

August 22, 2008

Doug Nelson c/o Sharon Knowlton
Children's Hospital & Research Center Oakland
747 52nd Street
Oakland, Ca. 94609

**Subject: Draft Phase I Environmental Site Assessment Report
Children's Hospital & Research Center of Oakland
747 52nd Street
Oakland, California**

Dear Mr. Nelson:

Attached for your review is the Draft Phase I Environmental Site Assessment (Phase I ESA) completed by The Source Group, Inc. (SGI) for the Children's Hospital & Research Center Oakland (CHRCO) facility located at 747 52nd Street, Oakland, California (Subject Property). This assessment has revealed no evidence of recognized environmental conditions in connection with the Subject Property.

Based on interviews with CHRCO engineers we understand that an underground storage tank (UST) was previously located and removed near the southwest corner of wing B. No further information regarding the contents of the UST or whether any contamination was present upon removal was available.

Based on our historical research, we identified several documented fuel and solvent release sites located near (<1/8 mile) and upgradient of the Subject property. It is SGI's opinion that the potential for such releases to have migrated to and be present in groundwater underlying the Subject Property at concentrations that would pose regulatory or human health risk concerns is low due to the magnitude of the releases and characteristics of the chemicals released.

SGI understands that future projects may include excavation and dewatering associated with the reconstruction of hospital building wings B and C. Excess soil and groundwater generated from excavations and dewatering that will be disposed of offsite should be tested to confirm that it is non-hazardous and meets the acceptance criteria of the receiving facility. The sampling frequencies and test methods employed to characterize the soil or groundwater are typically determined by the disposal facility accepting the soil or groundwater.

Those buildings at the project site constructed prior to the 1980s may have lead and asbestos present in some form. Demolition of the project site buildings has the potential to release lead particles, asbestos fibers, and/or other hazardous materials to the air, where they may be inhaled by construction workers and the general public. In addition, other common items such as fluorescent lighting, thermostats, and electrical transformers can contain hazardous materials which may pose a health risk if not handled and disposed of properly. If present, a qualified contractor should be retained to remove asbestos containing materials and lead-based paint, as appropriate, prior to demolition. SGI has recently completed the asbestos and lead surveys for the Subject Property, the results of which will be presented in a separate report.

*Mr. Doug Nelson
August 22, 2008
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The Source Group appreciates the opportunity to conduct this work for CHRCO. Should you have any questions regarding the Draft Phase I ESA Report or this letter, please call us at (925) 944-2856, ext 326.

Sincerely,

The Source Group, Inc.

Kent R. Reynolds
Project Manager

Attachment: Draft Phase I Environmental Site Assessment Report

DRAFT

**DRAFT PHASE I ENVIRONMENTAL SITE
ASSESSMENT**

**Children's Hospital and Research Center of
Oakland**

**747 52nd Street
Oakland, California**

01-CHO-001

Prepared For:

Children's Hospital and Research Center of Oakland
747 52nd Street
Oakland, California 94609

Prepared By:



3451-C Vincent Road
Pleasant Hill, California 94523

August 22, 2008

Prepared By:

Nathan Colton
Staff Scientist

Reviewed By:

Kent R. Reynolds
Principal Geologist

Patrick Kelleher, P.G.
Project Geologist

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EXECUTIVE SUMMARY

Children's Hospital and Research Center Oakland (CHRCO) retained The Source Group, Inc. (SGI) to conduct an ASTM E 1527-05 and all appropriate inquiry (40 CFR § 312.2) compliant Phase I Environmental Site Assessment (ESA) in conjunction with the planned demolition and reconstruction of the Hospital's B and C wings located at located at 747 52ND Street in the City of Oakland, California (Subject Property; Figure 1) construction of a new 12-story hospital to replace the existing hospital on the Subject Property.

The primary purpose of the Phase I ESA is to identify potential or probable "recognized environmental conditions (RECs)" that could potentially impact the Subject Property. Specifically, the scope of work for the Phase I ESA consisted of historical assessment of land use associated with the Subject Property and immediately adjacent properties through review of reasonably available agency records, interviews with applicable representatives of the Subject Property owners, a reconnaissance of the Subject Property and immediately surrounding properties, and review of regulatory databases regarding the presence or likelihood of RECs within the Subject Property and adjoining properties. In addition, the Phase I ESA included a review of previous investigations conducted at the Subject Property and/or immediately adjacent properties.

The Subject Property is comprised of the Children's Hospital and Research Center of Oakland (Current Campus). The Subject property also include the east of Dover Street (one-half city block) that contains residential eight residential structures, four of which are owned by the Hospital, and four of which are in private ownership and residential use, and the Hospital's Family Center (Residential Area; Figure 2). The Current Campus is comprised of a parking garage, outpatient care facility, main hospital building, helipad, and office buildings. The Current Campus is almost entirely paved with asphalt and concrete except for landscaped portions. The Subject Property is located in an area characterized as mixed commercial/residential. The Subject Property is bounded to the north by 52nd street with single-family residences beyond, to the east by Highway 24 with residential properties beyond, to the south by Highway 24, and to the west by Martin Luther King Jr. Way with parking lots and multi-level residences beyond (Figure 2).

The Subject Property has been developed and in use for a mix of residential and commercial activities since at least 1903. While all uses of the Subject Property have not been determined, historic data collected during this assessment has provided known uses for specific points in time.

The following is a summary of the history of the Subject Property based on current and historical records and interpretations by SGI.

- The Subject Property was first developed sometime in the early 1900s and consisted of single-family residences, including the McElrath Mansion property;
- In 1912, the McElrath Mansion property was acquired by the Baby Hospital Association, and in 1913 or 1914, the Children's Hospital of Oakland (then called the Baby Hospital) formerly opened its doors;
- In 1928, the McElrath property was demolished and the current A, B, and C hospital building wings were constructed;
- In 1930, the Baby Hospital was renamed Children's Hospital of the East Bay;
- In 1959, a research laboratory was built across 51st Street from the existing hospital;
- In 1962, the diagnostic and treatment center (D&T building) portion of the main hospital was constructed;
- In 1963, a nurses' dormitory was built along the northwest corner of the intersection of Grove and 52nd Streets;
- In 1964, the hospital was renamed Children's Hospital Medical Center of Northern California;
- In 1975, a third floor was added to the D&T building and a second floor was added to the research laboratory built in 1959;
- In 1982, the 82-Tower building portion of the main hospital was constructed; and
- In the mid 1990s, the Western Expansion building of the main hospital was constructed.

This assessment has revealed no evidence RECs in connection with the Subject Property.

The following environmental concerns, which are not RECs, were noted during this assessment:

Former UST: According to CHRCO personnel (Mr. Michael Carlson) an underground storage tank (UST) was located south of the engineering building at the corner of B and C sections of the AB&C building (Figure 3). The contents of the UST are unknown and to the best of his knowledge, the UST has been removed. No further information regarding the UST was available. SGI understands that future projects may include excavation and dewatering associated with the reconstruction of hospital building wings B and C. Depending on the depth and location of future excavations and, or trenching, the potential exists to encounter soil and groundwater that has been impacted with releases associated with the former UST.

Mitigation measures should be developed for worker health and safety considerations and the proper management of impacted soil and groundwater.

Upgradient Release Sites: Based on our historical research, we identified several documented fuel and solvent release sites located near (<1/4 mile) and upgradient of the Subject property. It is SGI's opinion that the potential for such releases to have migrated to and be present in groundwater underlying the Subject Property at concentrations that would pose regulatory or human health risk concerns is low due to the magnitude of the releases and characteristics of the chemicals released.

SGI understands that future projects may include excavation and dewatering associated with the reconstruction of hospital building wings B and C. Excess soil and groundwater generated from excavations and dewatering that will be disposed of offsite should be tested to confirm that it is non-hazardous and meets the acceptance criteria of the receiving facility. The sampling frequencies and test methods employed to characterize the soil or groundwater are typically determined by the disposal facility accepting the soil or groundwater.

ACM and LBP: Those buildings at the Subject Property constructed prior to the 1980s may have lead and asbestos present in some form. Prior to 1978, lead compounds were commonly used in interior and exterior paints. Prior to the 1980s, building materials often contained asbestos fibers, which were used to provide strength and fire resistance. Demolition of the Subject Property buildings has the potential to release lead particles, asbestos fibers, and/or other hazardous materials to the air, where they may be inhaled by construction workers and the general public. In addition, other common items such as fluorescent lighting, thermostats, and electrical transformers can contain hazardous materials which may pose a health risk if not handled and disposed of properly. Removal and disposal of these materials should be conducted according to the applicable Occupational Safety and Health Administration (OSHA) and Environmental Protection Agency (EPA) guidelines and recommendations.

1.0 INTRODUCTION

This report presents the findings of a Phase I Environmental Site Assessment (ESA) conducted by The Source Group, Inc. (SGI) for Children's Hospital and Research Center of Oakland (CHRCO) for the site located at 747 52nd Street, Oakland, California (Subject Property; Figure 1). CHRCO retained SGI to conduct a Phase I ESA as part of its due diligence associated with the demolition and reconstruction of the Hospital's B and C wings.

1.1 Purpose and Scope

The primary purpose of the Phase I ESA is to identify potential or probable "recognized environmental conditions (RECs)" that could potentially impact the subject property as defined and according to the standard of care as specified by the American Society for Testing and Materials (ASTM) Standard E 1527-05. Generally, a REC is the presence or likely presence of petroleum products or hazardous substances on the ground, groundwater, or surface water on a property under conditions that indicate an existing release, a past release, or a material threat of a release. The term includes those conditions that would be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.

The Phase I ESA was performed in accordance with SGI's proposal, dated February 15, 2008, inclusive of ASTM Standard E-1527-005. Specifically, the scope of work for the Phase I ESA consisted of historical assessment of land use associated with the Subject Property and immediately adjacent properties through review of reasonably available agency records, interviews with applicable representatives of the Subject Property, a reconnaissance of the Subject Property and immediately surrounding properties, and review of regulatory databases regarding the presence or likelihood of RECs associated with the Subject Property. In addition, the Phase I ESA included a review of previous investigations conducted at the subject property and/or immediately adjacent properties. Representatives of SGI visited the Subject Property on July 23, 2008. Color photographs of the subject property are presented in Appendix A. The work performed by SGI is subject to the limitations as noted in this report.

1.2 Special Terms and Conditions (Third Party Reliance)

This report is for the use and benefit of, and may be relied upon by CHRCO, or any of its affiliates, and third parties authorized by CHRCO. Any third party agrees by accepting this report that any use or reliance on this report shall be limited by the exceptions and limitations in this report, the terms and conditions of the project contract with CHRCO with the exception of the limit of liability, and with the

acknowledgment that actual site conditions may change with time, and that hidden conditions may exist at the Subject Property that were not discoverable within the authorized scope of the assessment.

SGL makes no other representation to any third party except that it has used the degree of care and skill ordinarily exercised by environmental consultants in the preparation of the report and in the assembling of data and information related thereto. No other warranties are made to any third party, either express or implied.

1.3 Limitations

SGL has prepared this Phase I ESA using reasonable efforts in each phase of its work to identify recognized environmental conditions associated with hazardous substances, wastes and petroleum products at the Subject Property. The methodology of this Phase I ESA is consistent with the ASTM Standard Practice for E 1527-05. Findings within this report are based on information collected from observations made on the day of the site investigation and from reasonably ascertainable information obtained from governing public agencies and private sources.

This report is not definitive and should not be assumed to be a complete or specific definition of the conditions above or below grade. Information in this report is not intended to be used as a construction document and should not be used for demolition, renovation, or other construction purposes. SGL makes no representation or warranty that the past or current operations at the Subject Property are or have been in compliance with all applicable federal, state and local laws, regulations and codes.

Regardless of the findings stated in this report, SGL is not responsible for consequences or conditions arising from facts that were concealed, withheld, or not fully disclosed at the time the assessment was conducted.

This report does not warrant against future operations or conditions, nor does it warrant against operations or conditions present of a type or at a location not investigated.

The regulatory database report provided is based on an evaluation of the data collected and compiled by a contracted data research company. The report focuses on the Subject Property and neighboring properties that could impact the Subject Property. Neighboring properties listed in governmental environmental records are identified within specific search distances. The search distance varies depending upon the particular government record being checked. The regulatory research is designed to meet the requirements of ASTM Standard E 1527-05. The information provided in the regulatory database report is assumed to be correct and complete.

Subsurface conditions may differ from the conditions implied by the surface observations and can only be reliably evaluated through intrusive techniques.

Reasonable efforts have been made during this assessment of aboveground and underground storage tanks and ancillary equipment. "Reasonable efforts" are limited to information gained from visual observation of largely unobstructed areas, recorded database information held in public record and available information gathered from interviews. Such methods may not identify subsurface equipment that may have been hidden from view due to paving, construction or debris pile storage, or incorrect information from sources.

SGL reviewed past ownership of the Subject Property in an attempt to determine past site usage. SGL is not a professional title insurance firm and makes no guarantee, explicit or implied, that the records which were reviewed represent a comprehensive or precise delineation of past site ownership or tenancy for legal purposes.

We identified obvious subject property uses from the present back to the early 1910s at which time portions of the Subject Property were developed for residential use. This is considered to be data failure since the timeline does not extend back to the first known developed use. We consider the resulting data gap insignificant because the gathered information along with our professional experience raises no reasonable concerns regarding this gap.

2.0 SITE DESCRIPTION

2.1 Site Location and Description

The Subject Property is located entirely within the City of Oakland (Figure 1). The Subject Property is comprised of twenty-one parcels and encompasses an area of approximately 10.7 acres (Figures 1 and 2).

The Subject Property is located at 747 52nd Street in the City of Oakland, California (Figure 1). The Subject Property is comprised of the Children's Hospital and Research Center of Oakland (Current Campus). The Subject Property also includes the area east of Dover Street (one-half city block), between 52nd Street and 53rd Street that contains residential eight residential structures, four of which are owned by the Hospital, and four of which are in private ownership and residential use, and the Hospital's Family Center (Residential Area; Figure 2). The Current Campus is comprised of a parking garage, outpatient care facility, main hospital building, helipad, and office buildings. The Current Campus is almost entirely paved with asphalt and concrete except for landscaped portions.

2.2 Surrounding Sites

The Subject Property is located in an area characterized as mixed commercial/residential. The Subject Property is bounded to the north by 53rd Street with single-family residences beyond, to the east by Highway 24 with residential properties beyond, to the south by Highway 24, and to the west by Martin Luther King Jr. Way with parking lots and multi-level residences beyond (Figure 2).

2.3 Physical Setting

2.3.1 Geography

The Subject Property is located within the Coast Ranges geomorphic province, which is characterized by a series of parallel, northwesterly-trending, folded, and faulted mountain chains. In this part of the providence, the gentle low-lying topography is composed of reworked marine and non-marine sedimentary deposits derived from steeply inclined hills located to the east of the Subject Property. Quaternary uplift resulted in the geologically recent formation of Bay Area hills and valleys including the East Bay Hills. The uplift has caused erosion of the mountains and hills with accompanying deposition in the valleys.

The center of the Subject Property Area is located at 37 degrees 50 minutes 13.0 seconds north latitude and 122 degrees 16 feet 0.2 inches west longitude. The general topographic gradient within the Subject Property is generally sloped towards the west. The elevation of the Subject Property is approximately 100 feet above mean sea level.

2.3.2 Hydrogeology

2.3.2.1 Regional Setting

The Subject Property is located near the San Francisco Bay within an area identified as the East Bay Plain. The East Bay Plain is situated on the east side of the San Francisco Bay depression. The alluvial sediments of the East Bay Plain consist of a mixture of gravel, sand and clay deposited by coalescing alluvial fans. In the vicinity of the site, fluvial and near shore deposits have been mapped (Helley et. al.). The fluvial deposits are described as unconsolidated, moderately sorted, fine sand and silt, with clayey silt and occasional thin beds of coarse sand (Muir 1993). The near-shore deposits are described as a well-sorted, fine to medium grained sand and silt, with lenses of sandy clay and clay. Depth to water is approximately 25-30 feet below ground surface (bgs). Based on soil and groundwater investigations conducted at facilities in the vicinity of the Site, groundwater flow underlying the Subject Property is believed to be generally towards the southwest.

2.3.2.2 Local Setting

Review of boring logs obtained during field investigations on adjacent sites (200 feet west of the Subject Property) indicate soils consisting of silty clays, clays, sandy silts, and sandy clays from ground surface to approximately 10 feet below ground surface (bgs). Below 10 feet bgs, sandy and gravelly clays, and clayey sands, and gravels were encountered to a maximum explored depth of 34 feet bgs (West 2002).

Depth to groundwater in the vicinity of the Subject Property has been reported to occur at approximately 6 and 15 feet below ground surface (bgs). Based on soil and groundwater investigations conducted at facilities in the vicinity of the Site, groundwater flow underlying the Subject Property is estimated to be generally towards the southwest.

3.0 HISTORICAL RESEARCH

SGL reviewed historic documents including aerial photographs, topographical maps, city directories, Sanborn Maps, and conducted an environmental lien search for the Subject Property. Environmental Data Resources, Inc (EDR) of Southport, Connecticut was contracted for this service. In addition to historical data obtained through EDR, building permits, inspection records, historical maps, parcel maps, and historical photographs were obtained from the South San Francisco Building and Planning Divisions and Library and reviewed. The results of the review are summarized below.

3.1 Aerial Photographs and Topographical Maps

SGL reviewed available aerial photographs of the Subject Property and surrounding areas provided by EDR. Each photograph was reviewed for the presence of structures or locations that might utilize petroleum hydrocarbons or other hazardous materials in the course of normal operations. The locations of identified structures were cross-referenced with other available data such as EDR database results and city directories. The available aerial photographs ranged from 1930 to 1998. The following are descriptions and interpretations of the aerial photograph reviews, supplemented with information obtained from the city directory search and information obtained during the site reconnaissance.

Year	Comments
1939	<p>Subject Property: The Subject Property is developed with single-family residences.</p> <p>Surrounding Area: Surrounding areas consist of single-family residences.</p>
1946	<p>Subject Property: A large commercial-style building appears in the central portion of the Subject Property. According to Sanborn maps, this building appears to be the Children's Hospital and Clinic.</p> <p>Surrounding Area: Surrounding areas appear unchanged from the 1946 aerial photograph.</p>
1959	<p>Subject Property: The large commercial-style building denoted in the 1946 aerial photograph has expanded and includes a parking lot located on the south side of 51st Street.</p> <p>Surrounding Area: Surrounding area appear unchanged from earlier aerial photograph.</p>
1965	<p>Subject Property: Two additional large commercial-style building and parking lot are depicted north of the Children's Hospital denoted in the 1959 aerial photograph. The new building situated along Martin Luther King Jr. Way was identified in Sanborn maps to be a nursing and the larger building situated east of the nursing home was the Diagnostic Clinic.</p> <p>Surrounding Area: Surrounding area appear unchanged from earlier aerial photograph.</p>
1982	<p>Subject Property: No significant changes were observed.</p> <p>Surrounding Area: Surrounding areas appear more densely populated with larger buildings. In</p>

Year	Comments
	addition, highway-24 is denoted along the eastern perimeter of the Subject Property and BART tracks are denoted along the western perimeter.
1993	<p>Subject Property: The Subject Property appears as it does today. All three commercial-style buildings occupied by the Children's Hospital, which included the hospital, Diagnostic Center, and nursing home, have been replaced by two large buildings occupied by the Children's Hospital. In addition, a large building also occupied by the Children's Hospital has replaced the parking lot formerly located on the south side of 51st Street.</p> <p>Surrounding Area: No significant changes observed.</p>
1998	<p>Subject Property: No significant changes observed.</p> <p>Surrounding Area: No significant changes observed.</p>

Aerial photographs confirm the presence of the Children's Hospital present on the Subject Property since at least 1946. See Appendix B for copies of the aerial photographs obtained from EDR (1939, 1946, 1959, 1965, 1982, 1993, and 1998).

Topographical Maps

SGL reviewed USGS topographic maps of the Subject Property, adjoining properties, and surrounding area from the EDR collection. Topographical maps for the Subject Property were available from as early as 1915. Copies of the topographic maps reviewed are provided in Appendix C. Map summaries follow.

- 1915 USGS 15-Minute Series San Francisco, California; Scale: 1: 62,500

The Subject Property is occupied by one building (McElrath Mansion Property). Temescal Creek runs along the southern portion of the Subject Property. Adjacent areas appear to be developed with structures.

- 1948 USGS 15-Minute Series San Francisco, California; Scale: 1: 50,000

The small building depicting in the 1915 topographical map has been replaced by a large structure interpreted by SGL to be the original hospital. Surrounding areas remain unchanged.

- 1949 USGS 7.5-Minute Series Oakland West, California; Scale: 1: 24,000

The Subject Property and surrounding area generally appear unchanged.

- 1959 USGS 7.5-Minute Series Oakland West, California; Scale: 1: 24,000

The Subject Property and surrounding area generally appear unchanged.

- 1968 USGS 7.5-Minute Series Oakland West, California; Scale: 1: 24,000

The Subject Property appears relatively unchanged. However, to the west of the Subject Property along Grove Street (Martin Luther King Jr. Way), the BART transit system is under construction. In addition, Highway 24 bounding the Subject Property to the east is under construction.

- 1973 USGS 7.5-Minute Series Oakland West, California; Scale: 1: 24,000

The Subject Property and surrounding area generally appear unchanged, except that both the BART transit system and Highway 24 construction projects have been completed.

- 1980 USGS 7.5-Minute Series Oakland West, California; Scale: 1: 24,000

The Subject Property and surrounding area generally appear unchanged.

3.2 City Directories

Historic City Business Directories were obtained EDR for the address of the Subject Property and nearby surrounding sites. The directories were searched for addresses of business within and adjacent to the Subject Property that might utilize petroleum hydrocarbons or other hazardous materials in the course of normal operations. The following facilities were listed in the EDR city directories on or near Subject Property.

Address	Name or Use	Year
747 52 nd Street	Multiple Medical Facility Listings	1991
	Unlisted in Research Source	1992
	Private Medical Practice	1996
	Private Medical Practices	2000
	Oakland Symphony Chorus	
	Unlisted in Research Source	2002
Surrounding Addresses	Various Residential Listings	1920-2000

Of the facilities listed on or near the Subject Property, none were identified that may utilize petroleum hydrocarbons or other hazardous materials in the course of normal operations.

See Appendix D for copies of the EDR city directory search.

3.3 Sanborn Fire Insurance Maps

Sanborn Fire Insurance Maps were obtained from EDR for the Subject Property and surrounding areas. Each map was checked for structures or locations that might utilize petroleum hydrocarbons or other hazardous materials in the course of normal operations. Sanborn Fire Insurance Maps were available for the Subject Property covering the years 1903, 1911, 1951, 1952, 1967, and 1969. A summary of findings is included below.

1903: Coverage of the Subject Property in 1903 was limited to the area between Shattuck Avenue and what is today Martin Luther King Jr. Way (listed as Grove Way in the 1903 Sanborn Map) between 51st Street and 46th Street. During this time, residential properties and commercial stores were located on the Subject Property. In addition, the Anchor Brewing Company was located on the west side of Shattuck Avenue at the corner of 51st Street and Shattuck Avenue. Surrounding areas to the west consisted of residential properties and commercial stores. The Oakland Transit Consolidated, which consisted of an abandoned powerhouse and car barn, is depicted on the corner of 47th Street and Grove Avenue.

1911: A mix of residential properties and commercial stores are located on the Subject Property. A large residential property (McElrath Property) is located directly east of Grove Avenue, south of 52nd Street. The Anchor Brewing Company is still depicted on the corner of Shattuck Avenue and 51st Street. East of the Subject Property on the corner of Shattuck Avenue and 51st Street, a Pacific Gas & Electric (PG&E) substation is depicted. Directly east of the Subject Property on the 4000 block on Shattuck Avenue, a Steam Laundry facility and the Oakland Traction Company Car Barn are depicted. In addition, a steam cleaning operator is also depicted on the southern portion of the Subject Property at the corner of 47th Street and Grove Avenue. The areas to the north, west, and south of the Subject Property residential properties are depicted.

1951: The large residential property depicted in the 1911 Sanborn Map has been replaced by the Children's Clinic Hospital. North of the hospital and also located on the Subject Property, three nursing homes are depicted. The remaining areas of the Subject Property are occupied by residential properties. The Anchor Brewing Company is no longer depicted. Surrounding areas continue to be occupied by residential properties in addition to the PG&E substation and laundry facility still depicted on the corner of Shattuck Avenue and 51st Street and on the corner of Grove Avenue and 47th Street, respectively. However, the Oakland Traction Company Car Barn formerly located on the east side of Shattuck Avenue between 51st Street and 50th Street is no longer depicted and has been replaced by a shopping market.

1952: The Subject Property and surrounding areas appear as they do in the 1951 Sanborn Map. An additional Sanborn Map covering the area north of the Subject Property up to 55th Street and west of Telegraph Avenue was available for 1952. On this map, Marshall Steel Cleaning Works is depicted west of Telegraph Avenue between 55th Street and 53rd Street.

1967: Additional nursing homes are located west of the Children's Hospital. In addition, the nursing homes previously located north of the hospital have been replaced by a diagnostic center interpreted by SGI to be affiliated with the hospital. Residential properties formerly located south of the hospital are no longer depicted and south of 51st Street along Grove Avenue, the Bruce Lyon Memorial Lab is shown. Surrounding areas appear relatively unchanged except for the steam laundry facility formerly located on the corner of Grove Avenue and 47th Street, which has been replaced by a facility labeled as "VAC".

1969: The Subject Property and surrounding areas appear relatively unchanged from the 1967 Sanborn Map.

See Appendix E for a copy of the Sanborn Map Search Results.

3.4 Environmental Lien Search

SGI contracted EDR to perform an environmental lien search for the address of the Subject Property located 747 52nd Street, assessor's parcel number (APN): 14-1205-19-1. No environmental liens were found for the Subject Property under the given address and APN.

See Appendix F for a copy of the Environmental Lien Search Results.

3.5 Prior Reports

A Draft Environmental Impact Report (EIR) and Final EIR, submitted as an addendum for the Children's Hospital located on the Subject Property, were obtained and reviewed. Both reports were prepared by Environmental Science Associates, Inc., San Francisco, California (ESA) and are dated October 12, 1989 and May 2, 1990, respectively. Historical information about the hospital was obtained from the Draft EIR and was used to supplement other information obtained by SGI to determine the chronological history of the hospital. A summary of the history is provided in section 3.8 below.

3.6 Other Sources of Information

To obtain additional information on the history of the Subject Property and surrounding areas, building permits City of Oakland Permit Center were obtained. In addition, historical clippings and historical photographs for the Children's Hospital were obtained from the Oakland Public Library. A summary of the information obtained is included below.

Copies of permits, historical photographs, and historical clippings are included as Appendix G.

3.6.1 Permits

Permits from as early as 1922 were obtained and reviewed. Permits obtained include framing permits, gas permits, plumbing permits, mechanical permits, building permits, and inspection records for facilities located on the Subject Property. Permits and inspection records were reviewed to determine if any past activities constituted a REC to the Subject Property. Information from the permits was also used to supplement information from other sources for the purpose of generating a chronological history of all developments within the Subject Property.

3.6.2 Historical Clippings

Three news articles (clippings) were obtained from the Oakland Public Library related to the Children's Hospital. The first, an article titled "History of The Baby Hospital" was taken from *The Baby Hospital Bulletin*, a monthly publication produced by the Baby Hospital Association of Alameda County. The article is from the first monthly publication, dated August 1914 and outlines the history of the Children's Hospital. According to the article, the Baby Hospital officially opened its doors as the Baby Hospital around 1913 in a residence formerly owned by the McElrath family and located at 51st Street and Dover Street. The second, an article published in the *Berkeley Chronicle*, dated April 4, 1941 describes the transition of the hospital from the residential building into a new building similar to what is presently there. According to the article, on March 27, 1928, portions of the current building were constructed. The third, an article published in the *San Francisco Tribune* on May 17, 1945, outlines the expansion of the hospital into the facility currently located on the Subject Property today.

3.6.3 Historical Photographs

Two historical photographs that show the Children's Hospital were obtained from the Oakland Library. The first photograph, dated 1914, shows the Children's Hospital (then called the Baby Hospital) as it appeared when it occupied the McElrath residence. The second photograph, an illustration of the planned hospital expansion from an article dated May 17, 1945, illustrates the proposed Children's Hospital building, which is how the ABC wings of the hospital appears today.

3.7 Interviews

Individuals were interviewed in order to obtain information regarding the current or past use of petroleum hydrocarbons or other hazardous materials within the Subject Property. Information obtained from interviews is cross-referenced with information gathered from other sources such as databases, regulatory agencies or historical documents.

Mr. Michael Carlson

Mr. Michael Carlson works as a Stationary Engineer for the Children's Hospital and has been familiar with the Subject Property for more than 20 years. According to Mr. Michael Carlson, a UST was formerly located next to the electrical room. Mr. Carlson had no knowledge of the quantity or type material stored in the UST. According to Mr. Carlson, the UST was removed prior to his association with the hospital. Mr. Carlson was present during the site reconnaissance.

3.8 Summary

Based on the review of historical data obtained through EDR, the City of Oakland Planning and Building Departments, the City of Oakland Library, and an EIR it appears that the Subject Property was first developed in the early 1910s. The following is a summary of the history of the Subject Property based on current and historical records and interpretations by SGI. A summary of the Subject Property development follows.

- The Subject Property was first developed sometime in the early 1900s and consisted of single-family residences, including the McElrath Mansion property;
- In 1912, the McElrath Mansion property was acquired by the Baby Hospital Association, and around 1913 or 1914, the Children's Hospital of Oakland (then called the Baby Hospital) formerly opened its doors;
- In 1928, the McElrath Mansion property was demolished and the AB&C building portion of the current hospital was constructed;
- In 1930, the Baby Hospital was renamed Children's Hospital of the East Bay;
- In 1959, a research laboratory was built across 51st Street from the existing hospital;
- In 1962, the diagnostic and treatment center (D&T building) portion of the main hospital was constructed;
- In 1963, a nurses' dormitory was built along the northwest corner of the intersection of Grove and 52nd Streets;
- In 1964, the hospital was renamed Children's Hospital Medical Center of Northern California;
- In 1975, a third floor was added to the D&T building and a second floor was added to the research laboratory built in 1959;
- In 1982, the 82-Tower building portion of the main hospital was constructed; and

- In the mid 1990s, the Western Expansion building of the main hospital was constructed.

Based on the review of historic documents for facilities located on and adjacent to the Subject Property, no facilities were identified that warranted further investigation.

DRAFT

4.0 SITE RECONNAISSANCE

On July 23, 2008, SGI conducted a site reconnaissance of the Subject Property. An exterior site reconnaissance was performed for all areas of the Subject Property. However, for the residential homes, the exterior site reconnaissance was limited to the street. In addition, an interior site reconnaissance was performed for the main hospital building. The objective of the site reconnaissance was to obtain information indicating the likelihood of identifying RECs in connection with the Subject Property.

Individuals were also interviewed in order to obtain information regarding the current or past use of petroleum hydrocarbons or other hazardous materials within the Subject Property. Information obtained from interviews is cross-referenced with information gathered from other sources such as databases, regulatory agencies or historical documents.

A copy of the photographic log from the site reconnaissance is included as Appendix A.

4.1 Subject Property

4.1.1 Structures

A number of structures were observed on the Current Campus and Residential Area. On the Current Campus, structures present included the main hospital building, an outpatient care center, a parking garage, an office building, and a helipad. In the Residential Area, residential single-family homes and the Family Center were observed. A description of each is provided below.

Current Campus

Main Hospital

During the site reconnaissance, the interior and exterior of the main hospital building were observed. The main hospital building consisted of a five-story structure that was completed in four stages beginning in the late 1920s up through the mid-1990s. These four stages are reflected in the four sections of the hospital building known as the AB&C building, the D&T building, the 82-Towers building, and the Western Expansion building (Figure 3). The main hospital houses patient care rooms, laboratories, a generator room, a steam plant, electrical rooms, offices, and a cafeteria/kitchen. On each floor, two janitorial storage closets housing general cleaning supplies were observed. Outside of the main hospital building on the southwest corner, a loading dock and dumpster area were observed. Near the loading dock, the biohazard waste storage area is located. Biohazard wastes, such as used surgical supplies, are heated in an outdoor autoclave prior to disposal into the general refuse dumpster. Also within this

area, various storage vans and a paint shed were observed. According to Mr. Carlson, the storage vans are used for storing small quantities of hydraulic fluid and oil for the onsite generators. No staining was observed.

Remaining Structures

During the site reconnaissance, the outpatient care center, parking garage, office buildings, and helipad were observed from the exterior. Numerous storage sheds were observed beneath the helipad that according to Mr. Carlson, are used for storing construction materials related to ongoing construction activities at the hospital. Items stored included metal debris, small quantities of paint, pipe-fittings, and scrap wood. In addition, two 55-gallon drums were observed on the Subject Property beneath the helipad in the construction materials storage area. The contents of the drums are unknown but both drums were labeled as hazardous. No stains or spills were observed. The Subject Property was observed to be entirely paved with the exception of landscaped portions associated with the hospital.

Residential Area

The Residential Area includes the Family Center and adjacent residential properties. The site reconnaissance of the Residential Area was limited to the exterior of the properties from the street. No RECs were identified within the Residential Area.

4.1.2 On-Site Chemical and Petroleum Product Storage

SGL looked for chemicals, hazardous substances, petroleum-based fuels and lubricants, and janitorial and cleaning supplies stored on the Subject Property. A number of hazardous materials were observed inside the storage vans located on the Subject Property and in janitorial closets inside the hospital building. These materials included paint and various other chemicals related to the construction activities and maintenance of the on-site generators located on the Subject Property. All materials were located within enclosed storage vans and no evidence of spills or stains was observed. No floor drains were observed in any of the storage areas. Based upon our observations no RECs were observed for hazardous materials storage.

4.1.3 Waste Disposal Practices

SGL identified the current wastes generated at the Subject Property. Waste generated on the Subject Property consisted of biohazard waste related to hospital activities, oily wastes related to restaurant operations, and general refuse. All wastes were disposed of into a dumpster located in a fenced enclosure outside near the loading docks at the southwest portion of the main hospital building.

Biohazard waste was autoclaved prior to deposition. In addition, autoclaved needles were stored in separate 55-gallon labeled trash bin inside the dumpster area.

4.1.4 Storage Tanks

Owners and operators of certain USTs are required to register those USTs with the state agency responsible for administrating the federally mandated UST program. SGI visually observed the Subject Property for surficial evidence of current USTs and ASTs. One 8,000-gallon diesel UST was present in the vicinity of the loading dock/dumpster area just outside the southwest portion of the main hospital building. According to Mr. Carlson, diesel fuel is used to power the backup generators. In addition, Mr. Carlson indicated that sometime in the past, a UST was located south of the engineering building at the corner of B and C sections of the AB&C building (Figure 3). The contents of the UST are unknown and to the best of his knowledge, the UST has been removed. No further information regarding the UST was available.

4.1.5 Polychlorinated Biphenyls (PCBs)

Federal regulations put into effect following the Toxic Substances Control Act (TSCA) require that electrical transformers be labeled to identify their PCB content. Manufacture and distribution of PCBs was banned in 1979. Transformer owners are responsible for compliance with all applicable regulations governing those transformers, including maintenance of the transformer and any remediation work resulting from a transformer-related incident.

Pacific Gas and Electric (PG&E), the owner of the electrical transformers at the Subject Property, would be responsible for proper removal and disposal of the transformers, if required.

4.1.6 Exterior Surface Condition

SGI observed the exterior surface of the Subject Property. No pits, ponds, lagoons, or areas of distressed or dead vegetation were observed at the Subject Property during the site reconnaissance. Most of the Subject Property is paved except for landscaped areas. Several storm drains were observed in the streets that border the Subject Property.

4.1.7 Asbestos Containing Materials and Lead Based Paints

Those buildings at the project site constructed prior to the 1980s may have lead and asbestos present in some form. Prior to 1978, lead compounds were commonly used in interior and exterior paints. Prior to the 1980s, building materials often contained asbestos fibers, which were used to provide strength and

fire resistance. Demolition of the project site buildings has the potential to release lead particles, asbestos fibers, and/or other hazardous materials to the air, where they may be inhaled by construction workers and the general public. In addition, other common items such as fluorescent lighting, thermostats, and electrical transformers can contain hazardous materials which may pose a health risk if not handled and disposed of properly.

B and C Wings of the AB&C Building are scheduled to be demolished within the Subject Property. An asbestos and lead-based paint materials survey has recently been completed in Wings B and C by SGI. The results of the survey will be presented in a separate report.

4.2 Surrounding Areas

The Subject Property is located in an area characterized as mixed commercial/residential. The Subject Property is bounded to the north by 53rd street with single-family residences beyond, to the east by Highway 24 with residential properties beyond, to the south by Highway 24, and to the west by Martin Luther King Jr. Way with parking lots and multi-level residences beyond. No RECs were observed during the exterior reconnaissance of the immediately adjacent surrounding areas.

5.0 RECORDS REVIEW

5.1 Environmental Data Resources Database Review

To investigate the current regulatory status of the Subject Property and surrounding properties, SGI reviewed environmental databases to obtain information concerning the usage, storage, treatment, and disposal of hazardous substances. EDR was subcontracted for this service. The database information was reviewed to identify previous off-site activities and/or facilities that may represent an environmental concern to the subject property. EDR reports are included as Appendix H.

The databases discussed in this section were reviewed for information regarding documented and/or suspected releases of regulated hazardous substances and/or petroleum products on or near the subject property. The following federal, state and local government databases were reviewed.

Federal ASTM Standard

Database	Description
NPL	National Priority List
Proposed NPL	Proposed National Priority List Sites
NPL Recovery	National Priority Lists Sites Recovery
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CERC-NFRAP	CERCLIS No Further Remedial Action Planned
CORRACTS	Corrective Action Report
ICIS	Integrated Compliance Information System
RCRA-TSD	Resource Conservation and Recovery Information System
RCRA-LGQ	Resource Conservation and Recovery Information System – Large Quantity Generator
RCRA-SQG	Resource Conservation and Recovery Information System – Small Quantity Generator
ERNS	Emergency Response Notification System
FUDS	Formerly Used Defense Sites
ODI	Open Dump Inventory
UMTRA	Uranium Mill Tailings Sites
US ENG CONTROLS	Engineering Controls Sites List
US INST CONTROLS	Sites with Institutional Controls

State ASTM Standard

Database	Description
AWP	Annual Workplan Sites
Cal-Sites	California Sites List
CHMIRS	California Hazardous Material Incident Reporting System
Cortese	Cal-EPA/Office of Emergency Information Property Database
Notify-65	State Water Resources Control Board Proposition 65 Database
Toxic Pits	Toxic Pits Cleanup Act Sites
SWF/LF	Solid Waste Information System
WMUDUDS/SWAT	Waste Management Unit Database
LUST	Leaking Underground Storage Tank Incident Reports
CA BOND EXP. PLAN	Bond Expenditure Plan
SWRCY	Recycler Database
UST	Registered Underground Storage Tanks Database
VCP	Voluntary Cleanup Program Properties
INDIAN LUST	Leaking Underground Storage Tanks on Indian Land
INDIAN UST	Underground Storage Tanks on Indian Land
CA FID	Facility Inventory Database
Hist UST	Historical Underground Storage Tank Database
SWEEPS UST	Statewide Environmental Evaluation and Planning System UST lists
WIP	Well Investigation Program Case List

Federal ASTM Supplemental

Database	Description
CONSENT	Superfund (CERCLA) Consent Decrees
ROD	Records of Decision
Delisted NPL	National Priority List Deletions
FINDS	Facility Index System/Facility Identification Initiative Program Summary Report
HMIRS	Hazardous Materials Information Reporting System
MLTS	Material Licensing Tracking System
MINES	Mines Master Index Files
NPL Liens	Federal Superfund Liens
PADS	PCB Activity Database System
DOD	Department of Defense Sites

Database	Description
US BROWNFIELDS	Listing of Brownfields Sites
RAATS	RCRA Administrative Action Tracking System
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
SSTS	Section 7 Tracking Systems
FTTS INSP	FIFRA/TSCA Tracking System – FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

State or Local Supplemental

Database	Description
AST	Aboveground Petroleum Storage Tank Facilities
CLEANERS	Cleaner Facilities
CDL	Clandestine Drug Labs
CA WDS	Waste Discharge System
CS	A list of contaminated sites overseen by the Toxic Release Program
DEED	List of Deed Restrictions
SCH	School Property Evaluation Program
EMI	Emissions Inventory Data
ENVIROSTOR	Department of Toxic Substance Controls database listing sites with known contamination.
HAZNET	Facility and Manifest Data
REF	Unconfirmed Properties Referred to Another Agency
NFA	No Further Action
NFE	Properties Needing Further Evaluation
CA SLIC	SLIC Region Data base from California Regional Quality Control Board
Haznet	Hazardous Waste Manifest Database from Department of Toxic Substances Control
RESPONSE	State Response Sites
SL	Alameda County Property List

EDR Proprietary Historical Databases

Database	Description
Manufactured Gas Plants	Former Manufactured Gas Sites
Historical Auto Stations	Historical Auto Stations
Historical Cleaners	Historical Cleaners

Brownfields Databases

Database	Description
US BROWNFIELD	A Listing of Brownfields Sites
VCP	Voluntary Cleanup Program Properties

5.2 Mapped Sites

Out of the databases searched above, only the following federal, state and local government databases contained mapped site listings within the appropriate search radius as specified in ASTM E 1527-05. See Appendix H for the complete EDR Radius Map database report.

Federal

Database	Description
RCRIS-SMQ	Resource Conservation and Recovery Information System – Small Quantity Generator
FINDS	Facility Index System/Facility Identification Initiative Program Summary Report

State

Database	Description
Cortese	Cal-EPA/Office of Emergency Information Site Database
SWEEPS-UST	Statewide Environmental Evaluation and Planning System – UST Database no longer updated
Notify-65	State Water Resources Control Board Proposition 65 Database
LUST	Leaking Underground Storage Tank Incident Reports
UST	Registered Underground Storage Tanks Database
CS	A list of contaminated sites overseen by the Toxic Release Program
CA FID	Facility Inventory Database
Hist UST	Historical Underground Storage Tank Database
AST	Above Ground Storage Tanks
HAZNET	Facility and Manifest Data
CLEANERS	Cleaner Facilities

State or Local Supplemental

Database	Description
----------	-------------

CA SLIC	SLIC Region Data base from California Regional Quality Control Board
ENVIROSTOR	DTSC Database for Sites with known Contamination

5.2.1 Results of Database Review

To identify those facilities that constituted a recognized environmental condition to the Subject Property, mapped sites were evaluated on the nature of their listings, their location, and distance from the Subject Property. The topography of the Subject Property and adjacent areas slopes toward the southwest. Groundwater flow is reported by EDR to be towards the north. Facilities warranted further investigation if they were located hydraulically upgradient of the Subject Property within a distance of 1/4-mile and had a known release of a hazardous material affecting soil or groundwater. In addition, those facilities which were located hydraulically downgradient and within 1/8-mile of the Subject Property and had a known release of a hazardous material affecting groundwater also warranted further investigation. Of the mapped facilities, seven met the screening criteria described above and warranted additional investigation. These seven facilities include:

- Children's Hospital of Oakland located on the Subject Property at 747 52nd Street;
- Children's Hospital of Oakland located southwest of the Subject Property at 4701 Martin Luther King Jr. Way;
- PG&E Station D formerly located northeast of the Subject Property on the corner of 51st Street and Shattuck Avenue;
- Jin H. Kang formerly located northeast of the Subject Property at 5131 Shattuck Avenue;
- Arco Station #01468 located northeast of the Subject Property at 5131 Shattuck Avenue; and
- Former Chevron Station located northeast of the Subject Property at 5101 Telegraph Avenue.
- Berkeley Land Company (formerly One-Hour Martinizing).

Children's Hospital of Oakland (747 52nd Street)

The Children's Hospital of Oakland (747 52nd Street) is listed in the EMI, HAZNET, RCRA-SQG, FINDS, NY MANIFESTS, and UST databases. This facility is listed as a hospital and medical laboratory and stores small quantities (less than 1000 kilograms (kg)) of hazardous materials, which include photochemicals and metal sludge. No violations were noted and it appears that all hazardous materials were stored according to local, state, and federal guidelines. The facility is also registered with the Underground Storage Tank (UST) database for the operation of an [8,000-gallon diesel UST to power](#)

onsite backup generators. Based on its lack of reported release, and location southwest of the proposed area of redevelopment, the presence of a UST on the Subject Property does not constitute a REC.

Children's Hospital of Oakland (4701 Martin Luther King Jr. Way)

The Children's Hospital of Oakland is listed in the LUST, Cortese, and CS databases. The site is currently developed as an offsite parking lot for CHRCO. In October 1990, a release of gasoline affecting groundwater was discovered during the removal of three USTs. Preliminary site assessment is currently underway. Additional information regarding this site is discussed further below..

PG&E Station D

The PG&E Station D is listed in the Historical UST database for having a UST. No leaks were detected in the tank. No additional information was available.

Jin H. Kang

The Jin H. Kang gas station is listed in the Historical UST database for four USTs. Three of the tanks consisted of 12,000-gallon USTs used for storing product and were installed in 1980. The fourth tank, a 150-gallon UST used for storing waste oil, was installed in 1968. This facility is listed under the same address as the Arco station #06148 and is interpreted by SGI to have been replaced by the Arco station described below.

Arco Station #01468

The Arco Station #01468 is listed in the HAZNET, LUST, Cortese, CA FID UST, EMI, SWEEPS UST, UST, and CS databases. On January 6, 1987, a release of waste oil affecting groundwater was discovered during maintenance of a UST. Characterization of affected groundwater was initiated April 6, 1992 and is still being conducted. In addition, another release from a UST was discovered during a tank closure. A preliminary site assessment is underway. Based on the nature of the release and its proximity this site is not judged to represent a REC to the Subject Property.

Former Chevron Station

The Chevron station is listed in the Notify-65, HAZNET, LUST, Cortese, CA FID UST, and CS databases. On January 1, 1991, a release affecting groundwater was discovered during a UST closure. Groundwater samples collected at the site had detectable concentrations of MTBE. Based on its distance from the Subject Property and the nature of its release, this site does not constitute a REC to the Subject Property.

Berkeley Land Company (former One-Hour Martinizing)

The Berkeley Land Company is listed in the LUST, Cortese, and CS databases. On May 31, 1995, a release of tetrachloroethene (PCE) and petroleum hydrocarbons affecting groundwater was detected during the closure of a UST. The site is currently listed with a regulatory status of "closed" with a close date of January 6, 1999. Based on its distance from the Subject Property, regulatory status, and nature of the release, this site does not constitute a REC to the Subject Property.

Other Releases Identified

A number of historical dry cleaning operations and automotive service stations were identified by EDR within ¼-mile and upgradient of the Subject Property. Both types of facilities have the potential to release petroleum fuels or solvents to groundwater. It is SGI's opinion that the potential for any such releases to have migrated to and be present in groundwater underlying the Subject Property at concentrations that would pose regulatory or human health risk concerns is low due to the nature of potential releases and characteristics of the chemicals released. Therefore, none of these facilities constitutes a REC to the Subject Property.

Unmappable (Orphan) Site Listings

The Source Group also reviewed the "unmappable" (also referred to as "orphan") listings within the EDR database report, cross-referencing available address information and facility names. Unmappable sites are listings that cannot be plotted with confidence, but are identified as being located within the general area of the Project Area based on the partial street address, city name, or zip code. In general, a listing cannot be mapped due to inaccurate or incomplete address information in the database that was supplied by the corresponding regulatory agency. Each orphan site was reviewed and an attempt was made to determine if the site was within the boundaries of the Subject Property. None of the sites were located within the Subject Property boundary and as such do not represent a REC.

5.3 Local Agency File Review

Based on the review of historical documents and photographs, conducting a site walk and from the review of the EDR database results, one facility, The Children's Hospital of Oakland site located at 4701 Martin Luther King Jr. Way, was identified as a potential REC and warranted additional assessment to determine their past use and development, and to estimate the environmental impact (if any) to the Subject Property. To determine whether this facility constituted a REC to the Subject Property, site investigation reports were obtained from the Alameda County Department of Environmental Health online database and reviewed. Below is a summary of the findings.

In April/May 2002, a soil and groundwater investigation was conducted by West Environmental Services and Technology (West) for CHRCO. The investigation included the advancement of three soil borings down to a maximum depth of 35 feet below ground surface (bgs), the collection of 12 soil samples, and

the installation and sampling of three groundwater monitoring wells. Soil samples had detectable concentrations of total petroleum hydrocarbons as gasoline (TPHg) and total petroleum hydrocarbons as diesel (TPHd). Groundwater samples were analysed for TPHg, benzene, toluene ethylbenzene, xylene (BTEX), and methyl-tert butyl alcohol (MTBE). Based on the screening level risk assessment (SLRE) completed by West, only TPHg concentrations in one groundwater sample exceeded risk-based screening levels. Therefore, West recommended case closure for the site (West, 2002). Groundwater flow, according to investigation conducted by West, is reported to be towards the south-southeast (West, 2002). Based on its distance from the Subject Property and relative groundwater flow direction, this facility does not constitute a REC to the Subject Property.

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6.0 CONCLUSIONS

SGI has performed this Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-05 for the Subject Property located at 747 52nd Street, Oakland, California. Any additions to, exceptions to, or deletions from this practice are described in Section 1 of this report.

The Subject Property is located in an area characterized as mixed commercial/residential. The Subject Property is bounded to the north by 52nd street with single-family residences beyond, to the east by Highway 24 with residential properties beyond, to the south by Highway 24, and to the west by Martin Luther King Jr. Way with parking lots and multi-level residences beyond.

Based on the review of historical data obtained through EDR, the City of Oakland Planning and Building Departments, the City of Oakland Library, and an EIR it appears that the Subject Property was first developed in the early 1910s. The current hospital structure was first built in 1928 and consisted of the AB&C building portion the main hospital. Based on the review of historic documents for facilities located on and adjacent to the Subject Property, no facilities were identified that warranted further investigation.

During the site reconnaissance, the Subject Property was observed to be occupied by five structures including a parking garage, outpatient care center, main hospital building, office building, and helipad. In addition, single-family residences along with a Family Center occupied the northern portion of the Subject Property. The site reconnaissance was limited to the exterior of all structures with the exception of the main hospital building. During the site reconnaissance various hazardous materials (e.g., paints, small quantities of petroleum products) related to construction activities and other maintenance activities were observed inside storage containers present on the Subject Property. In addition, various construction materials associated with ongoing construction activities were observed underneath the helipad. No staining was observed. One 8,000-gallon diesel UST is currently in operation at the main hospital. In addition, one historical UST was present just south of the engineering room. According to Mr. Carlson, this UST has been removed. However, the contents and size of the UST is unknown. No further information as to the origins or whether any contamination was present upon removal was available. The Subject Property is almost entirely paved except for general landscaped areas.

A number of facilities are located near the Subject Property that appears on one or more agency databases. Based on the nature of their releases, distance from the Subject Property, and relative location to the Subject Property, none constituted a REC to the Subject Property.

This assessment has revealed no evidence RECs in connection with the Subject Property.

The following environmental concerns, which are not RECs, were noted during this assessment:

Former UST: According to CHRCO personnel (Mr. Michael Carlson) a UST was located south of the engineering building at the corner of B and C sections of the AB&C building (Figure 3). The contents of the UST are unknown and to the best of his knowledge, the UST has been removed. No further information regarding the UST was available. SGI understands that future projects may include excavation and dewatering associated with the reconstruction of hospital building wings B and C. Depending on the depth and location of future excavations and, or trenching, the potential exists to encounter soil and groundwater that has been impacted with releases associated with the former UST. Mitigation measures should be developed for worker health and safety considerations and the proper management of impacted soil and groundwater.

Upgradient Release Sites: Based on our historical research, we identified several documented fuel and solvent release sites located near (<1/4 mile) and upgradient of the Subject property. It is SGI's opinion that the potential for such releases to have migrated to and be present in groundwater underlying the Subject Property at concentrations that would pose regulatory or human health risk concerns is low due to the magnitude of the releases and characteristics of the chemicals released.

SGI understands that future projects may include excavation and dewatering associated with the reconstruction of hospital building wings B and C. Excess soil and groundwater generated from excavations and dewatering that will be disposed of offsite should be tested to confirm that it is non-hazardous and meets the acceptance criteria of the receiving facility. The sampling frequencies and test methods employed to characterize the soil or groundwater are typically determined by the disposal facility accepting the soil or groundwater.

ACM and LBP: Those buildings at the Subject Property constructed prior to the 1980s may have lead and asbestos present in some form. Prior to 1978, lead compounds were commonly used in interior and exterior paints. Prior to the 1980s, building materials often contained asbestos fibers, which were used to provide strength and fire resistance. Demolition of the Subject Property buildings has the potential to release lead particles, asbestos fibers, and/or other hazardous materials to the air, where they may be inhaled by construction workers and the general public. In addition, other common items such as fluorescent lighting, thermostats, and electrical transformers can contain hazardous materials which may pose a health risk if not handled and disposed of properly. Although the presence of these materials is not a REC, this is an environmental concern. Removal and disposal of these materials should be conducted according to the applicable Occupational Safety and Health Administration (OSHA) and Environmental Protection Agency (EPA) guidelines and recommendations.

7.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

We declare that, to the best of our professional knowledge and belief, we meet the definition of environmental professional as defined in §312.10 of 40 CFR 312. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed this Phase I ESA in general conformance with the standards and practices set forth in ASTM Designation: E 1527-05.

Report Prepared by:

Nathan Colton
Senior Staff Scientist

Report Reviewed by:

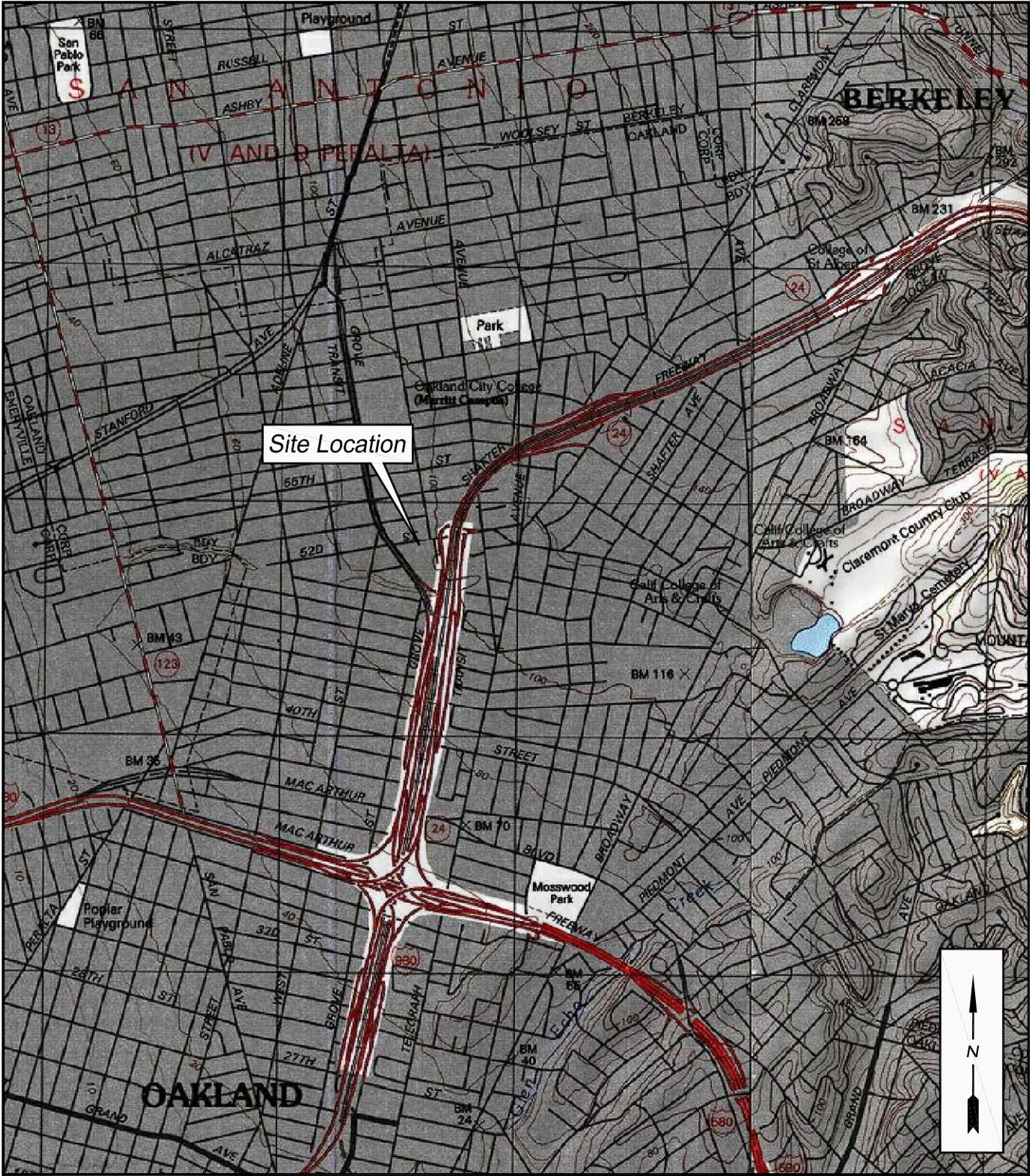
Kent R. Reynolds
Principal Geologist

Patrick Kelleher
Project Geologist

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FIGURES



SGI THE SOURCE GROUP, Inc.
environmental

3451 VINCENT ROAD, SUITE C
PLEASANT HILL, CA 94523

SOURCE: U.S.G.S. 7.5" QUAD SHEET
OAKLAND WEST, CALIFORNIA
REVISED 1993

SCALE:



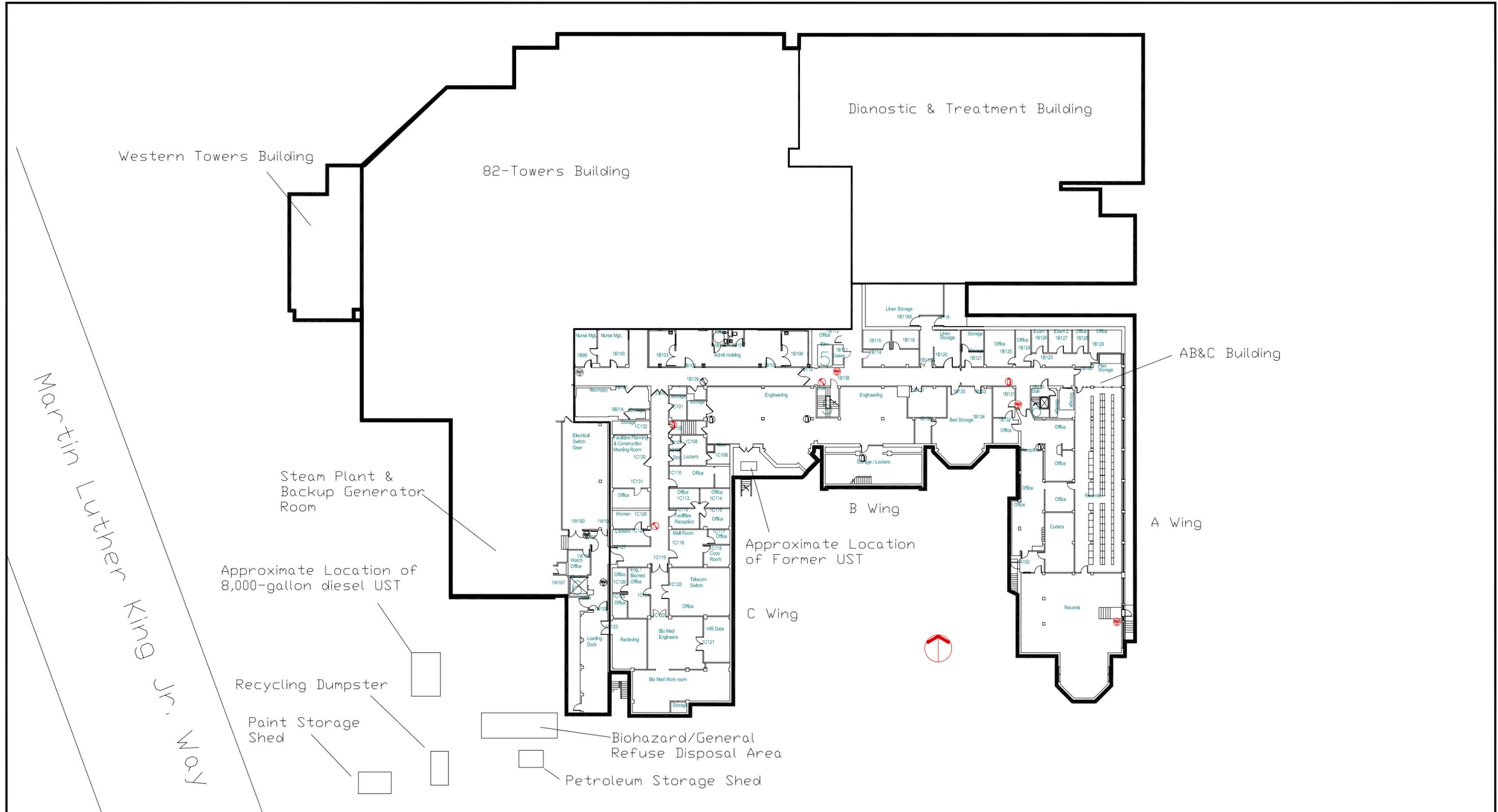
**SUBJECT PROPERTY
LOCATION MAP**

CLIENT:
CHILDREN'S HOSPITAL & RESEARCH
CENTER OAKLAND

DATE:
8/8/08

LOCATION:
747 52nd STREET
OAKLAND, CALIFORNIA

FIGURE:
1



SOURCE GROUP, INC.

3451-C VINCENT ROAD
PLEASANT HILL, CALIFORNIA 94523

SCALE:



PROJECT NO.

01-COH.002

CLIENT:

Harris & Associates, Inc.

FACILITY:

Childrens Hopsital & Research Center Oakland
Oakland, California

DATE:

5/8/08

DRAWN BY:

NC

APP. BY:

KR

FIGURE 3

SUBJECT PROPERTY MAP

APPENDIX A

SITE RECONNAISSANCE PHOTOGRAPHS

Client Name: Children's Hospital and Research Center
Oakland

Photo Date: 7/23/08

Project: Children's Hospital and Research Center Oakland Phase I ESA



Photograph 1: View of the front of the Main Hospital Building looking south from the corner of 52nd Street and Martin Luther King Jr. Way.



Photograph 2: View of Subject Property looking northeast from the southwest corner. Note helipad in background.

Client Name: Children's Hospital and Research Center
Oakland

Photo Date: 7/23/08

Project: Children's Hospital and Research Center Oakland Phase I ESA



Photograph 3: *View of Subject Property looking northeast from the corner of 52nd Street and Martin Luther King Jr. Way. Note parking garage in left background and Outpatient Care Center in right background.*



Photograph 4: *View of the Subject Property looking west from the corner of 52nd Street and Martin Luther King Jr. Way. Note residential properties west of the Subject Property.*

Client Name: Children's Hospital and Research Center
Oakland

Photo Date: 7/23/08

Project: Children's Hospital and Research Center Oakland Phase I ESA



Photograph 5: *View of the Subject Property looking southeast from the corner of 53rd Street and Martin Luther King Jr. Way. Note parking garage in foreground.*



Photograph 6: *View of the Subject Property looking east from the corner of 53rd Street and Martin Luther King Jr. Way.*

Client Name: Children's Hospital and Research Center
Oakland

Photo Date: 7/23/08

Project: Children's Hospital and Research Center Oakland Phase I ESA



Photograph 7: *View of Subject Property looking southwest from the corner of Dover Street and 53rd Street. Note D&T portion of the Main Hospital in the background.*



Photograph 8: *View of boilers located in the engineering room.*

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Oakland

Photo Date: 7/23/08

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Photograph 9: View of one of the nurses' station located in the main hospital.



Photograph 10: View of oxygen cylinders located in a biohazard waste storage room located in the main hospital building.

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Oakland

Photo Date: 7/23/08

Project: Children's Hospital and Research Center Oakland Phase I ESA



Photograph 11: View of a janitorial cleaning closet located in the main hospital.



Photograph 12: View of the biohazard waste disposal area. Note autoclave oven in the background and dumpster in the left foreground.

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Oakland

Photo Date: 7/23/08

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Photograph 13: *View of recycling dumpster. Note paint shed in the background and petroleum storage van in left foreground.*



Photograph 14: *View of paints located in the paint shed.*

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Oakland

Photo Date: 7/23/08

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Photograph 15: View of the hydraulic oil containers located in the storage van depicted in photograph 13.



Photograph 16: View of the boilers located in the steam plant.

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Photo Date: 7/23/08

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Photograph 17: View of the back-up generators located in the steam plant.



Photograph 18: View of the location of the former UST.

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Photograph 19: View construction supplies stored beneath the helipad.



Photograph 20: View of the two 55-gallons drums labeled as hazardous located in the construction materials storage area.

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Oakland

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Photograph 21: View of pipe-fittings and construction materials stored beneath the helipad.



Photograph 22: View looking northwest from the southern portion of the Subject Property. Note BART transit line overhead and multi-level residential structures located in the background.

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Oakland

Photo Date: 7/23/08

Project: Children's Hospital and Research Center Oakland Phase I ESA



Photograph 23: *View looking south from the western perimeter of the Subject Property. Note off-ramp to Highway 24.*



Photograph 24: *View of residential homes located north of the Subject Property. View is looking north from the northern portion of the Subject Property.*

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Oakland

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Photograph 25: *View of looking east from the corner of 53rd and Dover Streets. Note residential homes in the foreground.*



Photograph 26: *View looking east from the corner of 52nd and Dover Streets. Note Highway 24 overpass in foreground.*

APPENDIX B

EDR AERIAL PHOTOGRAPHS

APPENDIX C

EDR TOPOGRAPHICAL MAPS

APPENDIX D

EDR CITY DIRECTORY SEARCH RESULTS

APPENDIX E

EDR SANBORN MAP RESULTS

APPENDIX F

EDR ENVIRONMENTAL LIEN SEARCH RESULTS

APPENDIX G

COPIES OF PERMITS, HISTORICAL CLIPPINGS, AND HISTORICAL PHOTOGRAPHS

APPENDIX H

EDR RADIUS MAP DATABASE REPORT