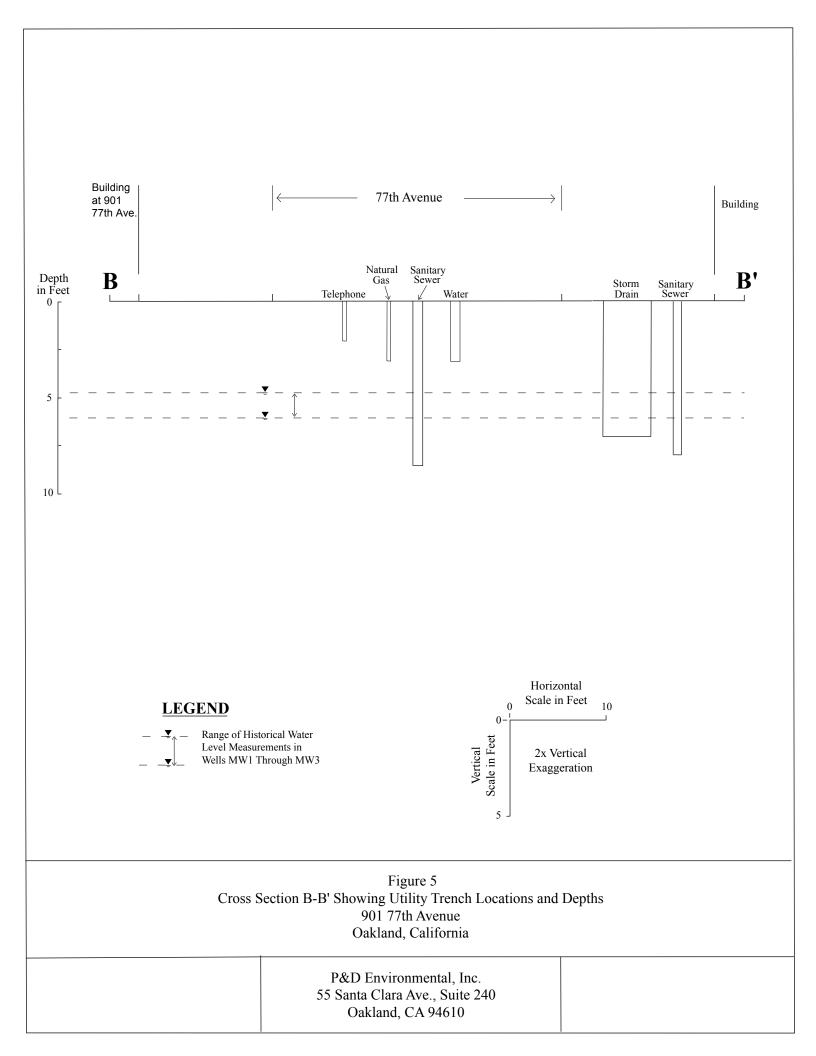
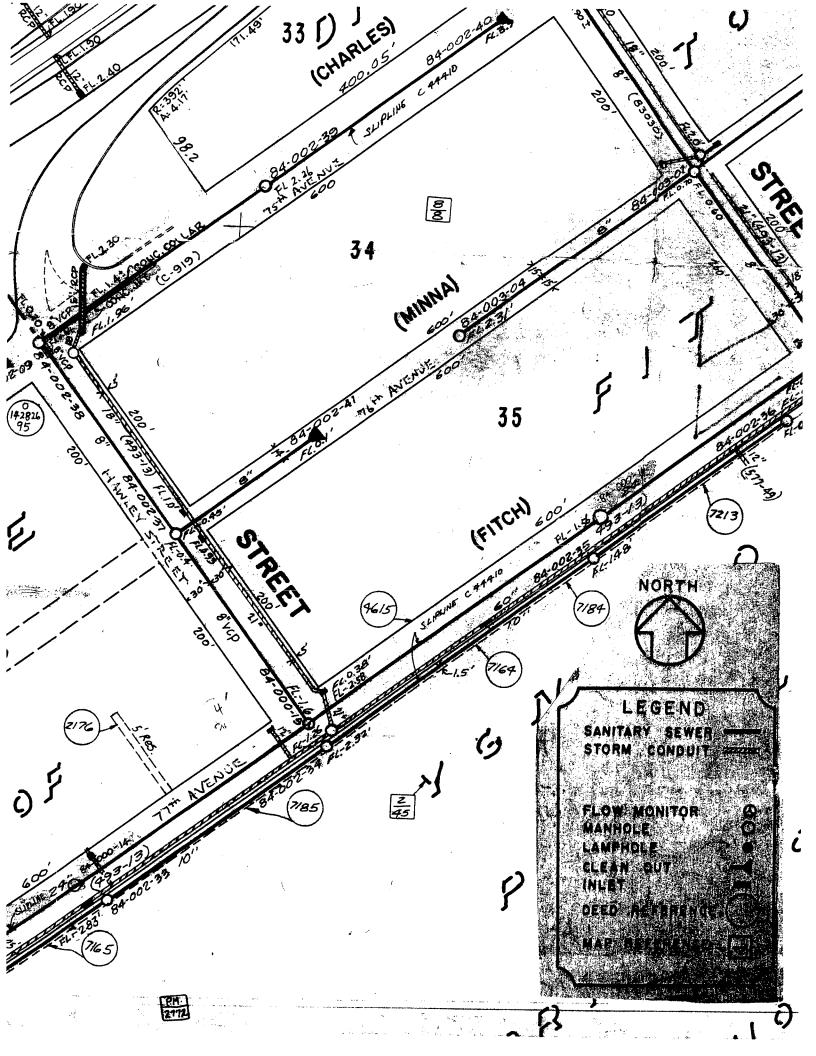


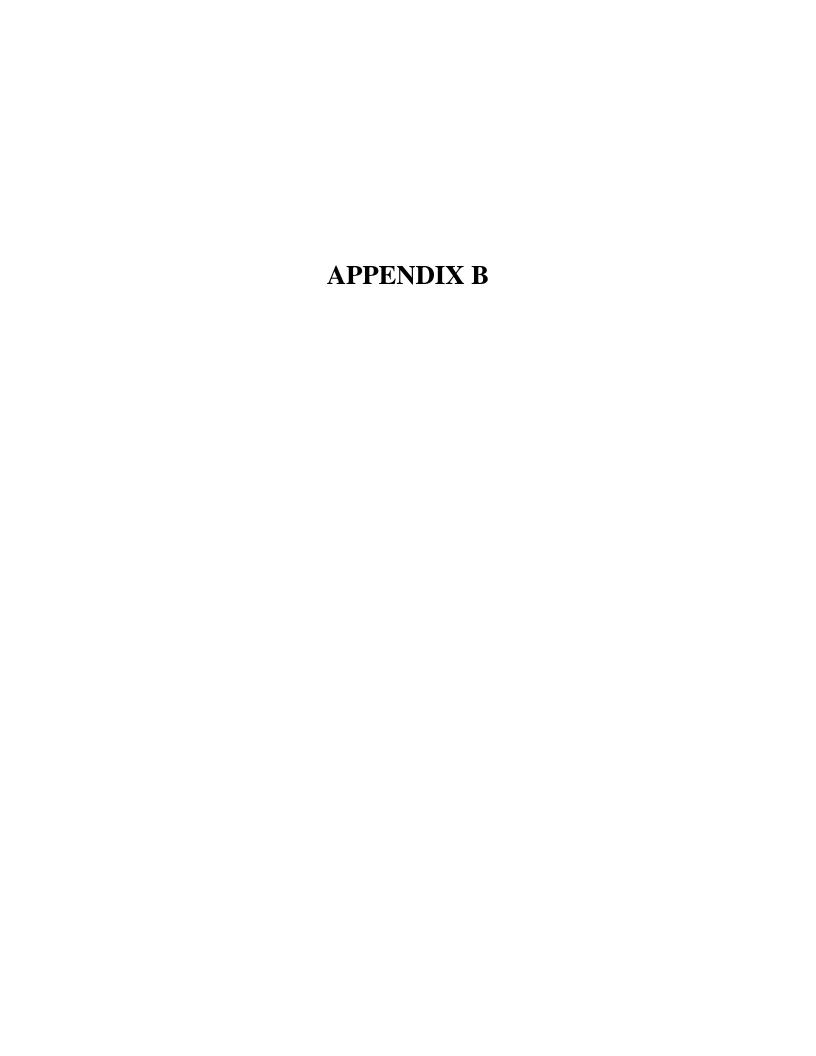
Figure 4
Cross Section A-A' Showing Utility Trench Locations and Depths
901 77th Avenue
Oakland, California

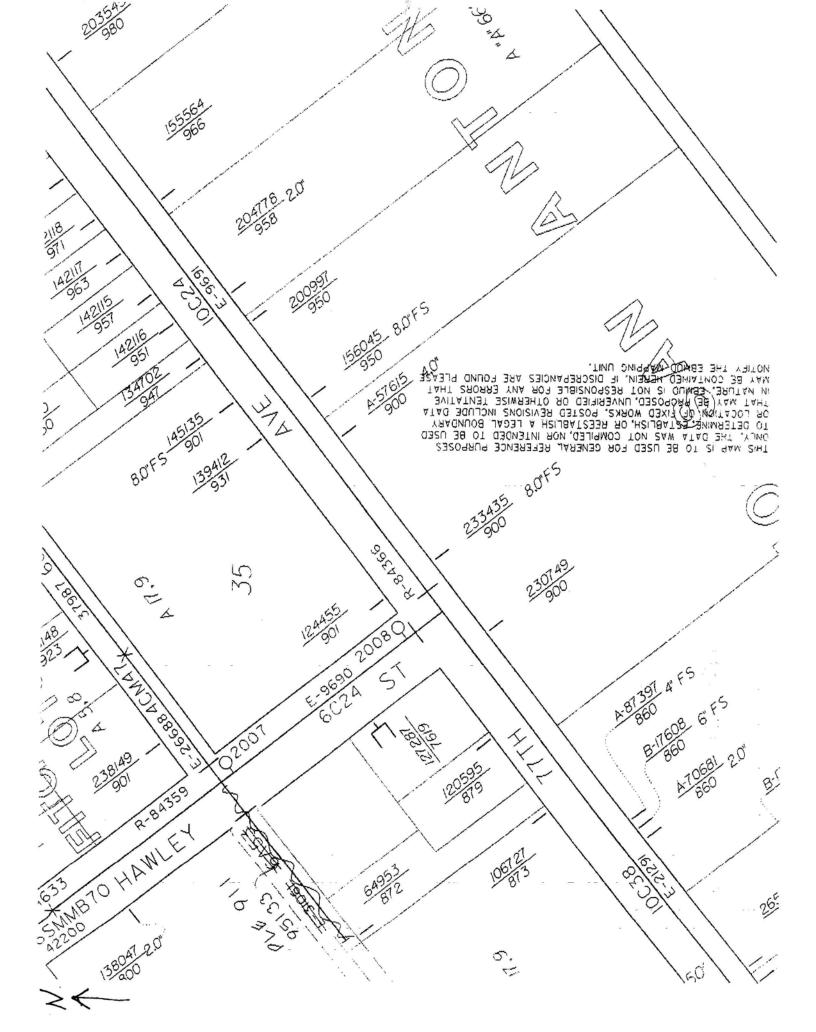
P&D Environmental, Inc. 55 Santa Clara Ave., Suite 240 Oakland, CA 94610



APPENDIX A







APPENDIX C

Division Gas Engineer

Gas Engineering & Planning 4801 Oakport Street Oakland, CA 94601 (Ofc) 510/437-2110 AFT5@PGE.COM

December 11, 2006

Pacific Gas and

Mr. Erick Olson P & D Environmental, Inc. 55 Santa Clara Ave, Suite 240 Oakland, CA 94610

Dear Mr. Olson:

Re: Utility Information Request for 901 77th Avenue, Oakland, CA 94621

The enclosed prints identify the location of our gas & electric facilities. Please note that PG&E does not verify its gas and/or electric facilities by sending copies of its maps. Should you require map interpretation concerning gas facilities contact Denise Lee at (510) 437-2211. For interpretation concerning electric facilities, contact Joe Paonessa at (510) 437-2115 or John Nunes at (510) 437-2241.

Be sure to advise your construction contractor to exercise extreme caution when working in the area of our facilities.

California Government Code and OSHA Regulation require that all underground facilities be marked and located prior to digging. The contractor must notify Underground Service Alert (USA) at (800) 227-2600 at least two working days prior to construction and delineate with white paint or other suitable markings the area to be excavated so we may mark our facilities on the surface of the street. These markings are only valid for 28 days. Requests to USA need to be made to renew markings if the most recent request has elapsed the 28-day time period.

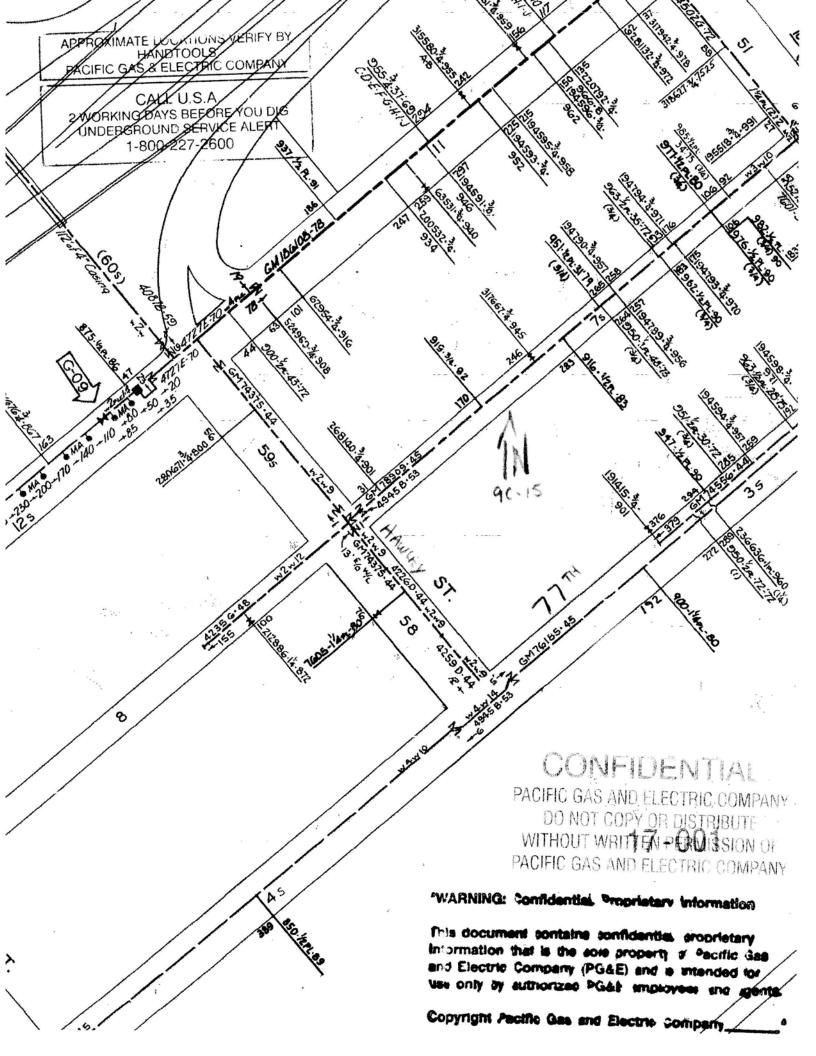
If the contractor fails to adhere to these regulations and facility damages occur, it may be necessary to report the incident to the state. The contractor could be subject to a penalty of up to \$50,000 per incident (California Government Code 4216-4217 effective January 1, 1990). Of course, this action should not be necessary since we stand ready to mark our facilities upon request.

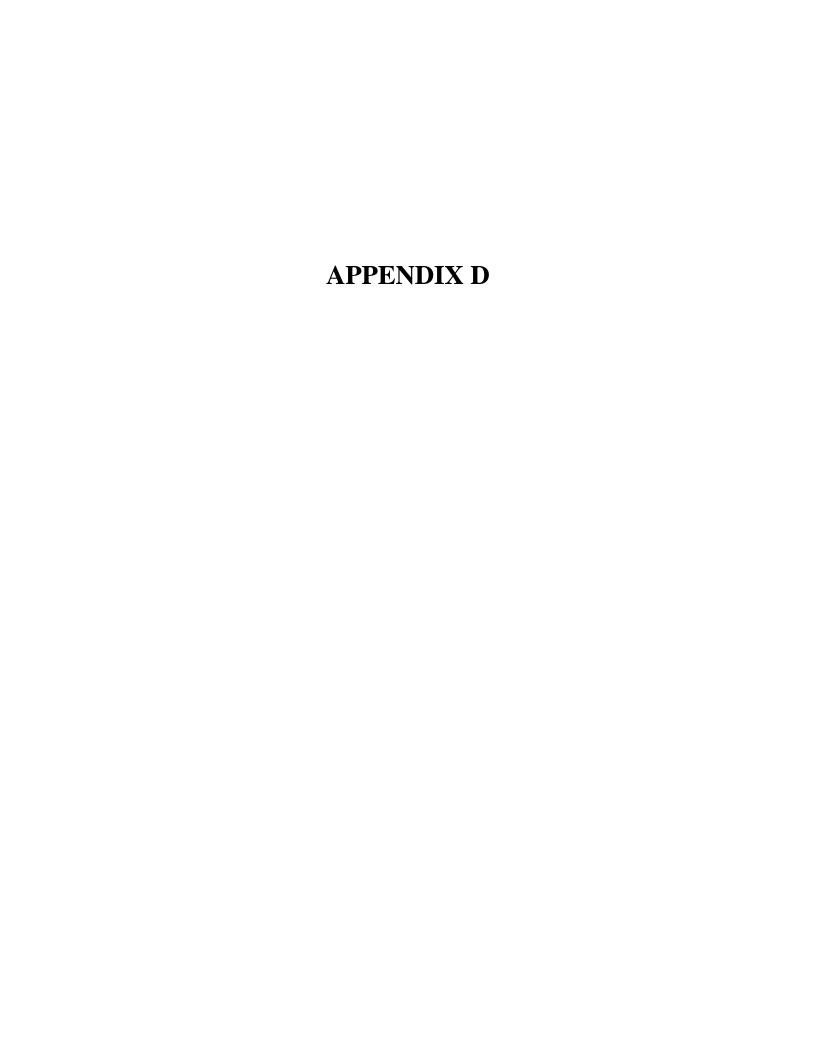
When it is clear that your project will involve relocating or installing PG&E facilities, please contact our clerk at (510) 437-2020. She will send you the necessary forms and instructions.

Sincerely,

Anthony Thompson

Enclosures







2600 Camino Ramon Suite 2W650 San Ramon, CA 94583

January 5, 2007

P & D Environmental, Inc. 55 Santa Clara Ave., Suite 240 Oakland, CA 94610

Attn: Eric Olson

SUBJECT: Fuel Leak Case #RO0002509, 901 77th Avenue, Oakland, CA 94621

Dear Mr. Olson:

AT&T California has reviewed the plan map for the project mentioned above. We have determined that we **do have** existing facilities within the project limits as shown on the attached drawings.

It is your responsibility to review the attached drawings and determine whether or not our facilities conflict with your project. If you determine a conflict exists, please notify AT&T California in writing of the need to relocate its facilities well in advance of the commencement of the Project. If manhole or box adjustments are required, you must fax a letter of request 30 days in advance. My fax number is (925) 327-0843.

The drawings indicate only the approximate location of our existing facilities in the field. Please contact **UNDERGROUND SERVICE ALERT** on **1-800-642-2444** prior to any excavation work in these areas.

If you have further questions or concerns regarding this information, please call AT&T California's *Design Engineer*, *Pauline Williams*, at (510) 727-6092.

Sincerely,

Karen Boles Public Works Coordinator

PLRs: 5 (1 dwg)

PWC: OAK 06-16B / EW02370

15TH AVE 76TH AVE TRANCES ST. *86Ø38869Ø (Ø) 816' 1 CFD 3 1/2 (1966)