# Appendix F

# **Phase I Environmental Site Assessment**

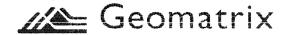
Centennial Boulevard Site Santa Clara, California

Prepared for:

**49ers Stadium, LLC** 4949 Centennial Boulevard Santa Clara, California 95054

May 2008

Project No. 4115.003





May 6, 2008 Project 4115.003

Mr. John Wasson 49ers Stadium, LLC 4949 Centennial Boulevard Santa Clara, California 95054

Subject:

Phase I Environmental Site Assessment

Centennial Boulevard Site Santa Clara, California

Dear Mr. Wasson:

Enclosed is our report that presents the findings of the Phase I Environmental Site Assessment (ESA) that we performed on behalf of the 49ers Stadium, LLC (49ers) of the property located at Centennial Boulevard in Santa Clara, California. The ESA was conducted to assist the 49ers in evaluation of site conditions for redevelopment planning, which includes the construction of a new stadium and associated parking areas.

We appreciate the opportunity to work with the 49ers on this project. Please contact either of the undersigned if you have any questions or require additional information.

Sincerely yours,

GEOMATRIX CONSULTANTS, INC.

Martin B. Bloes Senior Scientist Scott D. Warner, CEG, CHG

Vice President and Principal Hydrogeologist

AJO/kwg

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Enclosure

# **Phase I Environmental Site Assessment**

Centennial Boulevard Site Santa Clara, California

Prepared for:

**49ers Stadium, LLC** 4949 Centennial Boulevard Santa Clara, California 95054

Prepared by:

Geomatrix Consultants, Inc. 2101 Webster Street, 12th Floor Oakland, California 94612

May 2008

Project No. 4115.003





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Appendix J



#### PHASE I ENVIRONMENTAL SITE ASSESSMENT

Centennial Boulevard Site Santa Clara, California

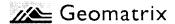
#### **EXECUTIVE SUMMARY**

Geomatrix Consultants, Inc (Geomatrix) conducted a Phase I Environmental Site Assessment (ESA) on behalf of the 49ers Stadium, LLC (49ers) for the property located at Centennial Boulevard in Santa Clara, California (the site). The site is occupied by the 49ers training facility, a maintenance building, several storage sheds, a practice field, three parking lots, a construction yard, and an electrical substation. The property currently is owned by the City of Santa Clara (City); the 49ers are considering redevelopment of the site into a new stadium facility and associated parking areas.

This ESA was conducted consistent with the ASTM International (ASTM) E 1527-05 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Standard). The ASTM Standard complies with U.S. Environmental Protection Agency All Appropriate Inquiries Final Rule, which took effect on November 1, 2006. The purpose of the ESA is to compile and review available information about the site and immediate vicinity to identify recognized environmental conditions (RECs) and historical RECs, as defined by the ASTM Standard.

The primary findings of the ESA are summarized below.

The site consists of ten parcels totaling approximately 39 acres located in the North Bayshore area of the City of Santa Clara in the Santa Clara Valley (Figure 1). The site includes the overflow parking lot for the Santa Clara Golf and Tennis Club and the Santa Clara Convention Center (referred to as Garage Site A), the City of Santa Clara electrical substation on Tasman Drive, the Great America overflow parking lot, a small portion of the City of Santa Clara Youth Soccer Park, the 49ers training facility, and the Centennial storage/staging yard (Figure 2). The site is bordered to the north by Tasman Drive and the former Santa Clara Landfill, which is now the Santa Clara Golf and Tennis Club; to the northeast by an industrial park; to the east by Lafayette Street; to the south and southeast by the Silicon Valley Power Northern Receiving Station, the Gianera Power Plant, two City of Santa Clara aboveground water storage tanks, and the Hetch-Hetchy Regional Water System right-of-way; and to the west by the San Tomas Aquino Creek, Great America theme park, and the Santa Clara Convention Center (Figure 3).

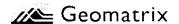


During previous investigation activities performed in the vicinity of the site, first groundwater has reportedly been encountered at approximately 10 to 15 feet below ground surface (bgs) and a deeper groundwater zone has reportedly been encountered at a depth of 20 to 25 feet bgs.

According to a review of historical aerial photographs and an interview with the property owner performed during this assessment, the site consisted of agricultural orchards up until the time it was developed into its current use. Site reconnaissance conducted by Geomatrix on April 7, 2008 did not reveal activities or features of significant environmental concern. Additionally, the site is not listed on any environmental databases.

Environmental investigations have been conducted by others at the former landfill north of the site, at several properties within the industrial park northeast of the site, and at several commercial properties southeast of the site. Three off-site properties with reported releases of chemicals to soil and/or groundwater that could have the potential to impact the site were identified. Based on the reported groundwater flow direction and the reported limited extent of impacted groundwater beneath the facilities, two downgradient properties were concluded to have a low potential for impacts to affect the site. Investigations at the third property (i.e., Hogan Drive property) have reported detections of CVOCs in soil and groundwater samples collected from the property, which is located hydraulically crossgradient to the site. Remediation activities have been performed at this property; however, investigations are currently ongoing and a conclusion of whether the impacts at this property could affect the site could not be reached.

This assessment has revealed no evidence of RECs; however, the potential for residual pesticides in soil and groundwater associated with historical agricultural use cannot be eliminated from consideration. No soil or groundwater investigations have been conducted at the site to confirm or clear the presence of residual chemical impact. Based on this, insufficient information is available to classify the potential presence of residual pesticides in soil and/or groundwater as an REC. Soil and groundwater sampling activities are required to assess the potential presence of residual pesticides at the site and its impact on future site redevelopment plans. Additionally, ongoing investigation at the Hogan Drive property located hydraulically crossgradient to the site should be monitored to determine whether the impacts at this off-site property could affect the site and future site redevelopment plans.



#### PHASE I ENVIRONMENTAL SITE ASSESSMENT

Centennial Boulevard Site Santa Clara, California

# 1.0 INTRODUCTION

This report presents the results of a Phase I Environmental Site Assessment (ESA) for the property located at Centennial Boulevard in Santa Clara, California (the site) (Figure 1). The site is occupied by the 49ers training facility, a maintenance building, several storage sheds, a practice field, three parking lots, a construction yard, and an electrical substation. Geomatrix Consultants, Inc. (Geomatrix) performed the ESA on behalf of the 49ers Stadium, LLC (49ers). We understand the site currently is owned by the City of Santa Clara (City), and that the 49ers are considering redevelopment of the site, which includes the construction of a new stadium and associated parking areas. It is our understanding that the City will retain ownership of the subject property, and that the 49ers will occupy the property as lease holders.

This ESA was conducted consistent with the ASTM International (ASTM) E 1527-05 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Standard, 2005). ASTM E 1527-05 complies with U.S. Environmental Protection Agency (EPA) All Appropriate Inquiries (AAI) Final Rule (40 CFR 312), which was promulgated November 1, 2005, and took effect on November 1, 2006.

# 1.1 PURPOSE

The purpose of this ESA is to compile and review available information about the site and immediate vicinity to identify *recognized environmental conditions* (RECs) to the extent feasible pursuant to ASTM E 1527-05. According to the ASTM Standard, a REC is defined as:

"the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a threat to public health or the environment and that generally would not be the



subject of an enforcement action if brought to the attention of appropriate government agencies."

#### 1.2 REASON FOR PERFORMING THE ESA

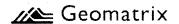
The 49ers are considering redevelopment of the site and require an ESA to evaluate site conditions for redevelopment planning and to support the Environmental Impact Report. This ESA has been prepared using the ASTM Standard and constitutes "all appropriate inquiry into the previous ownership and uses of the property consistent with good commercial or customary practice" as defined at 42 United States Code (U.S.C.) §9601(35)(B).

# 1.3 SCOPE OF SERVICES

The scope of services for this ESA is described in the April 2, 2008, Geomatrix proposal to the 49ers. This ESA included the following tasks:

- conducting site reconnaissance to observe and document current conditions and activities at the site;
- conducting a visual survey of immediately adjacent parcels from the site or from public streets;
- interviewing the site owner and occupant as identified by the 49ers;
- interviewing past owners and occupants of the site if identified by the current owner;
- interviewing a representative of a local environmental regulatory agency regarding potential environmental conditions, if applicable;
- reviewing historical documents, state, tribal and local government records or other restrictions on the site going back to the first time the site had structures or was used for residential, agricultural, commercial, industrial, or governmental purposes, if readily available;
- reviewing available historical aerial photographs for the site and vicinity;
- reviewing available Sanborn Fire Insurance maps for the site and vicinity;
- reviewing available historical topographic maps for the site and vicinity;

<sup>1.</sup> The AAI Final Rule applies to "... conditions indicative of releases and threatened releases of hazardous substances... (and) petroleum or petroleum products are excluded from the definition of hazardous substance..." (40 CFR 312.1).



- obtaining a regulatory database search report to identify reported on-site and off-site chemical releases that may affect soil or groundwater conditions at the site;
- obtaining a report of environmental liens against the site;
- reviewing selected agency files identified in the regulatory database search report (EDR report<sup>2</sup> included in Appendix A) to obtain current status of environmental assessments and/or remediation at the site and nearby properties;
- reviewing environmental documents related to the site provided by the 49ers;
- evaluating the available information outlined above and identifying data gaps, open issues, and key uncertainties; and,
- preparing a report documenting these activities and identified *recognized* environmental conditions (RECs) and historical recognized environmental conditions (HRECs), including our opinions on the significance of the data gaps insofar as they impact the ability to identify possible RECs and HRECs.

#### 1.4 EXCLUSIONS

This ESA did not include a property title search or identification of all previous tenants; collection and chemical analysis of samples of soil, water, or air; or an evaluation of seismic characteristics. In addition, according to the ASTM Standard, the following issues are not part of the scope of a Phase I ESA:

- Asbestos-containing building materials
- Lead in drinking water
- Radon
- Ecological resources
- Biological agents

- Cultural and historic resources
- Wetlands
- Industrial hygiene
- Endangered species
- Mold

- Regulatory compliance
- Lead-based paint
- Health and safety
- Indoor air quality

#### 1.5 SIGNIFICANT ASSUMPTIONS

Based on the information provided in the EDR report (Appendix A) and regulatory agency records (discussed in Section 4.1), the regional horizontal groundwater gradient in the vicinity of the site is assumed to be to the north northeast,. Geomatrix did not measure groundwater elevations during this Phase I ESA to confirm groundwater gradient direction at the site.

<sup>2.</sup> Environmental Data Resources, Inc. (EDR), of Milford, Connecticut, report dated March 25, 2008.



# 1.6 LIMITATIONS

This report does not constitute legal advice. Geomatrix also makes no determination or recommendations regarding the decision to purchase, sell, or provide financing for the site.

#### Uncertainty Not Eliminated

Per the ASTM Standard, no ESA can wholly eliminate uncertainty regarding the potential for RECs or HRECs in connection with a property. The use of the ASTM Standard is intended to reduce, but not eliminate, this uncertainty.

Within the limitations of the agreed-upon scope of work and the ASTM Standard, Geomatrix has conducted this ESA in a professional manner in accordance with generally accepted practices, using the degree of skill and care ordinarily exercised by environmental consultants under similar circumstances. Due to physical limitations inherent to this or any environmental assessment, Geomatrix does not warrant that the site is free of pollutants or that all pollutants have been identified. As such, no absolute determination of environmental risks can be made. No other warranties, expressed or implied, are made.

# Reliance on Information Provided by Others

Geomatrix has relied upon information provided by others in the evaluation of environmental site conditions reported herein. Geomatrix did not attempt to independently verify the accuracy or completeness of that information. To the extent that the opinion and conclusions in this report are based in whole or in part on such information, those conclusions are contingent on its accuracy and validity. Geomatrix assumes no responsibility for any consequence arising from any information or condition that was concealed, withheld, misrepresented, or otherwise not fully disclosed or available to Geomatrix.

# 1.7 USER RELIANCE

This ESA report has been prepared by Geomatrix for the express use of the 49ers, David J. Powers, and the City of Santa Clara. No other parties shall rely on this report without the written consent of Geomatrix and these parties. The 49ers, David J. Powers, and the City of Santa Clara may release this report to third parties; however, such third party in using this report agrees that it shall have no legal recourse against Geomatrix, its parent, or subsidiaries.

#### 2.0 SITE DESCRIPTION

The characteristics and uses of the site and vicinity are described in the following sections.



# 2.1 LOCATION AND LEGAL DESCRIPTION

The proposed stadium site is located north of the Hetch-Hetchy right-of-way, east of the San Tomas Aquino Creek, south of Tasman Drive, and west of Lafayette Street in Santa Clara, California (Figure 2). Two additional parcels are included in the site boundaries, but are not directly adjacent to the proposed stadium site. The electrical substation is located to the west of the San Tomas Aquino Creek and south of Tasman Drive (Figure 2). The proposed Garage Site A is located north of Tasman Drive and east of the San Tomas Aquino Creek (Figure 2).

According to the Chicago Title Company's Preliminary Title Reports provided by the 49ers to Geomatrix, the site encompasses the following parcels, totaling approximately 39 acres:

| Description                               | Address                      | Assessor's Parcel Number   |
|---|------------------------------|--|
| Garage Site A                             | 5166 Stars and Stripes Drive | 104-03-040   |
| City of Santa Clara Electrical Substation | Tasman Drive                 | 104-43-038   |
| Great America Overflow Parking Lot        | Centennial Boulevard         | 104-43-030   |
| City of Santa Clara Youth<br>Soccer Park  | 5049 Centennial Boulevard    | 104-43-049   |
| 49ers Training Facility                   | 4949 Centennial Boulevard    | 104-43-047   |
| Centennial Storage/Staging Site           | 4857 Centennial Boulevard    | 104-06-012, 104-06-013,<br>104-06-014, 104-06-017,<br>104-06-086 |

The general layout of the site is shown on Figure 2.

#### 2.2 SITE AND VICINITY GENERAL CHARACTERISTICS

The general site setting and the geology and hydrogeology in the vicinity of the site are summarized in the following paragraphs.

# 2.2.1 General Site Setting

The site is located in the North Bayshore area of the City of Santa Clara in the Santa Clara Valley (Figure 1). The site is bordered to the north by recreational facilities, to the east by a Lafayette Street, to the south and southeast by industrial facilities, and to the west by the San Tomas Aquino Creek and commercial parcels (Figure 2).

# 2.2.2 Geology and Hydrogeology

According to the California Regional Water Quality Board, San Francisco Bay Region (Water Board), the site is located in the Santa Clara Valley on levee and overbank/flood basin deposits (Water Board, 2002a). The site is on a low lying, relatively flat portion of the valley



near the boundary where alluvial fan deposits merge and interfinger with estuarine deposits. Shallow sediments beneath the site are characterized by silty to sandy clay and sandy clay and lesser amounts of sand and gravelly sand.

According to the geologic mapping of Helley (1989), the sediments underlying the site consist of Holocene age levee and floodplain deposits. Natural levee deposits border the channels of the Guadalupe River and the San Tomas Aquino Creek (sandy to silty clay). Floodplain deposits consist of organic-rich clay to very fine silty-clay deposits occupying the lowest topographic position between the Holocene natural levee deposits.

In the vicinity of the site, first groundwater is reported to occur at a depth of 10 to 15 feet below ground surface (bgs) and a deeper groundwater zone is reported to occur at a depth of 20 to 25 feet bgs (Geomatrix, 2005).

#### 2.3 CURRENT USE OF THE SITE AND ADJOINING PARCELS

The parcel located at 5166 Stars and Stripes Drive currently is used as overflow parking for the Santa Clara Golf and Tennis Club and the Santa Clara Convention Center (referred to as Garage Site A). The substation located on Tasman Drive is a 12 kilovolt (kV) electrical transmission facility serving the businesses in the North Bayshore area. The substation is owned and operated by the City. The parking lot west of Centennial Boulevard is an overflow parking lot for the Great America theme park. A small portion of the City of Santa Clara Youth Soccer Park property is included within the site boundaries and currently consists of landscaping and the entrance to the facility's parking lot.

The parcel located at 4949 Centennial Boulevard currently is used as the 49ers headquarters and training facility. The main building is a two-story building which includes a weight room, locker room, and swimming pool on the ground floor and office space and conference rooms on the second floor. Adjacent to the main building is a two-story maintenance building which consists of a large warehouse on the ground floor and storage space on the second floor. A large training field is located east of the buildings and surface parking lots are located adjacent to the buildings and the training field.

The parcels located at 4857 Centennial Boulevard currently are being leased by the City to Paragon Services, Inc., and are used as a construction storage and staging area. The adjoining property to the southeast of the construction yard is the Silicon Valley Power Northern



Receiving Station, which shares the 4857 Centennial Boulevard address. Further east are the Altamont Commuter Express and Amtrak railway and Lafayette Street.

South of the site is the Gianera Power Plant, two 4.7 million-gallon capacity aboveground water storage tanks belonging to the City, and the Hetch-Hetchy Regional Water System right-of-way managed by the San Francisco Public Utilities Commission (SFPUC). To the west are the San Tomas Aquino Creek, the Great America theme park, and the Santa Clara Convention Center. North of the site are the Santa Clara Golf and Tennis Club and the City of Santa Clara Youth Soccer Park. Tasman Drive and the Santa Clara Valley Transportation Authority (VTA) light rail system run through the site north of the Centennial Boulevard overflow parking lot.

#### 3.0 INFORMATION PROVIDED BY USER

At the request of Geomatrix, John Wasson, Project Executive with the 49ers Stadium, LLC, completed an ESA questionnaire for the site. The purpose of the questionnaire was to gather information from the 49ers, user of this ESA, regarding the site. A copy of the completed questionnaire is included in Appendix B. Specific information about the site provided by Mr. Wasson in the questionnaire is described in Sections 3.1 through 3.5. Additional information provided by Mr. Wasson is presented in Section 3.6.

#### 3.1 TITLE RECORDS AND ENVIRONMENTAL LIENS OR ACTIVITY AND USE LIMITATIONS

According to Mr. Wasson, the 49ers do not have knowledge regarding environmental liens or activity and use limitations of the site. Preliminary title reports, commissioned by the 49ers from the Chicago Title Company, did not indicate any environmental liens or activity and use limitations for the site, nor did it indicate any easements or prior titles that would suggest the potential for environmental impacts to exist at the site.

#### 3.2 SPECIALIZED KNOWLEDGE

Pursuant to the questionnaire, Mr. Wasson provided historical research on the property to Geomatrix. Historical research included historical aerial photographs of the site and environmental documents, maps, and photos of the former Santa Clara Landfill, which is located directly north of the site adjacent to Garage Site A. Mr. Wasson also provided as-built drawings for the training facility located at 4949 Centennial Boulevard.

# 3.3 COMMONLY KNOWN OR REASONABLY ASCERTAINABLE INFORMATION

As described in the questionnaire responses, Mr. Wasson provided information on known past uses of the property to Geomatrix (described further in Section 6.2). Additionally, Mr. Wasson



provided the results of an internet search of the U.S. Environmental Protection Agency's (U.S. EPA) Envirofacts Database concerning the site and properties in the vicinity of the site.

#### 3.4 VALUATION REDUCTION FOR ENVIRONMENTAL ISSUES

The 49ers anticipated interest in the property is not for purchase and is expected to be a leasehold position based on considerations not directly related to fair market value of the land. As a result, no valuation reduction or fair market value assessment of the property is included in this report.

# 3.5 OWNER, PROPERTY MANAGER, AND OCCUPANT INFORMATION

Mr. Wasson provided contact information for Ron Garratt, Assistant City Manager of the City of Santa Clara, to Geomatrix (Section 5.0). Mr. Wasson also provided title reports as indicated in Section 3.1. A questionnaire was completed by Mr. Garratt, which is included in Appendix C and summarized in Section 7.0.

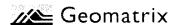
#### 3.6 OTHER

Mr. Wasson provided numerous documents and database search records to Geomatrix for review as part of this ESA. A list of the documents is included with the references (Section 13.0). A summary of the information provided in these reports pertaining to environmental conditions at the site is presented below and the database findings are discussed in Section 4.1.

#### Former City of Santa Clara All Purpose Sanitary Landfill

The former City of Santa Clara All Purpose Sanitary Landfill, located directly north of the site (Figure 3), originally included the locations of Garage Site A, the overflow parking lot for Great America, the youth soccer park, and the 49ers training facility within its boundaries. The original 260-acre property was divided into 7 parcels (Parcels 1 through 7); however, adjacent construction ultimately reduced the available landfill area to approximately 210 acres.

The former landfill was owned by the City and operated by the All Purpose Landfill and Disposal Company and Mission Trail Waste Systems as a Class III landfill. According to the Water Board, accepted waste materials included municipal waste, construction debris, and non-hazardous industrial and commercial wastes. Relatively smaller quantities of hazardous materials, including solvents, organic compounds, heavy metals, acids, and bases, were also disposed at the landfill (Water Board, 2002a).



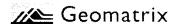
According to EMCON Associates, the landfill was operated from 1934 to 1993, when it ceased accepting waste and began implementing closure activities. Parcels 2 and 4 were closed in the late 1970s and early 1980s and were subsequently converted to a municipal golf course in 1986. Parcels 5 and 7, which includes the overflow parking lot for the Santa Clara Convention Center, the overflow parking lot for Great America, the youth soccer park, and the 49ers training facility, are located south of Parcel 4 and were not used for landfilling. Portions of these parcels were incorporated into the golf course and developed commercially. Parcels 1 and 3/6 were the last to close in the early 1990s (EMCON Associates, 1992).

According to the Water Board, groundwater samples collected from points beneath the landfill are reported to be affected by chlorinated volatile organic compounds (CVOCs). Historic maximum reported concentrations for some of these compounds were 250 micrograms per liter ( $\mu$ g/L) cis-1,2-dichloroethene (cis-1,2-DCE), 61  $\mu$ g/L trans-1,2-dichloroethene (trans-1,2-DCE), and 37  $\mu$ g/L vinyl chloride. The groundwater samples with CVOCs detected were collected from beneath Parcel 4; the inferred groundwater plume is approximately 1,000 feet wide and 1,500 feet long. Groundwater impacted with CVOCs, landfill leachate, and landfill gas are reportedly not migrating beyond the landfill footprint (Water Board, 2002a).

According to the Water Board, extensive groundwater monitoring at the landfill site indicates that concentrations of CVOCs in groundwater are stable or declining. Buildup and migration of leachate is prevented by capping, clay cut-off walls, and operation of a leachate control and removal system. A landfill gas collection system is in operation. Additionally, landfill gas probes are located along the perimeter of the landfill, including directly north of the Garage Site A (SCS Engineers, 2006).

According to the Water Board, sampling of groundwater monitoring wells upgradient of the landfill suggested that low levels (i.e., on the order of or less than regulatory thresholds) of volatile organic compounds (VOCs) are migrating toward the landfill site from off-site upgradient areas. Shallow well (i.e., 25 feet deep) G-15 is located at Garage Site A. Groundwater samples collected from this well did not contain detectable concentrations of CVOCs in 2004 (EMCON/OWT, Inc., 2004). Surface water samples obtained from the San Tomas Aquino Creek and the Guadalupe Creek indicate that trace levels of VOCs detected in the two creeks originate from upstream sources (Water Board, 2002a).

The former landfill property also was found to be listed as Pacific Energy and Ogden Power Pacific, Inc. The Bay Area Air Quality Management District granted a permit to Pacific Energy



in March 1985 to construct a landfill gas collection and conversion facility at the landfill on the closed portion of Parcel 1, Parcel 2, and Parcel 4. Additional information about Pacific Energy is provided in Section 4.1.2.

#### 4.0 RECORDS REVIEW

The records reviewed for this ESA included standard environmental databases, readily-available historical information (e.g., aerial photographs and topographic maps), and documents provided by the 49ers. The information from the review of these documents is described in the following sections.

#### 4.1 STANDARD ENVIRONMENTAL RECORD SOURCES

Geomatrix retained Environmental Data Resources, Inc. (EDR) of Milford, Connecticut, to search federal, state, and tribal environmental regulatory databases to identify properties located within 1 mile of the site with documented environmental releases and/or those that use, store, or dispose of regulated chemicals. The radii of the database searches corresponded to the recommended radii in the ASTM Standard. A list and descriptions of the regulatory databases searched and the results are presented in the EDR report, dated March 25, 2008, which is provided in Appendix A. The information provided by EDR is limited to what has been reported or registered in each database. The environmental databases identified that may indicate a spill or release are:

- CORRACTS contains a list of handlers that have reported Resource Conservation and Recovery Act (RCRA) Corrective Action Activity;
- RCRIS the RCRA database, which includes selected information on sites that generate, store, treat, or dispose of hazardous waste;
- AWP- This California Environmental Protection Agency-generated list contains the Department of Toxic Substance Control's (DTSC's) Annual Workplan, and identifies hazardous substance sites targeted for cleanup;
- Cal Sites contains known and potential hazardous substance sites listed by the DTSC;
- Cortese identifies public drinking water wells with detectable concentrations of constituents, hazardous substances sites selected for remedial action, and other release sites;



- TOXIC PITS- The State Water Resources Control Board (SWRCB) supplies the data for this list which identifies sites suspected of containing hazardous substances where cleanup has not yet been completed; and
- WMUDS/SWAT contains an inventory of sites that are registered with the SWRCB as waste management units;
- LUST the Leaking Underground Storage Tank database, which contains leaking underground storage tank (UST) sites;
- BEP- Department of Health Services' Bond Expenditure Plan.
- RAATS the RCRA administration Tracking System, which contains records based on enforcement actions issued under RCRA for major violators. It also includes administrative and civil actions brought by the U.S. EPA;
- UST the Underground Storage Tank database contains registered USTs;
- CA FID the Facility Inventory Database contains active and inactive UST locations;
- HIST UST contains a historical list of registered USTs;
- AST the Aboveground Storage Database contains registered aboveground storage tanks (ASTs);
- HAZNET contains data extracted from hazardous waste manifests submitted each year to the DTSC;
- TRIS the Toxic Release Inventory System, which identifies facilities that have reported to the U.S. EPA that they release toxic chemicals to the air, water, and land in reportable quantities under SARA Title III, Section 313; and
- CA SLIC contains spill, leaks, and industrial cleanup sites from the Water Board.

Based on this list of key environmental databases, Geomatrix reviewed the EDR report and online database findings to identify cases that could potentially affect soil or groundwater beneath the site. According to the EDR report, the site was not identified in any of the databases searched. Additionally, 32 properties were identified within ½-mile of the site. Of the 32 properties, Geomatrix identified three which were generally either fuel-leak cases within ¼-mile or solvent cases within ½-mile of the site and had not received regulatory closure according to the EDR report and online database findings.



If the EDR report did not contain sufficient information to determine whether a property has the potential to affect the site or if the information provided by EDR indicated that a property does have the potential to affect the site, then Geomatrix requested access to review case files at the applicable regulatory agency. In addition to open case files, Geomatrix requested files for some properties that were listed as "closed" in the EDR report to obtain information regarding groundwater flow direction. Geomatrix did not request information for properties listed as "orphan sites" by EDR that did not have any information regarding their locations relative to the site. Based on these criteria, Geomatrix contacted the Water Board, the DTSC, and the Santa Clara Valley Water District (SCVWD) and requested files for the site and surrounding properties of interest.

Additional information was provided by Mr. Wasson of the 49ers from his search on the U.S. EPA's Envirofacts database. Geomatrix also conducted an online data base search of the Water Board's Geotracker database and the DTSC's Envirostor database. The information reviewed in the case files made available by these agencies and in the EDR report and online databases is summarized below and in Table 1. The locations of off-site properties with reported releases to soil and/or groundwater that could have the potential to impact the site are shown on Figure 4.

#### 4.1.1 On-site

The site was not identified in the EDR database search.

# 4.1.2 Off-site

The following three off-site facilities with reported releases to soil and/or groundwater that could have the potential to impact the site were identified in the EDR database search:

**2301 Calle De Luna**, D&H Manufacturing Co. (1/4 - 1/2 mile northeast of the site): RCRA-SQG, FINDS, HAZNET, SLIC. The information included in the records reviewed indicates that:

- D&H Manufacturing Company manufactured precision metal parts for the semiconductor industry at this facility from 1984 to 2005. They operated an 8,000 square-foot single-story building on the property which had a chemical storage area with a sump to contain fluids draining from the metal chip bins.
- Soil and groundwater in the area of the sump are impacted with CVOCs. Sampling in 2001 found high concentrations of CVOCs, particularly tetrachloroethylene (PCE), 1,1,1-trichloroethane (TCA), and methylene chloride. The greatest concentration of PCE was 3,900 milligrams per kilogram (mg/kg) in soil and 71



milligrams per liter (mg/L) in groundwater. The groundwater contaminant plume is contained beneath the onsite building and the adjacent off site building at 2281 Calle de Luna (downgradient).

- Twelve groundwater monitoring wells have been installed as part of environmental investigations: eight on the property, two on the downgradient property (2281 Calle de Luna), and two in the City's right of way adjacent to the downgradient property.
- Approximately 55 cubic yards of contaminated soil was excavated from trenches around the former sump area in 2003. After soil excavation, Hydrogen Releasing Compound (HRC) was added to the bottom of the trenches prior to backfilling with clean soil to enhance subsurface conditions to promote biological degradation of residual CVOCs.

Based on the reported groundwater flow direction (hydraulically downgradient from the site) and the limited extent of impacted groundwater beneath the facility, the potential for the impacts at this facility to affect the site is judged to be low.

4767 Lafayette Street, Shaheen Property (1/4 – 1/2 mile northeast of the site): LUST, SLIC, HIST LUST. The information included in the records reviewed indicates that:

- A gas station formerly operated at this location on the corner of Lafayette Street and Hogan Drive from approximately 1964 to 1989. Three 4,000-gallon underground gasoline tanks and one 500-gallon underground waste oil storage tank were present on the property and were removed in 1989.
- Sampling conducted in October 1989 did not detect total petroleum hydrocarbons (TPH) or benzene, toluene, ethylbenzene, and xylenes (collectively referred to as BTEX) beneath the gasoline tanks. Moderate to low concentrations of TPH, toluene, ethylbenzene, and xylenes were detected beneath the waste oil tank, as well as a high concentration of oil and grease. Additionally, low concentrations of CVOCs were detected in a sample of the waste oil, including TCE at 44 mg/L and PCE at 24 mg/L.
- Additional sampling was conducted beneath the former gasoline tanks in December 1989 at the request of the City of Santa Clara Fire Department. Soil samples contained TPH quantified as gasoline (TPHg) at concentrations up to 6 mg/kg. Water results showed the presence of TPHg up to 3,300 mg/L.
- Additional soil excavation was completed in 1990 to a depth of 12 feet bgs beneath the former gasoline tanks and the waste oil tank. Following confirmation sampling, the excavations were reportedly backfilled with clean imported material.

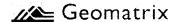


• The SCVWD has not issued a closure letter for this site. A two-story office/retail structure has since been built at this location in 1991.

Based on the reported groundwater flow direction (hydraulically crossgradient from the site) and the limited extent of petroleum hydrocarbons remaining in the subsurface beneath the facility, the potential for the impacts at this facility to affect the site is judged to be low.

*Hogan Drive/Lafayette Street*, Hogan Drive Property (1/4 - 1/2 mile northeast of the site): VCP, ENVIROSTOR. The information included in the records reviewed indicates that:

- A dry cleaning facility formerly operated at this location in the Fairway Glen Shopping Center. The shopping center was constructed in the 1960s; however, it is unknown when the dry cleaning facility began operation at this location. The last owner operated the facility from approximately 1994 to the mid 2000s. The facility operator collected wastewater in tanks on site before having it disposed off site. Three storage tanks and one 55-gallon drum were located in a hazardous materials storage shed behind the shop on a concrete pad without secondary containment (e.g., berms or curbs).
- The identification of PCE and TCE at an adjacent property (4764 Lafayette Street) led to an environmental investigation of the Fairway Glen Shopping Center. The results of a soil and groundwater investigation indicated the presence of PCE at concentrations of 410 micrograms per liter (μg/L) at 2 feet bgs and 330 μg/L at 8 feet bgs.
- Approximately 900 cubic yards of PCE-contaminated soil was excavated from beneath the former dry cleaning facility in 2006. Confirmation sampling indicated PCE remained in the soil up to 14 feet bgs; however, further excavation was constrained by the street curb and the presence of subsurface utilities (i.e., active water main).
- Additional investigation activities conducted in June 2006 identified concentrations of PCE in groundwater up to 8 mg/L and in soil up to 2.4 mg/kg. Trace levels of Cis-1,2-DCE and TCE were also detected in groundwater.
- The former Fairway Glen Shopping Center has been demolished and a residential development has been built at this location.
- Additional investigation is currently ongoing. Field work to collect soil, soil vapor, and groundwater data north of the site has been completed in October 2007; however, results have not yet been reported.



Although the reported groundwater flow direction is hydraulically crossgradient from the site, the potential for the impacts at this facility to affect the site cannot be determined in the absence of the results of the ongoing investigations.

Other off-site facilities were identified in the vicinity of the site which did not have reported releases to soil and/or groundwater that could have the potential to impact the site. A large number of properties were identified in the industrial park located ½ to ½ mile northeast of the site with no reported leaks or spills. The majority of these properties are listed as hazardous waste handlers because they are facilities which generate, transport, store, treat and/or dispose of hazardous waste in reportable quantities. Other off-site facilities of interest include the following three properties which are adjacent to the site:

**5401 Lafayette Street**, Ogden Power Pacific, Inc. (<1/4 mile north of the site): EMI, ENVIROSTOR. The information included in the records reviewed indicates that:

- Ogden Power Pacific, Inc. has also been known as Pacific Energy, Pacific Lighting Energy Systems, and Pacific Recovery Corporation and is located at the former landfill property.
- In 1985, Pacific Lighting Energy Systems applied for a permit to actively discharge an average of 100 gallons per day of landfill gas condensate into Parcels 1, 2, and 4 of the Santa Clara Landfill. The landfill gas condensate is a byproduct of the landfill gas extraction process, which typically consists of water and liquid contaminants (e.g., VOCs and sulfur compounds) removed from gas recovered system at the Santa Clara Landfill.
- The Water Board issued Waste Discharge Requirements (Order No. 85-58) for Pacific Lighting Energy Systems; however, this was rescinded in 2002 (Order No. R2-2002-0009) because it was no longer applicable following discontinuation of the discharge of condensate and closure of the landfill.

**4857** Centennial Boulevard, Silicon Valley Power Northern Receiving Station (<1/4 mile southeast of the site): RCRA-SQG. The information included in the records reviewed indicates that:

- The Northern Receiving Station is a facility which generates, transports, stores, treats, and/or disposes of less than 1,000 kilograms of hazardous waste per month.
- The Northern Receiving Station is connected to the PG&E Los Esteros Substation by a 230 kV transmission line.



2339 Gianera Street, Gianera Power Plant (<1/4 mile south of the site). The information reviewed indicates that:

- The Gianera Power Plant is an 8.5 acre facility operated by the City of Santa Clara Electric Department. Electric power is generated with two natural gas-fired combustion turbines to meet peak load power demands in the City.
- Distillate oil is used as an emergency backup fuel and is stored at the facility in a 100,000 gallon above ground tank, which is located within secondary containment consisting of a 6-foot high concrete dike. Drainage within the diked area and an adjacent concrete loading pad flow to a sump connected to a gravity oil/water separator. Treated effluent from the oil/water separator is discharged to the facility storm drain system under National Pollutant Discharge Elimination System (NPDES) permit and ultimately discharges to the San Tomas Aquino Creek.

# 4.1.3 Orphan Sites

EDR provided a list of three properties with incomplete address information. Geomatrix reviewed the information provided in the EDR report to assess whether they are listed in a database that indicates a potential release and/or impact to soil and groundwater. Geomatrix also made an attempt to locate the orphan sites using the addresses included in the EDR report, the use of an internet-based mapping service, and the Water Board's Geotracker website and DTSC's Envirostor website. Based on the addresses included in the EDR report, Geomatrix was able to locate all of the properties.

Two of the orphan sites, Union Mine Landfill and Town & Country Cleaners, are located greater than 1 mile from the site. The third site, Hogan Drive Property, is located within 1/4 to 1/2 mile east of the site and is discussed in Section 4.1.2.

# 4.2 HISTORICAL INFORMATION

The following sources of information were requested from EDR and used to compile historical information about the site:

- aerial photographs dated 1939, 1956, 1965, 1974, 1982, 1993, 1999, and 2005;
- topographic maps dated 1953, 1961, 1968, 1973, and 1980;
- Sanborn maps there is no coverage for the site; and
- city directory abstracts for the period from 1922 through 2001.



Aerial photographs are presented in Appendix D; topographic maps are presented in Appendix E; the result of the Sanborn map search is included in Appendix F; and city directory abstracts are presented in Appendix G.

Geomatrix also requested that EDR conduct a record search of environmental liens against the site; a copy of EDR's environmental lien search report is presented in Appendix H. A summary of historical information pertaining to the site and its surroundings reviewed from the information sources listed above is presented herein.

# 4.2.1 Historical Aerial Photographs

Geomatrix reviewed historical aerial photographs of the site and vicinity from the years stated above. Copies of the aerial photographs are included in Appendix D. Observations of the site and surrounding areas from the aerial photographs review are presented in Table 2 and summarized below.

The site remained largely undeveloped and consisted mainly of farm land until the 1982 aerial photograph when the electrical substation is present. Centennial Boulevard and the 49ers training facility are present in the 1990 photograph and the youth soccer park is present in the 2005 photograph.

The surrounding areas were undeveloped and consisted mainly of farm land until the 1974 aerial photograph when housing developments are present south of the site and construction on the Great America theme park has begun southwest of the site. Tasman Drive is present in 1976 and additional residential and commercial develop occurs in the surrounding areas. The first large water tank south of the site is present in the 1982 photograph and the second large water tank is present in the 1985 photograph. The golf course north of the site and the Gianera Power Plant south of the site are present in 1990. The Northern Receiving Station is present in the 2005 photograph.

# 4.2.2 Historical Topographic Maps

Topographic maps were obtained from EDR for the years stated above. The topographic map scales were 1:24,000 (1 inch equals 2,000 feet). Copies of the topographic maps are included in Appendix E. Observations of the site and surrounding areas from the topographic maps review are presented in Table 3 and summarized below.

The 1953 topographic map shows the site and surrounding areas undeveloped with a Southern Pacific Railroad line adjacent to the site. The 1961, 1968, 1973, and 1980 topographic maps



show the site relatively unchanged and the surrounding areas increasing in commercial and residential development.

# 4.2.3 City Directory Abstracts

Geomatrix reviewed a historical city directory abstract for the site and surrounding area obtained from EDR. A summary of listings for the period of 1922 through 2001, using approximately 5-year intervals, were provided in the abstract. The city directory abstract is included as Appendix G of this report.

There are no listings for the site between the years of 1922 and 1986, or for the year 2000. Beginning in 1991, San Francisco 49ers Administrative Offices are listed at 4949 Centennial Court and 4949 Centennial Boulevard.

For the surrounding area, identified by EDR as addresses within 1/8 mile of the Site, there are no entries listed.

# 4.2.4 Environmental Lien Records

Geomatrix reviewed an environmental lien search report prepared by EDR for the site.

| Title Vested In                        | Title Received From                               | Deed<br>Date | Assessor's Parcel Number(s)              | Environmental<br>Lien | Activity and<br>Use<br>Limitations |
|--|---|--------------|--|-----------------------|------------------------------------|
| City of Santa Clara                    | Santa Clara Municipal Refuse Disposal Corporation | 2/25/72      | 104-03-040                               | No                    | No                                 |
| Santa Clara County<br>Transit District | City of Santa Clara                               | 5/3/89       | 104-03-038                               | No                    | No                                 |
| City of Santa Clara                    | A.O. Skankey and<br>Marguerite Skankey            | 9/30/65      | 104-43-030,<br>104-43-047,<br>104-43-049 | No                    | No                                 |
| City of Santa Clara                    | J and E Esperanca<br>Investments, LLC             | 9/18/01      | 104-06-012,<br>104-06-014                | No                    | No                                 |
| City of Santa Clara                    | Duc and Elliot<br>Builders                        | 7/28/01      | 104-06-013,<br>104-06-017                | No                    | No                                 |
| City of Santa Clara                    | See note below                                    | 1/21/03      | 104-06-086                               | No                    | No                                 |

Note:

The environmental lien search report is included in Appendix H of this report.

The rights to APN 104-06-086 was received by the City of Santa Clara from Resolution 6990 which ordered the vacation of a portion of the Centennial Boulevard public right-of-way.



# 5.0 SITE RECONNAISSANCE

The objective of the site reconnaissance was to obtain information indicating the likelihood of identifying RECs in connection with the site. Geomatrix personnel conducted site reconnaissance on April 7, 2008, with Richard Hill of the City of Santa Clara and John Wasson, Murlan Fowell, Anthony Lozano, and Richard Genoff of the 49ers. The site reconnaissance methodology and our observations are summarized in the following sections.

# 5.1 METHODOLOGY AND LIMITING CONDITIONS

The reconnaissance included observing existing conditions of the site and the general surrounding areas with respect to possible environmental concerns. Weather conditions during the site visits were clear. The weather did not have an impact on the performance of the site reconnaissance. Geomatrix personnel visually observed the exterior of the on-site buildings and the area surrounding the buildings and toured the buildings to visually observe the buildings' interior. Geomatrix personnel took photographs during the site reconnaissance; copies of the photographs from the site reconnaissance are included in Appendix I. During the site reconnaissance, information regarding facility use and chemical storage and handling for the substation was provided by Mr. Hill and for the 49ers training facility was provided by Mr. Fowell, Mr. Lozano and Mr. Genoff.

During the site reconnaissance, Geomatrix personnel did not observe the roof of either the main building or the maintenance building at the 49ers training facility.

On-site observations are summarized in Section 5.2. Geomatrix personnel observed properties adjacent to the site on April 7, 2008. Our off-site observations are summarized in Section 5.3.

#### 5.2 ON-SITE OBSERVATIONS

The areas observed during the site reconnaissance included the overflow parking lot for the Santa Clara Convention Center (proposed Garage Site A), the electrical substation, the overflow parking lot for Great America, the youth soccer park, the 49ers training facility, and the storage/staging yard at the end of Centennial Boulevard.

# Proposed Garage Site A

The proposed Garage Site A (Photos I-1 through I-5; Appendix I) is currently a fenced in paved surface parking lot. There is one vehicle entrance on Stars and Stripes Drive. Three large metal storage containers were observed onsite as well as pallets of metal siding. The perimeter of the



parking lot is unpaved and contains some vegetation. There is a row of trees on the western boundary of the parking lot. Groundwater monitoring well G-15 was observed in this area. Well G-15 is constructed of 6-inch diameter metal casing protruding from the ground surface in the southwestern area of the site, the well was not capped (Photo I-5; Appendix I). To the south of the parking lot is an unpaved walkway leading up to Tasman Drive.

# City of Santa Clara Electrical Substation

The electrical substation (Photos I-6 through I-14; Appendix I) is a fenced in property consisting of a control building, three transformers, five capacitor boxes, and switching equipment. The substation consists of a gravel surface with creek stone surrounding the transformer towers. A paved roadway extends around the perimeter of the facility. According to Mr. Hill, the 12 kV electrical substation was built in approximately 1976 as part of the American bicentennial expansion in Santa Clara. The facility does not require an onsite operator. Routine inspection of the substation is conducted every two weeks.

Several vault boxes were observed on the ground, which Mr. Hill explained were large underground concrete vaults that house the copper cable grid. Eight lead acid batteries with three cells each were observed in the control room (Photo I-14; Appendix I). The batteries are housed in a steel containment unit surrounded by absorbent bags. No staining or other visible sign of leaks was observed in the immediate vicinity of the batteries. A spill kit was located adjacent to the batteries. No other containers or chemicals were observed at the facility.

#### Great America Overflow Parking Lot

The overflow parking lot (Photo I-15; Appendix I) is a fenced in paved surface parking lot. The perimeter of the parking lot is landscaped. There are two vehicle entrances to the parking lot on Centennial Boulevard. There is a gated bridge over the San Tomas Aquino Creek which leads to the main Great America parking lot. Power poles are present on the western perimeter of the property. A row of parked school buses and church buses were observed at the southern end of the parking lot.

#### City of Santa Clara Youth Soccer Park

The soccer park (Photos I-16 through I-19; Appendix I) is a gated property consisting of three soccer fields, a building, and a surface parking lot. The soccer park was observed from the exterior of the perimeter gate. The portion of the property within the proposed stadium



boundaries includes the driveway and the landscaping outside of the perimeter gate. There are small vault boxes in the landscaping south of the driveway associated with the irrigation system. Signs were observed identifying the water as recycled water.

#### 49ers Training Facility

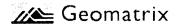
The 49ers training facility (Photos I-20 through I-48; Appendix I) consists of two buildings, a training field and surface parking lots. Mr. Wasson informed us that the facility has been present since the late 1980s. Prior to development as the 49ers headquarters and training facility, the site consisted of agricultural orchards. According to the as-built drawings, provided by Mr. Wasson, the building consists of slab on grade construction. There is a transformer pad with a transformer noted in the southwestern portion of the property; however, this was not observed by Geomatrix personnel during the site visit.

The main two-story building consists of the lobby and training facility on the first floor and administrative offices and conference rooms on the second floor. Geomatrix personnel did not enter all of the offices or conference rooms on the second floor. The training facility includes the weight room, locker room, and a swimming pool. Mr. Lozano escorted Geomatrix personnel through the training facility and provided access to the elevator room, which he informed us is inspected once a year, and the electrical room.

In the swimming pool facility, a bookshelf was observed with small quantities (less than 5-gallon containers) of paint and other common commercial cleaning supplies (Photo I-24; Appendix I). In the pool maintenance room, gallon-sized containers of muriatic acid were observed in large plastic buckets on secondary containment pallets (Photo I-28; Appendix I). Mr. Lozano described the circulating pool sanitation system and informed us that the system is inspected daily. A drain ran through the center of the maintenance room and staining was observed on the concrete floor surface. A pool of liquid was observed on the floor, which Mr. Lozano explained was due to a leak in the sand filter system.

Geomatrix personnel did not view the building roof, but Mr. Lozano informed us that the heating, ventilation and air conditioning (HVAC) units are on the roof and they were replaced with new units in 2007.

The two-story maintenance building consists of a storage warehouse, an office, and a restroom on the first floor and office material storage on the second floor. Mr. Genoff escorted Geomatrix personnel through the maintenance building and the outdoor storage areas.



Landscape maintenance equipment, hand tools, lube oil, spray paint, field marking paint, and other common commercial products associated with building and yard maintenance activities were observed on storage shelves (Photo I-29; Appendix I). Small quantities of household paint were observed on the cement floor beneath a long workbench and on pallets (Photos I-30 through I-33; Appendix I). Mr. Genoff informed Geomatrix personnel that the field marking paints are water-based and the goal post paints contain ink. Additional containers of paints, paint thinners, and solvents were observed in a storage cabinet labeled "flammable" (Photos I-34 and I-35; Appendix I). No leaks or significant staining were observed on the warehouse floor.

A small pump station is located within the warehouse which operates the overhead and underground irrigation for the practice field. Storage of new halogen lights was observed above the office (Photo I-37; Appendix I). The second floor is accessed by stairway or a dumbwaiter, which is used to move boxes and other storage items. The second floor contains file cabinets and shelves with boxes of paperwork, office supplies, kitchen supplies, commercial cleaning products, football equipment, and sports paraphernalia.

An enclosed dumpster is located adjacent to the maintenance warehouse (Photo I-38; Appendix I). A few paint containers and other miscellaneous equipment were observed behind the dumpster. Several Personal On Demand Storage (PODS) units are located in the parking lot adjacent to the practice field. Mr. Fowell informed us that sports paraphernalia and give away items are kept in those storage units. Several storage sheds were observed at the end of the practice field, which Mr. Fowell informed Geomatrix personnel contain practice equipment (Photo I-40; Appendix I).

An outdoor chemical storage shed (Photos I-41 through I-47; Appendix I) located in the parking lot adjacent to the practice field contains diesel and mid-grade unleaded fuel in 55-gallon drums on a secondary containment system. Small quantities of pesticides, herbicides, and other landscaping chemicals were observed on shelves within the shed. Yard tools, other field maintenance equipment, and large bags of fertilizer on wooden pallets were observed outside of the shed. Behind the shed, batteries, rusted paint cans, hydraulic oil, and paint thinners were observed in a plastic crate and on the concrete pavement. Mr. Genoff informed Geomatrix personnel that he did not know where these items originated. No spills or surface staining was observed in this area.



# Centennial Storage/Staging Site

The storage and staging site (Photos I-49 through I-50; Appendix I) at the end of Centennial Boulevard is a fenced in unpaved dirt and gravel lot currently used by Paragon Services as a construction yard. The construction yard was observed from the exterior of the perimeter fence. Power poles are present on the western end of the construction yard. A large dumpster was observed onsite as well as construction equipment and materials.

# 5.3 SURROUNDING PROPERTIES

The property to the north of the site is the Santa Clara Golf and Tennis Club (5155 Stars and Stripes Drive) and the City of Santa Clara Youth Soccer Park (5049 Centennial Boulevard). To the northeast is an industrial park. To the east is the Altamont Commuter Express and Amtrak railway and Lafayette Street. The railway runs along the western edge of the street and consists of railroad tracks surrounded by gravel. The Great America Station (5099 Stars and Stripes Drive) is located under the Tasman Drive overpass.

The property to the southeast of the site is the Silicon Valley Power Northern Receiving Station (4857 Centennial Boulevard; Photos I-51 through I-53; Appendix I). The properties to the south of the site include the Gianera Power Plant (2339 Gianera Street; Photos I-54 through I-56; Appendix I) and the Hetch-Hetchy right-of-way. There are two 4.7 million gallon above ground water storage tanks (Photo I-57; Appendix I) located to the west of the Gianera Power Plant. Further south is a residential neighborhood. To the east are Great America (5101 Great America Parkway) and the Santa Clara Convention Center (5001 Great America Parkway; Photo I-58; Appendix I).

# 6.0 INTERVIEWS

Geomatrix interviewed a representative of the City of Santa Clara and the 49ers to obtain information regarding facility use, chemical usage, handling, and storage, and site history. In addition, Geomatrix interviewed representatives of several regulatory agencies. Information obtained during these interviews is summarized in this section.

#### 6.1 CITY OF SANTA CLARA

Richard Hill, an electrician, with the City of Santa Clara, provided current property information for the substation during Geomatrix site reconnaissance in April 2008. This site reconnaissance information is described in Section 5.0.



An ESA questionnaire that Geomatrix developed based on the ASTM Standard was provided to Ronald Garratt, Assistant City Manager of the City of Santa Clara, who completed the questionnaire. The questionnaire information is presented in Section 7.0.

#### 6.2 49ERS

John Wasson, Project Executive with the 49ers Stadium, LLC; Murlan Fowell, Vice President of Operations with the San Francisco 49ers; Anthony Lozano, Facilities Manager with the San Francisco 49ers; and Richard Genoff, Maintenance Manager with the San Francisco 49ers, provided current property information for the 49ers training facility during Geomatrix site reconnaissance in April 2008. This site reconnaissance information is described in Section 5.0.

An ESA questionnaire that Geomatrix developed based on the ASTM Standard was provided to Mr. Wasson who completed the questionnaire. The questionnaire information is presented in Section 3.0.

# 6.3 LOCAL GOVERNMENTAL OFFICIAL

Geomatrix contacted representatives from the Water Board, DTSC, and SCVWD for additional information regarding the site. Files were provided for review at the Water Board, DTSC, and SCVWD. Because the site is within the original boundaries of the former Santa Clara landfill, Geomatrix personnel contacted the Water Board caseworker for further information.

Cecil Felix was the Water Board caseworker for the landfill property until November 2007. He confirmed that the landfill was in operation until the early 1990s when it ceased accepting waste and began implementing closure activities. He confirmed that Parcels 5 and 7, which currently includes the proposed Garage Site A, the overflow parking lot for Great America, the youth soccer park, and the 49ers training facility, were not used for landfilling. Updated Waste Discharge Requirements (Order No. R2-2002-0008) were issued in 2002 to bring the landfill into compliance with Title 27 regulations.

# 7.0 PROPERTY OWNER QUESTIONNAIRE

Ronald Garratt, Assistant City Manager of the City of Santa Clara, completed an ESA questionnaire provided by Geomatrix. The questionnaire was prepared consistent with the ASTM Standard. The purpose of the questionnaire is to obtain information from an individual familiar with site operations. A copy of the completed questionnaire is included as Appendix C.



According to Mr. Garratt, the City of Santa Clara acquired the Great America parking lot property, approximately 110 acres, in transactions occurring in the late 1960s and early 1970s. As late as the 1960s, the entire area was predominately pear and prune orchards. The subject property and the adjoining property have been used for industrial purposes and as an equipment repair facility. In the early 1980s, an electric substation was built on approximately 2 acres of the parking lot area to support businesses in the North Bayshore area. Additionally, the Great America theme park has a maintenance facility for rides and equipment on the southern end of its property, however, this area is not adjacent to the proposed stadium location.

Mr. Garratt assumes that pesticides were used on site when it was agricultural land. He also indicated that batteries, paints, and other chemicals are used and stored in the theme park maintenance area. He is not aware of any pits, ponds, sumps, or storage tanks being present on the site and stated that the parking lot area has had an asphalt cap for approximately 25 years. He is also not aware of any pipes, leaks, or spills that may have occurred on the property. Initial review of electric utility records indicate no polychlorinated biphenyls (PCBs) were used for cooling of equipment.

Mr. Garratt is not aware of any water wells on the property. He indicated that water service in this area is through the City of Santa Clara's water distribution system and that there are not many backup wells in the North Bayshore area given the flow of subsurface industrial contaminants from the Central Expressway/Lafayette industrial areas to the Bay. He is not aware of any environmental impacts associated with the site, but noted that the closed Santa Clara Landfill is approximately 1,200 feet from the edge of the proposed stadium under the adjacent golf course.

According to Mr. Garratt, environmental and geotechnical assessments have been conducted for the Santa Clara Convention Center to the north of the site. He also believes environmental and geotechnical assessments were conducted for the Great America theme park property. He is not aware of any environmental liens or activity or use limitations against the property.

#### 8.0 FINDINGS

The findings of this ESA indicate the following potential RECs:

• The potential presence of residual pesticides in site soil due to the former use of the site as agricultural orchards.



• Potential off-site impacts from the Hogan Drive property located crossgradient to the site where investigations are ongoing.

#### 9.0 OPINION

There is a potential for residual pesticides to be present in soil remaining onsite due to the former use of the site as agricultural orchards. No soil or groundwater investigations have been conducted at the site to confirm or clear the presence of residual chemical impact. Based on this, insufficient information is available to classify the potential presence of residual pesticides in soil and/or groundwater as an REC.

Investigations at the Hogan Drive property have reported detections of CVOCs in soil and groundwater samples collected from the property, which is located hydraulically crossgradient to the site. Remediation activities have been performed at this property; however, investigations are currently ongoing and a conclusion of whether the impacts at this property could affect the site could not be reached. Based on this, insufficient information is available to classify the potential off-site impacts as an REC.

# 9.1 ADDITIONAL INVESTIGATION

Additional investigation may be necessary to further assess the potential presence of residual pesticides at the site and its impact on future site redevelopment plans.

# 9.2 DATA GAPS

According to the ASTM Standard, a data gap is defined as a lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information. Data gaps may result from incompleteness in any of the activities required by this practice, including, but not limited to site reconnaissance, and interviews. A data gap is only significant if other information and/or professional experience raises reasonable concerns involving the data gap. As such, no significant data gaps were identified during this ESA.

#### 10.0 CONCLUSIONS

Geomatrix has performed a Phase I ESA of the site located at Centennial Boulevard in Santa Clara, California in conformance with the scope and limitations of ASTM Standard E 1527-05. Any exceptions to, or deletions from, this practice are described in Section 11.0 of this report.



This assessment has revealed no evidence of RECs; however, the potential for residual pesticides to be present in site soils cannot be eliminated from consideration and may require additional investigation to determine the impact on future site redevelopment plans. Additionally, ongoing investigation at the Hogan Drive property located crossgradient to the site should be monitored to determine whether the impacts at this off-site property could affect the site and future site redevelopment plans.

# 10.1 OTHER CONSIDERATIONS

It is recommended that groundwater monitoring well G-15, which is located at the Garage Site A, either be properly destroyed according to SCVWD and Water Board guidelines or, if deemed necessary by the Water Board, preserved for future sampling activities prior to development activities.

#### 11.0 DEVIATIONS

No deviations or deletions from ASTM Standard E 1527-05 were made during preparation of this ESA.

#### 12.0 ADDITIONAL SERVICES

No additional services were provided as part of this ESA.



#### 13.0 REFERENCES

- California Regional Water Quality Control Board (Water Board), 1985, Order No. 85-58: Waste Discharge Requirements for Pacific Lighting Energy Systems, Inc. and the City of Santa Clara, City of Santa Clara Station, Santa Clara, Santa Clara County.
- California Regional Water Quality Control Board (Water Board), 1991, Order No. 91-158, NPDES No. CA0029076: Waste Discharge Requirements for City of Santa Clara Electric Department Gianera Power Plant, Santa Clara, Santa Clara County.
- California Regional Water Quality Control Board (Water Board), 1994, Order No. 94-050: Waste Discharge Requirements and Rescission of Order No. 73-77 for City of Santa Clara and Mission Trail Waste Systems Santa Clara All Purpose Landfill Inactive Class III Solid Waste Disposal Site, Santa Clara, Santa Clara County.
- California Regional Water Quality Control Board (Water Board), 2002a, Order No. R2-2002-0008: Updated Waste Discharge Requirements and Rescission of Order No. 94-050 for City of Santa Clara Santa Clara All Purpose Landfill, Santa Clara, Santa Clara County.
- California Regional Water Quality Control Board (Water Board), 2002b, Order No. R2-2002-0009: Rescission of Waste Discharge Requirements Order No. 85-58 for Pacific Recovery Corporation, City of Santa Clara Station, Santa Clara, Santa Clara County.
- California Regional Water Quality Control Board (Water Board), 2004, Order No. R2-2004-0072: Adoption of Final Site Cleanup Requirements and Rescission of Order No. R2-2003-0011 for D&H Manufacturing Company, Donna Wills, and Richard Wills, 2301 Calle de Luna, Santa Clara, Santa Clara County.
- Chicago Title Company, 2007a, Preliminary Report for 104-06-012, 013, 014, 017, 039, 040, 085, 086, Santa Clara, California, October 15.
- Chicago Title Company, 2007b, Preliminary Report for APN 104-43-030, Santa Clara, California, October 17.
- Chicago Title Company, 2007c, Preliminary Report for 104-43-047, Santa Clara, California, October 17.
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- Environmental Data Resources Inc, 2008a, The EDR Radius Map with GeoCheck<sup>®</sup>, March 25.
- Environmental Data Resources Inc, 2008b, Certified Sanborn® Map Report, March 26.
- Environmental Data Resources Inc, 2008c, The EDR-City Directory Abstract, March 26.
- Environmental Data Resources Inc, 2008d, The EDR Environmental Lien Search Report, April 3.
- Geomatrix, 2005, Review of Monitoring Well Installation Proposal for 2281 Calle de Luna, Santa Clara, California, November 1.
- SCS Engineers, 2006, Monitoring Well and Gas Probe Destruction and Construction Report, All Purpose Landfill, 5500 Lafayette Street, Santa Clara, California, September 11.
- Soil Tech Engineering, Inc., 1990, Additional Subsurface Investigation for the Former Gas Station Located at 4764 Lafayette Street, Santa Clara, California.
- Treadwell & Rollo (T&R), 2001, Draft Phase I and Phase II Environmental Site Assessment, 2301 Calle de Luna, Santa Clara, California, May 24.
- Treadwell & Rollo (T&R), 2006, Quarterly Groundwater Monitoring Report, Second and Third Quarters 2006, 2301 Calle de Luna, Santa Clara, California, December 22.



#### 14.0 ENVIRONMENTAL PROFESSIONAL SIGNATURE AND STATEMENT

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in section 312.10 of 40 Code of Federal Regulations (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 the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312. Resumes for the environmental professionals are included in Appendix J.

Martin B. Bloes

Senior Scientist

Scott D. Warner, CEG, CHG

Principal Hydrogeologist





### SUMMARY OF ENVIRONMENTAL REVIEW<sup>1</sup>

| Property   | Address                   | Distance from<br>Subject<br>Property | Groundwater<br>Gradient | Chemicals of<br>Concern   | Media<br>Affected    | Case/<br>Status | Potential<br>Site Impact? |
|--|---------------------------|--------------------------------------|-------------------------|---------------------------|----------------------|-----------------|---------------------------|
| Northern Receiving<br>Station                                    | 4857 Centennial Boulevard | < 1/4 mile south                     | Upgradient              | Arsenic, lead,<br>mercury | NA                   | NA              | No                        |
| Micro Lithography Inc/<br>WD Media Corporation                   | 5101 Lafayette Street     | < 1/4 mile<br>northeast              | Downgradient            | Organic<br>solids         | NA                   | NA              | No                        |
| Ogden Power Pacific,<br>Inc./Santa Clara Landfill                | 5401 Lafayette Street     | < 1/4 mile north                     | Downgradient            | NA                        | NA                   | Open            | No                        |
| Santa Clara Landfill   | 5500 Lafayette Street     | < 1/4 mile north                     | Downgradient            | Gasoline                  | Groundwater          | LUST/<br>Closed | No                        |
| Nu-Metal Finishing Inc.  | 5171 Lafayette Street     | 1/4 – 1/2 mile<br>northeast          | Downgradient            | NA                        | NA                   | NA              | No                        |
| Sun Circuits<br>Incorporated                                     | 5191 Lafayette Street     | 1/4 – 1/2 mile<br>northeast          | Downgradient            | NA                        | NA                   | NA              | No                        |
| Flextronics Photonics  | 5102 Calle del Sol        | 1/4 – 1/2 mile<br>northeast          | Downgradient            | NA                        | NA                   | NA              | No                        |
| Sun Circuits<br>Incorporated                                     | 5124 Calle del Sol        | 1/4 – 1/2 mile<br>northeast          | Downgradient            | NA                        | NA                   | NA              | No                        |
| Paragon Electronic<br>Systems Incorporated/<br>Sun Circuits Inc. | 2318 Calle de Luna        | 1/4 – 1/2 mile<br>northeast          | Downgradient            | NA                        | NA                   | NA              | No                        |
| Amalar Inc   | 2317 Calle de Luna        | 1/4 – 1/2 mile<br>northeast          | Downgradient            | NA                        | NA                   | NA              | No                        |
| D&H Manufacturing  | 2301 Calle de Luna        | 1/4 – 1/2 mile<br>northeast          | Downgradient            | PCE, VOCs                 | Soil,<br>groundwater | SLIC/<br>Open   | No                        |



### SUMMARY OF ENVIRONMENTAL REVIEW<sup>1</sup>

| Property   | Address              | Distance from<br>Subject<br>Property | Groundwater<br>Gradient | Chemicals of<br>Concern | Media<br>Affected    | Case/<br>Status | Potential<br>Site Impact? |
|--|----------------------|--------------------------------------|-------------------------|-------------------------|----------------------|-----------------|---------------------------|
| Coatek, Inc.                                     | 2272 Calle de Luna   | 1/4 – 1/2 mile<br>northeast          | Downgradient            | NA                      | NA                   | NA              | No                        |
| Abacus Machining &<br>Mechanical Assembly<br>Inc | 2271 Calle de Luna   | 1/4 – 1/2 mile<br>northeast          | Downgradient            | NA                      | NA                   | NA              | No                        |
| Altatron Inc.                                    | 2264 Calle de Luna   | 1/4 – 1/2 mile<br>northeast          | Downgradient            | NA                      | NA                   | NA              | No                        |
| South Bay Truck &<br>Equipment                   | 2222 Calle de Luna   | 1/4 – 1/2 mile<br>northeast          | Downgradient            | NA                      | NA                   | NA              | No                        |
| Shibaura Tech Int                                | 2221 Calle de Luna   | 1/4 – 1/2 mile<br>northeast          | Downgradient            | NA                      | NA                   | NA              | No                        |
| Bill Doran Co.                                   | 2200 Calle de Luna   | 1/4 – 1/2 mile<br>northeast          | Downgradient            | Gasoline                | Soil,<br>groundwater | LUST/<br>Closed | No                        |
| Cirtex Inc.                                      | 2346 Calle del Mundo | 1/4 – 1/2 mile<br>northeast          | Downgradient            | NA                      | NA                   | NA              | No                        |
| Alzeta Corporation                               | 2343 Calle del Mundo | 1/4 – 1/2 mile<br>northeast          | Downgradient            | NA                      | NA                   | NA              | No                        |
| G & K Metal Finishing                            | 2307 Calle del Mundo | 1/4 – 1/2 mile<br>northeast          | Downgradient            | NA                      | NA                   | NA              | No                        |
| Clark Precision<br>Sheetmetal                    | 2275 Calle del Mundo | 1/4 – 1/2 mile<br>northeast          | Downgradient            | NA                      | NA                   | NA              | No                        |
| Sakimoto Nursery/<br>NuMetal Finishing Inc.      | 2262 Calle del Mundo | 1/4 – 1/2 mile<br>northeast          | Downgradient            | NA                      | NA                   | NA              | No                        |



### SUMMARY OF ENVIRONMENTAL REVIEW<sup>1</sup>

| Property                             | Address                                  | Distance from<br>Subject<br>Property | Groundwater<br>Gradient | Chemicals of<br>Concern | Media<br>Affected    | Case/<br>Status        | Potential<br>Site Impact? |
|--------------------------------------|--|--------------------------------------|-------------------------|-------------------------|----------------------|------------------------|---------------------------|
| Screen Manufacturing<br>Technologies | 2246 Calle del Mundo                     | 1/4 – 1/2 mile<br>northeast          | Downgradient            | NA                      | NA                   | NA                     | No                        |
| Gyrex Corporation                    | 2234 Calle del Mundo                     | 1/4 – 1/2 mile<br>northeast          | Downgradient            | NA                      | NA                   | NA                     | No                        |
| Mos Tool & Engineering<br>Inc        | 2233 Calle del Mundo                     | 1/4 – 1/2 mile<br>northeast          | Downgradient            | NA                      | NA                   | NA                     | No                        |
| Italix Company<br>Incorporated       | 2232 Calle del Mundo                     | 1/4 – 1/2 mile<br>northeast          | Downgradient            | NA                      | NA                   | NA                     | No                        |
| Austin Associates                    | 4800 Great America Parkway,<br>Suite 420 | 1/4 – 1/2 mile<br>southeast          | Crossgradient           | NA                      | NA                   | NA                     | No                        |
| Siemens Rolm<br>Communications Inc   | 4900 Old Ironsides Drive                 | 1/4 – 1/2 mile southeast             | Crossgradient           | NA                      | NA                   | NA                     | No                        |
| AECS Corporation                     | 4677 Old Ironsides Drive,<br>Suite 260   | 1/4 – 1/2 mile<br>southeast          | Crossgradient           | NA                      | NA                   | NA                     | No                        |
| Applied Materials<br>Building 55     | 4600 Old Ironsides Drive                 | 1/4 – 1/2 mile<br>southeast          | Crossgradient           | NA                      | NA                   | NA                     | No                        |
| Hogan Drive Property                 | Hogan Drive/Lafayette Street             | 1/4 – 1/2 mile<br>southeast          | Crossgradient           | PCE                     | Soil,<br>groundwater | VCP/<br>Active         | No                        |
| John Shaheen Property                | 4764 Lafayette Street                    | 1/4 - 1/2 mile<br>southeast          | Crossgradient           | VOCs                    | Soil,<br>groundwater | LUST,<br>SLIC/<br>Open | No                        |
| Yerba Buena Way                      | Yerba Buena Way/Lafayette<br>Street      | 1/2 – 1 mile<br>north                | Downgradient            | PAHs, TPH               | Soil                 | VCP/<br>Certified      | No                        |



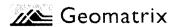
#### SUMMARY OF ENVIRONMENTAL REVIEW<sup>1</sup>

Centennial Boulevard Site Santa Clara, California

| Property                       | Address                     | Distance from<br>Subject<br>Property | Groundwater<br>Gradient | Chemicals of<br>Concern                    | Media<br>Affected    | Case/<br>Status   | Potential<br>Site Impact? |
|--------------------------------|-----------------------------|--------------------------------------|-------------------------|--|----------------------|-------------------|---------------------------|
| 71 Vista Montana               | 71 Vista Montana            | 1/2 – 1 mile<br>northeast            | Crossgradient           | Arsenic,<br>pesticides                     | Soil                 | VCP/<br>Active    | No                        |
| Fairway Glen Golfcourse        | 1661 Hogan Drive            | 1/2 - 1 mile east                    | Crossgradient           | Gasoline                                   | Soil,<br>groundwater | LUST/<br>Closed   | No                        |
| Agnews State Hospital -<br>DGS | Agnew Road/Lafayette Street | 1/2 – 1 mile<br>southeast            | Upgradient              | Arsenic, lead                              | Soil                 | VCP/<br>Certified | No                        |
| Agnews State Hospital          | Avenue A/Lick Road          | 1/2 – 1 mile<br>southeast            | Upgradient              | Hydrocarbon<br>solvents,<br>lead, asbestos | Soil                 | VCP/<br>Certified | No                        |

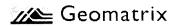
#### Note:

<sup>1.</sup> Findings from the EDR Radius Map with GeoCheck provided by Environmental Data Resources, Inc, Envirofacts online database, Geotracker online database, and Envirostor online database. The EDR report is presented in Appendix A.



# TABLE 2 SUMMARY OF HISTORICAL AERIAL PHOTOGRAPHS REVIEW<sup>1</sup>

| Year | Scale     | Site   | Off-site  |
|------|-----------|--|---|
| 1939 | 1" = 550' | The site appears to be undeveloped.  | A road borders the eastern boundary of the site. The surrounding areas appear to be used for agriculture.   |
| 1954 | Unknown   | The site appears relatively unchanged compared to the 1939 aerial photo.       | The surrounding areas appear relatively unchanged compared to the 1939 aerial photo.  |
| 1956 | 1" = 550' | The site appears relatively unchanged compared to the 1954 aerial photo.       | The surrounding areas appear relatively unchanged compared to the 1954 aerial photo.  |
| 1958 | Unknown   | The site appears relatively unchanged compared to the 1956 aerial photo.       | The surrounding areas appear relatively unchanged compared to the 1956 aerial photo.  |
| 1963 | Unknown   | The site appears relatively unchanged compared to the 1958 aerial photo.       | The surrounding areas appear relatively unchanged compared to the 1958 aerial photo.  |
| 1965 | 1" = 330' | The site appears relatively unchanged compared to the 1963 aerial photo.       | The surrounding areas appear relatively unchanged compared to the 1963 aerial photo.  |
| 1968 | Unknown   | The site appears relatively unchanged compared to the 1963 aerial photo.       | The surrounding areas appear relatively unchanged compared to the 1963 aerial photo.  |
| 1974 | 1" = 601' | The site appears relatively unchanged compared to the 1974 aerial photo.       | The surrounding areas include housing developments in addition to agricultural areas. There is an aqueduct west of the site. The construction of the Great America theme park is southwest of the site. |
| 1974 | Unknown   | The site appears relatively unchanged compared to the other 1974 aerial photo. | The surrounding areas appear relatively unchanged compared to the other 1974 aerial photo.  |
| 1976 | Unknown   | The site appears relatively unchanged compared to the 1974 aerial photo.       | The surrounding areas appear relatively unchanged compared to the 1974 aerial photo. Tasman Drive is now present.   |
| 1980 | Unknown   | The site appears relatively unchanged compared to the 1976 aerial photo.       | The surrounding areas appear relatively unchanged compared to the 1976 aerial photo.  |



 $\label{eq:table 2} \textbf{SUMMARY OF HISTORICAL AERIAL PHOTOGRAPHS REVIEW}^1$ 

| Year | Scale     | Site   | Off-site  |
|------|-----------|--|---|
| 1982 | 1" = 690' | The electrical substation is present. The remainder of the site appears relatively unchanged compared to the 1980 aerial photo.  | The surrounding areas appear to be developed with residential and commercial buildings. The parcels northeast of the site contain large rectangular buildings. One of the large aboveground water storage tanks is present south of the site. |
| 1985 | Unknown   | The site appears relatively unchanged compared to the 1982 aerial photo.   | Both of the large aboveground water storage tanks are present south of the site.  |
| 1990 | Unknown   | Centennial Boulevard and the 49ers training facility are present. The western half of the site appears to be used for agriculture. The northwest portions of the site appear to be parking lots. | The golf course is present to the north of the site. The Gianera Power Plant is present south of the site.  |
| 1993 | 1" = 666' | The parking lot north of Tasman Drive is present. The rest of the site appears relatively unchanged compared to the 1990 aerial photo.   | The surrounding areas appear relatively unchanged compared to the 1990 aerial photo.  |
| 1994 | Unknown   | The site appears relatively unchanged compared to the 1993 aerial photo.   | The surrounding areas appear relatively unchanged compared to the 1993 aerial photo.  |
| 1996 | Unknown   | The site appears relatively unchanged compared to the 1994 aerial photo.   | The surrounding areas appear relatively unchanged compared to the 1994 aerial photo.  |
| 1999 | 1" = 666' | The site appears relatively unchanged compared to the 1993 aerial photo.   | The surrounding areas appear relatively unchanged compared to the 1993 aerial photo, except for the area south of the site which is a housing development.  |
| 2005 | 1" = 379' | The youth soccer park is present northeast of the site. A paved parking lot now occupies the western portion of the site.  | The Northern Receiving Station now occupies the area south of the site.  Vegetation now occupies the undeveloped area north of the site.  |

#### Note:

<sup>1.</sup> Aerial photographs provided by the 49ers, EDR, and Pacific Aerial Surveys. Copies of the topographic maps are presented in Appendix D.



### TABLE 3 SUMMARY OF HISTORICAL TOPOGRAPHIC MAPS REVIEW<sup>1</sup>

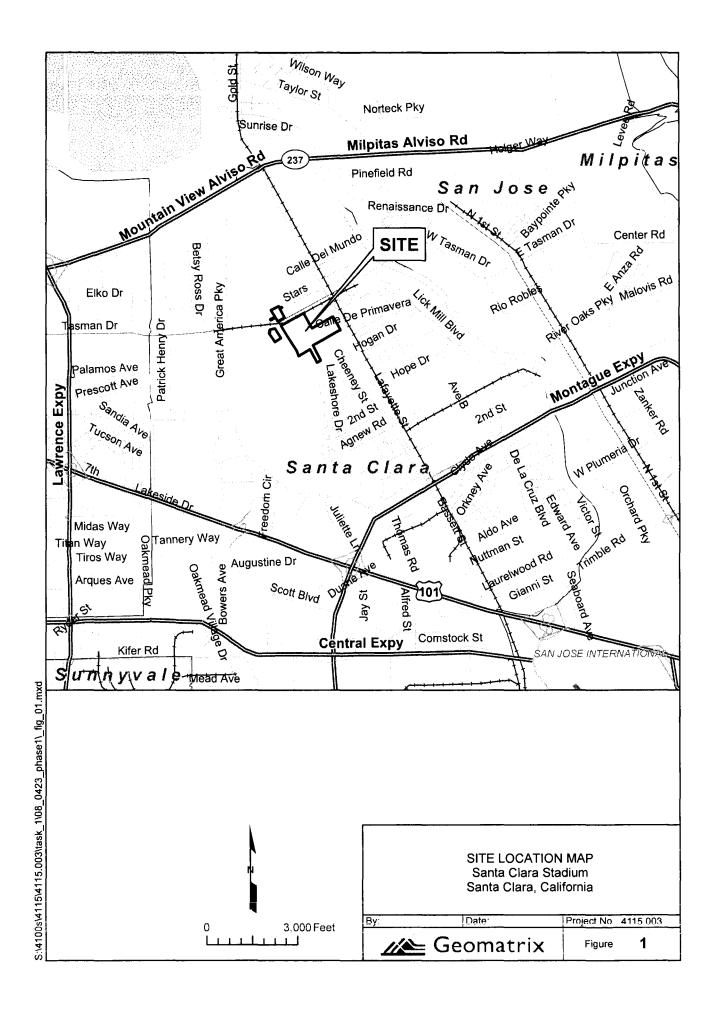
| Year | Scale   | Site  | Off-site   |
|------|---------|---|--|
| 1953 | 1:24000 | The site appears to be undeveloped.                             | The surrounding areas appear to be undeveloped. There is a Southern Pacific Railroad line adjacent to the site.                |
| 1961 | 1:24000 | The site appears relatively unchanged compared to the 1953 map. | The areas south of the site include housing developments.  |
| 1968 | 1:24000 | The site appears relatively unchanged compared to the 1961 map. | Hughes Sch. appears east of the site,<br>but the surrounding areas appear<br>relatively unchanged compared to the<br>1961 map. |
| 1973 | 1:24000 | The site appears relatively unchanged compared to the 1968 map. | The surrounding areas appear relatively unchanged compared to the 1968 map.  |
| 1980 | 1:24000 | The site appears relatively unchanged compared to the 1973 map. | The surrounding areas are largely developed. There is an aqueduct and parking area west of the site.                           |

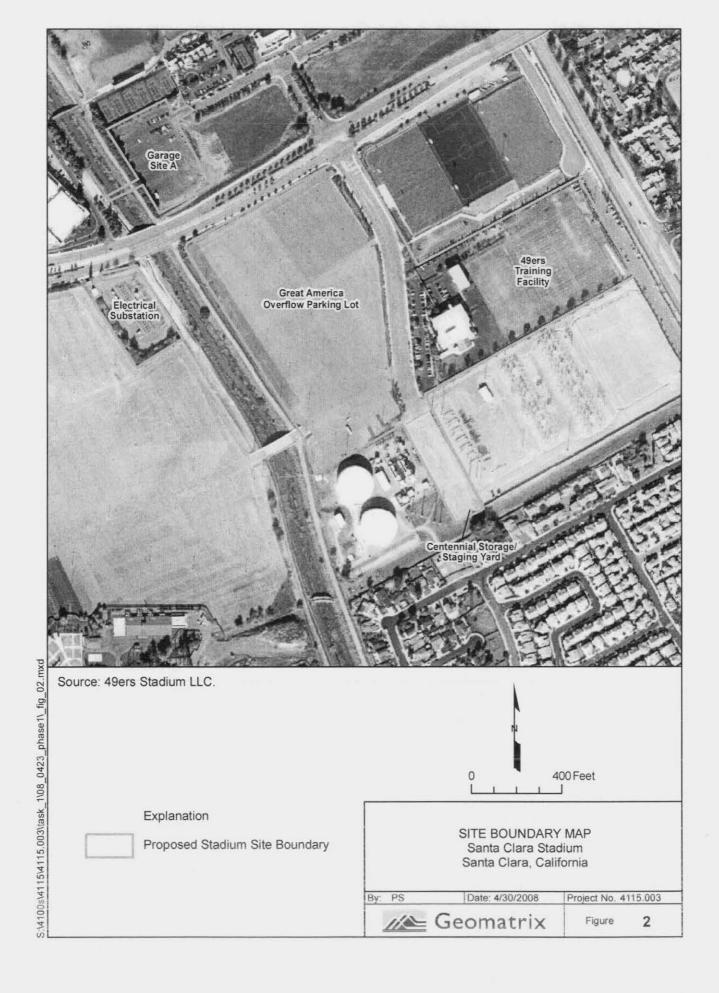
Note:

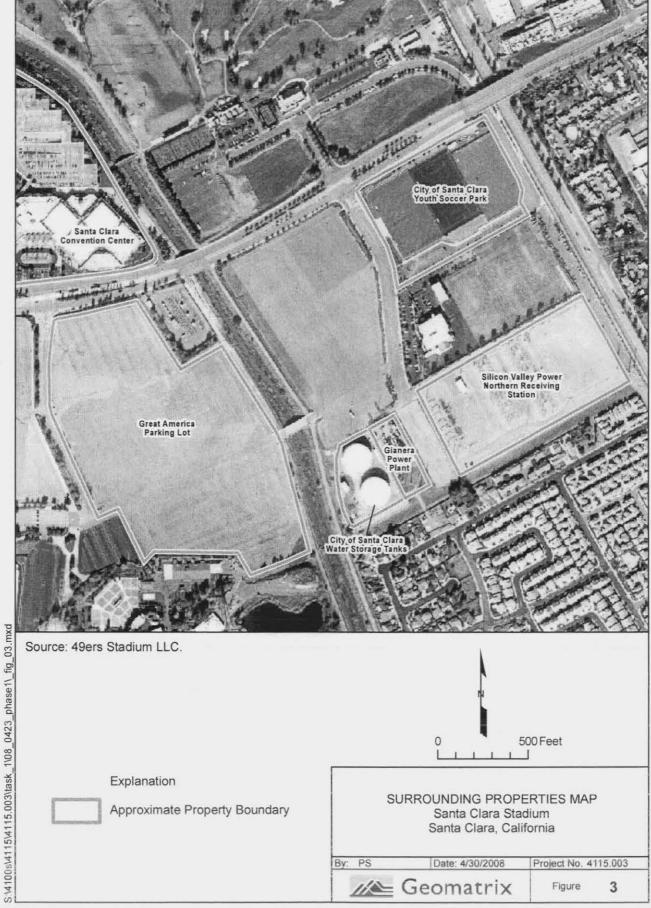
1. Topographic maps provided by EDR. Copies of the topographic maps are presented in Appendix E.

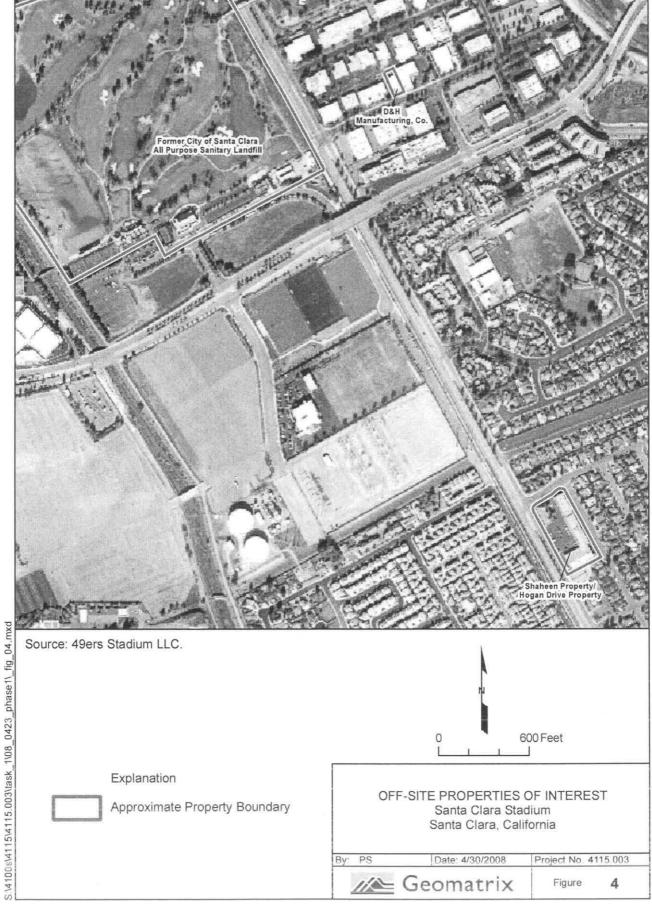


# **FIGURES**











### **APPENDIX A**

### **EDR Database Search Report**