

Preliminary Site Assessment
Mack Brown Property, Parcel #37
Boone, Watauga County, NC

H&H Job No. ROW-148
State Project U-4020
WBS Element # 35015.1.1
May 29, 2008



2923 South Tryon Street
Suite 100
Charlotte, NC 28203
704-586-0007

3334 Hillsborough Street
Raleigh, NC 27607
919-847-4241

**Preliminary Site Assessment Report
Mack Brown Property Parcel #37
Boone, Watauga County, North Carolina
H&H Project ROW-148**

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**Preliminary Site Assessment
Mack Brown Property, Parcel #37
Boone, Watauga County, North Carolina
H&H Project ROW-148**

1.0 Introduction

Hart & Hickman, PC (H&H) has prepared this Preliminary Site Assessment (PSA) documenting assessment activities performed at the Mack Brown property (NC DOT Parcel #37) located at 465 East King Street (US Highway 421) in Boone, Watauga County, North Carolina. This assessment was conducted on behalf of the North Carolina Department of Transportation (NC DOT) in accordance with the scope of work outlined in our February 29, 2008 proposal.

The purpose of this assessment was to determine the presence or absence of impacted soil at the subject property in the proposed construction areas related to the widening of US Highway 421 (State Project U-4020). A site location map is included as Figure 1 and a site map is presented as Figure 2. The NC DOT preliminary plan of the US Highway 421 widening area near the Mack Brown property is included in Appendix A.

Based on information provided by the NC DOT and property neighbors, several businesses operate out of the Mack Brown property including an insurance company and used car dealership. According to an Environmental Data Resources (EDR) report for the site vicinity, the property does not appear on the North Carolina Underground Storage Tank (UST) database, and H&H did not observe surface evidence of current USTs or of a previous UST removal.

2.0 Site Assessment

Soil Assessment Field Activities

H&H mobilized to the Mack Brown property on April 9, 2008 to advance six soil borings (37-1 through 37-6) by direct push technology (DPT). Prior to advancing the soil borings, H&H reviewed a geophysical survey performed by URS Corporation (URS) between March 18 and March 22, 2008. URS utilized ground penetrating radar (GPR) and time domain electromagnetic (TDEM) technology to identify potential geophysical anomalies and potential USTs at the site. The URS results indicated a magnetic anomaly on the southeastern portion of the property as a potential UST;

however, follow-up with GPR did not indicate a UST in this area. URS's report including a site map depicting the results of the GPR and TDEM results is included in Appendix B.

Prior to conducting soil borings, utilities were marked by NC One Call and DOT's contractor, Vaughn and Melton. Borings were also cleared to a depth of five ft by hand auger. H&H utilized Geologic Exploration, Inc. of Statesville, North Carolina to advance soil borings 37-1 through 37-6 by DPT (see Figure 2). To facilitate the selection of soil samples for laboratory analysis, soil from each boring was screened continuously for the presence of volatile organic compounds (VOCs) with an organic vapor analyzer (OVA). Additionally, H&H observed the soil for visual and olfactory indications of petroleum impacts. In general, a soil sample from each boring that exhibited the highest reading on the OVA was selected for laboratory analysis. Soil boring logs are included in Appendix C.

H&H submitted six samples (37-1 @ 10-12 ft; 37-2 @ 2-5 ft; 37-3 @ 10-12 ft; 37-4 @ 0-2 ft; 37-5 @ 5-7 ft; and 37-6 @ 5-7 ft) for laboratory analysis. Soil samples are identified by the NC DOT Parcel number, soil boring, and the depth interval in ft. Samples were sent to Prism Laboratories Inc. of Charlotte, North Carolina under standard chain-of-custody procedure for analysis of total petroleum hydrocarbons (TPH) for gasoline-range organics (GRO) and diesel-range organics (DRO) by EPA Method 8015B. Sample depths and analytical results are summarized in Table 1. Laboratory analytical data sheets for Parcel 37 soil samples and chain-of-custody documentation for this site are provided in Appendix D. The chain-of-custody form includes samples collected from other nearby parcels. The analytical results are discussed below.

3.0 Analytical Results

Target analytes were detected in the soil samples collected from Parcel 37. Low concentrations of TPH DRO (up to 230 mg/kg) were detected in all six soil samples analyzed. The TPH DRO concentrations exceed the NC DENR Action Level of 10 mg/kg. TPH GRO concentrations were not detected.

Based on laboratory analytical results and OVA readings, widespread low level TPH DRO concentrations are situated on Parcel 37 between the existing northern curb of East King Street and

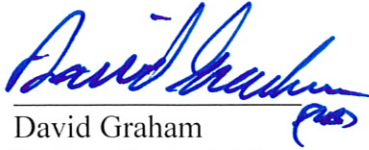
the proposed utility easement line. H&H estimates that there are a total of 2,500 cubic yards (3,500 tons) of impacted soil between the soil surface and 12 ft at Parcel 37. Impacted soil may also be present at depths greater than 12 ft. Impacted soil is present between the existing northern curb of East King Street and the proposed utility easement line. DOT plans indicate a proposed fill of approximately 2 ft in this area. Because this is a fill area, most of the impacted soil will not likely be disturbed. Impacted soil will be generated by installation of the proposed catch basin on the southeastern corner of the property, any soil grading work below the existing grade, and during any utility line installations. Installation of the catch basin may generate approximately 50 cubic yards (70 tons). Impacted soil that is removed should be properly managed and disposed at a permitted facility.

4.0 Summary and Regulatory Considerations

H&H has reviewed Geophysical survey results and collected soil samples at Parcel 37. No USTs appear to be present within the proposed utility easement area. Analytical results indicate widespread low level concentrations of TPH DRO above NC DENR Action Levels. H&H estimates that there are a total of 8,600 cubic yards (12,900 tons) of impacted soil above 12 ft at Parcel 37. The impacted soil is situated between the existing northern curb of East King Street and the proposed utility easement line. DOT plans indicate a proposed fill of approximately 2 ft in this area. Because this is a fill area, most of the impacted soil will not likely be disturbed. Installation of the catch basin may generate approximately 50 cubic yards (70 tons). Impacted soil that is removed should be properly managed and disposed at a permitted facility.

5.0 Signature Page

This report was prepared by:



David Graham
Project Geologist for
Hart and Hickman, PC

This report was reviewed by:



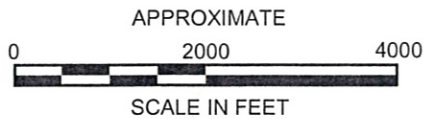
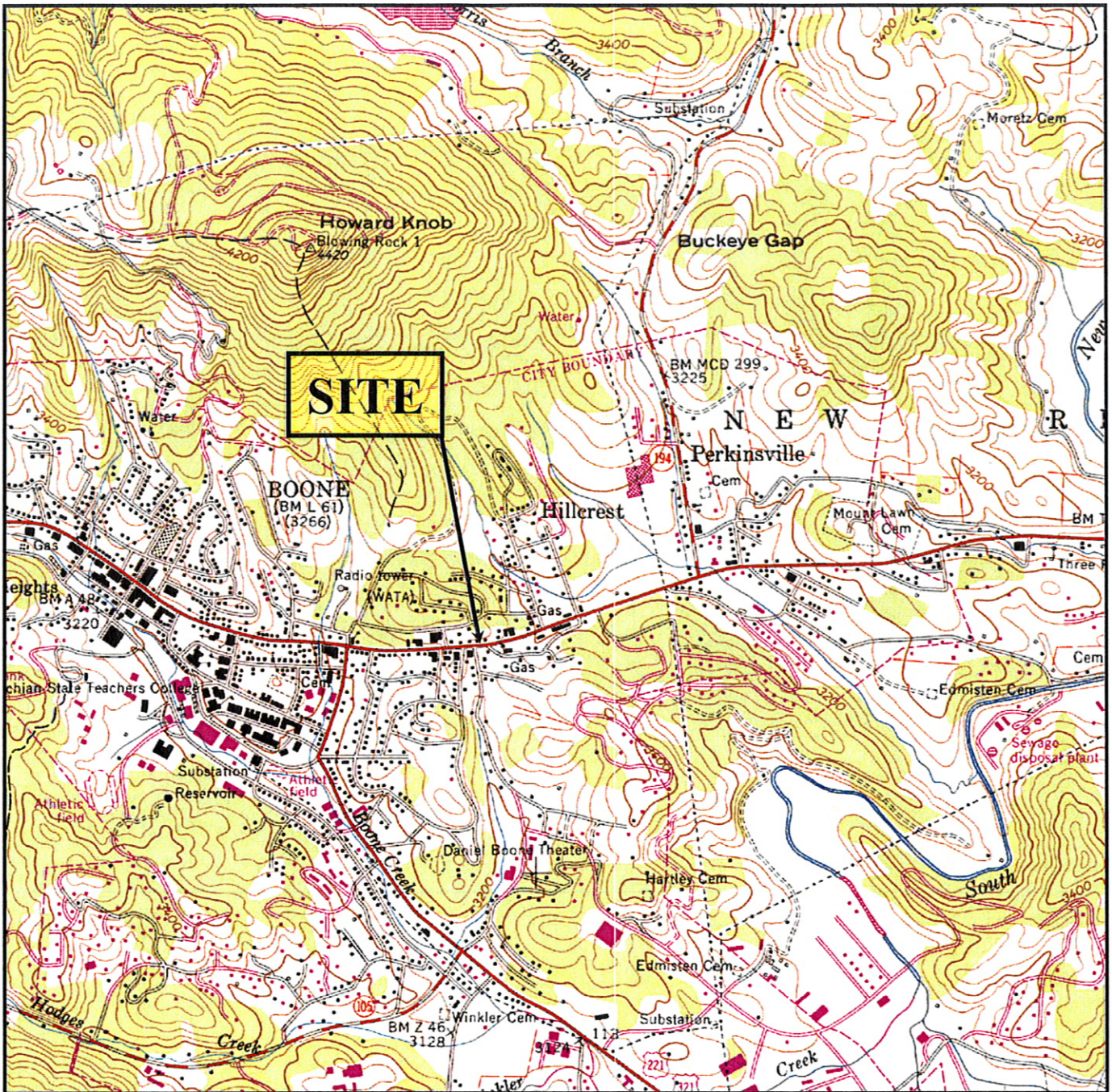
Matt Bramblett, PE
Principal and Project Manager for
Hart and Hickman, PC

Table 1
Soil Analytical Results
Mack Brown Property, Parcel # 37
Boone, North Carolina
H&H Job No. ROW-148

Sample ID	37-1	37-2	37-3	37-4	37-5	37-6	NCDENR Action Level (mg/kg)
	10-12 4/9/2008 (mg/kg)	2-5 4/9/2008 (mg/kg)	10-12 4/9/2008 (mg/kg)	0-2 4/9/2008 (mg/kg)	5-7 4/9/2008 (mg/kg)	5-7 4/9/2008 (mg/kg)	
<u>TPH-DRO/GRO (8015B)</u>	42	14	23	34	86	230	10
Diesel-Range Organics (DRO)	<5.6	<5.9	<5.6	<5.4	<5.5	<6.5	10
Gasoline-Range Organics (GRO)							

Notes:


EPA Method follows parameter in parenthesis;
Bold denotes value exceeds NCDENR Action Level
 TPH=total petroleum hydrocarbons



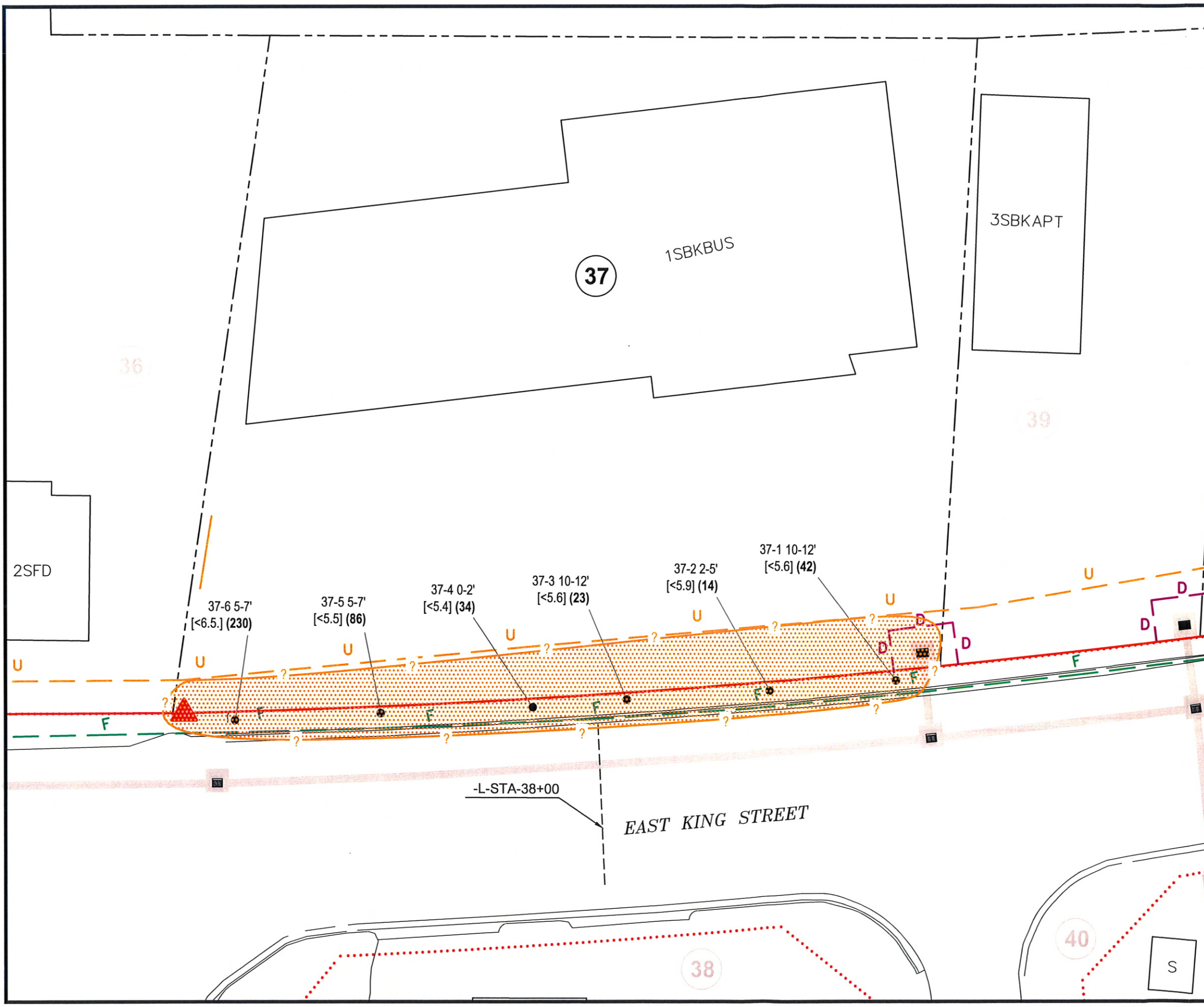
U.S.G.S. QUADRANGLE MAP

BOONE, NC 1959
PHOTOREVISED 1978

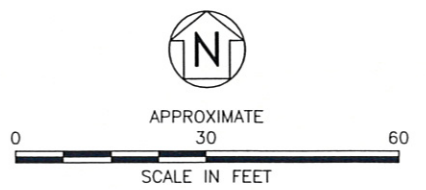
QUADRANGLE
7.5 MINUTE SERIES (TOPOGRAPHIC)

TITLE	SITE LOCATION MAP	
PROJECT	MACK BROWN PROPERTY PARCEL #37 BOONE, NORTH CAROLINA	
 2923 South Tryon Street-Suite 100 Charlotte, North Carolina 28203 704-586-0007 (p) 704-586-0370 (f)		
DATE:	4-28-08	REVISION NO: 0
JOB NO:	ROW-148	FIGURE NO: 1

S:\AAA-Master Projects\INC DOT Right-of-Way -ROW\148 Boone PSAs\Files from DOT\Proj\FIGURES\37_38_41-43_45_47_48_A.dwg, 37, 5/28/2008 4:40:00 PM, 1:1



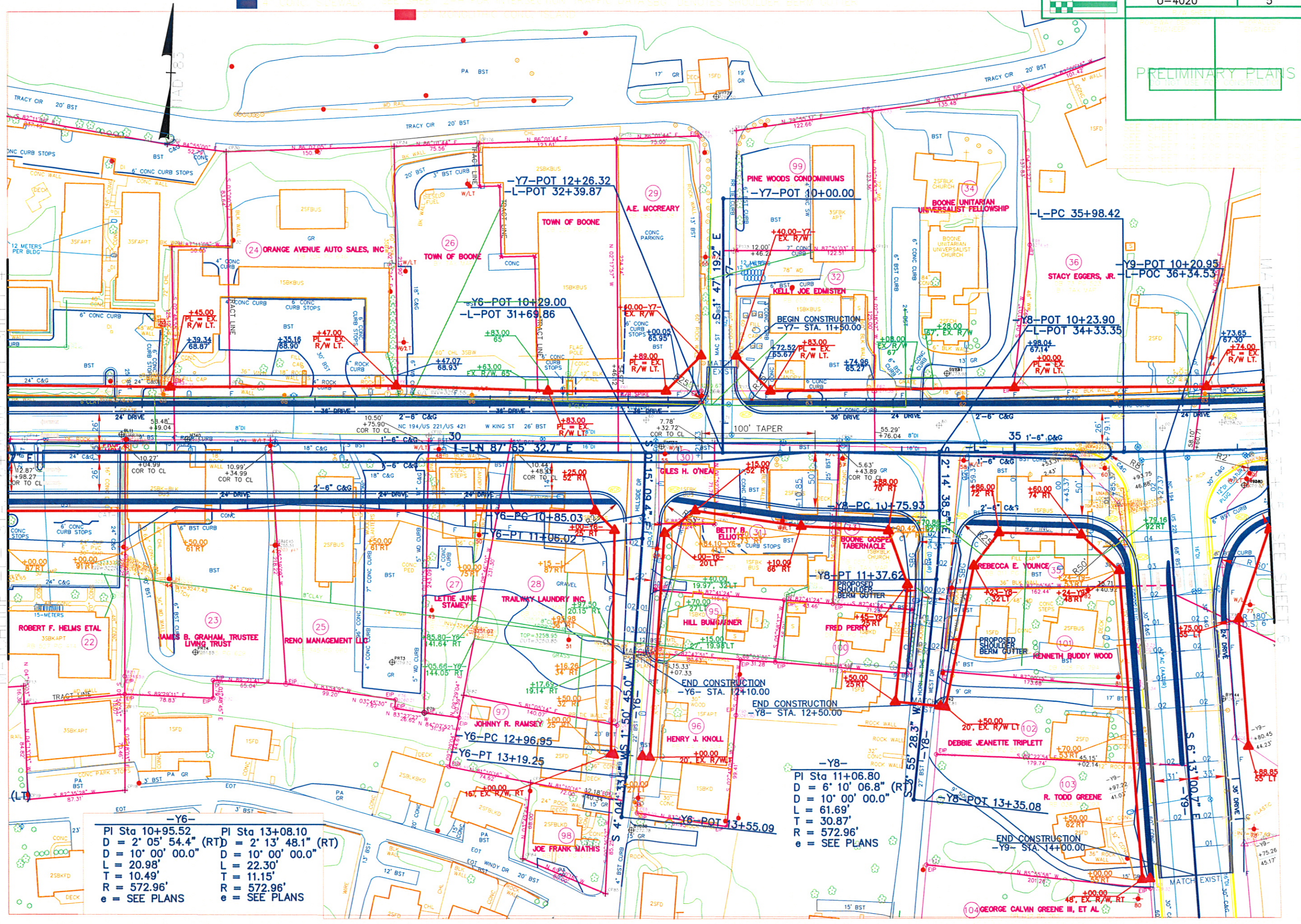
- LEGEND**
- PROPERTY LINE
 - EXISTING RIGHT-OF-WAY
 - ▲ PROPOSED RIGHT-OF-WAY
 - F- PROPOSED FILL LINE
 - D- PROPOSED DRAINAGE EASEMENT
 - U- PROPOSED UTILITY EASEMENT
 - [Pattern] IMPACTED SOIL AREA
 - [Pattern] PROPOSED DRAINAGE PIPE
 - [Symbol] PROPOSED CATCH BASIN
 - SOIL BORING
 - 37 PARCEL NUMBER
 - [] = TPH GRO mg/kg
 - () = TPH DRO mg/kg
 - BOLD** DENOTES EXCEEDANCE OF NCDENR ACTION LEVEL



TITLE	
SITE MAP AND SOIL ANALYTICAL RESULTS	
PROJECT	
MACK BROWN PROPERTY PARCEL #37 BOONE, NORTH CAROLINA	
2923 South Tryon Street-Suite 100 Charlotte, North Carolina 28203 704-586-0007(p) 704-586-0373(f)	
DATE: 4-24-08	REVISION NO. 0
JOB NO: ROW-148	FIGURE: 2

Appendix A
NC DOT Preliminary Plan

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

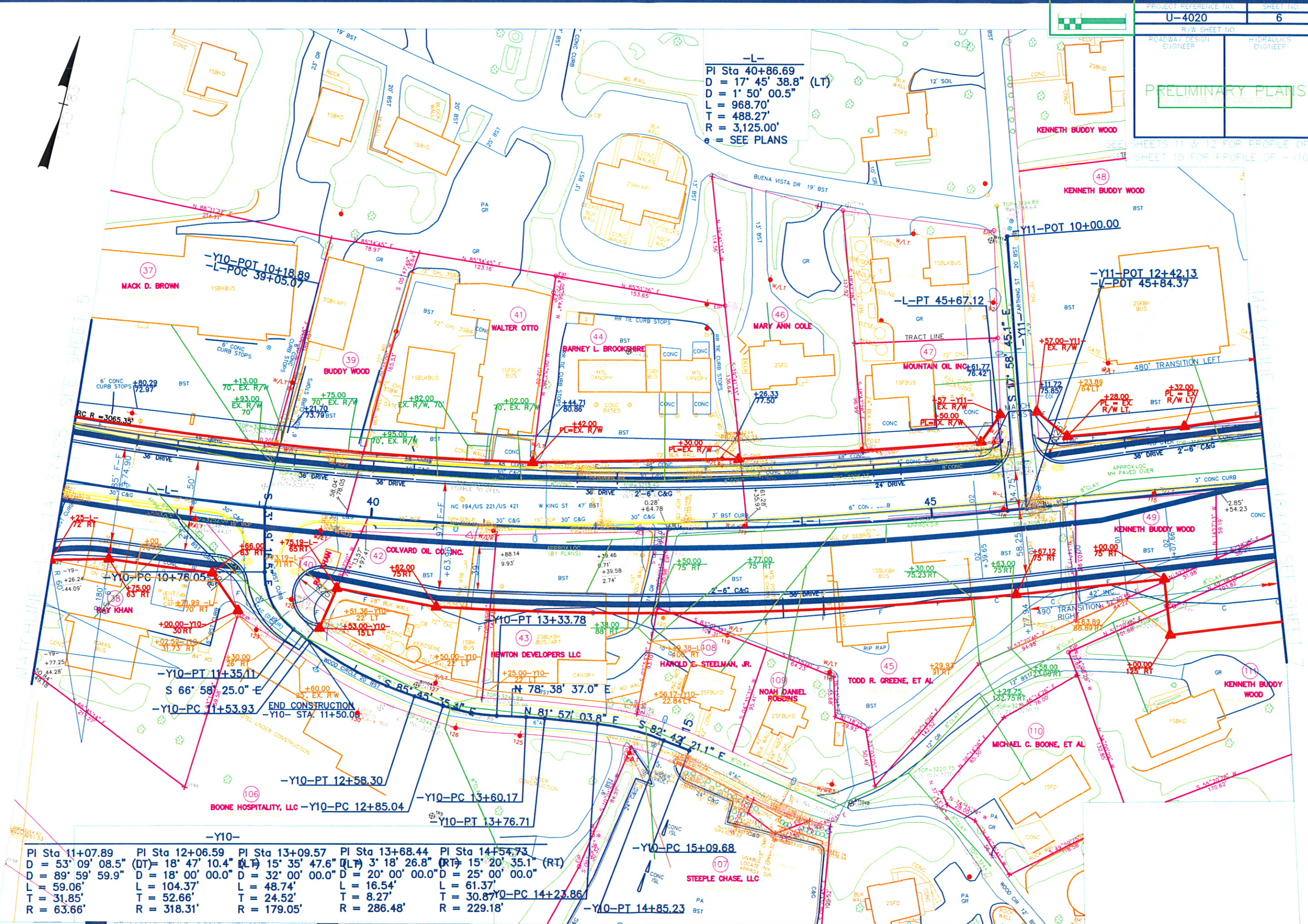


-Y6-	
PI Sta 10+95.52	PI Sta 13+08.10
D = 2' 05" 54.4" (RT)	D = 2' 13" 48.1" (RT)
L = 10' 00' 00.0"	L = 10' 00' 00.0"
T = 20.98'	T = 22.30'
R = 10.49'	R = 11.15'
R = 572.96'	R = 572.96'
e = SEE PLANS	e = SEE PLANS

-Y8-
 PI Sta 11+06.80
 D = 6' 10' 06.8" (R)
 D = 10' 00' 00.0"
 L = 61.69'
 T = 30.87'
 R = 572.96'
 e = SEE PLANS

S:\AAA-Master Projects\NC DOT Right-of-Way - ROW\PROJ-148 Boone PSAs\Figures\bind.dwg, Model, 5/28/2008 12:07:22 PM, 1:80

-L-
 PI Sta 40+86.69
 D = 17' 45" 38.8" (LT)
 D = 1' 50' 00.5"
 L = 968.70'
 T = 488.27'
 R = 3,125.00'
 e = SEE PLANS



PI Sta 11+07.89	PI Sta 12+06.59	PI Sta 13+09.57	PI Sta 13+68.44	PI Sta 14+54.73
D = 53' 09" 08.5"	D = 18' 47" 10.4"	D = 15' 35" 47.6"	D = 3' 18" 26.8"	D = 15' 20" 35.1"
D = 89' 59" 59.9"	D = 18' 00" 00.0"	D = 32' 00" 00.0"	D = 20' 00" 00.0"	D = 25' 00" 00.0"
L = 59.06'	L = 104.37'	L = 48.74'	L = 16.54'	L = 61.37'
T = 31.85'	T = 52.66'	T = 8.27'	T = 30.87'	T = 10-PC 14+23.86'
R = 63.66'	R = 318.31'	R = 179.05'	R = 286.48'	R = 229.18'

S:\AAA-Master Projects\INC DOT Right-of-Way-ROW\PROW-148 Boone P\AS\Files from DOT\Proj\FIGURES\bind.dwg, Model, 5/28/2008 1:26:33 PM, 1/80

Appendix B
URS Geophysical Report



March 31, 2008

Mr. Matt Bramblett, P.E.
Hart & Hickman
2923 South Tryon Street
Suite 100
Charlotte, North Carolina 28203

**Subject: Geophysical Investigation Report and UST Delineation
NCDOT State Project U-4020, Watauga County
Parcels #30, 31, 33, 35, 37, 38
Boone, North Carolina
URS Project No. 31825704**

Dear Mr. Bramblett:

In accordance with our technical and cost proposal (TCP) submitted to North Carolina Department of Transportation (NCDOT) on March 7, 2008, URS Corporation (URS) is pleased to present the findings of the geophysical investigation conducted as part of NCDOT State Project U-4020, Watauga County, WBS Element 35015.1.1. The objective of the investigation was to locate underground storage tanks (USTs) within the NCDOT right-of-way and construction easements along US 421/King Street in Boone, North Carolina. The geophysical investigation was conducted in advance of proposed widening of US 421/King Street and will be used to assist with the Preliminary Site Assessment (PSA) of individual parcels within the right-of-way and easement.

Site Description

The geophysical investigation was conducted for Hart & Hickman at Parcels #30, 31, 33, 35, 37, and 38. According to the Request for Proposal (RFP) issued by NCDOT, dated February 20, 2008, Parcels #30, 33, and 35 are expected to be total takes. Therefore, all accessible portions of these parcels were surveyed for this investigation. For Parcels #31, 37, and 38, the right-of-way and construction easements were surveyed for this investigation. These limits had been physically marked in the field by others prior to conducting the geophysical investigation. None of these parcels were abandoned at the time of the geophysical investigation. The majority of the survey areas consisted of asphalt driveways or parking lots.

Survey Methods

The geophysical investigation was conducted using primarily the electromagnetic (EM) method. The Geonics, Ltd. EM-61 MKII (EM-61) instrument was used to perform the investigation. Ground-penetrating radar (GPR) was used as a follow-up technique to the

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EM-61 survey. The GPR survey was completed using a Sensors & Software, Inc. Noggin PLUS Smart Cart System with a 250 MHz scanning antenna.

Electromagnetic Surveying with the EM-61 MKII (EM-61)

The EM-61 is a time domain EM instrument specifically designed to detect buried metal objects. The EM-61 generates rapid EM pulses through a transmitter coil. These pulses induce secondary EM fields in the near subsurface. The secondary EM fields induced from moderately conductive subsurface materials (i.e. soil and rock) are of relatively short duration. However, the secondary EM fields induced from metallic objects, such as reinforced concrete or steel drums, are of relatively long duration. The EM-61 measures this prolonged response from metallic objects after the EM response from conductive earth materials dissipates. This design provides high resolution of metallic targets. The depth of investigation of the instrument is relatively unaffected by site specific subsurface conditions.

The EM-61 measures the EM response in milliVolts (mV). The variations in EM response readings from some background level are more diagnostic than the absolute values. EM response values can be plotted and contoured to evaluate the variations across the site. Variations in the EM response resulting from buried metallic objects such as cast iron pipes are generally manifested by relatively large amplitude (greater than about 50 mV) anomalies.

The response amplitude for a given buried metallic object is primarily a function of burial depth and size of the object. It is thus useful to have some means of interpreting the depth of a given object. The EM-61 uses a two receiver coil system consisting of a top coil and a bottom coil. This design facilitates the recognition of near-surface objects from deeper targets. The EM-61 record includes the response from the top coil, the bottom coil and the differential response between the two coils. Near surface objects, such as small pieces of scrap metal, can mask the response from larger objects, such as utility lines, drums or underground storage tanks, at deeper depths. The two-coil design of the EM-61, and differential processing, allows for this masking effect to be significantly reduced. Although the EM-61 is designed to mitigate interference from surface features, large metallic objects at the surface, such as cars, buildings, and fences can effectively saturate the EM response and mask potential buried metal objects below.

Ground Penetrating Radar (GPR)

The GPR method involves transmitting relatively high-frequency electromagnetic pulses into the subsurface using a transducer antenna, and recording the subsequent signal from reflected and refracted electromagnetic energy using a receiving antenna. The electromagnetic pulses, or radar waves are influenced by many factors in the subsurface, the most important being the dielectric constant of the soil. The dielectric constant is the ratio of the speed of light in a vacuum (0.3m/ns) to the velocity of the GPR wave, quantity squared. Therefore, changes in dielectric constant correspond to changes in electromagnetic wave propagation velocity. When the wavelength is short compared to the thickness of soil layers, which is generally

Mr. Matt Bramblett, P.E.
Hart & Hickman
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true, electromagnetic waves are reflected at the interfaces of dielectric contrast in accordance with the principles of optics.

GPR is useful in mapping and locating subsurface features and stratigraphy under a variety of conditions. The method is useful in many types of geologic, environmental, and engineering applications including: locating and mapping buried waste materials; locating and delineating metallic and nonmetallic utilities, pipes, underground storage tanks and drums; mapping geological strata, fractures, and voids; and delineating and mapping previously excavated and backfilled areas.

The effectiveness of GPR surveying at a given site is directly related to the dielectric properties of the subsurface materials. The effective depth of exploration provided by the method can be limited by subsurface materials characterized with high conductivity and dielectric constants, including clay, metal and metallic minerals, or reinforced pavement, all of which absorb radar energy instead of reflecting waves back to the surface receiver. In general, the depth of investigation at a given site is inversely proportional to frequency and the degree of feature resolution is proportional to frequency. Irregular and/or rough terrain can negatively impact the quality of GPR data.

Field Investigation

The field investigation was conducted between March 18 and 22, 2008. EM-61 data were collected along parallel profiles spaced approximately 3 feet apart across the portions of the survey areas that were accessible with the EM-61. Inaccessible areas included portions of the parcels containing parked cars, dumpsters, and landscaping features. EM-61 data were recorded at a rate of 5 readings per second, which equates to an along-profile data point spacing of less than 1 foot.

A Trimble ProXRS global positioning system (GPS) was used to record simultaneous positional data coincident with the EM-61 data. The ProXRS system provides real-time differential corrections via an Omnistar subscription service. The acquired differential GPS (DGPS) have a horizontal accuracy of approximately 3 feet. URS also used the GPS system to record the locations of relevant site features.

Prior to conducting the GPR investigation, URS performed preliminary in-field analysis of the EM-61 data to identify anomalies potentially indicative of USTs. GPR follow-up was conducted at individual point target locations identified in the EM-61 data or within the sections of the parcels that could not be accessed using the EM-61. Because GPR was used as a follow-up technique, no data sets were post-processed for purposes of this investigation.

Data Processing

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Hart & Hickman
March 31, 2008
Page 4

The EM-61 data were pre-processed using the program DAT61 MK2, issued by Geonics Ltd. The program was used primarily to prepare the data for contouring in Surfer, issued by Golden Software. Contoured data represent EM-61 Channel 3 response data. Channel 3 data include milliVolt readings recorded at a relatively later time interval during the measured response from the secondary EM field. Thus, this channel generally records secondary field responses from depths consistent with USTs. Interference from surface or near-surface features (e.g. reinforced concrete, buried catch basin, etc.) will also be recorded by this channel, which is why the GPR follow-up survey was conducted over EM-61 anomalies that could not be readily attributed to existing site features.

Investigation Results

The results of the geophysical investigation for Parcels #30, 31, and 33 are presented as **Figure 1**. The results for Parcel #35 are presented as **Figures 2 and 3**. The results for Parcels #37 and 38 are presented as **Figures 4 and 5**, respectively.

Responses from metallic objects are represented by color-shaded contours outside the interpreted background response range. Relatively strong responses (i.e. yellow to dark red contours) generally indicate buried objects of significant metal mass or surface or near-surface features (e.g. reinforced concrete pad). Relatively muted responses (i.e. dark blue contours) generally indicate decreased metal mass or metallic objects potentially buried to greater depths. Sources of known or suspected metallic interference are identified accordingly in **Figures 1 through 5**. Anomalies consistent with EM-61 response patterns for USTs are identified in **Figures 1 through 5** with either green or magenta ellipses. These anomalies were subsequently targeted for GPR follow-up surveying.

The EM-61 anomaly annotated with the green ellipse in **Figure 1** indicates a potential UST as indicated by both the EM-61 and GPR surveys. GPR surveying across this anomaly revealed parabolic-shaped reflection patterns that are consistent with USTs. The EM-61 anomalies annotated with magenta ellipses in **Figures 1, 4, and 5** indicate that the GPR follow-up survey did not reveal the characteristic parabolic-shaped reflection patterns typically associated with USTs. However, it should be noted that USTs that may no longer be intact may not exhibit characteristic GPR reflection patterns. Therefore, intrusive investigations of the EM-61 anomalies annotated with magenta ellipses in **Figures 1, 4, and 5** may be warranted if it is necessary for completion of the PSA to have confirmation of the identity of these anomalies.

A single UST appears to be buried along the southern edge of the building situated at Parcel #35. The EM-61 results in **Figure 2** indicate high-amplitude responses consistent with the presence of a UST. Follow-up GPR surveying also revealed the presence of parabolic-shaped reflection patterns associated with USTs. A fill port is situated within the center of the geophysical anomaly. The GPR antenna was used to identify the perimeter of the UST.

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Figure 3 presents a photo of the field markings that indicate the interpreted UST perimeter at Parcel #35.

In general, sections of the parcels that are represented by the interpreted background range of colors in the EM-61 results appear to be free of buried metal to depths within the survey capabilities of the instrument. The results presented in **Figures 1 through 5** do not constitute an underground utility avoidance survey and therefore should be used in conjunction with proper utility marking protocol prior to beginning any intrusive work at these parcels.

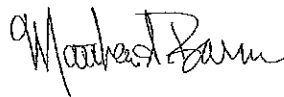
Limitations

This geophysical investigation was conducted in accordance with reasonable and accepted engineering geophysics practices, and the interpretations and conclusions are rendered in a manner consistent with other consultants in our profession. All geophysical techniques have some level of uncertainty and limitations. No other representations of the reported information is expressed or implied, and no warranty or guarantee is included or intended.

We greatly appreciate the opportunity to work with you on this project. We will transmit AutoCAD files (.DXF type) of the geophysical results in a separate submittal. Please contact Matt Barner at (704) 716-0737 if you have any questions regarding this report.

Very truly yours,


URS Corporation – North Carolina



Matthew A. Barner
Senior Geophysicist



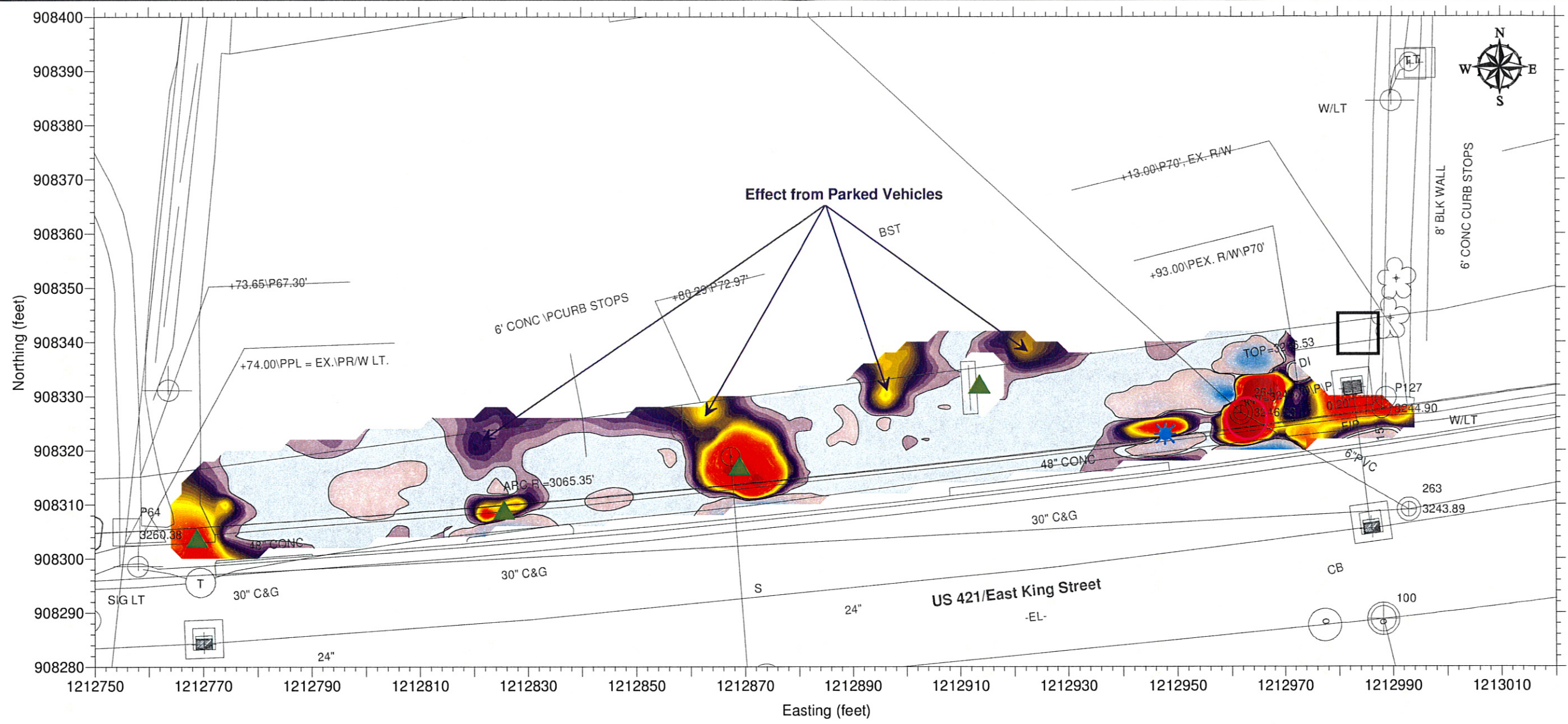
Timothy J. King
Principal Geophysicist



Walt Plekan, L.G.
Project Manager

Enc.: Figure 1 – Geophysical Investigation Results, Parcels #30, 31, 33
Figure 2 – Geophysical Investigation Results, Parcel #35
Figure 3 – Site Photograph, Parcel #35
Figure 4 – Geophysical Investigation Results, Parcel #37
Figure 5 – Geophysical Investigation Results, Parcel #38

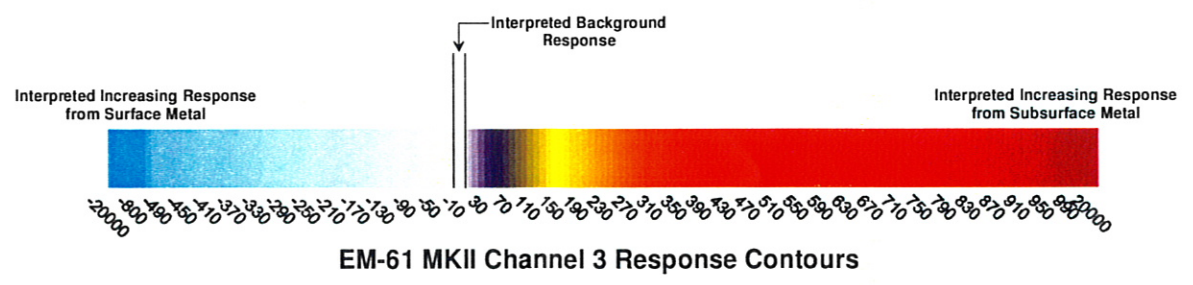
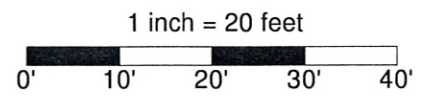
1c: Vernon Keys, URS, Raleigh
File 3182 5704 – 4.2



Legend

- EM-61 Anomaly Surveyed with GPR Follow-Up (GPR Does not Indicate Potential UST)
- ★ Utility Feature
- ▲ Pole/Light/Sign
- Vehicle

- Notes:
1. Coordinates in NC State Plane, NAD-83 datum.
 2. Data from Geonics, Ltd. EM-61 MKII instrument.
 3. Base drawing from U-4020 contract drawings provided by NCDOT.
 4. EM-61 location control and additional site features from DGPS survey by URS Corporation.



		6135 Park South Dr., Ste. 300 Charlotte, NC 28210 (704) 522-0330	
Geophysical Investigation Results Parcel #37			
NCDOT State Project U-4020, Watauga County Boone, North Carolina			
DESIGNED BY	DRAWN BY	CHECKED BY	JOB NUMBER
MAB	03/27/08	MAB	03/28/08
		SJH	03/28/08
			31825704
			Figure 4

Appendix C
Soil Boring Logs



BORING NUMBER 37-1

2923 South Tryon Street-Suite 100
Charlotte, North Carolina 28203
704-586-0007(p) 704-586-0373(f)

3334 Hillsborough Street
Raleigh, North Carolina 27607
919-847-4241(p) 919-847-4261(f)

PROJECT: Boone PSA's

JOB NUMBER: ROW-148 (37)

LOCATION: Boone, North Carolina

LOG OF BORING - HART HICKMAN.GDT - 5/21/08 09:16 - S:\AAA-MASTER PROJECTS\INC DOT RIGHT-OF-WAY -ROW\ROW-148 BOONE PSA\BORING LOGS\ROW-148 (37).GPJ

DEPTH (ft)	RECOVERY (%)	BLOW COUNT	OVA (ppm)		LITHOLOGY	MATERIAL DESCRIPTION	WELL DIAGRAM	DEPTH (ft)
			BKG.	SAMP.				
0.0						Brown/orange, sandy CLAY, dry		0.0
2.5	100		0.3	0.7		Brown/red, sandy CLAY with some partially weathered rock, slightly damp		2.5
5.0				0.8		Brown/red, silty SAND, dry		5.0
7.5	75			0.8		Orange/tan, silty SAND, some partially weathered rock		7.5
10.0				0.7		Orange/tan, silty SAND, some partially weathered rock		10.0
12.5	50			1.1		Bottom of borehole at 12.0 feet.		12.5
15.0								15.0

DRILLING CONTRACTOR: Geologic Exploration
DRILL RIG/ METHOD: 6620DT / Geoprobe
SAMPLING METHOD: DPT Sleeves
LOGGED BY: M. Falknor
DRAWN BY:

BORING STARTED: 4/9/08
BORING COMPLETED: 4/9/08
TOTAL DEPTH: 12
SURFACE ELEV:
DEPTH TO WATER:

Remarks:
 Borehole hand-augered to 5 ft. Sample collected from 10-12 feet for laboratory analysis.



BORING NUMBER 37-2

2923 South Tryon Street-Suite 100
Charlotte, North Carolina 28203
704-586-0007(p) 704-586-0373(f)

3334 Hillsborough Street
Raleigh, North Carolina 27607
919-847-4241(p) 919-847-4261(f)

PROJECT: Boone PSA's
JOB NUMBER: ROW-148 (37)
LOCATION: Boone, North Carolina

LOG OF BORING - HART HICKMAN GDT - 5/21/08 09:16 - S:\AAA-MASTER PROJECTS\INC DOT RIGHT-OF-WAY -ROW-148 BOONE PSA\BORING LOGS\ROW-148 (37).GPJ

DEPTH (ft)	RECOVERY (%)	BLOW COUNT	OVA (ppm)		LITHOLOGY	MATERIAL DESCRIPTION	WELL DIAGRAM	DEPTH (ft)
			BKG.	SAMP.				
0.0			0.3	0.9		Red/brown, silty SAND, dry		0.0
2.5	100					Red/brown, silty SAND with some clay, dry		2.5
5.0				2.7		Orange/tan, silty SAND, medium sized partially weathered rock		5.0
7.5	90			1.9		Orange/tan, silty SAND, medium sized partially weathered rock		7.5
10.0				0.6		Orange/tan, silty SAND, medium sized partially weathered rock		10.0
12.5	50			0.6		Orange/tan, silty SAND, medium sized partially weathered rock		12.5
15.0						Bottom of borehole at 12.0 feet.		15.0

DRILLING CONTRACTOR: Geologic Exploration
DRILL RIG/ METHOD: 6620DT / Geoprobe
SAMPLING METHOD: DPT Sleeves
LOGGED BY: M. Falknor
DRAWN BY:

BORING STARTED: 4/9/08
BORING COMPLETED: 4/9/08
TOTAL DEPTH: 12
SURFACE ELEV:
DEPTH TO WATER:

Remarks:
Borehole hand-augered to 5 ft. Sample collected from 2-5 feet for laboratory analysis.



BORING NUMBER 37-3

2923 South Tryon Street-Suite 100
Charlotte, North Carolina 28203
704-586-0007(p) 704-586-0373(f)

3334 Hillsborough Street
Raleigh, North Carolina 27607
919-847-4241(p) 919-847-4261(f)

PROJECT: Boone PSA's
JOB NUMBER: ROW-148 (37)
LOCATION: Boone, North Carolina

LOG OF BORING - HART HICKMAN.GDT - 5/27/08 13:46 - S:\AAA-MASTER PROJECTS\NC DOT RIGHT-OF-WAY -ROW-148 BOONE PSA\BORING LOGS\ROW-148 (37).GPJ

DEPTH (ft)	RECOVERY (%)	BLOW COUNT	OVA (ppm)		LITHOLOGY	MATERIAL DESCRIPTION	WELL DIAGRAM	DEPTH (ft)
			BKG.	SAMP.				
0.0						Red/brown, silty CLAY, slightly damp		0.0
2.5	100		0.3	0.7		Red/brown, silty SAND, slightly damp		2.5
5.0						Red/brown, silty SAND, slightly damp		5.0
7.5	100					Red/brown, fine silty SAND, some clay, slightly damp		7.5
10.0						Red/brown, medium silty SAND with partially weathered rock and quartz fragments		10.0
12.5	50			1.4		Bottom of borehole at 12.0 feet.		12.5
15.0								15.0

DRILLING CONTRACTOR: Geologic Exploration
DRILL RIG/ METHOD: 6620DT / Geoprobe
SAMPLING METHOD: DPT Sleeves
LOGGED BY: M. Falknor
DRAWN BY:

BORING STARTED: 4/9/08
BORING COMPLETED: 4/9/08
TOTAL DEPTH: 12
SURFACE ELEV:
DEPTH TO WATER:

Remarks:
Borehole hand-augered to 5 ft. Sample collected from 10-12 feet for laboratory analysis.



BORING NUMBER 37-4

2923 South Tryon Street-Suite 100
Charlotte, North Carolina 28203
704-586-0007(p) 704-586-0373(f)

3334 Hillsborough Street
Raleigh, North Carolina 27607
919-847-4241(p) 919-847-4261(f)

PROJECT: Boone PSA's
JOB NUMBER: ROW-148 (37)
LOCATION: Boone, North Carolina

LOG OF BORING - HART HICKMAN.GDT - 5/21/08 09:16 - S:\AAA-MASTER PROJECTS\NC DOT RIGHT-OF-WAY -ROW\ROW-148 BOONE PSA\BORING LOGS\ROW-148 (37).GPJ

DEPTH (ft)	RECOVERY (%)	BLOW COUNT	OVA (ppm)		LITHOLOGY	MATERIAL DESCRIPTION	WELL DIAGRAM	DEPTH (ft)
			BKG.	SAMP.				
0.0			0.3	0.7		Brown/orange, silty SAND, damp		0.0
2.5	100			0.5		Brown/orange, silty SAND, damp		2.5
5.0	25			0.6		Red/orange, sandy SILT, dry		5.0
7.5						Refusal at 7.0 feet. Bottom of borehole at 7.0 feet.		7.5
10.0								10.0
12.5								12.5
15.0								15.0

DRILLING CONTRACTOR: Geologic Exploration
DRILL RIG/ METHOD: 6620DT / Geoprobe
SAMPLING METHOD: DPT Sleeves
LOGGED BY: M. Falknor
DRAWN BY:

BORING STARTED: 4/9/08
BORING COMPLETED: 4/9/08
TOTAL DEPTH: 7
SURFACE ELEV:
DEPTH TO WATER:

Remarks:
Borehole hand-augered to 5 ft. Sample collected from 0-2 feet for laboratory analysis.



BORING NUMBER 37-5

2923 South Tryon Street-Suite 100
Charlotte, North Carolina 28203
704-586-0007(p) 704-586-0373(f)

3334 Hillsborough Street
Raleigh, North Carolina 27607
919-847-4241(p) 919-847-4261(f)

PROJECT: Boone PSA's
JOB NUMBER: ROW-148 (37)
LOCATION: Boone, North Carolina

LOG OF BORING - HART HICKMAN.GDT - 5/22/08 17:07 - S:\AAA-MASTER PROJECTS\NC DOT RIGHT-OF-WAY -ROW\ROW-148 BOONE PSA\BORING LOGS\ROW-148 (37).GPJ

DEPTH (ft)	RECOVERY (%)	BLOW COUNT	OVA (ppm)		LITHOLOGY	MATERIAL DESCRIPTION	WELL DIAGRAM	DEPTH (ft)
			BKG.	SAMP.				
0.0								0.0
2.5	90		0.4	0.9		Brown/tan, sandy SILT, dry		2.5
5.0				0.8		Brown/tan, sandy SILT, dry		5.0
7.5	60			1.3		Brown/tan, silty SAND, large partially weathered rock fragments, dry		7.5
10.0						Refusal at 8.0 feet. Bottom of borehole at 8.0 feet.		10.0
12.5								12.5
15.0								15.0

DRILLING CONTRACTOR: Geologic Exploration
DRILL RIG/ METHOD: 6620DT / Geoprobe
SAMPLING METHOD: DPT Sleeves
LOGGED BY: M. Falknor
DRAWN BY:

BORING STARTED: 4/9/08
BORING COMPLETED: 4/9/08
TOTAL DEPTH: 8
SURFACE ELEV:
DEPTH TO WATER:

Remarks:
Borehole hand-augered to 5 ft. Sample collected from 5-7 feet for laboratory analysis.



BORING NUMBER 37-6

2923 South Tryon Street-Suite 100
Charlotte, North Carolina 28203
704-586-0007(p) 704-586-0373(f)

3334 Hillsborough Street
Raleigh, North Carolina 27607
919-847-4241(p) 919-847-4261(f)

PROJECT: Boone PSA's
JOB NUMBER: ROW-148 (37)
LOCATION: Boone, North Carolina

LOG OF BORING - HART HICKMAN.GDT - 5/21/08 09:16 - S:\AAA-MASTER PROJECTS\INC DOT RIGHT-OF-WAY -ROW\ROW-148 BOONE PSA\BORING LOGS\ROW-148 (37).GPJ

DEPTH (ft)	RECOVERY (%)	BLOW COUNT	OVA (ppm)		LITHOLOGY	MATERIAL DESCRIPTION	WELL DIAGRAM	DEPTH (ft)
			BKG.	SAMP.				
0.0			0.6	0.9		Red/orange, medium sandy SILT, dry		0.0
2.5	100			0.8		Orange/tan, fine sandy SILT, dry		2.5
5.0	50			1.5		Orange/tan, fine sandy SILT, dry		5.0
7.5						Refusal at 7.0 feet. Bottom of borehole at 7.0 feet.		7.5
10.0								10.0
12.5								12.5
15.0								15.0

DRILLING CONTRACTOR: Geologic Exploration
DRILL RIG/ METHOD: 6620DT / Geoprobe
SAMPLING METHOD: DPT Sleeves
LOGGED BY: M. Falknor
DRAWN BY:

BORING STARTED: 4/9/08
BORING COMPLETED: 4/9/08
TOTAL DEPTH: 7
SURFACE ELEV:
DEPTH TO WATER:

Remarks:
Borehole hand-augered to 5 ft. Sample collected from 5-7 feet for laboratory analysis.

Appendix D
Laboratory Analytical Report



NC Certification No. 402
 SC Certification No. 99012
 NC Drinking Water Cert. No. 37735

Laboratory Report

04/28/08

North Carolina Department of
 Transportation
 Attn: David Graham
 c/o Hart and Hickman
 2923 South Tryon St. Ste 100
 Charlotte, NC 28203

Project Name: Boone PSAs
 Project ID: ROW-148
 Project No.: WBS# 35015.1.1
 Sample Matrix: Soil

Client Sample ID: 37-1 (10-12)
 Prism Sample ID: 211261
 COC Group: G0408351
 Time Collected: 04/09/08 8:48
 Time Submitted: 04/11/08 9:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
<u>Percent Solids Determination</u>									
Percent Solids	89.5	%			1	SM2540 G	04/15/08 11:15	mbarber	
<u>Diesel Range Organics (DRO) by GC-FID</u>									
Diesel Range Organics (DRO)	42	mg/kg	7.8	1.3	1	8015B	04/22/08 21:25	jvogel	Q31936
Sample Preparation:			25.13 g	/	1 mL	3545	04/21/08 15:15	wconder	P21394
					Surrogate	% Recovery	Control Limits		
					o-Terphenyl	120	49 - 124		
<u>Sample Weight Determination</u>									
Weight 1	6.06	g			1	GRO	04/17/08 0:00	athao	
Weight 2	6.32	g			1	GRO	04/17/08 0:00	athao	
<u>Gasoline Range Organics (GRO) by GC-FID</u>									
Gasoline Range Organics (GRO)	BRL	mg/kg	5.6	3.5	50	8015B	04/17/08 22:41	wbradley	Q31818
					Surrogate	% Recovery	Control Limits		
					aaa-TFT	102	55 - 129		

Sample Comment(s):

BRL = Below Reporting Limit

Values are reported down to the reporting limit only. No J-Flags applied.

The results in this report relate only to the samples submitted for analysis and meet state certification requirements other than NELAC certification except for those instances indicated in the case narrative and/or test comments.

All results are reported on a dry-weight basis

Angela D. Overcash, V.P. Laboratory Services

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449 Springbrook Road - P.O. Box 240543 - Charlotte, NC 28224-0543

Phone: 704/529-6364 - Toll Free Number: 1-800/529-6364 - Fax: 704/525-0409



NC Certification No. 402
 SC Certification No. 99012
 NC Drinking Water Cert. No. 37735

Laboratory Report

04/28/08

North Carolina Department of
 Transportation
 Attn: David Graham
 c/o Hart and Hickman
 2923 South Tryon St. Ste 100
 Charlotte, NC 28203

Project Name: Boone PSAs
 Project ID: ROW-148
 Project No.: WBS# 35015.1.1
 Sample Matrix: Soil

Client Sample ID: 37-2 (2-5)
 Prism Sample ID: 211258
 COC Group: G0408351
 Time Collected: 04/09/08 8:00
 Time Submitted: 04/11/08 9:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
<u>Percent Solids Determination</u>									
Percent Solids	85.0	%			1	SM2540 G	04/15/08 11:15	mbarber	
<u>Diesel Range Organics (DRO) by GC-FID</u>									
Diesel Range Organics (DRO)	14	mg/kg	8.2	2.0	1	8015B	04/18/08 5:06	jvogel	Q31874
Sample Preparation:			49.95 g	/	2 mL	3550B	04/17/08 10:30	jvogel	P21377
					Surrogate	% Recovery	Control Limits		
					o-Terphenyl	87	48 - 130		
<u>Sample Weight Determination</u>									
Weight 1	6.60	g			1	GRO	04/15/08 0:00	Lbrown	
Weight 2	6.66	g			1	GRO	04/15/08 0:00	lbrown	
<u>Gasoline Range Organics (GRO) by GC-FID</u>									
Gasoline Range Organics (GRO)	BRL	mg/kg	5.9	3.7	50	8015B	04/17/08 21:06	wbradley	Q31818
					Surrogate	% Recovery	Control Limits		
					aaa-TFT	101	55 - 129		

Sample Comment(s):

BRL = Below Reporting Limit

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NC Certification No. 402
 SC Certification No. 99012
 NC Drinking Water Cert. No. 37735

Laboratory Report

04/28/08

North Carolina Department of
 Transportation
 Attn: David Graham
 c/o Hart and Hickman
 2923 South Tryon St. Ste 100
 Charlotte, NC 28203

Project Name: Boone PSAs
 Project ID: ROW-148
 Project No.: WBS# 35015.1.1
 Sample Matrix: Soil

Client Sample ID: 37-3 (10-12)
 Prism Sample ID: 211260
 COC Group: G0408351
 Time Collected: 04/09/08 8:35
 Time Submitted: 04/11/08 9:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
Percent Solids Determination									
Percent Solids	89.8	%			1	SM2540 G	04/15/08 11:15	mbarber	
Diesel Range Organics (DRO) by GC-FID									
Diesel Range Organics (DRO)	23	mg/kg	7.8	1.9	1	8015B	04/18/08 6:18	jvogel	Q31874
Sample Preparation:			50.25 g	/	2 mL	3550B	04/17/08 10:30	jvogel	P21377
			Surrogate				% Recovery	Control Limits	
			o-Terphenyl				67	48 - 130	
Sample Weight Determination									
Weight 1	6.00	g			1	GRO	04/17/08 0:00	athao	
Weight 2	5.82	g			1	GRO	04/17/08 0:00	athao	
Gasoline Range Organics (GRO) by GC-FID									
Gasoline Range Organics (GRO)	BRL	mg/kg	5.6	3.5	50	8015B	04/17/08 22:09	wbradley	Q31818
			Surrogate				% Recovery	Control Limits	
			aaa-TFT				77	55 - 129	

Sample Comment(s):

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Angela D. Overcash, V.P. Laboratory Services

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NC Certification No. 402
 SC Certification No. 99012
 NC Drinking Water Cert. No. 37735

Laboratory Report

04/28/08

North Carolina Department of
 Transportation
 Attn: David Graham
 c/o Hart and Hickman
 2923 South Tryon St. Ste 100
 Charlotte, NC 28203

Project Name: Boone PSAs
 Project ID: ROW-148
 Project No.: WBS# 35015.1.1
 Sample Matrix: Soil

Client Sample ID: 37-4 (0-2)
 Prism Sample ID: 211259
 COC Group: G0408351
 Time Collected: 04/09/08 8:20
 Time Submitted: 04/11/08 9:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
<u>Percent Solids Determination</u>									
Percent Solids	93.0	%			1	SM2540 G	04/15/08 11:15	mbarber	
<u>Diesel Range Organics (DRO) by GC-FID</u>									
Diesel Range Organics (DRO)	34	mg/kg	7.5	1.8	1	8015B	04/18/08 5:42	javogel	Q31874
Sample Preparation:			50.01 g	/	2 mL	3550B	04/17/08 10:30	javogel	P21377
					Surrogate	% Recovery	Control Limits		
					o-Terphenyl	53	48 - 130		
<u>Sample Weight Determination</u>									
Weight 1	6.11	g			1	GRO	04/17/08 0:00	athao	
Weight 2	5.76	g			1	GRO	04/17/08 0:00	athao	
<u>Gasoline Range Organics (GRO) by GC-FID</u>									
Gasoline Range Organics (GRO)	BRL	mg/kg	5.4	3.4	50	8015B	04/17/08 21:37	wbradley	Q31818
					Surrogate	% Recovery	Control Limits		
					aaa-TFT	77	55 - 129		

Sample Comment(s):

BRL = Below Reporting Limit

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All results are reported on a dry-weight basis

Angela D. Overcash, V.P. Laboratory Services



NC Certification No. 402
 SC Certification No. 99012
 NC Drinking Water Cert. No. 37735

Laboratory Report

04/28/08

North Carolina Department of
 Transportation
 Attn: David Graham
 c/o Hart and Hickman
 2923 South Tryon St. Ste 100
 Charlotte, NC 28203

Project Name: Boone PSAs
 Project ID: ROW-148
 Project No.: WBS# 35015.1.1
 Sample Matrix: Soil

Client Sample ID: 37-5 (5-7)
 Prism Sample ID: 211262
 COC Group: G0408351
 Time Collected: 04/09/08 9:00
 Time Submitted: 04/11/08 9:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
<u>Percent Solids Determination</u>									
Percent Solids	90.9	%			1	SM2540 G	04/15/08 11:15	mbarber	
<u>Diesel Range Organics (DRO) by GC-FID</u>									
Diesel Range Organics (DRO)	86	mg/kg	7.6	1.2	1	8015B	04/22/08 22:02	jvogel	Q31936
Sample Preparation:			25.22 g	/	1 mL	3545	04/21/08 15:15	wconder	P21394
					Surrogate		% Recovery	Control Limits	
					o-Terphenyl		123	49 - 124	
<u>Sample Weight Determination</u>									
Weight 1	6.10	g			1	GRO	04/17/08 0:00	athao	
Weight 2	6.00	g			1	GRO	04/17/08 0:00	athao	
<u>Gasoline Range Organics (GRO) by GC-FID</u>									
Gasoline Range Organics (GRO)	BRL	mg/kg	5.5	3.4	50	8015B	04/17/08 23:21	wbradley	Q31818
					Surrogate		% Recovery	Control Limits	
					aaa-TFT		81	55 - 129	

Sample Comment(s):

BRL = Below Reporting Limit

Values are reported down to the reporting limit only. No J-Flags applied.

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All results are reported on a dry-weight basis

Angela D. Overcash, V.P. Laboratory Services

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NC Certification No. 402
 SC Certification No. 99012
 NC Drinking Water Cert. No. 37735

Laboratory Report

04/28/08

North Carolina Department of
 Transportation
 Attn: David Graham
 c/o Hart and Hickman
 2923 South Tryon St. Ste 100
 Charlotte, NC 28203

Project Name: Boone PSAs
 Project ID: ROW-148
 Project No.: WBS# 35015.1.1
 Sample Matrix: Soil

Client Sample ID: 37-6 (5-7)
 Prism Sample ID: 211263
 COC Group: G0408351
 Time Collected: 04/09/08 9:20
 Time Submitted: 04/11/08 9:20

Parameter	Result	Units	Report Limit	MDL	Dilution Factor	Method	Analysis Date/Time	Analyst	Batch ID
<u>Percent Solids Determination</u>									
Percent Solids	76.6	%			1	SM2540 G	04/15/08 11:15	mbarber	
<u>Diesel Range Organics (DRO) by GC-FID</u>									
Diesel Range Organics (DRO)	230	mg/kg	8.9	1.4	1	8015B	04/23/08 8:25	jvogel	Q31936
Sample Preparation:			25.53 g	/	1 mL	3545	04/21/08 15:15	wconder	P21394
					Surrogate	% Recovery	Control Limits		
					o-Terphenyl	107	49 - 124		
<u>Sample Weight Determination</u>									
Weight 1	4.71	g			1	GRO	04/17/08 0:00	athao	
Weight 2	5.30	g			1	GRO	04/17/08 0:00	athao	
<u>Gasoline Range Organics (GRO) by GC-FID</u>									
Gasoline Range Organics (GRO)	BRL	mg/kg	6.5	4.1	50	8015B	04/17/08 23:44	wbradley	Q31818
					Surrogate	% Recovery	Control Limits		
					aaa-TFT	80	55 - 129		

Sample Comment(s):

BRL = Below Reporting Limit

Values are reported down to the reporting limit only. No J-Flags applied.

The results in this report relate only to the samples submitted for analysis and meet state certification requirements other than NELAC certification except for those instances indicated in the case narrative and/or test comments.

All results are reported on a dry-weight basis

Angela D. Overcash, V.P. Laboratory Services

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Full Service Analytical & Environmental Solutions

149 Springbrook Road • P.O. Box 240543 • Charlotte, NC 28224-0543
Phone: 704/529-6364 • Fax: 704/525-0409

Client Company Name: HART & HILKMAN
Report To/Contact Name: D. Cochran
Reporting Address: 2423 S. TAYLOR

Phone: 704-586-0000 Fax (Yes) (NO):
Email (Yes) (No) Email Address: d.cochran@hartandhilkman.com
EDD Type: PDF / Excel / Other
Site Location Name: Boone - DOT
Site Location Physical Address: Boone, NC

CHAIN OF CUSTODY RECORD

PAGE 6 OF 10 QUOTE # TO ENSURE PROPER BILLING:

Project Name: Raw-148 UST Project: (Yes) (No)
Short Hold Analysis: (Yes) (No) UST Project: (Yes) (No) I III III IV
*Please ATTACH any project specific reporting (QC LEVEL I III III IV) provisions and/or QC Requirements
Invoice To:
Address:

Purchase Order No./Billing Reference

Requested Due Date 1 Day 2 Days 3 Days 4 Days 5 Days
"Working Days" 6-9 Days Standard 10 days Rush Work Must Be Pre-Approved
Samples received after 15:00 will be processed next business day.
Turnaround time is based on business days, excluding weekends and holidays.
(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

LAB USE ONLY
Samples INTACT upon arrival? YES NO N/A
Received ON WET ICE? Temp 13
PROPER PRESERVATIVES indicated?
Received WITHIN HOLDING TIMES?
CUSTODY SEALS INTACT?
VOLATILES rec'd W/OUT HEADSPACE?
PROPER CONTAINERS used?

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL
Certification: NELAC USACE FL NC
SC OTHER N/A
Water Chlorinated: YES NO
Sample Iced Upon Collection: YES NO

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER			PRESERVATIVES	ANALYSES REQUESTED	REMARKS	PRISM LAB ID NO.
				*TYPE SEE BELOW	NO.	SIZE				
37-1(10-12)	4/9/08	0848	soil	VQA, 26	3	40ml 60z	none/meth	X		211261
37-5(5-7)		0900	soil	↓	↓	↓	↓	X		211262
37-6(5-7)		0920	soil					X		211263
35-5(7-10)		0955	soil	VA-2100S				X		211264
35-6(7-10)		1010	soil					X		211265
42-17(2-5)		1110	soil	VQA, 26	3	40ml 60z	none/meth	X		211266
42-18(7-10)		1120	soil	↓	↓	↓	↓	X		211267
42-19(0-2)		1130	soil					X		211268
42-20(6-7)		1140	soil	↓	↓	↓	↓	X		211269
42-22(10-12)		1150	soil	↓	↓	↓	↓	X		211270

PRESS DOWN FIRMLY - 3 COPIES

Sampler's Signature: [Signature] Sampled By (Print Name): M. Falkner Affiliation: H&H

Additional Comments: Military/hours

Received By: (Signature) Date

Received For Prism Laboratories By: [Signature] Date: 4/11/08 9:20
COC Group No. 60483351

Method of Shipment: Fed Ex UPS Hand-delivered Prism Field Service Other

NPDES: NC SC NC SC NC SC NC SC NC SC NC SC

GROUNDWATER: NC SC NC SC NC SC

DRINKING WATER: NC SC NC SC

SOLID WASTE: NC SC NC SC

RCRA: NC SC NC SC

CERCLA: NC SC NC SC

LANDFILL: NC SC NC SC

OTHER: NC SC NC SC

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic TI = Teflon-lined Can VOA = Volatile Organics Analysis (7erm Head Space)

PRISM USE ONLY
Site Arrival Time:
Site Departure Time:
Field Tech Fee:
Mileage:

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL



Full Service Analytical & Environmental Solutions

449 Springbrook Road • P.O. Box 240543 • Charlotte, NC 28224-0543
Phone: 704/529-6364 • Fax: 704/525-0409

Client Company Name: HART & HICKMAN

Report To/Contact Name: D. Green

Reporting Address: 2403 S. Tryon St

Phone: 704-386-0007 Fax (Yes) (No):

Email (Yes) (No) Email Address: dgreen@hartandhickman.com

EDD Type: PDF Excel Other

Site Location Name: BOONE DOT

Site Location Physical Address: BOONE, NC

CHAIN OF CUSTODY RECORD

PAGE 5 OF 10 QUOTE # TO ENSURE PROPER BILLING:

Project Name: Row-178

Short Hold Analysis: (Yes) (No) UST Project: (Yes) (No)

*Please ATTACH any project specific reporting (QC LEVEL I III IV)

provisions and/or QC Requirements

Invoice To:

Address:

Purchase Order No./Billing Reference

Requested Due Date 1 Day 2 Days 3 Days 4 Days 5 Days

"Working Days" 6-9 Days Standard 10 days Rush Work Must Be

Samples received after 15:00 will be processed next business day.

Turnaround time is based on business days, excluding weekends and holidays.

(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES

RENDERED BY PRISM LABORATORIES, INC. TO CLIENT)

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER OR SLUDGE)	SAMPLE CONTAINER			PRESERVATIVES	ANALYSES REQUESTED	REMARKS	PRISM LAB ID NO.
				*TYPE SEE BELOW	NO.	SIZE				
47-5 (2-5)	4/18/08	1525	soil	WHA, 26	3	40ml 6oz	None meth	X		211251
41-1 (5-7)		1600						X		211252
41-2 (2-5)		1615						X		211253
41-3 (5-7)		1625						X		211254
41-4 (5-7)		1640						X		211255
41-5 (2-5)		1655						X		211256
41-6 (2-5)		1715						X		211257
37-2 (2-5)	4/19/08	0800						X		211258
37-4 (0-2)		0820						X		211259
37-3 (10-12)		0835						X		211260

PPH-CR-01

Sampled By (Print Name) M. Falkner Affiliation A&H

Received By (Signature) [Signature]

Relinquished By (Signature) [Signature]

Upon relinquishing, this Chain of Custody is your authorization for Prism to proceed with the analyses as requested above. Any changes must be submitted in writing to the Prism Project Manager. There will be charges for any changes after analyses have been initialized.

Additional Comments: Relinquished For Prism Laboratories By [Signature]

Site Arrival Time: 4/19/08 9:20

Site Departure Time: 9:20

Field Tech Fee: 60453351

Mileage: 970

PRISM USE ONLY

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL

Original