

Year	Project/Project Area Use
1949 & 1950	<p><i>Subject Property</i> – The maps show significant changes to the subject property. The “Fir Street Housing Project” (a 28-unit apartment complex) is located on the KC Records site. A building labeled “The Baldwin 31 Apartments” is located on the Baldwin property. On the SUL property, the maps show one building that is divided into multiple retail spaces and a restaurant.</p> <p><i>Adjacent Properties</i> – The maps show significant changes to the properties adjacent to the subject property. Properties adjacent to the KC Records site are configured as follows: to the west (from north to south), an automobile repair shop and gasoline station, a building with multiple retail spaces and a restaurant (in the 1950 map the restaurant has been replaced with a retail space), and a building that is labeled “Training Center for the Blind” and “Auto’s & General Storage” (in the 1950 map this building has been converted to a curtain manufacturing facility); to the north (from west to east), two structures labeled “oils” and “greasing,” then residential buildings and buildings labeled “F” for flat; to the east (south of the Baldwin property), residential buildings; and to the south there is no significant change to the 1916 map. Properties adjacent to the Baldwin property are configured as follows: to the north, residential buildings and a medium-sized building labeled “Danish Brotherhood Washington Hall”; to the east and south, residential buildings and buildings labeled with an “A” indicating an automobile garage. Properties adjacent to the SUL property are configured as follows: to the west, residential buildings; to the north, a 50-unit apartment building; to the east, a building with five retail spaces; to the southeast, two structures labeled “gas & oils”; and to the south, residential and retail buildings.</p>
1969	<p><i>Subject Property</i> – Configurations shown on the maps are similar to those shown on the 1949 and 1950 maps, with the exception that the “Fir Street Housing Project” that was located on the KC Records site in 1949 and 1950 has been replaced with one large warehouse building and two medium-sized warehouse buildings that are all labeled “King County Warehouses.”</p> <p><i>Adjacent Properties</i> – Configurations shown on the maps are similar to those shown on the 1949 and 1950 maps.</p>

The historical Sanborn map review indicates that the subject property was largely undeveloped until sometime between 1905 and 1949. Uses on the subject property after that time included residential, retail, and warehousing. No *recognized environmental conditions* were identified on the subject property; however, the following sites of potential concern and one *recognized environmental condition* for the subject property were identified on adjacent properties:

- In the 1893 map, a 25-ft diameter AST is located within a “tank house” located immediately adjacent to the northwest of the SUL property. The contents of this tank are not known.
- In the 1904 and 1905 maps, a building labeled “Chinese Laundry” is located adjacent to the south of the KC Records site. The use of chlorinated solvents did not begin until about the 1930s; however, petroleum-based solvents were sometimes used in earlier “dry cleaning” or non-water-based operations.
- In the 1916 map, a building labeled “Chinese Hand Laundry” is located adjacent to the south of the KC Records site.
- In the 1949 and 1950 maps, an automobile repair shop and gasoline station is located adjacent to the west of the KC Records site. The former use of the adjacent property to the west as a gasoline station is considered a *recognized environmental condition* for the subject property. Additionally, there are two structures labeled “oils” and “greasing” located adjacent to the northwest of the KC Records site. There are also two structures labeled “gas & oils” located adjacent to the southeast of the SUL property.

Environmental Data Resources Database Report

Environmental Data Resources (EDR) was subcontracted to conduct a search (as prescribed by ASTM) of publicly available federal, state, and local agency environmental databases for information

regarding the subject property, and a regulatory database report was obtained. A copy of the EDR report is provided on CD-ROM in Attachment 4.

The search focused on information in the various lists maintained by the agencies of sites with known and potential environmental conditions that may represent a threat to human health and the environment. EDR conducted its search of listed information (which is keyed to a geographic mapping system) using the location of the subject property, and identified sites listed in the databases that are located within up to a 1-mile radius of the subject property. The EDR report listings for the subject and adjacent properties are briefly described below and are summarized in Table 1. The locations of the identified sites are shown on Figure 2.

Several properties within and adjacent to the subject property or that are considered to be hydraulically upgradient from the project area, based on topography, are listed in the EDR database report. Properties are ranked “A” in Table 1 because they have had a known release with no cleanup conducted and have the highest potential to affect the planned redevelopment project. Additionally, properties are ranked “B” in Table 1 because they are either: 1) located hydraulically upgradient, not adjacent to but within close proximity to the subject property and have had a contaminant release to soil and groundwater with an unknown cleanup status; 2) historically been identified as potentially operating a dry cleaners on the subject property with no reported releases; 3) located adjacent to the subject property with a confirmed contaminant release to soil that was reportedly cleaned up; or 4) located within close proximity (but not adjacent) and hydraulically crossgradient to the subject property with a confirmed contaminant release to soil and an unknown cleanup status. Properties ranked “A” or “B” are considered to represent *recognized environmental conditions* for the subject property and are described in greater detail below:

- **TD Auto Body & Repair/H and I Auto Service/Franks Avenue Station (Map ID #1):** This site is listed in the Facility Index System/Facility registry system (FINDS), the Confirmed and Suspected Contaminated Site List (CSCSL), the Hazardous Sites List (HSL), and as an EDR Historical Auto Station between 1940 and 1990. The site is listed as having a confirmed release of petroleum hydrocarbons and a suspected release of non-halogenated solvents, “EPA Priority Pollutants – Metals and Cyanide,” and “Metals – Other non-priority pollutant metals” to surface water. The site is listed as having a suspected release of petroleum hydrocarbons, non-halogenated solvents, “EPA Priority Pollutants – Metals and Cyanide,” and “Metals – Other non-priority pollutant metals” to soil and sediment. The “Ecology Site Status (MTCA cleanup process)” is “Ranked, Awaiting RA [Remedial Action].”
- **B & B Auto Repair Seattle/ Uptown Radiator Service (Map ID# 2):** This site is listed in the Leaking Underground Storage Tank (LUST) database, the Spill Prevention Preparedness and Response Division (SPILLS) database, Underground Storage Tank (UST) database, and as an EDR Historical Auto Station between 1930 and 1986. The site reportedly had two USTs (contents not identified in the database report) on site and both were removed. The site

is listed as having a petroleum hydrocarbon release to soil and groundwater. The LUST Facility Status is “Cleanup Started.”

- **Johnny S Dry Cleaners/ Fuller Jas R (Map ID #3):** This site is listed within the subject property as an EDR historical cleaners in 1920, 1940, 1944, 1955, 1960, 1966 and 1970.
- **Armored Transport of Seattle/ Fourteenth Avenue Service Station/ HTC Service Station (Map ID #4):** This site is listed in the Independent Cleanup Report (ICR), FINDS, LUST, and UST databases. Additionally, this site is listed in the Resource Conservation and Recovery Act (RCRA) database as a conditionally exempt small quantity generator of hazardous waste and was historically reported as a large quantity generator of hazardous waste. The site is also listed as an EDR Historical Auto Station between 1944 and 1970. The site is listed as having a petroleum hydrocarbon release to soil that was reportedly cleaned up. The site reportedly had between six and nine USTs on site (contents not identified in the database report). Three of the USTs were reportedly removed and six USTs had a “Tank System Status” of “Closure in Process” in 1996.
- **Former Lloyd’s Rocket Gas Station (Map ID #5):** This site is listed in the FINDS, US Brownfields, CSCSL, Voluntary Cleanup Program (VCP), UST, LUST, and ICR databases, and as an EDR Historical Auto Station. The site is identified as having had a confirmed release of petroleum hydrocarbons to soil and groundwater. The site has reportedly had six USTs on site (contents not identified in the database report) and all were removed. The Ecology site status is “RA in progress.”

The sites listed in Table 1 that have been ranked “C” have been identified as being either 1) a historical dry cleaner or automobile service station that operated adjacent to the subject property with no reported releases or 2) a site that is within close proximity to the subject property on which there was a confirmed release to soil and groundwater, but has been cleaned up and has a No Further Action status with Ecology. For sites ranked “C,” the potential for encountering contamination from these sites during redevelopment activities is considered low.

Public Health – Seattle & King County

Landau Associates contacted Public Health – Seattle & King County (Public Health) for information regarding solid waste, hazardous materials/chemical storage, or USTs on the subject property. Public Health completed a search for each of the addresses and/or parcel numbers located within the subject property. No relevant information was received from Public Health for the subject property (Vanzo, P., 2011, personal communication).

City of Seattle – Fire and Planning Departments

Landau Associates submitted a request for public records to the City of Seattle Fire Department (Fire Department) and City of Seattle Department of Planning and Development (Planning Department) requesting information or copies of permits related to prior use or storage of hazardous materials, hazardous materials incidents, and/or spills, USTs, and septic or sewer permits on the subject property.

On December 28, 2010, Ms. Lauren Poole with the Fire Marshal's Office at the fire department indicated that there were no records available for the subject property (Poole, L., 2010, personal communication).

Landau Associates conducted a review of historical permit records from the Planning Department on January 18, 2011. Of the available permit records that were reviewed, only one (a boiler permit) is determined to be relevant to this environmental review. This boiler permit, issued in December 2002, indicates there was a "boiler replacement" at the Baldwin property.

Washington State Department of Ecology

Landau Associates submitted a request for public records to Ecology for four properties (Former TD Auto Body & Repair; Former Armored Transport of Seattle; Former Lloyd's Rocket Gas Station; and Former B & B Auto Repair Seattle). Ecology files were reviewed to evaluate the extent of any contamination and the status of cleanup at the sites listed below.

- **Former TD Auto Body & Repair:** In 1993, Ecology received a report that management at TD Auto Body & Repair had been dumping hazardous materials in the yard behind the building (Ecology 1993). The hazardous materials reportedly dumped included solvents, paint thinners, lacquer and enamel thinners, bonding material, used motor oil, and antifreeze. By the end of 2001, representatives from the King County Local Hazardous Waste Program (LHWP) and Public Health had conducted multiple site visits and taken three soil samples due to observations of soil staining in the southern portion of the property. In December 2001, three soil samples were collected from the soil slope located on the southern side of the building at depths ranging from 6 to 10 inches. The samples were analyzed for extended diesel-range total petroleum hydrocarbons (TPH-Dx), volatile organic compounds (VOCs), and total metals. Heavy oil was detected in all three samples, at concentrations of 760 parts per million (ppm), 1,700 ppm, and 3,200 ppm. Lead was detected in all three samples, at concentrations of 160 ppm, 120 ppm, and 1,000 ppm. VOCs were not detected in any of the three samples. Sample results from 2001 indicate that concentrations of heavy oil and lead in one of the three sample locations exceeded the current Washington State Model Toxics Control Act (MTCA) Method A cleanup levels for unrestricted land uses of 2,000 ppm and 250 ppm, respectively.
- **Former Armored Transport of Seattle:**
 - Onsite Enterprises Inc. submitted a UST decommissioning report for the site to Ecology in October 1991 (Onsite Enterprises 1991). The report indicated that there were two 6,000-gallon (unleaded gasoline and waste oil) and one 8,000-gallon (diesel) USTs removed from beneath the parking lot located in the northern portion of the site. The report indicated that 200 cubic yards of contaminated soil was removed from the site for remediation and confirmation soil samples were taken. A total of 26 soil samples were collected at locations that included the excavation sidewalls, near fuel pipe connections, beneath fuel island dispensers, and from stockpiled soil. Soil samples were selectively analyzed for gasoline-range TPH (TPH-G); benzene, toluene, ethylbenzene, and xylenes (BTEX); TPH-D; oil-range TPH (TPH-O); and/or leachable metals. Fourteen of the 26 soil samples were analyzed for TPH-G, TPH-D, and BTEX. Four of the 14 samples had benzene concentrations that were above the MTCA Method A cleanup level for

unrestricted land uses with concentrations ranging from 0.036 ppm to 15.0 ppm. Concentrations of toluene, ethylbenzene, xylenes, and TPH-G were above the MTCA Method A cleanup levels for unrestricted land uses in one of 14 samples at concentrations of 14.0 ppm, 19.0 ppm, 53.0 ppm, and 780 ppm, respectively. Concentrations of TPH-D and metals in samples were either not detected or below MTCA Method A cleanup levels for unrestricted land uses. Onsite Enterprises estimated that slight TPH-G contamination likely extends to the west and southwest of the excavation limits. Groundwater at the site ranged from 8 ft to 15 ft below ground surface.

- In October 1991, Environmental Profiles, Inc. submitted a notice of intent to install a UST at the site on behalf of Armored Transport, Inc (Environmental Profiles 1991). The notice indicates that an 8,000-gallon UST would be installed for the storage of diesel fuel. The notice of intent to install a UST was received by Ecology and approved for installation on or after November 18, 1991.
- In an Ecology LUST File Summary for the site dated 2001, Ecology indicated that the groundwater impact is likely negligible as the source of petroleum-contaminated soil has been removed (Ecology 2001). In 2001, Ecology updated the site status to “Reported Cleaned Up.”
- **Former Lloyd’s Rocket Gas Station:** Galloway Environmental Inc. submitted a UST removal and site assessment report to Ecology in September 1997 (Galloway Environmental 1997). The report indicated that there were four 4,000-gallon (gasoline), one 6,000-gallon (diesel), and one 300-gallon (waste oil) USTs removed from the site. Approximately 80 cubic yards of soil was excavated from above and adjacent to the tanks. Groundwater was not encountered during excavation activities. A total of 24 soil samples were taken from areas adjacent to and 1 ft below the USTs and from stockpiled soil. Soil samples were selectively analyzed for TPH-G, BTEX, TPH-Dx, and TPH-O. Sixteen (16) of the 24 soil samples were analyzed for TPH-G and BTEX and 4 of the 24 soil samples were analyzed for TPH-Dx and TPH-O. Current MTCA Method A cleanup levels for unrestricted land use were exceeded in 11 of 16 samples for TPH-G (with concentrations above MTCA Method A levels ranging from 120 ppm to 17,000 ppm); in 10 of 16 samples for benzene (with concentrations above MTCA Method A levels ranging from 0.2 ppm to 38 ppm); in 1 of 16 samples for toluene (210 ppm); in 4 of 16 samples for ethylbenzene (with concentrations above MTCA Method A levels ranging from 7.2 ppm to 270 ppm); in 6 of 16 samples for xylenes (with concentrations above MTCA Method A levels ranging from 15.8 ppm to 780 ppm); and in 2 of 4 samples for TPH-O (13,000 ppm and 16,000 ppm). Concentrations of TPH-D did not exceed current MTCA Method A cleanup levels for unrestricted land use in any of the four samples taken. Galloway Environmental indicated in the report that additional environmental studies are in-progress. Ecology records do not indicate to what extent contamination has been cleaned up at the site; however, based on topography, the likely groundwater flow direction (to the southeast), the proximity of the site to the subject property (approximately 250 ft), and because the subject property is likely hydraulically crossgradient from the Lloyd’s Station, it is unlikely that contaminants have migrated from the site to the subject property.
- **Former B & B Auto Repair Seattle:** No Ecology files were available for review.

The Ecology file review indicates that there has been a confirmed release of TPH and lead to soil at the former TD Auto Body & Repair site with no cleanup reported. The former TD Auto Body & Repair site is located hydraulically upgradient and adjacent to the subject property and there is a potential for migration of contaminants from this site to the subject property, which is a *recognized environmental*

condition for the subject property. While there have been confirmed TPH releases to soil at both the former Armored Transport of Seattle and the former Lloyd's Rocket Gas Station, there is considered to be a low potential that contaminants have or could migrate from these sites to the subject property, because: 1) both sites are located hydraulically crossgradient to the subject property; 2) Ecology has indicated that the former Armored Transport of Seattle site is "Reported Cleaned Up"; and 3) the former Lloyd's Rocket Gas Station is located approximately 250 ft from the subject property.

SITE RECONNAISSANCE

A site reconnaissance was conducted within accessible areas of the subject property and surrounding area on January 18, 2011. The purpose of the site reconnaissance was to observe current land use activities and environmental conditions, and crosscheck/verify the information developed during the historical and regulatory data review task to the extent practicable. The interior of both buildings located at the KC Records site and the interior of most of the building located at the SUL property were observed. The building located on the Baldwin property and a portion of the SUL building were inaccessible during the site reconnaissance. Areas between and around buildings were inspected to the extent practicable. Properties adjacent to the subject property were observed from the public rights-of-way. Current land use(s) and conditions at the properties within or adjacent to the subject property were documented with notes and photographs and a summary is provided below. Additionally, information from the site reconnaissance is included in Table 1 and on Figure 2.

Subject Property

The KC Records site is located south of East Fir Street, north of East Yesler Way, east of 12th Avenue, and west of 13th Avenue (Figure 2). The site is developed with two warehouse buildings that are used by King County for archives and record storage. Both warehouses are equipped with heating, ventilation, and air conditioning (HVAC) and fire sprinkler systems. The primary heat source for both warehouses is natural gas and lighting is provided using fluorescent bulbs. Both warehouses have cupboards or lockers in which common household chemicals and cleaning supplies are stored, including de-icer, WD-40®, soaps, glass cleaner, bleach, and powdered cleansers. There were no spills or staining observed in any chemical or cleaning supply storage areas. The eastern warehouse building is used for record storage and the western warehouse building is used as a publicly accessible archives facility. A refrigerator is located in the west warehouse for the storage of cellulose nitrate negatives. What appeared to be three ground-mounted electrical transformers were observed within an outdoor fenced area between the two warehouses. No surface staining was observed on the ground surface surrounding the transformers and there was no labeling on the transformers indicating the presence of polychlorinated

biphenyls (PCBs).

The SUL property is located north of East Yesler Way, between 13th Avenue and 14th Avenue (Figure 2). The site is developed with a building currently used as office space. The primary heat source for the building is natural gas. “Popcorn” ceiling was observed throughout much of the building. The building contained an elevator and a wheelchair lift, both of which likely require the use of hydraulic oil or fluids. The building contains two basements (the north and south basements). Access to the south basement was not possible at the time of the site reconnaissance. The north basement is used for supply storage including boxes of files, pallets, and other miscellaneous items. Two chemical storage areas were observed in the north basement including the storage of paint, primer, glass cleaner, and other cleaning supplies. Chemicals were stored either on the ground or on shelves. No spills or staining were observed in the north basement. Based on an interview with Mr. John Chuta, the Chief Financial Officer for the Seattle Urban League, there is a boiler buried in the northwestern corner of the building (as described below in the Property Owner Interview section; Chuta, J., 2011, personal communication). There was no evidence of the buried boiler within the north basement; however, due to the large number of items stored it was difficult to observe the entire basement floor.

The Baldwin property is located south of East Fir Street, between 13th Avenue and 14th Avenue (Figure 2). There is a vacant/condemned apartment building located on the property. As described above, the building was not accessible due to safety concerns; however, outdoor areas of the property were observed (i.e., the parking lot and areas with vegetation).

The site reconnaissance did not identify any obvious indications of contamination on the subject property. As noted above, the interior of the Baldwin Apartment building and a portion of the interior of the SUL building were not accessible during the site reconnaissance.

Adjacent Properties

Land uses on properties adjacent to the subject property include an elementary school; a church; restaurants; single- and multi-family residential buildings; manufacturing, retail, and automobile repair facilities; vacant property; and parking lots (Figure 2). Based on observations made of properties near and adjacent to the subject property during the site reconnaissance, sites observed to have activities considered to have the potential to impact the proposed redevelopment project are described below.

Universal Auto Body & Services Inc. (formerly TD Auto Body & Repair; Figure 2 Map ID #1) is located adjacent to the west of the KC Records site and provides automobile bodywork and mechanical repair services. Based on the distance from which this property was observed and the potential for wet surfaces due to recent rainfall, the presence of surface staining could not be confirmed or ruled out. As described above, past releases of hazardous materials have been documented at this site.

Former B & B Auto Repair (currently a vacant lot; Figure 2 Map ID #2) is located 225 ft to the northwest of the KC Records site. The site is currently fenced off and vacant. All buildings have been demolished and removed. There was a large area of ponded water in the southeastern corner of the site (likely due to significant rainfall that had occurred within a week of the site reconnaissance). Two 30-gallon drums were located on the site and were labeled as “Purge Water/Decon Water Pending Analysis” dated September 20, 2010. As described above, past releases of hazardous materials have been documented at this site.

Garda Company (formerly Armored Transport of Seattle; Figure 2 Map ID #4) is located adjacent to the southeast of the SUL property (south of East Yesler Way and east of 14th Avenue South) and provides armored car services. An AST and a fuel pump island were observed in the parking lot area of this property. A “diesel” sign was visible on the pump island. Based on the distance from which this property was observed and the potential for wet surfaces due to recent rainfall, the presence of surface staining could not be confirmed or ruled out. As described above, past releases of hazardous materials have been documented at this site.

Northshore Hawaiian B.B.Q. & Bar (formerly Lloyd’s Rocket Gas Station; Figure 2 Map ID #5) is located 250 ft southwest of the KC Records site (south of East Yesler Way and west of 12th Avenue South). Groundwater monitoring wells are located throughout the site and two 55-gallon drums with the date “1-18-09” written on them were located in the southeastern corner of the property. As described above, past releases of hazardous materials have been documented at this site.

A pole-mounted electrical transformer was observed adjacent to the west of the Baldwin property; however, no surface staining was observed on the ground surface below the transformer and any labeling regarding PCB content was not visible from ground level.

PROPERTY OWNER INTERVIEWS

Landau Associates conducted phone or in-person interviews with representatives from the organizations that currently own the subject property. The interviewees were:

- Mr. Tony Adams, Manager of Archives and Mail Services, King County
- Mr. John Chuta, Chief Financial Officer, Seattle Urban League
- Ms. Shurvon Wright, Baldwin Apartments Property Manager, Seattle Housing Authority
- Ms. Judi Fani, Real Property Acquisitions and Commercial Leasing Coordinator, Seattle Housing Authority.

Relevant information from the interviews for the project is described below.

- Both warehouse buildings at the KC Records site previously underwent asbestos-containing building materials (ACBM) and lead-based paint (LBP) abatement and/or removal. Specific

details and the date of this abatement were unavailable (Adams, T., 2011, personal communication).

- There are currently no hazardous materials stored at the KC Records site with the exception of household and janitorial cleaning supplies (Adams, T., 2011, personal communication).
- Prior to being used as a record storage facility and archives, the KC Records site warehouses were used for storage of miscellaneous King County-owned equipment and as an evidence room for the King County Sheriff's Office (Adams, T., 2011, personal communication).
- The SUL building was historically two separate hotels that were combined into one building and remodeled for use as an apartment building, then later remodeled by the Seattle Urban League to be used as office space. The dates on which the hotels were combined and later remodeled for use as an apartment building are not known; however, the Seattle Urban League purchased the property approximately 25 years ago, prior to remodeling it for use as office space (Chuta, J., 2011, personal communication).
- The SUL building is known to have ACBM and LBP. No abatement or removal of ACBM or LBP has been completed; however, according to Mr. Chuta, the ACBM and LBP is encapsulated (Chuta, J., 2011, personal communication).
- A coal-fired boiler was historically used at the SUL building, but is no longer used and was buried in place in the northwestern corner of the building (Chuta, J., 2011, personal communication).
- The Baldwin property was purchased by SHA in 2007 from Mr. Alan Hua (Fani, J., 2011, personal communication).
- The Baldwin Property apartment building is currently condemned and has had no tenants living in it since early 2010 (Wright, S., 2011, personal communication). The building was condemned in 2007 due to electrical issues, a leak in the roof, and problems with the natural gas-fueled boiler.
- The Baldwin Property apartment building likely has ACBM and LBP within it and no abatement or removal of ACBM or LBP has been completed (Fani, J., 2011, personal communication).

The known or likely presence of ACBM and LBP within the SUL building and the Baldwin property building are considered *recognized environmental conditions* for the subject property.

SITES OF POTENTIAL CONCERN

Based on the results of the historical and regulatory data review and the site reconnaissance, sites of potential concern for the planned redevelopment project have been identified and are listed in Table 1 and highlighted on Figure 2. The sites are ranked based on an assessment of the potential for encountering contamination during the planned redevelopment project. As indicated in Table 1, the former TD Auto Body & Repair (currently Universal Auto Body & Services Inc.) is identified as having the highest potential to affect construction or redevelopment activities based on the potential for contamination to have migrated from this site to the subject property.

DATA GAPS

The following data gaps were identified during our assessment. The data gaps and our evaluation of the impact on the findings of this assessment are as follows:

- Due to the age of the buildings within the project area, there is the potential for asbestos-containing building materials to be present. Additional data are needed regarding any previous survey or abatement activities. This data gap is considered significant.
- The Former B & B Auto Repair Seattle site (currently vacant) is listed as having had a petroleum hydrocarbon release to soil and groundwater from a LUST. During the site reconnaissance, two 30-gallon drums labeled as “Purge Water/Decon Water Pending Analysis” dated September 20, 2010 were observed. No files were available for review from Ecology. The current status of cleanup activities at this site is not known. While this site is likely hydraulically upgradient of the subject property, this data gap is not considered significant, due to the distance from the subject property (225 ft) and the ongoing evidence of investigation/cleanup.
- The interior of the Baldwin property apartment building and some areas within the SUL property building were not accessible; therefore, interior building inspections and detailed exterior inspections were not conducted as part of this assessment. This data gap is not considered significant, due to the residential/office-related uses of these buildings.

CONCLUSIONS AND RECOMMENDATIONS

While it is known that there has been some abatement or removal of asbestos-containing building materials (ACBM) and lead-based paint (LBP) at the KC Records site, specific details of this abatement or removal are not known. A review of available information regarding abatement or removal of ACBM and LBP at the KC Records site should be conducted prior to any demolition or construction activities at the site. Due to the age of the buildings located at the SUL property and the Baldwin property, it is likely that they contain ACBM and LBP and there is no record of abatement or removal. Further evaluation is needed to determine the extent to which ACBM and LBP are present within the buildings located at the SUL property and the Baldwin property.

In addition, as noted above, the Baldwin Property apartment building is currently condemned due to electrical issues, a leak in the roof, and problems with the natural gas-fueled boiler. Further evaluation of the current condition of this building is needed as part of any planning for building renovations.

This assessment has identified sites adjacent or within close proximity to the subject property with reported contamination to soil and/or groundwater based on available historical and regulatory information. Planning for construction should include contingencies for appropriate site-specific health and safety procedures that meet the requirements of WAC 296-155-176 to minimize the potential for workers to be exposed to hazardous materials during construction. In addition, if residential development is proposed, additional characterization, removal, and proper disposal of contaminated soil with concentrations greater than the MTCA cleanup level may be necessary. A site-specific health and safety

plan would also need to be prepared and followed if new areas of contamination were discovered during site demolition and development activities on the subject property. Primary potential exposure pathways to construction workers that would be addressed in the plan include direct contact with contaminated soil, groundwater, and petroleum product; inhalation of hazardous compounds present in construction-generated dust; and inhalation of volatile petroleum compounds. Conventional dust control measures would be needed to minimize the exposure of workers and the immediate surrounding populations to construction-generated dust.

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This technical memorandum has been prepared for the exclusive use of Collins Woerman Inc. and the Seattle Housing Authority for specific application to the Yesler Terrace Redevelopment project. No other party is entitled to rely on the information, conclusions, and recommendations included in this document without the express written consent of Landau Associates. Further, the reuse of information, conclusions, and recommendations provided herein for extensions of the project or for any other project, without review and authorization by Landau Associates, shall be at the user's sole risk. Landau Associates warrants that within the limitations of scope, schedule, and budget, our services have been provided in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality under similar conditions as this project. We make no other warranty, either express or implied.

The limited scope of services for this effort consisted of a review of historical and regulatory data, a site reconnaissance, and preparation of this technical memorandum. This scope of services does not constitute a Phase I ESA per the *ASTM Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, E 1527-05. The scope of work for this assessment was focused to meet the objectives of the project.

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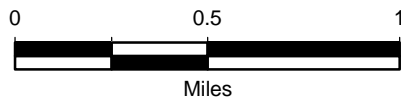
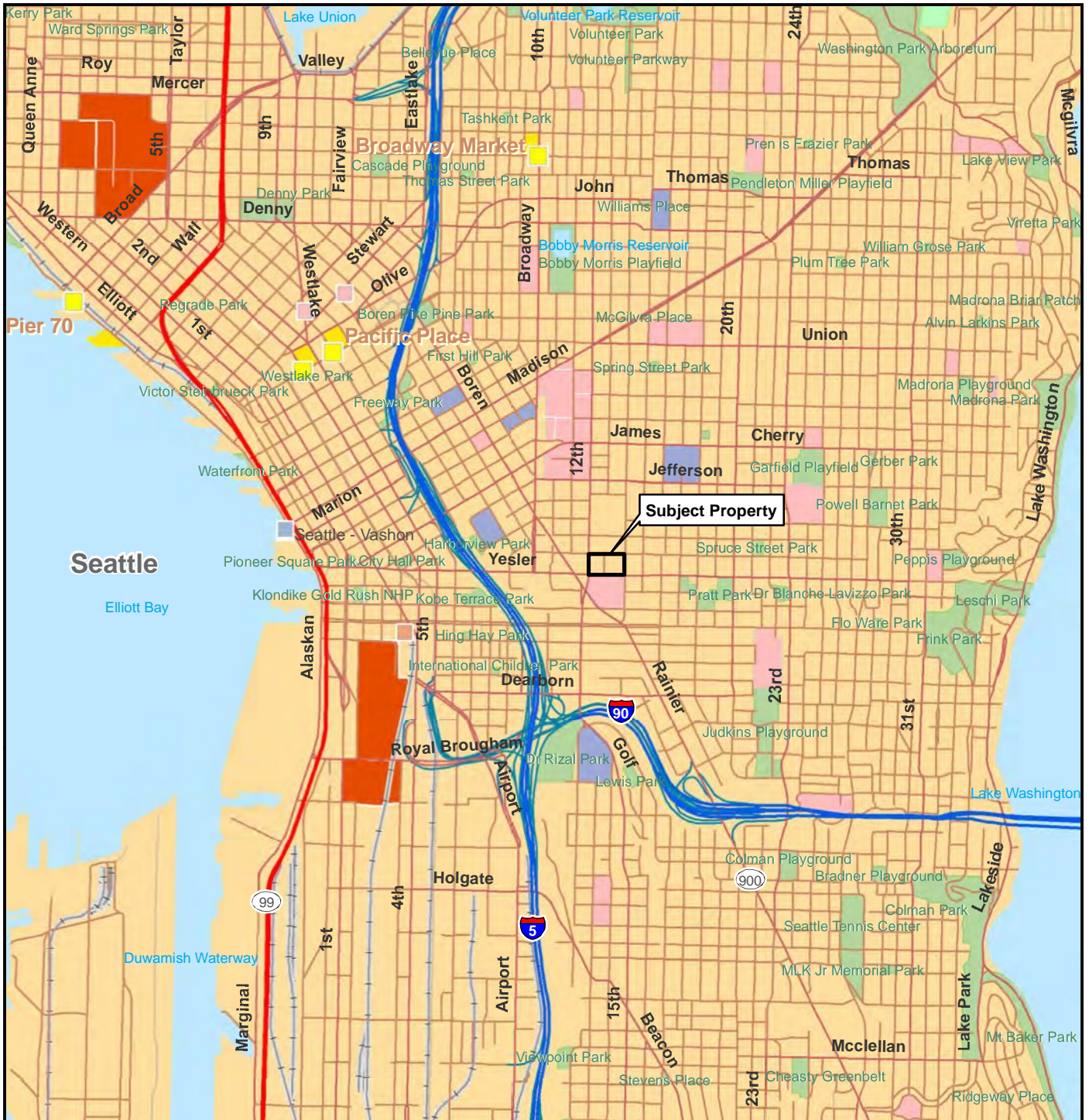
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Wright, S. 2011. Personal communication (telephone conversation with Mark Brunner, Landau Associates). Shurvon Wright, Baldwin Apartments Property Manager, Seattle Housing Authority. Re: *History of Baldwin Apartments Property*. January 14.

ATTACHMENTS

- Figure 1: Vicinity Map
- Figure 2: Site Map
- Table 1: Sites of Potential Concern Identified in Sanborn Maps, Environmental Data Resources Report, and Ecology Files
- Attachment 1: Aerial Photographs
- Attachment 2: Historical Topographic Maps
- Attachment 3: Historical Sanborn Fire Insurance Maps
- Attachment 4: Environmental Data Resources Radius Map[™] with GeoCheck[®] (on CD-ROM)



Data Source: ESRI 2008



Y:\Projects\816003\MapDocs\050\053\Fig1.mxd 2/9/2011

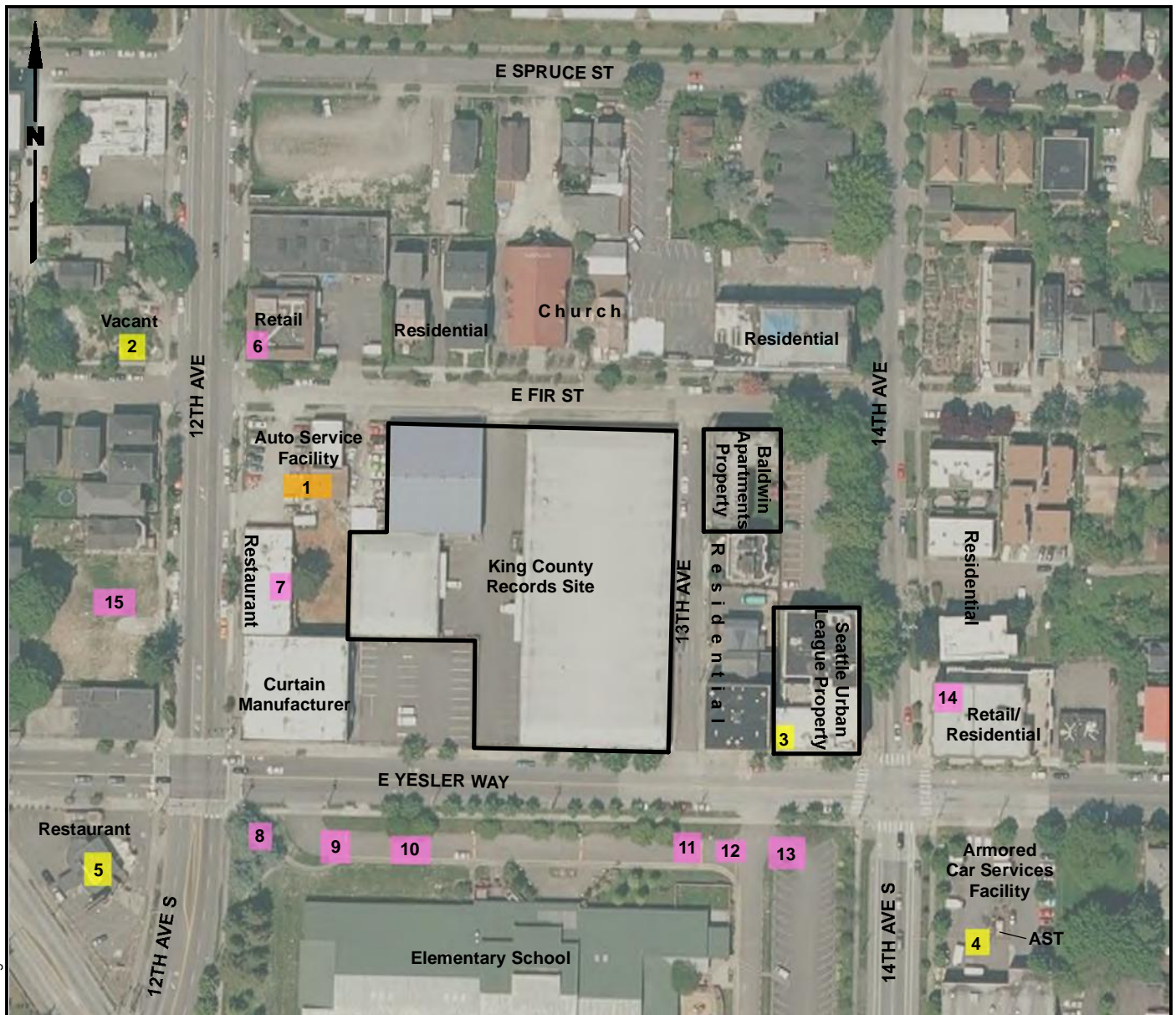


Yesler Terrace Redevelopment
Seattle, Washington

Vicinity Map

Figure
1

Y:\Projects\1818003\MapDocs\050053\Fig2-SiteMap.mxd 3/4/2011 NAD 1983 StatePlane Washington North FIPS 4801 Feet



Legend

- A** Sites that have either been identified as *recognized environmental conditions* for the subject property due to known releases adjacent to and upgradient of the subject property and there has been no cleanup conducted. There is potential for encountering contamination at/adjacent to these sites during construction. (See Table 1)
- B** Sites that have been identified as *recognized environmental conditions* for the subject property due to: 1) historically operated as a dry cleaner with no reported releases; 2) located hydraulically upgradient, not adjacent to but within close proximity to the subject property and have had a contaminant release to soil and groundwater with an unknown cleanup status; 3) located adjacent to the subject property with a confirmed contaminant release to soil that was reportedly cleaned up; or 4) located within close proximity and hydraulically crossgradient to the subject property with a confirmed contaminant release to soil and groundwater and an unknown cleanup status. The potential for encountering contamination from these sites during redevelopment activities is considered low. (See Table 1)
- C** These sites are either: 1) adjacent to the subject property and have been the location of historical dry cleaners or historical auto stations or 2) have had a confirmed contaminant release to soil and groundwater that has been cleaned up and have received a "No Further Action" status from Ecology. The potential for encountering contamination from these sites during redevelopment activities is considered very low. (See Table 1)

Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.



Data Source: I3 Image Server

TABLE 1

**SITES OF POTENTIAL CONCERN IDENTIFIED IN SANBORN MAPS, ENVIRONMENTAL DATA RESOURCES REPORT, AND ECOLOGY FILES
YESLER TERRACE REDEVELOPMENT
SEATTLE, WASHINGTON**

Figure 2 Map ID	Orientation to Subject Property	Site Address(es)	EDR Report Site Names	Notes Regarding Potential for Encountering Contamination During Construction	Current Tenant (Site Reconnaissance Notes)
1	Adjacent to west	1209 E Fir St / 130 12th Ave	TD Auto Body & Repair / H and I Auto Service / Franks Avenue Station	Listed as an EDR Historical Auto Station between 1940 and 1990, shown as a gasoline station on the 1949, 1950, and 1969 Sanborn maps, and the site currently operates as an automobile service facility. The site is listed as having a confirmed release of petroleum hydrocarbons and a suspected release of non-halogenated solvents and metals to storm/sewer. The site is also listed as having a suspected release of petroleum hydrocarbons, non-halogenated solvents, and metals to soil. Soil sampling results confirmed a release of petroleum hydrocarbons and lead to soil. Based on publicly available information, there has been no cleanup at the site.	Automobile service facility
2	225 ft to the northwest	151 12th Ave	B & B Auto Repair Seattle / Uptown Radiator Service	Listed as an EDR historical auto station between 1930 and 1986. The site is listed as having a LUST that released petroleum hydrocarbons to soil and groundwater. The current status of cleanup activities is not known.	Vacant
3	Within project	1310 Yesler Way / 1314 Yesler Way	Johnny S Dry Cleaners / Fuller Jas R	Listed as an EDR historical cleaners in 1920, 1940, 1944, 1955, 1960, 1966 and 1970.	Seattle Urban League property, subject property
4	Adjacent to southeast	100 14th Ave S / 1401 E Yesler Way	Fourteenth Avenue Service Station / Armored Transport of Seattle / HTC Service Station	Listed as an EDR Historical Auto Station between 1944 and 1970. The site is listed as having a petroleum hydrocarbon release to soil that was reportedly cleaned up. The site historically may have had as many as six USTs on site. A UST closure report indicates at least three of the USTs have been removed.	Armored Car Facility (observed aboveground fuel tank and fuel pump in parking lot)
5	250 ft to the southwest	110 Boren Ave / 105 12th Ave S	Former Lloyd's Rocket Gas Station / Ewing Sam L	Listed as an EDR historical auto station between 1951 and 1990. Listed as an EDR historical cleaners in 1944. The EDR report indicates that the site has had a release of petroleum hydrocarbons to soil and groundwater due to six LUSTs. Additionally, this site is shown on the 1949 and 1950 Sanborn maps as a gasoline service station. The current status of cleanup activities is not known.	Restaurant (observed groundwater monitoring wells)
6	Adjacent to northwest	150 12th Ave	Gregory Repair	Listed as an EDR historical auto station between 1925 and 1975.	Retail

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YESLER TERRACE REDEVELOPMENT
SEATTLE, WASHINGTON**

Figure 2 Map ID	Orientation to Subject Property	Site Address(es)	EDR Report Site Names	Notes Regarding Potential for Encountering Contamination During Construction	Current Tenant (Site Reconnaissance Notes)
7	Adjacent to west	118 12th Ave	Robertson S Laundry and Dry Cleaners	Listed as an EDR historical cleaners in 1966 and 1970.	Food Service
8	Adjacent to southwest	1203 Yesler Way	Fukei S	Listed as an EDR historical cleaners in 1920.	Elementary School
9	Adjacent to south	1219 Yesler Way	Kurata Geo Y	Listed as an EDR historical cleaners in 1935 and 1940.	Elementary School
10	Adjacent to south	1227 Yesler Way	Rikoshima Z	Listed as an EDR historical cleaners in 1925.	Elementary School
11	Adjacent to south	1307 Yesler Way	Keep Kleen Kleaners	Listed as an EDR historical cleaners between 1951 and 1975.	Elementary School
12	Adjacent to south	1313 Yesler Way	Royal Laundry Agency	Listed as an EDR historical cleaners in 1940.	Elementary School
13	Adjacent to south	1317 Yesler Way	Yesler Way Wet Wash Lndy Co	Listed as an EDR historical cleaners in 1920.	Elementary School
14	Adjacent to east	1404 Yesler Way	Ed S Carpet and Upholstery Cleaners	Listed as an EDR historical cleaners in 1966.	Mixed-use (retail and residential)

TABLE 1

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YESLER TERRACE REDEVELOPMENT
SEATTLE, WASHINGTON**

Figure 2 Map ID	Orientation to Subject Property	Site Address(es)	EDR Report Site Names	Notes Regarding Potential for Encountering Contamination During Construction	Current Tenant (Site Reconnaissance Notes)
15	175 ft to the west	109-117 12th Avenue	SHA Brownfields Site / Former Nu Way Cleaners / SHA 12th Avenue Site / Turner Beatter Property / C Miller Property	This site is referred to by Ecology as the SHA Brownfields site and has a long history of dry cleaning operations operating since 1931. The site is listed in the US Brownfields database as having a release of petroleum hydrocarbons, non-halogenated solvents, and halogenated organic compounds to soil and groundwater. All buildings and USTs have been removed, remedial actions have been completed, and based on soil and groundwater monitoring results contaminant concentrations in soil and groundwater are below MTCA cleanup levels. The site has been given an Ecology status of "No Further Action."	Vacant

Sites that have either been identified as *recognized environmental conditions* for the subject property due to known releases adjacent to and upgradient of the subject property and there has been no cleanup conducted. There is potential for encountering contamination at/adjacent to these sites during construction.

Sites that have been identified as *recognized environmental conditions* for the subject property due to: 1) historically operated on the subject property as a dry cleaner with no reported releases; 2) located hydraulically upgradient, not adjacent to but within close proximity to the subject property and have had a contaminant release to soil and groundwater with an unknown cleanup status; 3) located adjacent to the subject property with a confirmed contaminant release to soil that was reportedly cleaned up; or 4) located within close proximity and hydraulically crossgradient to the subject property with a confirmed contaminant release to soil and groundwater and an unknown cleanup status. The potential for encountering contamination from these sites during redevelopment activities is considered low.

These sites are either: 1) adjacent to the subject property and have been the location of historical dry cleaners or historical auto stations with no reported releases or 2) a site that is within close proximity to the subject property and have had a confirmed contaminant release to soil and groundwater that has been cleaned up and has received a "No Further Action" status from Ecology. The potential for encountering contamination from these sites during redevelopment activities is considered very low.

UST = Underground Storage Tank
LUST - Leaking Underground Storage Tank
REC = Recognized Environmental Condition
VCP = Washington State Department of Ecology Voluntary Cleanup Program
VOC = Volatile Organic Compound

ATTACHMENT 1

Aerial Photographs



Yesler Terrace Redevelopment
Seattle, Washington

1946 Aerial Photograph



Yesler Terrace Redevelopment
Seattle, Washington

1956 Aerial Photograph



1969 Aero-Metric/Seattle

Yesler Terrace Redevelopment
Seattle, Washington



Yesler Terrace Redevelopment
Seattle, Washington

1974 Aerial Photograph



1985 Aero-Metric/Seattle

Yesler Terrace Redevelopment
Seattle, Washington

LA LANDAU
ASSOCIATES

1985 Aerial Photograph

Yesler Terrace 1998



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Date: 8/17/2009

Source: King County iMAP - Property Information (<http://www.metrokc.gov/GIS/iMAP>)



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