



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY  
GOVERNOR

LYNDO TIPPETT  
SECRETARY

November 17, 2008

MEMORANDUM TO: Name  
Project Development and Environmental Analysis Branch

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

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

TIP NO: B-4543  
WBS: 33758.1.1  
F.A. PROJECT: NNNF-00-0(0)  
COUNTY: Harnett  
DESCRIPTION: Bridge 120 over the Black River on SR 1558

SUBJECT: **Geotechnical 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 hazardous material and geotechnical issues that could impact the project's planning, design, or construction.

### **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

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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 the project corridor on October 7, 2008. A search of appropriate environmental agencies' databases was performed to assist in evaluating sites identified during this study.

### **Anticipated Impacts**

The Geotechnical Engineering Unit observed no contaminated properties during the field reconnaissance and regulatory agencies' records search. 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. See Appendices A and B for an area map and site photograph.

If there are questions regarding the geoenvironmental issues, please contact Ethan J. Caldwell, at 919-250-4088.



## **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

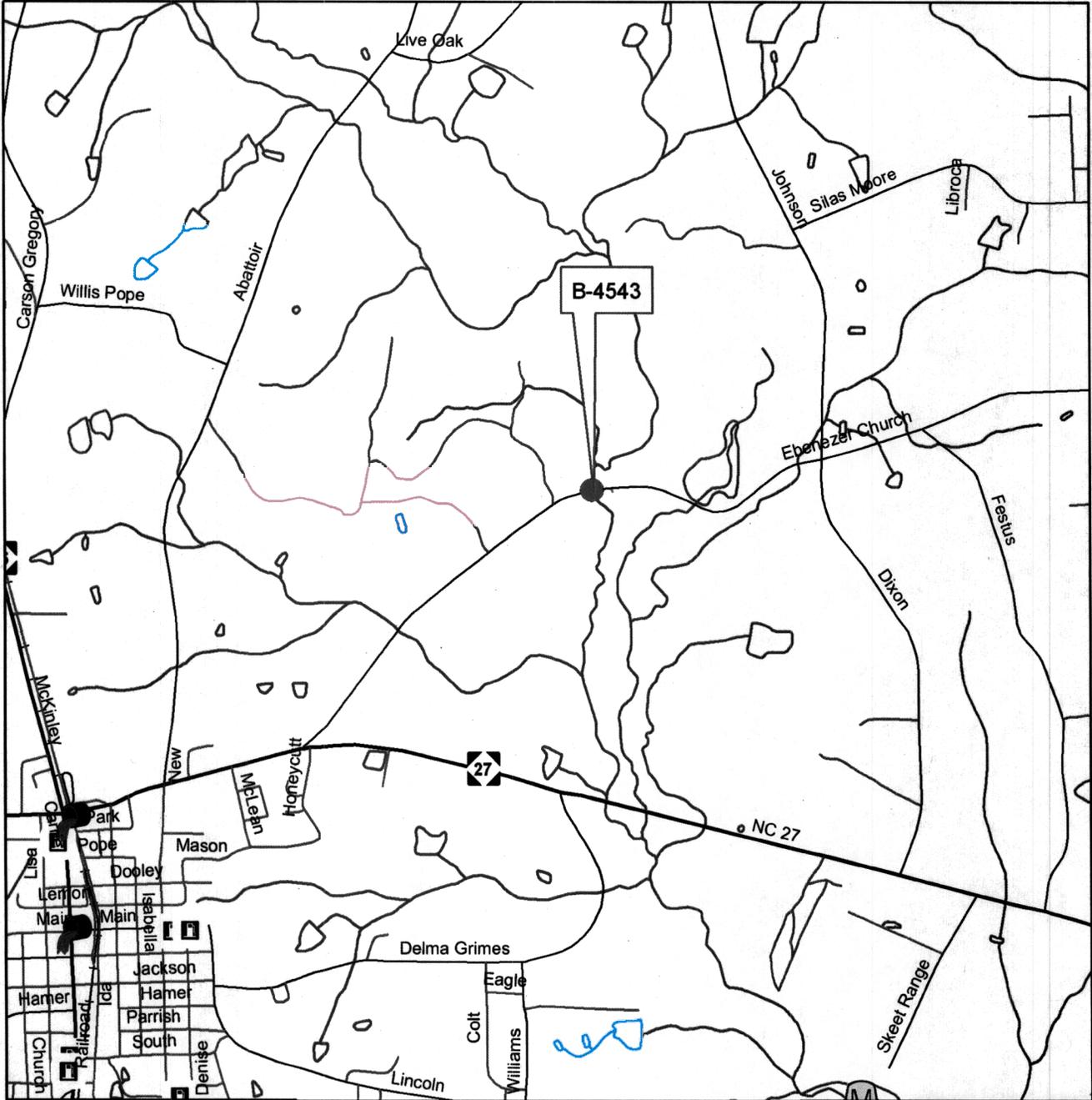
Greg Perfetti, PE, State Bridge Engineer

D.R. Henderson, PE, State Hydraulics Engineer

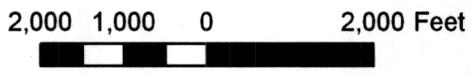
Charles W. Brown, PE, PLS, State Location & Surveys Engineer



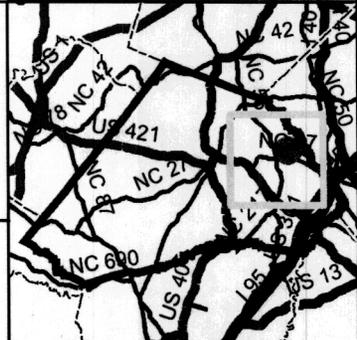
**Appendix A**  
**Locations of USTs, Landfills, & Other Potentially Contaminated Sites**



Project 33758.1.1 (TIP # B-4543)  
 Bridge # 120 over the Black River on  
 SR 1558 (Ebenezer Church Rd)  
 Harnett County



NC Department of Transportation  
 Geotechnical Engineering Unit  
 GeoEnvironmental Section



**Appendix B**  
**Site Photograph**  
October 7, 2008



Bridge 120 over the Black River on SR 1558. View to the east.