PHASE I ENVIRONMENTAL SITE ASSESSMENT
PARCEL S83-058
GARLAND AND VANDEMAN
HOUSTON, TEXAS

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REAL ESTATE DIVISION
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SUMMARY

Tolunay-Wong Engineers, Inc., (TWEI) was requested by the City of Houston, Department of Public Works and Engineering, Geo-Environmental Branch, to conduct a Phase I Environmental Site Assessment (Phase I ESA) for Parcel S83-058, approximately 10,000 square feet on the northeast corner of Garland and Vandeman Streets in Houston, Texas.

The purpose of the Phase I ESA was to document environmental conditions of the Site and adjacent properties. This was done by identifying, to the extent feasible, pursuant to the process described in the *American Society for Testing and Materials (ASTM) Standard Practice for ESA's (ASTM E-1527-00)*, Recognized Environmental Conditions (RECs) at the Site.

The work for this report was conducted in accordance with TWEI Proposal No. P04-087, dated September 14, 2004, as authorized by Mr. Michael K. Ho on September 21, 2004. Work was executed in general accordance with the guidelines in *ASTM-E-1527-00* and with the *City of Houston Department of Public Works and Engineering ECRE Standard Practice (ECRE Standard Practice).*

A TWEI environmental professional inspected the Site and adjacent properties on September 29, 2004. Database searches and municipal records review were performed for the Site and adjacent properties. Applicable maps, publications, and historical aerial photographs were reviewed.

There are no findings related to the presence of Recognized Environmental Conditions (RECs) at the Site, as defined by *ASTM-E-1527-00.*

We have no recommendations for additional study.

1 INTRODUCTION

Tolunay-Wong Engineers, Inc., (TWEI) was requested by the City of Houston, Department of Public Works and Engineering, Geo-Environmental Branch (CoH), to conduct a Phase I Environmental Site Assessment (Phase I ESA) for Parcel S83-058, approximately 10,000 square feet on the northwest corner of Garland Street and Vandeman Street extended in Houston, Texas.

1.1 PURPOSE

The purpose of the Phase I ESA was to document environmental conditions of the Site and adjacent properties. This was done by identifying, to the extent feasible, pursuant to the process described in the *American Society for Testing and Materials (ASTM) Standard Practice for ESA's (ASTM E-1527-00)*, Recognized Environmental Conditions (RECs) at the Site. "Recognized Environmental Conditions" include:

> "the presence or likely presence of any hazardous substance or petroleum products on a property under conditions that indicate any existing release, a past release, or a material threat of a release of hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water on 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 material risk of harm 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 governmental agencies. Conditions determined to be de minimis are not Recognized Environmental Conditions." (ASTM-E-1527, 2000).

1.2 REASON FOR PERFORMING THE PHASE I ESA

CoH requested the Phase I ESA as part of the environmental due diligence associated with sale of the City of Houston's surplus properties.

1.3 DETAILED SCOPE-OF-SERVICES FOR THE PHASE I ESA

The work for this report was conducted in accordance with TWEI Proposal No. P04-E087 dated September 14, 20048, as authorized by Mr. Michael K. Ho on September 21, 2004. Work for the Phase I ESA was executed in general accordance with the guidelines in *ASTM-E-1527-00* and with the *City of Houston Department of Public Works and Engineering ECRE Standard Practice (ECRE Standard Practice).*

The scope of services for this project included:

- A historical review of prior owners of the Site. A review of records available from past and current landowners was included in the process. A Chain-of-Title search was conducted as part of this historical review.

- A historical review of land use, including review of aerial photographs, soil conservation maps, or other available historical data.

- Contacting Federal, State and Local regulatory agencies to identify records that could indicate negative environmental impacts at the Site. Agencies that were contacted included the Houston Fire Department and the Texas Railroad Commission.

- Reviewing surrounding properties to determine if their land usage or business practices could have contributed to a negative environmental impact to the Site.

- Evaluating surrounding areas for sensitive environmental receptors, i.e., drinking water wells, aquifers, schools, etc.

- Conducting a site reconnaissance to evaluate topography and visibly observe conditions at the Site that may have suggested environmental impairment; drums with unknown contents, underground storage tanks, waste dump areas, stained areas, stressed vegetation, etc.

- Conducting a literature search and site reconnaissance of the general hydrology and geology of the Site.

- Preparing this report stating the findings of the Phase I ESA. Included in this report are conclusions and recommendations as to the evidence of, or the potential for RECs at the Site at the time of the investigation.

1.4 SIGNIFICANT ASSUMPTIONS

If significant assumptions have been made in the course of conducting this Phase I ESA, they have been discussed in the relevant section of this report.

1.5 SPECIAL TERMS AND CONDITIONS

No special terms or conditions apply to this Phase I ESA.

2 SITE DESCRIPTION

2.1 LOCATION AND LEGAL DESCRIPTION

The Site is comprised of approximately 10,000 square feet out of Lots 3, 4, and 5 Block 19 of the Pecan Park Addition, located at the northwest corner of Garland Street and Vandeman Street extension in Houston, Texas. The Site and general vicinity are depicted in Figure 1 – Site Map. The Client provided a legal description, historical deed information, and site survey. A 100-year chain of title search was conducted utilizing the legal description. The Site survey forms the basis of the Site Map (Figure 1) while the legal description, historical deed information, and 100-year chain-of-title documentation are contained in Appendix A.

2.2 SITE AND VICINITY GENERAL CHARACTERISTICS

2.2.1 Topography

The *US Geologic Survey 7.5 Minute Topographic Park Place, TX (1982) Quadrangle Map* was used to evaluate the Site. According to the topographic map, the Site is located on the high ground (approximately 30-35 feet above mean sea level (MSL)) between Brays Bayou and Plum Creek. The head of a tributary to Brays Bayou is located approximately one-half mile northwest of the Site across Griggs Road. Plum Creek, which discharges into Sims Bayou, is located approximately 3300 feet south of the Site.

2.2.2 Surface Water Hydrology

The Federal Emergency Management Agency *Flood Insurance Rate Map (FEMA FIRM), Community Panel Number 4820C0885K, April 20, 2000,* was used to evaluate the Site relative to flood zones. The map indicates that the base flood elevations have been determined and that the Site is located outside the 500-year floodplain. It is our understanding that FEMA will be publishing revised flood insurance maps in 2004. FEMA has stated in public announcements that many areas previously considered non-flood plain areas will be reclassified as flood plains. CoH should be aware of the potential for reclassification of this area.

2.2.3 General Geologic and Soil Characteristics

The Gulf Coast region of Texas is underlain by a thick wedge of sediments that have been deposited by fluvial and deltaic processes. The sediments are represented as a series of wedges thickening towards the coast. Recent sediments were deposited in present day alluvial valleys and floodplains of the major drainage systems. These sedimentary units typically contain cohesionless soils (sands, silts, and their intermixtures) intermixed with cohesive soils (clays, sandy clays, and silty clays).

Older sedimentary deposits consist of the Beaumont, Lissie, and Willis Formations. The sediments that compose each of these geologic formations are similar in depositional composition in that streams of coalescing fluvial and deltaic systems deposited them. The soils, which developed from these systems, include clay, silt, sand, and their intermixtures.

Exploration, principally by the petroleum industry, has identified these sediments to be extensively disrupted by "growth" faults and faults associated with shallow piercement and deep-seated salt domes. Growth faults are essentially slip surfaces formed by "landslides" that occurred at the same time of sediments deposition. The subsurface displacement of strata increases with depth. Faults associated with salt domes are similar to growth faults in that the faulting takes place in the sediments, but the model of deformation is generated by mobile salt migration. Evidence of continuing activity of faults is demonstrated by minor topographic scarps and ponds on virgin land, and disruption of pavements, structures, land subsidence, etc., in developed areas.

A review of internal files at TWEI indicated no faults at the Site or general vicinity.

Information concerning the soils of the area was obtained from the *1977 Soil Survey, Harris County, Texas.* The Site occurs within Lake Charles Urban Land Complex. This is a nearly level complex in broad, regular areas that range from 20 acres to about 1,800 acres in size. Slopes are mainly 0 – 1 percent, but range from 0 – 3 percent in some areas leading to drainage ways.

Lake Charles soils make up 20 – 80 percent of this unit: Urban land, 10 – 75 percent; and other soils, 15 percent or less. The areas making up this complex are so intricately mixed that separation was not feasible at the scale used in mapping. The surface layer of the Lake Charles soil is about 36 inches thick. In the upper 22 inches it is very firm, neutral, black clay. In the lower 14 inches it is very firm, mildly alkaline, very dark gray clay. In the layer below that it is about 16 inches thick and is very firm, mildly alkaline, dark gray clay that has intersecting slickensides. The next layer, to a depth of 74 inches, is very firm, mildly alkaline, gray clay that has mottles of olive brown and yellowish brown.

Urban land consists of soils that have been altered or covered by buildings or other urban structures. Classifying these soils is not practical. Typical structures are single- and multiple-unit dwellings, streets, schools, churches, parking lots office buildings, and shopping centers that are less than 40 acres in size. The Urban land includes remnants of Lake Charles soils that have been altered by cutting, filling, and grading in urban development. In many areas of this mapping unit 6 – 18 inches of fill material covers the natural soil.

This mapping unit has severe limitations for urban development. The main limitation is the high shrink-swell potential of the clay, which results in buckled streets and sidewalks and cracked walls.

2.3 CURRENT USE OF THE SITE

The Site is currently a vacant lot.

2.4 DESCRIPTIONS OF STRUCTURES, ROADS, AND OTHER IMPROVEMENTS ON THE SITE

There are no structures or other improvements on the Site. The Site has access to all public utilities.

2.5 CURRENT USES OF THE ADJOINING PROPERTIES

The Site is located within the City of Houston, Pecan Park Addition. This is a single-family dwelling residential neighborhood. The Site is bounded on the east by Garland Street and on the south by Hemlock Street. On the west and north the Site is bounded by single-family homes.

3 USER PROVIDED INFORMATION

3.1 TITLE RECORDS

As stated in Section 2.1, the Client provided a legal description, historical deed information, and Site survey. A 100-year chain of title search was conducted utilizing the legal description.

No easements, rights-of-way, surface leases or environmental liens affecting the surface estate of the Site were recorded in the legal description deed information or Survey.

The first recorded deed information about the Site occurred on March 10, 1927, by plat, when the Magnolia Park Land Co. became the owner of record. No previous owners were found during the title search. Through a series of deeds (1930, 1935, 1941, 1943, and 1951) lots 4 and 5 came into the possession of W.D. Antone, and Lot 3 of the Site came into possession of Ruth Gladys Smith. By warranty deed the City of Houston acquired Lot 3 from Ruth Gladys (Smith) Childress in 1965 and Lots 4 and 5 from W.D. Antone in 1966. Lots 3, 4, and 5 refer to Block 19 of the Pecan Park Addition.

3.2 ENVIRONMENTAL LIENS

No environmental liens were recorded in any of the documentation reviewed as part of this Phase I ESA.

3.3 SPECIALIZED KNOWLEDGE

There is no specialized knowledge associated with this Phase I ESA.

3.4 VALUATION REDUCTION FOR ENVIRONMENTAL ISSUES

In TWEI's opinion, this investigation did not reveal anything that should warrant a reduction in the value of the Site due to environmental issues.

3.5 OWNER, PROPERTY MANAGER, AND OCCUPANT INFORMATION

The owner for this Phase I ESA provided no information. There were neither property managers nor occupants at the Site.

4 RECORDS REVIEW

The objective of the records review is to obtain and review records that will help identify Recognized Environmental Conditions in connection with the Site.

Atlas Environmental Research, Inc., was contracted to perform a regulatory records search. Environmental databases were searched within a radius as defined by *ASTM E-1527-00*, except where the search distance was reduced per the City of Houston *Department of Public Works and Engineering ECRE Standard Practice* specifications (except for NPL, RCRA TDS and SHWS). The *Atlas Radius Map Report* is presented in Appendix B.

4.1 STANDARD FEDERAL GOVERNMENT DATABASES

4.1.1 NPL

Section 105(a)(8)(B) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, requires that the statutory criteria provided by the Hazardous Ranking System (HRS) be used to prepare a list of national priorities among known releases or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States. Sites placed on the National Priorities List (NPL) are also known as Superfund sites and are considered priorities for State and Federal cleanup efforts. Information concerning NPL sites is maintained by the EPA's Office of Emergency and Remedial Response.

The Site does not appear on the NPL list.

There are no NPL listings identified within a one-mile (1-mile) radius of the Site.

4.1.2 CERCLIS

This database is sponsored by the EPA's Office of Emergency and Remedial Response, Information Management Center. The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database contains information on site inspections, preliminary assessments, and remediation of hazardous waste sites. In addition, site name, location, and characteristics are also stored within this database.

The Site does not appear on CERCLIS.

There are no CERCLIS listings within a one-half mile (1/2-mile) radius of the Site.

4.1.3 NFRAP

No Further Remedial Action Planned (NFRAP) sites have been removed and archived from the CERCLIS inventory. This designation means that to the best of the EPA's knowledge,

assessment at a site has been completed and the EPA has determined no further steps will be taken to list the site on NPL, unless information indicates that this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that based upon available information, the location is not judged to be a potential NPL site. This database contains the same fields and information as CERCLIS.

The Site does not appear on NFRAP.

There is one NFRAP listing within a one-half mile (1/2-mile) radius of the Site. The listing is the Force Inc. at 7026 Lawndale Avenue, approximately 2400 feet northwest of the Site. Work on this site was finished in 1984. This is not considered a significant environmental risk to the Site.

4.1.4 RCRIS

This database was obtained from the Environmental Protection Agency (EPA). Resource Conservation and Recovery Information System (RCRIS) is a national management and inventory system of RCRA (Resource Conservation and Recovery Act) hazardous waste handlers. Handlers can be characterized as fitting one or more categories: 1) Treatment, Storage, Disposal, and Combustion Facilities (TSD's); 2) Generators (Large Quantity, Small Quantity, or Conditionally Exempt); and, 3) Transporters. RCRIS captures identification and location data from all handlers and a wide range of information on TSDs regarding permit/closure status, compliance with Federal and State regulations, and cleanup activities. Information regarding state and/or federal evaluations, violations, and enforcement actions is also maintained within RCRIS.

The Site does not appear on the RCRIS TSD, RCRIS LQG, or RCRIS SQG databases.

There is one RCRIS site within the ¼ mile search radius of the Site and two RCRIS-TSD sites identified within a one-mile (1-mile) radius of the Site. The RCRIS facility is Transport Electric Company at 6975 Griggs, approximately ¼ mile north of the Site. No violations are recorded in the database for this site. Active Tank and Industrial Cleaning, Inc., is a RCRIS-TSD facility at 7224 Lawndale Avenue, approximately 2270 feet northeast of the Site. No violations were recorded at this facility in the database search. The database identified as a RCRIS-TSD facility, but could not locate Kirby Steel Products Company. The database did indicate no violations at the Kirby Steel Products facility. These facilities are not considered significant environmental risks to the Site.

4.1.5 ERNS

The Emergency Response Notification System (ERNS) is an archived database that stores information on notification of oil discharges and hazardous substance releases through the year 2000. ERNS provides the most comprehensive data complied on notifications of oil discharges and hazardous substance releases in the United States from 1986 through 2000. During its use, more than 275,000 release notifications were entered into ERNS.

The Site does not appear on ERNS.

There are no ERNS sites identified within a one-quarter mile (1/4-mile) radius of the Site.

4.1.6 NRS

In mid-2000, the EPA began phasing out their responsibility for maintaining the ERNS database and turning over full control to the National Response Center (NRC). The database was redesigned and renamed National Response System (NRS). The NRC is now the sole federal point of contact for reporting oil and chemical spills and NRS is now the most comprehensive source of compiled data on notification of oil and chemical spills from the year 2000 to present.

The Site does not appear on NRS.

There are no NRS sites identified within a one-quarter mile (1/4 mile) radius of the Site.

4.2 STATE GOVERNMENT DATABASES

4.2.1 State Superfund

The Texas Commission on Environmental Quality (TCEQ) is required under the Texas Solid Waste Disposal Act, Texas Health and Safety Code Chapter 361, as amended, to identify and assess facilities that may constitute an imminent and substantial endangerment to public health and safety or the environment due to a release or threatened release of hazardous substances into the environment. Information on State Superfund Sites is maintained by the TCEQ – Pollution Cleanup Division.

The Site does not appear on State Superfund lists.

There are no State Superfund sites identified within a one-mile (1-mile) radius of the Site.

4.2.2 LPST

The Leaking Petroleum Storage Tank Database (LPST) is maintained by the Texas Commission on Environmental Quality (TCEQ) - Petroleum Storage Tank Division. It contains summary information about leaking tanks reported to the commission such as identification number, location information, responsible party information, and priority and status codes. Other information, including maps of monitoring wells, subsurface information, and contaminant data is often available in report format from the LPST file located in TCEQ Central Records – Austin.

The Site does not appear on the LPST list.

There are two LPST sites listed within a one-half mile (1/2-mile) radius of the Site. Both of the sites are located between one-quarter and one-half mile from the Site and have been closed by TCEQ. These LPST sites are not considered to pose a significant environmental risk to the Site.

4.2.3 PST

The Petroleum Storage Tank (PST) Database is maintained by the Texas Commission on Environmental Quality (TCEQ) - Petroleum Storage Tank Division. It has been retrieved from the TCEQ's TRACS PST System. Facility, owner, and specific tank information is maintained within four miles in this system. These files contain information on above/underground storage tanks that have been registered with the TCEQ. Owner and facility address and contact name information has been extracted for all tanks in this database. Specific tank data such as status, installation date, capacity, construction, and contents has been included in the database report.

The Site does not appear on the PST list.

There are two PST sites identified within a one-quarter mile (1/4-mile) radius of the Site. The Pronto Mart at 6899 Griggs Road contained three underground gasoline tanks with a total capacity of 9000 gallons. These tanks were removed in 1988. Griggs Shell at 6955 Griggs Road currently has two underground gasoline tanks (total capacity: 20,000 gallons) and one underground diesel tank (total capacity: 8000 gallons). These tanks are listed as 'in use'. These sites are not considered a significant environmental risk to the Site.

4.2.4 Texas Municipal Solid Waste Landfills

This database is maintained by the Texas Commission on Environmental Quality (TCEQ) – Municipal Solid Waste division. It contains summary information about landfills permitted by the commission such as identification numbers, location information, applicant/owner information, and site characteristics/status. Other information is available from the Landfill files located in the TCEQ Central Records – Austin.

The Site does not appear on Texas Municipal Solid Waste Landfills lists.

There are no Texas Municipal Solid Waste Landfill sites identified within a one-half mile (1/2-mile) radius of the Site.

4.2.5 TX VCP

The Texas Voluntary Clean Up Program (VCP) was established to provide administrative, technical, and legal incentives to encourage the clean-up of contaminated sites in Texas.

The Site does not appear on the VCP list.

There is one TX VCP site listed within a one-half mile (1/2-mile) radius of the Site. The site is the Teledyne-Post –Houston site at 829 South 75th Street. Final closure has been granted to this site. This is not considered a significant environmental risk to the Site.

4.2.6 Texas Brownfields Site Assessments

Texas Brownfields Site Assessments (BSA) is administered by the TCEQ for brownfield sites that are being remediated under US EPA grant monies.

The Site does not appear on the BSA sites lists.

There are no BSA sites identified within a one-half mile (1/2-mile) radius of the Site.

4.2.7 Texas Innocent Owner/Operator Program

The Texas Innocent Owner/Operator Program (IOP) is operated by the TCEQ. The database contains information on all sites that are in the IOP. An IOP is defined as an owner or operator whose property is contaminated as a result of a release or migration of contaminants from a source not located on their property. The owner/operator did not cause or contribute to the source of the contamination.

The Site does not appear on the IOP sites lists.

There are no IOP sites identified within a one-half mile (1/2-mile) radius of the Site.

4.3 ADDITIONAL ENVIRONMENTAL RECORD SOURCES

4.3.1 Railroad Commission Pipeline Map

Review of the Railroad Commission Pipeline Maps indicated that there is one pipeline mapped within 1-mile of the Site. The pipeline is identified as an LPG line operated by Enterprise Products Operating L.P. The line is located along the Southern Pacific railroad track and Griggs Road, approximately 800 feet northwest of the Site. Location of this line along the south side of the railroad track was confirmed during site reconnaissance.

4.3.2 Railroad Commission Oil and Gas Well Map

Review of the Railroad Commission Oil and Gas Well Maps revealed that there are no oil or gas wells located on or within the vicinity of the Site.

4.3.3 City of Houston Fire Department

Senior Captain Troy Lilley, of the Houston Fire Department's Hazardous Materials Response Team, was contacted (by fax) regarding any incidents of hazardous material spills or leaks at, or near, the Site. The Fire Department was requested to search Houston Harris County Key Map Page 535, Square E. A copy of the complete Houston Fire Department Search Results is contained in Appendix C of this Report. While spills had been recorded in Key Map Square 535E, none of them were on or adjacent to the Site.

4.4 PHYSICAL SETTING SOURCES

The *1982 US Geologic Survey 7.5 Minute Topographic Park Place, TX, (1982), Quadrangle Map* was reviewed as part of the Phase I ESA. In addition to the discussion in Section 2.2.1 of this report, pertaining to the general topography of the Site, other features of note shown on the topographic map include:

- A church is located approximately 800 feet northeast of the Site;
- Lutheran High School is located approximately one-half mile south of the Site along Garland Street;
- Two churches are located immediately north of Lutheran High School; and
- Forest Park Cemetery is located along the south bank of Brays Bayou approximately a half mile northeast of the Site across Griggs Road.

4.5 HISTORICAL USE INFORMATION ON THE SITE AND ADJOINING PROPERTIES

4.5.1 City Directories

City directories include listings of residences, businesses, and professional concerns organized both alphabetically by name similar to a telephone book, and alphanumerically by street name then specifically by street address. City directories covering the Site and surrounding area were available for review. TWEI reviewed directories at five-year increments from 2002 back to 1952. Prior to 1987 there were no non-residential listings on any of the streets in the vicinity of the Site. City directory listings indicate that the Site is located in a primarily residential neighborhood. Due to the small number of non-residential listings the listing are presented in one table. It should be noted that the years not listed in the table indicate that no business listings were found. The non-residential listings are as follows:

Table 1: City Directory Listings

Year	Address	Business
2002	6912 Schley	Barrera Machine Shop
1987	6940 Hemlock	New America Agency
1982	6810 Hemlock	Dirt Dauber Nursery
1982	6920 Hemlock	Dewitt Electric
1977	6810 Hemlock	Dirt Dauber Nursery
1977	7018 Hemlock	A Better Electronic
1962	7010 Schley	Randell Painting

4.5.2 Sanborn Map Review

In the late nineteenth century, companies began preparing maps for use by fire insurance companies. These maps indicate construction materials of specific structures in developed urban areas. With the advent of retail gasoline service stations, the approximate locations of tanks were noted, often without AST or UST designations. These maps were updated and expanded geographically periodically through the twentieth century.

Sanborn maps for 1947, 1950, and 1969 were reviewed for this report. All three of these maps were created before Garland was extended north of Vandeman, and before Vandeman ended on the east side of Garland (See discussion of 1979 aerial photograph in Section 4.5.3). The maps show the Site vicinity to be a residential area of single-family homes with detached garages, much as it is today. There are no commercial or industrial facilities in the immediate Site vicinity in any of the three maps.

4.5.3 Aerial Photography

TWEI sourced historical aerial photographs for the Site from Atlas Environmental Research, Inc. (Atlas). Atlas provided aerial photographs from 1944, 1953, 1969, 1979, 1989, 1995, and 2002. These historical aerial photographs are contained in Appendix E of this report.

In the 1944 photograph the area in the vicinity of the Site appears as a recently completed residential neighborhood, based on the size of the few existing trees. Very few trees obscure the view of streets and houses in the photograph. Large plots of land north of Griggs Road and also northeast of Lawndale at South 75th Street are undeveloped indicating a relatively young area for development. In this photograph Garland does not extend north of Vandeman Street. A house is located on the Site.

In the 1953 photograph, the neighborhood trees are larger, especially northeast of the Site along Vandeman and Schley Streets. Commercial, residential, and light industrial development has filled in the open tracts of land north of Griggs and Lawndale. Garland has not yet been extended to meet South 75th Street at Griggs Road.

By 1969 developmental infilling has taken over the few remaining open lots seen in the 1953 photograph. The neighborhood trees continue to grow and obscure the view of many streets and individual houses. Garland has not yet been extended to Griggs.

By 1979, Garland has been extended to the north. It is not clear from the photograph whether or not the railroad crossing to tie into South 75th Street at Griggs has been completed yet. If the crossing and subsequent connection with Griggs and South 75th had not been made by the time of the photograph, it took place relatively soon thereafter. Garland has also been widened since the 1969 photograph and north of Hemlock appears to be a divided street with a median. The extension to the north and widening of Garland has removed the house that was formerly located on the Site. Vandeman ends on the east side of Garland. It is difficult to see but note that the first house on the north side of Hemlock, west of Garland, and adjacent to the Site sits at an angle to Hemlock. (This house is immediately west of the Site.) This angle reflects the original location and orientation of Vandeman Street, west of Garland. The Site vicinity remains

residential.

The 1989 photograph looks much the same as the 1979 photograph with no significant changes.

In the 1995 photograph, the Site is clearly visible. The house at the northwest corner of Hemlock and Garland is clearly sitting at an angle that reflects the original location of Vandeman west of Garland. The area of the Site remains residential.

The 2002 photograph looks much the same as the 1995 photograph with no significant changes. The Site and the diagonal sitting house are both clearly visible in this photograph.

5 SITE RECONNAISSANCE

5.1 OBJECTIVE

The objective of the site reconnaissance was to obtain information indicating the likelihood of identifying Recognized Environmental Conditions in connection with the Site. A TWEI environmental professional conducted a Phase I site reconnaissance inspection on September 29, 2004. Site reconnaissance photographs are contained in Appendix F of this report. Observations are also shown on Figure 1 – Site Map.

5.2 METHODOLOGY AND LIMITING CONDITIONS

The TWEI environmental professional traversed the perimeter of the Site and inspected the interior of the Site. Representative conditions and key features were photographed and documented on a field log.

5.3 GENERAL SITE SETTING

The Site is located in a residential setting. Non-residential activity is located mainly north of Griggs Road.

5.4 CURRENT USE OF THE PROPERTY

The observed current use of the Site is discussed in Section 2.4 of this Report.

5.5 INDICATIONS OF PAST USES OF THE SITE

There was no observed evidence of past uses of the Site.

5.6 CURRENT USES OF THE ADJOINING PROPERTIES

The observed current uses of the adjoining properties discussed in Section 2.5 of this Report were supported by site reconnaissance observations.

5.7 INDICATIONS OF PAST USES OF THE ADJOINING PROPERTIES AND SURROUNDING AREA

There were no observed indications of past uses of the adjoining properties and surrounding area.

5.8 OBSERVATIONS

Pursuant to *ASTM-E-1527-00*, conditions of concern that the environmental professional conducting the Phase I ESA checked for during the site reconnaissance included:

5.8.1 Roads and Paths

Garland Street is to the east of the Site, and Hemlock is to the south of the Site. It appears that the neighbor to the west uses the Site to park vehicles and trailers on a regular basis. There are no other paths at the Site.

5.8.2 Potable Water Supply, Waste Water, and Sewage Disposal Systems

The Site has access to normal residential utility and city services.

5.8.3 PCB-Containing Equipment

No PCB containing equipment was noted at the Site.

5.8.4 Stained Soil or Pavement

No stained soil or pavement was noted at the Site.

5.8.5 Hazardous Substances and Petroleum Products in Connection with Identified Uses

No indications of hazardous substances or petroleum products were noted at the Site.

5.8.6 Storage Tanks and Pipelines

A single LPG pipeline operated by Enterprise Products as marked on the oil and gas pipeline map was confirmed during the site reconnaissance and is located along the south side of the railroad track, north of the Site. A Center Point Energy gas line marker was observed on the south side of Hemlock Street across from the Site.

5.8.7 Stressed Vegetation

No stressed vegetation was noted at the Site.

5.8.8 Other Conditions of Concern

The following potential conditions of concern were also checked-for during the site reconnaissance:

- Pits, ponds, or lagoons;
- Unidentified substance containers;
- Oil, gas, and water wells;
- Odors;
- Drums;
- Hazardous substance and petroleum products containers; and;
- Pools of non-aqueous liquid.

None of these were observed during the site reconnaissance.

6 INTERVIEWS

6.1 INTERVIEWS WITH OWNERS

Owners of the Site were not interviewed as part of this Phase I ESA.

6.2 INTERVIEWS WITH SITE MANAGER/OCCUPANTS

There were no managers or occupants at the Site.

6.3 INTERVIEWS WITH LOCAL GOVERNMENT OFFICIALS

No research from other activities undertaken as part of this Phase I ESA resulted in findings warranting interviews with local government officials.

6.4 INTERVIEWS WITH OTHERS

No knowledgeable persons were readily available for interviews regarding the Site.

7 FINDINGS, OPINIONS, AND CONCLUSIONS

Tolunay-Wong Engineers, Inc., (TWEI) was requested by CoH, to conduct a Phase I ESA for Parcel S83-058 in Houston, Harris County, Texas.

TWEI made no findings in relation to the presence of Recognized Environmental Conditions (RECs), as defined by the ASTM standard for Phase I ESAs, at the Site.

8 RECOMMENDATIONS

Based on the findings and conclusions above, TWEI has no recommendations for additional study.

9 LIMITATIONS AND EXCEPTIONS

9.1 USER RELIANCE

The services described in this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client and the City of Houston unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions, recommendations, and conclusions contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. Environmental conditions may exist at the property that cannot be identified by visual observation. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, nor the use of segregated portions of this report.

The following limitations apply to the Phase I ESA:

Pursuant to *ASTM E-1527-00*, the following were excluded from the scope-of-work for the Phase I ESA:

- Radon;
- Regulatory compliance;
- Soils testing;
- Health and safety;
- Asbestos surveys;
- Wetlands
- Lead in drinking water;
- Lead-based paints;
- Industrial hygiene;
- Ecological resources;
- Groundwater testing;

The findings related to faults reported in this Phase I ESA are the result of review of in-house documentation and do not constitute a full Phase I Fault Study.

10 ADDITIONAL SERVICES

TWEI is not providing any environmental services additional to this Phase I ESA for Parcel S83-058.

11 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

The material and data in this report, a Phase I ESA for Parcel S83-058, on the northwest corner of Garland and Vandeman, Houston, Harris County, Texas, were prepared under the supervision and direction of the undersigned.

TWEI Project Number 04-E009-9

October 7, 2004

Barry Chamberlain
Consulting Geologist

Paul R. Wild
Vice President
Environmental Services Division

12 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

The resumes of the environmental professionals who prepared this report are presented below.

BARRY N. CHAMBERLAIN
ENVIRONMENTAL CONSULTANT

SPECIALIZATION

Mr. Chamberlain has a broad background in environmental issues with oil and gas, petrochemical, agricultural and governmental clients with a focus on management and execution site assessments, including Phase I ESAs, field assessments and background audits and the environmental implications of applied technologies. Mr. Chamberlain has experience in environmental compliance, risk audits, permitting, wetlands delineations, design of soil and ground water remediation systems, soil and ground water contamination investigations. Previous work includes oil and gas exploration and production logging, reservoir development, and geologic evaluation and wire line supervision for onshore and offshore GOM projects.

PROFESSIONAL HISTORY

Independent Environmental Consultant, Houston, TX, 2003-Present

Washington Group International, Consulting Scientist, Houston, TX, 1999-2003

CURA, Inc., Environmental Geologist, Houston, TX, 1997-1998

Terra Technologies, Inc., Senior Consultant, Houston, TX, 1996-1997

KPMG Peat Marwick, L.L.P., Senior Consultant, Houston, TX, 1995-1996

McLaren/Hart Environmental Engineering, Inc., Geosciences Manager, Houston, TX, 1993-1995

IT Corporation, Project Manager, Houston, TX, 1988-1993

EDUCATION

M.S./Geology, Memphis State University, 1985

B.S. /Geology, Memphis State University, 1978

CERTIFICATION

OSHA 40-Hour HAZWOPER Training

OSHA HAZWOPER Management and Supervisor Training

Basic Wetlands Delineation, Wetlands Training Institute, 2001

Texas Risk Reduction Program, Short Course, University of Houston, 2000

Groundwater Hydrology, Continuing Education Course, Rice University 1988

AFFILIATIONS

National Association of Groundwater Scientists and Engineers

Geological Society of America

Political Economy Research Center

PAUL R. WILD
VICE PRESIDENT - ENVIRONMENTAL SERVICES DIVISION

SPECIALIZATION

Conducts technical reviews of environmental management systems, and directs environmental compliance audits, risk assessments, environmental site assessments, and asbestos surveys. Manages RCRA Facility Investigations and Corrective Measures Studies. Manages all phases of underground storage tank release evaluations from initial investigation to remediation. Conducts Environmental Assessments under the National Environmental Policy Act. Evaluates analytical testing data and oversees contract laboratory quality asurance, including on-site auditing. Supervises drilling and sampling operations at hazardous waste sites and provides assessment of soil and groundwater contamination. Conducts chemical literature research and assesses waste treatment methods. Evaluates applicable or relevant and appropriate requirements (ARARs) in relation to remedial actions and air/water/waste permitting. Develops health and safety plans and monitors health and safety plan compliance. Evaluates census tract data, property ownership records, aerial photography, house-to-house survey data, and other publicly-available data, including interviews with regulatory and governmental agency personnel, to assess possible or probable social and economic impacts to communities from construction and remediation projects.

PROFESSIONAL HISTORY

Tolunay-Wong Engineers, Inc., Houston, Texas, 2002 to Present
Washington Group International, Houston, Texas, 1985 - 2002, Manager of Environmental Services
Resource Engineering, Inc. (ENSR), Houston, Texas, 1985, Staff Chemist
McBride-Ratcliff and Associates, Inc., Houston, Texas, 1984 - 1985, Field Technician

EDUCATION

B.S. Chemistry (Zoology minor): Marshall University, 1983

CERTIFICATION

OSHA Certified for Hazardous Waste Site Work (OSHA 29 CFR 1910.120)
OSHA 29 CFR 1910.120 Supervisor Training
Asbestos Hazard Emergency Response Act (AHERA) building inspector and management planner
Illinois Licensed Asbestos Inspector #100-7145
TCEQ Corrective Action Project Manager Reg. #CAPM00385

AFFILIATIONS

American Chemical Society

PUBLICATIONS

"A Contaminant-Resistant Slurry Trench," W. R. Tobin, co-author, presented at the First Annual Southern Regional Ground Water Conference, San Antonio, Texas, September 1985, pp. 193-208.
"Attapulgite: A Clay Liner Solution?" W. R. Tobin, co-author, Civil Engineering, Vol. 56, No. 2, February 1986, pp. 56-58.
"The Environmental Site Assessment as a Pre-Investment Security," presented at the Texas Section, American Society of Civil Engineers Spring Meeting, Dallas, Texas, April 1987.

13 REFERENCES

Atlas Environmental Research Report, Inc., Atlas E. R. Map Report. Atlas Job 04-09-952, September 27, 2004.

ASTM Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, Designation E-1527-00.

City of Houston, Department of Public Works and Engineering. ECRE Standard Practice, March 23, 1998.

Federal Emergency Management Agency, Flood Insurance Rate Map, Community Panel Number 4820C0885K, April 20, 2000.

Key Maps, Inc., Key Map Houston Harris County Atlas, 2003, 44th Edition.

US Dept. of Agriculture, Soil Survey Harris County, Texas, 1977.

US Geological Survey, 7.5-Minute Topographic Map, Park Place, Texas Quadrangle Sheet, 1982.

Railroad Commission of Texas, Texas Pipelines, Park Place, Texas, 7.5 minute Quadrangle, July 8, 2003.

Railroad Commission of Texas, Park Place, Texas, 7.5 minute Quadrangle, July 8, 2003.

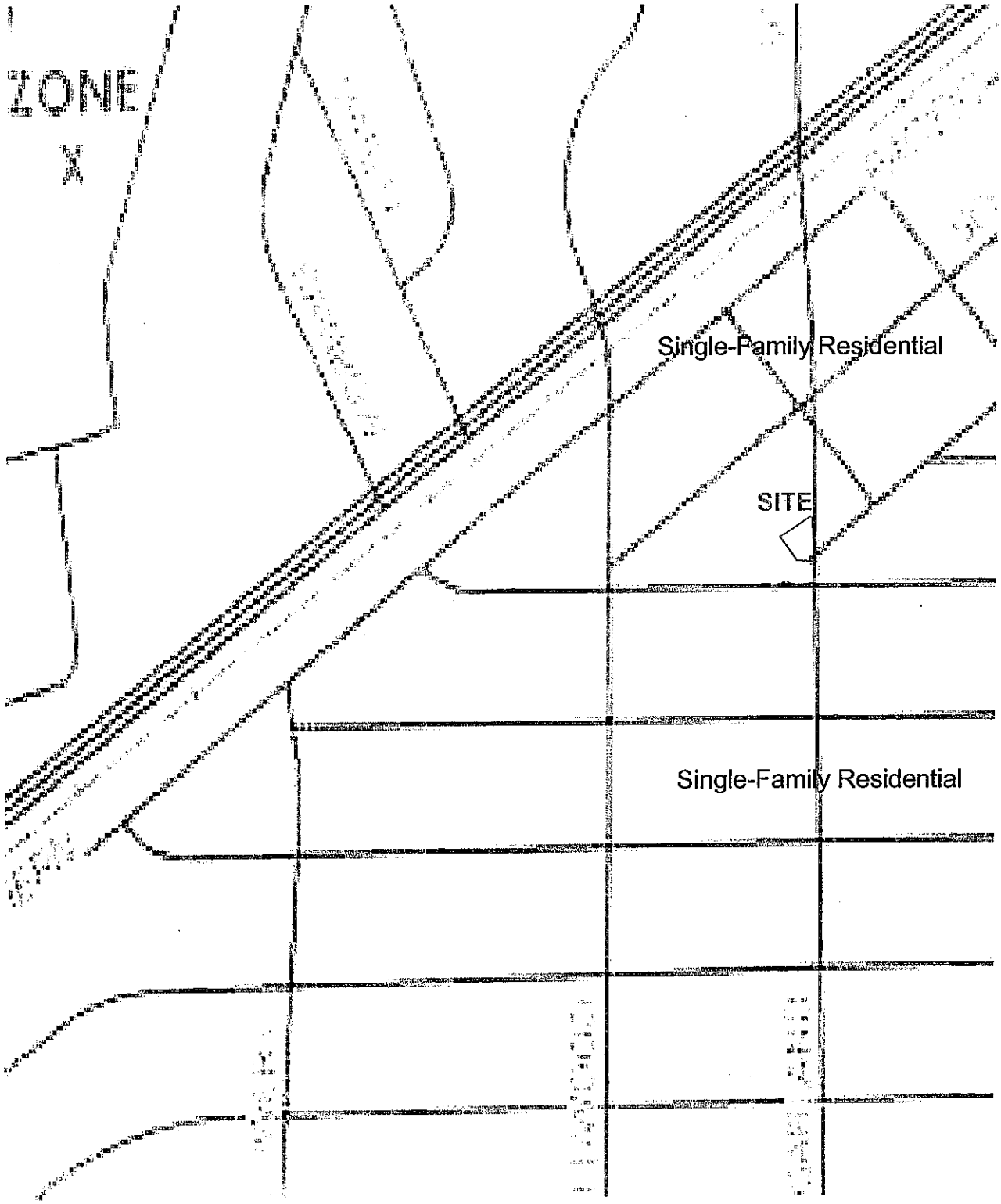


FIGURE 1: SITE MAP	**NTS**	**N**
PROJECT: PHASE I ESA **Parcel S83-058** **Garland and Vandeman** **Houston, Harris County, TX**	**Tolunay-Wong Engineers, Inc.** **Houston, Texas**	**Project No.: 04-E009-9** **Client:** **City of Houston**

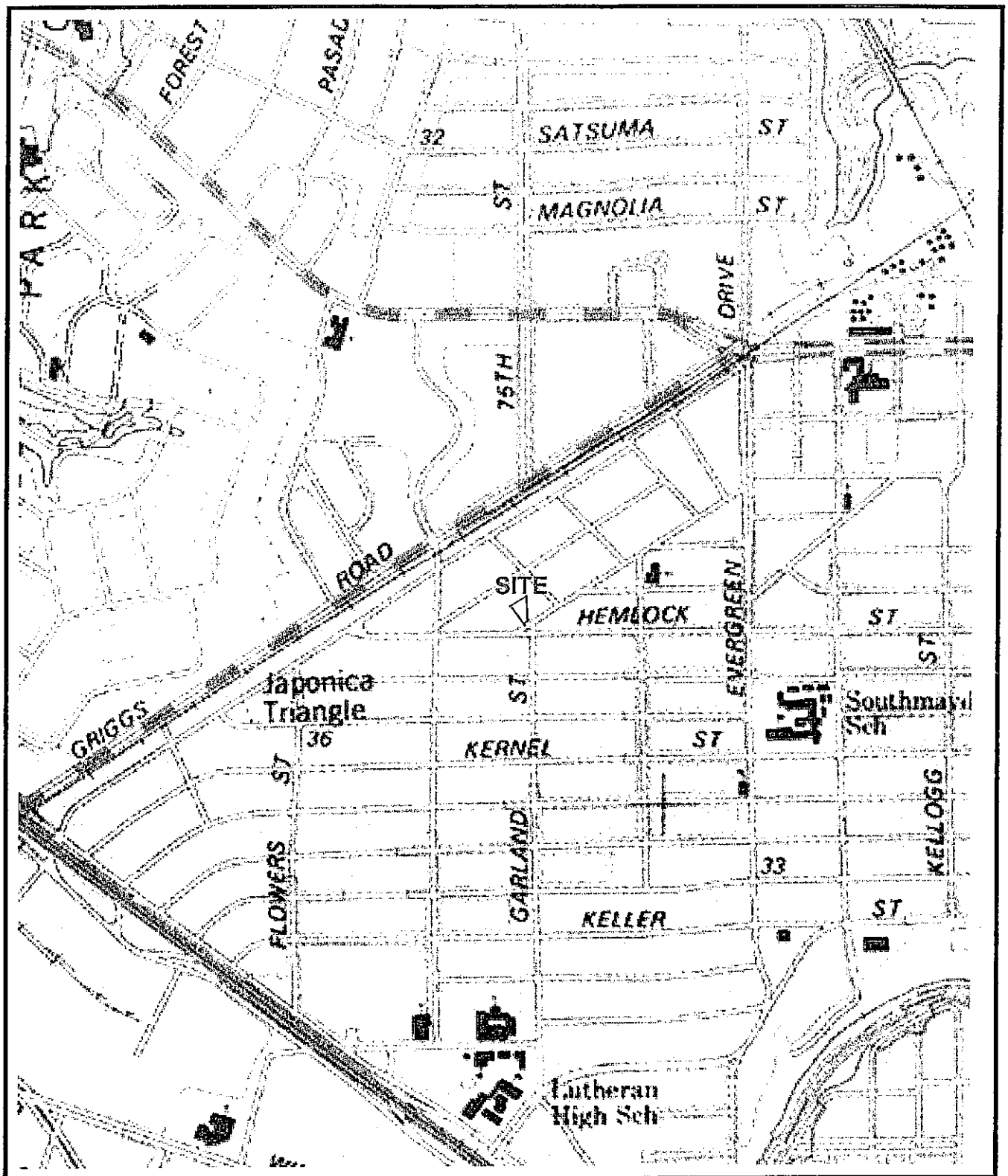


FIGURE 2: TOPOGRAPHIC MAP

SOURCE: US Geologic Survey 7.5 Minute Quadrangle Topographic Map
Park Place, TX, 1982

Scale: 1"=~955'

N

PROJECT: PHASE I ESA Parcel S83-058 Garland and Vandeman Houston, Harris County, TX	Tolunay-Wong Engineers, Inc. Houston, Texas	Project No.: 04-E009-9 Client: City of Houston Houston, TX

REALTYDATASERVICES
THECRUMPGROUPINC

405 Main St, Suite 440
Houston, Texas 77002
Ph: 713-223-1333
Fx: 713-223-1334

HISTORICAL CHAIN OF TITLE
For Use With Phase I ESA

Requested by:	TOLUNAY-WONG ENGINEERS, INC.	RDS #:	13695F.04
Attention:	Marilyn Wolff	Effective Date:	09/29/2004
Reference #:	04-E009-9	Report Date:	10/04/2004

SUBJECT TRACT: 9993 square feet of land out of Lots 3, 4 & 5, Block 19, PECAN PARK ADDITION, per plat recorded in Volume 8, Page 29, Harris County Map Records, Harris County, Texas. (HCAD # 060-126-020-0003)

PHYSICAL ADDRESS: N/A

OWNER OF RECORD: City of Houston

DATE: 8/5/1966
INSTRUMENT: Warranty Deed
GRANTEE: **City of Houston**
GRANTOR: W.D. Antone and wife Amy Antone
REFERENCE: C-362015
COMMENTS: Lots 4 & 5

DATE: 12/22/1965
INSTRUMENT: Warranty deed
GRANTEE: **City of Houston**
GRANTOR: Ruth Gladys (Smith) Childress
REFERENCE: C-226820
COMMENTS: Lot 3

DATE: 12/8/1951
INSTRUMENT: Quit Claim Deed
GRANTEE: **Ruth Gladys Smith**
GRANTOR: Ralph Edgar Smith
REFERENCE: 2372/438
COMMENTS: Lot 3

DATE: 8/12/1943
INSTRUMENT: Deed
GRANTEE: **W.D. Antone**
GRANTOR: A. Laurice Rives
REFERENCE: 1290/678
COMMENTS: Lots 4 & 5

The information contained herein, is to our best knowledge and belief, a correct showing of Deeds, Easements, Right-of-Ways and Leases of record affecting the surface estate of the subject tract. Mineral and/or subsurface information may appear, but should not be considered as conclusive. This information is not an opinion of title. This information is provided to the client (addressee) for the client's sole use and benefit and may not be used or relied upon by any other party. By accepting this report, the client agrees that Realty Data Services will not assume any financial responsibility beyond the fee received for issuance of said report, nor does Realty Data Services accept responsibility for any inconsistencies or incorrect posting or errors on the part of the County Clerk of said County.

DATE: 10/22/1941
INSTRUMENT: Deed
GRANTEE: **A.L. Rives**
GRANTOR: Magnolia Park Land Co.
REFERENCE: 1223/558
COMMENTS: Lot 4

DATE: 11/22/1937
INSTRUMENT: Deed
GRANTEE: **Ralph E. Smith**
GRANTOR: Magnolia Park Land Co.
REFERENCE: 1078/362
COMMENTS: Lot 3

DATE: 7/12/1935
INSTRUMENT: Deed
GRANTEE: **A.L. Rives**
GRANTOR: A.N. Rives
REFERENCE: 1030/80
COMMENTS: Lot 5

DATE: 7/15/1930
INSTRUMENT: Deed
GRANTEE: **A.N. Rives**
GRANTOR: East End Home Builders, Inc.
REFERENCE: 849/128
COMMENTS: Lot 5

DATE: 5/29/1930
INSTRUMENT: Deed
GRANTEE: **East End Home Builders, Inc.**
GRANTOR: Magnolia Park Land Co.
REFERENCE: 842/520
COMMENTS: Lot 5

DATE: 3/10/1927
INSTRUMENT: Plat
GRANTEE: **The Public**
GRANTOR: Magnolia Park Land Co.
REFERENCE: 8/29
COMMENTS: Plat of Pecan Park. Note: A conveyance into the grantor herein was not found.

EASEMENTS, RIGHT OF WAYS, SURFACE LEASES AND ENVIRONMENTAL LIENS AFFECTING THE SURFACE ESTATE OF THE SUBJECT TRACT:

None found.

The information contained herein, is to our best knowledge and belief, a correct showing of Deeds, Easements, Right-of-Ways and Leases of record affecting the surface estate of the subject tract. Mineral and/or subsurface information may appear, but should not be considered as conclusive. This information is not an opinion of title. This information is provided to the client (addressee) for the client's sole use and benefit and may not be used or relied upon by any other party. By accepting this report, the client agrees that Realty Data Services will not assume any financial responsibility beyond the fee received for issuance of said report, nor does Realty Data Services accept responsibility for any inconsistencies or incorrect posting or errors on the part of the County Clerk of said County.

ATLAS E.R. Map Report
(Exceeds ASTM Standard E1527-00)

Area of Review:

Atlas Job 04-09-952
Garland & Vandeman
Houston, Texas

Site (Centerpoint) Coordinates:

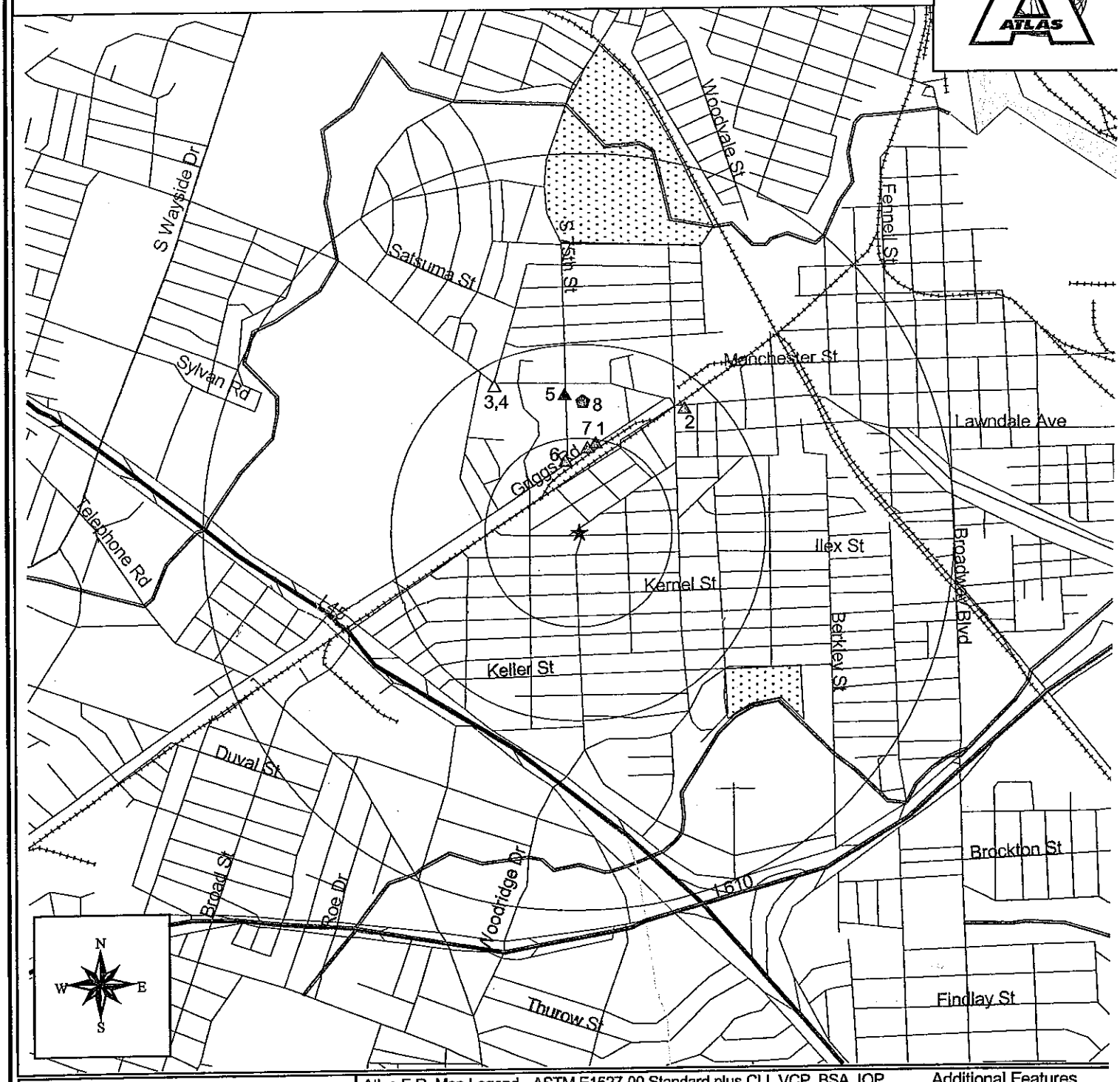
North 29° 42.690' (29.7115)
West 95° 17.670' (-95.2945)

Prepared For:

Marilyn Wolff
Tolunay-Wong Engineers
Houston, Texas

Prepared on September 27, 2004 by
Atlas Environmental Research, Inc.
9514 McNeil Road, Suite 201
Austin, Texas 78758
1-800-940-0977

Atlas Job #04-09-952, September 27, 2004
Garland & Vandeman
Houston, Texas



Mapped to 1/4 mile =
RCRIS, ERNS / NRS, PST

Mapped to 1/2 mile =
CERCLIS, NFRAP, LPST, Landfills / CLI, VCP / BSA / IOP

Mapped to 1 mile =
RCRIS TSD, NPL, Superfund

Approximate Locations Only
1/4, 1/2, & 1 Mile Radii Shown

1:24000

1320 0 1320 Feet

Atlas E.R. Map Legend - ASTM E1527-00 Standard plus CLI, VCP, BSA, IOP

- Section 1 - RCRIS
- Section 1.1 - RCRIS TSD
- Section 2 - CERCLIS
- Section 3 - NFRAP
- Section 4 - NPL
- Section 5/5A - ERNS / NRS
- Section 6 - Superfund Point
- Section 6 - Superfund Boundary
- Section 7 - LPST
- Section 8 - RST
- Section 9/9A - MSW / CLI Landfills
- Section 10/10A/10B - VCP / BSA / IOP

Additional Features

- Airports
- Major Water
- Parks
- Railroads
- Rivers & Bayous
- Subject Property
- Subject Property Bounda

Atlas E.R., Inc. / 1.800.940.0977

Online at WWW.ENVIRONMENTALMAPS.COM

Report Summary

Section	ASTM Database & Date	Radius	# Sites Mapped	# LUs *	MapIDs
1 **	RCRIS (excludes TSDs) – 4/12/2004	¼ mile	1	0	1
1.1 **	RCRIS TSD Facilities – 4/12/2004	1 mile	1	1	2
2	CERCLIS – 5/17/2004	½ mile	0	0	
3	NFRAP – 5/17/2004	½ mile	1	0	3
4	NPL – 5/17/2004	1 mile	0	0	
5 ***	ERNS – 5/19/2000	¼ mile	0	0	
5A ***	NRS – 3/15/2002	¼ mile	0	0	
6	State Superfund – 8/30/2004	1 mile	0	0	
7	LPST – 5/3/2004	½ mile	2	0	4-5
8	PST – 8/20/2004	¼ mile	2	0	6-7
9	MSW Landfills – 5/24/2004	½ mile	0	0	
9A	Closed / Abandoned Landfills	½ mile	0	0	
10	VCP – 7/3/2004	½ mile	1	0	8
10A	BSA – 7/3/2004	½ mile	0	0	
10B	IOP – 7/3/2004	½ mile	0	0	
			Total Sites Mapped = 8	1 = Total LUs	

* Location Unknown Sites (LUs) - Extensive effort is made to ensure that as many sites as possible are geocoded or manually pointed for an Atlas E.R. Map & Report. However, due to inaccurate and /or insufficient information within a particular database, some sites cannot be accurately located and may be noted as "LU" in this report. These sites will not appear on the map, but full database information has been included in the report. These sites may or may not be within the area but are submitted for your review.

** All RCRIS Facilities listed within the EPA's CORRACTS (Corrective Action) Database have been included in this report if they are determined to be within the area of review.

*** The NRS (National Response System) replaced the ERNS (Emergency Response Notification System) database in the year 2000. It is the sole federal point of contact for spills information.

Resource Conservation and Recovery Information System (RCRIS) - Atlas E.R. Map Report
Notifier / Non-notifier facilities

(excludes TSDs, includes CORRACTS and non-CORRACTS Facilities)

Source: Environmental Protection Agency (EPA)
Database Updated: April 12, 2004

Disclaimer - Atlas Environmental Research will not be held financially liable for any errors or omissions that may occur in the Atlas E.R. Map / Report as a result of the information obtained from the EPA / TCEQ, or as a result of the geocoding / data warehousing process. All information in this report has been obtained from state and / or federal publically available databases and is presented "as is." None of this information has been changed or verified by Atlas Environmental Research and, therefore, may be inaccurate and / or incomplete. Certain errors within this database may prevent a site from geocoding or even from being manually pointed on the map. For these reasons, it is recommended that all data received be field verified and that the area of review be field surveyed to help ensure that no sites are overlooked in the due diligence process.

Facility ID: TXD045188729 Notification Date: 09/26/88 Facility Contact: DENNY-L WOOTEN
Facility Name: TRANSPORT ELECTRIC CO
Address: 6975 GRIGGS Contact Phone: 7139269661
City: HOUSTON Zip: 77023 Corrective Action (CORRACTS): No

MAP ID
1

1274
Distance from site (feet)
0.24
Distance from site (miles)
N
Direction from site
-95.29372
-X (Decimal Degrees)
29.71507
Y (Decimal Degrees)

Commercial Facility Status: No Data
Transporter Indicator: No Data
UIC Indicator: No Data
Specification Used Oil Marketing: No Data

TSD or Combustion Indicator: No Data
TSD Description: No Data
Generator Description: No Data
Generator Indicator: Less than 100 kg/month

Eval. Date	Evaluation Type	Area of Violation	Viol. Date	Resolved Date	Enforcement Type	Enforce. Date	Penalty Assessed
	No Evaluations	No Violations			No Enforcements		

(includes CORRACTS and non-CORRACTS Facilities)

Source: Environmental Protection Agency (EPA)
Database Updated: April 12, 2004

Disclaimer - Atlas Environmental Research will not be held financially liable for any errors or omissions that may occur in the Atlas E.R. Map / Report as a result of the information obtained from the EPA / TCEQ, or as a result of the geocoding / data warehousing process. All information in this report has been obtained from state and / or federal publically available databases and is presented "as is." None of this information has been changed or verified by Atlas Environmental Research and, therefore, may be inaccurate and / or incomplete. Certain errors within this database may prevent a site from geocoding or even from being manually pointed on the map. For these reasons, it is recommended that all data received be field verified and that the area of review be field surveyed to help ensure that no sites are overlooked in the due diligence process.

Facility ID: TXD099393670 Notification Date: 5/20/81 Facility Contact: GUY HERMAN
Facility Name: ACTIVE TANK & INDL CLNG INC Contact Phone: 7139217282
Address: 7224 LAWNDALE Corrective Action (CORRACTS): No
City: HOUSTON Zip: 77011

MAP ID 2

2271 Distance from site (feet)
0.43 Distance from site (miles)
NE Direction from site
-95.28982 -X (Decimal Degrees)
29.71634 Y (Decimal Degrees)

Commercial Facility Status: No Data
Transporter Indicator: Transporter - type unknown
UIC Indicator: No Data
Specification Used Oil Marketing: No Data
TSD or Combustion Indicator: No Data
TSD Description: Closure/Post Closure
Generator Description: No Data
Generator Indicator: No Data

Eval. Date	Evaluation Type	Area of Violation	Viol. Date	Resolved Date	Enforcement Type	Enforce. Date	Penalty Assessed
	No Evaluations	No Violations			No Enforcements		

Facility ID: TXD045761699 Notification Date: 8/18/80 Facility Contact: KERRY-L GEORGES
Facility Name: KIRBY STEEL PRODUCTS COMPANY Contact Phone: 7139283191
Address: 1102 HOB STREET Corrective Action (CORRACTS): No
City: HOUSTON Zip: 77023

MAP ID LU

0 Distance from site (feet)
0 Distance from site (miles)
Direction from site
-X (Decimal Degrees)
Y (Decimal Degrees)

Commercial Facility Status: No Data
Transporter Indicator: No Data
UIC Indicator: No Data
Specification Used Oil Marketing: No Data
TSD or Combustion Indicator: No Data
TSD Description: Closure/Post Closure
Generator Description: No Data
Generator Indicator: No Data

Eval. Date	Evaluation Type	Area of Violation	Viol. Date	Resolved Date	Enforcement Type	Enforce. Date	Penalty Assessed
	No Evaluations	No Violations			No Enforcements		

No Further Remedial Action Planned Sites (NFRAP) - Archived CERCLIS Sites

Source: Environmental Protection Agency (EPA)
Database Updated: May 17, 2004

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EPA ID Number: TXD074165986
Site Name: FORCE INC

Address: 7026 LAWNDALE
City: HOUSTON Zip: 77023
Site Characteristic: WASTE OIL RECOVERY FACILITY.

Incident Type:
NPL Status: N
Federal Facility Status: N

MAP ID
3

2382	Distance from site (feet)
0.45	Distance from site (miles)
NNW	Direction from site
-95.29812	-X (Decimal Degrees)
29.71731	Y (Decimal Degrees)

Site Characteristic:

Event	Date Started	Date Finished
DISCOVERY		19791101
PRELIMINARY ASSESSMENT	19800301	19800301
SITE INSPECTION	19840801	19840801
VS		19840801

Texas Leaking Underground Petroleum Storage Tanks (LPST)

Source: Texas Commission on Environmental Quality (TCEQ)
Database Updated: May 3, 2004

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MAP ID 4

109526	RECLAIM ENVIRONMENTAL INC	RECLAIM ENVIRONMENTAL INC	
LPST ID Number	Facility Name	PRP - Name	
0018648	7026 LAWNDALE	7026 LAWNDALE	
Facility ID Number	Facility Address	PRP - Address	
5/25/1995	7026 LAWNDALE	HOUSTON / TX / 77023	2381
Date Reported	Facility Location	PRP - City / PRP - State / PRP - Zip	Distance from site (feet)
	HOUSTON / 77023	JOHN TUMA / 713/928-2737	0.45
	Facility City / Facility Zip	PRP - Contact / PRP - Phone	Distance from site (miles)
No groundwater impact, no apparent threats or impacts to receptors			NNW
Priority			Direction from site
			-95.29812
Final concurrence issued, case closed			-X (Decimal Degrees)
Status			29.71731
			Y (Decimal Degrees)

MAP ID 5

107180	WAREHOUSE FAC ABANDONED	BRATTEN T O ESTATE OF	
LPST ID Number	Facility Name	PRP - Name	
0031958	820 S 75TH ST	1301 GREENGRASS	
Facility ID Number	Facility Address	PRP - Address	
8/30/1993	820 S 75TH ST	HOUSTON / TX / 77008	1947
Date Reported	Facility Location	PRP - City / PRP - State / PRP - Zip	Distance from site (feet)
	HOUSTON / 77023	713/864-6800	0.36
	Facility City / Facility Zip	PRP - Contact / PRP - Phone	Distance from site (miles)
Minor soil contamination - does not require a RAP			N
Priority			Direction from site
			-95.29507
Final concurrence issued, case closed			-X (Decimal Degrees)
Status			29.71694
			Y (Decimal Degrees)

Texas Petroleum Storage Tanks (PST)

Source: Texas Commission on Environmental Quality (TCEQ)
Database Updated: August 20, 2004

Disclaimer - Atlas Environmental Research will not be held financially liable for any errors or omissions that may occur in the Atlas E.R. Map / Report as a result of the information obtained from the EPA / TCEQ, or as a result of the geocoding / data warehousing process. All information in this report has been obtained from state and / or federal publically available databases and is presented "as is." None of this information has been changed or verified by Atlas Environmental Research and, therefore, may be inaccurate and / or incomplete. Certain errors within this database may prevent a site from geocoding or even from being manually pointed on the map. For these reasons, it is recommended that all data received be field verified and that the area of review be field surveyed to help ensure that no sites are overlooked in the due diligence process.

MAP ID
6

1015
Distance from site (feet)

0.19
Distance from site (miles)

N
Direction from site

-95.29504
-X (Decimal Degrees)

29.71438
Y (Decimal Degrees)

Facility Name, Location, & Manager:

PRONTO MART
6899 GRIGGS RD
HOUSTON
77023

LAM NGUYEN
7139244150

Operator First Name:
Operator Last Name:
Operator Phone: 7139244150

Facility Number: 10733
Registration Date: 050886
Facility Type: Unidentified
Underground Tanks: 0003
Above-Ground Tanks: 0000

Owner Information:
BACENAS

Tank ID	Installed Date	Tank Status	Status Date	Tank Capacity	UST / AST
2	010166	Removed from ground	060188	0003000	Underground
1	010166	Removed from ground	060188	0003000	Underground
3	010166	Removed from ground	060188	0003000	Underground

Tank 2:
Compartment: A
Capacity: 0
Substance: Gasoline
Other Substance:
Tank Material: Steel
Other Tank Material:
Pipe Material:
Other Pipe Material:

Tank 1:
Compartment: A
Capacity: 0
Substance: Gasoline
Other Substance:
Tank Material: Steel
Other Tank Material:
Pipe Material:
Other Pipe Material:

Tank 3:
Compartment: A
Capacity: 0
Substance:
Other Substance: Empty
Tank Material: Steel
Other Tank Material:
Pipe Material:
Other Pipe Material:

Texas Petroleum Storage Tanks (PST)

Source: Texas Commission on Environmental Quality (TCEQ)
Database Updated: August 20, 2004

Disclaimer - Atlas Environmental Research will not be held financially liable for any errors or omissions that may occur in the Atlas E.R. Map / Report as a result of the information obtained from the EPA / TCEQ, or as a result of the geocoding / data warehousing process. All information in this report has been obtained from state and / or federal publically available databases and is presented "as is." None of this information has been changed or verified by Atlas Environmental Research and, therefore, may be inaccurate and / or incomplete. Certain errors within this database may prevent a site from geocoding or even from being manually pointed on the map. For these reasons, it is recommended that all data received be field verified and that the area of review be field surveyed to help ensure that no sites are overlooked in the due diligence process.

MAP ID
7

1188
Distance from site (feet)
0.22
Distance from site (miles)
N
Direction from site
-95.29408
-X (Decimal Degrees)
29.71488
Y (Decimal Degrees)

Facility Name, Location, & Manager:

GRIGGS SHELL
6955 GRIGGS
HOUSTON
77023

YOUSEF
713-926-1123

Operator First Name: ASSAD
Operator Last Name: BOULOS
Operator Phone: 713-450-1199

Facility Number: 74572
Registration Date: 092101
Facility Type: Retail
Underground Tanks: 0003
Above-Ground Tanks: 0000

Owner Information:

ANA INC
O J
HARRIS
713-674-5004

Tank ID	Installed Date	Tank Status	Status Date	Tank Capacity	UST / AST
1	060201	In use		0012000	Underground
2	040201	In use		0008000	Underground
3	040201	In use		0008000	Underground

Tank 1:
Compartment: A
Capacity: 0
Substance: Gasoline
Other Substance:
Tank Material: Jacketed (steel w/external nonmetallic jacket)
Other Tank Material:
Pipe Material: Steel
Other Pipe Material:

Tank 2:
Compartment: A
Capacity: 0
Substance: Gasoline
Other Substance:
Tank Material: Jacketed (steel w/external nonmetallic jacket)
Other Tank Material:
Pipe Material: Jacketed (steel w/external nonmetallic jacket)
Other Pipe Material:

Tank 3:
Compartment: A
Capacity: 0
Substance: Diesel
Other Substance:
Tank Material: Composite (steel w/external FRP cladding)
Other Tank Material:
Pipe Material: Jacketed (steel w/external nonmetallic jacket)
Other Pipe Material:

Voluntary Cleanup Program Database (VCP)

Source: Texas Commission on Environmental Quality (TCEQ)
Database Updated: July 3, 2004

Disclaimer - Atlas Environmental Research will not be held financially liable for any errors or omissions that may occur in the Atlas E.R. Map / Report as a result of the information obtained from the EPA / TCEQ, or as a result of the geocoding / data warehousing process. All information in this report has been obtained from state and / or federal publically available databases and is presented "as is." None of this information has been changed or verified by Atlas Environmental Research and, therefore, may be inaccurate and / or incomplete. Certain errors within this database may prevent a site from geocoding or even from being manually pointed on the map. For these reasons, it is recommended that all data received be field verified and that the area of review be field surveyed to help ensure that no sites are overlooked in the due diligence process.

TCEQ VCP ID Number: 0105
TCEQ Solid Waste Registration Number:
TCEQ LPST Tank Number:
EPA ID / CERCLIS Registration Number:
EPA ID / RCRIS Registration Number:

Site Name: Teledyne Post-Houston
Site Address: 829 South 75th Street
Site City: Houston
Facility Type: Blueprint Paper Facility

Contaminant Categories: TPH, VOCs, Metals

TCEQ Project Manager: Ellington
Application Received: 10/24/95
Type Lead: Owner
Phase: Completed

Size of Site (Acres): 1.78
Latitude:
Longitude:

Media Affected: Soils

MAP ID
8

1842
Distance from site (feet)
0.34
Distance from site (miles)
N
Direction from site
-95.29425
-X (Decimal Degrees)
29.71668
Y (Decimal Degrees)

Applicant Information

Name: Teledyne, Inc.
Address: P.O. Box 39419
City: N. Ridgeville
State: OH
Zip: 44039

Contact First Name: Edward W.
Contact Last Name: Slavin, Jr.
Contact Title: DOT Environmental Engin
Phone: 216-353-0710
Fax:

Consultant Information

Name: Harding Lawson Associates
Address: 9800 Richmond Avenue, Suite 200
City: Houston
State: TX
Zip: 77042

Contact First Name: Todd
Contact Last Name: Preiss
Contact Title: Senior Geologist
Phone: 713-974-9613
Fax: 713-974-9673

Date of Agreement: 11/1/95
Rules (Risk Reduction or PST): RRR
Standards (Risk Reduction 1,2,3 or PST Plan A / B): 2
Certificate Issued: 12/14/95
Type of Certificate (Conditional or Final): F

Zone-9
Garland

Houston Fire Department
Search Request

Following are all incidents at the requested location to which the Hazardous Materials Response Team responded from January 1, 1994 through today's date; they are not necessarily the only spills that may have occurred during the period of time. This report has been furnished by the Hazardous Materials Response Team. Contact person is Senior Captain Troy D. Lilley, phone number (713) 928-6711; FAX number (713) 928-6160.

NOTE: HMRT does not maintain records for locations outside of the City of Houston.

Requesting Company: TOLUNAY WONG

Company Representative: BARRY CHAMBERLAIN

Company FAX Number: 71372203199/24/2004 - 17:54:55

End search: [illegible]
Search ID #00807: Key Map coordinate 535E Garland @ Vandeman

950201217 - 02/01/95 - 2100 Evergreen - None - No Release
950606242 - 06/06/95 - 7115 Palmetto - (Turn around) -
951019093 - 10/19/95 - 7135 Japonica - (Turn around) -

960703004 - 07/03/96 - 7226 Woodridge - (Turn around) -

970604119 - 06/04/97 - 1800 Berkley - Natural Gas - Undetrmnd Amt

980720484 - 07/20/98 - 9800 La Porte Fwy - Motor Oil - 6 gal
981215141 - 12/15/98 - 1801 Coral St. - Hazardous Waste, solid, n.o.s. - No Release

No incidents in Key Map coordinate 535E during 1999.

No incidents in Key Map coordinate 535E during 2000.

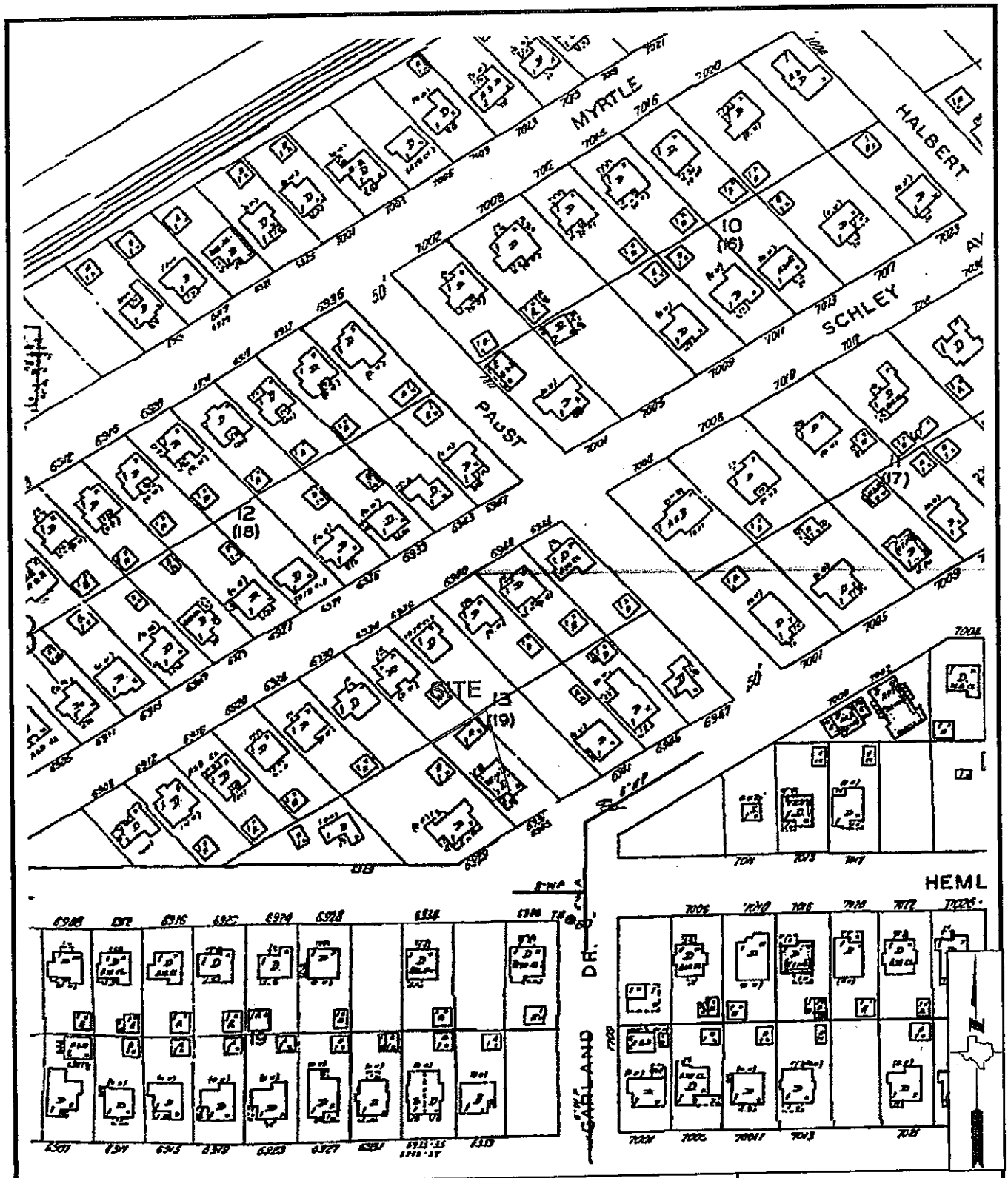
No incidents in Key Map coordinate 535E during 2001.

020517222 - 05/17/02 - 7214 Garden - Natural Gas - Undetrmnd Amt

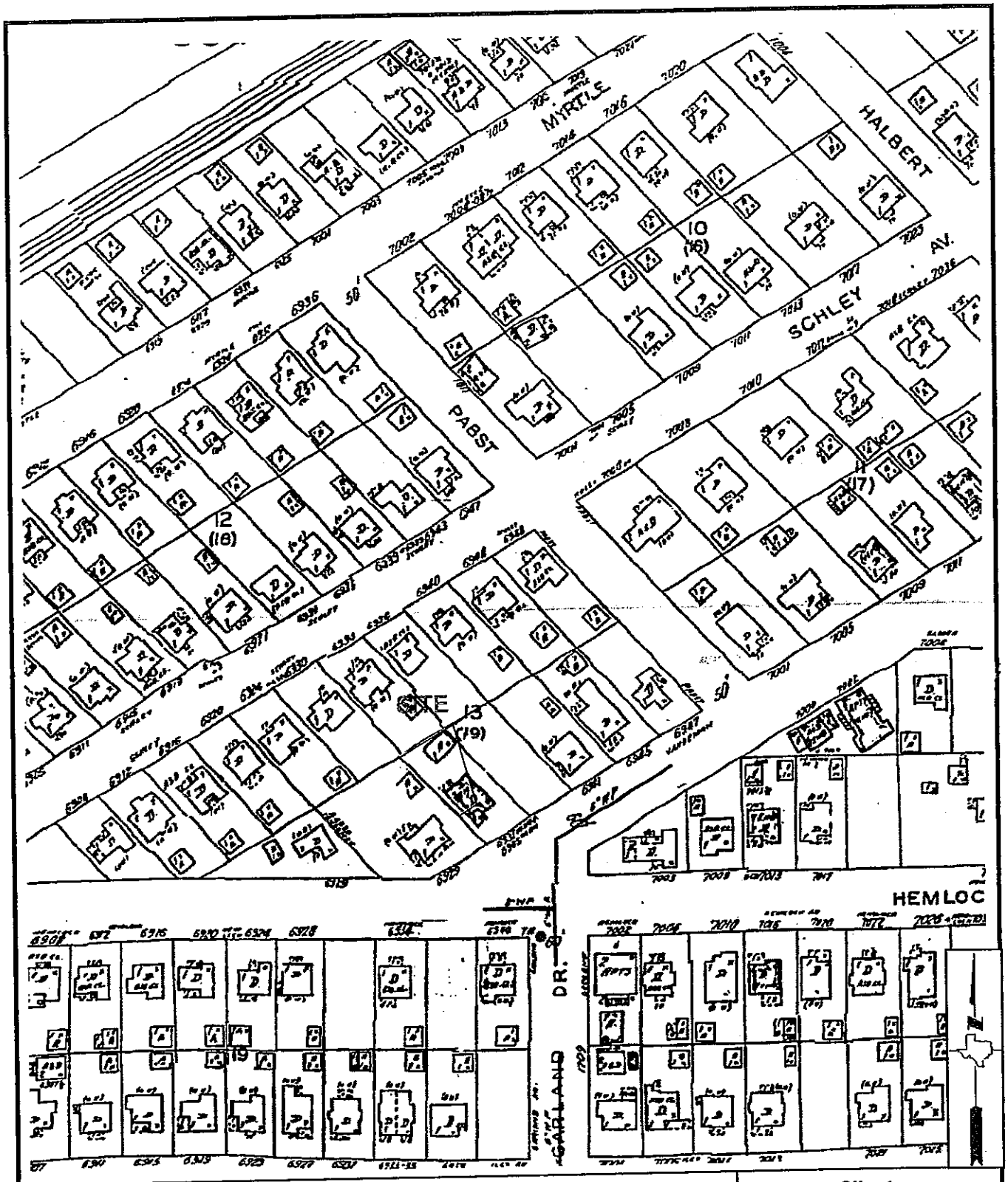
No incidents in Key Map coordinate 535E during 2003.

0401290590 - 01/29/04 - 7124 Linden - (Turn around) -

End search: 18:02:59 (0 mins., 55 secs.)



1947 Sanborn Map	**Client:** **City of Houston** **Houston, TX**
Project: Phase I ESA **Parcel S83-058** **Garland & Vandeman** **Houston, Harris County, TX**	**Tolunay-Wong Engineers, Inc.** **Houston, Texas**
	Project No.: 04-E009-9
	Scale: 1"=~150'



1950 Sanborn Map

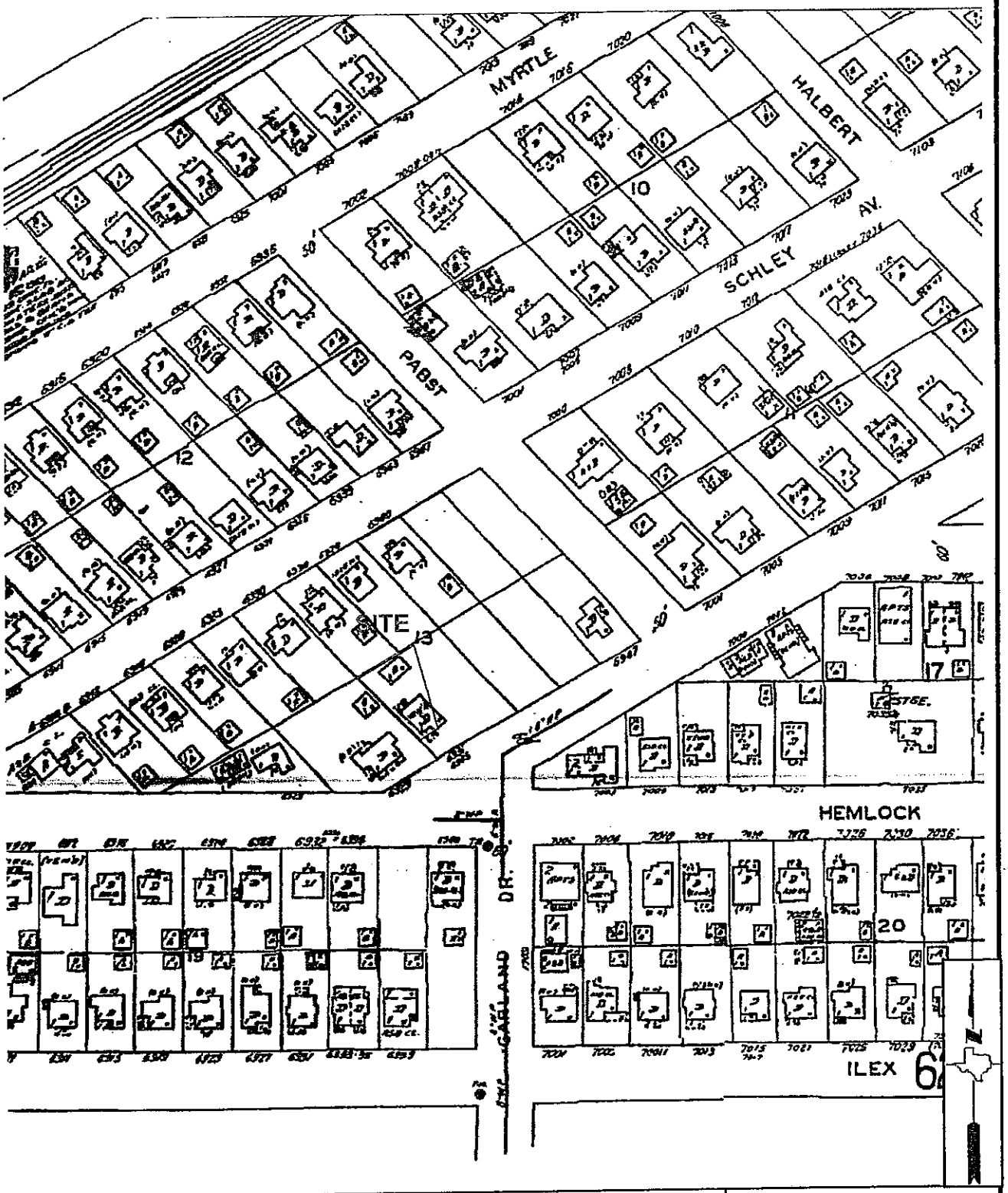
Client:
City of Houston
Houston, TX

Project: Phase I ESA
Parcel S83-058
Garland & Vandeman
Houston, Harris County, TX

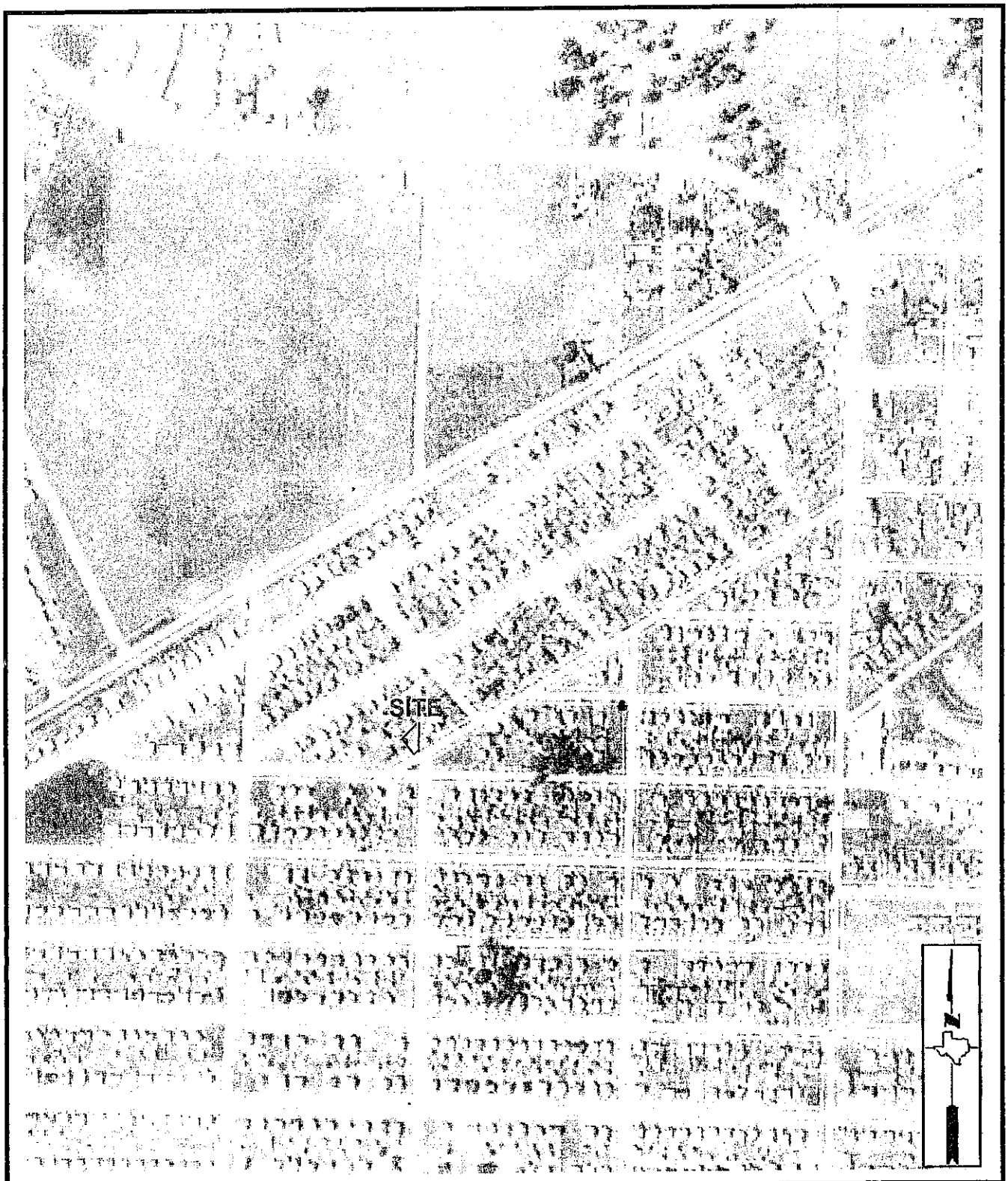
Tolunay-Wong Engineers, Inc.
Houston, Texas

Project No.: 04-E009-9

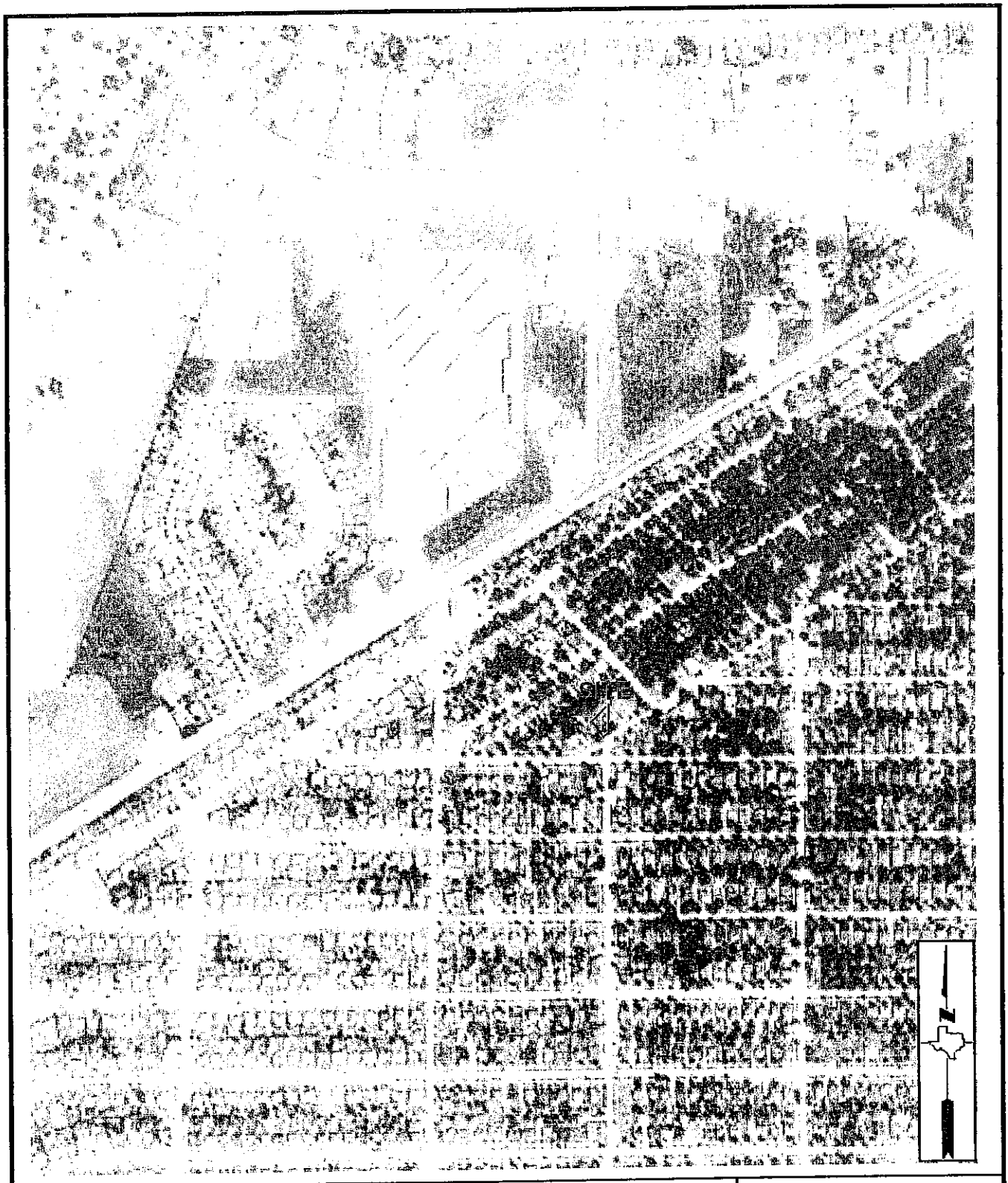
Scale: 1"=~150'



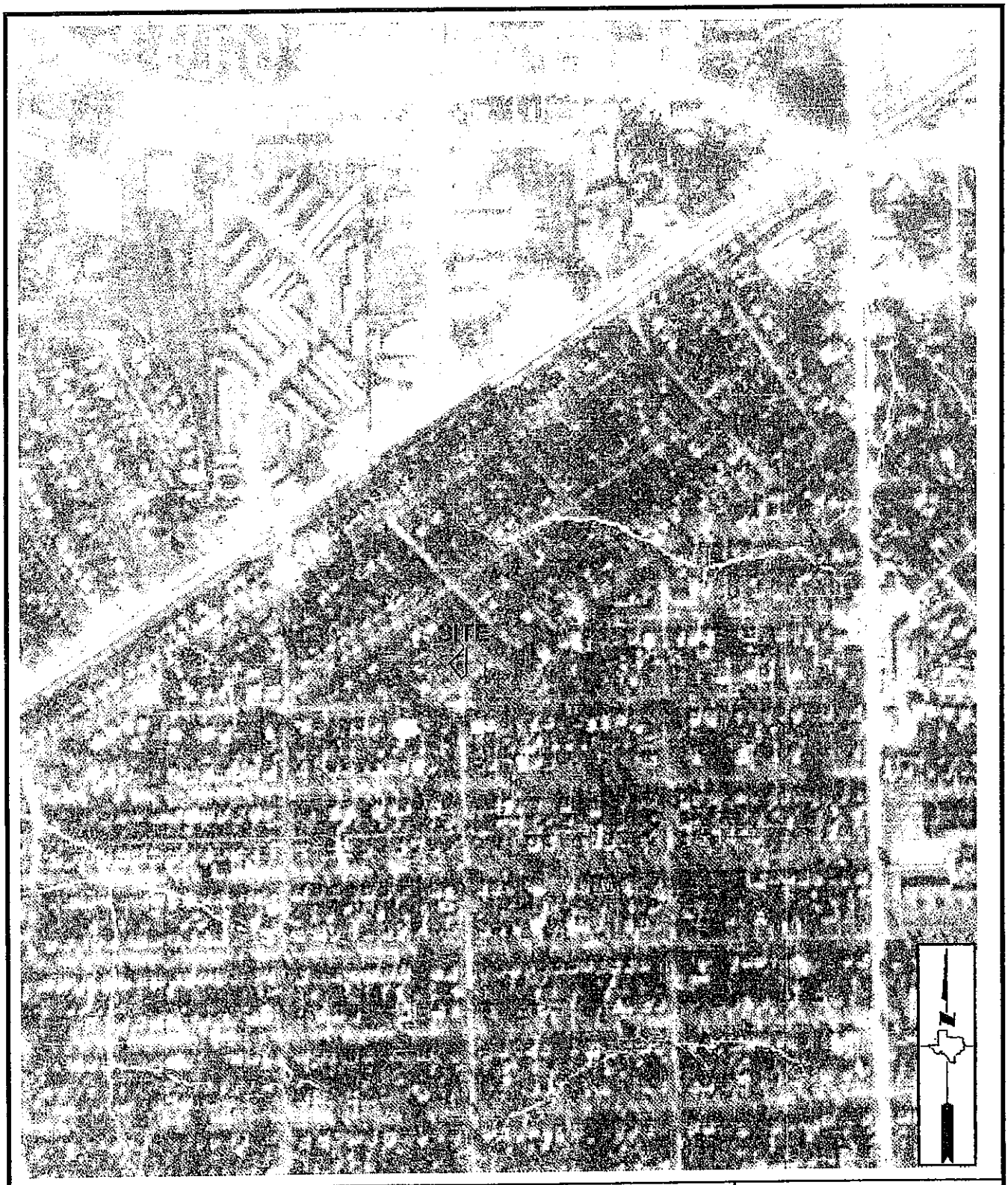
1969 Sanborn Map		**Client:** **City of Houston** **Houston, TX**
Project: Phase I ESA **Parcel S83-058** **Garland & Vandeman** **Houston, Harris County, TX**	**Tolunay-Wong Engineers, Inc.** **Houston, Texas**	**Project No.: 04-E009-9** **Scale: 1"=~90'**



1944 Aerial Photograph	**Client:** **City of Houston** **Houston, TX**
Project: Phase I ESA **Parcel S83-058** **Garland & Vandeman** **Houston, Harris County, TX**	**Tolunay-Wong Engineers, Inc.** **Houston, Texas**
	Project No.: 04-E009-9
	Scale: 1"=~500'

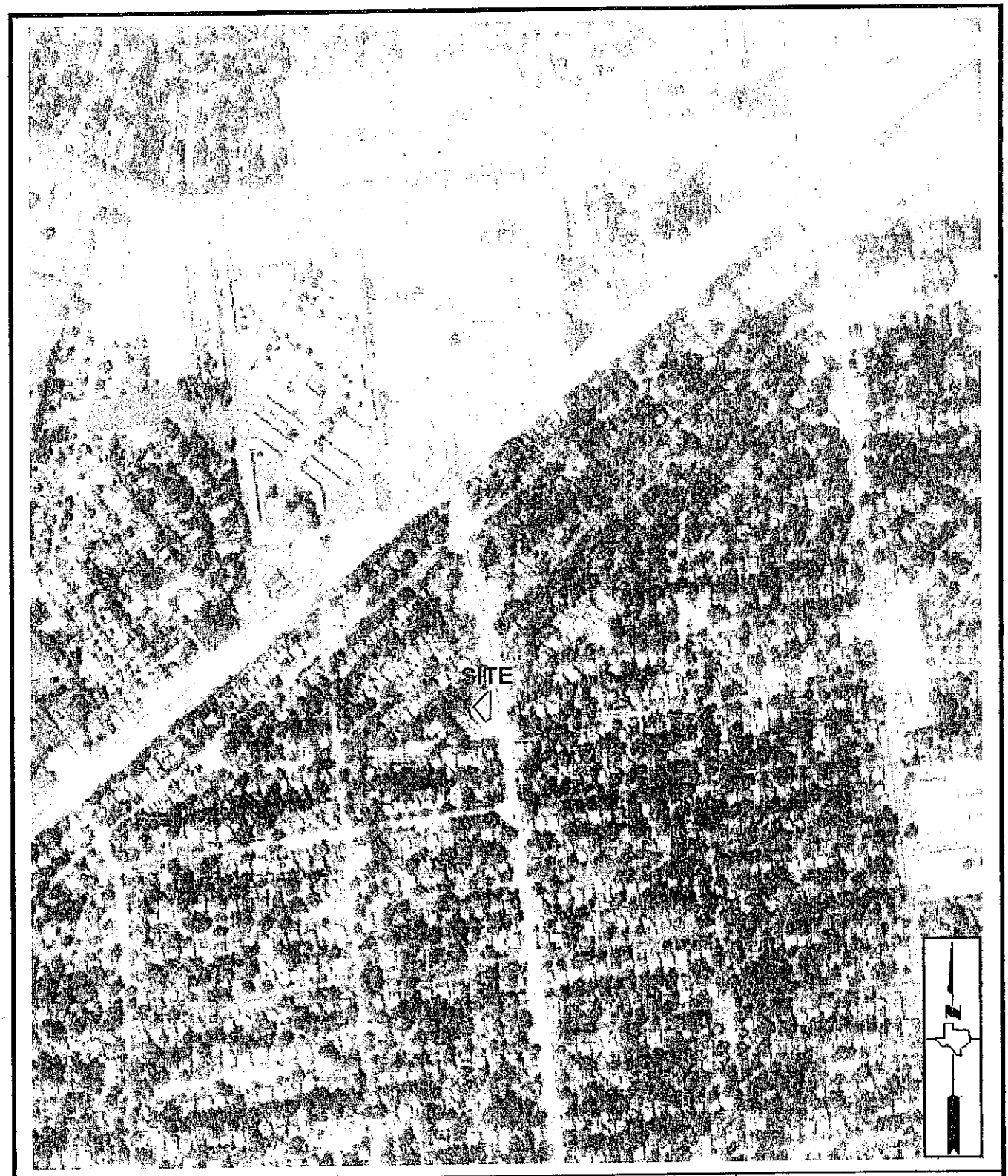


1953 Aerial Photograph		**Client:** **City of Houston** **Houston, TX**
Project: Phase I ESA **Parcel S83-058** **Garland & Vandeman** **Houston, Harris County, TX**	**Tolunay-Wong Engineers, Inc.** **Houston, Texas**	**Project No.: 04-E009-9** **Scale: 1"=~500'**



1969 Aerial Photograph	**Client:** **City of Houston** **Houston, TX**
Project: Phase I ESA **Parcel S83-058** **Garland & Vandeman** **Houston, Harris County, TX**	**Tolunay-Wong Engineers, Inc.** **Houston, Texas**
	Project No.: 04-E009-9
	Scale: 1"=~500'

1979 Aerial Photograph	**Client:** **City of Houston** **Houston, TX**
Project: Phase I ESA **Parcel S83-058** **Garland & Vandeman** **Houston, Harris County, TX**	**Tolunay-Wong Engineers, Inc.** **Houston, Texas**
	Project No.: 04-E009-9
	Scale: 1"=~500'



1989 Aerial Photograph	**Client:** **City of Houston** **Houston, TX**
Project: Phase I ESA **Parcel S83-058** **Garland & Vandeman** **Houston, Harris County, TX**	**Tolunay-Wong Engineers, Inc.** **Houston, Texas**
	Project No.: 04-E009-9
	Scale: 1"=~500'

1995 Aerial Photograph	**Client:** **City of Houston** **Houston, TX**
Project: Phase I ESA **Parcel S83-058** **Garland & Vandeman** **Houston, Harris County, TX**	**Tolunay-Wong Engineers, Inc.** **Houston, Texas**
	Project No.: 04-E009-9
	Scale: 1"=~500'

2002 Aerial Photograph		**Client:** **City of Houston** **Houston, TX**
Project: Phase I ESA **Parcel S83-058** **Garland & Vandeman** **Houston, Harris County, TX**	**Tolunay-Wong Engineers, Inc.** **Houston, Texas**	**Project No.: 04-E009-9** **Scale: 1"=~500'**

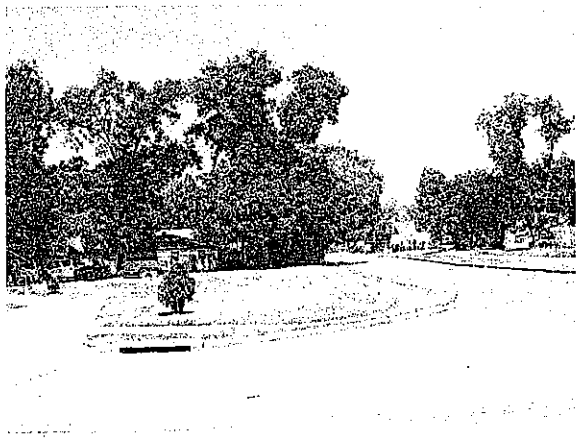


Photo 1: General view looking north across the Site. Hemlock Street in foreground.

Photo 2: General view looking northwest across the Site. View is from east of Garland

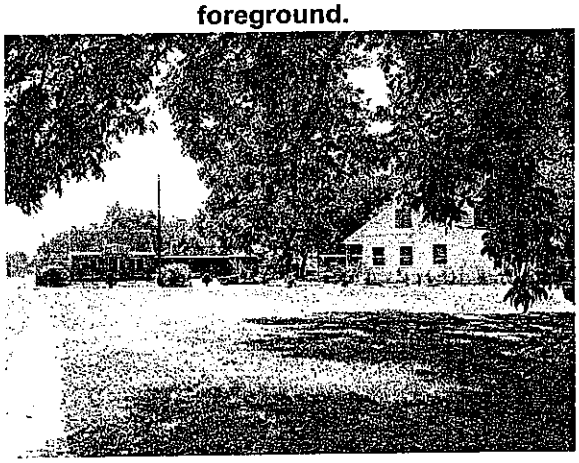


Photo 3: General view looking south across Site.

Photo 4: General view looking southwest across the Site.

Photo 5: Looking toward Vandeman across the Site.

Photo 6: LPG line along along railroad track at Griggs Road north of Site.

APPENDIX E: SITE RECONAISSANCE PHOTOGRAPHS

Project: Phase I ESA Parcel S83-058 Garland & Vandeman Houston, Harris County, TX	Tolunay-Wong Engineers, Inc. Houston, Texas	Project No.: 04-E009-9 Client: City of Houston Houston, TX