

# **Highway Frontage in Boerne** 5 +/- Acres of Improved Land

31001 Interstate 10

Boerne, TX 78006

Reagan Williamson, LREB



#### **Property Highlights**

With a little over 5 acres of flat land located a stones throw from Mercedes and Toyota of Boerne on the same side of the access road, this property has been improved and is ready for the next owner to build to their requirements. Currently operating as ExploreUSA, this property is very flat and build-able. Improvements to the property are a water well in 2012, approximately 1.5 acres of engineered 6" concrete flat work, 50 AMP service arranged in a horseshoe around the concrete, 3 phase power to the property and several pole barn structures. There is no permanent building to have to demolish making this a unique opportunity for the next business to conform the land and their building to their needs.

As traffic heads west to Boerne on I-10, Explore USA is in a highly visible section of the roadway and can easily be seen from over half a mile heading West. Sign-age potential offers superior drive traffic impressions for the business. Easily accessible by either exiting Ralph Fair Road or Boerne Stage Road, both sides of the highway utilize two way traffic on the access roads.

## **Property Details**

5.079 Acres
Zoned: Commercial (CA) and Septic (S)
Located in the Boerne EJT

For more detailed information on this property, please refer to the Phase 1 Environmental Assessment Report as conducted by Terracon on 31 November, 2008. This Phase 1 is included as information only and deemed reliable and accurate at the time of the report. Since purchase of the property, the current owner has made substantial improvements and it is suggested that the current Phase 1 be amended by the potential buyer to reflect said improvements or a new Phase 1 may be ordered by the potential buyer.

In addition, there is not a current survey of the property and the buyer will be responsible for obtaining a new survey, if they desire, before closing of the sale.

#### **Property Pricing**

The property is currently being marketed for sale at \$16/SF or \$3.550,000.00







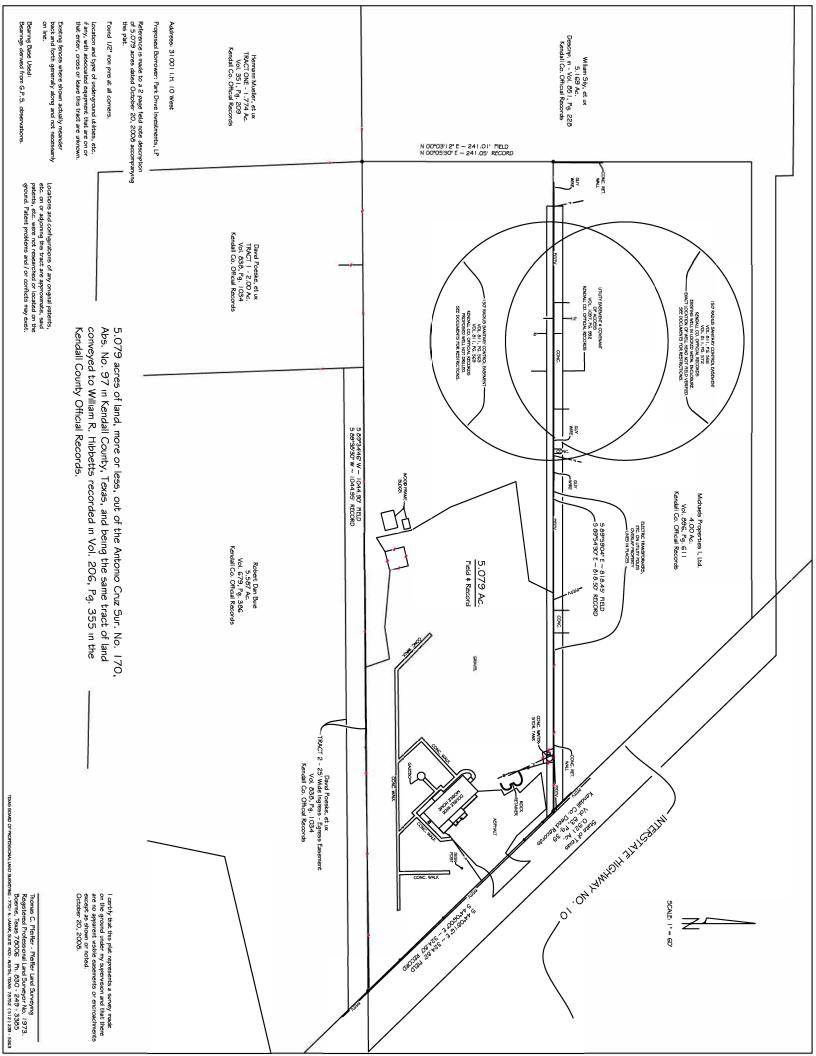






# **PHOTOS**







#### PHASE I ENVIRONMENTAL SITE ASSESSMENT

FIVE ACRES IN BOERNE, TEXAS
31001 IH 10 WEST
BOERNE, KENDALL COUNTY, TEXAS

Project Number: 90087312 Report Date: November 13, 2008



Prepared for:

PARK DRIVE INVESTMENTS, LP Plano, Texas

Prepared by:

**Terracon**San Antonio, Texas

November 13, 2008



## **Consulting Engineers & Scientists**

Terracon Consultants, Inc. 6911 Blanco Road San Antonio, Texas 78216-6164 Phone 210.641.2112 Fax 210.641.2124 www.terracon.com

Mr. Brian Booker
Park Drive Investments, LP
5808 Communications Parkway
Plano, Texas 75093

Telephone: 469-429-4100

E-mail: bbooker@exploreusa.com

Re: Phase ! Environmental Site Assessment

Five Acres in Boerne, Texas

31001 IH 10 West

Boerne, Kendall County, Texas 78006

Project No. 90087312

Dear Mr. Booker:

Terracon Consultants, Inc. (Terracon) is pleased to submit the enclosed Phase I Environmental Site Assessment (ESA) report for the above-referenced site. This assessment was performed in accordance with our proposal dated October 22, 2008.

We appreciate the opportunity to perform these services for you. Please contact us if you have questions regarding this information or if we can provide any other services.

Sincerely,

Terracon Consultants, Inc.

Lene Griego

**Environmental Scientist** 

Joe A. Lambert

✓Environmental Department Manager

Attachments: Two Hard Copies and one PDF



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#### COMMON ACRONYMS 1

ACM ...... Asbestos containing material AST ..... Aboveground storage tank ASTM ...... American Society for Testing and Materials AUL ..... Activity and use limitation BGS..... Below ground surface BTEX..... Benzene, toluene, ethylbenzene, and xylenes CERCLA....... Comprehensive Environmental Response, Compensation, and Liability Act CFR..... Code of Federal Regulations DOT...... United States Department of Transportation EPA...... United States Environmental Protection Agency HREC ...... Historical recognized environmental condition LUST..... Leaking underground storage tank MCL..... Maximum contaminant level MSDS...... Material safety data sheet NGVD...... National Geodetic Vertical Datum NOV ..... Notice of violation NPL ..... National Priority List NRCS...... USDA Natural Resource Conservation Service OSHA...... Occupational Safety and Health Administration PCB..... Poly-chlorinated biphenyl RCRA...... Resource Conservation and Recovery Act REC..... Recognized environmental condition SPCC ...... Spill Prevention, Control and Countermeasure SWPPP ...... Stormwater pollution prevention plan TEPH...... Total extractable petroleum hydrocarbons TPH...... Total petroleum hydrocarbons TVPH...... Total volatile petroleum hydrocarbons TRI ...... Toxic release inventory TSCA...... Toxic Substances Control Act USGS...... United States Geological Survey UST...... Underground storage tank VCP..... Voluntary cleanup program VOC ...... Volatile organic compound

#### Units of measure

sq ft or ft²...... square feet
mg/kg...... milligrams per kilogram
mg/l..... milligrams per liter
ug/l..... micrograms per liter
ppb..... parts per billion
ppm..... parts per million

<sup>&</sup>lt;sup>1</sup> An additional list of acronyms and definitions is included in Appendix B.



## PHASE I ENVIRONMENTAL SITE ASSESSMENT FIVE ACRES IN BOERNE, TEXAS 31001 IH 10 WEST BOERNE, KENDALL COUNTY, TEXAS

Project No. 90087312 Report Date: November 13, 2008

#### **EXECUTIVE SUMMARY**

This Phase I ESA was performed in accordance with our proposal dated October 22, 2008, and was conducted consistent with the procedures included in ASTM E 1527-05, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.* The ESA was conducted under the supervision or responsible charge of Joe A. Lambert, Environmental Professional. Chris Nungesser performed the site reconnaissance on November 6, 2008.

A cursory summary of findings is provided below. It should be recognized that details were not included or fully developed in this section, and the report must be read in its entirety for a comprehensive understanding of the items contained herein.

- The site is approximately 5 acres of land located at 31001 IH 10 West in Boerne, Kendall County, Texas, and is currently occupied by Clayton Homes, a manufactured homes retailer. The land has a small asphalt parking lot, approximately three acres that are covered with base material, an office building, with the remaining land dirt and grass.
- No indications of recognized environmental conditions were identified during the field reconnaissance of the site and adjoining properties conducted on November 6, 2008.
- Based on a review of the historical information, the site was in agricultural use from at least 1938 until sometime before 1985, at which time a clubhouse/office for an on-site driving range was located in the northeast corner. From at least 1996 to present, the site has been used for a mobile home dealership. Terracon did not identify recognized environmental conditions (RECs) to the site in the historical review.
- Terracon did not identify RECs to the site based on our review of the regulatory database summary report.

#### Recommendations

Based on the scope of services, limitations, and findings of this assessment, Terracon did not identify RECs which, in our opinion, warrant additional investigation at this time.



## **EXECUTIVE SUMMARY (cont.)**

However, during the site reconnaissance, Terracon observed a disposal area in a south-central location of the site. Based upon visual observation of surface materials only, the debris appeared to consist primarily of wood, plastic, roofing material, and PVC pipe. Evidence of leakage, spills or other releases from these materials was not observed during the visual reconnaissance. The material did not appear to be hazardous in nature; however, it should be removed and disposed in accordance with local and state regulations prior to further site development.



## PHASE I ENVIRONMENTAL SITE ASSESSMENT FIVE ACRES IN BOERNE, TEXAS 31001 IH 10 WEST BOERNE, KENDALL COUNTY, TEXAS

Project No. 90087312 Report Date: November 13, 2008

#### 1.0 INTRODUCTION

## 1.1 Site Description

## **Site Description**

Site Name	Five Acres in Boerne, Texas	
Site Location/Address	31001 IH 10 West, Boerne, Kendall County, Texas	
Land Area	Approximately 5 acres	
Site Improvements	The site is currently occupied by Clayton Homes, a manufactured homes retailer. The land has a small asphalt parking lot, approximately three acres of base material, an office building, with the remaining land dirt and grass.	

The site vicinity is depicted on Figure 1 of Appendix A, which was reproduced from a portion of the DeLorme Street Atlas USA® 2008. A Site Diagram of the site and adjoining properties is included as Figure 2 of Appendix A. Acronyms and terms used in this report are described in Appendix B.

## 1.2 Scope of Services

This Phase I ESA was performed in accordance with our proposal dated October 22, 2008, and was conducted consistent with the procedures included in ASTM E 1527-05, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. The purpose of this ESA was to assist the client in developing information to identify RECs in connection with the site as reflected by the scope of this report. This purpose was undertaken through user-provided information, a regulatory database review, historical and physical records review, interviews, including local government inquiries, as applicable, and a visual noninvasive reconnaissance of the site and adjoining properties. Limitations, ASTM deviations, and significant gaps (if identified) are evident from reviewing the applicable scope of services and the report text.

#### 1.3 Standard of Care

This ESA was performed in accordance with generally accepted practices of this profession, undertaken in similar studies at the same time and in the same geographical area. We have endeavored to meet this standard of care, but may be limited by conditions encountered during

Five Acres in Boerne, Texas Project No. 90087312 November 13, 2008



performance, a client-driven scope of work, or inability to review information not received by the report date. When appropriate, these limitations are discussed in the text of the report, and an evaluation of their significance with respect to our findings has been conducted.

Phase I ESAs, such as the one performed at this site, are of limited scope, are noninvasive and cannot eliminate the potential that hazardous, toxic, or petroleum substances are present or have been released at the site beyond what is identified by the limited scope of this ESA. In conducting the limited scope of services described herein, certain sources of information and public records were not reviewed. It should be recognized that environmental concerns may be documented in public records that were not reviewed. No ESA can wholly eliminate uncertainty regarding the potential for RECs in connection with a property. Performance of this practice is intended to reduce, but not eliminate, uncertainty regarding the potential for RECs. No warranties, express or implied, are intended or made. The limitations herein must be considered when the user of this report formulates opinions as to risks associated with the site or otherwise uses the report for any other purpose. These risks may be further evaluated - but not eliminated - through additional research or assessment. We will, upon request, advise you of additional research or assessment options that may be available and associated costs.

## 1.4 Additional Scope Limitations, ASTM Deviations and Significant Data Gaps

Based upon the agreed-on scope of services, this ESA did not include subsurface or other invasive assessments, business environmental risk evaluations, or other services not particularly identified and discussed herein. Reasonable attempts were made to obtain information within the scope and time constraints set forth by the client; however, in some instances, information requested is not, or was not, received by the issuance date of the report. Consideration of such information is beyond the scope of this assessment. Information obtained for this ESA was received from several sources that we believe to be reliable; nonetheless, the authenticity or reliability of these sources cannot and is not warranted hereunder. This ESA was further limited by the following:

• Credentials of the company (Statement of Qualifications) have not been included in this report but are available upon request.

An evaluation of the significance of these limitations and missing information with respect to our findings has been conducted, and where appropriate, significant data gaps are identified and discussed in the text of the report. However, it should be recognized that an evaluation of significant data gaps is based on the information available at the time of report issuance, and an evaluation of information received after the report issuance date may result in an alteration of our conclusions, recommendations, or opinions. We have no obligation to provide information obtained or discovered by us after the issuance date of the report, or to perform any additional services, regardless of whether the information would affect any conclusions, recommendations, or opinions in the report. This disclaimer specifically applies to any information that has not been provided by the client.

Five Acres in Boerne, Texas Project No. 90087312 November 13, 2008



This report represents our service to you as of the report date and constitutes our final document; its text may not be altered after final issuance. Findings in this report are based upon the site's current utilization, information derived from the most recent reconnaissance and from other activities described herein; such information is subject to change. Certain indicators of the presence of hazardous substances or petroleum products may have been latent, inaccessible, unobservable, or not present during the most recent reconnaissance and may subsequently become observable (such as after site renovation or development). Further, these services are not to be construed as legal interpretation or advice.

#### 1.5 Reliance

This ESA report is prepared for the exclusive use and reliance of Park Drive Investments LP. Use or reliance by any other party is prohibited without the written authorization of Park Drive Investments LP and Terracon Consultants, Inc. (Terracon).

Reliance on the ESA by the client and all authorized parties will be subject to the terms, conditions and limitations stated in the proposal, ESA report, and Terracon's Agreement for Services. The limitation of liability defined in the Agreement for Services is the aggregate limit of Terracon's liability to the client and all relying parties.

Continued viability of this report is subject to ASTM E 1527-05 Sections 4.6 and 4.8. If the ESA will be used by a different user (third party) than the user for whom the ESA was originally prepared, the third party must also satisfy the user's responsibilities in Section 6 of ASTM E 1527-05.

#### 1.6 Client Provided Information

Prior to the site visit, Mr. Brian Booker, client's representative, provided the following information.

#### 1.6.1 Specialized Knowledge or Experience

Mr. Booker was not aware of specialized knowledge or experience that is material to recognized environmental conditions (RECs) in connection with the site.

#### 1.6.2 Actual Knowledge of Environmental Liens or Activity and Use Limitations (AULs)

Mr. Booker did not have actual knowledge of environmental liens or AULs encumbering the site or in connection with the site.



## 1.6.3 Reason for Significantly Lower Purchase Price

Mr. Booker was not aware of a significantly lower purchase price because of the presence of hazardous substances or petroleum products.

## 1.6.4 Commonly Known or Reasonably Ascertainable Information

Mr. Booker was not aware of commonly known or reasonably ascertainable information within the local community about the site that is material to RECs in connection with the site.

#### 1.6.5 Obvious Indicators of Contamination at the Site

Mr. Booker was not aware of obvious indicators that point to the presence or likely presence of contamination at the site.

#### 2.0 PHYSICAL SETTING

## **Physical Setting**

	Filysical Setting	
PHYSICAL SETTING	INFORMATION FOR SITE AND SURROUNDING AREA	SOURCE
Topography (Refer to Ap	pendix C for an excerpt of the Topographic Map)	
Site Elevation	Approximately 1410 feet (NGVD)	USGS Topographic Map,
Surface Runoff/ Topographic Gradient	Gently sloping towards the south	Van Raub, Texas  Quadrangle, 1991.
Closest Surface Water	An unnamed tributary to Balcones Creek, approximately 1,500 feet to the east of the site.	Quadrangio, 1001.
Soil Characteristics		
Soil Type	Denton Silty Clay	Kendall County, Texas
Description	The Denton Silty Clay series consist of deep, well drained, slowly permeable soils that formed in clayey materials over residuum weathered from limestone bedrock. These nearly level or gently sloping soils are on uplands and have slopes ranging from 0 to 5 percent.	USDA, Natural Resources Conservation Service Soil Survey issued Soil Survey of Kendall County, Texas, United States Department of Agriculture, Soil Conservation Service. 1981
Geology/Hydrogeology		
Formation	Upper Glen Rose Formation, Kgru	
Description	Limestone, dolomite, and marl as alternating resistant and recessive beds forming stair step topography. Limestone, aphanitic to fine grained. Hard to soft and marly, light gray to yellowish gray. Dolomite, fine grained, porous, yellowish brown. Marine megafossils include molluscan steinkerns. rudistids, oysters, and echinoids.	Geologic Map of the New Braunfels, Texas, 30X60 Minute Quadrangle , 2000



PHYSICAL SETTING I	SOURCE	
Estimated Depth to First Occurrence of Ground water  First occurrence to groundwater at 250 feet at a well reported .44 miles northeast of the site.		Submitted Driller's Reports for <insert> county, Texas www.texasinfo.net, 2008</insert>
Primary Aquifer	Trinity Outcrop	Texas Water Development Board www.texasinfo.net , 2008
*Hydrogeologic Gradient: Not known - may be inferred to be parallel to topographic gradient (primarily to south.)		

<sup>\*</sup> The groundwater flow direction and the depth to shallow, unconfined groundwater, if present, would likely vary depending upon seasonal variations in rainfall and other hydrogeological features. Without the benefit of on-site groundwater monitoring wells surveyed to a datum, groundwater depth and flow direction beneath the site cannot be directly ascertained.

#### 3.0 HISTORICAL USE INFORMATION

Terracon reviewed the following historical sources for indications of RECs. A summary of the historical review is included in Section 3.12. Copies of selected historical documents are included in Appendix C.

## 3.1 Historical Topographic Maps

Readily available historical USGS topographic maps were reviewed to identify RECs in connection with the site. Reviewed historical topographic maps are summarized below.

- **1953**, Van Raub, TX (1:24,000)
- **1991**, Van Raub, TX1:24,000)

## **Historical Topographic Maps**

Direction	Description
Site	Vacant, undeveloped land in 1953 and 1991.
North	North of the site is vacant, undeveloped land in 1953 and 1991, with Route 87/Interstate 10 to the northeast. Beyond the vacant land in the north is a road and in 1991 there are structures beyond the road.
East	Beyond Route 87/Interstate 10 is vacant land with a road beyond the land in 1953, with structures beyond the Interstate in 1991.
South	A single structure is to the southeast in 1953 and 1991, with more structures in southwest in both years.
West	Undeveloped areas are indicated to the west of the site in 1953 and 1991, with built up area beyond the undeveloped land in both years.

## 3.2 Historical Aerial Photographs

Selected historical aerial photographs from 1938 - Agricultural Stabilization & Conservation Service, Army Mapping Service, United States Geological Survey, Texas Department of



Transportation, United States Department of Agriculture were reviewed at approximately 10 to 15 year intervals, if readily available, to obtain information concerning the history of development on and near the site. Evaluation of these aerials may be limited by a photo's quality and scale. Selected photographs are summarized below.

- 1938 Agricultural Stabilization & Conservation Service (ASCS), 1" = 500'
- 1952 Army Mapping Service, 1" = 500'
- 1966 ASCS, 1" = 500'
- 1973 ASCS, 1977, 1" = 700'
- 1986 Texas Department of Transportation, 1" = 700'
- 1996 United States Geological Survey, 1" = 700'
- 2004 United States Department of Agriculture, 1" = 700'

#### **Historical Aerial Photographs**

Description			
·			
The site was in agricultural use in 1938, 1952, 1966, and 1973. In the 1986 aerial photograph, a			
building is visible in the northeast corner of the site. In 1996 and 2004, mobile homes are visible			
on the photograph in the eastern half of the site.			
Areas to north of the site were in agricultural use in 1938, 1952, and 1966. In 1973 the land to the			
north appears to be over grown with trees in the aerial photograph. The 1986 aerial photograph			
shows an area of base material north of the site. In 1996, parked cars and two buildings are			
visible in the aerial photograph. The 2004 aerial photograph shows a strip mall, asphalt parking			
area and parked cars on the property north of the site.			
East of the site was a two lane road with agricultural land beyond the road in 1938 and 1952. In			
1966 and 1973 the road to the east was four lanes and the agricultural land east of the road			
contained a farm house. In 1986 and 1996 the road east of the site was four lanes, agricultural			
land and a farm house was beyond the road with a residential development in the northeast and			
commercial building in the southeast. The 2004 aerial photograph is much the same as 1996,			
except the farm house east of the road is no longer visible.			
The areas south of the site are in agricultural use in 1938, 1952, 1966, and 1973. A road is in the			
aerial photographs visible south of the site from 1952-2004. In the 1986, and 1996 aerial photos a			
building visible on the property south of the site. The 2004 aerial photograph is much the same as			
1996, except for three more buildings on the property south of the site.			
The areas west of the site are in agricultural use with undeveloped land beyond the tilled plot in			
1938, 1952, 1966, 1973, and 1986. The area west of the site, in the 2004 aerial photograph,			
appears to be mowed with a wooded area further west.			

## 3.3 Historical City Directories

Cole and Polk City Directories were researched by GeoSearch, and no directories were found for the site or surrounding areas.

Five Acres in Boerne, Texas Project No. 90087312 November 13, 2008



## 3.4 Historical Fire Insurance Maps

Based on research by GeoSearch and inquiries to the San Antonio Library, Sanborn Maps are not published for the site and vicinity.

## 3.5 Property Tax File Information

Based on a review of information obtained from Bexar assessor's records, the current site owner is Bill Hibbets.

#### 3.6 Title Search

At the direction of the client, a title search was not included as part of the scope of services. Unless notified otherwise, we assume that the client is evaluating this information outside the context of this report.

#### 3.7 Environmental Liens

Environmental lien records recorded against the site were not provided by the client. At the direction of the client, performance of a review of these records was not included as part of the scope of services and unless notified otherwise, we assume that the client is evaluating this information outside the context of this report.

#### 3.8 Building Department Records

Terracon inquired about building department records with the City of Boerne for information indicating RECs on the site.

At the issuance of this report, a response had not been received from the City of Boerne Building Department.

## 3.9 Zoning/Land Use Records

According to the Kendall County Assessor's records the site is currently zoned as Commercial Acreage (CA) and Septic (S).

## 3.10 Historical Interviews

The following individuals were interviewed regarding historical use of the site.



#### **Interviewees**

<u>Interviewer</u>	Interviewee/Phone #	<u>Title</u>	Date/Time
Lené Griego	Bill Hibbitts/210-862-9919	Owner	11/05/08, 4:10 p.m.
Chris Nungesser	Tina Bagely	Manager of Clayton Homes	11/11/08, 2:00 p.m.

#### Mr. Bill Hibbetts

Mr. Hibbetts has owned the site for approximately 23 years and does not know of any other environmental assessments for the site. He stated that to his knowledge the site was vacant land or maybe used for grazing before he bought it, and he is not aware of any USTs, ASTs, or other storage tanks on the site. Mr Hibbetts stated that when he first owned the land he leased it out to a driving range, but the site was not long enough for that purposes. After that it has been used as a mobile home retail store. Mr. Hibbetts is not aware of any major spills, or releases on the site. Base material or fill was used to level the site. He stated that he does not have any knowledge of environmental violations, citations, notifications, fines, or liens associated with the site. Mr. Hibbetts indicated there are no wells on the site, but there is a well next door that he believed is supplying water to the site. He stated that there is septic system on the site, but does not know exactly where. Mr. Hibbetts stated he does not have any reason to suspect contamination in the soil or groundwater. He does not have knowledge of the above mentioned concerns with adjacent or surrounding properties.

Bill Hibbets was not aware of any pending, threatened or past environmental litigation, proceedings or notices of possible violations of environmental laws or liability in connection with the site.

#### Ms. Tina Bagely

Ms. Bagely has worked at Clayton Homes since October of 2005 and does not know of any other environmental assessments for the site. She stated that to her knowledge the site was always a mobile home dealership and she is not aware of any USTs, ASTs, or other storage tanks on the site. Ms. Bagely is not aware of any major spills, releases, fill dirt or soil placed on the site. Ms. Bagely stated there are no wells on the site and Clayton Homes has their water trucked in once a month. She stated that there is a septic system on the site that is located under the flower bed in front of the Clayton Homes office on the IH-10 W side of the building. She does not have any reason to suspect contamination in the soil or groundwater. Ms. Bagely mentioned that Clayton Homes gets their electrical service from Bandera Electric Cooperative and there is no natural gas service on the site.

#### 3.11 Prior Report Review

Previous environmental reports, permits and registrations, or geotechnical reports for the site were not provided by the client to Terracon for review.



## 3.12 Historical Use Information Summary

Based on a review of the historical information, the site was in agricultural use from at least 1938 until sometime before 1985, at which time a clubhouse/office for an on-site driving range was located in the northeast corner. From at least 1996 to present, the site has been used for a mobile home dealership. Terracon did not identify recognized environmental conditions (RECs) to the site in the historical review.

#### 4.0 RECORDS REVIEW

Regulatory database information was provided by GeoSearch, a contract information services company. The purpose of the records review was to identify RECs in connection with the site. Evaluating identified regulatory facilities for potential vapor intrusion conditions was outside the scope of this assessment. Information in this section is subject to the accuracy of the data provided by the information services company and the date at which the information is updated, and the scope herein did not include confirmation of facilities listed as "unmappable" by regulatory databases.

In some of the following subsections, the words up-gradient, cross-gradient and down-gradient refer to the topographic gradient in relation to the site. As stated previously, the groundwater flow direction and the depth to shallow groundwater, if present, would likely vary depending upon seasonal variations in rainfall and the depth to the soil/bedrock interface. Without the benefit of on-site groundwater monitoring wells surveyed to a datum, groundwater depth and flow direction beneath the site cannot be directly ascertained.

#### 4.1 Federal and State/Tribal Databases

Listed below are the facility listings identified on federal and state/tribal databases within the ASTM-required search distances from the approximate site boundaries. Database definition, descriptions, and the database search report are included in Appendix D.

#### **Federal and State Databases**

<u>Database</u>	<u>Description</u>	Radius (miles)	<u>Listings</u>
	Federal		
NPL	This database includes U.S. Environmental Protection Agency (EPA) National Priority List sites that fall under the EPA's Superfund program, established to fund the cleanup of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action.	1.0	0



<u>Database</u>	<u>Description</u>	Radius (miles)	<u>Listings</u>		
CERCLIS	CERCLIS is the repository for site and non-site specific Superfund information in support of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). This database contains an extract of sites that have been investigated or are in the process of being investigated for potential environmental risk.	0.5	0		
NFRAP	NFRAP (No Further Remedial Action Planned) refers to facilities that have been removed and archived from its inventory of CERCLA sites.	0.5	0		
RCRISC	The USEPA maintains a database of Resource Conservation and Recovery Act (RCRA) facilities associated with treatment, storage, and disposal (TSD) of hazardous materials that are undergoing "corrective action". A "corrective action" order is issued when there has been a release of hazardous waste or constituents into the environment from a RCRA facility.	1.0	0		
RCRIST	The Resource Conservation and Recovery Act Information System (RCRIS) RCRIST database is a compilation by the USEPA of facilities that report storage, transportation, treatment, or disposal of hazardous waste. Unlike the RCRISC database, the RCRIST database does not include RCRA facilities where corrective action is required.	0.5	0		
RCRISG Violators	The RCRIS Generators/Handler database, also maintained by the USEPA, lists facilities that generate hazardous waste as part of otheir normal business practices. Generators are listed as large, small, or conditionally exempt. Large quantity generators (LQG) produce at least 1000 kg/month of non-acutely hazardous waste or 1 kg/month of acutely hazardous waste. Small quantity generators (SQG) produce 100-1000 kg/month of non-acutely hazardous waste. Conditionally exempt small quantity generators (CESQG) are those that generate less than 100 kg/month of non-acutely hazardous waste.	0.1	0		
ERNS	This database contains data on reported releases of oil and hazardous substances. The data comes from spill reports made to the EPA, U.S. Coast Guard, the National Response Center and/or the Department of Transportation.	Site	0		
	State				
TXSF	The state Superfund program mission is to remediate abandoned or inactive sites within the state that pose an unacceptable risk to public health and safety or the environment, but which do not qualify for action under the federal Superfund program (NPL - National Priority Listing). Information in this database includes any recent developments and the anticipated action for these sites.	1	0		
VCP	The Texas Voluntary Cleanup Program (VCP) provides administrative, technical, and legal incentives to encourage the cleanup of contaminated sites in Texas. Since all non-responsible parties, including future lenders and landowners, receive protection from liability to the state of Texas for cleanup of sites under the VCP, most of the constraints for completing real estate transactions at those sites are eliminated. As a result, many unused or underused properties may be restored to economically productive or community beneficial uses.	0.25	0		
MSWLF	Sites listed within a solid waste landfill database may include active landfills and inactive landfills, where solid waste is treated or stored.	0.5	0		



<u>Database</u>	<u>Description</u>	Radius (miles)	<u>Listings</u>
CALF	TCEQ, under a contract with Texas State University, and in cooperation with the 24 regional Council of Governments in the State, has located over 4,000 closed and abandoned municipal solid waste landfills throughout Texas. This listing contains "unauthorized sites". Unauthorized sites have no permit and are considered abandoned. The information available for each site varies in detail.	0.5	0
LPST	The Leaking Underground Storage Tank listing is derived from the Petroleum Storage Tank (PST) database and is maintained by the Texas Commission on Environmental Quality (TCEQ). This database includes facilities with reported leaking petroleum storage tanks.	0.5	1
PST	The Underground Storage Tank listing is derived from the Petroleum Storage Tank database which is administered by the TCEQ (Texas Commission on Environmental Quality). Both Underground storage tanks (USTs) and Aboveground storage tanks (ASTs) are included in this report.	0.01	0
SPILLS	The Texas Commission on Environmental Quality provides this database. Information includes releases of hazardous or potential hazardous chemical/materials into the environment.	Site	0
DCR	The DCR listing includes dry cleaning drop stations and facilities registered with the Texas Commission on Environmental Quality.	0.5	0
IOP	Texas Innocent Owner / Operator (IOP) provides a certificate to an innocent owner or operator if their property is contaminated as a result of a release or migration of contaminants from a source or sources not located on the property, and the did not cause or contribute to the source or sources of contamination.	0.25	0

In addition to the above ASTM-required listings, Terracon reviewed other federal, state, local and proprietary databases provided by the database firm. A list of the additional reviewed databases is included in the regulatory database report included in Appendix D.

The following table summarizes the site-specific information provided by the database and/or gathered by this office for identified facilities. Facilities are listed in order of proximity to the subject site. Additional discussion for selected facilities may follow the summary table.

#### **Listed Facilities**

Facility Name and Location	Estimated Distance/Direction/Gradient	Database Listings
Tindall Cecil Chevy Olds, Inc.	Approximately 1320 feet / east / cross-	LPST
I 10 West	gradient	LF31

#### Tindall Cecil Chevy Olds, Inc.

Tindall Cecil Chevy Olds, Inc. is located at I 10 West approximately 1,320 feet east of IH10 and cross gradient to the site. The regulatory database has this LPST as "No groundwater impacted, no apparent threats or impacts to receptors." Final concurrence for case closure was issued to the responsible party by the Texas Commission on Environmental Quality. Due to its regulatory status and distance, this facility does not constitute a recognized environmental condition to the site.



Unmapped facilities are those that do not contain sufficient address or location information to evaluate the facility listing locations relative to the site. The report listed no facilities in the unmapped section.

## 4.2 Local Agency Inquiries

#### 4.2.1 Fire Department

The City of Boerne Fire Marshall, Mr. Mark Mattick, was contacted by e-mail regarding environmental records or information indicating environmental concerns for the site. Mr. Mattick stated that after reviewing his files "We show no records of any incidents" for the afore mentioned area.

#### 4.2.2 Planning Department

The City of Boerne Planning Department, Mr. Turk, was contacted by e-mail regarding environmental records for the site. At the issuance of this report, a response had not been received from the planning department.

## 4.2.3 Texas Commission on Environmental Quality

Terracon contacted Mr. Jim Hay, Open Records Team, MC-197, IR/Open Records & Reporting Services, with the Texas Commission on Environmental Quality (TCEQ) was contacted by email regarding environmental records for the site. At the issuance of this report a response has not been received from the TCEQ.

The absence of a response from the TCEQ constitutes a data gap. However, it is unlikely that records from the TCEQ will identify recognized environmental conditions beyond those identified by the historical and regulatory reviews. Accordingly, it is our opinion that the absence of TCEQ will not affect Terracon's ability to identify recognized environmental conditions at the site.

#### 4.3 Records Review Summary

Terracon did not identify recognized environmental conditions in the regulatory review.

#### 5.0 SITE RECONNAISSANCE

#### 5.1 General Site Information

Information contained in this section is based on a visual reconnaissance conducted while walking through the site and the accessible interior areas of structures, if any, located on the site. Figure 2 in Appendix A is a diagram of the site. Photo documentation of the site at the time of the visual reconnaissance is provided in Appendix E. Credentials of the individuals planning and conducting the site visit are included in Appendix F.



#### **General Site Information**

Site Reconnaissance				
Field Personnel	Chris Nungesser			
Reconnaissance Date	November 6, 2008			
Weather Conditions	Clear			
Site Contact/Title	Tina Bagley / Manager of Clayton Homes			
Site Description				
Site Name	Five Acres in Boerne, Texas			
Site Location/Address	31001 IH 10 West, Boerne, Kendall County, Texas			
Land Area	Approximately 5 acres			
Site Improvements	The site is currently occupied by Clayton Homes, a manufactured homes retailer. The land has a small asphalt parking lot, approximately three acres of base material, an office building, with the remaining land dirt and grass.			
Zoning	The site is zoned Commercial (CA) and Septic (S).			
Site Topographic Relief	The direction of topographic relief begins at a high point on the site and gently slopes southeast to adjoining properties.			
Building Description				
Building Identification	Building Use	Approx. Construction Date	Number of Stories	Approx. Size (ft²)
Clayton Homes Office Building	Office	unknown	1	unknown
The office building and mobile homes on site are not considered permanent structures in the Kendall County Assessor's records	Display Models	unknown	1 ea.	unknown
Site Utilities				
Electricity	Bandera Electric Cooperative			
Drinking Water	Trucked in by a private company.			
Wastewater	On site septic system			
Natural Gas	N/A			

## 5.2 General Description of Site, Occupants, and Operations

The site is approximately 5 acres of land located at 31001 IH 10 West in Boerne, Kendall County, Texas and is currently occupied by Clayton Homes, a manufactured homes retailer. The land has a small asphalt parking lot, approximately three acres of base material, an office building, with the remaining land dirt and grass.



## 5.3 Site Observations

The following table summarizes site observations and interviews. Affirmative responses (designated by an "X") are discussed in more detail following the table.

## **Site Characteristics**

Category	Item or Feature	Observed	
	Emergency generators		
	Elevators		
	Air compressors		
	Hydraulic lifts		
Site Operations,	Dry cleaning		
Processes, and	Photo processing		
Equipment	Laboratory hoods and/or incinerators		
	Waste treatment systems and/or water treatment		
	systems		
	Heating and/or cooling systems	Χ	
	Other processes or equipment		
Aboveground	Aboveground storage tanks		
Chemical or Waste	Drums, barrels and/or containers ≥ 5 gallons		
Storage	MSDS		
	Underground storage tanks or ancillary UST equipment		
	Sumps, cisterns, catch basins and/or dry wells		
Underground	Grease traps		
Chemical or Waste	Septic tanks and/or leach fields	X	
Storage, Drainage or	Oil/water separators		
Collection Systems	Pipeline markers		
	Interior floor drains		
Electrical	Pad or pole mounted transformers and/or capacitors	Χ	
Transformers/ PCBs	Other equipment		
-	Stressed vegetation		
	Stained soil		
	Stained pavement or similar surface		
	Leachate and/or waste seeps		
D. C.	Trash, debris and/or other waste materials	Χ	
Releases or Potential	Dumping or disposal areas	X	
Releases	Construction/demolition debris and/or dumped fill dirt		
	Surface water discoloration, odor, sheen, and/or free		
	floating product		
	Strong, pungent or noxious odors		
	Exterior pipe discharges and/or other effluent discharges		
0.1 H	Surface water bodies		
Other Notable Site	Quarries or pits		
Features _	Wells		

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#### Heating and/or cooling systems

Three A/C units were noted on the site; one of the units serviced the office building and the other units serviced display homes.

#### Septic tanks and/or leach fields

The site contained one septic tank. According to Tina Bagely, the manager of Clayton Homes, the septic tank is located in the flowerbed east of the main building. The septic tank was not observed during the site visit; however, stains or noxious odors were not detected near the flowerbed.

#### Pad or pole mounted transformers and/or capacitors

During Terracon's site visit, four pole-mounted transformers, owned and serviced by Bandera Electric Cooperative, were observed along the northern and eastern boundaries of the site; however, no information with regard to PCB content of the transformer fluids was observed. Transformers contain mineral oil which may contain minor amounts of PCB and could be considered "PCB contaminated" (PCB content of 50-500 ppm).

Bandera Electric Cooperative maintains responsibility for the transformers, and if the transformers were "PCB contaminated," the utility company is not required to replace the transformer fluids until a release is identified.

No surficial staining was observed in the vicinity of the transformers. However, no evidence of current or prior release was observed in the vicinity of the electrical equipment during the site reconnaissance.

#### **Releases or Potential Releases**

## Trash, debris and/or other waste materials

One solid waste disposal dumpster, serviced by Waste Management, was observed near the center of the site along the southern fence. No evidence of staining, noxious odors or hazardous waste disposal was observed within or in the vicinity of the on-site dumpster.

#### Dumping or disposal areas

During the site reconnaissance, Terracon observed a disposal area in a south-central location of the site. Based upon visual observation of surface materials only, the debris appeared to consist primarily of wood, plastic, roofing material, and PVC pipe. Evidence of leakage, spills or other releases from these materials was not observed during the visual reconnaissance. The material did not appear to be hazardous in nature; however, it should be removed and disposed in accordance with local and state regulations prior to further site development.



## 5.4 Interviews Conducted During Visual Reconnaissance

The following individuals were interviewed regarding the presence or absence of the features listed in the table above.

#### **Interviewees**

<u>Interviewer</u>	Interviewee/Phone #	<u>Title</u>	<u>Date/Time</u>
Lené Griego	Bill Hibbitts/210-862-9919	Owner	11/05/08, 4:10 p.m.
Chris Nungesser	Tina Bagely	Manager of Clayton Homes	11/11/08, 2:00 p.m.

Information obtained from the above-listed interviewees is discussed in Sections 3.9 and 5.3.

## 5.5 Site Reconnaissance Summary

No indications of recognized environmental conditions were identified during the field reconnaissance of the site and adjoining properties conducted on November 6, 2008.

#### 6.0 ADJOINING PROPERTY RECONNAISSANCE

Visual observations of adjoining properties (from site boundaries) are summarized below.

## **Adjoining Properties**

Direction	Description	
North	A strip mall is to the north of the site.	
East	IH10 West is to the east of the site.	
South	Buie Lumber is to the south and an unknown business is to the southwest of the site.	
West	Undeveloped land is to the west of the site.	

#### 7.0 ADDITIONAL SERVICES

Per the agreed scope of services specified in the proposal, additional services (e.g., asbestos sampling, lead-based paint sampling, wetlands evaluation, lead in drinking water testing, radon testing, etc.) were not conducted.



#### 8.0 FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

## 8.1 Findings and Conclusions

This Phase I ESA was performed in accordance with our proposal dated October 22, 2008, and was conducted consistent with the procedures included in ASTM E 1527-05, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.* The ESA was conducted under the supervision or responsible charge of Joe A. Lambert, Environmental Professional. Chris Nungesser performed the site reconnaissance on November 6, 2008.

A cursory summary of findings is provided below. It should be recognized that details were not included or fully developed in this section, and the report must be read in its entirety for a comprehensive understanding of the items contained herein.

- The site is approximately 5 acres of land located at 31001 IH 10 West in Boerne, Kendall County, Texas, and is currently occupied by Clayton Homes, a manufactured homes retailer. The land has a small asphalt parking lot, approximately three acres that are covered with base material, an office building, with the remaining land dirt and grass.
- No indications of recognized environmental conditions were identified during the field reconnaissance of the site and adjoining properties conducted on November 6, 2008.
- Based on a review of the historical information, the site was in agricultural use from at least 1938 until sometime before 1985, at which time a clubhouse/office for an on-site driving range was located in the northeast corner. From at least 1996 to present, the site has been used for a mobile home dealership. Terracon did not identify recognized environmental conditions (RECs) to the site in the historical review.
- Terracon did not identify RECs to the site based on our review of the regulatory database summary report.

#### Recommendations

Based on the scope of services, limitations, and findings of this assessment, Terracon did not identify RECs which, in our opinion, warrant additional investigation at this time.

However, during the site reconnaissance, Terracon observed a disposal area in a south-central location of the site. Based upon visual observation of surface materials only, the debris appeared to consist primarily of wood, plastic, roofing material, and PVC pipe. Evidence of leakage, spills or other releases from these materials was not observed during the visual

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reconnaissance. The material did not appear to be hazardous in nature; however, it should be removed and disposed in accordance with local and state regulations prior to further site development.

#### 9.0 DECLARATION

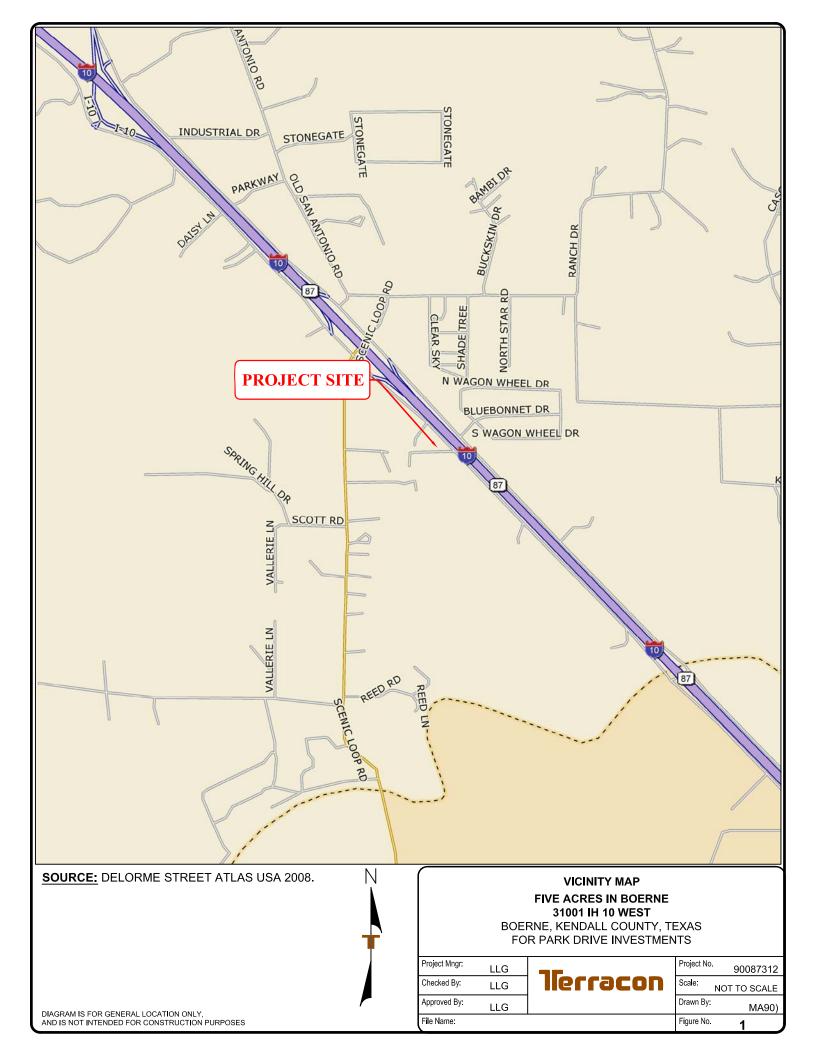
I, Joe A. Lambert, declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in Section 312.10 of 40 CFR 312; and I have the specific qualifications based on education, training, and experience to assess a site of the nature, history, and setting of the subject site. I have developed and performed the All Appropriate Inquiries in conformance with the standards and practice set forth in 40 CFR Part 312.

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## **APPENDIX A**

Figure 1 - Topographic Map, Figure 2 - Site Diagram



# BENJAMIN MOORE SHOPPING CENTER POLE MOUNTED TRANSFORMER POLE MOUNTED TRANSFORMER POLE MOUNTED TRANSFORMER WATER WELL / AND TANK PARKING AREA UNDEVELOPED FIELD POLE MOUNTED TRANSFORMER MOWED FIELD STORAGE BOX BASE MATERIAL ROCK . SIDEWALK FURNITURE STORAGE SHED MOBIL HOMES **BUIE LUMBER** LAYDOWN YARD **LEGEND SITE DIAGRAM FIVE ACRES IN BOERNE** - SITE BOUNDARY 31001 IH 10 WEST BOERNE, KENDALL COUNTY, TEXAS FOR PARK DRIVE INVESTMENTS GENERAL SITE GRADIANT Project Mngr. Project No. LLG 90087312 **Terracon** Checked By: Scale: LLG NOT TO SCALE Drawn By: Approved By: LLG MA90) DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES File Name: Figure No. 2

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## **APPENDIX B**

**Description of Terms and Acronyms** 

## **Description of Selected General Terms and Acronyms**

Term/Acronym	Description
	Asbestos Containing Material. Asbestos is a naturally occurring mineral, three varieties of which (chrysotile, amosite, crocidolite) have been commonly used as fireproofing or as binding agents in construction materials. Inhalation of asbestos fibers has been documented to cause asbestosis (scarring of the lung), lung cancer, and mesothelioma (a cancer of the chest wall lining).
ACM	Most Federal and State agencies define ACM as a material containing more that one (1) percent asbestos, although some states, such as California, define ACM as material containing 0.1% or more asbestos. In order to determine the ACM status of suspect building materials, a minimum number of samples must be collected and analyzed, depending on the type and quantity of the suspect material. A suspect material can only be confirmed as non-ACM when analytical results of all required samples are below applicable regulatory limits. Asbestos concentrations are generally determined using polarized light microscopy or transmission electron microscopy. An asbestos containing material may be classified as either friable or non-friable. Friable materials are those that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. Non-friable ACM are materials in which the asbestos fibers are more firmly bound in a matrix of tar, plastic or other such material, and which have a lower potential for asbestos fiber release.
	Federal and State regulations require that that an asbestos survey be performed prior to renovation, dismantling, demolition or other activities that may disturb suspect or confirmed ACM unless such materials are removed as ACM prior to planned disturbances. ACM removal may also be required if confirmed ACM becomes damaged, or if renovation or demolition activities could result in damage to confirmed or suspect ACM. Depending upon the quantity, notification to Federal or State regulatory agencies may be required prior to ACM removal (abatement) operations. Abatement of friable or potentially friable ACM must be performed by a licensed abatement contractor in accordance with applicable federal, state, or local regulations. OSHA worker protection regulations will also apply.
AHERA	Asbestos Hazard Emergency Response Act
AST	Above Ground Storage Tanks. ASTs are generally described as storage tanks less than 10% of which are below ground (i.e., buried). Tanks located in a basement, but not buried, are also considered ASTs. Whether, and the extent to which, an AST is regulated, is determined on a case-by-case basis and depends upon tank size, its contents and the jurisdiction of its location.
AULs	Activity and Use Limitations
BGS	Below Ground Surface
BTEX	Benzene, Toluene, Ethyl benzene, and Xylenes. BTEX are VOC components found in gasoline and commonly used as analytical indicators of a petroleum hydrocarbon release.
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act (a.k.a. Superfund). CERCLA is the federal act that regulates abandoned or uncontrolled hazardous waste sites. Under this Act, joint and several liability may be imposed on potentially responsible parties for cleanup-related costs.
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System. An EPA compilation of sites having suspected or actual releases of hazardous substances to the environment. CERCLIS also contains information on site inspections, preliminary assessments and remediation of hazardous waste sites. These sites are typically reported to EPA by states and municipalities or by third parties pursuant to CERCLA Section 103.
CFR	Code of Federal Regulations
CESQG	Conditionally exempt small quantity generators.
DOT	U.S. Department of Transportation
EPA	U.S. Environmental Protection Agency
ERNS	Emergency Response Notification System. An EPA-maintained federal database which stores information on notifications of oil discharges and hazardous substance releases in quantities greater than the applicable reportable quantity under CERCLA. ERNS is a cooperative data-sharing effort between EPA, DOT, and the National Response Center.
ESA	Environmental Site Assessment
FRP	Fiberglass Reinforced Plastic
Hazardous Substance	As defined under CERCLA, this is (A) any substance designated pursuant to section 1321(b)(2)(A) of Title 33, (B) any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title; (C) any hazardous waste having characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (with some exclusions); (D) any toxic pollutant listed under section 1317(a) of Title 33; (E) any hazardous air pollutant listed under section 112 of the Clear Air Act; and (F) any imminently hazardous chemical substance or mixture with respect to which the EPA Administrator has taken action under section 2606 of Title 15. This term does not include petroleum, including crude oil or any fraction thereof which is not otherwise listed as a hazardous substance under subparagraphs (A) through (F) above, and the term does not include natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).

## **Description of Terms and Acronyms (cont.)**

Term/Acronym	Description
Hazardous Waste	This is defined as having characteristics identified or listed under section 3001 of the Solid Waste Disposal Act (with some exceptions). RCRA, as amended by the Solid Waste Disposal Act of 1980, defines this term as a "solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may (A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; or (B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed."
IC / EC	Industrial Controls / Engineering Controls
ILP	Innocent Landowner Program
IOP	Innocent Owner/Operator Program
LQG	Large quantity generators.
LUST	Leaking Underground Storage Tank. This is a federal term set forth under RCRA for leaking USTs. Some states also utilize this term.
MCL	Maximum Contaminant Level. This Safe Drinking Water concept (and also used by many states as a ground water cleanup criteria) refers to the limit on drinking water contamination that determines whether a supplier can deliver water from a specific source without treatment.
MSDS	Material Safety Data Sheets. Written/printed forms prepared by chemical manufacturers, importers and employers which identify the physical and chemical traits of hazardous chemicals under OSHA's Hazard Communication Standard.
NESHAP	National Emissions Standard for Hazardous Air Pollutants (Federal Clean Air Act). This part of the Clean Air Act regulates emissions of hazardous air pollutants.
NFRAP	Facilities where there is "No Further Remedial Action Planned," as more particularly described under the Records Review section of this report.
NGVD	National Geodetic Vertical Datum
NOV	Notice of Violation. A notice of violation or similar citation issued to an entity, company or individual by a state or federal regulatory body indicating a violation of applicable rule or regulations has been identified.
NPDES	National Pollutant Discharge Elimination System (Clean Water Act). The federal permit system for discharges of polluted water.
NPL	National Priorities List, as more particularly described under the Records Review section of this report.
OSHA	Occupational Safety and Health Administration or Occupational Safety and Health Act
PACM	Presumed Asbestos-Containing Material. A material that is suspected of containing or presumed to contain asbestos but which has not been analyzed to confirm the presence or absence of asbestos.
PCB	Polychlorinated Biphenyl. A halogenated organic compound commonly in the form of a viscous liquid or resin, a flowing yellow oil, or a waxy solid. This compound was historically used as dielectric fluid in electrical equipment (such as electrical transformers and capacitors, electrical ballasts, hydraulic and heat transfer fluids), and for numerous heat and fire sensitive applications. PCB was preferred due to its durability, stability (even at high temperatures), good chemical resistance, low volatility, flammability, and conductivity. PCBs, however, do not break down in the environment and are classified by the EPA as a suspected carcinogen. 1978 regulations, under the Toxic Substances Control Act, prohibit manufacturing of PCB-containing equipment; however, some of this equipment may still be in use today.
pCi/l	picoCuries per Liter of Air. Unit of measurement for Radon and similar radioactive materials.
PLM	Polarized Light Microscopy (see ACM section of the report, if included in the scope of services)
PST	Petroleum Storage Tank. An AST or UST that contains a petroleum product.
Radon	A radioactive gas resulting from radioactive decay of naturally-occurring radioactive materials in rocks and soils containing uranium, granite, shale, phosphate, and pitchblende. Radon concentrations are measured in picoCuries per Liter of Air. Exposure to elevated levels of radon creates a risk of lung cancer; this risk generally increases as the level of radon and the duration of exposure increases. Outdoors, radon is diluted to such low concentrations that it usually does not present a health concern. However, radon can accumulate in building basements or similar enclosed spaces to levels that can pose a risk to human health. Indoor radon concentrations depend primarily upon the building's construction, design and the concentration of radon in the underlying soil and ground water. The EPA recommended annual average indoor "action level" concentration for residential structures is 4.0 pCi/l.
RCRA	Resource Conservation and Recovery Act. Federal act regulating solid and hazardous wastes from point of generation to time of disposal ("cradle to grave"). 42 U.S.C. 6901 et seq.
RCRA Generators	The RCRA generators list is part of the RCRIS database maintained by EPA and lists facilities that generate hazardous waste as part of their normal business operations, as more particularly defined under Section 5.0 of this report.
RCRA CORRACTS/TSDs	The USEPA maintains a database of RCRA facilities associated with treatment, storage, and disposal (TSD) of hazardous materials, which are undergoing "corrective action". A "corrective action" order is issued when there is a release of hazardous waste or constituents into the environment from a RCRA facility.

## **Description of Terms and Acronyms (cont.)**

Term/Acronym	Description
RCRA Non-	The RCRA Non-CORRACTS/TSD Database is a compilation by the USEPA of facilities, which report storage, transportation, treatment, or disposal of hazardous waste. Unlike the
CORRACTS/TSDs	RCRA CORRACTS/TSD database, the RCRA Non-CORRACTS/TSD database does not include RCRA facilities where corrective action is required.
RCRA	RAATS. RCRA Administrative Actions Taken. RAATS information is now contained in the RCRIS database and includes records of administrative enforcement actions against
Violators List	facilities for noncompliance.
RCRIS	Resource Conservation and Recovery Information System, as defined in the Records Review section of this report.
REC	Recognized Environmental Conditions are defined by ASTM E 1527-05 as "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property." The term includes hazardous substances or petroleum products even under conditions of compliance with laws. The term is not intended to include <i>de minimis</i> conditions that generally do not present a material risk of harm to the 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.
SCL	State "CERCLIS" List (see SPL /State Priority List, below).
SPCC	Spill Prevention, Control and Countermeasures. SPCC plans are required under federal law (Clean Water Act and Oil Pollution Act) for any facility storing petroleum in tanks and/or containers of 55-gallons or more that when taken in aggregate exceed 1,320 gallons. SPCC plans are also required for facilities with underground petroleum storage tanks with capacities of over 42,000 gallons. Many states have similar spill prevention programs, which may have additional requirements.
SPL	State Priority List. State list of confirmed sites having contamination in which the state is actively involved in clean up activities or is actively pursuing potentially responsible parties for clean up. Sometimes referred to as a State "CERCLIS" List.
SQG	Small quantity generators.
SWF	Solid Waste Facility. Landfills listed by a state database.
TPH	Total Petroleum Hydrocarbons
TRI	Toxic Release Inventory. Routine EPA report on releases of toxic chemicals to the environment based upon information submitted by entities subject to reporting under the Emergency Planning and Community Right to Know Act.
TSCA	Toxic Substances Control Act. A federal law regulating manufacture, import, processing and distribution of chemical substances not specifically regulated by other federal laws (such as asbestos, PCBs, lead-based paint and radon). 15 U.S.C 2601 et seq.
USACE	United States Army Corps of Engineers
USC	United States Code
USGS	United States Geological Survey
USNRCS	United States Department of Agriculture-Natural Resource Conservation Service
UST	Underground Storage Tank. Most federal and state regulations, as well as ASTM E 1527-05, define this as any tank, incl., underground piping connected to the tank, that is or has been used to contain hazardous substances or petroleum products and the volume of which is 10% or more beneath the surface of the ground (i.e., buried).
VCP	Voluntary Cleanup Program
VOC	Volatile Organic Compound
	Areas that are typically saturated with surface or ground water that creates an environment supportive of wetland vegetation (i.e., swamps, marshes, bogs). The Corps of Engineers Wetlands Delineation Manual (Technical Report Y-87-1) defines wetlands as areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. For an area to be considered a jurisdictional wetland, it must meet the following criteria: more than 50 percent of the dominant plant species must be categorized as Obligate, Facultative Wetland, or Facultative on lists of plant species that occur in wetlands; the soil must be hydric; and, wetland hydrology must be present.
Wetlands	The federal Clean Water Act which regulates "waters of the US," also regulates wetlands, a program jointly administered by the USACE and the EPA. Waters of the U.S. are defined as: (1) waters used in interstate or foreign commerce, including all waters subject to the ebb and flow of tides; (2) all interstate waters including interstate wetlands; (3) all other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, etc., which the use, degradation, or destruction could affect interstate/ foreign commerce; (4) all impoundments of waters otherwise defined as waters of the U. S., (5) tributaries of waters identified in 1 through 4 above; (6) the territorial seas; and (7) wetlands adjacent to waters identified in 1 through 6 above. Only the USACE has the authority to make a final wetlands jurisdictional determination.

## **Description of Terms and Acronyms (cont.)**

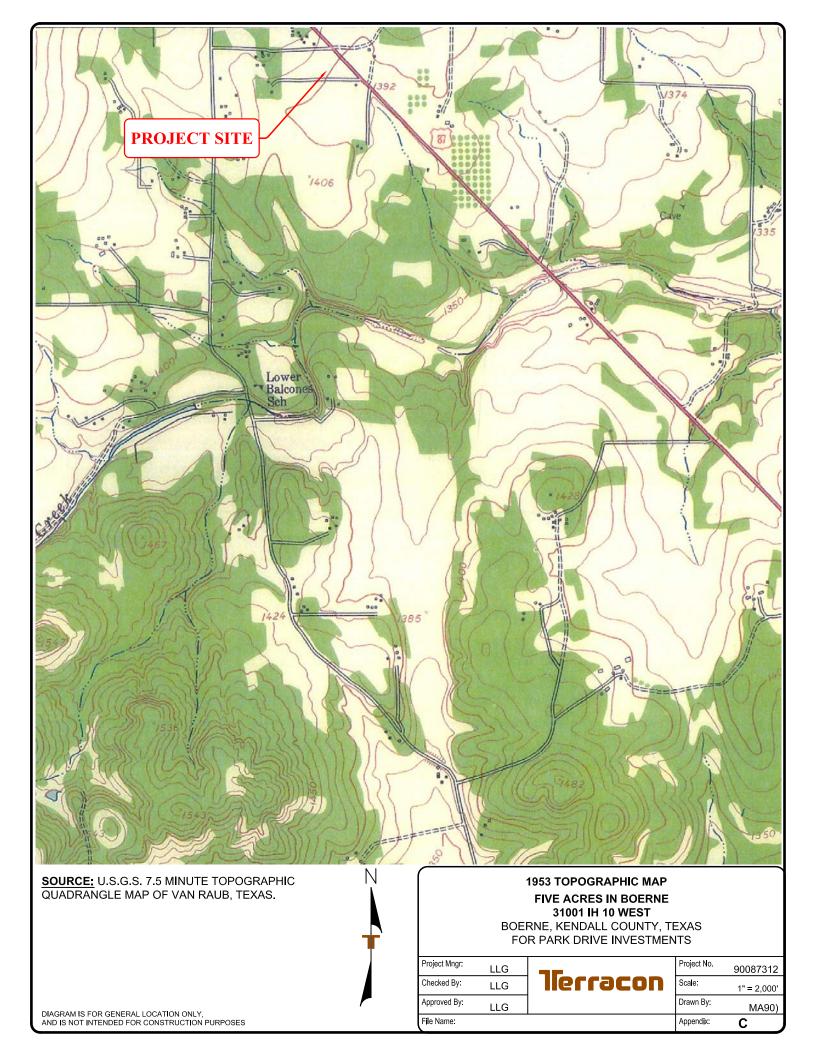
Texas	Description
Term/Acronym	
TXSF	The state Superfund program mission is to remediate abandoned or inactive sites within the state that pose an unacceptable risk to public health and safety or the environment, but
	which do not qualify for action under the federal Superfund program (NPL - National Priority Listing). Information in this database includes any recent developments and the
	anticipated action for these sites.
VCP	The Texas Voluntary Cleanup Program (VCP) provides administrative, technical, and legal incentives to encourage the cleanup of contaminated sites in Texas. Since all non-
	responsible parties, including future lenders and landowners, receive protection from liability to the state of Texas for cleanup of sites under the VCP, most of the constraints for
	completing real estate transactions at those sites are eliminated. As a result, many unused or underused properties may be restored to economically productive or community
	beneficial uses.
MSWLF	Sites listed within a solid waste landfill database may include active landfills and inactive landfills, where solid waste is treated or stored.
CALF	TCEQ, under a contract with Texas State University, and in cooperation with the 24 regional Council of Governments in the State, has located over 4,000 closed and abandoned
	municipal solid waste landfills throughout Texas. This listing contains "unauthorized sites". Unauthorized sites have no permit and are considered abandoned. The information
	available for each site varies in detail.
LPST	The Leaking Underground Storage Tank listing is derived from the Petroleum Storage Tank (PST) database and is maintained by the Texas Commission on Environmental Quality
	(TCEQ). This database includes facilities with reported leaking petroleum storage tanks.
PST	The Underground Storage Tank listing is derived from the Petroleum Storage Tank database which is administered by the TCEQ (Texas Commission on Environmental Quality).
	Both Underground storage tanks (USTs) and Aboveground storage tanks (ASTs) are included in this report.
SPILLS	The Texas Commission on Environmental Quality provides this database. Information includes releases of hazardous or potential hazardous chemical/materials into the
	environment.
DCR	The DCR listing includes dry cleaning drop stations and facilities registered with the Texas Commission on Environmental Quality.
IOP	Texas Innocent Owner / Operator (IOP) provides a certificate to an innocent owner or operator if their property is contaminated as a result of a release or migration of contaminants
	from a source or sources not located on the property, and the did not cause or contribute to the source or sources of contamination.

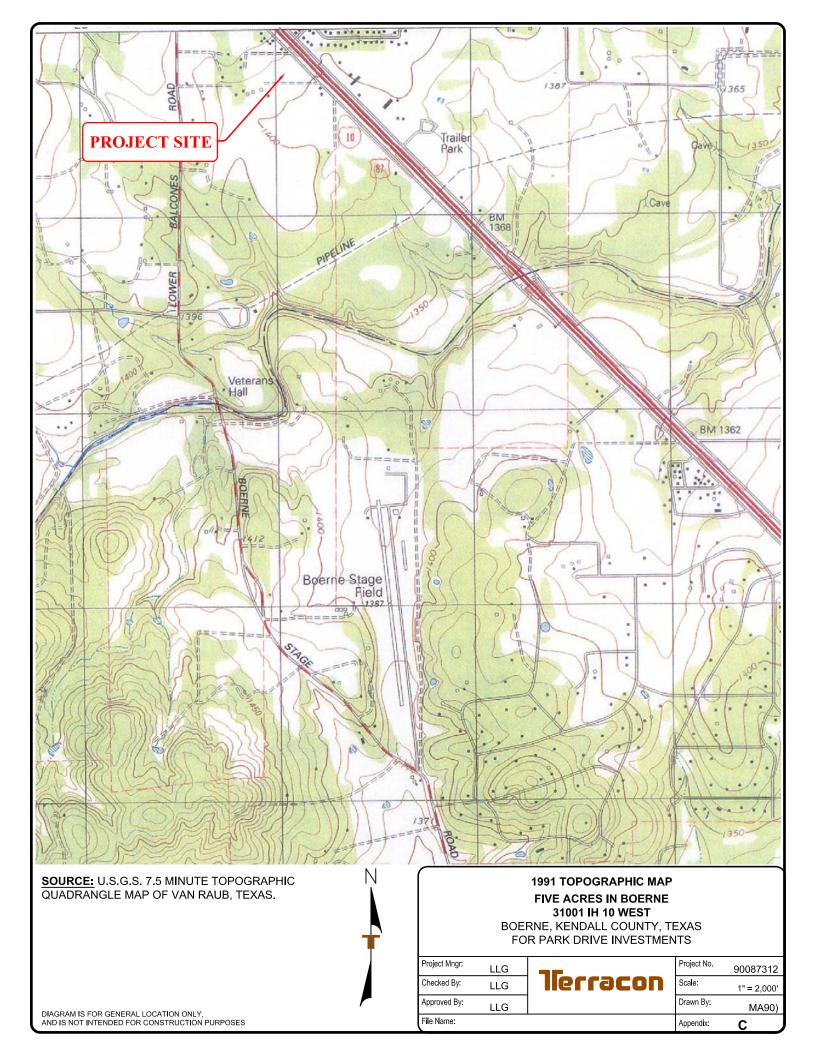
Five Acres in Boerne Project No. 90087312 November 13, 2008

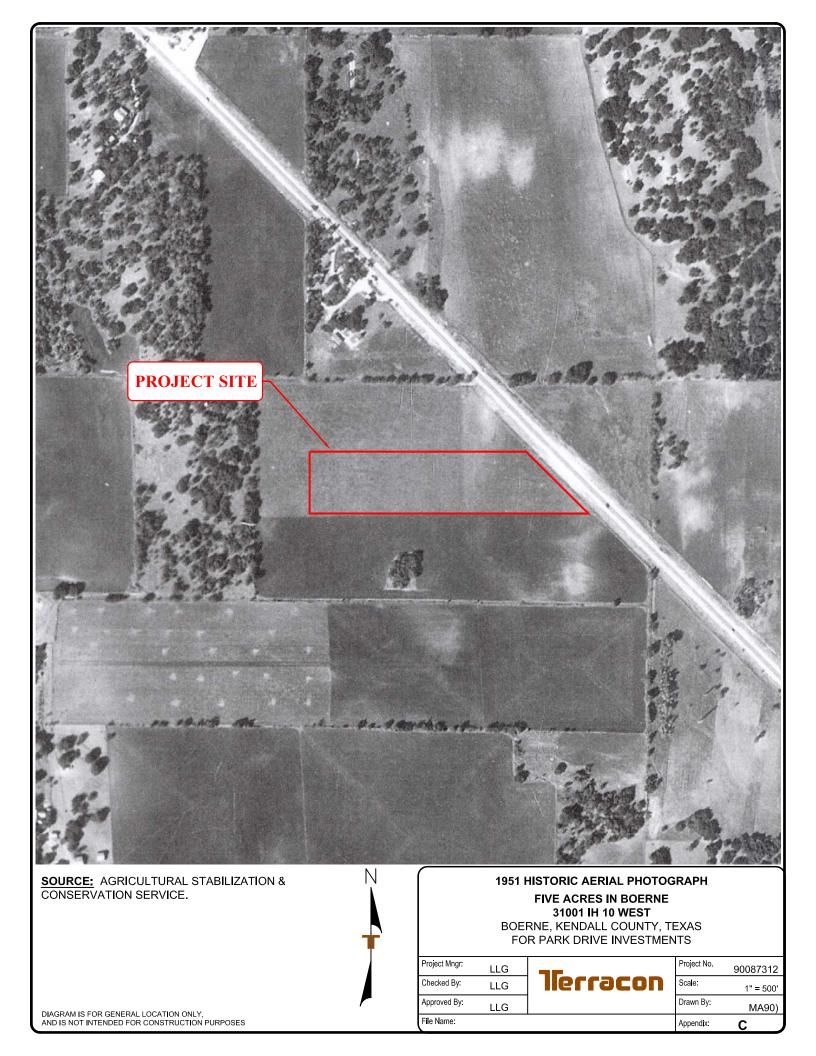


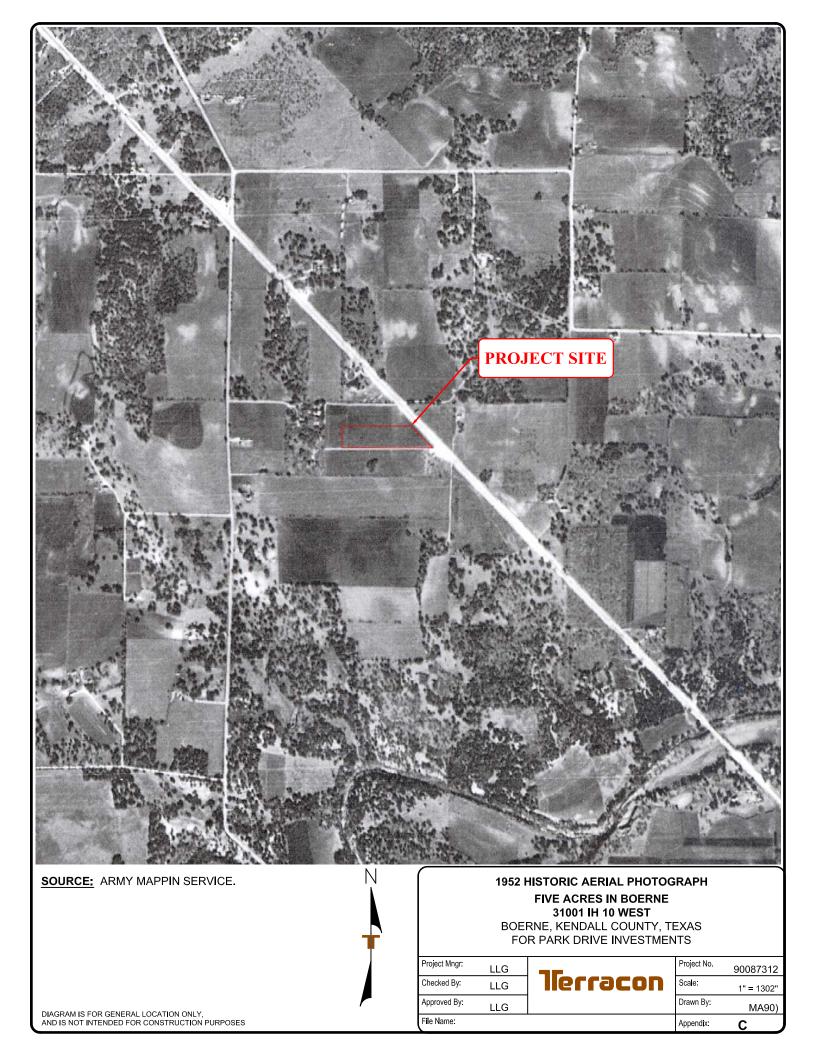
## **APPENDIX C**

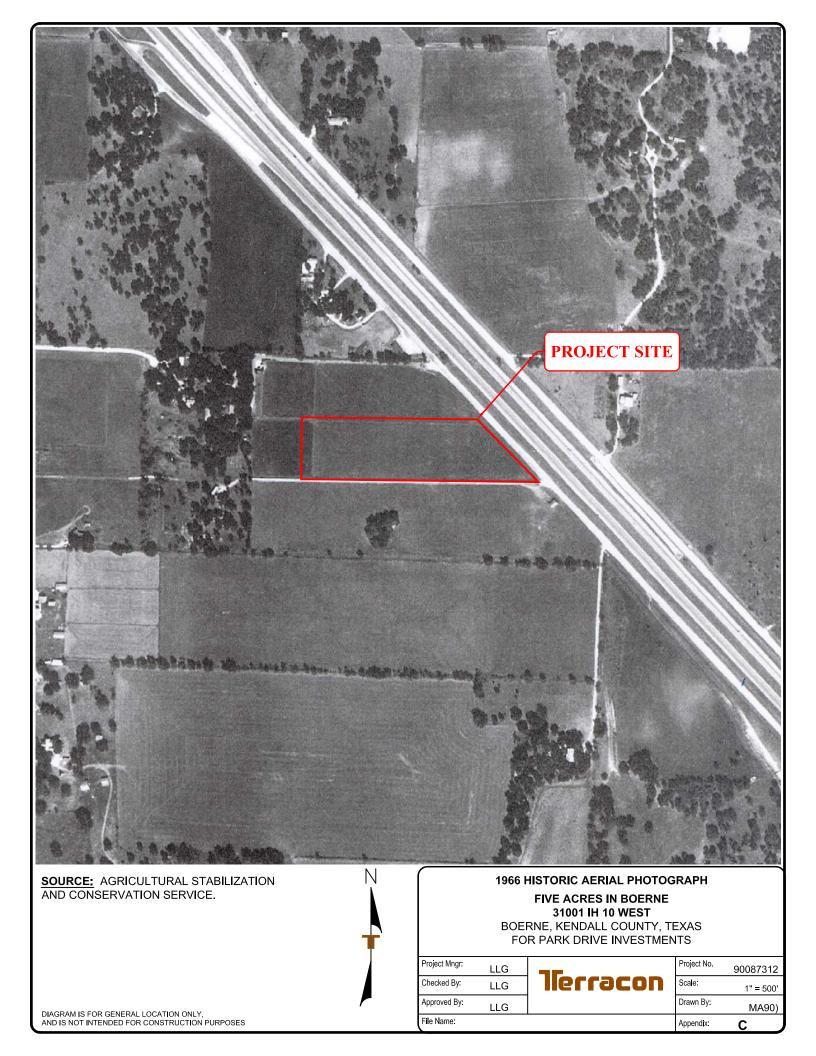
**Historical Documentation** 













- SITE BOUNDARY



File Name:

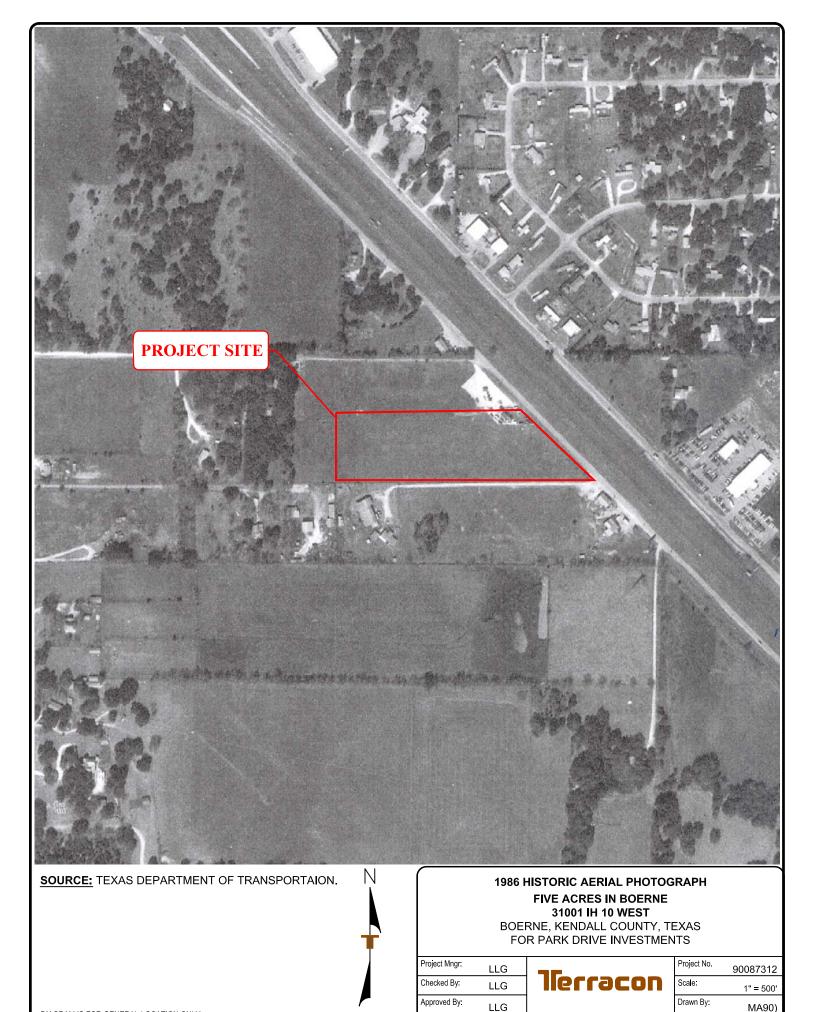
# BOERNE, KENDALL COUNTY, TEXAS

FOR PARK DRIVE INVESTMENTS

Project Mngr.	LLG	75
Checked By:	LLG	llerracon
Approved By:	LLG	

Annondiv	(
Drawn By:	MA90)
Scale:	1" = 833'
Project No.	90087312

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES



File Name:

Appendix:

С

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES



### **LEGEND**

- SITE BOUNDARY

#### FIVE ACRES IN BOERNE 31001 IH 10 WEST

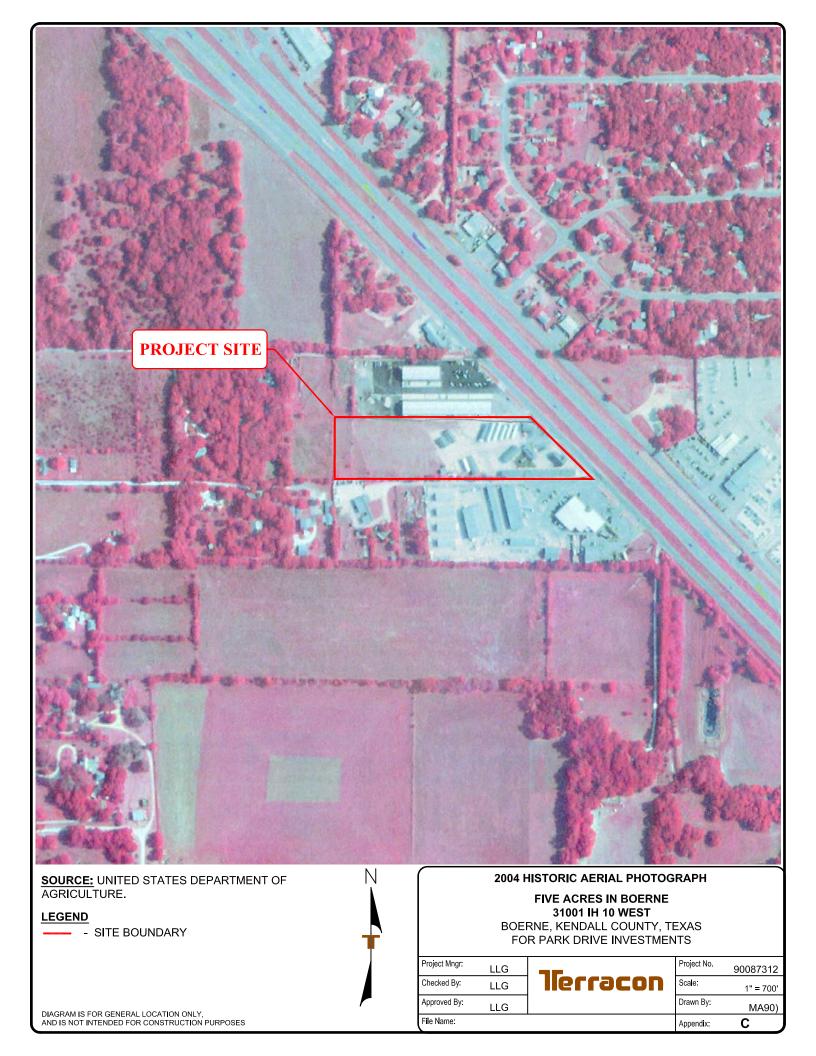
BOERNE, KENDALL COUNTY, TEXAS FOR PARK DRIVE INVESTMENTS

Project Mngr	LLG	32
Checked By:	LLG	llerracon
Approved By:	LLG	

File Name:

Project No.	90087312
Scale:	1" = 500'
Drawn By:	MA90)
Appendix:	С

DIAGRAM IS FOR GENERAL LOCATION ONLY, AND IS NOT INTENDED FOR CONSTRUCTION PURPOSES



Five Acres in Boerne Project No. 90087312 November 13, 2008



### **APPENDIX D**

**Environmental Database Information** 



## Radius Report

http://www.geo-search.net/QuickMap/index.htm?DataID=Standard0000000383

Click on link above to access the map and satellite view of current property

Target Property:

Five Acres in Boerne 31001 IH 10 W BOERNE, Kendall County, Texas 78006

Prepared For:

Terracon Consultants-San Antonio

Order #: 187

Job #: 383

Project #: 90087312

Date: 11/03/2008

#### TARGET PROPERTY SUMMARY

Five Acres in Boerne 31001 IH 10 W BOERNE, Kendall County, Texas 78006

Centroid County: **Kendall**Centroid Zipcode: **78006**Centroid State: **TX** 

USGS Quadrangle: Van Raub, TX
Target Property Geometry: Point

Target Property Longitude(s)/Latitude(s):

(-98.700203, 29.748156)

County/Counties Covered: Bexar (TX), Kendall (TX)

Zipcode(s) Covered:

Boerne TX: 78006, 78015

State(s) Covered:

TX

\*Target property is located in Radon Zone 3 (Kendall County, TX). Zone 3 counties have a predicted average indoor radon screening level less than 2 pCi/L.

Disclaimer - The information provided in this report was obtained from a variety of public sources. GeoSearch cannot ensure and makes no warranty or representation as to the accuracy, reliability, quality, errors occurring from data conversion or the customer's interpretation of this report. This report was made by GeoSearch for exclusive use by its clients only. Therefore, this report may not contain sufficient information for other purposes or parties. GeoSearch and its partners, employees, officers And independent contractors cannot be held liable For actual, incidental, consequential, special or exemplary damages suffered by a customer resulting directly or indirectly from any information provided by GeoSearch.



## DATABASE FINDINGS SUMMARY (SOURCE)

DATABASE	ACRONYM		UNLOCA- TABLE	SEARCH RADIUS (miles)
<u>FEDERAL</u>				
AEROMETRIC INFORMATION RETRIEVAL SYSTEM / AIR FACILITY SUBSYSTEM	AIRSAFS	0	0	Target Property
BIENNIAL REPORTING SYSTEM	BRS	0	0	Target Property
CLANDESTINE DRUG LABORATORY LOCATIONS	CDL	0	0	Target Property
EPA DOCKET DATA	DOCKETS	0	0	Target Property
FEDERAL ENGINEERING CONTROLS	EC	0	0	Target Property
EMERGENCY RESPONSE NOTIFICATION SYSTEM	ERNS	0	0	Target Property
FACILITY REGISTRY SYSTEM	FRS	0	0	Target Property
HAZARDOUS MATERIALS INCIDENT REPORTING SYSTEM	HMIRS	0	0	Target Property
INTEGRATED COMPLIANCE INFORMATION SYSTEM (FORMERLY DOCKETS)	ICIS	0	0	Target Property
INTEGRATED COMPLIANCE INFORMATION SYSTEM NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	ICISNPDES	0	0	Target Property
MATERIAL LICENSING TRACKING SYSTEM	MLTS	0	0	Target Property
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM	NPDES	0	0	Target Property
PCB ACTIVITY DATABASE	PADS	0	0	Target Property
PERMIT COMPLIANCE SYSTEM	PCS	0	0	Target Property
CERCLIS LIENS	SFLIENS	0	0	Target Property
SECTION SEVEN TRACKING SYSTEM	SSTS	0	0	Target Property
TOXICS RELEASE INVENTORY	TRI	0	0	Target Property
TOXIC SUBSTANCE CONTROL ACT INVENTORY	TSCA	0	0	Target Property
NO LONGER REGULATED RCRA GENERATOR FACILITIES	NLRRCRAG	0	0	Target Property and Adjoining
RESOURCE CONSERVATION & RECOVERY ACT - GENERATOR	RCRAG	0	0	Target Property and Adjoining
BROWNFIELDS MANAGEMENT SYSTEM	BF	0	0	0.5000
COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION & LIABILITY INFORMATION SYSTEM	CERCLIS	0	0	0.5000
LAND USE CONTROL INFORMATION SYSTEM	LUCIS	0	0	0.5000
NO FURTHER REMEDIAL ACTION PLANNED- CERCLIS ARCHIVES	NFRAP	0	0	0.5000
NO LONGER REGULATED RCRA NON-CORRACTS TSD FACILITIES	SNLRRCRAT	0	0	0.5000

## DATABASE FINDINGS SUMMARY (SOURCE)

DATABASE	ACRONYM	LOCA- UNLO	-	SEARCH RADIUS (miles)
OPEN DUMP INVENTORY	ODI	0	0	0.5000
RESOURCE CONSERVATION & RECOVERY ACT - TREATMENT, STORAGE & DISPOSAL	RCRAT	0	0	0.5000
DELISTED NATIONAL PRIORITIES LIST	DNPL	0	0	1.0000
DEPARTMENT OF DEFENSE SITES	DOD	0	0	1.0000
FORMERLY USED DEFENSE SITES	FUDS	0	0	1.0000
NO LONGER REGULATED RCRA CORRECTIVE ACTION FACILITIES	NLRRCRAC	0	0	1.0000
NATIONAL PRIORITIES LIST	NPL	0	0	1.0000
PROPOSED NATIONAL PRIORITIES LIST	PNPL	0	0	1.0000
RESOURCE CONSERVATION & RECOVERY ACT - CORRECTIVE ACTION	RCRAC	0	0	1.0000
RECORD OF DECISION SYSTEM	RODS	0	0	1.0000
SUB-TOTAL		0	0	
STATE (TX)				
GROUNDWATER CONTAMINATION CASES	GWCC	0	0	Target Property
HISTORIC GROUNDWATER CONTAMINATION CASES	HISTGWCC	0	0	Target Property
TCEQ LIENS	LIENS	0	0	Target Property
MUNICIPAL SETTING DESIGNATIONS	MSD	0	0	Target Property
NOTICE OF VIOLATIONS	NOV	0	0	Target Property
STATE INSTITUTIONAL/ENGINEERING CONTROLS	SIEC01	0	0	Target Property
SPILLS LISTING	SPILLS	0	0	Target Property
DRY CLEANER REGISTRATION	DCR	0	0	0.2500
INDUSTRIAL AND HAZARDOUS WASTE	IHW	1	0	0.2500
PERMITTED INDUSTRIAL HAZARDOUS WASTE SITES	PIHW	0	0	0.2500
PETROLEUM STORAGE TANKS	PST	2	0	0.2500
AFFECTED PROPERTY ASSESSMENT REPORTS	APAR	0	0	0.5000
BROWNFIELDS SITE ASSESSMENTS	BSA	0	0	0.5000



## DATABASE FINDINGS SUMMARY (SOURCE)

DATABASE	ACRONYM	LOCA- TABLE	UNLOCA- TABLE	SEARCH RADIUS (miles)
CLOSED & ABANDONED LANDFILL INVENTORY	CALF	0	0	0.5000
INNOCENT OWNER / OPERATOR	IOP	0	0	0.5000
LEAKING PETROLEUM STORAGE TANKS	LPST	1	0	0.5000
MUNICIPAL SOLID WASTE LANDFILL SITES	MSWLF	0	0	0.5000
RAILROAD COMMISSION VCP AND BROWNFIELD SITES	RRCVCP	0	0	0.5000
RADIOACTIVE WASTE SITES	RWS	0	0	0.5000
TIER I I CHEMICAL REPORTING PROGRAM	TIERII	2	0	0.5000
VOLUNTARY CLEANUP PROGRAM	VCP	0	0	0.5000
RECYCLING FACILITIES	WMRF	0	0	0.5000
STATE SUPERFUND	SF	0	0	1.0000
SUB-TOTAL		6	0	
TRIBAL				
UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	USTR06	0	0	0.2500
LEAKING UNDERGROUND STORAGE TANKS ON TRIBAL LANDS	LUSTR06	0	0	0.5000
OPEN DUMP INVENTORY ON TRIBAL LANDS	ODINDIAN	0	0	0.5000
INDIAN RESERVATIONS	INDIANRES	0	0	1.0000
SUB-TOTAL		0	0	

TOTAL 6 0



## DATABASE FINDINGS SUMMARY (DETAIL)

ACRONYM	Target Property	SEARCH RADIUS (miles)	1/8 Mile (> TP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total	
FEDERAL									
AIRSAFS		.0200	0	0	0	0	0	0	
BRS		.0200	0	0	0	0	0	0	
CDL		.0200	0	0	0	0	0	0	
DOCKETS		.0200	0	0	0	0	0	0	
EC		.0200	0	0	0	0	0	0	
ERNS		.0200	0	0	0	0	0	0	
FRS		.0200	0	0	0	0	0	0	
HMIRS		.0200	0	0	0	0	0	0	
ICIS		.0200	0	0	0	0	0	0	
ICISNPDES		.0200	0	0	0	0	0	0	
MLTS		.0200	0	0	0	0	0	0	
NPDES		.0200	0	0	0	0	0	0	
PADS		.0200	0	0	0	0	0	0	
PCS		.0200	0	0	0	0	0	0	
SFLIENS		.0200	0	0	0	0	0	0	
SSTS		.0200	0	0	0	0	0	0	
TRI		.0200	0	0	0	0	0	0	
TSCA		.0200	0	0	0	0	0	0	
NLRRCRAG		.1250	0	0	0	0	0	0	
RCRAG		.1250	0	0	0	0	0	0	
BF		.5000	0	0	0	0	0	0	
CERCLIS		.5000	0	0	0	0	0	0	
LUCIS		.5000	0	0	0	0	0	0	
NFRAP		.5000	0	0	0	0	0	0	
NLRRCRAT		.5000	0	0	0	0	0	0	
ODI		.5000	0	0	0	0	0	0	
RCRAT		.5000	0	0	0	0	0	0	

## DATABASE FINDINGS SUMMARY (DETAIL)

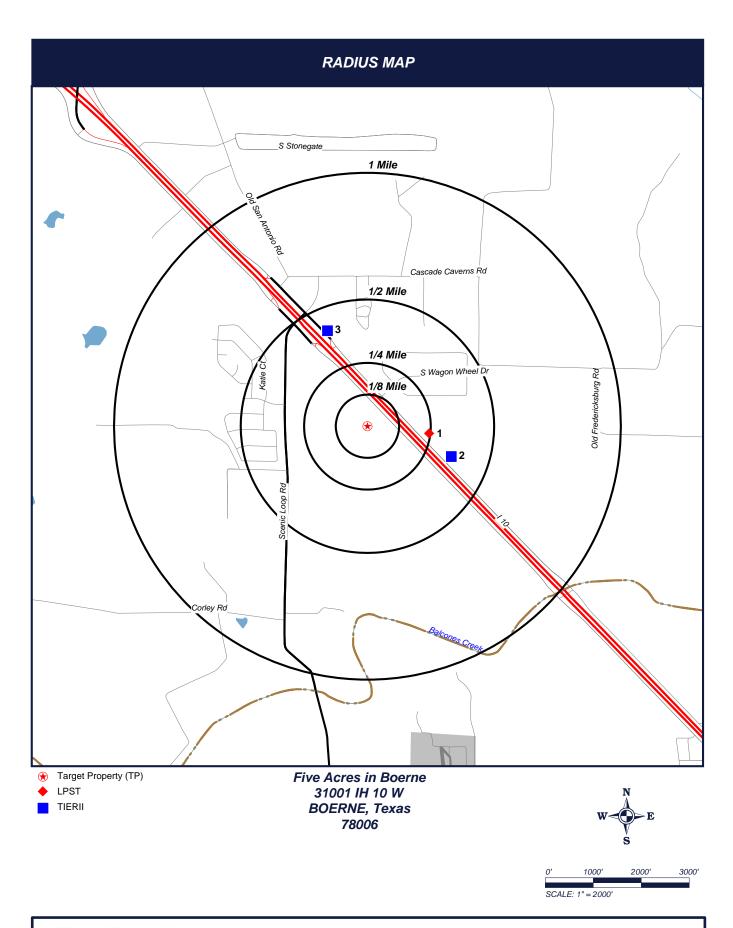
		SEARCH							
ACRONYM	Target Property	RADIUS (miles)	1/8 Mile (> TP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total	
DNPL		1.000	0	0	0	0	0	0	
DOD		1.000	0	0	0	0	0	0	
FUDS		1.000	0	0	0	0	0	0	
NLRRCRAC		1.000	0	0	0	0	0	0	
NPL		1.000	0	0	0	0	0	0	
PNPL		1.000	0	0	0	0	0	0	
RCRAC		1.000	0	0	0	0	0	0	
RODS		1.000	0	0	0	0	0	0	
SUB-TOTAL			0	0	0	0	0	0	
STATE (TX)									
GWCC		.0200	0	0	0	0	0	0	
HISTGWCC		.0200	0	0	0	0	0	0	
LIENS		.0200	0	0	0	0	0	0	
MSD		.0200	0	0	0	0	0	0	
NOV		.0200	0	0	0	0	0	0	
SIEC01		.0200	0	0	0	0	0	0	
SPILLS		.0200	0	0	0	0	0	0	
DCR		.2500	0	0	0	0	0	0	
IHW		.2500	0	1	0	0	0	1	
PIHW		.2500	0	0	0	0	0	0	
PST		.2500	0	2	0	0	0	2	
APAR		.5000	0	0	0	0	0	0	
BSA		.5000	0	0	0	0	0	0	
CALF		.5000	0	0	0	0	0	0	
OP		.5000	0	0	0	0	0	0	
_PST		.5000	0	1	0	0	0	1	
MSWLF		.5000	0	0	0	0	0	0	

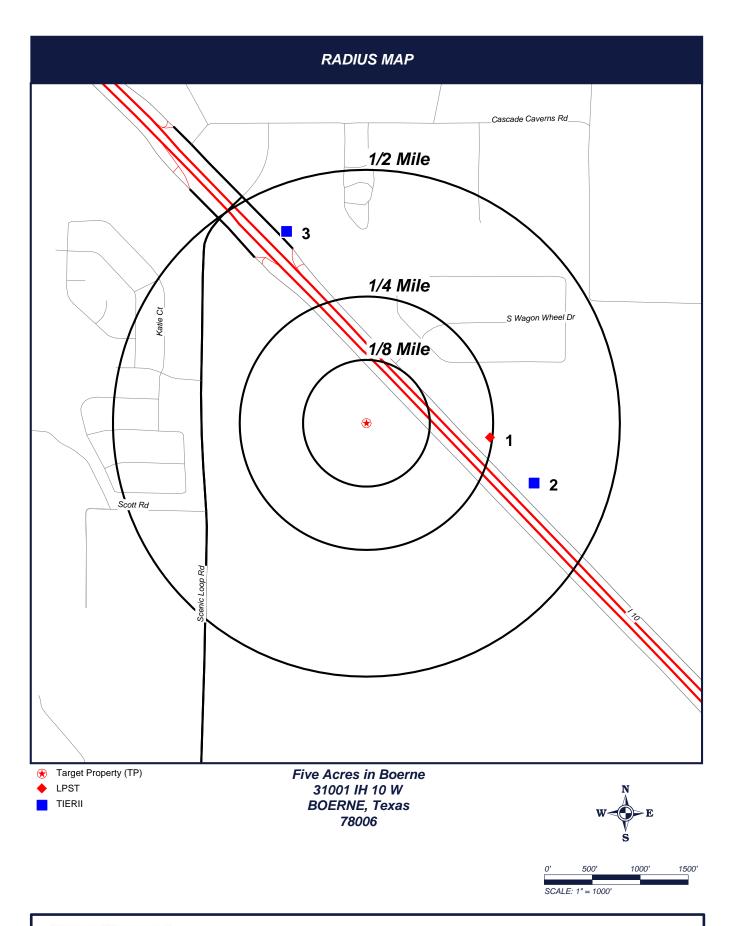
## DATABASE FINDINGS SUMMARY (DETAIL)

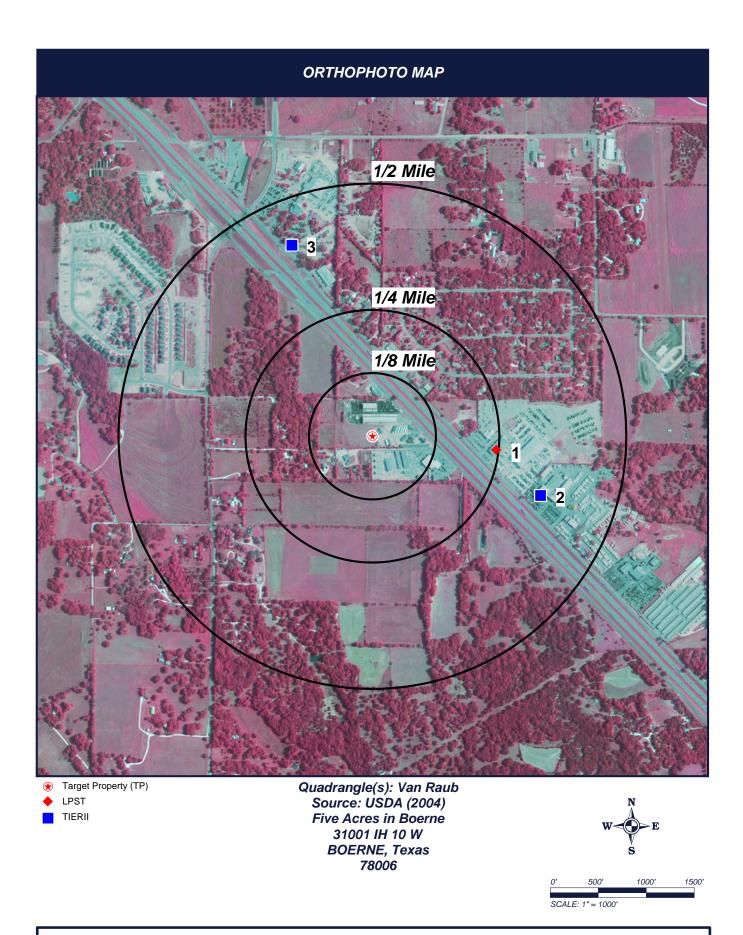
ACRONYM	Target Property	SEARCH RADIUS (miles)	1/8 Mile (> TP)	1/4 Mile (> 1/8)	1/2 Mile (> 1/4)	1 Mile (> 1/2)	> 1 Mile	Total	
RRCVCP		.5000	0	0	0	0	0	0	
RWS		.5000	0	0	0	0	0	0	
TIERII		.5000	0	0	2	0	0	2	
VCP		.5000	0	0	0	0	0	0	
WMRF		.5000	0	0	0	0	0	0	
SF		1.000	0	0	0	0	0	0	
SUB-TOTAL			0	4	2	0	0	6	
<u>TRIBAL</u>									
USTR06		.2500	0	0	0	0	0	0	
LUSTR06		.5000	0	0	0	0	0	0	
ODINDIAN		.5000	0	0	0	0	0	0	
INDIANRES		1.000	0	0	0	0	0	0	
SUB-TOTAL			0	0	0	0	0	0	

TOTAL 0 4 2 0 0 6

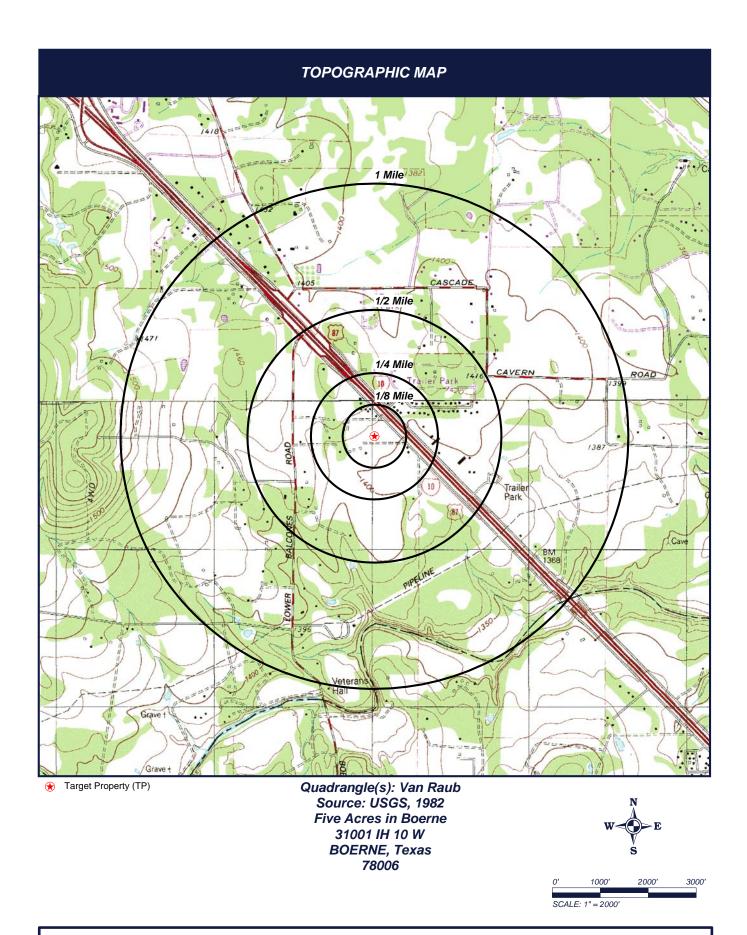














## REPORT SUMMARY OF LOCATABLE SITES

MAP ID#	DATABASE NAME	SITE ID#	DISTANCE FROM SITE	SITE NAME	ADDRESS	CITY, ZIP CODE	PAGE #
1	LPST	106749	0.246 E	TINDALL CECIL CHEVY OLDS INC	W IH 10	BOERNE, 78006	1
1	PST	0006050	0.246 E	CECIL TINDALL CHEVY-OLDS	IH 10 W 4 MI EAST OF	BOERNE, 78006	2
1	PST	0070458	0.246 E	CAVENDER CHEVROLET	I 10 WEST EXIT 543	BOERNE, 78006	6
1	IHW	61761	0.246 E	CAVENDER CHEVROLET OLDSMOBILE	IH 10 W	BOERNE, 78006	7
2	TIERII	4Y9HW7002JDS	0.351 E	ANCIRA ENTERPRISES	30500 IH 10 WEST	BOERNE, 78006	9
3	TIERII	4YBFLD01BKE2	0.411 NW	JENNINGS ANDERSON FORD	31480 IH 10 WEST	BOERNE, 78006	10

### LEAKING PETROLEUM STORAGE TANKS (LPST)

MAP ID# 1

Distance from Property: 0.25 mi. E

**FACILITY INFORMATION** 

LPST ID#: 106749 FACILITY ID#: 0006050

REPORTED DATE: 5/27/1993

NAME: TINDALL CECIL CHEVY OLDS INC

ADDRESS: W IH 10

**BOERNE** 

CONTACT: ANN KINNARD

ADDRESS: PO BOX 1102

PHONE: 210-698-3922

**PRP INFORMATION** 

PRIORITY CODE: (4.2) NO GROUNDWATER IMPACT, NO APPARENT THREATS OR IMPACTS TO RECEPTORS

STATUS CODE: (6A) FINAL CONCURRENCE ISSUED, CASE CLOSED

**TANK INFORMATION** 

TANKID#/TYPE: 1/UST INSTALLED: 01/01/1979 STATUS(DATE): IN USE (NOT REPORTED)

NAME: CECIL TINDALL CHEVY OLDS INC

**BOERNE, TX 78006** 

CAPACITY(gal.): 0 CONTENTS: USED OIL

TANK MATERIAL/CONTAINMENT: STEEL / NOT REPORTED PIPE MATERIAL/CONTAINMENT: STEEL / NOT REPORTED

TANK/PIPE RELEASE DETECTION: NOT REPORTED / NOT REPORTED TANK/PIPE CORROSION PROTECTION: NOT REPORTED / NOT REPORTED

SPILL/OVERFILL PROTECTION: NOT REPORTED

MAP ID# 1

Distance from Property: 0.25 mi. E

#### **FACILITY INFORMATION**

FACILITY ID #: 0006050

NAME: CECIL TINDALL CHEVY-OLDS
ADDRESS: IH 10 W 4 MI EAST OF
BOERNE, TX 78006

TYPE: UNIDENTIFIED

TCEQ REGION: 13

FACILITY IN OZONE NON-ATTAINMENT AREA: NO
NUMBER OF UNDERGROUND TANKS AT FACILITY: 4
NUMBER OF ABOVEGROUND TANKS AT FACILITY: 0

FACILITY CONTACT: D CANTU, BUS MGR

PHONE: 830--69-8-39 22

DATE REGISTRATION FORM RECEIVED: 05/08/86

SIGNATURE ON REGISTRATION FORM: D CANTU, BUS. MGR. DATE OF SIGNATURE ON REGISTRATION FORM: 04/25/86

**SELF-CERTIFICATION INFORMATION** 

NO SELF-CERTIFICATION DATA REPORTED FOR THIS FACILITY

#### **UNDERGROUND STORAGE TANK INFORMATION**

TANK ID #: 1 TANK STATUS: IN USE

INSTALL DATE: 01/01/1979 STATUS DATE: NOT REPORTED

REGISTRATION DATE: 05/08/1986

CAPACITY: 0 GALLONS SUBSTANCE STORED: USED OIL

TANK DESIGN AND EXTERNAL CONTAINMENT (I thru IV)

NOT REPORTED

PIPING DESIGN AND EXTERNAL CONTAINMENT ( I thru IV)

NOT REPORTED

TYPE OF PIPING:

TANK INTERNAL PROTECTION (INTERNAL LINING) DATE: NOT REPORTED

TANK MATERIAL: **STEEL** OTHER TANK MATERIAL: PIPE MATERIAL: **STEEL** OTHER PIPE MATERIAL:

PIPE CONECTORS AND VALVES (I thru III)

**NOT REPORTED** 

TANK CORROSSION PROTECTION (I thru III)

NOT REPORTED

TANK CORROSSION PROTECTION VARIANCE: NO VARIANCE

PIPE CORROSSION PROTECTION (I thru III)

NOT REPORTED

PIPE CORROSSION PROTECTION VARIANCE: NO VARIANCE STAGE 1 VAPOR RECOVERY EQUIPMENT STATUS: NOT REPORTED

STAGE 1 EQUIPMENT INSTALL DATE: **NOT REPORTED**STAGE 2 VAPOR RECOVERY EQUIPMENT STATUS:
STAGE 2 EQUIPMENT INSTALL DATE: **NOT REPORTED** 

TANK TESTED ?: YES INSTALLER NAME:



CUSTOMER #: 03574

NAME: CECIL TINDALL CHEVROLET-OLDSMOBILE INC

ADDRESS: PO BOX 1102

**BOERNE, TX 78006** 

TYPE: PRIVATE OR CORPORATE

NUMBER OF FACILITIES REPORTED BY CURRENT OWNER: 1
NUMBER OF UNDERGROUND TANKS FOR CURRENT OWNER: 4
NUMBER OF ABOVEGROUND TANKS FOR CURRENT OWNER: 0

OWNER CONTACT: CECIL TINDALL

PHONE: 830-698-3922



TANK ID #: 4 TANK STATUS: IN USE

INSTALL DATE: 01/01/1983 STATUS DATE: NOT REPORTED

REGISTRATION DATE: 05/08/1986

CAPACITY: 99 GALLONS SUBSTANCE STORED: UNKNOWN

TANK DESIGN AND EXTERNAL CONTAINMENT (I thru IV)

NOT REPORTED

PIPING DESIGN AND EXTERNAL CONTAINMENT (I thru IV)

NOT REPORTED

TYPE OF PIPING:

TANK INTERNAL PROTECTION (INTERNAL LINING) DATE: NOT REPORTED

TANK MATERIAL: **STEEL**OTHER TANK MATERIAL:
PIPE MATERIAL: **STEEL**OTHER PIPE MATERIAL:

PIPE CONECTORS AND VALVES (I thru III)

NOT REPORTED

TANK CORROSSION PROTECTION (I thru III)

NOT REPORTED

TANK CORROSSION PROTECTION VARIANCE: NO VARIANCE

PIPE CORROSSION PROTECTION (I thru III)

NOT REPORTED

PIPE CORROSSION PROTECTION VARIANCE: NO VARIANCE STAGE 1 VAPOR RECOVERY EQUIPMENT STATUS: NOT REPORTED

STAGE 1 EQUIPMENT INSTALL DATE: **NOT REPORTED**STAGE 2 VAPOR RECOVERY EQUIPMENT STATUS:
STAGE 2 EQUIPMENT INSTALL DATE: **NOT REPORTED** 

TANK TESTED ?: **NO** INSTALLER NAME:

TANK ID #: 3 TANK STATUS: IN USE

INSTALL DATE: 01/01/1983 STATUS DATE: NOT REPORTED

REGISTRATION DATE: 05/08/1986

CAPACITY: 99 GALLONS SUBSTANCE STORED: UNKNOWN

TANK DESIGN AND EXTERNAL CONTAINMENT (I thru IV)

NOT REPORTED

PIPING DESIGN AND EXTERNAL CONTAINMENT ( I thru IV)

NOT REPORTED

TYPE OF PIPING:

TANK INTERNAL PROTECTION (INTERNAL LINING) DATE: NOT REPORTED

TANK MATERIAL: **STEEL** OTHER TANK MATERIAL: PIPE MATERIAL: **STEEL** OTHER PIPE MATERIAL:

PIPE CONECTORS AND VALVES (I thru III)

**NOT REPORTED** 

TANK CORROSSION PROTECTION (I thru III)

NOT REPORTED

TANK CORROSSION PROTECTION VARIANCE: NO VARIANCE

PIPE CORROSSION PROTECTION (I thru III)

NOT REPORTED

PIPE CORROSSION PROTECTION VARIANCE: NO VARIANCE STAGE 1 VAPOR RECOVERY EQUIPMENT STATUS: NOT REPORTED

STAGE 1 EQUIPMENT INSTALL DATE: **NOT REPORTED**STAGE 2 VAPOR RECOVERY EQUIPMENT STATUS:
STAGE 2 EQUIPMENT INSTALL DATE: **NOT REPORTED** 

TANK TESTED ?: **NO** INSTALLER NAME:



TANK ID #: 2 TANK STATUS: IN USE

INSTALL DATE: 01/01/1983 STATUS DATE: NOT REPORTED

REGISTRATION DATE: 05/08/1986

CAPACITY: 99 GALLONS SUBSTANCE STORED: UNKNOWN

TANK DESIGN AND EXTERNAL CONTAINMENT (I thru IV)

NOT REPORTED

PIPING DESIGN AND EXTERNAL CONTAINMENT (I thru IV)

**NOT REPORTED**TYPE OF PIPING:

TANK INTERNAL PROTECTION (INTERNAL LINING) DATE: NOT REPORTED

TANK MATERIAL: **STEEL** OTHER TANK MATERIAL: PIPE MATERIAL: **STEEL** OTHER PIPE MATERIAL:

PIPE CONECTORS AND VALVES (I thru III)

NOT REPORTED

TANK CORROSSION PROTECTION (I thru III)

NOT REPORTED

TANK CORROSSION PROTECTION VARIANCE: NO VARIANCE

PIPE CORROSSION PROTECTION (I thru III)

NOT REPORTED

PIPE CORROSSION PROTECTION VARIANCE: NO VARIANCE STAGE 1 VAPOR RECOVERY EQUIPMENT STATUS: NOT REPORTED

STAGE 1 EQUIPMENT INSTALL DATE: **NOT REPORTED**STAGE 2 VAPOR RECOVERY EQUIPMENT STATUS:
STAGE 2 EQUIPMENT INSTALL DATE: **NOT REPORTED** 

TANK TESTED ?: **NO** INSTALLER NAME:

UNIT ID: 00015428 TANK ID: 1 COMPARTMENT LETTER: A

TANK RELEASE DETECTION METHOD

**NOT REPORTED** 

TANK RELEASE DETECTION VARIANCE: NO VARIANCE

PIPE RELEASE DETECTION METHOD

NOT REPORTED

PIPE RELEASE DETECTION VARIANCE: NO VARIANCE

SPILL AND OVERFILL PREVENTION

NOT REPORTED

SPILL AND OVERFILL PREVENTION VARIANCE: NO VARIANCE

UNIT ID: 00168020 TANK ID: 4 COMPARTMENT LETTER: A

TANK RELEASE DETECTION METHOD

NOT REPORTED

TANK RELEASE DETECTION VARIANCE: NO VARIANCE

PIPE RELEASE DETECTION METHOD

NOT REPORTED

PIPE RELEASE DETECTION VARIANCE: NO VARIANCE

SPILL AND OVERFILL PREVENTION

NOT REPORTED

SPILL AND OVERFILL PREVENTION VARIANCE: NO VARIANCE

UNIT ID: 00168021 TANK ID: 3 COMPARTMENT LETTER: A

TANK RELEASE DETECTION METHOD

NOT REPORTED

TANK RELEASE DETECTION VARIANCE: NO VARIANCE

PIPE RELEASE DETECTION METHOD

NOT REPORTED

PIPE RELEASE DETECTION VARIANCE: NO VARIANCE

SPILL AND OVERFILL PREVENTION

NOT REPORTED

SPILL AND OVERFILL PREVENTION VARIANCE: NO VARIANCE



UNIT ID: 00168022 TANK ID: 2 COMPARTMENT LETTER: A

TANK RELEASE DETECTION METHOD

NOT REPORTED

TANK RELEASE DETECTION VARIANCE: NO VARIANCE

PIPE RELEASE DETECTION METHOD

NOT REPORTED

PIPE RELEASE DETECTION VARIANCE: NO VARIANCE

SPILL AND OVERFILL PREVENTION

**NOT REPORTED** 

SPILL AND OVERFILL PREVENTION VARIANCE: NO VARIANCE

**ABOVEGROUND STORAGE TANK INFORMATION** 

NO ABOVEGROUND STORAGE TANK DATA REPORTED FOR THIS FACILITY



MAP ID# 1

Distance from Property: 0.25 mi. E

#### **FACILITY INFORMATION**

FACILITY ID #: 0070458

NAME: CAVENDER CHEVROLET

ADDRESS: I 10 WEST EXIT 543

BOERNE, TX 78006

TYPE: UNIDENTIFIED TCEQ REGION: 13

FACILITY IN OZONE NON-ATTAINMENT AREA: NO NUMBER OF UNDERGROUND TANKS AT FACILITY: 0 NUMBER OF ABOVEGROUND TANKS AT FACILITY: 1

FACILITY CONTACT: JAMES LANIK

PHONE: **830--75-5-82 42** 

DATE REGISTRATION FORM RECEIVED: 03/03/98

SIGNATURE ON REGISTRATION FORM: TRUETT BUDD, PRES DATE OF SIGNATURE ON REGISTRATION FORM: 02/05/98

**SELF-CERTIFICATION INFORMATION** 

NO SELF-CERTIFICATION DATA REPORTED FOR THIS FACILITY

**UNDERGROUND STORAGE TANK INFORMATION** 

NO UNDERGROUND STORAGE TANK DATA REPORTED FOR THIS FACILITY

ABOVEGROUND STORAGE TANK INFORMATION

TANK ID #: 1 TANK STATUS: IN USE

INSTALL DATE: 02/16/1998
REGISTRATION DATE: 03/03/1998
CAPACITY: 2000 GALLONS
SUBSTANCE STORED: GASOLINE

TANK MATERIAL:

CONTAINMENT: CONCRETE

#### **OWNER INFORMATION**

CUSTOMER #: 51539

NAME: ON SITE FUELS INC

ADDRESS: PO BOX 645

HELOTES, TX 78023

TYPE: CORPORATION

NUMBER OF FACILITIES REPORTED BY CURRENT OWNER: 64

NUMBER OF UNDERGROUND TANKS FOR CURRENT OWNER: 16

NUMBER OF ABOVEGROUND TANKS FOR CURRENT OWNER: 75

OWNER CONTACT: TRUETT BUDD

PHONE: 210-945-0999



### INDUSTRIAL AND HAZARDOUS WASTE (IHW)

**OWNER INFORMATION** 

PHONE: 210-981-4515

ADDRESS: NOT REPORTED

NAME: CAVENDER CHEVROLET OLDSMOBILE

**BOERNE, TX 78006** 

MAP ID# 1

Distance from Property: 0.25 mi. E

**FACILITY INFORMATION** 

REGISTRATION #: 61761 EPA ID: TXD981609720

TNRCC ID #: 020102

NAME: CAVENDER CHEVROLET OLDSMOBILE

ADDRESS: IH 10 W

**BOERNE, TX** 

CONTACT: BRIAN WYATT PHONE: 210-981-4515

BUSINESS DESCRIPTION: NOT REPORTED INDUSTRIAL WASTE PERMIT #: NOT REPORTED

MUNICIPAL WASTE PERMIT #: NOT REPORTED

SIC CODE: 56110

WASTE GENERATOR: YES
WASTE RECEIVER: NO
WASTE TRANSPORTER: NO
TRANSFER FACILITY: NO

MAQUILADORA (MEXICAN FACILITY): NO

STATUS: INACTIVE

AMOUNT OF WASTE GENERATED: CONDITIONALLY EXEMPT SMALL QUANTITY GENERATOR

GENERATOR TYPE: NON-INDUSTRIAL AND/OR MUNICIPAL

THIS FACILITY IS A NOTIFIER

THIS FACILITY IS NOT A STEERS REPORTER - (STATE OF TEXAS ENVIRONMENTAL ELECTRONIC REPORTING SYSTEM)

THIS FACILITY IS NOT REQUIRED TO SUBMIT AN ANNUAL WASTE SUMMARY REPORT

THIS FACILITY IS NOT INVOLVED IN RECYCLING ACTIVITIES

LAST UPDATE TO TRACS (TCEQ REGULATORY ACTIVITIES AND COMPLIANCE SYSTEM): 11/04/2003

**ACTIVITIES** 

**ACTIVITY TYPE: UNKNOWN** 

ACTIVITY DESCRIPTION: NOT REPORTED

**WASTE** 

WASTE ID: 00044546

WASTE CODE STATUS: INACTIVE
WASTE IS RADIOACTIVE: NO
WASTE IS TREATED OFF SITE: YES

GENERATOR'S DESCRIPTION OF WASTE: NOT REPORTED

WASTE ID: 00044547

WASTE CODE STATUS: INACTIVE
WASTE IS RADIOACTIVE: NO
WASTE IS TREATED OFF SITE: YES

GENERATOR'S DESCRIPTION OF WASTE: NOT REPORTED

WASTE ID: 00138761

WASTE CODE STATUS: INACTIVE
WASTE IS RADIOACTIVE: NO
WASTE IS TREATED OFF SITE: YES

GENERATOR'S DESCRIPTION OF WASTE: SPENT SOLVENT



## INDUSTRIAL AND HAZARDOUS WASTE (IHW)

WASTE ID: 00138762

WASTE CODE STATUS: INACTIVE
WASTE IS RADIOACTIVE: NO
WASTE IS TREATED OFF SITE: YES

GENERATOR'S DESCRIPTION OF WASTE: IMMERSION CLEANER

WASTE ID: 00151655

WASTE CODE STATUS: INACTIVE
WASTE IS RADIOACTIVE: NO
WASTE IS TREATED OFF SITE: YES

GENERATOR'S DESCRIPTION OF WASTE: SPENT PAINT

WASTE ID: 00151656

WASTE CODE STATUS: INACTIVE
WASTE IS RADIOACTIVE: NO
WASTE IS TREATED OFF SITE: YES

GENERATOR'S DESCRIPTION OF WASTE: SPENT BRAKE CLEANER



# TIER I I CHEMICAL REPORTING PROGRAM (TIERII)

MAP ID# 2

Distance from Property: 0.35 mi. E

#### **SITE INFORMATION**

UNIQUE ID: 4Y9HW7002JDS
SITE ID: FATR20064Y9HW7002JDS
NAME: ANCIRA ENTERPRISES
ADDRESS: 30500 IH 10 WEST
BOERNE, TX 78006

SIGNED DATE: 02/15/2007

VALIDATION REPORT: THIS FACILITY PASSED ALL VALIDATION CHECKS.

MAILING ADDRESS: 6111 BANDERA ROAD

SAN ANTONIO, TX 78238

**SITE DETAILS** 

CHEMICAL LOCATION: IN PARKING LOT CHEMICAL AMOUNT: 2,000 GALLONS

CHEMICAL NAME: GASOLINE

MAXIMUM AMOUNT: NOT REPORTED

FIRE: YES GAS: NOT REPORTED LIQUID: YES SOLID: NOT REPORTED

PURE: NOT REPORTED MIXTURE: YES



# TIER I I CHEMICAL REPORTING PROGRAM (TIERII)

MAP ID# 3

Distance from Property: 0.41 mi. NW

**SITE INFORMATION** 

UNIQUE ID: 4YBFLD01BKE2
SITE ID: FATR20064YBFLD01BKE2
NAME: JENNINGS ANDERSON FORD

ADDRESS: 31480 IH 10 WEST BOERNE, TX 78006

SIGNED DATE: 02/16/2007

VALIDATION REPORT: THIS FACILITY PASSED ALL VALIDATION CHECKS.

MAILING ADDRESS: P.O. BOX 490

BOERNE, TX 78006

**SITE DETAILS** 

CHEMICAL LOCATION: IN THE PARKING LOT BEHIND THE SERVICE CENTER

CHEMICAL AMOUNT: 2,000 GALLONS

CHEMICAL LOCATION: IN THE PARKING LOT BEHIND THE SERVICE CENTER

CHEMICAL AMOUNT: 1,000 GALLONS

CHEMICAL NAME: GASOLINE

MAXIMUM AMOUNT: NOT REPORTED

FIRE: YES GAS: NOT REPORTED LIQUID: YES SOLID: NOT REPORTED

PURE: NOT REPORTED MIXTURE: YES

CHEMICAL NAME: DIESEL

MAXIMUM AMOUNT: NOT REPORTED

FIRE: YES GAS: NOT REPORTED LIQUID: YES SOLID: NOT REPORTED

PURE: NOT REPORTED MIXTURE: YES



# REPORT SUMMARY OF UNLOCATABLE SITES

DATABASE TYPE	SITE ID#	SITE NAME	ADDRESS	CITY	ZIP CODE
LPST	098721	KENDALL COUNTRY RENTAL	IH 10	BOERNE	78006
PST	0024035	KENDALL COUNTRY RENTAL	INTERSTATE 10	BOERNE	78006
PST	0032058	PREMIER EQUIPMENT		BOERNE	78006

# LEAKING PETROLEUM STORAGE TANKS (LPST)

FACILITY INFORMATION PRP INFORMATION

LPST ID#: **098721** FACILITY ID#: **0024035** NAME: **FDIC** 

REPORTED DATE: 4/11/1991 ADDRESS: 999 NW GRAND BLVD STE 200

NAME: KENDALL COUNTRY RENTAL OKLAHOMA CITY, OK 73118-6077

ADDRESS: IH 10 CONTACT: VIRGINIA ROBERTSON

**BOERNE** PHONE: **512-731-2000** 

PRIORITY CODE: (4A) SOIL CONTAMINATION ONLY, REQUIRES FULL SITE ASSESSMENT & REMEDIAL ACTION PLAN (RAP)

STATUS CODE: (6A) FINAL CONCURRENCE ISSUED, CASE CLOSED

**TANK INFORMATION** 

TANKID#/TYPE: 2/UST INSTALLED: 01/01/1980 STATUS(DATE): REMOVED FROM GROUND (03/15/1991)

CAPACITY(gal.): 500 CONTENTS: GASOLINE
TANK MATERIAL/CONTAINMENT: STEEL / NOT REPORTED

PIPE MATERIAL/CONTAINMENT: NOT REPORTED / NOT REPORTED

TANK/PIPE RELEASE DETECTION: NOT REPORTED / NOT REPORTED

TANK/PIPE CORROSION PROTECTION: NOT REPORTED / NOT REPORTED

SPILL/OVERFILL PROTECTION: NOT REPORTED



**OWNER INFORMATION** 

NAME: FDIC REC FIRST CITY DALLAS

**DALLAS, TX 75201** 

OWNER CONTACT: WILLIAM LAVALLE

NUMBER OF FACILITIES REPORTED BY CURRENT OWNER: 8

NUMBER OF UNDERGROUND TANKS FOR CURRENT OWNER: 16
NUMBER OF ABOVEGROUND TANKS FOR CURRENT OWNER: 0

ADDRESS: 1910 PACIFIC AVE 1300

TYPE: PRIVATE OR CORPORATE

**CUSTOMER #: 34540** 

PHONE: 972-761-8312

#### **FACILITY INFORMATION**

FACILITY ID #: 0024035

NAME: KENDALL COUNTRY RENTAL
ADDRESS: INTERSTATE 10
BOERNE, TX 78006

TYPE: UNIDENTIFIED TCEQ REGION: 13

FACILITY IN OZONE NON-ATTAINMENT AREA: NO NUMBER OF UNDERGROUND TANKS AT FACILITY: 2 NUMBER OF ABOVEGROUND TANKS AT FACILITY: 0

FACILITY CONTACT: R GRIER, PRES

PHONE: 512--24-9-35 15

DATE REGISTRATION FORM RECEIVED: 05/08/86
SIGNATURE ON REGISTRATION FORM: R GRIER, PRES
DATE OF SIGNATURE ON REGISTRATION FORM: 04/09/86

#### **SELF-CERTIFICATION INFORMATION**

NO SELF-CERTIFICATION DATA REPORTED FOR THIS FACILITY

#### **UNDERGROUND STORAGE TANK INFORMATION**

TANK ID #: 2 TANK STATUS: REMOVED FROM GROUND

INSTALL DATE: 01/01/1980 STATUS DATE: 03/15/1991

REGISTRATION DATE: 05/08/1986

CAPACITY: 500 GALLONS SUBSTANCE STORED: GASOLINE

TANK DESIGN AND EXTERNAL CONTAINMENT (I thru IV)

NOT REPORTED

PIPING DESIGN AND EXTERNAL CONTAINMENT ( I thru IV)

**NOT REPORTED** 

TYPE OF PIPING:

TANK INTERNAL PROTECTION (INTERNAL LINING) DATE: NOT REPORTED

TANK MATERIAL: **STEEL**OTHER TANK MATERIAL:
PIPE MATERIAL: **UNKNOWN** 

OTHER PIPE MATERIAL: **STEEL WRAPPED**PIPE CONECTORS AND VALVES (I thru III)

**NOT REPORTED** 

TANK CORROSSION PROTECTION (I thru III)

NOT REPORTED

TANK CORROSSION PROTECTION VARIANCE: NO VARIANCE

PIPE CORROSSION PROTECTION (I thru III)

NOT REPORTED

PIPE CORROSSION PROTECTION VARIANCE: NO VARIANCE STAGE 1 VAPOR RECOVERY EQUIPMENT STATUS: NOT REPORTED

STAGE 1 EQUIPMENT INSTALL DATE: **NOT REPORTED**STAGE 2 VAPOR RECOVERY EQUIPMENT STATUS:
STAGE 2 EQUIPMENT INSTALL DATE: **NOT REPORTED** 

TANK TESTED ?: YES INSTALLER NAME:



TANK ID #: 1 TANK STATUS: REMOVED FROM GROUND

INSTALL DATE: 01/01/1980 STATUS DATE: 03/15/1991

REGISTRATION DATE: 05/08/1986

CAPACITY: 500 GALLONS SUBSTANCE STORED: DIESEL

TANK DESIGN AND EXTERNAL CONTAINMENT (I thru IV)

NOT REPORTED

PIPING DESIGN AND EXTERNAL CONTAINMENT (I thru IV)

NOT REPORTED

TYPE OF PIPING:

TANK INTERNAL PROTECTION (INTERNAL LINING) DATE: NOT REPORTED

TANK MATERIAL: **STEEL**OTHER TANK MATERIAL:
PIPE MATERIAL: **UNKNOWN** 

OTHER PIPE MATERIAL: **STEEL WRAPPED**PIPE CONECTORS AND VALVES (I thru III)

NOT REPORTED

TANK CORROSSION PROTECTION (I thru III)

NOT REPORTED

TANK CORROSSION PROTECTION VARIANCE: NO VARIANCE

PIPE CORROSSION PROTECTION (I thru III)

NOT REPORTED

PIPE CORROSSION PROTECTION VARIANCE: NO VARIANCE STAGE 1 VAPOR RECOVERY EQUIPMENT STATUS: NOT REPORTED

STAGE 1 EQUIPMENT INSTALL DATE: **NOT REPORTED**STAGE 2 VAPOR RECOVERY EQUIPMENT STATUS:
STAGE 2 EQUIPMENT INSTALL DATE: **NOT REPORTED** 

TANK TESTED ?: YES INSTALLER NAME:

UNIT ID: 00061844 TANK ID: 2 COMPARTMENT LETTER: A

TANK RELEASE DETECTION METHOD

NONE

TANK RELEASE DETECTION VARIANCE: NO VARIANCE

PIPE RELEASE DETECTION METHOD

NONE

PIPE RELEASE DETECTION VARIANCE: NO VARIANCE

SPILL AND OVERFILL PREVENTION

NOT REPORTED

SPILL AND OVERFILL PREVENTION VARIANCE: NO VARIANCE

UNIT ID: 00061845 TANK ID: 1 COMPARTMENT LETTER: A

TANK RELEASE DETECTION METHOD

NONE

TANK RELEASE DETECTION VARIANCE: NO VARIANCE

PIPE RELEASE DETECTION METHOD

NONE

PIPE RELEASE DETECTION VARIANCE: NO VARIANCE

SPILL AND OVERFILL PREVENTION

NOT REPORTED

SPILL AND OVERFILL PREVENTION VARIANCE: NO VARIANCE

**ABOVEGROUND STORAGE TANK INFORMATION** 

NO ABOVEGROUND STORAGE TANK DATA REPORTED FOR THIS FACILITY



**OWNER INFORMATION** 

ADDRESS: PO BOX 1309

PHONE: 830-775-7761

NAME: WESTEX INVESTMENT CORPORATION

NUMBER OF FACILITIES REPORTED BY CURRENT OWNER: 88

NUMBER OF UNDERGROUND TANKS FOR CURRENT OWNER: 146
NUMBER OF ABOVEGROUND TANKS FOR CURRENT OWNER: 40

**DEL RIO, TX 78840** 

OWNER CONTACT: MARVIN F KOLINEK

TYPE: PRIVATE OR CORPORATE

**CUSTOMER #: 11346** 

#### **FACILITY INFORMATION**

FACILITY ID #: 0032058
NAME: PREMIER EQUIPMENT

ADDRESS:

**BOERNE, TX 78006** 

TYPE: UNIDENTIFIED TCEQ REGION: 13

FACILITY IN OZONE NON-ATTAINMENT AREA: NO NUMBER OF UNDERGROUND TANKS AT FACILITY: 2 NUMBER OF ABOVEGROUND TANKS AT FACILITY: 0

FACILITY CONTACT: R BAUM, PRES.

PHONE: 512-249-2416

DATE REGISTRATION FORM RECEIVED: 05/08/86
SIGNATURE ON REGISTRATION FORM: R BAUM, PRES.
DATE OF SIGNATURE ON REGISTRATION FORM: 05/03/86

**SELF-CERTIFICATION INFORMATION** 

NO SELF-CERTIFICATION DATA REPORTED FOR THIS FACILITY

#### **UNDERGROUND STORAGE TANK INFORMATION**

TANK ID #: 1 TANK STATUS: REMOVED FROM GROUND

INSTALL DATE: 01/01/1984 STATUS DATE: 12/31/1986

REGISTRATION DATE: 05/08/1986

CAPACITY: 1000 GALLONS SUBSTANCE STORED: GASOLINE

TANK DESIGN AND EXTERNAL CONTAINMENT (I thru IV)

NOT REPORTED

PIPING DESIGN AND EXTERNAL CONTAINMENT ( I thru IV)

NOT REPORTED

TYPE OF PIPING:

TANK INTERNAL PROTECTION (INTERNAL LINING) DATE: NOT REPORTED

TANK MATERIAL: **STEEL** OTHER TANK MATERIAL: PIPE MATERIAL: **STEEL** OTHER PIPE MATERIAL:

PIPE CONECTORS AND VALVES (I thru III)

**NOT REPORTED** 

TANK CORROSSION PROTECTION (I thru III)

NOT REPORTED

TANK CORROSSION PROTECTION VARIANCE: NO VARIANCE

PIPE CORROSSION PROTECTION (I thru III)

NOT REPORTED

PIPE CORROSSION PROTECTION VARIANCE: NO VARIANCE STAGE 1 VAPOR RECOVERY EQUIPMENT STATUS: NOT REPORTED

STAGE 1 EQUIPMENT INSTALL DATE: **NOT REPORTED**STAGE 2 VAPOR RECOVERY EQUIPMENT STATUS:
STAGE 2 EQUIPMENT INSTALL DATE: **NOT REPORTED** 

TANK TESTED ?: **NO** INSTALLER NAME:



TANK ID #: 2 TANK STATUS: REMOVED FROM GROUND

INSTALL DATE: 01/01/1984 STATUS DATE: 12/30/1986

REGISTRATION DATE: 05/08/1986

CAPACITY: 1000 GALLONS SUBSTANCE STORED: DIESEL

TANK DESIGN AND EXTERNAL CONTAINMENT (I thru IV)

NOT REPORTED

PIPING DESIGN AND EXTERNAL CONTAINMENT (I thru IV)

**NOT REPORTED**TYPE OF PIPING:

TANK INTERNAL PROTECTION (INTERNAL LINING) DATE: NOT REPORTED

TANK MATERIAL: STEEL
OTHER TANK MATERIAL:
PIPE MATERIAL: STEEL
OTHER PIPE MATERIAL:

PIPE CONECTORS AND VALVES (I thru III)

NOT REPORTED

TANK CORROSSION PROTECTION (I thru III)

NOT REPORTED

TANK CORROSSION PROTECTION VARIANCE: NO VARIANCE

PIPE CORROSSION PROTECTION (I thru III)

NOT REPORTED

PIPE CORROSSION PROTECTION VARIANCE: NO VARIANCE STAGE 1 VAPOR RECOVERY EQUIPMENT STATUS: NOT REPORTED

STAGE 1 EQUIPMENT INSTALL DATE: **NOT REPORTED**STAGE 2 VAPOR RECOVERY EQUIPMENT STATUS:
STAGE 2 EQUIPMENT INSTALL DATE: **NOT REPORTED** 

TANK TESTED ?: **NO** INSTALLER NAME:

UNIT ID: 00084110 TANK ID: 1 COMPARTMENT LETTER: A

TANK RELEASE DETECTION METHOD

NONE

TANK RELEASE DETECTION VARIANCE: NO VARIANCE

PIPE RELEASE DETECTION METHOD

NONE

PIPE RELEASE DETECTION VARIANCE: NO VARIANCE

SPILL AND OVERFILL PREVENTION

NOT REPORTED

SPILL AND OVERFILL PREVENTION VARIANCE: NO VARIANCE

UNIT ID: 00084111 TANK ID: 2 COMPARTMENT LETTER: A

TANK RELEASE DETECTION METHOD

NONE

TANK RELEASE DETECTION VARIANCE: NO VARIANCE

PIPE RELEASE DETECTION METHOD

NONE

PIPE RELEASE DETECTION VARIANCE: NO VARIANCE

SPILL AND OVERFILL PREVENTION

NOT REPORTED

SPILL AND OVERFILL PREVENTION VARIANCE: NO VARIANCE

**ABOVEGROUND STORAGE TANK INFORMATION** 

NO ABOVEGROUND STORAGE TANK DATA REPORTED FOR THIS FACILITY



# AIRSAFS Aerometric Information Retrieval System / Air Facility Subsystem

(3/2008)

The EPA modified the Aerometric Information Retrieval System (AIRS) to a database that exclusively tracks the compliance of stationary sources of air pollution with EPA regulations: the Air Facility Subsystem (AFS). Since this change in 2001, the management of the AIRS/AFS database was assigned to EPA s Office of Enforcement and Compliance Assurance.

# **BF** Brownfields Management System

(7/2008)

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. The EPA maintains the activities, including grantee assessment, cleanup and redevelopment, of the various Brownfield grant programs through the Brownfields Management System database.

# **BRS** Biennial Reporting System

(1/2003)

The United States Environmental Protection Agency (EPA), in cooperation with the States, biennially collects information regarding the generation, management, and final disposition of hazardous wastes regulated under the Resource Conservation and Recovery Act of 1976 (RCRA), as amended. The purpose of this report is to communicate the findings of EPA s Biennial Reporting System (BRS) data collection efforts to the public, government agencies, and the regulated community.

Currently, the EPA states that data collected between 1991 and 1997 was originally a part of the defunct Biennial Reporting System and is now incorporated into the RCRAInfo data system.

# CDL Clandestine Drug Laboratory Locations

(7/2008)

The U.S. Department of Justice ("the Department") provides this information as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments. The Department does not establish, implement, enforce, or certify compliance with clean-up or remediation standards for contaminated sites; the public should contact a state or local health department or environmental protection agency for that information.

# **CERCLIS**

Comprehensive Environmental Response, Compensation & Liability Information System

(7/2008)

CERCLIS is the repository for site and non-site specific Superfund information in support of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). This database contains an extract of sites that have been investigated or are in the process of being



investigated for potential environmental risk.

#### **DNPL** Delisted National Priorities List

(7/2008)

This database includes U.S. Environmental Protection Agency (EPA) Final National Priorties List sites where remedies have proven to be satisfactory or sites where the original analyses were inaccurate, and the site is no longer appropriate for inclusion on the NPL, and final publication in the Federal Register has occurred.

# **DOCKETS** EPA Docket Data

(12/2005)

EPA Docket data lists Civil Case Defendents, filing dates as far back as 1971, laws broken including section, violations that occurred, pollutants involved, penalties assessed and superfund awards all by facility and geographically.

# **DOD** Department of Defense Sites

(12/2005)

This information originates from the National Atlas of the United States, publication date October 2005. Army DOD, Army Corps of Engineers DOD, Air Force DOD, Navy DOD and Marine DOD areas of 640 acres or more are included.

# **EC** Federal Engineering Controls

(6/2008)

A listing of site locations where Engineering Controls are in effect, such as a cap, barrier, or other device engineering to prevent access, exposure, or continued migration of contamination. Used in conjunction with Institutional Controls.

# **ERNS** Emergency Response Notification System

(12/2007)

This database contains data on reported releases of oil and hazardous substances. The data comes from spill reports made to the EPA, U.S. Coast Guard, the National Response Center and/or the Department of Transportation.

# FRS Facility Registry System

(4/2008)

The EPA's Office of Environmental Information (OEI) developed the Facility Registry System (FRS) as the centrally managed database that identifies facilities, sites or places subject to environmental regulations or of environmental interest. The Facility Registry System replaced the Facility Index System or FINDS database.

# **FUDS** Formerly Used Defense Sites

(9/2008)

The 2007 FUDS inventory includes properties previously owned or leased to the United States and under Secretary of Defense jurisdiction. The remediation of these properties is the responsibility of the Department of Defense.



#### **HMIRS**

Hazardous Materials Incident Reporting System

(7/2008)

The HMIRS database contains unintentional hazardous materials release information reported to the US Department of Transportation.

#### **ICIS**

Integrated Compliance Information System (formerly DOCKETS)

(3/2008)

ICIS is a case activity tracking and management system for civil, judicial, and administrative federal EPA enforcement cases. ICIS contains information on federal administrative and federal judicial cases under the following environmental statutes: the Clean Air Act, the Clean Water Act, the Resource Conservation and Recovery Act, the Emergency Planning and Community Right-to-Know Act - Section 313, the Toxic Substances Control Act, the Federal Insecticide, Fungicide, and Rodenticide Act, the Comprehensive Environmental Response, Compensation, and Liability Act, the Safe Drinking Water Act, and the Marine Protection, Research, and Sanctuaries Act.

# **ICISNPDES**

Integrated Compliance Information System National Pollutant Discharge

(3/2008)

Elimination System

ICIS-NPDES is an information management system maintained by the Office of Compliance to track permit compliance and enforcement status of facilities regulated by the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act. ICIS-NPDES is designed to support the NPDES program at the state, regional, and national levels.

# **LUCIS**

Land Use Control Information System

(9/2006)

The LUCIS database is maintained by the US Navy and contains information for former Base Realignment and Closure (BRAC) properties across the United States.

# **MLTS**

Material Licensing Tracking System

(3/2008)

MLTS is a list of approximately 8,100 sites which have or use radioactive materials subject to Nuclear Regulatory Commission (NRC) licensing requirements.

#### **NFRAP**

No Further Remedial Action Planned- CERCLIS Archives

(7/2008)

This database includes sites, which have been determined by the EPA, following preliminary assessment, to no longer pose a significant risk or require further activity under CERCLA. After initial investigation, no contamination was found, contamination was quickly removed or contamination was not serious enough to require Federal Superfund action or NPL consideration.

# **NLRRCRAC**

No Longer Regulated RCRA Corrective Action Facilities

(8/2008)

This database includes RCRA Corrective Action facilities that are no longer regulated by the EPA or do not meet other RCRA reporting requirements.



# **NLRRCRAG** No Longer Regulated RCRA Generator Facilities

(8/2008)

This database includes RCRA Generator facilities that are no longer regulated by the EPA or do not meet other RCRA reporting requirements. This listing includes facilities that formerly generated hazardous waste.

# NLRRCRAT No Longer Regulated RCRA Non-CORRACTS TSD Facilities

(8/2008)

This database includes RCRA Non-Corrective Action TSD facilities that are no longer regulated by the EPA or do not meet other RCRA reporting requirements. This listing includes facilities that formerly treated, stored or disposed of hazardous waste.

# NPDES NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

(4/2007)

Information in this database is extracted from the (PCS) Water Permit Compliance System database which is used by EPA to track surface water permits issued under the Clean Water Act. Refer to the PCS and/or ICIS-NPDES database as source of current data.

#### NPL National Priorities List

(7/2008)

This database includes U.S. Environmental Protection Agency (EPA) National Priorities List sites that fall under the EPA's Superfund program, established to fund the cleanup of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action.

### **ODI** Open Dump Inventory

(6/1985)

Information on facilities or sites where solid waste is disposed of which is not a sanitary landfill which meets the criteria promulgated under section 6944 of the Solid Waste Disposal Act (42 U.S.C. 6941 et seq.) and which is not a facility for disposal of hazardous waste.

# PADS PCB Activity Database

(12/2007)

The PCB Activity Database System (PADS) is used by the EPA to monitor the activities of polychlorinated biphenyls (PCB) handlers.

# PCS Permit Compliance System

(3/2008)

The Permit Compliance System is used in tracking enforcement status and permit compliance of facilities controlled by the National Pollutant Discharge Elimination System (NPDES) under the Clean Water Act and is maintained by the Office of Compliance. PCS is designed to support the NPDES program at the state, regional, and national levels.

# PNPL Proposed National Priorities List

(7/2008)

This database contains sites proposed to the National Priorities List (NPL) in the Federal Register. The EPA investigates these sites to determine if they may present long-term threats to public



health or the environment.

# **RCRAC** Resource Conservation & Recovery Act - Corrective Action

(8/2008)

This database includes hazardous waste sites listed with corrective action activity in the RCRAInfo system. The Corrective Action Program requires owners or operators of RCRA facilities (or treatment, storage, and disposal facilities) to investigate and cleanup contamination in order to protect human health and the environment. The EPA defines RCRAInfo as the comprehensive information system which provides access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS).

# RCRAG Resource Conservation & Recovery Act - Generator

(8/2008)

This database includes sites listed as generators of hazardous waste (large, small, and exempt) in the RCRAInfo system. See RCRA Description page for more information. The EPA defines RCRAInfo as the comprehensive information system which provides access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS).

# RCRAT Resource Conservation & Recovery Act - Treatment, Storage & Disposal

(8/2008)

This database includes Non-Corrective Action sites listed as treatment, storage and/or disposal facilities of hazardous waste in the RCRAInfo system. The EPA defines RCRAInfo as the comprehensive information system which provides access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRAInfo replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS).

# **RODS** Record of Decision System

(7/2008)

These decision documents maintained by the U.S. EPA describe the chosen remedy for NPL (Superfund) site remediation. They also include site history, site description, site characteristics, community participation, enforcement activities, past and present activities, contaminated media, the contaminants present, and scope and role of response action.

# SFLIENS CERCLIS Liens

(9/2008)

A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases



and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties. This database contains those CERCLIS sites where the Lien on Property action is complete.

# SSTS Section Seven Tracking System

(12/2006)

SSTS is the system that EPA uses to track pesticide producing establishments and the amount of pesticides they produce. SSTS records the registration of new establishments and records pesticide production at each establishment. It is a repository for information on the establishments that produce pesticides.

# TRI Toxics Release Inventory

(12/2006)

This EPA database includes information about releases and transfers of toxic chemicals from manufacturing facilities.

# TSCA Toxic Substance Control Act Inventory

(12/2002)

The TSCA Chemical Substance Inventory contains information on the production amount of toxic chemicals from each manufacturer and importer site.



# APAR Affected Property Assessment Reports

(4/2008)

As regulated by the TCEQ, an Affected Property Assessment Report is required when a person is addressing a release of chemical of concern (COC) under 30 TAC Chapter 350, the Texas Risk Reduction Program (TRRP). The purpose of the APAR is to document all relevant affected property information to identify all release sources and COCs, determine the extent of all COCs, identify all transport/exposure pathways, and to determine if any response actions are necessary. The Texas Administrative Code Title 30 §350.4(a)(1) defines affected property as the entire area (i.e. on-site and off-site; including all environmental media) which contains releases of chemicals of concern at concentrations equal to or greater than the assessment level applicable for residential land use and groundwater classification.

#### **BSA** Brownfields Site Assessments

(9/2008)

The BSA database includes relevant information on contaminated Brownfields properties that are being cleaned.

# CALF Closed & Abandoned Landfill Inventory

(11/2005)

TCEQ, under a contract with Texas State University, and in cooperation with the 24 regional Council of Governments in the State, has located over 4,000 closed and abandoned municipal solid waste landfills throughout Texas. This listing contains "unauthorized sites". Unauthorized sites have no permit and are considered abandoned. The information available for each site varies in detail.

# **DCR** Dry Cleaner Registration

(5/2008)

The DCR listing includes dry cleaning drop stations and facilities registered with the Texas Commission on Environmental Quality.

#### **GWCC** Groundwater Contamination Cases

(12/2007)

This report contains a listing of groundwater contamination cases which were documented for the 2007 calendar year. Texas Water Code, Section 26.406 requires the annual report to describe the current status of groundwater monitoring activities conducted or required by each agency at regulated facilities or associated with regulated activities. The agencies reporting these contamination cases include the Texas Commission on Environmental Quality, Railroad Commission of Texas, Texas Alliance of Groundwater Districts, and Department of State Health Services.

#### HISTGWCC

Historic Groundwater Contamination Cases

NR

This historic report contains all agency groundwater contamination cases documented from 1994 to



2006. The agencies that reported these contamination cases included the Texas Commission on Environmental Quality, Railroad Commission of Texas, Texas Alliance of Groundwater Districts, and Department of State Health Services.

#### IHW Industrial and Hazardous Waste

(4/2008)

Owner and facility information is included in this database of permitted and non-permitted industrial and hazardous waste sites. Industrial waste is waste that results from or is incidental to operations of industry, manufacturing, mining, or agriculture. Hazardous waste is defined as any solid waste listed as hazardous or possesses one or more hazardous characteristics as defined in federal waste regulations.

# IOP Innocent Owner / Operator

(9/2008)

Texas Innocent Owner / Operator (IOP) provides a certificate to an innocent owner or operator if their property is contaminated as a result of a release or migration of contaminants from a source or sources not located on the property, and they did not cause or contribute to the source or sources of contamination.

#### LIENS TCEQ Liens

(10/2008)

Liens filed upon State and/or Federal Superfund Sites by the TCEQ.

# LPST Leaking Petroleum Storage Tanks

(6/2008)

The Leaking Petroleum Storage Tank listing is derived from the Petroleum Storage Tank (PST) database and is maintained by the Texas Commission on Environmental Quality (TCEQ). This listing includes aboveground and underground storage tank facilities with reported leaks.

# MSD Municipal Setting Designations

(9/2008)

TCEQ defines an MSD as an official state designation given to property within a municipality or its extraterritorial jurisdiction that certifies that designated groundwater at the property is not used as potable water, and is prohibited from future use as potable water because that groundwater is contaminated in excess of the applicable potable-water protective concentration level. The prohibition must be in the form of a city ordinance, or a restrictive covenant that is enforceable by the city and filed in the property records. The MSD property can be a single property, multi-property, or a portion of property.

# MSWLF Municipal Solid Waste Landfill Sites

(8/2008)

Sites listed within a solid waste landfill database may include active landfills and inactive landfills, where solid waste is treated or stored.



# NOV Notice of Violations (3/2008)

This database containing Notice of Violations (NOV) is maintained by the Texas Commission on Environmental Quality. An NOV is written notification that documents and communicates violations observed during an inspection to the business or individual inspected.

# PIHW Permitted Industrial Hazardous Waste Sites (4/2008)

Owner and facility information is included in this database of all permitted industrial and hazardous waste sites. Industrial waste is waste that results from or is incidental to operations of industry, manufacturing, mining, or agriculture. Hazardous waste is defined as any solid waste listed as hazardous or possesses one or more hazardous characteristics as defined in federal waste regulations. Permitted IHW facilities are regulated under 30 Texas Administrative Code Chapter 335 in addition to federal regulations.

# PST Petroleum Storage Tanks (7/2008)

The Petroleum Storage Tank database is administered by the TCEQ (Texas Commission on Environmental Quality). Both Underground storage tanks (USTs) and Aboveground storage tanks (ASTs) are included in this report. Petroleum Storage Tank registration has been a requirement with the TCEQ since 1986.

# RRCVCP Railroad Commission VCP and Brownfield Sites (10/2008)

According to the Railroad Commission of Texas, their Voluntary Cleanup Program (RRC-VCP) provides an incentive to remediate Oil & Gas related pollution by participants as long as they did not cause or contribute to the contamination. Applicants to the program receive a release of liability to the state in exchange for a successful cleanup.

# **RWS** Radioactive Waste Sites (7/2006)

This TCEQ database contains all sites in the State of Texas that have been designated as Radioactive Waste sites.

# SF State Superfund (2/2008)

The state Superfund program mission is to remediate abandoned or inactive sites within the state that pose an unacceptable risk to public health and safety or the environment, but which do not qualify for action under the federal Superfund program (NPL - National Priority Listing). Information in this database includes any recent developments and the anticipated action for these sites.

# SIEC01 State Institutional/Engineering Controls (9/2008)

The Texas Risk Reduction Program (TRRP) requires the placement of institutional controls (e.g., deed notices or restrictive covenants) on affected property in different circumstances as part of



completing a response action. In its simplest form, an institutional control (IC) is a legal document that is recorded in the county deed records. In certain circumstances, local zoning or ordinances can serve as an IC. This listing may also include locations where Engineering Controls are in effect, such as a cap, barrier, or other engineering device to prevent access, exposure, or continued migration of contamination.

# SPILLS Spills Listing (1/2008)

This Texas Commission on Environmental Quality (TCEQ) database includes releases of hazardous or potentially hazardous materials into the environment.

# TIERII Tier I I Chemical Reporting Program (12/2006)

The Texas Tier II Chemical Reporting Program in the Department of State Health Services (DSHS) is the state repository for EPCRA-required Emergency Planning Letters (EPLs), which are one-time notifications to the state from facilities that have certain extremely hazardous chemicals in specified amounts. The Program is also the state repository for EPCRA/state-required hazardous chemical inventory reports called Texas Tier Two Reports. This data contains those facility reports for the 2006 and 2005 calendar years.

# VCP Voluntary Cleanup Program (9/2008)

The Texas Voluntary Cleanup Program (VCP) provides administrative, technical, and legal incentives to encourage the cleanup of contaminated sites in Texas. Since all non-responsible parties, including future lenders and landowners, receive protection from liability to the state of Texas for cleanup of sites under the VCP, most of the constraints for completing real estate transactions at those sites are eliminated. As a result, many unused or underused properties may be restored to economically productive or community beneficial uses.

# WMRF Recycling Facilities (3/2008)

This listing of recycling facilities is maintained by the Texas Commission on Environmental Quality.



#### **INDIANRES** Indian Reservations

(1/2000)

The Department of Interior and Bureau of Indian Affairs maintains this database that includes American Indian Reservations, off-reservation trust lands, public domain allotments, Alaska Native Regional Corporations and Recognized State Reservations.

# LUSTR06

Leaking Underground Storage Tanks On Tribal Lands

(5/2008)

Leaking underground storage tanks on Tribal lands located in Region 6 include the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

# **ODINDIAN** Open Dump Inventory on Tribal Lands

(11/2006)

Information on facilities or sites on Tribal lands where solid waste is disposed of which is not a sanitary landfill and meets the criteria promulgated under section 6944 of the Solid Waste Disposal Act (42 U.S.C. 6941 et seq.) and is not a facility for disposal of hazardous waste.

#### USTR06

Underground Storage Tanks On Tribal Lands

(4/2008)

Underground storage tanks on Tribal lands located in Region 6 include the following states: Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.



# RCRA DESCRIPTIONS

#### **Acronyms**

RCRAG - Generator

**RCRAT** - Treatment, Storage & Disposal (Non-Corracts)

RCRAC - Corrective Action

# **Generator Types**

#### **Large Quantity Generators**

- Generate 1,000 kg or more of hazardous waste during any calendar month; or
- Generate more than 1 kg of acutely hazardous waste during any calendar month; or
- Generate more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste during any calendar month; or
- Generate 1 kg or less of acutely hazardous waste during any calendar month, and accumulate more than 1kg of acutely hazardous waste at any time; or
- Generate 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulated more than 100 kg of that material at any time.

# **Small Quantity Generators**

- Generate more than 100 and less than 1000 kilograms of hazardous waste during any calendar month and accumulate less than 6000 kg of hazardous waste at any time; or
- Generate 100 kg or less of hazardous waste during any calendar month, and accumulate more than 1000 kg of hazardous waste at any time.

### **Conditionally Exempt Small Quantity Generators**

- Generate 100 kilograms or less of hazardous waste per calendar month, and accumulate 1000 kg or less of hazardous waste at any time; or
- Generate one kilogram or less of acutely hazardous waste per calendar month, and accumulate at any time:
  - 1 kg or less of acutely hazardous waste; or
  - 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste; or
- Generate 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste during any calendar month, and accumulate at any time:
  - 1 kg or less of acutely hazardous waste; or
  - 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste.

Note: Descriptions also apply to No Longer Regulated RCRA sites (NLRRCRAG, NLRRCRAT, and NLRRCRAC)





November 3, 2008

Terracon Consultants Attn: Lene Griego

RE: CITY DIRECTORY SEARCH

Dear Ms. Griego,

GeoSearch conducted a city directory search for 31001 IH 10 W in Boerne, TX. There were no directories available for the City of Boerne or Kendall County, while directories for surrounding cities did not have coverage for the area. Research was conducted using the Texas State Library and Archives Commission's Genealogy Collection. If you have any questions please do not hesitate to call at (512) 472-9966.

Sincerely,

Justin Clinger

Justo Chy



**Date:** November 3, 2008

**GS Job Number:** 90087312

**Client Contact:** Lene Griego

**Client Information:** Terracon Consultants, Inc.

6911 Blanco Rd

San Antonio, TX 78216

**Project Number:** 90087312

**Site Information:** Five Acres in Boerne

The collection of Sanborn fire insurance maps has been reviewed according to the site information listed above. Based on the information provided, no coverage is available.

Disclaimer – The information in this report was obtained from a variety of public sources. GeoSearch cannot insure or makes no warranty or representation as to the accuracy, reliability, quality, errors occurring from data conversion or the customers interpretation of this report. Therefore, this report may not contain sufficient information for other purposes or parties. GeoSearch and its partners, employees, officers and independent contractors cannot be held liable for actual, incidental, consequential, special or exemplary damages suffered by a customer resulting directly or indirectly from any information provided by GeoSearch.

Five Acres in Boerne Project No. 90087312 November 13, 2008



# **APPENDIX E**

**Site Photographs** 

**Project Name: Five Acres In Boerne** 

Project No. 90087312

Photos Taken: November 6, 2008





**Photo #1** Photo showing the paved parking area and main office on the site.



**Photo #3** Photo showing base material and mobile homes on the site.



**Photo #5** Photo showing the water storage tank on the site. Note the blue pressure tank left of the water tank.



**Photo #2** Photo from the western boundary of the site facing east.



**Photo #4** One of four pole-mounted transformers on the site.



**Photo #6** Photo showing typical demonstration home on the site.

**Project Name: Five Acres In Boerne** 

Project No. 90087312

Photos Taken: November 6, 2008





**Photo #7** Photo showing the dumpster on the site.



**Photo #9** Photo taken in the main office.



**Photo #11** Photo showing Buie Lumber south of the site.



**Photo #8** Photo showing the contents of one of the sheds on the site. Only furniture and decorations are stored in these sheds.



**Photo #10** Photo showing the shopping center north of the site.



**Photo #12** Photo showing the lay down yard south of the site.

Five Acres in Boerne Project No. 90087312 November 13, 2008



**APPENDIX F** 

**Credentials** 

# LENÉ L. GRIEGO STAFF BIOLOGIST

#### PROFESSIONAL EXPERIENCE

Mrs. Griego is a Staff Biologist in Terracon's San Antonio, Texas, office. She is proficient in Environmental Site Assessments (ESAs) and Remediation Oversight. Mrs. Griego has acquired an understanding of facility operating systems, state and federal regulations, and the fate and transport of chemicals through air,soil, surface water, and groundwater.

**AQUATIC TAXONOMIC IDENTIFICATION:** Prior to working at Terracon, Mrs. Griego investigated Salado Creek in San Antonio, for the San Antonio River Authority. Her work included analayzing the recycled water used to maintain flow in the creek, identify the 15 different species of fish and the 75 different species of invertebrate taxa, and use this analysis to assess the aquatic habitat. This information was used in a report for the Clean Rivers Act

**AQUATIC BIOLOGIST:** As the Project Manager for the San Antonio Japanese Tea Garden capital campaign, Mrs. Griego researched and designed the restoration of the Coi ponds at the Japanese Tea Gardens in Brackenridge Park. The nearly 100 year old ponds leaked through the walls and bottom, Mrs. Griego defined the problems, identified the solutions and recommended varoius companies to restore the ponds with filtration and aeration systems. The ponds opened in March of 2008.

#### PROJECT EXPERIENCE

#### • Environmental Site Assessments (ESAs)

Performed ESAs on several properties throughout Texas. These assessments included reviewing available sources such as historical photographs, topographic maps, city directories, endangered species reports, determination of wetlands, FCC regulations, and listed tribal and regulatory databases. The ESAs also included extensive knowledge and identification of distinctive features such as caves, cavities, dry river beds and distressed vegetation, that may or may not be associated with environmental conditions.

# • Waukeshaw Pearce Equipment Rental – San Juan, Texas

Conducted a Phase I Environmental Site Assessment for an equipment rental facility. The equipment included backhos, trenchers, and frontloaders. The facility repaired and maintained the equipment on site. Assessed underground storage tanks, equipment wash rack, petroeum products storage, chemical and hazardous materials storage, and the environmental concerns that developed from the facility activities.

#### Lockhill Selma at DeZavala – San Antonio, Texas

Conducted a Phase I Environmental Site Assessment for the Stream Realty Acquisiton over the Recharge and Contributing Zones of the Edwards Aquifer. Assessed an approximate 19-acre tract of land for environmental concerns.

# • Nye Elementary School – Laredo, Texas

Performed Remediation Oversight for Nye Elementary School. Provided oversight during the excavation of impacted soils from school grounds and the disinfection of impacted areas as a result of a release from the school's sewer system.

#### **EDUCATION**

Master of Science in Aquatic Biology, 2005, Texas State University

Bachelor of Science, Geography, 2001, Southwest Texas State University

40 Hour Hazardous Waste Operations and Emergency Response Course October 24, 2007

40 USCOE HourWetland Delineation Certification Course October 26, 2007

Initial Asbestos Inspector Course,

December 14, 2007

Storm Water Construction Inspector Workshop, January 19, 2007

#### **WORK HISTORY**

San Antonio Parks Foundation
San Antonio, TX Aquatic Biologist
June 2005-June 2006

Clean Environments, Inc. San Antonio, TX Environmental Scientist Jan-August 2007

Terracon Consultants, Inc. 2007-Present

# LAMBERT, JOE ENVIRONMENTAL MANAGER

#### PROFESSIONAL EXPERIENCE

Joe Lambert has over 20 years of professional environmental and analytical chemistry experience with specialized knowledge in environmental testing and chemical analysis.

As Environmental Department Manager in Terracon's San Antonio office, Mr. Lambert has overseen hundreds of projects involving a wide range of assessment, monitoring and remediation services. These projects have included underground storage tank removals, subsurface plume delineations, worksite perimeter monitoring, oilfield cleanup, storm water runoff and erosion control, landfill gas monitoring, product recovery and groundwater remediation. Joe has provided technical expertise and oversight for Indoor Air Quality projects, Spill Prevention, Control and Countermeasures (SPCC) Plans. Phase I and Phase II Environmental Site Assessments, hazardous materials handling and disposal, spill containment and cleanup, as well as contaminated soil This work has required regulatory excavation and remediation. compliance in accordance with Texas Commission on Environmental Quality and Environmental Protection Agency protocols and has included the Innocent Owner/Operator Program (IOP), the Voluntary Cleanup Program (VCP) and the US EPA Brownfields Program.

Prior to working with Terracon, DCE, Mr. Lambert was the Assistant Laboratory Manager/Quality Assurance Director for Chemron Incorporated, San Antonio, Texas. He administered daily operations of an environmental testing laboratory and was responsible for planning, implementation, and supervision of major analytical programs supporting a wide variety of environmental monitoring, safety, and remediation activities.

Mr. Lambert also worked in Mexico for eleven years as the Regional Manager for Caleb Brett / Intertek International, (Houston, Mexico City). He was responsible for six chemical inspection laboratories involved in the bulk petroleum transport industry. He supervised a staff of 38 technicians in inspecting, sampling, analyzing, and quality control of petroleum products including LPG, gasoline, crude oil, fuel oil, diesel, and other bulk commodities with locations in the USA and Mexico along the international border from Texas to California. Joe's duties included matters of personnel, safety, technical training, equipment purchasing, budget, client relations, data validation and reporting. He was involved in client presentations and represented company as an international liaison and interpreter in contract negotiations with a number of U.S. Oil Companies and the Mexican government (Petroleos Mexicanos).

#### PROJECT EXPERIENCE

San Antonio Water System Aquifer Storage & Recovery (ASR)
 Program – Bexar County, Texas

Performed a Phase II subsurface assessment at four specific locations along the proposed ASR pipeline route that were identified

#### **EDUCATION**

Bachelor of Science, Natural Science, 1977, Miami University, Oxford Ohio.

University of Texas at El Paso, Graduate Studies program, Environmental Science and Geology, 1986-1988, completed 23 credit hours.

## CERTIFICATIONS

40 Hour OSHA Certificate and Refresher, current.

Certificate for conducting IAQ Investigations (American IAQ Council), 2000.

#### **AFFILIATIONS**

Air and Waste Management Association
American Indoor Air Quality Council
Member

#### **WORK HISTORY**

Terracon, Environmental Manager, 2004-current.

Drash Consulting Engineers, Inc., Environmental Manager, 1998-2004.

Chemron Incorporated, Assistant Laboratory Manager/Quality Assurance Director, 1991-1998

Caleb Brett Incorporated, Regional Manager, 1981-1991.

as areas of potential environmental concern. The assessment involved drilling borings and collecting subsurface samples of soil and groundwater at various intervals for laboratory analyses.

# • Cedar Creek Property - San Antonio, Texas

Conducted a Phase I Environmental Site Assessment for part of the Parklands Acquisition over the Recharge and Contributing Zones of the Edwards Aquifer. Assessed historical structures, wetlands, endangered species, sole-source aquifer, and environmental concerns for properties totaling over 800 acres in size.

# • Thrift Property - San Antonio, Texas

Conducted a Phase I Environmental Site Assessment for the Proposition 3 Land Acquisition over the Recharge and Contributing Zones of the Edwards Aquifer. Assessed an approximate 641-acre tract of land for environmental concerns.

# • 11.9-Acre New Proposed School - Somerset, Texas

Performed Phase I Environmental Site Assessment for 11.9-acre tract of land containing numerous oil fields.

#### • 340-Acres – Laredo, Texas

Conducted a Phase I Environmental Site Assessment for approximately 340-acres of raw/industrial land for consideration as a housing development. Also evaluated the property for signs of state and federally listed species and their habitat. Conducted a limited archaelogical survey for indication of significant historical artifacts and remains.

# • Skygen Project - Corups Christi, Texas

Performed air monitoring for health and safety at several refineries in Corpus Christi, Texas. The air monitoring was prompted by subsurface excavation for a proposed transmission line along the North Oak Park Substation to Lon Hill Switchyard 138 in Corpus Christi, Texas.

#### • Dallas Terminal - Dallas, Texas

Principal in charge of overseeing remediation activities for a leaking petroleum storage tank trucking facility. Also conducted numerous water sampling events and prepared regulatory compliance reports.

#### San Antonio International Airport Remain Overnight Apron - San Antonio, Texas

Performed subsurface assessments (drilling, sample collection, and analysis) and a Hazardous Materials Inventory for contamination at the San Antonio Internation Airport.

#### SPCC Site Evaluation – La Villa, Texas

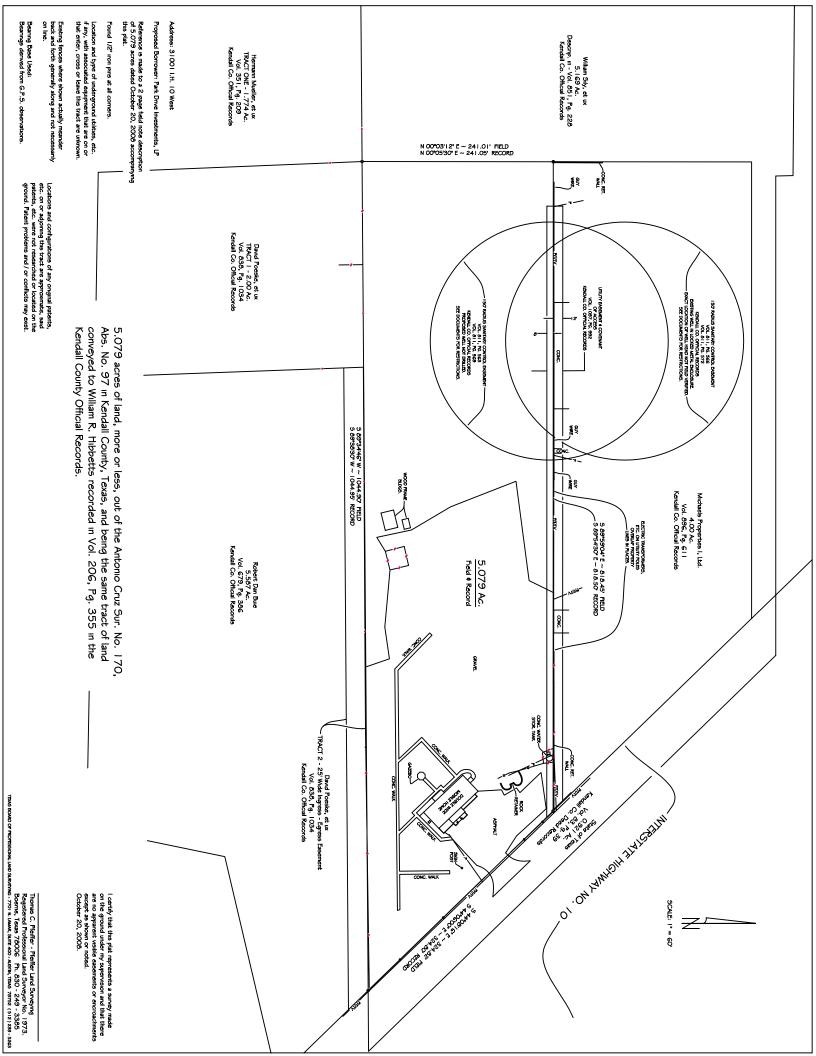
Evaluated SPCC plans for 30 sites.

# • Laredo Community College Voluntary Cleanup Program - Laredo, Texas

Conducted a Full Affected Property Assessment Report (APAR) for the Laredo Community College. Excavated over 2,000 cubic yards of contaminated soil. Project received closure.

# **ADDITIONAL COURSES**

Contractor Safety Council of the Coastal Bend Refinery Training, 2001.





# KENDALL COUNTY FIRE MARSHAL

Fire Inspection Report

	Date: 9/14/16		-	Time: 10:30	_
	Business: Explo	re USA RV	Supercenter		_
	Occupant: Char	les Flippen	(General	Wanager)	-
	Physical Address: 3/	1001 IH10 WE	154	Suite #:	_
		981- 5618 spectionFollow	C F	CASEY @ Expl Fipper @ explore u- Follow-up Inspection fi	oje USA. com sa. com
	Fire Protection Sy	stems: Fire Alarm F	Fire Sprinkler / Hood	System / Knox Box	
1. Exit S	igns & Emergency Lighting	Ado	lexit sign w/	Emergency light to	Service building.
2. Exit de	oors unlocked / exit access	unblocked		<del></del>	
3. SDS I	Information; NFPA 704 Visit	ole from street			
A. Electr	ical devices (cover plates, ex	t. cords, multi- outlet) <u>Sec v</u>	re wall outlet in	Lobby (Poscorn Mac	hine)
	ral Housekeeping (combust				
6, Flamo	mable / Combustible Storage	e( 5 -10 gal)			
	ble Fire Extinguishers (Sen	-	ive and tag a	U extinguishers	(see note)
8. Kitche	en vent hood (serviced and	tagged)			
<b>NK</b> 9. Fire S	prinkler System (inspected	and tagged)			
√10. Fire A	larm System (inspected and	d tagged)			
Comments:	+ 1. Secure He	lium aas cylin	day in storage	closet	
Note: 1	All extinguishers a	re to be mounted	no more tha	n 60" above flor	or/grade.
You a show cause wh	re here-by notified to remed by you should not be require	ly the conditions as indiced to comply. If at expire	cated above within	days/hours upon rec	eipt of this notice or n(s) exists, and no
	id be shown, further action s			By Order of the Fire	
Fire Marshal F	Representative:	Faci	lity Representative: 2	poles to Adolph & 1	Rich Cary
		Reference: Kend	iall County Fire Code		

DEPARTMENT OF DEVELOPMENT MANAGEMENT 211 East San Antonio Street, Suite & Boerne, Tenza 78008 Telephone: (512) 249-2343 Ent. 41 File 8 - 2557

SEPTIC FORM

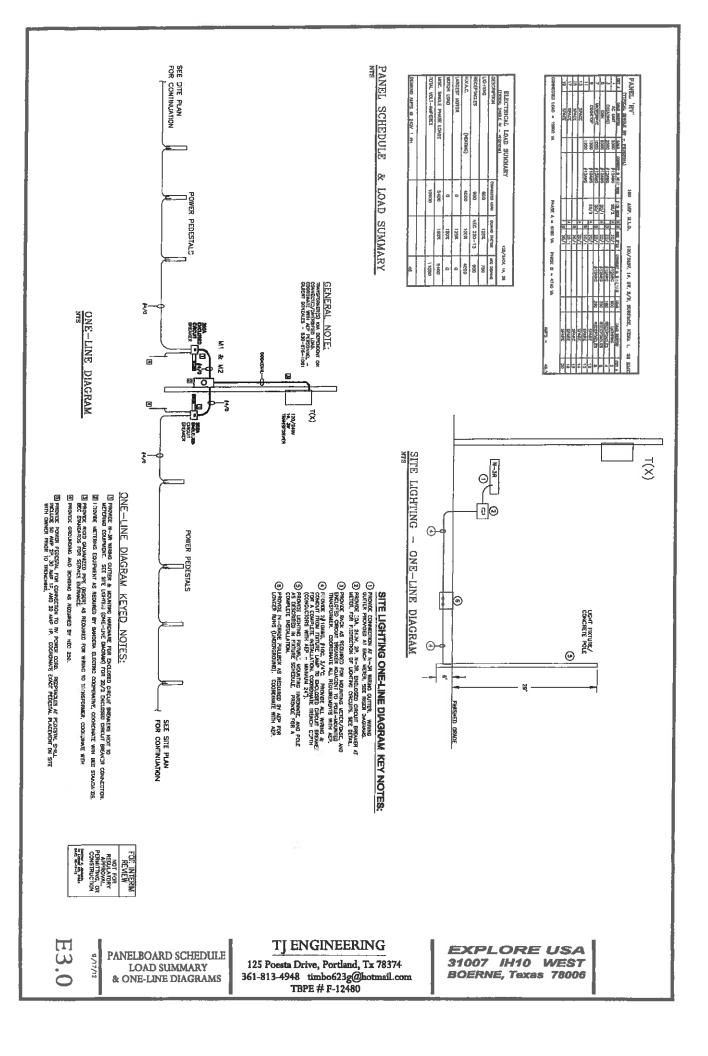
PRIVATE SEWAGE FACILITY PERMIT (LICENSED) IN KENDALL COUNTY, TEXAS APPLICANT INFORMATION: PROPERTY OWNER (LICENSEE) MIDWAY Homes CONTRACTOR TOTZE COUST, Co. SUBDIVISION OR LOCATION OFF TH 10 ACCESS RD 2MI SO. ST BUSTENE TOTAL AREA SQ. FT. OR ACRES NO. BDRMS. NO. BQ. FT. OF HSE. OR GAL/DAY 150 PERC. RT. /7.3 CLASS NO. \_\_\_TRENCH REQ. SQ.FT. 250 OR BED REQ.SQ.FT. GALLON CAPACITY REQ. FOR CONCRETE SEPTIC TANK 750 INSTALLED: LENGTH 10 +10 +66 386 WEDTH SQ. FT. 258 TRENCH REMARKS: ATTHOR 12 SOLL HAD TO BE LETLACED WITH TOPSAIL DOE TO MEDIUM T (SKETCH APPROXIMATE DISTANCES, NOT TO SCALE.) ACCESS LD STACE

> 750 GM. DIVIDED TRUK DANKE AMKAL

THE COUNTY OF KENDALL, THE TEXAS DEPARTMENT OF HEALTH, OR THEIR AGENTS OR DESIGNES, MAKE NO REPRESENTATION THAT FACILITIES HEREIN LICENSED WILL PROVIDE SATISFACTORY SERVICE TO THE PREMISES SERVED. IT WILL BE THE LICENSEE'S RESPONSIBILITY TO MAKE ANY CHANGES OR MODIFICATIONS WHICH OPERATING EXPERIENCE MAY SHOW TO BE NECESSARY IN ORDER FOR THESE FACILITIES TO PROVIDE SATISFACTORY SERVICE. SEPTIC DISTANCES MEET MINIMUM TEXAS DEPARTMENT OF HEALTH SEPARATION DISTANCES IN MOST INSTANCES, SOME RENOVATIONS MAY BE LESS IF REPAIRED OR REPLACED IN THE SAME GENERAL AREA AS THE PRE-EXISTING SYSTEM BEING RENOVATED.

PERMIT (LICENSE) GRANTED AND APPROVED THIS DATE: /3 TUN 9/

John D. Bunkin, Director Dept. of Dev. Management



ELECTRICAL SITE PLAN - DIMENSIONED (RV's) Θ

FOR INTERIOR REVIEW

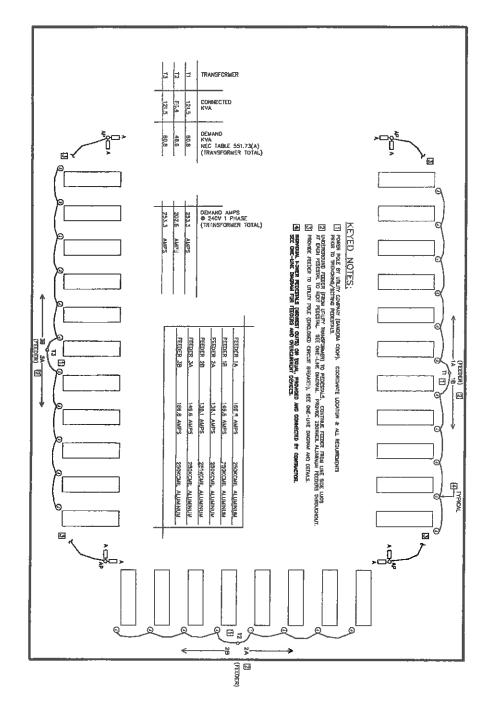
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) ) DIMENSIONED ELECTRICAL SITE PLAN

TJ ENGINEERING

125 Poesta Drive, Portland, Tx 78374 361-813-4948 timbo623g@hotmail.com TBPE # F-12480 EXPLORE USA 31007 IH10 WEST BOERNE, Texas 78006

ELECTRICAL SITE PLAN (RV's) - PEDESTAL LOCATIONS





\*/\*\*/\*\* E1.0

ELECTRICAL SITE PLAN TJ ENGINEERING

125 Poesta Drive, Portland, Tx 78374 361-813-4948 timbo623g@hotmail.com TBPE # F-12480 EXPLORE USA 31007 IH10 WEST BOERNE, Texas 78006



# **Proposal and Contract**

August 30, 2012

**Explore USA RV Supercenter** 31001 IH-10 West **Boerne, TX 78006** 

> Tele:830-981-5618 Fax:830-755-4694

Attn: Jeff Benoist

PAVECON, Ltd. will furnish all labor, materials and equipment required for the performance of the following described work in connection with construction or improvements at: 31001 IH-10 West

The work is to be performed as follows: Per soils report.

item #	Bid Item	d Item Qty Units		Unit Price	Total Price
1	6" CONCRETE APPROACH (4000 PSI)	1200	SF	15.34	\$18,413.00
2	EARTHWORK	80000	SF	.83	\$66,508.00
3	6" CONCRETE PAVING (4000 PSI)	80000	SF	3.40	\$271,995.00
4	6" STEEL BOLLARDS	4	EA	313.3	\$1,252.00
5	TOTAL				\$358,169.00
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4. No work shall be performed prior to the location of all utility lines as located by DIG TESS services. The owner shall be responsible for the location of any irrigation lines, private electrical lines and any substructures unknown to PAVECON, Ltd.

By accepting this proposal, Owner agrees to indemnify and to hold PAVECON, Ltd. harmless from all claims, including its reasonable attorneys' fee incurred in defending any claim, resulting from damages to any utility line, irrigation line, private electrical, or sub structure not identified or clearly marked. Any damage to clearly marked utility lines, irrigation line, private electrical lines, or sub structures shall be the responsibility of PAVECON, Ltd.

- 5. Unless a lump sum price is to be paid for the foregoing work and is clearly so stated it is understood and agreed that the quantities referred to above are estimates only and that payment shall be made at the stated unit prices on the actual quantities of work performed by PAVECON as determined upon completion of the work.
- 6. PAVECON shall not be responsible for any damage to or deterioration of any of our work, whether completed or in process, resulting from any cause or causes beyond our control, but not limited to failure of subgrade, including soil volume changes, or failure of inadequacy of any labor or materials not furnished and installed by us, whether or not such failure or inadequacy was or could have been known at the time our work was undertaken.
- 7. PAVECON is not responsible for removing vehicles from repair areas. PAVECON will notify you in advance and you must make arrangements to have vehicles removed at your expense.
- 8. In the event all work under this contract is not completed in one operation, Company shall be paid in full for all items of work completed upon the completion thereof. Any work under this contract for which PAVECON has not received a "work order" calling for completion within one year from the date of this agreement will be subject to renegotiations of prices, or cancellation at PAVECON's option.
- 9. Terms of Payment Payment in full for all work performed hereunder during any month shall be made no later than the tenth day of the month next following. Final and complete payment for all work performed herein shall be made upon completion of such work and receipt of our invoice. Interest at the rate of (18) percent per annum shall be charged you and paid by you on all unpaid balances from the due date to the date of receipt of payment by PAVECON. Reasonable attorneys fees and cost of collection shall be charged you and paid by you, if incurred by us.

ACCEPTED:	PAVECON, LTD.
	Dwayne Gardner
Dg061	Project Manager



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Project Note: Quote includes only line items listed above. No proposed grades given.

### INCLUSIONS:

a) Tax is on materials.

b) Unit pricing prevails on all items unless otherwise noted.

c) PAVECON, Ltd. guarantees this work for materials and workmanship for a period of 1-year from installment, excluding unusual abuse or neglect.

#### **EXCLUSIONS:**

a) Permits, Bonds, and Testing.

b) Utility relocation/adjustment, irrigation, or landscape repair.

c) Back-fill walks, curbs, & islands.

- d) Pumping, heating, or cooling of concrete.
- e) All work areas must be free of materials & equipment.
- f) Rock excavation, soil treatments, tree removal.
- g) Demo, sawing, haul off of spoils created by others.
- h) Pavement markings, wheel stops, signage.
- i) Barricades and Traffic Control.
- j) Layout edge of paving by others.
- k) Reflective cracking, vegetation sterilization.
- 1) This estimate is based on completing work in 1 move-in.
- m) Sleeves for Irrigation. Dewatering.
- n) Erosion Control or SWPPP.
- o) THIS IS A UNIT PRICE BID BASED ON PLAN QUANITIES. IF QUANITY DESCREPANCIES ARE NOTED, UNIT PRICE IS TO BE USED.

## **TERMS AND CONDITIONS**

- 1. PAVECON, Ltd., (PAVECON) will carry workmen's compensation insurance covering its employees and shall provide public liability and property damage insurance.
- 2. Any changes from the specifications or modifications of the terms of this contract shall be set put in writing and signed by both parties.
- 3. This proposal expires fifteen (15) days from the date hereof but may be accepted at any later date at the sole option of the Company.



## **REPORT OF**

## GEOTECHNICAL ENGINEERING STUDY

EXPLORE USA RV SUPERCENTER BOERNE, TEXAS BMC PROJECT NO. 12-12-0113

## **FOR**

MR. JEFF BENOIST EXPLORE USA RV SUPERCENTER 31001 IH-10 WEST BOERNE, TEXAS 78006

MAY 8, 2012



## **BURGE • MARTINEZ CONSULTING, INC.**

## Geotechnical Engineering • Environmental • Testing

May 8, 2012

Mr. Jeff Benoist Explore USA RV Supercenter 31001 IH-10 West Boerne, Texas 78006

RE:

**Geotechnical Engineering Study** 

**Explore USA RV Supercenter** 

31001 IH-10 West Boerne, Texas

BMC Project No. 12-12-0113

Dear Mr. Benoist:

Burge-Martinez Consulting, Inc. (BMC) has completed the subsurface exploration and geotechnical engineering analysis for the above-referenced project, in general accordance with BMC Proposal No. P12-12-077, dated April 4, 2012. Our report, which includes the results of our subsurface exploration program, laboratory testing program, and geotechnical engineering analysis, is enclosed with this letter.

Based on the results of the field exploration program, the site is considered suitable for the proposed development, provided that the recommendations enclosed in this report are followed.

We appreciate the opportunity to be of service to you during the design phase of this project. We look forward to continuing our involvement with this project during the construction phase by providing construction materials testing services. If you have any questions regarding the information contained in this report or if we can be of further assistance to you, please feel free to contact us.

Respectfully submitted,

BURGE•MARTINEZ CONSULTING, INC.

Texas Registered Engineering Firm F-7740

Geotechnical Engineering Services

Benny J. Krieger, Jr., P.E.

Geotechnical Dept. Manager

Distribution: Addressee (3)

Robert W. Burge, Jr., P.E. Principal

3453 North Pan Am Expressway, Suite 201, San Antonio, Texas 78219 Phone: 210-646-8566 Sax: 210-590-7476

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## **PROJECT OVERVIEW**

## **Project Location**

This report presents the results of our subsurface exploration and engineering analysis for the proposed improvements to be made at the Explore USA RV Supercenter facility located at 31001 IH-10 West in Boerne, Texas. The approximate site location is shown on the *Site Vicinity Map* provided in the Appendix.

### **Scope of Work**

The conclusions and recommendations contained in this report are based on eight (8) soil borings (B-1 through B-8) performed by Alpha Omega Drilling Services, Inc. on April 17, 2012. Borings B-1 and B-2 were drilled within the proposed building footprint and extended to a termination depth of approximately 15 feet below the existing ground surface elevations. Borings B-3 through B-8 were drilled in the existing pavement areas and extended to a termination depth of approximately six (6) feet.

## **Proposed Construction**

Based on information provided to us, the project will consist of the design and construction of an approximate 10,000 square-foot office building. Additionally, the proposed improvements include paving the existing parking and sales lot areas. It is our understanding that the design team has decided to pave the sales lot area with reinforced concrete due to the heavy fork lift traffic. We anticipate that the proposed single-story structure will be lightly loaded and supported by a monolithic slab-on-grade foundation system.

It should be noted that BMC was not provided with any structural information, proposed grades, or a proposed finished floor elevation. Based on available information and our understanding of the proposed construction, we anticipate that the cut/fill requirements for grading purposes within the building pad will be  $5\pm$  feet to reach the finished floor elevation. It is our understanding that the finished grades of the sales lot area will generally follow the existing grade of the property. BMC should be provided with the final grading plans, once completed, as this may affect the recommendations provided herein.

The *Boring Location Plan* was developed from a *Detention Pond Plan*, Page C-1, prepared by Coyle Engineering, dated May 7, 2009. Since topographic information and finished floor elevations were not provided, elevations are not noted on the borings logs. Furthermore, the borings were located in the field using pacing/taping procedures from existing structures/landmarks identified on the available site plan.

## **Purposes of Exploration**

The purposes of this study were to explore the subsurface soil, rock, and groundwater conditions at the site and to develop engineering recommendations to guide design and construction of the soil/rock supported elements of the project. We accomplished these purposes by:

- 1. reviewing available geologic and soil survey maps of the project area,
- 2. drilling borings to explore the subsurface soil, rock, and groundwater conditions,
- 3. performing laboratory tests on selected representative soil/rock samples from the borings to evaluate pertinent engineering properties, and
- 4. analyzing the field and laboratory data to develop appropriate engineering recommendations.

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## **EXPLORATION PROCEDURES**

## **Subsurface Exploration Procedures**

The soil/rock borings were performed with a standard, truck-mounted drill rig, which utilized continuous solid stem flight augers to advance the boreholes. No drilling fluid was used during the drilling program. Upon completion of the borings, the boreholes were backfilled with spoils generated during the drilling process and the excess spoils were mounded over the boreholes.

Representative samples of the subsurface soil/rock were obtained employing split-spoon sampling procedures in general accordance with ASTM D-1586. Relatively disturbed samples were obtained at selected depths in the borings by driving a standard two (2) inch outer diameter split-spoon sampler 18 inches into the subsurface material using a 140 pound hammer falling 30 inches. The number of blows required to drive the split-spoon sampler the final 12 inches of penetration (N-value) is recorded in the "SPT N-value" column of the boring logs. Where rock was encountered or limited sample was recovered, subsurface samples were collected directly off of the flight augers.

The drilling crew maintained field logs of the soil/rock encountered in the borings. After recovery, each sample was removed from the sampler and visually classified. Representative portions of each sample were then sealed and delivered to our laboratory for further visual examination and laboratory testing.

## **Laboratory Testing Program**

Representative soil/rock samples were selected and tested in our laboratory to check field classifications and to determine pertinent engineering properties. The laboratory testing program included visual classifications, moisture content tests, Atterberg Limits tests, and percent passing No. 200 Sieve. All data obtained from the laboratory tests are included on the respective boring logs in the Appendix.

Each soil sample was classified on the basis of texture and plasticity in accordance with the Unified Soil Classification System (USCS). A brief explanation of the USCS is included with this report. The various soil/rock types were grouped into the major zones noted on the boring logs. The stratification lines designating the interfaces between earth materials on the boring logs and profiles are approximate; in situ, the transitions may be gradual.

The soil/rock samples will be retained in our laboratory for a period of 30 days, after which, they will be discarded unless other instructions are received by the client.

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### **EXPLORATION RESULTS**

## **Site Conditions**

At the time of our field exploration, the site was improved with the existing RV sales lot and sales office. The sales lot was covered with a gravel base material. There is a small parking area in front of the sales office that is covered with asphalt. The property is accessible from IH-10. The property is surrounded by commercial businesses and undeveloped land. The site has good drainage towards the southeast corner of the property.

## **Regional Geology and Soil Survey**

According to the Bureau of Economic Geology at The University of Texas at Austin, Geologic Atlas of Texas, San Antonio Sheet, the proposed site is located in the Glen Rose Formation (Kgru), upper part. This Lower Cretaceous Age Formation consists of limestone, dolomite, and marl as alternating resistant and recessive beds forming stair-step topography. The limestone is hard to soft and marly, light gray to yellowish gray, and fine-grained. The dolomite is fine-grained, porous, and yellowish brown with marine mega fossils. The upper part is relatively thinner bedded, more dolomitic, and less fossiliferous. The thickness is about 400 feet.

The Soil Survey of Kendall County, Texas published by the United States Department of Agriculture, National Cooperative Soil Survey, indicates that the shallow soils in the general vicinity of the site are classified as Denton Silty Clay, 1 to 3 percent slopes. The Denton Series consists of gently sloping, moderately deep, well drained, clayey soils that formed in clayey sediment over fractured limestone and marl. This moderately deep, gently sloping soil is on uplands. Typically, the surface layer is dark grayish brown silty clay that is 24 inches thick. The subsoil is brown clay to a depth of 39 inches and has small, rounded, soft calcium carbonate bodies and weakly cemented fragments of limestone. The subsoil rests on a bed limestone and marl. Reaction of the soil is moderately alkaline throughout. The soil is well drained and surface runoff is medium. There is a slight hazard of water erosion.

## **Soil Conditions**

The natural, near surface deposits, which were studied by our field exploration program, are generally consistent with the soil survey and regional geology. Below the surfacing materials (asphalt, gravel base material, etc.), the soils encountered at our boring locations generally consisted of expansive clay overlying lean clay/chalk and marl of the Glen Rose Formation.

Based on our observations at the time of our field study, the stratigraphy of the subsurface materials at this site can generally be described as presented in the following table:

StratumRange in Depth (ft)Soil Description and ClassificationBASE0 - 0.5Gravelly Base MaterialI0 - 4Stiff to hard, brown FAT CLAY (CH) with varying amounts of gravelVery stiff to hard, light tan LEAN CLAY (CL), SANDY LEAN CLAY (CL), FAT CLAY (CH), and CHALK to dense, tan CLAYEY SAND (SC) with varying amounts of gravel and sand that became marly with

**Table 1: Subsurface Soil Conditions** 

Borings B-2, and B-5 through B-8 encountered about six inches of gravelly base material at the surface. This gravelly base material generally covers the existing sales lot area that will be paved with reinforced concrete.

depth.

**Stratum I** – This stratum consisted of stiff to hard, brown FAT CLAY (CH) with varying amounts of gravel. Atterberg Limits tests conducted on representative samples of this stratum indicated that this material has Liquid Limits (LL's) ranging from 72 to 84 with corresponding Plasticity Indices (PI's) ranging from 48 to 58. Based on these measured indices, this material has a very high potential for changes in volume if fluctuations in the soil's moisture content occur.

**Stratum II** – This stratum consisted of very stiff to hard, light tan LEAN CLAY (CL), SANDY LEAN CLAY (CL), FAT CLAY (CH), and CHALK to dense, tan CLAYEY SAND (SC) with varying amounts of gravel and sand that became marly with depth. Atterberg Limits tests conducted on representative samples of this stratum indicated that this material has LL's ranging from 39 to 53 with corresponding PI's ranging from 20 to 34. Representative samples of this stratum had 31 to 74 percent, by dry weight, pass a No. 200 Sieve. Based on these measured indices, this material has a moderate to high potential for changes in volume if fluctuations in the soil's moisture content occur. Generally, this stratum was cemented and became very hard in consistency with depth.

## **Groundwater Observations**

Groundwater was not encountered during drilling operations. Observations for groundwater were made during sampling and upon completion of the drilling operations. In dry auger drilling operations, water is not introduced into the boreholes, and the groundwater position can often be determined by observing water flowing into or out of the borehole. Furthermore, visual observation of the soil samples retrieved during the auger drilling operations can often be used in evaluating the groundwater conditions. It should be noted that groundwater conditions can fluctuate due to seasonal and climatic variations, and should be measured (checked) prior to construction activities.

## **ANALYSIS AND RECOMMENDATIONS**

The following recommendations are based on the eight (8) borings performed at the site, laboratory test results, and the limited design information provided to us. Based on the available information, we anticipate that the cut/fill requirements will be up to five (5) feet to reach the finished floor elevations for the proposed building. It is our understanding that the finished elevations will generally follow the existing ground elevations of the property. We recommend that if there are any changes to the project characteristics as discussed in this report, BMC should be retained to review them so it can be determined if changes to the recommendations are necessary.

Based upon our understanding of the proposed construction, this study includes recommendations for supporting the proposed structure on a monolithic slab-on-grade foundation system. The following sections discuss this foundation system, along with recommendations for design and construction of the pavements and utilities.

## **Expansive Soil Conditions**

Based on the existing subsurface soil conditions, the project site is considered to be expansive, as defined by the 2009 and 2012 International Building Code (IBC) Section 1803.5.3. Although we have provided measures to reduce the magnitude of movements, these measures are not as stringent as outlined by the IBC to classify the site as non-expansive.

The proposed structure may be constructed on a monolithic slab-on-grade foundation system provided it can be designed for the highly variable soil conditions encountered at this site. The potential vertical rise (PVR) for the subsurface soil stratigraphy encountered in the borings drilled at this site was calculated using the Texas Department of Transportation (TxDOT) Method TEX-124-E. These calculations indicate potential vertical movements and effective design plasticity indices (PIs) as follows:

**Table 2: Expansive Soil Conditions** 

Building Areas (Borings)	Existing PVR (inches)	Effective Design PI
10,000 Square-Foot Office (B-1 & B-2)	2-1/2	31

Note: These PVR calculations are based on the existing site conditions and account for a minimum overburden pressure of 1psi. The effective design PI is the weighted average of all PI values within the upper 15 feet utilizing a value no less than 15.

Due to the expansive soil conditions identified in the borings, we do not recommend designing the new grade-supported structure for the existing site conditions. In order to reduce the potential vertical movement associated with the expansive clays, soil movement reduction options are provided in the following section.

## **Soil Movement Reduction Options**

The potential differential movements associated with the existing site conditions exceed typical tolerable levels for grade-supported structural elements; therefore, cut and fill modifications are provided in order to reduce the PVR to a more acceptable level. Although the structures can be designed structurally to withstand a higher PVR, the owner would have to accept the increased probability that foundation movement will occur and plumbing leaks may occur.

At grade construction in this area is typically designed for a PVR of one (1) inch or less. We can provide additional recommendations, if requested by the owner and design team.

Table 3: Cut/Fill Modification Conditions

Building Area (Borings)	CASE	Cut/Fill Modification	PVR <sup>1</sup>	Effective Design PI <sup>2</sup>
10,000 Square-Foot Office (B-1 & B-2)	I	1.5 feet	1 inch	25

- Notes: (1) The PVR calculations are based on the existing clay soils and gravelly base material being removed and replaced with select structural fill material having a maximum PI of 15. The gravelly base material may be stock piled on-site and reused as select fill material for the building pad if it meets the specifications for select structural fill material as outlined herein.
  - (2) The effective design PI is the weighted average of all PI values within the upper 15 feet utilizing a PI value no less than 15.

Despite the design condition, this does not mean that soil-related movements are eliminated. It only means that the slab and foundation can be structurally designed for the magnitude of movement without failure of the foundation system. However, this movement does not take into account the movement criteria that is required or perceived by the building owner/occupants. These "operational" performance criteria may be, and often are, more restrictive than the structural criteria or tolerances.

Additional recommendations for cut and fill modifications are provided in the *Building Subgrade* Preparation and Earthwork Operations section. We can also provide additional soil movement reduction options, upon request, if the design team and owner feel that more or less potential movement is required or deemed acceptable for the structure. Furthermore, the recommendations presented in the study can be modified, if needed, once the site topography and finished floor elevations for the proposed structure are provided by the design team.

## **Slab-on-Grade Foundation System**

The subsurface conditions encountered at the site are determined to be suitable for supporting the proposed structure on a monolithic slab-on-grade foundation system. Based on the anticipated structural loading and SPT values, as monitored during drilling of our borings, we recommend that the monolithic slab-on-grade foundation system be designed for a maximum net allowable end bearing capacity of 2,500 psf into native in-situ material or select structural fill.

We recommend that the beams have a minimum width of 10 inches and extend a minimum of 12 inches below exterior finished grade and into native in-situ material or select fill material. Exterior grade beams should extend a minimum of 18 inches below the finished exterior grade. These recommendations are for proper development of bearing capacity for the continuous beam sections of the foundation system and are NOT based on structural considerations. Grade beam widths and depths for structural considerations may need to be greater than recommended herein and should be properly evaluated and designed by the structural engineer.

The following table presents the design criteria published by the Building Research Advisory Board (BRAB), Wire Reinforcement Institute (WRI), and the Post-Tensioning Institute (PTI), 3<sup>rd</sup> Edition. These values were based on our understanding of the proposed project, our interpretation of the information and data collected as part of this study, the criteria publications, and on our past experience with similar projects.

Based on the soil conditions, the proposed structure may be supported using Type III reinforced slab-on-grade foundation system in accordance with BRAB.

Table 4: Slab-on-Grade Design Criteria

Recommended BRAB, WRI, & PTI Criteria	Modified
for Slab-on-Grade Foundation	Condition
Minimum Over-excavation	18 inches
Minimum Select Fill Pad Thickness	18 inches
Potential Vertical Rise (PVR)	1 inch
Effective Design Plasticity Index (PI)	25
Unconfined Compressive Strength, (tsf)	1.0
Slope Correction Coefficient	1.0
Constant Soil Suction, pF	3.8
Climatic Rating (C <sub>w</sub> )	17
Net Allowable Bearing Capacity	2,500 psf
Soil Support Index, c	0.89
Edge Distance Penetration, e <sub>m</sub> , Center	8.5 feet
Edge Distance Penetration, e <sub>m</sub> , Edge	4.4 feet
Thornthwaite Index (I <sub>m</sub> )	-9
Center Lift	0.4 inch
Edge Lift	0.8 inch

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Following any over-excavation and site preparation processes and if required by final grade elevations, the proposed building pad can be built-up and leveled using additional select structural fill material, as detailed in the *Building Subgrade Preparation and Earthwork Operations* section.

For a monolithic slab-on-grade foundation system, designed and constructed as recommended in this report, post construction settlements should be one (1) inch or less. Settlement response of fill supported slabs is influenced more by the quality of construction than by soil-structure interaction. Therefore, it is essential that the recommendations for both the foundation and the building pad construction be strictly followed throughout the construction phase of the proposed building's foundation.

## **Seismic Considerations**

According to the IBC (Section 1613.3.2), the site shall be classified in accordance with Chapter 20 of ASCE 7-10: Minimum Design Loads for Buildings and Structures. According to the ASCE 7-10 and 2009 IBC documents, the site classification is based on the subsurface soil/rock profile to a depth of 100 feet. Since the maximum depth explored for this study was 15 feet, we have assumed that the geologic formation condition extends to a depth of at least 100 feet. Based on the soil/rock profile encountered and these assumptions, the Site Class is "C" as defined by ASCE 7-10, Table 20.3-1 (or 2009 IBC, Table 1613.5.2).

## **Building Subgrade Preparation and Earthwork Operations**

After excavating to the desired depth within the building pad area, and prior to fill placement, the exposed subgrade surfaces should be observed by the Geotechnical Engineer or authorized representative. The following site preparation would be necessary for a monolithic slab-ongrade foundation system:

- 1) Existing topsoil, any existing loose materials, and FILL should be stripped and removed from the proposed building footprint. Existing tree roots and stumps should be grubbed and removed from the site.
- 2) Following stripping and grubbing operations, the floor slab areas should be over-excavated to the depth as illustrated on Table 3 in the *Soil Movement Reduction Options* section. The over-excavation areas should extend a minimum of five (5) feet beyond the horizontal limits of the proposed building footprint. A qualified geotechnical engineer, or representative, should be on-site during earthwork operations to observe and approve any cut areas prior to fill placement.
- Following excavation, the exposed subgrade areas should be proof-rolled to expose any weak, soft, wet, or otherwise unsuitable soils that should be removed.
- Following proof-rolling, the exposed subgrade soils should be scarified to a depth of six (6) inches, moisture conditioned between 0 and +4 percentage points above optimum moisture content and compacted to at least 95 percent of the maximum dry density as determined in accordance with ASTM D698.

5) Following approval of the subgrade, the select fill should be placed up to the desired final building pad elevation. In no case shall the select fill material thickness be less than 18 inches. The select fill should be placed in eight (8) inch maximum thick loose lifts. The select fill should be moisture conditioned between -3 and +3 percentage points of optimum moisture content and compacted to a minimum of 95 percent of the maximum dry density as determined in accordance with ASTM D698, Standard Proctor Method. One nuclear density test should be performed for each 5,000 square feet, or a minimum of three (3) nuclear density tests per lift, whichever results in more tests.

When placing the select fill, care should be taken to avoid water ponding in the select fill layer. This could cause post-construction movements, which exceed the estimated values. Care must be taken to prevent landscape watering, surface drainage, leaking utility lines or other sources of water from entering the select fill.

Any import or select fill should be an approved inorganic material, free of debris. The select fill material should be approved by the Geotechnical Engineer prior to importing on site. The onsite soils may be utilized provided the following recommendations for select fill are met. This material should be placed in lifts not exceeding eight (8) inches in loose thickness, moisture conditioned to within ±3 percentage points of the optimum moisture content, and compacted to a minimum of 95 percent of the maximum dry density as determined in accordance with ASTM D698, Standard Proctor Method. Select fill material should have a maximum Plasticity Index (PI) of 15 and have a maximum particle size of three (3) inches.

## **Pavement Design**

General paving areas and drive areas will be provided primarily for the RV sales lot and for the fork-lift vehicles used to position these RV's around the sales lot.

Our pavement analysis was generally based on the design procedure developed by AASHTO's *Guide for Design of Pavement Structures*, 1993. Based on the site location and facility type, we utilized an effective pavement life of 20 years. Also for this analysis, we estimated a CBR (California Bearing Ratio) value of three (3) percent for the Stratum I soils, which will likely be the predominant subgrade materials following rough grading operations. We estimated this CBR value since evaluation of CBR values by either field or laboratory testing was not included in the scope of our services. We selected this value based on our knowledge and experience with similar soil conditions. We suggest that additional testing, including CBR testing and Atterberg Limits, be conducted on the actual subgrade materials at the time of construction in order to verify the assumptions in this report.

The following design parameters and criteria were considered in our analyses:

• Resilient Modulus: 4500 psi (CBR = 3.0)

Modulus of Soils Reaction, k value
Reliability:
90 percent

• Overall Standard Deviation: 0.35 for rigid pavement

Initial Serviceability: 4.2Terminal Serviceability: 2.0

The sales lot area should consist of a rigid (concrete) pavement system. The table below provides two pavement options for the design team's consideration and provides the associated 18-kip equivalent single-axle load (ESAL) capacities.

**Table 5: Pavement Design Sections** 

	Heavy Duty	Heavy Duty
	<b>Pavement Section</b>	<b>Pavement Section</b>
Pavement Material	Thickness, (in)	Thickness, (in)
Reinforced Concrete	6	7
Crushed Limestone Base	Note 1	Note 1
Compacted Subgrade	6	6
18-Kip ESAL's	273,000	656,000

Note 1) Crushed limestone base may be used as a level-up course.

For the above pavement section options, we have calculated the 18-kip equivalent single-axle loads (ESALs) for the design team's consideration. If our assumptions or the traffic loading conditions do not meet the intended use or if further information comes available, we would be happy to provide further design recommendations.

Reinforced Concrete - Concrete should be designed to exhibit a flexural strength (third point loading) of at least 580 psi at 28 days (this is a compressive strength of about 4,000 psi). The flexural strength ( $M_r$ ) may be approximated by the following formula from ACI 330R:  $M_r$ =2.3 ( $f_c'$ )<sup>35,</sup> where  $f_c'$  is the average 28 day compressive strength of the concrete test cylinders. The actual relationship between flexural and compressive strength for the proposed mix should be evaluated in the laboratory.

<u>Compacted Subgrade</u> - Subgrade should be moisture conditioned between optimum and plus four (+4) percentage points above optimum moisture content and compacted to at least 95 percent of the maximum dry density as determined by ASTM D-698. **In addition to compaction testing, all pavement subgrade areas should be proof-rolled for approval.** 

The following recommendations are provided for reinforcement and jointing.

**Table 6: Typical Rigid Pavement Jointing Requirements** 

Type of Joint	Joint Spacing	Joint Depth	Joint Width <sup>2</sup>
Contraction	15 feet each way	One-fourth (1/4) of slab	One-eighth (1/8) to
(Control)		thickness	one-fourth (1/4) inch
Construction	At location of	Full depth of	One-eighth (1/8) to
	contraction joints	pavement thickness	one-fourth (1/4) inch
Isolation	As required to isolate	Full depth of	Three-fourths (3/4) to
	from structures	pavement thickness	one (1) inch
Expansion <sup>1</sup>	60 feet each way	Full depth of	Three-fourths $(\frac{3}{4})$ to
_	-	pavement thickness	one (1) inch

Notes: 1.) Serious consideration should be given to the total elimination of expansion joints. In this region, drying shrinkage of concrete typically significantly exceeds anticipated expansion due to thermal affects. As a result, the need for expansion joints is eliminated. Construction of an unnecessary joint may be also become a maintenance problem.

2.) All joint widths should be as noted above or as required by the joint sealant manufacturer.

Distributed Steel:

Steel reinforcement may consist of:No. 3 reinforcing steel bars at 18 inches on center each way, Grade 60. It is imperative that the distributed steel be positioned accurately in the pavement cross section.

All construction joints shall have dowels. Dowel information varies with pavement thickness. The applicable dowel information is provided below:

Pavement Thickness: 6 inches 7 inches

Dowels 3/4-inch diameter 7/8-inch diameter

Dowel Spacing 12 inches on center 12 inches on center

Dowel Length 14 inches long 14 inches long

Dowel Embedment 6 inches minimum 6 inches minimum

General fill materials, whether coarse-grained or fine-grained, should have a maximum particle size of four (4) inches and be placed in lifts not exceeding eight (8) inches in loose thickness. Coarse-grained soils (SC, GC, or more granular) should be moisture conditioned to within ±3 percentage points of the optimum moisture content and compacted to a minimum of 95 percent of the maximum dry density as determined in accordance with ASTM D698. Fine-grained soils (CH, CL, ML, or MH) should be moisture conditioned between 0 and +4 percentage points above optimum moisture content and compacted to a minimum of 95 percent of the maximum dry density as determined in accordance with ASTM D698.

Proper perimeter drainage in and around pavement sections is very important, and should be provided so that infiltration of surface water from unpaved areas surrounding the pavement areas is minimized. We do not recommend installation of landscape beds or islands in the pavement. Such features provide an avenue for water to enter into the pavement section and the underlying subgrade soil. Water penetration usually results in degradation of the pavement section with time, and as vehicular traffic traverses the area of moisture infiltration.

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Curbs will help reduce migration of groundwater into the pavement sections from adjacent areas. A crack sealant compatible to both asphalt and concrete should be provided at all concrete-asphalt interfaces, and at all interfaces of existing/new pavement areas.

## **Utility Trench Recommendations**

Rock excavation equipment/techniques should be anticipated for installation of site utilities where bedrock was encountered. The contractor should review the boring logs during bid preparation. We suggest that the site and utility contractors perform any other necessary testing, as deemed necessary, to provide a suitable bid to the owner, which could include test pits or additional borings in areas not explored as part of this study.

It is vital that all backfill being placed into utility trenches be moisture conditioned and compacted to a degree that meets or exceeds the compaction of the adjacent areas, so that no settlement will occur. Additionally, it is important that proper backfill material be used. Generally, the material that is excavated from the trenches is stockpiled on site and subsequently used as backfill material in the trenches.

Additionally, it is our recommendation that all backfill material used in the utility trenches be moisture conditioned to within three (3) percentage points of the optimum moisture content and compacted to at least 95 percent of the maximum dry density as determined in accordance with ASTM D-698. Furthermore, it is our recommendation that the backfill material be placed in six (6) inch compacted lifts. The backfill material should be tested for moisture content and compaction for each six (6) inch lift at a minimum frequency of one (1) test per 100 linear feet. For narrow trenches that would be too confined to sufficiently compact the backfill materials, it is our recommendation that a flowable fill material be used to backfill the trench.

#### **Construction Considerations**

The site should be graded such that surface water runoff is directed away from any excavations during construction. In addition, site grading should allow for surface and roof drainage away from the structure during its design life. Planters and landscaping are not recommended within six (6) feet of the building areas, as they can allow for moisture infiltration into the subgrade.

The surface soils in this vicinity are moisture sensitive, and so any uncontrolled surface flow across the site could result in undesired infiltration and future difficulties with swell. For this reason, it is strongly urged that fill operations be performed in such a manner as to enhance natural water flow and control erosion.

Exposure to the environment may weaken the soils at the foundation bearing level if the excavations remain open for extended periods of time. Therefore, foundation concrete and select fill material should be placed as soon as possible after the excavations are completed. If the bearing soils are softened by surface water intrusion or exposure, the softened soils must be removed from the foundation excavation bottom immediately prior to placement of concrete or select fill material. If rainfall becomes imminent while the bearing soils are exposed, we

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recommend that a 1-to 3-inch thick "mud-mat" of "lean" concrete be placed on the bearing soils.

In a dry and undisturbed state, the surficial soil at the site will provide sufficient subgrade support for fill placement and construction operations. However, when wet, these soils will degrade quickly with disturbance from contractor operations. Therefore, good site drainage should be maintained during earthwork operations which will help maintain the integrity of the soil.

## **Limitations**

This report has been prepared to aid in the evaluation of subsurface conditions at this site and to assist design professionals in the geotechnical related design of this project. It is intended for use with regard to the specific project as described in this report. Any substantial changes or differences in assumed building loads or building layout should be brought to our attention so that we may determine any effect on the recommendations provided in this report.

The scope of our study did not include an environmental assessment of the soil, rock, or water conditions either on or adjacent to the site. As such, no environmental opinions are presented in this report.

The opinions and conclusions expressed in this report are those of BMC and represent interpretation of the subsurface conditions based on tests and the results of our analyses. BMC is not responsible for the interpretation or implementation by others of recommendations provided in this report. This report has been prepared in accordance with generally accepted principles of geotechnical engineering practice and no warranties are included, expressed, or implied, as to the professional services provided under the terms of our agreement.

The analysis and recommendations submitted in this report are based upon the data obtained from the test borings performed at the locations indicated in the *Boring Location Plan*, and from other information described in this report. This report does not reflect any variations that may occur between the test borings. In the performance of the subsurface exploration, specific information is obtained at specific locations and times. However, it should be noted that variations in soil conditions, such as depth to bedrock, exist on most sites between the boring locations, and conditions such as groundwater levels vary from time to time. The nature and extent of variations may not become evident until the course of construction.

If variations appear evident, BMC should be allowed to perform on-site observations during the construction period and note characteristics and variations to determine if a re-evaluation of the recommendations in this report will be necessary.

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## Closing

We recommend that the construction activities be monitored on a call-out basis by a qualified Geotechnical Engineer, or representative. We also recommend that once the plans are prepared, BMC be retained to review them so it can be determined if changes to the recommendations are necessary or if additional recommendations are required.

## **APPENDIX**

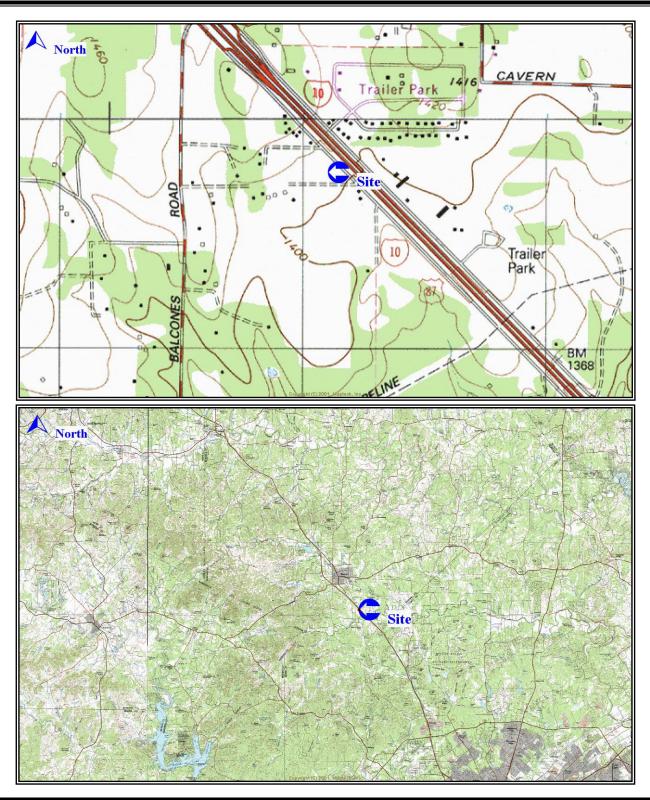
Site Vicinity Map

Boring Location Plan

Boring Logs (B-1 through B-8)

Soil Classification Chart

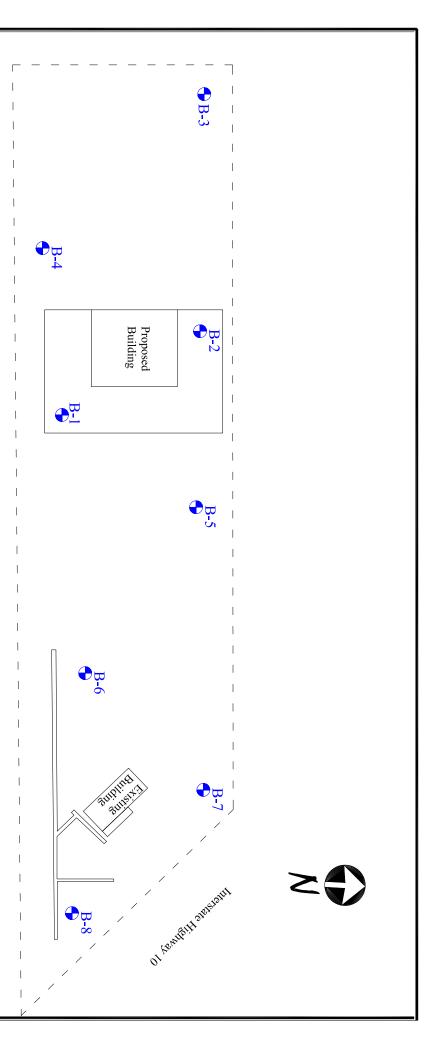
Laboratory and Field Test Procedures



Geotechnical Engineering Study Explore USA RV Supercenter 31001 IH-10 West Boerne, Texas BMC Project No. 12-12-0113



FIGURE 1
SITE VICINITY MAP



Note: Not drawn to Scale

Geotechnical Engineering Study
Explore USA RV Supercenter
31001 IH-10 West
Boerne, Texas
BMC Project No. 12-12-0113



FIGURE 2 BORING LOCATION PLAN

## BORING NUMBER B-1 PAGE 1 OF 1

		Fax. 210-590-7476											
CLIE	ENT E	explore USA RV											
PRC	JECT	NUMBER 12-12-0113	PROJECT LOCATION Boerne, Texas										
DAT	E STA	ARTED 4/17/12 COMPLETED 4/17/12	GROU	ND ELE	/ATIC	N		HOL	E SIZ	<b>E</b> 5"			
DRII	LLING	CONTRACTOR Alpha Omega Drilling	GROU	ND WAT	ER LI	EVELS:							
DRII	LLING	METHOD Dry Auger	A <sup>-</sup>	Г ТІМЕ О	F DRII	LING							
LOG	GED	BY Derek CHECKED BY R. Burge				LING							
гои	ES G	roundwater was not encountered during drilling operat	ions. Al	FTER DR	ILLING	}							
		* * * * * * * * * * * * * * * * * * * *		T						ATT	TERBE	RG	  -
O DEPTH (ft)	GRAPHIC	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	LIQUID	PLASTIC LIMIT	PLASTICITY INDEX	FINES CONTENT (%)
		Stratum I - Very stiff brown FAT CLAY (CH)											
-		Stratum II - Hard light tan LEAN CLAY (CL)		SS 1		5-6-12 (18)			30	79	28	51	
		Stratum II - Hard light tan LEAN CLAY (CL)			-		-						
_				SS 2		19-22-34 (56)			13				
5	-	- becomes sandy below 4 feet		SS 3		17-27- 50/3"	_		19	48	19	29	74
-		- becomes marly below 6 feet		✓ \ ✓ ss		50/2"			10				
GPJ GINT US.GDT 5/8/12	+ # # # # # # # # # # # # # # # # # # #			4									
	- "			≥ SS 5		50/2"	,		8				
GEOTECH BH COLUMNS 12-12-0113 EXPLORE USA RV SUPERCENTER - BOERNE.C		Bottom of hole at 15.0 feet.		⊠ SS 6		50/2"			5				
GEOTECH ВН С													

## BORING NUMBER B-2 PAGE 1 OF 1

		Fax. 210-590-7476											
CLIE	ENT _	Explore USA RV I	PROJECT NAME Explore USA RV Supercenter										
PRC	)JEC1	NUMBER 12-12-0113 I	PROJE	CT LOC	ATIO	N Boerne	, Tex	as					
DAT	E ST	ARTED_4/17/12	GROUN	ID ELE\	/ATIO	N		HOLI	E SIZ	<b>E</b> 5"			
DRII	LLING		GROUN	ID WAT	ER LE	EVELS:							
1		METHOD_Dry Auger	АТ	TIME O	F DRIL	LING							
1		BY Derek CHECKED BY R. Burge				LING							
		Groundwater was not encountered during drilling operation											
		Steamawater was not shoountered during arming operation	110. AI					1	1		ERBE	DC.	1.
O DEPTH	GRAPHIC	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	LIQUID	LIMITS		FINES CONTENT (%)
	IX.	Base Material											
		Stratum I - Stiff to hard brown FAT CLAY (CH)		SS 1		20-6-8 (14)			32	81	26	55	
-		- with gravel from 2 to 4 feet		SS 2		27-50/2"	-		20				
_ 5		Stratum II - Hard light tan CHALK				50/3"	-		10				
71/00				SS 4		50/1"	7		9				
1/8/6 105.60 INID 1/8/6	- III			≥ SS 5	-	50/2"	- /		8				
0 1 1 1 1 2 1 1 1 2 1 1 1 2 1 1 1 2 1		- becomes clayey below 13 feet  Bottom of hole at 15.0 feet.		⊠ SS 6		50/4"			8				

GEOTECH BH COLUMNS 12-12-0113 EXPLORE USA RV SUPERCENTER - BOERNE.GPJ GINT US.GDT 5/8/12

## BORING NUMBER B-3 PAGE 1 OF 1

CLIE	NT_E	Explore USA RV	PROJE	CT NAM	IE_Ex	plore USA	RVS	Super	cente	r			
PRO	JECT		PROJE	CT LOC	ATIO	N Boerne	, Texa	as					
		ARTED 4/17/12 COMPLETED 4/17/12						HOLI	E SIZI	E_5"			
DRIL	LING	CONTRACTOR Alpha Omega Drilling	GROUN	ID WAT	ER LE	EVELS:							
DRIL	LING	METHOD Dry Auger	AT	TIME OF	F DRIL	LING							
LOG	GED I	BY Derek CHECKED BY R. Burge	AT	END OF	DRIL	LING							
NOT	<b>ES</b> _G	roundwater was not encountered during drilling operation	ns. AF	TER DRI	LLING	<u></u>							
HL (1)	GRAPHIC LOG	MATERIAL DECORIDATION		SAMPLE TYPE NUMBER	ERY %	JW NTS LLUE)	T PEN.	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	L	ERBE IMITS	3	FINES CONTENT (%)
o DEPTH (ft)	GRA	MATERIAL DESCRIPTION		SAMPL	RECOVERY (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UI (p	MOIS	LIQUID	PLASTIC LIMIT	PLASTICITY INDEX	FINES C
		Stratum I - Very stiff brown FAT CLAY (CH)											
				SS 1		5-6-15 (21)			23	80	24	56	
		Stratum II - Very stiff to hard light tan LEAN CLAY (CL) to F CLAY (CH) with gravel	FAT	√ ss		12-19-9			5				
		- increases in sand content below 4 feet		2	_	(28)			<u> </u>				
5				SS 3		10-20-31 (51)			14	53	19	34	62
		Bottom of hole at 6.0 feet.		,									

GEOTECH BH COLUMNS 12-12-0113 EXPLORE USA RV SUPERCENTER - BOERNE.GPJ GINT US.GDT 5/8/12

## BORING NUMBER B-4 PAGE 1 OF 1

CLIENT Explore USA RV				CT NAM	IE_Ex	plore USA	RVS	Super	cente	r			
PRO	JECT	NUMBER 12-12-0113	PROJECT LOCATION Boerne, Texas										
DATI	STA	RTED 4/17/12 COMPLETED 4/17/12	GROU	ND ELEV	ATIC	N		HOLI	E SIZI	E_5"			
DRIL	LING	CONTRACTOR Alpha Omega Drilling	GROU	ND WAT	ER LI	EVELS:							
DRIL	LING	METHOD Dry Auger	A	TIME O	F DRIL	LING							
LOG	GED I	BY Derek CHECKED BY R. Burge	A	END OF	DRIL	LING							
NOT	<b>ES</b> _G	roundwater was not encountered during drilling operation	ons. Af	TER DRI	LLING	·							
				)E	%		Ä.	Ť.	: %)	ATT L	ERBE	RG	ENT
o DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)		PLASTIC LIMIT	PLASTICITY INDEX	FINES CONTENT (%)
		Stratum I - Very stiff brown FAT CLAY (CH)											
		Stratum II - Hard light tan LEAN CLAY (CL) with gravel		SS 1		5-7-11 (18)			28	82	29	53	
		Stratum ii - Hard light tan LEAN GLAT (GL) with graver											
				SS 2		11-22-18 (40)			12				
				√ ss									
5				3		31-50/3"			21				
	/////	Bottom of hole at 6.0 feet.											

GEOTECH BH COLUMNS 12-12-0113 EXPLORE USA RV SUPERCENTER - BOERNE.GPJ GINT US.GDT 5/8/12

## BORING NUMBER B-5 PAGE 1 OF 1

CLIE	NT_E	explore USA RV											
PRO	JECT		PROJE	CT LOC	ATIO	N Boerne	, Texa	as					
DATI	STA	RTED_4/17/12	ROUN	D ELEV	/ATIO	N		HOLI	E SIZ	E <u>5</u> "			
DRIL	LING	CONTRACTOR Alpha Omega Drilling 0	GROUN	ID WAT	ER LE	EVELS:							
DRIL	LING	METHOD Dry Auger	AT	TIME OF	FDRIL	LING							
LOG	GED I	BY Derek CHECKED BY R. Burge											
NOT	<b>ES</b> _G	roundwater was not encountered during drilling operation	ns. AF	TER DRI	LLING	·							
o DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	L	PLASTIC MESTIC MINIT STATES	PLASTICITY 3	FINES CONTENT (%)
	7	Base Material											
		Stratum I - Stiff brown FAT CLAY (CH)		SS 1		21-6-10 (16)			32				
		Stratum II - Very stiff to hard light tan LEAN CLAY (CL) with gravel	some	SS 2		8-14-11 (25)			12	49	17	32	
5						50/2"			13				
	/////	Bottom of hole at 6.0 feet.											

GEOTECH BH COLUMNS 12-12-0113 EXPLORE USA RV SUPERCENTER - BOERNE.GPJ GINT US.GDT 5/8/12

## BORING NUMBER B-6 PAGE 1 OF 1

CLIENT Explore USA RV			PROJECT NAME Explore USA RV Supercenter										
PROJECT NUMBER 12-12-0113				PROJECT LOCATION Boerne, Texas									
DATE	E ST	ARTED_4/17/12											
DRIL	LING	CONTRACTOR Alpha Omega Drilling											
DRIL	LING	METHOD Dry Auger	АТ	TIME OI	F DRIL	LING							
		BY _Derek CHECKED BY _R. Burge	AT TIME OF DRILLING AT END OF DRILLING										
		Groundwater was not encountered during drilling operatio											
	_			1						ATT	ERBE	RG	_
O DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY % (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)	l	PLASTIC WI	PLASTICITY INDEX	FINES CONTENT (%)
	X	Base Material											
		Stratum I - Hard brown FAT CLAY (CH) with gravel		SS 1		7-10-24 (34)			29	84	26	58	
		Stratum II - Hard light tan CHALK		≥ SS 2		50/2"			5				
5				≥ SS 3		50/2"			4				
	<u> </u>												
		Bottom of hole at 6.0 feet.											

GEOTECH BH COLUMNS 12-12-0113 EXPLORE USA RV SUPERCENTER - BOERNE.GPJ GINT US.GDT 5/8/12

## BORING NUMBER B-7 PAGE 1 OF 1

CLIENT Explore USA RV			PROJECT NAME Explore USA RV Supercenter										
PROJECT NUMBER 12-12-0113				PROJECT LOCATION Boerne, Texas									
DATI	E STA	ARTED_4/17/12											
DRIL	LING	CONTRACTOR Alpha Omega Drilling G	GROUND WATER LEVELS:										
DRIL	LING	METHOD Dry Auger	AT TIME OF DRILLING										
		BY Derek CHECKED BY R. Burge											
NOT	<b>ES</b> _G	Groundwater was not encountered during drilling operations	<del>-</del>										
				Щ	%	%		<u>⊢</u>	©	ATTERBE LIMITS			N:
o DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY 9 (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT WT. (pcf)	MOISTURE CONTENT (%)		PLASTIC LIMIT	PLASTICITY INDEX	FINES CONTENT (%)
	7	Base Material											
		Stratum I - Hard brown FAT CLAY (CH)  Stratum II - Dense tan CLAYEY SAND (SC) to hard tan SAN	DY	SS 1		4-12-22 (34)			22	72	24	48	
		LEAN CLAY (CL)		SS 2		11-13-16 (29)			19				31
5_		- becomes marly below 4 feet		SS 3		8-12-21 (33)			16				
		Bottom of hole at 6.0 feet.											

GEOTECH BH COLUMNS 12-12-0113 EXPLORE USA RV SUPERCENTER - BOERNE.GPJ GINT US.GDT 5/8/12

## BORING NUMBER B-8 PAGE 1 OF 1

CLIENT Explore USA RV			PROJECT NAME Explore USA RV Supercenter														
PROJECT NUMBER 12-12-0113				PROJECT LOCATION Boerne, Texas													
<b>DATE STARTED</b> <u>4/17/12</u> <b>COMPLETED</b> <u>4/17/12</u>				GROUND ELEVATION HOLE SIZE 5"													
DRIL	LING	CONTRACTOR Alpha Omega Drilling	GROUND WATER LEVELS:														
DRIL	LING	METHOD Dry Auger	AT TIME OF DRILLING														
LOG	GED I	BY Derek CHECKED BY R. Burge															
NOT	<b>ES</b> _G	roundwater was not encountered during drilling operation	ations. AFTER DRILLING														
			Вс %				_;	Ŀ	<u></u>		ERBE	BERG H					
o DEPTH (ft)	GRAPHIC LOG	MATERIAL DESCRIPTION		SAMPLE TYPE NUMBER	RECOVERY 9 (RQD)	BLOW COUNTS (N VALUE)	POCKET PEN. (tsf)	DRY UNIT W <sup>-</sup> (pcf)	MOISTURE CONTENT (%)		PLASTIC LIMIT	PLASTICITY INDEX	FINES CONTENT (%)				
	<b>X</b> .	Base Material															
		Stratum I - Stiff brown FAT CLAY (CH)		SS 1		4-5-8 (13)			39								
		Stratum II - Very stiff to hard light tan LEAN CLAY (CL)															
				SS 2		5-4-13 (17)			20	39	19	20					
5		- becomes marly below 4 feet		SS 3		25/1"			13								
		Bottom of hole at 6.0 feet.															

## **SOIL CLASSIFICATION CHART**

NA.	ONE	SYME	BOLS	TYPICAL			
IVI	AJOR DIVISI	UNS	GRAPH	LETTER	DESCRIPTIONS		
	GRAVEL AND	CLEAN GRAVELS		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES		
	GRAVELLY SOILS	(LITTLE OR NO FINES)		GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES		
COARSE GRAINED SOILS	MORE THAN 50% OF COARSE FRACTION	GRAVELS WITH FINES		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES		
	RETAINED ON NO. 4 SIEVE	(APPRECIABLE AMOUNT OF FINES)		GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES		
MORE THAN 50% OF MATERIAL IS	SAND AND	CLEAN SANDS		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES		
LARGER THAN NO. 200 SIEVE SIZE	SANDY SOILS	(LITTLE OR NO FINES)		SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES		
	MORE THAN 50% OF COARSE	SANDS WITH FINES		SM	SILTY SANDS, SAND - SILT MIXTURES		
	FRACTION PASSING ON NO. 4 SIEVE	(APPRECIABLE AMOUNT OF FINES)		sc	CLAYEY SANDS, SAND - CLAY MIXTURES		
		LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY		
FINE GRAINED SOILS	SILTS AND CLAYS			CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS		
OOILO				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY		
MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE				МН	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS		
SIZE	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		СН	INORGANIC CLAYS OF HIGH PLASTICITY		
				ОН	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS		
н	GHLY ORGANIC S	SOILS	717 717 717 717 7 717 717 717 717 7 717 71	PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS		

## **Laboratory and Field Test Procedures**

## Soil Classification per ASTM D2487

This soil testing standard was used for classifying soils according to the Unified Soil Classification System. The soil classifications of the earth materials encountered are as noted in the attached boring logs.

## Soil Water Content per ASTM D2216

This test determines the water content of soil or rock expressed as a percentage of the solid mass of the soil. The test results are listed under Moisture Content in the attached boring logs.

## Soil Liquid Limit per ASTM D4318

The soil Liquid Limit identifies the upper limit soil water content at which the soil changes from a moldable (plastic) physical state to a liquid state. The Liquid Limit water content is expressed as a percentage of the solid mass of the soil.

## Soil Plastic Limit per ASTM D4318

The soil Plastic Limit identifies a lower limit soil water content at which the soil changes from a moldable (plastic) physical state to a non-moldable (semi-solid) physical state. The Plastic Limit water content is expressed as a percentage of the solid mass of the soil.

## Plasticity Index per ASTM D4318

This is the numeric difference between the Liquid Limit and Plastic Limit. This index also defines the range of water content over which the soil-water system acts as a moldable (plastic) material. Higher Plasticity Index (PI) values indicate that the soil has a greater ability to change in soil volume or shrink and swell with lower or higher water contents, respectively.

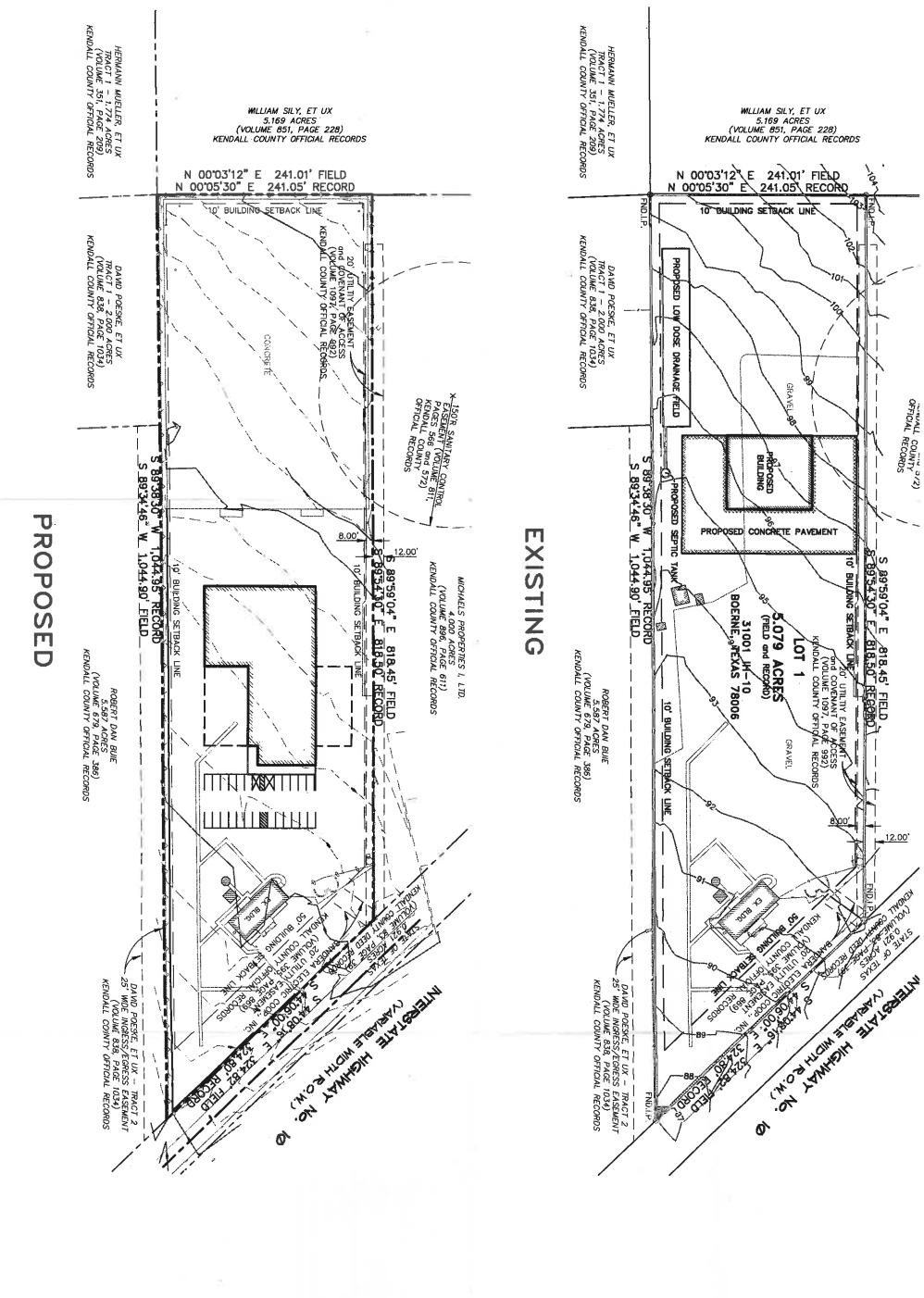
### Standard Penetration Test (SPT) and Split Spoon Sampler (SS) per ASTM D1586

This is the standard test method for both the penetration test and split-barrel (spoon) sampling of soils. This sampling method is used for soils or rock too hard for sampling using Shelby Tubes. The method involves penetration of a split spoon sampler into the soil or rock through successive blows of a 140 pound hammer in a prescribed manner.

#### **Blow Counts (N) per ASTM D1586**

This is the number of blows required to drive a Split Spoon Sampler by means of a 140 pound hammer for a distance of 12 inches in accordance with the variables stated in the test procedures.

**Boring Logs:** This is a summary of the above described information at each boring location.







## **Information About Brokerage Services**

Texas law requires all real estate license holders to give the following information about brokerage services to prospective buyers, tenants, sellers and landlords.

#### **TYPES OF REAL ESTATE LICENSE HOLDERS:**

- A BROKER is responsible for all brokerage activities, including acts performed by sales agents sponsored by the broker.
- A SALES AGENT must be sponsored by a broker and works with clients on behalf of the broker.

#### A BROKER'S MINIMUM DUTIES REQUIRED BY LAW (A client is the person or party that the broker represents):

- Put the interests of the client above all others, including the broker's own interests;
- Inform the client of any material information about the property or transaction received by the broker;
- Answer the client's questions and present any offer to or counter-offer from the client; and
- Treat all parties to a real estate transaction honestly and fairly.

#### A LICENSE HOLDER CAN REPRESENT A PARTY IN A REAL ESTATE TRANSACTION:

AS AGENT FOR OWNER (SELLER/LANDLORD): The broker becomes the property owner's agent through an agreement with the owner, usually in a written listing to sell or property management agreement. An owner's agent must perform the broker's minimum duties above and must inform the owner of any material information about the property or transaction known by the agent, including information disclosed to the agent or subagent by the buyer or buyer's agent.

**AS AGENT FOR BUYER/TENANT:** The broker becomes the buyer/tenant's agent by agreeing to represent the buyer, usually through a written representation agreement. A buyer's agent must perform the broker's minimum duties above and must inform the buyer of any material information about the property or transaction known by the agent, including information disclosed to the agent by the seller or seller's agent.

**AS AGENT FOR BOTH** - **INTERMEDIARY**: To act as an intermediary between the parties the broker must first obtain the written agreement of *each party* to the transaction. The written agreement must state who will pay the broker and, in conspicuous bold or underlined print, set forth the broker's obligations as an intermediary. A broker who acts as an intermediary:

- Must treat all parties to the transaction impartially and fairly;
- May, with the parties' written consent, appoint a different license holder associated with the broker to each party (owner and buyer) to communicate with, provide opinions and advice to, and carry out the instructions of each party to the transaction.
- Must not, unless specifically authorized in writing to do so by the party, disclose:
  - o that the owner will accept a price less than the written asking price;
  - o that the buyer/tenant will pay a price greater than the price submitted in a written offer; and
  - o any confidential information or any other information that a party specifically instructs the broker in writing not to disclose, unless required to do so by law.

**AS SUBAGENT:** A license holder acts as a subagent when aiding a buyer in a transaction without an agreement to represent the buyer. A subagent can assist the buyer but does not represent the buyer and must place the interests of the owner first.

#### TO AVOID DISPUTES. ALL AGREEMENTS BETWEEN YOU AND A BROKER SHOULD BE IN WRITING AND CLEARLY ESTABLISH:

- The broker's duties and responsibilities to you, and your obligations under the representation agreement.
- Who will pay the broker for services provided to you, when payment will be made and how the payment will be calculated.

**LICENSE HOLDER CONTACT INFORMATION:** This notice is being provided for information purposes. It does not create an obligation for you to use the broker's services. Please acknowledge receipt of this notice below and retain a copy for your records.

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