



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

PAT MCCRORY  
GOVERNOR

ANTHONY J. TATA  
SECRETARY

October 27, 2014

MEMORANDUM TO: Zahid M. Baloch  
Project Development Engineer

FROM: Terry W. Fox, LG *TW Fox*  
GeoEnvironmental Project Manager  
GeoEnvironmental Section  
Geotechnical Engineering Unit

TIP NO: R-2307  
WBS: 37944.1.1  
COUNTY: Catawba-Iredell  
DIVISION: 12  
DESCRIPTION: NC 150 from NC 16 Bypass to Just West of US 21

SUBJECT: **GeoEnvironmental Report for Planning**

The GeoEnvironmental Section has completed the GeoEnvironmental Report for Planning. This report has the following components and is transmitted as:

  X   Hazardous Materials Report (35) pages

Please contact me if you have any questions concerning this project.

**MAILING ADDRESS:**  
NC DEPARTMENT OF TRANSPORTATION  
GEOTECHNICAL ENGINEERING UNIT  
1589 MAIL SERVICE CENTER  
RALEIGH NC 27699-1589

TELEPHONE: 919-707-6850  
FAX: 919-250-4237

[www.ncdot.gov/doh/preconstruct/highway/geotech](http://www.ncdot.gov/doh/preconstruct/highway/geotech)

**LOCATION:**  
CENTURY CENTER COMPLEX  
BUILDING B  
1020 BIRCH RIDGE DRIVE  
RALEIGH NC 27610

## **Hazardous Materials Report**

The GeoEnvironmental Section of the Geotechnical Engineering Unit has investigated the above referenced project to identify hazardous material sites for inclusion in the environmental document.

### **HAZARDOUS MATERIALS EVALUATION**

#### **Purpose**

This section presents the results of a hazardous material evaluation conducted along the above referenced project. The main purpose of this investigation is to identify properties within the project study area that are or may be contaminated and therefore result in increased project costs and future liability if acquired by the Department. Hazardous material impacts may include, but are not limited to, active and abandoned underground storage tank (UST) sites, hazardous waste sites, regulated landfills and unregulated dumpsites.

#### **Techniques/Methodologies**

The Geographical Information System (GIS) was consulted to identify known sites of concern in relation to the project corridor. GeoEnvironmental Section personnel conducted a field reconnaissance along the above mentioned project on September 24, 2014. A search of appropriate environmental agencies' databases was performed to assist in evaluating sites identified during this study.

#### **Findings**

##### **UST Facilities**

Based on our study, twenty nine (29) sites may contain petroleum USTs within the project limits.

##### **Hazardous Waste Sites**

No Hazardous Waste Site was identified within the project limits.

##### **Landfills**

No apparent landfills were identified within the project limits.

##### **Other GeoEnvironmental Concerns**

One (1) other geoenvironmental concern, an automotive repair facility, was identified within the project limits.

#### **Anticipated Impacts**

Twenty nine (29) possible UST facilities, and one (1) automotive repair facility were identified within the proposed project limits. We anticipate low monetary and scheduling impacts resulting from these sites. (See the following summaries and appendices for details)

**Known and Potential Hazardous Material Sites****CATAWBA COUNTY**

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1)	<b>Property Name</b> Vacant Lot 5621 E NC 150 Denver, NC 28037	<b>Property Owner:</b> Loeffler Building & Design, Ltd PO Box 641 Denver, NC 28037-0641
	<b>Facility ID #:</b> N/A <b>Incident #:</b> 16960	<b>UST Owner:</b> Mid-State Oil Co c/o Richard King PO Box 849 Lexington, NC 27293-0849



This former gas station site (Mid-State Oil) is located on the southwest quadrant of East NC 150 and South NC 16 Business intersection. According to the UST Section Registry an unknown number of tanks were removed in 1990. Ground Water Incident 16960 was assigned to the facility at that time as contaminated soil was encountered. The incident was closed out in May 1991. **This site is anticipated to present low geoenvironmental impacts to the project.**

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- 2) **Property Name**  
Former Tint Shop NC  
5622 E NC 150  
Maiden, NC 28650
- Facility ID #:** 0-021461  
**Incident #:** 27640
- Property Owner:**  
Joseph Caraccia  
14723 24<sup>th</sup> Ave  
Flushing, NY 11357
- UST Owner:**  
Joseph Caraccia  
14723 24<sup>th</sup> Ave  
Flushing, NY 11357



This closed business (formerly Ron & Don's Sportsman) is located on the northwest side of East NC 150 and 200 feet southwest of the South NC 16 Business intersection. According to the UST Section Registry there are three (3) tanks presently on site. Ground Water Incident 27640 was assigned to this facility in 2003. There are monitoring wells on site. **This site is anticipated to present low geoenvironmental impacts to the project.** AKA: Ron & Don's Bait & Tackle, Mom N Pop's gas station

- 3) **Property Name**  
ABC Store  
5640 E NC 150  
Maiden, NC 28650
- Facility ID #:** 0-002394  
**Incident #:** 36483
- Property Owner:**  
Catawba Co. ABC Board  
1910 Fairgrove Church Rd SE  
Newton, NC 28658
- UST Owner:**  
BJR Construction  
7041 Worth Street  
Denver, NC 28037



This ABC Store (formerly Crossroads Sunmart gas station) is located on the northwest quadrant of East NC 150 and South NC 16 Business intersection. According to the UST Section Registry the two (2) registered tanks were removed in 1990. Ground Water Incident 36483 was assigned to this facility in 2006 due to the sites history, and proximity to other former gas stations. No groundwater sampling data is available. **This site is anticipated to present low geoenvironmental impacts to the project.**

- 4) **Property Name**  
CVS Pharmacy  
6050 NC 16 BUS  
Denver, NC 28037
- Facility ID #:** 0-004242  
**Incident #:** 03898
- Property Owner:**  
Norvell Denver, LLC.  
1 CVS Drive  
Woonsocket, RI 02895
- UST Owner:**  
Ken Whisnat Estate  
5026 Kiser Island Road  
Terrell, NC 28682



This CVS Pharmacy (formerly Express Food Mart & gas station) is located on the southeast quadrant of East NC 150 and South NC 16 Business intersection. According to the UST Section Registry (7) tanks were removed in 1994. Ground Water Incident 03898 was assigned to this facility in 1988. There is an active remediation system with numerous recovery wells on site. In addition, five (5) rusted steel drums with unknown contents have been stored next to the remediation compound. **This site is anticipated to present low geoenvironmental impacts to the project.**

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5)	<b>Property Name</b> KB's Auto Mobile Detailing 5683 E. NC 150 Denver, NC 28037	<b>Property Owner:</b> Willene & Sharon Little PO Box 117 Denver, NC 28037
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This automotive detailing business (former automotive repair garage) is located on the southeast side of East NC 150 and 350 feet northeast of the South NC 16 Business intersection. This property does not appear on the UST Section Registry. One (1) in-ground hydraulic lift is located in the building. There are no known ground water incidents associated with this property. **This site is anticipated to present low geoenvironmental impacts to the project.**

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- 6) **Property Name**  
The General Store of Denver, Inc.  
6360 E NC 150  
Sherrills Ford, NC 27705
- Facility ID #:** 0-002395  
**Incident #:** 18450
- Property Owner:**  
FCM Properties, LLC  
1262 Bennington Drive NW  
Concord, NC 28027
- UST Owner:**  
The General Store of Denver, Inc.  
c/o Frank Craven  
6360 E. NC 150  
Sherrills Ford, NC 27705



This Citgo gas station, convenience store and farm supply business is located on the east side of East NC 150 and Mt. Pleasant Road intersection. According to the UST Section Registry there are four (4) tanks currently in use. One (1) tank was removed in 1998. Ground Water Incident 18450 was also assigned to this facility in 1998. The site is being actively monitored. **This site is anticipated to present low geoenvironmental impacts to the project.**



7) **Property Name**  
Vacant Lot  
6766 E NC 150  
Sherrills Ford, NC 28673

**Facility ID #:** 0-007902

**Property Owner:**  
Rhonda Putnam  
1701 Auten Road  
Gastonia, NC 28054

**UST Owner:**  
J.T. Alexander & Son, Inc.  
PO Box 88  
 Mooresville, NC 28115



This former gas station site (Lake Side Texaco) is located on the north side of East NC 150 and across from the Power Drive intersection. According to the UST Section Registry three (3) tanks were removed in 1988. The building was demolished in 2009-10. There are no known ground water incidents associated with this property. **This site is anticipated to present low geoenvironmental impacts to the project.**

8) **Property Name**  
Denver Equipment Co.  
6778 E NC 150  
Sherrills Ford, NC 28673

**Property Owner:**  
Denver Realty Acquisition Co.  
6778 E NC 150  
Sherrills Ford, NC 28673



This restaurant supply business is located on the northeast quadrant of East NC 150 and Shade Tree Lane intersection. A gas station may have previously operated at this location. This property does not appear on the UST Section Registry. There are no known ground water incidents associated with this property. **This site is anticipated to present low geoenvironmental impacts to the project.**

- 9) **Property Name**  
Former Don's Place  
7566 E NC 150  
Sherrills Ford, NC 28673
- Property Owner:**  
JIBS, Inc.  
7333 Gabriel Street  
Sherrills Ford, NC 28673
- Facility ID #:** 0-007636
- UST Owner:**  
Don R. Strain  
7566 E NC 150  
Sherrills Ford, NC 28673
- Incident/UST #:** MO-797



This closed automotive repair shop (formerly Don's Place gas station) is located on the northwest quadrant of East NC 150 and Slanting Bridge Road intersection. According to the UST Section Registry the four (4) registered tanks were removed in 1991. Ground Water Incident/UST # MO-797 was assigned to this facility in 1991. The incident was closed the same year. **This site is anticipated to present low geoenvironmental impacts to the project.** AKA: Allen Service Center & Lake Side Tire & Auto.

10) **Property Name**  
Closed Business  
7914 E NC 150  
Terrell, NC 28682

**Property Owner:**  
Jean Huffman Connor  
1306 3<sup>rd</sup> St Drive SE  
Conover, NC 28613



This closed business (Yeole Cotton Gin Museum) possibly operated at one time as a gas station. It is located on the north side of East NC 150 and 575 feet west of the Sherrills Ford Road intersection. This property does not appear on the UST Section Registry. No known ground water incidents are associated with this property. **This site is anticipated to present low geoenvironmental impacts to the project.**

- 11) **Property Name**  
Terrell County Store  
9247 Sherrills Ford Road  
Terrell, NC 28682
- Facility ID #:** N/A
- Property Owner:**  
Jean Huffman Connor  
1306 3<sup>rd</sup> St Drive SE  
Conover, NC 28613
- UST Owner:**  
Jean Huffman Connor  
1306 3<sup>rd</sup> St Drive SE  
Conover, NC 28613



This general store is located on the west quadrant of East NC 150 and Sherrills Ford Road intersection. This business once operated as a gas station as evidenced by the vent pipe located near the east corner of the building. This property does not appear on the UST Section Registry. There are no known ground water incidents associated with this property. **This site is anticipated to present low geoenvironmental impacts to the project.**

- 12) **Property Name**  
U.S. Post Office  
7985 E NC 150  
Terrell, NC 28682
- Facility ID #:** 0-014327  
**Incident #:** 15677
- Property Owner:**  
Carroll & Shelia Lineberger  
PO Box 385  
Terrell, NC 28682
- UST Owner:**  
ACME Petroleum & Fuel Co.  
543 Cox Road  
Gastonia, NC 228054



The Terrell Post Office (formerly Terrell Shell gas station) is located on the east quadrant of East NC 150 and Sherrills Ford Road intersection. According to the UST Section Registry the four (4) registered tanks were removed in 1995. Ground Water Incident 15677 was assigned to this facility in 1995. There is an active remediation system with numerous recovery wells on site. **This site is anticipated to present low geoenvironmental impacts to the project.**

13) **Property Name**  
Former Terrell Bait Shop-L570  
7970 E NC 150  
Terrell, NC 28682

**Facility ID #:** 0-021875

**Property Owner:**  
Margaret Connor Garrison  
PO Box 605  
Claremont, NC 28610-0605

**UST Owner:**  
United Oil of the Carolinas  
2758 East Ozark Ave  
Gastonia, NC 28054



This closed gas station (Gran Pix) is located on the north quadrant of East NC 150 and Sherrills Ford Road intersection. According to the UST Section Registry four (4) tanks were removed in 1978. There are no known ground water incidents associated with this property. **This site is anticipated to present low geoenvironmental impacts to the project.**

14) **Property Name**  
Closed Business  
8455 E NC 150  
Terrell, NC 28682

**Property Owner:**  
Annie Holdsclaw Heirs  
719 Dogwood Lane  
 Mooresville, NC 28115



This closed business (operates part time as a church) is located on the southeast side of East NC 150 and 0.15 miles southwest of the Greenwood Road intersection. A gas station may have previously operated at this location. This property does not appear on the UST Section Registry. There are no known ground water incidents associated with this property. **This site is anticipated to present low geoenvironmental impacts to the project.**



- 15) **Property Name**  
Lake Effects Marina  
8629 E NC 150  
Terrell, NC 28682
- Facility ID #:** 0-007901  
**Incident #:** 20379
- Property Owner:**  
Annie B. Stutts Trust  
8629 E NC 150  
Terrell, NC 28682
- UST Owner:**  
J.T. Alexander & Son, Inc.  
c/o Tom Laws  
PO Box 88  
Mooresville, NC 28115



This business (former Midway Marina gas station) is located on the southeast side of East NC 150 and one-half mile northeast of the Greenwood Road intersection. According to the UST Section Registry three (3) tanks were removed in 1994 and five (5) tanks were removed in 1999. Ground Water Incident 20379 was assigned to this facility in 1999. There are monitoring wells on site. **This site is anticipated to present low geoenvironmental impacts to the project.**

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16)	<b>Property Name</b> Former Pier Marina & Campground 1479 NC 150 (River Hwy) Mooresville, NC 28117	<b>Property Owner:</b> Promenade on the Lake, LLC 7215 Lebanon Rd STE-G Charlotte, NC 28227	<b>IREDELL COUNTY</b>
	<b>Facility ID #:</b> N/A	<b>UST Owner:</b> Crescent Resources, Inc. 400 S. Tryon St, STE 1300 Charlotte, NC 28201	
	<b>Incident #:</b> 14975		



The parcel segment of concern is located on the southwest quadrant of NC 150 (River Hwy) and Big Dukes Lane intersection. A gas station and convenience store formerly operated at this location. This property does not appear on the UST Section Registry and the number of registered tanks is unknown. Ground Water Incident 14975 was assigned to this facility in 1990. Contaminated soil was noted on the database and again in 1995. No monitoring wells were observed on site. **This site is anticipated to present low geoenvironmental impacts to the project.**

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17)	<b>Property Name</b> HydroHoist of the Carolinas 1258 NC 150 (River Hwy) Mooreville, NC 28117	<b>Property Owner:</b> James & Kathy Kath 8116 Long Island Road Catawba, NC 28609
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This business is located on the north side of NC 150 (River Highway) and across from the Quite Cove Road intersection. A gas station may have previously operated at this location. This property does not appear on the UST Section Registry. There are no known ground water incidents associated with this property. **This site is anticipated to present low geoenvironmental impacts to the project.**

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18) **Property Name**  
Home Run Markets 3  
1228 NC 150 (River Hwy)  
Mooresville, NC 28117

**Facility ID #:** 0-021566

**Property Owner:**  
Home Run Market Properties, LLC  
4220 Neal Rd #415  
Mooresville, NC 28115

**UST Owner:**  
Home Run Market Properties, LL.  
PO Box 88  
Mooresville, NC 28115-0088



This Shell gas station and convenience store is located on the north side of NC 150 (River Highway) and 0.1 mile west of the Boaters Drive intersection. According to the UST Section Registry there are five (5) tanks currently in use. There are no known ground water incidents associated with this property. **This site is anticipated to present low geoenvironmental impacts to the project.**

- 19) **Property Name**  
Lake Norman BP  
1208 NC 150 (River Hwy)  
 Mooresville, NC 28117
- Facility ID #:** 0-035931
- Property Owner:**  
Jai Giriraj, Inc.  
3705 Halcyon Drive  
Huntersville, NC 28078
- UST Owner:**  
Jai Giriraj, Inc.  
1208 NC 150  
 Mooresville, NC 28117



This BP gas station convenience store is located on the north side of NC 150 (River Highway) and 0.1 miles west of the Boaters Drive intersection. According to the UST Section Registry there are four (4) tanks currently in use. There are no known ground water incidents associated with this property. **This site is anticipated to present low geoenvironmental impacts to the project.**

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20)	<b>Property Name</b> Garden Shed & More 842 NC 150 (River Hwy) Mooresville, NC 28117	<b>Property Owner:</b> Frances L. Nantz c/o Robert D. Nantz 842 NC 150 (River Hwy) Mooresville, NC 28117
	<b>Facility ID #:</b> N/A <b>Incident #:</b> 21301	<b>UST Owner:</b> Frances L. Nantz c/o Robert D. Nantz 951 Mt. Ulla Hwy Mooresville, NC 28117



This garden center (former gas station) is located on the northeast quadrant of NC 150 (River Highway) and White Oak Drive intersection. This property does not appear on the UST Section Registry. Ground Water Incident 21301 was assigned to this facility and four (4) tanks were removed in 2000. Petroleum contaminated soil was found, but below State Action levels. The incident was closed out the same year. **This site is anticipated to present low geoenvironmental impacts to the project.**

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21) **Property Name**  
Just Batteries, Inc.  
800 NC 150 (River Hwy)  
Mooresville, NC 28117

**Facility ID #:** 0-034993  
**Incident #:** 19218

**Property Owner:**  
HGST Group, LLC.  
c/o Daniel Sugarman  
800 NC 150 (River Hwy)  
Mooresville, NC 28117

**UST Owner:**  
Norman's House Demolishing, Co.  
3726 Aster Drive  
Charlotte, NC 28227



This business is located on the north side of NC 150 (River Highway) and 0.1 miles west of the Antiquity Lane intersection. According to the UST Section Registry six (6) tanks were removed in 1998. Ground Water Incident 19218 was assigned to this facility as contaminated soil was found during the tank removals. The contamination was below State Action levels and the incident was closed out the same year. **This site is anticipated to present low geoenvironmental impacts to the project.**

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- 22) **Property Name**  
Quik Trip 1009  
680 NC 150 (River Hwy)  
 Mooresville, NC 28117  
**Facility ID #:** 0-037806
- Property Owner:**  
Titan 1009 NC, LLC  
PO Box 3475  
Tulsa, OK 74101
- UST Owner:**  
Quiktrip Corporation  
4705 S 129<sup>th</sup> Ave  
Tulsa, OK 74134-7005



This gas station and convenience store is located on the northwest quadrant of NC 150 (River Highway) and Ervin Road intersection. According to the UST Section Registry there are three (3) tanks currently in use. This is a new facility built on a vacant lot, and there are no ground water incidents associated with this property. **This site is anticipated to present low geoenvironmental impacts to the project.**

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23) **Property Name**  
WilcoHess 360  
571 NC 150 (River Hwy)  
 Mooresville, NC 28117

**Facility ID #:** 0-036305

**Property Owner:**  
WilcoHess, LLC  
5446 University Parkway  
Winston Salem, NC 27105

**UST Owner:**  
WilcoHess, LLC  
5446 University Parkway  
Winston Salem, NC 27105



This Hess gas station and convenience store is located on the south side of NC 150 (River Highway) and 0.1 miles west of the Williamson Road intersection. According to the UST Section Registry there are four (4) tanks currently in use. There are no known ground water incidents associated with this property. **This site is anticipated to present low geoenvironmental impacts to the project.**

24) **Property Name**  
Circle K 1517  
558 NC 150 (River Hwy)  
Mooresville, NC 28117

**Facility ID #:** 0-036164

**Property Owner:**  
RSD Food Market Real Estate  
PO Box 3756  
Mooresville, NC 28117

**UST Owner:**  
Circle K Stores, Inc.  
2440 White Hall Park Drive STE 800  
Charlotte, NC 28273



This Circle K gas station and convenience store is located on the northwest quadrant of NC 150 (River Highway) and Bluefield Road intersection. According to the UST Section Registry there are four (4) tanks currently in use. There are no known ground water incidents associated with this property. **This site is anticipated to present low geoenvironmental impacts to the project.**

25) **Property Name**  
Xpress Stop #2  
491 NC 150 (River Hwy)  
 Mooresville, NC 28117

**Facility ID #:** 0-032606

**Property Owner:**  
MPG Mooresville, LLC  
c/o Corporate Property Group  
Melbourne, FL 32940

**UST Owner:**  
Xpress Stop, Inc.  
5309 Monroe Road #F  
Charlotte, NC 28205



This Valero gas station and convenience store is located on the south side of NC 150 (River Highway) and 0.1 miles west of the Rolling Hills Road intersection. According to the UST Section Registry there are four (4) tanks currently in use. There are no known ground water incidents associated with this property. **This site is anticipated to present low geoenvironmental impacts to the project.**

26) **Property Name**  
Shell (I-77 Texaco)  
468 NC 150 (River Hwy)  
Mooresville, NC 28117

**Facility ID #:** 0-010706

**Incident #:** 21541

**Property Owner:**  
John & Joanne Alexander  
PO Box 1104  
Statesville, NC 28687

**UST Owner:**  
J.T. Alexander & Son, Inc.  
PO Box 88  
Mooresville, NC 28115



This Shell gas station is located on the south side of NC 150 (River Highway) and 0.1 miles west of the Rolling Hills Road intersection. According to the UST Section Registry there are four (4) tanks currently in use. Four (4) tanks were removed in 2000. Ground Water Incident 21541 was assigned to this facility as contaminated soil was found during the tank removals. The incident was closed out the same year. **This site is anticipated to present low geoenvironmental impacts to the project.**

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27)	<b>Property Name</b> Port City Exxon 388 NC 150 (West Plaza Drive) Mooresville, NC 28117	<b>Property Owner:</b> John R. Graham, et. al. PO Box 28 Mooresville, NC 28117
	<b>Facility ID #:</b> 0-032870	<b>UST Owner:</b>
	<b>Incident/UST #:</b> MO-1864	Port City Exxon Attn: C. Graham 388 West Plaza Drive Mooresville, NC 28117



This Exxon gas station and convenience store is located in the northwest quadrant of NC 150 (West Plaza Drive) and Straightaway Drive intersection. According to the UST Section registry there are three (3) tanks currently in use. Ground Water Incident/UST #1864 was assigned to this facility (under 0-017519) during a waste oil tank removal in 1999. The incident was closed out the same year. **This site is anticipated to present low geoenvironmental impacts to the project.**

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- 28) **Property Name**  
Quality Mart 19  
391 NC 150 (West Plaza Drive)  
Mooresville, NC 28117  
**Facility ID #:** 0-010641
- Property Owner:**  
Quality Oil Co, LLC  
PO Box 2736  
Winston Salem, NC 27102
- UST Owner:**  
Quality Oil Co, LLC  
PO Box 2736  
1540 Silas Creek Dr.  
Winston Salem, NC 27102



This Shell gas station and convenience store is located in the southwest quadrant of NC 150 (West Plaza Drive) and Consumer Square Drive intersection. According to the UST Section registry there are three (3) tanks currently in use. One (1) tank was removed in 1988 and three (3) USTs were removed from the property in 1990. There are no known ground water incidents associated with this property. **This site is anticipated to present low geoenvironmental impacts to the project.**

29) **Property Name**  
Circle K  
255 NC 150 (West Plaza Drive)  
 Mooresville, NC 28117

**Facility ID #:** 0-036073

**Property Owner:**  
Circle K Stores, Inc.  
2440 White Hall Park Drive STE 800  
Charlotte, NC 28273

**UST Owner:**  
Circle K Stores, Inc.  
2440 White Hall Park Drive STE 800  
Charlotte, NC 28273



This Circle K gas station and convenience store is located in the southwest quadrant of NC 150 (West Plaza Drive) and Talbert Road intersection. According to the UST Section Registry there are four (4) tanks currently in use. There are no known ground water incidents associated with this property. **This site is anticipated to present low geoenvironmental impacts to the project.**

30) **Property Name**  
Quik Trip 1008  
161 NC 150 (West Plaza Drive)  
 Mooresville, NC 28117

**Facility ID #:** 0-037309

**Property Owner:**  
Azevedo Family Revoc Trust  
400 Hot Springs Road  
Santa Barbara, CA 93108

**UST Owner:**  
Quiktrip Corporation  
4705 S 129<sup>th</sup> Ave  
Tulsa, OK 74134-7005



This gas station and convenience store is located in the southwest quadrant of NC 150 (West Plaza Drive) and MacLeod Drive intersection. According to the UST Section Registry there are four (4) tanks currently in use. This is a new facility and there are no ground water incidents associated with this property. **This site is anticipated to present low geoenvironmental impacts to the project.**



Please note that discovery of additional sites not recorded by regulatory agencies and not reasonably discernible during the project reconnaissance may occur. The GeoEnvironmental Section should be notified immediately after discovery of such sites so their potential impact(s) may be assessed.

If there are questions regarding the geoenvironmental issues, please contact me, at 919-707-6870.

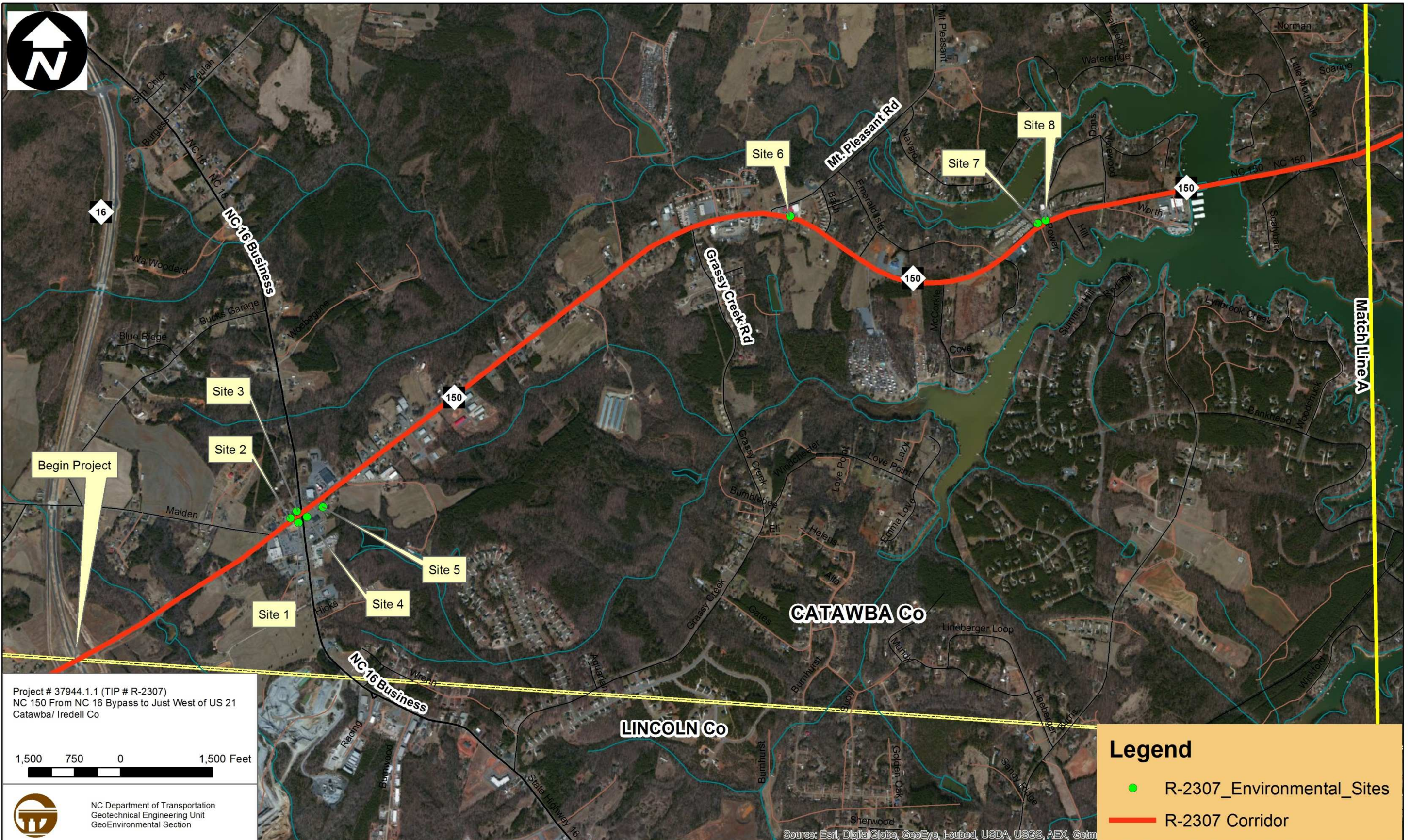


Terry W. Fox, LG  
GeoEnvironmental Project Manager  
GeoEnvironmental Section  
Geotechnical Engineering Unit

cc:

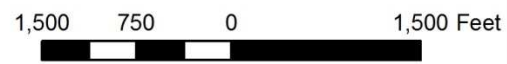
John Pilipchuk, LG, PE, State Geotechnical Engineer  
David Chang, Ph.D, PE, State Hydraulics Engineer  
Charles Brown, PE, PLS, State Locations and Surveys Engineer  
Tom Koch, PE, Assistant State Structures Engineer  
Glenn Mumford, PE, State Roadway Design Engineer  
Brian Skeens, PE, Area Roadway Construction Engineer  
Larry Carpenter, PE, Area Bridge Construction Engineer  
David Angel, Division 12 Right of Way Agent  
Eric Williams, PE, Geotechnical Regional Manager  
Clint Little, LG, Regional Geological Engineer  
Dennis Li, Ph. D, LG, Production Support Supervisor  
Terry Niles, ROW Unit, Property Management, Real Property Coordinator  
Row-notify@ncdot.gov  
File

Map 1 of 3  
 Appendix A  
 Location of USTs, Landfills, & Other Potentially Contaminated Sites



Begin Project

Project # 37944.1.1 (TIP # R-2307)  
 NC 150 From NC 16 Bypass to Just West of US 21  
 Catawba/ Iredell Co



NC Department of Transportation  
 Geotechnical Engineering Unit  
 GeoEnvironmental Section

**Legend**

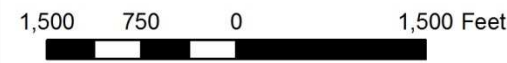
- R-2307\_Environmental\_Sites
- R-2307 Corridor

Source: Esri, DigitalGlobe, GeoEye, Irbid, USDA, USGS, AEX, Catm

Map 2 of 3  
 Appendix A  
 Location of USTs, Landfills, & Other Potentially Contaminated Sites



Project # 37944.1.1 (TIP # R-2307)  
 NC 150 From NC 16 Bypass to Just West of US 21  
 Catawba/ Iredell Co



NC Department of Transportation  
 Geotechnical Engineering Unit  
 GeoEnvironmental Section

**Legend**

- R-2307\_Environmental\_Sites
- R-2307 Corridor

Source: Esri, DigitalGlobe, GeoEye, I-cubed, USDA, USGS, AEX, Geom



Project # 37944.1.1 (TIP # R-2307)  
NC 150 From NC 16 Bypass to Just West of US 21  
Catawba/ Iredell Co

1,500 750 0 1,500 Feet

NC Department of Transportation  
Geotechnical Engineering Unit  
GeoEnvironmental Section

**Legend**

- R-2307\_Environmental\_Sites
- R-2307 Corridor

Source: Esri, DigitalGlobe, GeoEye, Earthstar, USDA, USGS, AEX, Getm



December 13, 2022

Mr. Ashley Cox, Jr., LG  
Geotechnical Engineering Unit  
North Carolina Department of Transportation  
1020 Birch Ridge Drive  
Raleigh, NC 27610

**RE: PHASE II GEOPHYSICAL INVESTIGATION OF PARCEL 206  
Sam's Investments LLC  
391 NC 150 (West Plaza Drive), Mooresville, NC  
ESP Project No. IS14.331**

TIP Number: R-2307B  
WBS Number: 37944.1.FR5  
County: IREDELL  
Description: NC 150 from SR 1840 (Greenwood Road) in Catawba County to US 21 in Iredell County

Dear Mr. Cox:

ESP Associates, Inc. (ESP) is pleased to submit this report on our GeoEnvironmental Phase II Geophysical Investigation of the subject parcel. This work was performed in accordance with your Request for Proposal dated November 2, 2022 and our Cost Proposal dated November 8, 2022.

We appreciate the opportunity to assist you during this phase of the project. If you should have any questions concerning this report, or if we may be of further assistance, please contact us.

Sincerely,

ESP Associates, Inc.

A handwritten signature in blue ink, appearing to read "Edward D. Billington".

Edward D. Billington, PG  
Senior Managing Geologist/Geophysicist  
CRP/EDB/PMW



not considered Final unless all signatures are completed

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Appendix A	Relevant NCDEQ Information
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## 1.0 INTRODUCTION

The NCDOT is planning to improve traffic flow and reduce traffic congestion on 15 miles of N.C. 150 from the N.C. 16 Bypass in Catawba County to just west of the U.S. 21/N.C. 150 interchange in Mooresville, Iredell County. This proposed work would involve widening the mostly two-lane highway to multiple lanes as well as improvements to the I-77/N.C. 150 interchange in Mooresville. The NCDOT requested that ESP Associates, Inc. (ESP) perform a geophysical investigation of Parcel 206 to locate possible storage tanks (USTs) and groundwater monitoring wells. Parcel 206 is located at 391 NC 150 (West Plaza Drive) at the southeast corner of the intersection of NC 150 and I-77 Northbound Off Ramp (Figure 1).

## 2.0 BACKGROUND INFORMATION

According to the 2014 Geoenvironmental Report for Planning (Phase I Report), Parcel 206 (Phase I Site 28) was a Shell gas station and convenience store (now abandoned) with three USTs currently on site and four USTs removed between 1988 and 1990. There are no known UST incidences associated with this site. This site was anticipated to present low geoenvironmental impacts to the project.

We checked the following online sources with the results summarized below:

- NCDEQ Registered Tank Database
  - The Facility name is listed as Sam's Mart 109 with Facility ID number 00-0-0000010641. The Registered Tanks Database indicated 4 USTs have been removed and 3 USTs are currently active but temporarily closed for this site:

Tank ID	Type	Volume, gallons	Year Installed	Year Removed
-	Gasoline	10,000	May 5, 1971	July 31, 1990
-	Gasoline	10,000	May 5, 1971	July 31, 1990
-	Oil, New/Used/Mix	550	May 5, 1971	June 1, 1983
-	Gasoline	6,000	May 5, 1971	July 31, 1990
UST-1	Diesel	10,000	September 7, 1990	Temporarily Closed
UST-2	Gasoline	10,000	September 7, 1990	Temporarily Closed
UST-3	Gasoline	10,000	September 7, 1990	Temporarily Closed

- North Carolina Department of Environmental Quality (NCDEQ) Division of Waste Management Site Locator Tool
  - **UST-8 Form:** On October 18, 2019, the form stated the three active USTs were temporarily closed as of October 17, 2019, which currently remains in effect.

- In addition, online documentation provided a site map from February 26, 2016 showing an above-ground storage tank (AST) located just east of the building in the rear of the lot (Appendix A1). There was no information provided for the AST in the NCDEQ files. Based on Google Earth historical imagery, the AST appears to have been removed between August 2019 and January 2021.
- NCDEQ UST Databases
  - Nothing found for this site.
- Iredell County GIS
  - Property owner is listed as Sam's Commercial Properties, LLC (formerly Sam's Investments, LLC).

### **3.0 SITE OBSERVATIONS**

During our December 2022 field work, the site was occupied by a vacant gas station (Figure 2). Four remnant pump islands, three sets of fill ports and manholes south of the remnant pump islands, and three vent pipes were observed on the east side of the property. The ground surface was covered by asphalt pavement, concrete pavement, grass, and utility construction materials, such as new telephone pole timbers and large spools of guy wire. No evidence of monitoring wells was observed on site.

### **4.0 GEOPHYSICAL DATA COLLECTION**

ESP geophysicist Ryan Pastrana, PG performed a geophysical study on December 1, 2022 that consisted of metal detection using a Geonics EM61 MK2 instrument (EM61) with a line spacing of approximately three feet. The EM61 data were reviewed in the field and ground-penetrating radar (GPR) data was collected over selected EM61 anomalies (Figures 3 and 4). Approximate locations of the EM61 data and relevant site features were obtained using a Geode differential GPS (DGPS) instrument connected to a MESA field computer. The GPR data were collected using our Sensors and Software Noggin 250 GPR system with a line spacing of one to two feet.

The EM61 early time gate response and differential response are shown on the plan sheet on Figures 6 and 7, respectively. The plan sheet data were provided by the NCDOT on December 5, 2022 and include the 75 percent design plans.

### **5.0 RESULTS**

The EM61 early time gate data show the response from both shallow and deeper metallic objects (Figure 3). The differential response reduces the effect of shallow anomalies and emphasizes anomalies from larger and more deeply buried metallic objects, such as USTs (Figure 4). Our



evaluation of the EM61 data indicated several anomalies around the building and in the canopy area that could not be attributed to known cultural features. GPR data collected over these anomalies indicated that they were caused by steel reinforcement in concrete pavement, buried utilities, and 3 known USTs designated UST-1, UST-2, and UST-3. Example GPR data collected over the 3 known USTs are shown on Figure 5.

The known USTs are located near the southeast corner of the site outside of the proposed ROW and easements. They are buried approximately 5 feet below ground surface (bgs) with an approximate diameter of 8 feet and an approximate length of 26 feet, corresponding to the recorded volume of 10,000 gallons each.

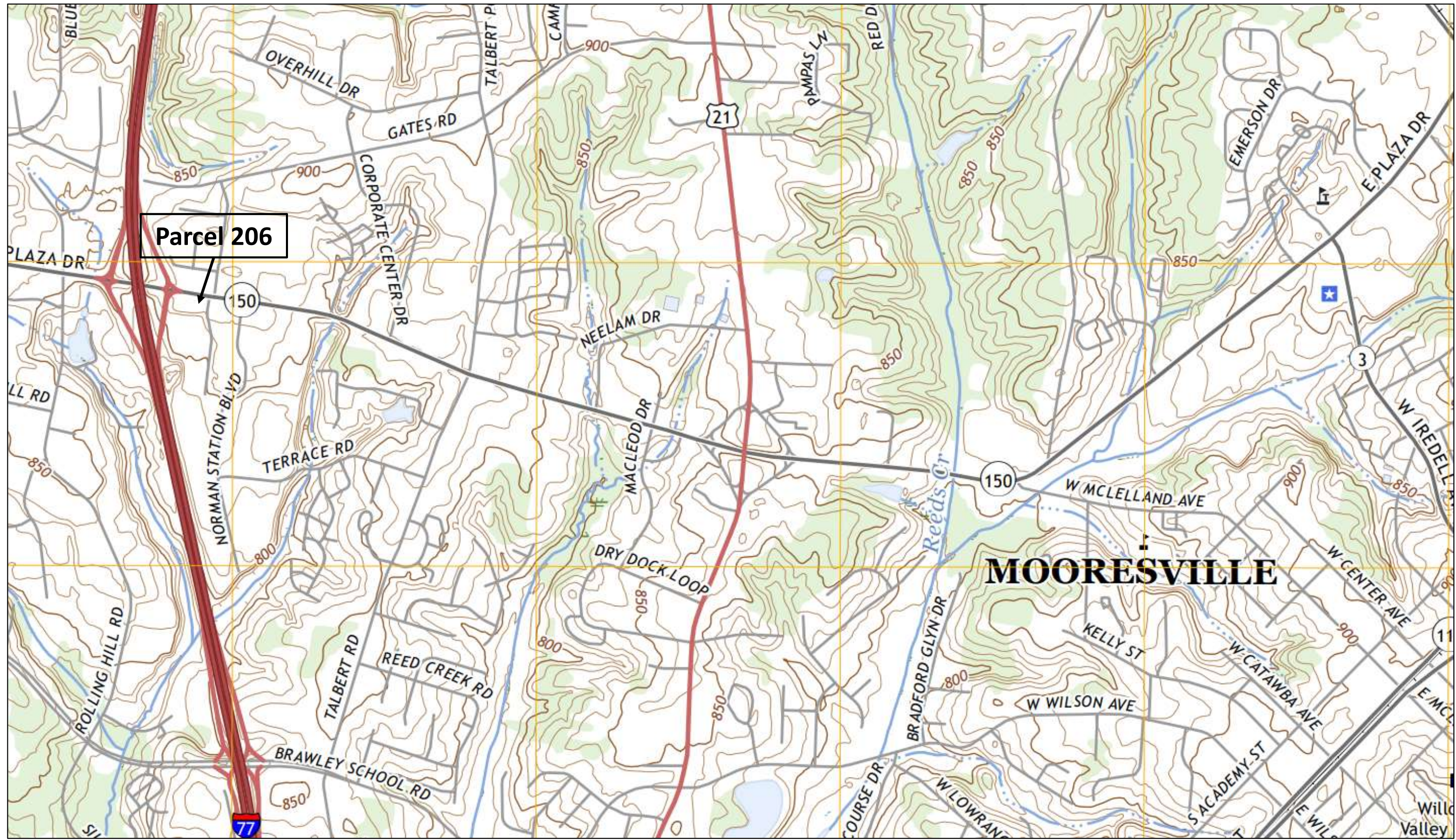
## **6.0 CONCLUSIONS**

The geophysical data indicated the presence of 3 known USTs on Parcel 206 located near the southeast corner of the parcel outside the proposed ROW and easements. The 3 known USTs are buried approximately 5 feet bgs with an estimated volume of 10,000 gallons each. No evidence was seen for monitoring wells or additional abandoned USTs.

## **7.0 LIMITATIONS**

ESP's professional services have been provided in accordance with generally accepted guidelines for performing geophysical surveys. It is recognized that the results of geophysical surveys are non-unique, subject to interpretation, and limited by the specific equipment, methodology, and site conditions. It is possible that not all subsurface features of interest have been identified by this work. The passage of time may result in a change in the conditions at this site. ESP does not warrant against future operations or conditions, or against operations or conditions present of a type or at a location not included as part of this work.

## FIGURES



From: USGS Topo 7.5 - minute map for MOORESVILLE, NC, Date: 2022, Original Scale: 1:24,000

PROJECT NO.	IS14.331
SCALE	NTS
DATE	12/6/2022
BY	CWA/CRP/EDB

**FIGURE 1 – PARCEL 206, SAM'S INVESTMENTS LLC  
SITE VICINITY MAP**

**NCDOT PROJECT R-2307B  
NC 150 FROM SR 1840 IN CATAWBA CO. TO US 21  
IREDELL COUNTY, NORTH CAROLINA**



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Suite E  
Greensboro, NC 27409  
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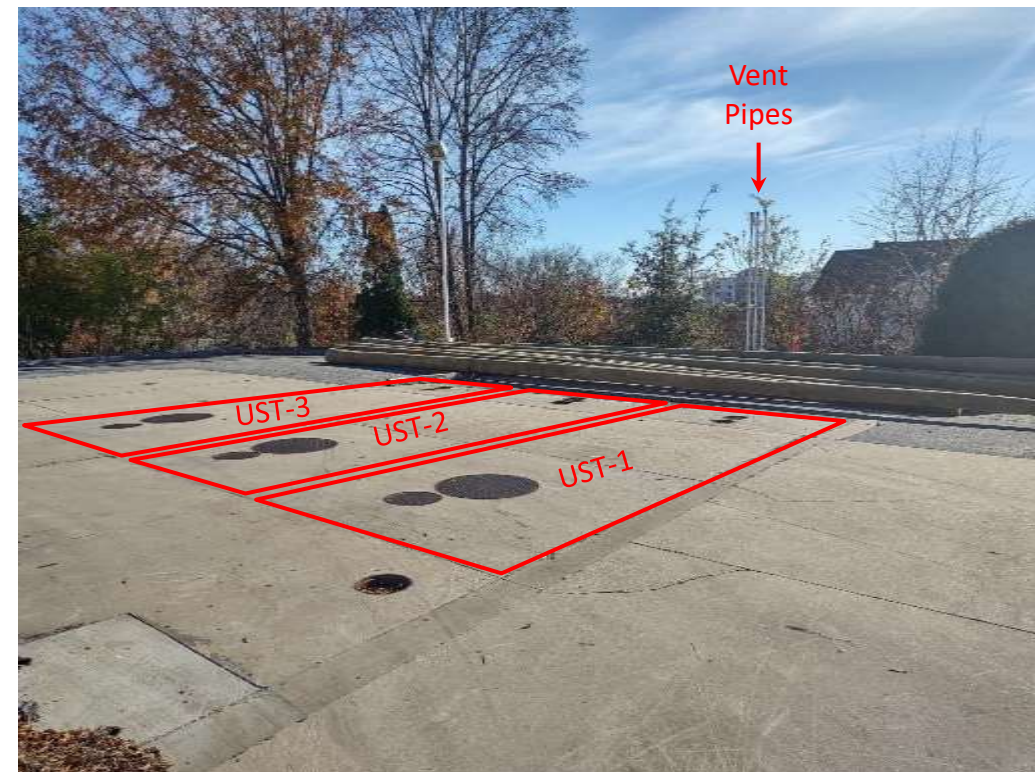
A. Photograph of the center of the site, facing southeast.



B. Photograph of the west side of the site, facing south.



C. Photograph of the east side of site showing UST basin and remnant pump islands, facing west.



D. Photograph of three known USTs (red) located on the southeast side of the site, facing southeast.

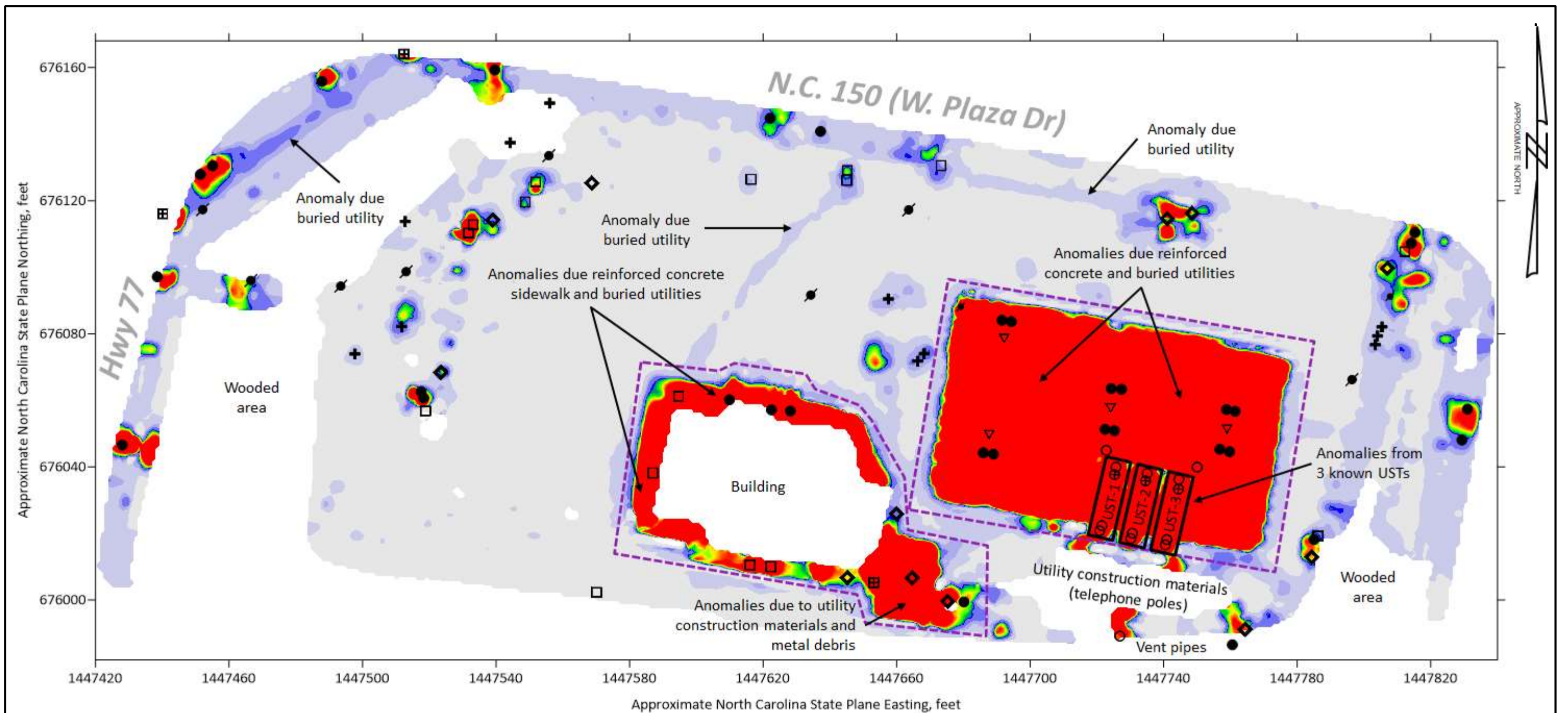
PROJECT NO.	IS14.331
SCALE	N/A
DATE	12/6/2022
BY	CWA/CRP/EDB

**FIGURE 2 – PARCEL 206, SAM'S INVESTMENTS LLC  
SITE PHOTOGRAPHS**

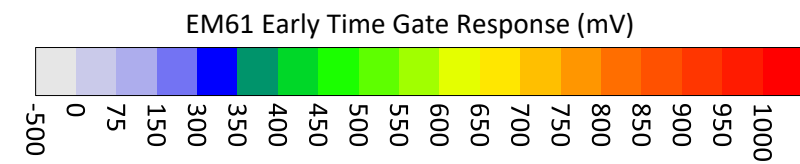
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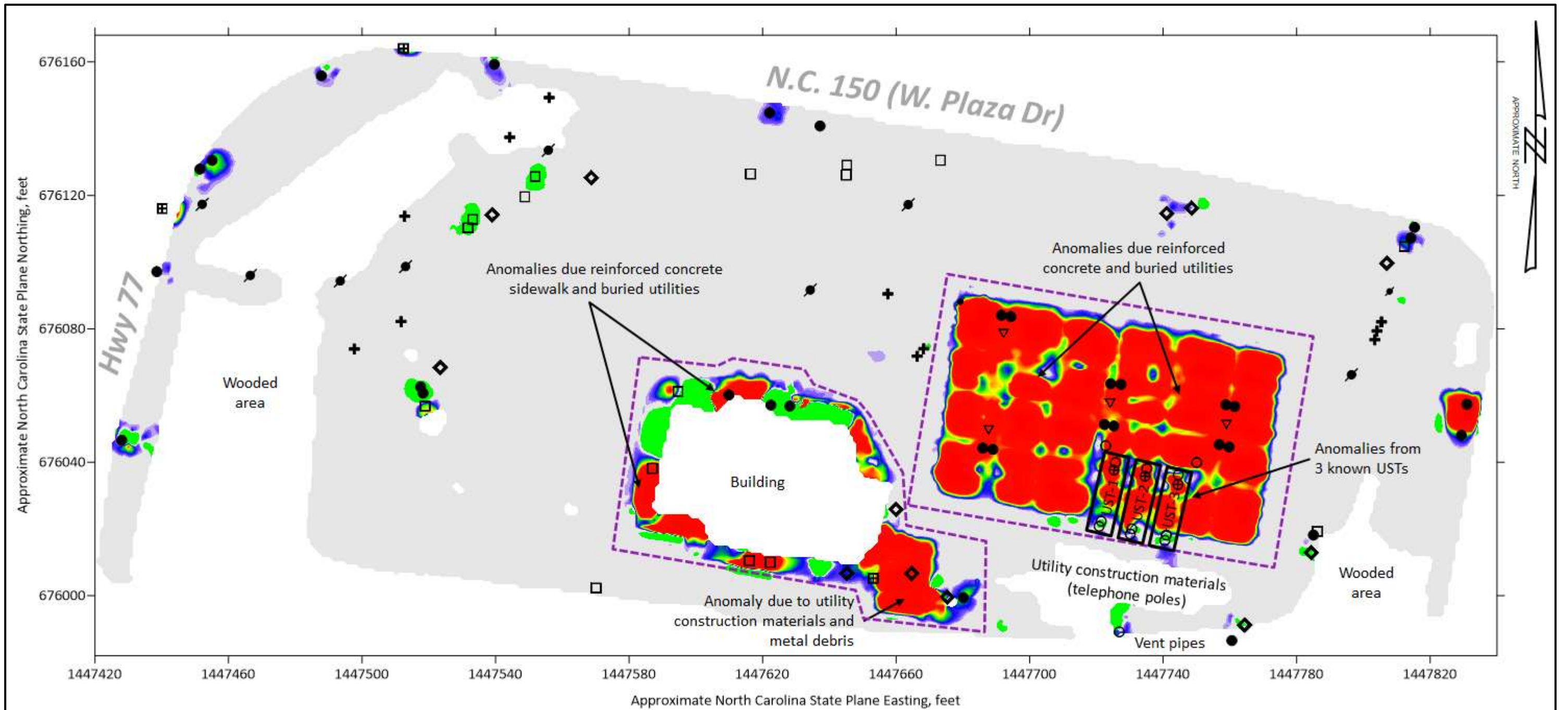


EXPLANATION	
◆ Miscellaneous metal object (pipe, debris, etc.)	○ UST Fill Port or Valve Cover
□ Utility Box (water meter, electrical outlet, etc.)	⊕ Monitoring Well
⊞ Drop Inlet or Catch Basin	- - Buried utility line (marked by others)
⊕ Manhole Cover	■ EM61 Data Collection Areas
● Culvert, storm drain pipe	▭ GPR Data Collection Areas
● Utility pole	▭ Underground Storage Tank
+ Guy wire anchor	▽ Remnant Pump Island
● Sign pole, other pole	

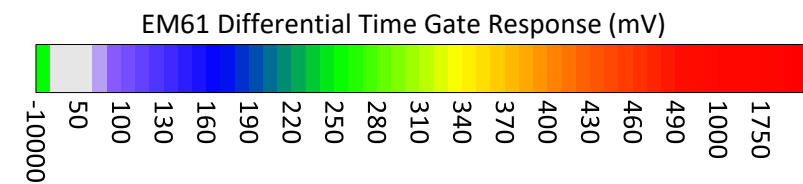


Note: Locations of data and features are approximate and were collected using a DGPS instrument. ESP makes no guarantees as to the accuracy of these locations. Coordinates on the axes of the maps are approximate and provided for general reference only.

PROJECT NO. IS14.331	<b>FIGURE 3 – PARCEL 206, SAM'S INVESTMENTS LLC</b> <b>EM61 EARLY TIME GATE DATA</b>		ESP Associates, Inc.
SCALE AS SHOWN			7011 Albert Pick Rd., Suite E Greensboro, NC 27409
DATE 12/6/2022	<b>NCDOT PROJECT R-2307B</b> <b>NC 150 FROM SR 1840 IN CATAWBA CO. TO US 21</b> <b>IREDELL COUNTY, NORTH CAROLINA</b>		336.334.7724
BY CWA/CRP/EDB			www.espassociates.com



EXPLANATION	
◆ Miscellaneous metal object (pipe, debris, etc.)	○ UST Fill Port or Valve Cover
□ Utility Box (water meter, electrical outlet, etc.)	⊕ Monitoring Well
⊞ Drop Inlet or Catch Basin	- - Buried utility line (marked by others)
⊕ Manhole Cover	■ EM61 Data Collection Areas
● Culvert, storm drain pipe	□ GPR Data Collection Areas
● Utility pole	□ Underground Storage Tank
+ Guy wire anchor	▽ Remnant Pump Island
● Sign pole, other pole	



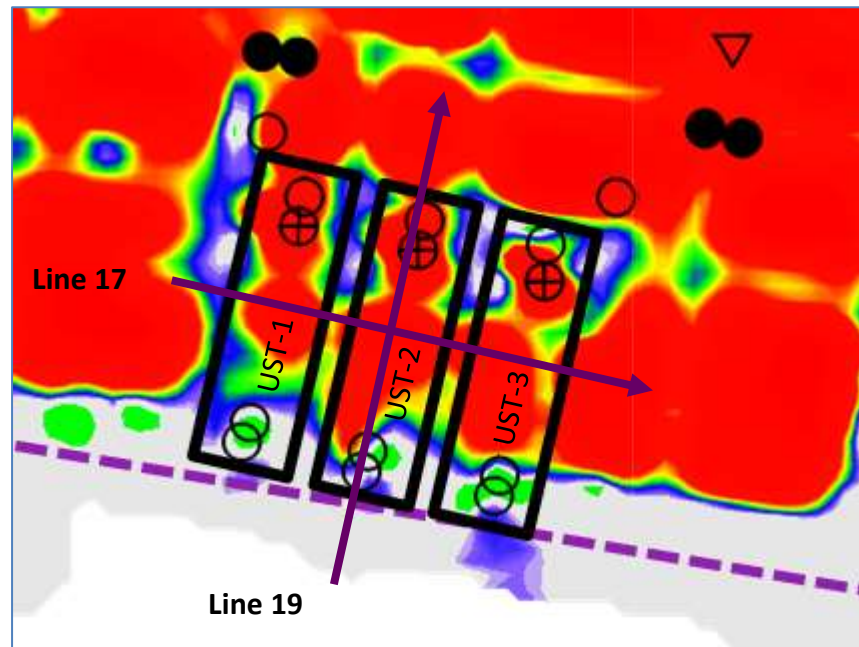
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PROJECT NO.	IS14.331
SCALE	AS SHOWN
DATE	12/6/2022
BY	CWA/CRP/EDB

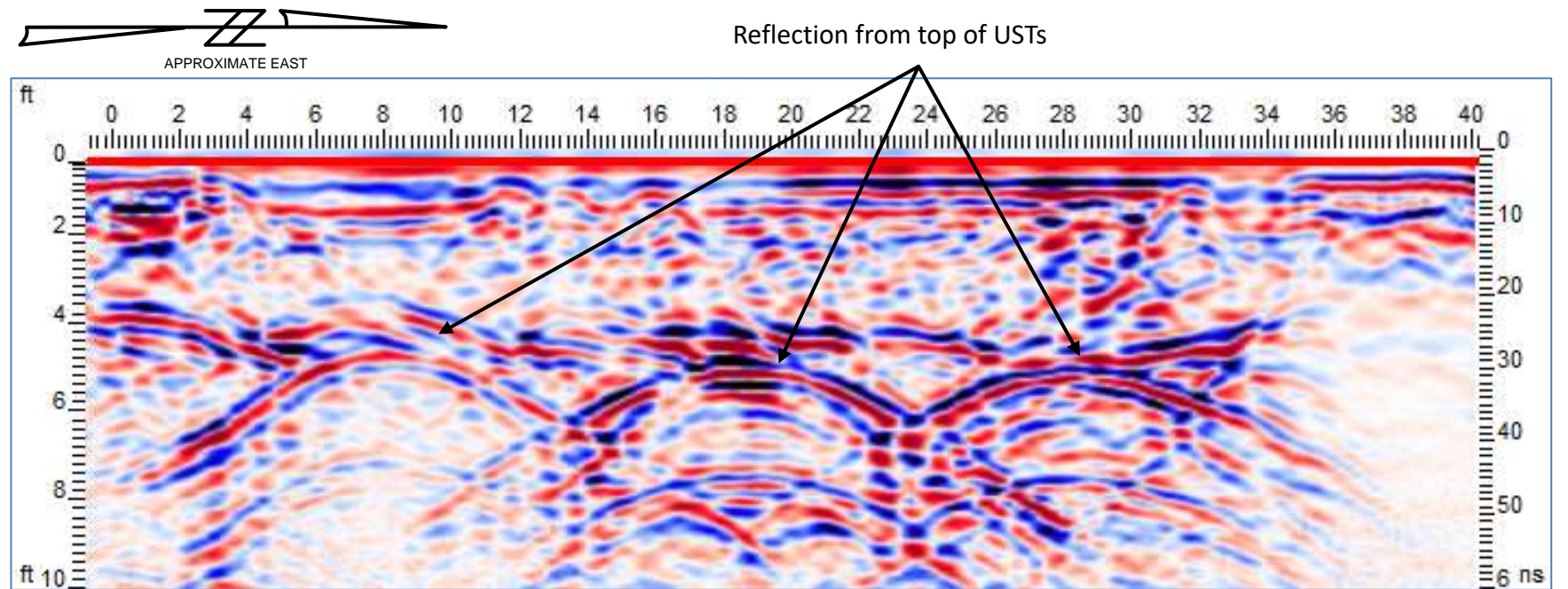
**FIGURE 4 – PARCEL 206, SAM'S INVESTMENTS LLC**  
**EM61 DIFFERENTIAL DATA**  
**NCDOT PROJECT R-2307B**  
**NC 150 FROM SR 1840 IN CATAWBA CO. TO US 21**  
**IREDELL COUNTY, NORTH CAROLINA**



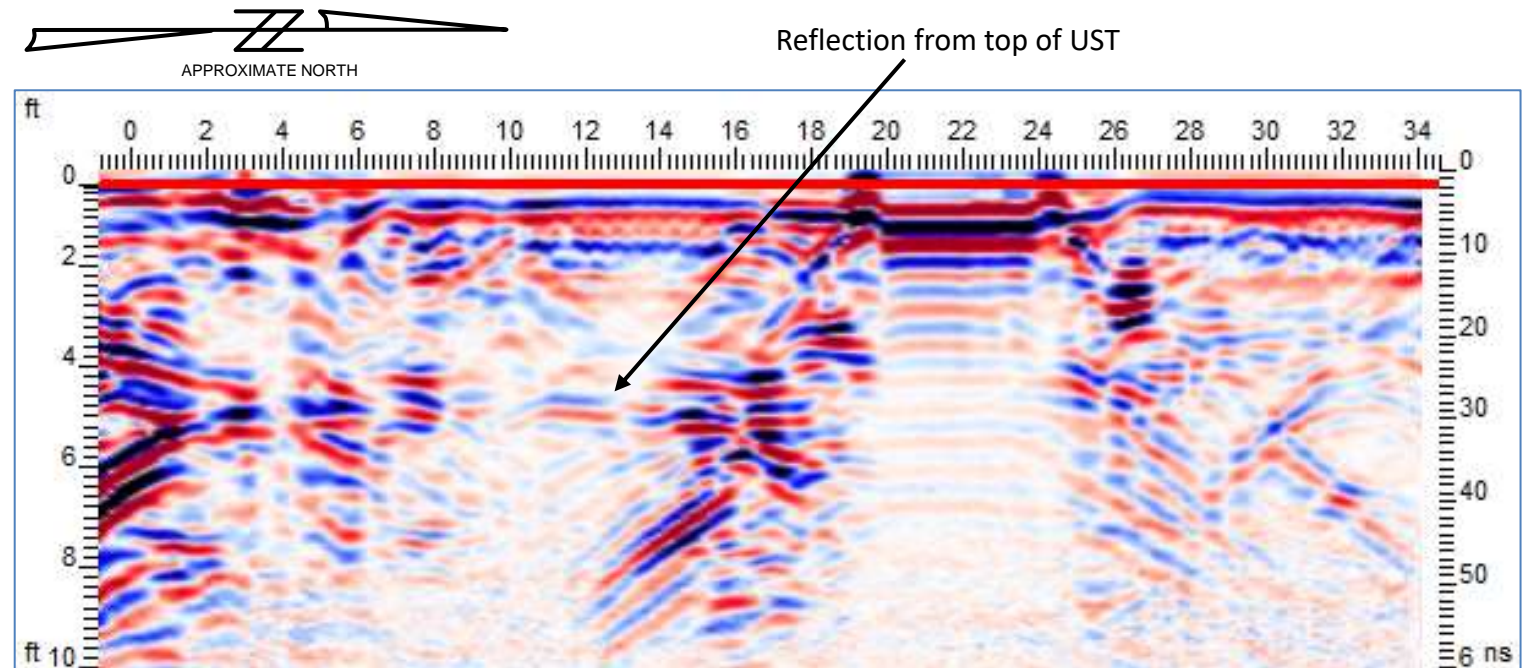
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A. Approximate location of example GPR lines over known USTs 1, 2, & 3 located in the southeast corner of the parcel.



B. Example GPR Line 17 short axes of known USTs 1, 2, & 3.



C. Example GPR Line 19 over long axis of UST-2. Reflection from USTs was partially blocked by steel plates on surface and reinforcement in the concrete.

Note: Locations of data and features are approximate and were collected using a DGPS instrument. ESP makes no guarantees as to the accuracy of these locations. Coordinates on the axes of the maps are approximate and provided for general reference only.

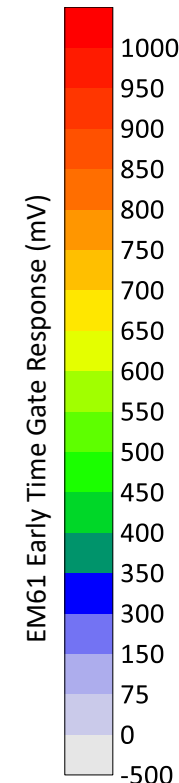
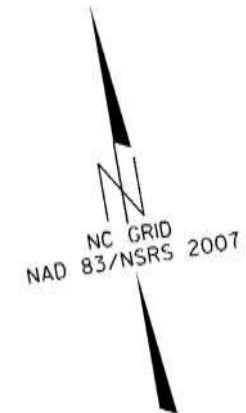
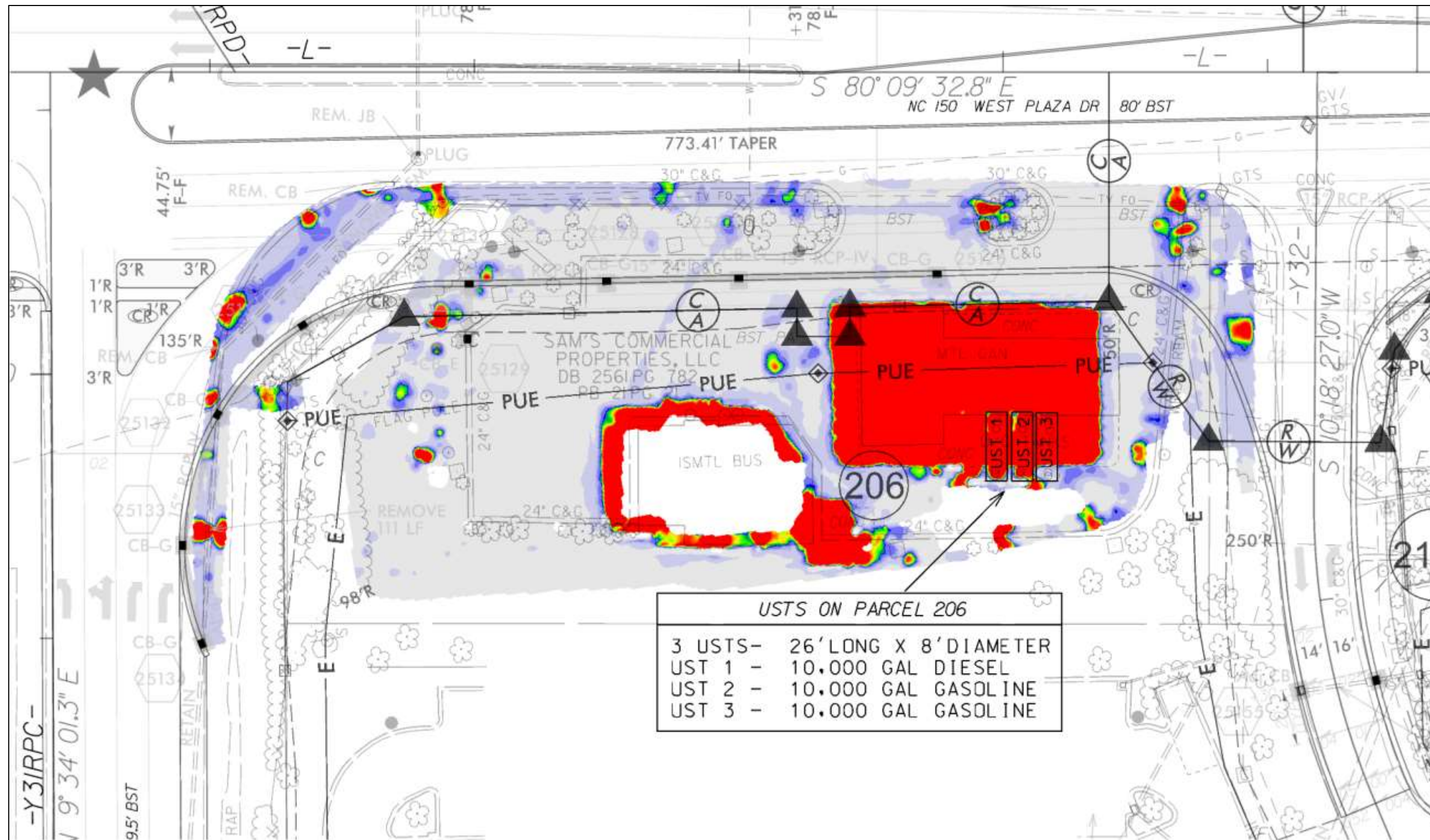
PROJECT NO.	IS14.331
SCALE	AS SHOWN
DATE	12/6/2022
BY	CWA/CRP/EDB

**FIGURE 5 – PARCEL 206, SAM'S INVESTMENTS LLC  
GPR IMAGES OF THREE KNOWN USTs**

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USTS ON PARCEL 206	
3 USTS-	26' LONG X 8' DIAMETER
UST 1 -	10,000 GAL DIESEL
UST 2 -	10,000 GAL GASOLINE
UST 3 -	10,000 GAL GASOLINE

Note: Drawing shows 75% design plans. See Figure 8 for explanation of symbols and line types.

- R2307B\_Geo\_env.dgn
- r2307b\_ncdot\_fs.dgn
- R-2307B\_HYD\_DRN.dgn
- R-2307B\_RDY\_ALN.dgn
- R-2307B\_RDY\_DSN.dgn, Default
- R-2307B\_RDY\_DSN\_Intersections.dgn
- R-2307B\_RDY\_ROW.dgn, Default
- R-2307B\_RDY\_SS.dgn



Note: Locations of geophysical data and USTs are approximate and were collected using a DGPS instrument. ESP makes no guarantees as to the accuracy of these locations.

PROJECT NO.	IS14.331
SCALE	1" = 40'
DATE	12/6/2022
BY	CWA/CRP/EDB

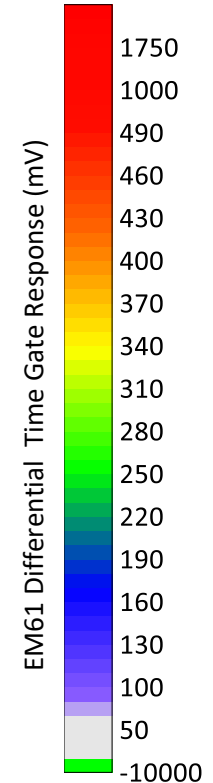
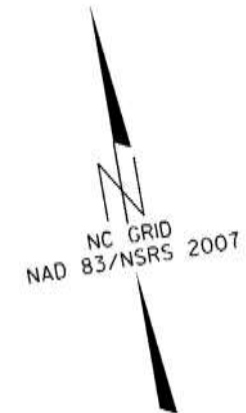
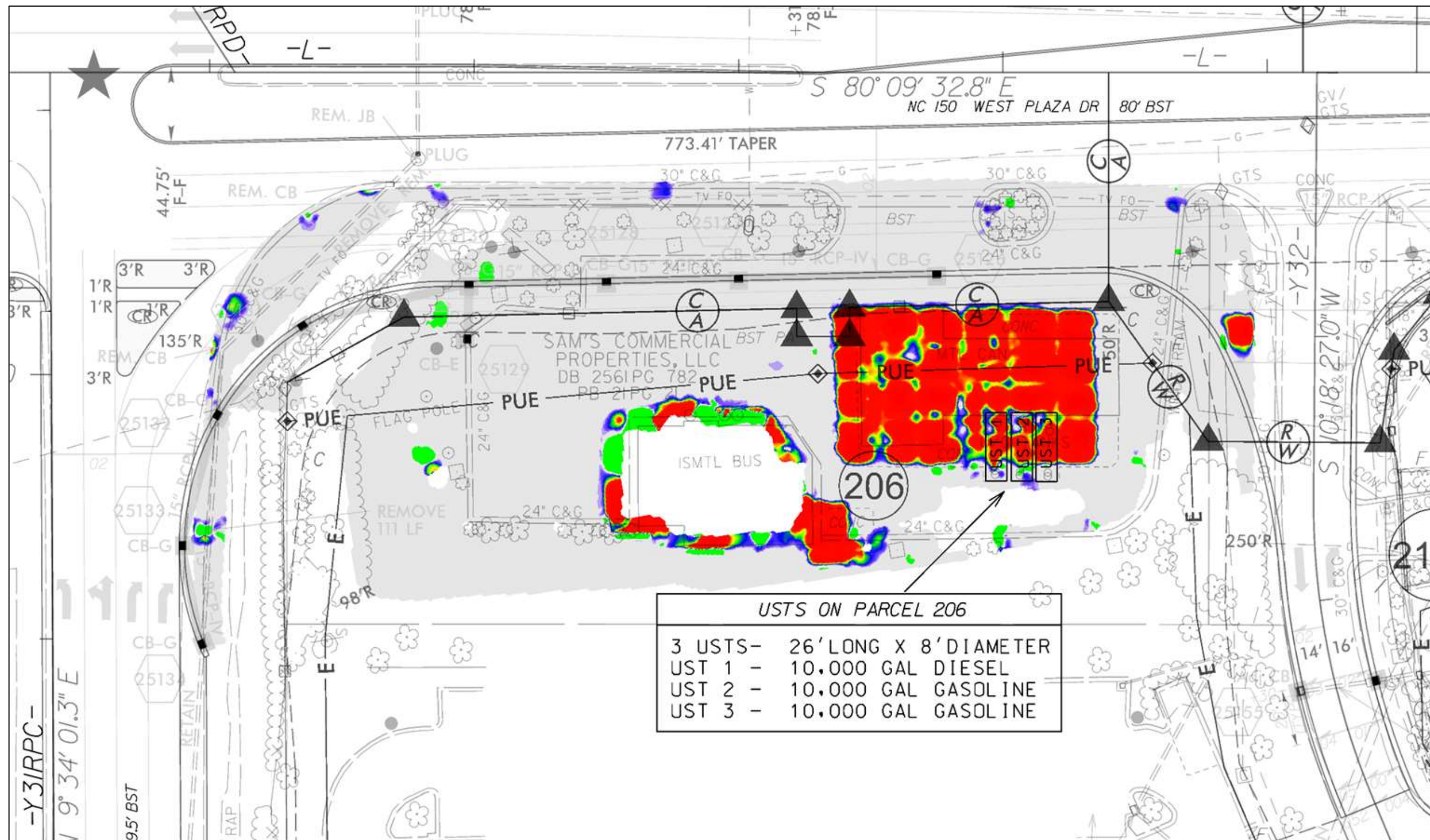
**FIGURE 6 – PARCEL 206, SAM'S INVESTMENTS LLC**  
**EM61 EARLY TIME GATE DATA ON PLAN SHEET**

**NCDOT PROJECT R-2307B**  
**NC 150 FROM SR 1840 IN CATAWBA CO. TO US 21**  
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USTS ON PARCEL 206	
3 USTS -	26' LONG X 8' DIAMETER
UST 1 -	10,000 GAL DIESEL
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Note: Drawing shows 75% design plans. See Figure 8 for explanation of symbols and line types.

- ☑ R2307B\_Geo\_env.dgn
- ☑ r2307b\_ncdot\_fs.dgn
- ☑ R-2307B\_HYD\_DRN.dgn
- ☑ R-2307B\_RDY\_ALN.dgn
- ☑ R-2307B\_RDY\_DSN.dgn, Default
- ☑ R-2307B\_RDY\_DSN\_Intersections.dgn
- ☑ R-2307B\_RDY\_ROW.dgn, Default
- ☑ R-2307B\_RDY\_SS.dgn



Note: Locations of geophysical data and USTs are approximate and were collected using a DGPS instrument. ESP makes no guarantees as to the accuracy of these locations.

PROJECT NO.	IS14.331
SCALE	1" = 40'
DATE	12/6/2022
BY	CWA/CRP/EDB

**FIGURE 7 – PARCEL 206, SAM'S INVESTMENTS LLC**  
**EM61 DIFFERENTIAL DATA ON PLAN SHEET**  
 NCDOT PROJECT R-2307B  
 NC 150 FROM SR 1840 IN CATAWBA CO. TO US 21  
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9/19/2022

# STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS CONVENTIONAL PLAN SHEET SYMBOLS

PROJECT REFERENCE NO.	SHEET NO.
-----------------------	-----------

Note: Not to Scale

### BOUNDARIES AND PROPERTY:

State Line	-----
County Line	-----
Township Line	-----
City Line	-----
Reservation Line	-----
Property Line	-----
Existing Iron Pin (EIP)	○
Computed Property Corner	X
Existing Concrete Monument (ECM)	□
Parcel/Sequence Number	②
Existing Fence Line	-x-x-x-
Proposed Woven Wire Fence	-o-o-o-
Proposed Chain Link Fence	-s-s-s-
Proposed Barbed Wire Fence	->->->-
Existing Wetland Boundary	-w-w-w-
Proposed Wetland Boundary	-w-w-w-
Existing Endangered Animal Boundary	-a-a-a-
Existing Endangered Plant Boundary	-p-p-p-
Existing Historic Property Boundary	-h-h-h-
Known Contamination Area: Soil	-s-s-s-
Potential Contamination Area: Soil	-s-s-s-
Known Contamination Area: Water	-w-w-w-
Potential Contamination Area: Water	-w-w-w-
Contaminated Site: Known or Potential	☠

### BUILDINGS AND OTHER CULTURE:

Gas Pump Vent or U/G Tank Cap	○
Sign	□
Well	⊕
Small Mine	⋈
Foundation	▭
Area Outline	▭
Cemetery	⊕
Building	▭
School	▭
Church	⊕
Dam	▭

### HYDROLOGY:

Stream or Body of Water	-----
Hydro, Pool or Reservoir	-----
Jurisdictional Stream	JS
Buffer Zone 1	BZ 1
Buffer Zone 2	BZ 2
Flow Arrow	→
Disappearing Stream	-----
Spring	○
Wetland	-w-w-w-
Proposed Lateral, Tail, Head Ditch	-----
False Sump	▽

### RAILROADS:

Standard Gauge	-----
RR Signal Milepost	○
Switch	□
RR Abandoned	-----
RR Dismantled	-----

### RIGHT OF WAY & PROJECT CONTROL:

Primary Horiz Control Point	○
Primary Horiz and Vert Control Point	●
Secondary Horiz and Vert Control Point	◆
Vertical Benchmark	⊕
Existing Right of Way Monument	△
Proposed Right of Way Monument (Rebar and Cap)	▲
Proposed Right of Way Monument (Concrete)	⊕
Existing Permanent Easement Monument	◇
Proposed Permanent Easement Monument (Rebar and Cap)	◆
Existing C/A Monument	△
Proposed C/A Monument (Rebar and Cap)	▲
Proposed C/A Monument (Concrete)	⊕
Existing Right of Way Line	-----
Proposed Right of Way Line	-----
Existing Control of Access Line	-----
Proposed Control of Access Line	-----
Proposed ROW and CA Line	-----
Existing Easement Line	-----
Proposed Temporary Construction Easement	-----
Proposed Temporary Drainage Easement	-----
Proposed Permanent Drainage Easement	-----
Proposed Permanent Drainage/Utility Easement	-----
Proposed Permanent Utility Easement	-----
Proposed Temporary Utility Easement	-----
Proposed Aerial Utility Easement	-----

### ROADS AND RELATED FEATURES:

Existing Edge of Pavement	-----
Existing Curb	-----
Proposed Slope Stakes Cut	-----
Proposed Slope Stakes Fill	-----
Proposed Curb Ramp	CR
Existing Metal Guardrail	-----
Proposed Guardrail	-----
Existing Cable Guiderail	-----
Proposed Cable Guiderail	-----
Equality Symbol	⊕
Pavement Removal	XXXX

### VEGETATION:

Single Tree	○
Single Shrub	○
Hedge	-----

Woods Line	-----
Orchard	-----
Vineyard	-----

### EXISTING STRUCTURES:

MAJOR:	
Bridge, Tunnel or Box Culvert	-----
Bridge Wing Wall, Head Wall and End Wall	-----
MINOR:	
Head and End Wall	-----
Pipe Culvert	-----
Footbridge	-----
Drainage Box: Catch Basin, DI or JB	CB
Paved Ditch Gutter	-----
Storm Sewer Manhole	⊕
Storm Sewer	-----

### UTILITIES:

\* SUE - Subsurface Utility Engineering  
LOS - Level of Service - A,B,C or D (Accuracy)

POWER:	
Existing Power Pole	●
Proposed Power Pole	○
Existing Joint Use Pole	●
Proposed Joint Use Pole	○
Power Manhole	⊕
Power Line Tower	⊕
Power Transformer	⊕
U/G Power Cable Hand Hole	⊕
H-Frame Pole	●
U/G Power Line Test Hole (SUE - LOS A)*	⊕
U/G Power Line (SUE - LOS B)*	-----
U/G Power Line (SUE - LOS C)*	-----
U/G Power Line (SUE - LOS D)*	-----

### TELEPHONE:

Existing Telephone Pole	●
Proposed Telephone Pole	○
Telephone Manhole	⊕
Telephone Pedestal	⊕
Telephone Cell Tower	⊕
U/G Telephone Cable Hand Hole	⊕
U/G Telephone Test Hole (SUE - LOS A)*	⊕
U/G Telephone Cable (SUE - LOS B)*	-----
U/G Telephone Cable (SUE - LOS C)*	-----
U/G Telephone Cable (SUE - LOS D)*	-----
U/G Telephone Conduit (SUE - LOS B)*	-----
U/G Telephone Conduit (SUE - LOS C)*	-----
U/G Telephone Conduit (SUE - LOS D)*	-----
U/G Fiber Optics Cable (SUE - LOS B)*	-----
U/G Fiber Optics Cable (SUE - LOS C)*	-----
U/G Fiber Optics Cable (SUE - LOS D)*	-----

### WATER:

Water Manhole	⊕
Water Meter	○
Water Valve	⊕
Water Hydrant	⊕
U/G Water Line Test Hole (SUE - LOS A)*	⊕
U/G Water Line (SUE - LOS B)*	-----
U/G Water Line (SUE - LOS C)*	-----
U/G Water Line (SUE - LOS D)*	-----
Above Ground Water Line	A/G Water

### TV:

TV Pedestal	⊕
TV Tower	⊕
U/G TV Cable Hand Hole	⊕
U/G TV Test Hole (SUE - LOS A)*	⊕
U/G TV Cable (SUE - LOS B)*	-----
U/G TV Cable (SUE - LOS C)*	-----
U/G TV Cable (SUE - LOS D)*	-----
U/G Fiber Optic Cable (SUE - LOS B)*	-----
U/G Fiber Optic Cable (SUE - LOS C)*	-----
U/G Fiber Optic Cable (SUE - LOS D)*	-----

### GAS:

Gas Valve	⊕
Gas Meter	⊕
U/G Gas Line Test Hole (SUE - LOS A)*	⊕
U/G Gas Line (SUE - LOS B)*	-----
U/G Gas Line (SUE - LOS C)*	-----
U/G Gas Line (SUE - LOS D)*	-----
Above Ground Gas Line	A/G Gas

### SANITARY SEWER:

Sanitary Sewer Manhole	⊕
Sanitary Sewer Cleanout	⊕
U/G Sanitary Sewer Line	SS
Above Ground Sanitary Sewer	A/G Sanitary Sewer
SS Force Main Line Test Hole (SUE - LOS A)*	⊕
SS Force Main Line (SUE - LOS B)*	-----
SS Force Main Line (SUE - LOS C)*	-----
SS Force Main Line (SUE - LOS D)*	-----

### MISCELLANEOUS:

Utility Pole	●
Utility Pole with Base	□
Utility Located Object	○
Utility Traffic Signal Box	⊕
Utility Unknown U/G Line (SUE - LOS B)*	-----
U/G Tank; Water, Gas, Oil	⊕
Underground Storage Tank, Approx. Loc.	UST
A/G Tank; Water, Gas, Oil	⊕
Geoenvironmental Boring	⊕
Abandoned According to Utility Records	AATUR
End of Information	E.O.I.

PROJECT NO.	IS14.331
SCALE	N/A
DATE	12/6/2022
BY	CWA/CRP/EDB

**FIGURE 8**  
**LEGEND FOR PLAN SHEET FIGURES**  
**NCDOT PROJECT R-2307B**  
**NC 150 FROM SR 1840 IN CATAWBA CO. TO US 21**  
**IREDELL COUNTY, NORTH CAROLINA**



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**APPENDIX A**  
**RELEVANT NCDEQ INFORMATION**

W Plaza Dr

W Plaza Dr

ATM ATM (Quality Mart)

Shell  
D P R  
D S R

1/2

3/4

5/6

7/8

LSV

Appendix A1  
Site Map from NCDEQ showing AST

Google

Map data ©2016 Google Imagery ©2016 , DigitalGlobe, Orbis Inc