



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY  
GOVERNOR

LYNDO TIPPETT  
SECRETARY

January 30, 2008

MEMORANDUM TO: William (Bill) T. Goodwin, PE  
Project Development – Bridge Unit – Unit Head  
Project Development and Environmental Analysis Branch

ATTN: Name  
Project Planning Engineer

FROM: Njoroge W. Wainaina, P.E.  
State Geotechnical Engineer  
Geotechnical Engineering Unit

TIP NO: B-4820  
WBS: 38590.1.1  
F.A. PROJECT: N/A  
COUNTY: Surry/Yadkin  
DESCRIPTION: BR 338 over the Yadkin River on SR 1190-1402

SUBJECT: **Geotechnical Pre-Scoping Report**

The Geotechnical Engineering Unit has performed a limited assessment of the above referenced project to assist in developing the scope of work necessary to provide early identification of geoenvironmental and geotechnical issues that could impact the project's planning, design, or construction.

**GEOENVIRONMENTAL IMPACT EVALUATION**

**Purpose**

This section presents the results of a geoenvironmental impact 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. Geoenvironmental impacts may include, but are not limited

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**MAILING ADDRESS:**  
NC DEPARTMENT OF TRANSPORTATION  
GEOENVIRONMENTAL SECTION  
1589 MAIL SERVICE CENTER  
RALEIGH NC 27699-1589

TELEPHONE: 919-250-4088  
FAX: 919-250-4237

WEBSITE: [WWW.DOH.DOT.STATE.NC.US](http://WWW.DOH.DOT.STATE.NC.US)

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

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. Geotechnical Engineering Unit personnel conducted a field reconnaissance along SR 1190-1402 from Market Street in Elkin to just southeast of Elm Street in Jonesville on January 15, 2008. A search of appropriate environmental agencies' databases was performed to assist in evaluating sites identified during this study.

### **Findings**

#### **Underground Storage Tank (UST) Facilities**

Based on our study, seven (7) sites presently, or formerly containing petroleum underground storage tanks (UST's) were identified within the project limits.

#### **Hazardous Waste Sites**

No Hazardous Waste Sites were identified within the project limits.

#### **Landfills**

No apparent landfills were identified within the project limits.

#### **Other GeoEnvironmental Concerns**

Two (2) other geoenvironmental concerns, an auto repair shop and the Yadkin River RR, were identified within the project limits.

### **Anticipated Impacts**

Seven (7) possible UST facilities, one auto repair shop, and the rail road yard were identified within the proposed project corridor. We anticipate low monetary and scheduling impacts resulting from these sites. (See Appendices A and B for details)

The Geotechnical Engineering Unit will provide soil and groundwater assessments on each of the above properties after identification of the selected alternative and before right of way acquisition. Please note that discovery of additional sites not recorded by regulatory agencies and not reasonably discernable during the project reconnaissance may occur. The Geotechnical Engineering Unit 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 Terry W. Fox, LG, at 919-250-4088.

### Known and Potential GeoEnvironmental Impact Sites

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1)	<b>Property Name</b> Tender Touch Home Care 105 Market Street Elkin, NC 28621	<b>Property Owner:</b> Evan Vestal 227 E. Main Street Elkin, NC 28624
	<b>Facility ID #:Unknown</b>	<b>UST Owner: Unknown</b>

This facility is currently Tender Touch Home Care. It is located in the southwest quadrant of Market Street and Gwyn Ave.(SR 1190). There is evidence of an old pump island in front of the building. No information could be found in the UST registry and no monitoring well noted on site. **This site is anticipated to present low geoenvironmental impacts to the project.**

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2)	<b>Property Name</b> White Swain Rentals 204 Market Street Elkin, NC 28621	<b>Property Owner:</b> Kenneth Haney 204 Market Street Elkin, NC 28621
	<b>Facility ID #: 0-026237</b>	<b>UST Owner: Same</b>

This facility appeared to be vacant on the day of recon. It is listed as White Swain Rentals. It is located in the southeast quadrant of Market Street and Gwyn Ave ( SR 1190). According to the UST registry the is one underground heating oil tank in use at this facility. No other evidence of any other UST system was noted. The building does have the appearance of a old service station. No monitoring wells were noted on site. **This site is anticipated to present low geoenvironmental impacts to the project.**

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3)	<b>Property Name</b> Yadkin River RR	<b>Property Owner:</b> Yadkin River RR
	<b>Facility ID #: N/A</b>	<b>UST Owner:.N/A</b>

The Yadkin River RR runs under Gwyn Ave ( SR 1190). Petroleum and creosote contaminated soil may be encountered along the track area. **This site is anticipated to present low geoenvironmental impacts to the project.**

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4)	<b>Property Name</b> Jonesville Automatic Transmission Service 474 Bridge Street Jonesville, NC 28642	<b>Property Owner:</b> Billy Taylor 474 Bridge Street Jonesville, NC 28642
	<b>Facility ID #: N/A</b>	<b>UST Owner:N/A</b>

This facility currently operates as an auto repair shop. It is located on the east side of Bridge Street ( SR 1402) approximately 275 feet north of Elm Street. There is no evidence of any UST system. At the time of the field inspection there were several junk cars on the property. No monitoring wells were noted on site. **This site is anticipated to present low geoenvironmental impacts to the project.**

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5)	<b>Property Name</b> N&W Auto Sales 462 N. Bridge Street Jonesville, NC 28642	<b>Property Owner:</b> William & Mark Swaim 324 Johnson Ridge Rd Elkin, NC 28621
	<b>Facility ID #:Unknown</b>	<b>UST Owner: Unknown</b>

This former gas station currently operates as a used car lot. It is located on the east side of Bridge Street (SR 1402) approximately 130 feet north of Elm Street. The tanks are still in place and are located by the southwest corner of the building about 75 feet from the centerline of Bridge Street. No information could be found in the UST Registry. No monitoring wells were noted on site. **This site is anticipated to present low geoenvironmental impacts to the project.**

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6)	<b>Property Name</b> Auto Glass Service 463 N. Bridge Street Jonesville, NC 28642	<b>Property Owner:</b> David Lyon 14410 Traphill Road Traphill, NC 28685
	<b>Facility ID #:Unknown</b>	<b>UST Owner:Uknown</b>

This former gas station currently operates as an auto glass and tire shop. It is located on the west side of Bridge Street approximately 130 feet north of Elm Street. According to the current owner the tanks were removed prior to his purchase. There are two in-ground hydraulic lifts still in use. No information could be found in the UST registry. No monitoring wells were noted on site **This site is anticipated to present low geoenvironmental impacts to the project.**

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7)	<b>Property Name</b> Hess-Wilco 411 Bridge Street Jonesville, NC 28642	<b>Property Owner:</b> Wilcohess LLC 5446 University Pkwy Winston-Salem, NC 27105
	<b>Facility ID #: 0-005625</b>	<b>UST Owner: Same</b>

This facility currently operates as a convenience store & gas station. It is located in the southwest quadrant of Bridge Street and Elm Street. According to the UST registry there are five tanks currently in use. The tank bed is located near the southeast corner of the building approximately 60 from the edge of payment on Bridge Street. No monitoring wells were noted on site. **This site is anticipated to present low geoenvironmental impacts to the project.**

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8)	<b>Property Name</b> Southern Bells 442 Bridge Street Jonesville, NC 28642	<b>Property Owner:</b> James V. Cockerham 5010 Allison Ave Charlotte, NC 28226
	<b>Facility ID #: Unknown</b>	<b>UST Owner: Unknown</b>

This facility currently operates as a restaurant. It is located on the east side of Bridge Street approximately 130 feet south of Elm Street. There are several monitoring wells located on this property. There is no evidence of any UST system and no information could be found in the UST registry. The monitoring wells could be associated with the old gas station (Beroth Oil Co) next door. **This site is anticipated to present low geoenvironmental impacts to the project.**

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9)	<b>Property Name</b> Beroth Oil Co 430 Bridge Street Jonesville, NC 28642	<b>Property Owner:</b> Beroth Oil Co PO Box 4089 Winston Salem, NC 27115
	<b>Facility ID #: 0-005098</b> <b>Incident #: 12188</b>	<b>UST Owner: Unknown</b>

This former gas station is currently vacant. It is located on the east side of Bridge street approximately 300 feet south of Elm Street. The property is just outside the project corridor. This facility also operated as Jonesville Amoco (facility ID 0-005099). According to the UST registry the Amoco had five tanks, all closed between 1988 and 1993. Beroth Oil Co had six tanks, all closed between 1994 and 2000. Several monitoring wells were noted on site. **This site is anticipated to present low geoenvironmental impacts to the project.**

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## **GEOTECHNICAL IMPACT EVALUATION**

### **Techniques/Methodologies**

### **Findings**

### **Anticipated Impacts/Recommendations**

If there are questions regarding the geotechnical issues, please contact [Name] at [Phone]

cc:

Art McMillan, PE, State Highway Design Engineer

Jay Bennett, PE, State Roadway Design Engineer

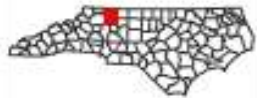
Greg Perfetti, PE, State Bridge Engineer

D.R. Henderson, PE, State Hydraulics Engineer

Charles W. Brown, PE, PLS, State Location & Surveys Engineer

Keith Johnston, PE, PLS, State Photogrammetric Engineer

**Appendix A**  
**Locations of USTs, Landfills, & Other Potentially Contaminated Sites**



Project 38590.1.1 (TIP # B-4820)  
 Replace Bridge # 338 over Yadkin River  
 on SR 1190-1402  
 Surry and Yadkin County



0.05 0.025 0 0.05 Miles



NC Department of Transportation  
 Geotechnical Engineering Unit  
 GeoEnvironmental Section





**Site Photographs  
January 15, 2008**



**Site 1:** Tender Touch Home Care

**Site 2:** White Swains Rental

No Photo



**Site 3:** Yadkin River RR

**Site 4:** Jonesville automatic Transmission Service





**Site 5: N&W Auto Sales**



**Site 6: Auto Glass Service**



**Site 7: Hess/ Wilco**



**Site 8: Southern Bells**



**Site 9: Beroth Oil Co ( Jonesville Amoco)**