



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

May 24, 2010

MEMORANDUM TO: Name
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: EB-4707
WBS: 38664.1.1
COUNTY: Orange-Durham
DIVISION: Division 5
DESCRIPTION: Widening Old Durham Rd (SR 1838)/Chapel Hill Rd (SR 2220)
from US 15-501 (Durham/Chapel Hill Blvd) to Garrett Rd
(SR 1116)

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 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

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www.ncdot.gov/doh/preconstruct/highway/geotech

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

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. Geotechnical Engineering Unit personnel conducted a field reconnaissance along the project corridor on May 11, 2010. 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, four (4) sites presently, or formerly containing petroleum USTs 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

No other geoenvironmental concerns were identified within the project limits.

Anticipated Impacts

Four (4) possible UST facilities were identified within the proposed project corridor. We anticipate low monetary and scheduling impacts resulting from these sites. (See the following table and appendices 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 Hazardous Material Sites

1)	Property Name Former Chapel Hill Nursery Scarlett Drive Chapel Hill, NC 27514 Facility ID #: N/A	Property Owner: Muthigi Gorvardham 4213 Peachway Drive Durham, NC 27705 UST Owner: N/A
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This closed business formerly operated as Chapel Hill Nursery. It is located in the southeastern quadrant of Scarlett Drive and Old Durham Road. The structure is approximately 50 feet south of the Old Durham Road centerline. No information could be found in the UST registry for this facility. Furthermore, no evidence of any UST system was observed in the field. However, the design of the building suggests it may have been a gas station at one time. **This site is anticipated to present low geoenvironmental impacts to the project.**

2)	Property Name R&H Mini Mart 117 Old Durham Road Chapel Hill, NC 27514 Facility ID #: N/A Incident #: 15985	Property Owner: Edward B. Heard Heirs 104 Old Durham Road Chapel Hill, NC 27514 UST Owner: N/A
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This facility currently operates as a convenience store. It is located on the south side of Old Durham Road and approximately 200 feet east of Scarlett Drive. Although no information was found in the UST Registry, evidence of an old pump island was noted during the filed reconnaissance. The former pump island is located approximately 55 feet south of the Old Durham Road median. GWI # 15985 has been assigned to this facility. **This site is anticipated to present low geoenvironmental impacts to the project.**

3)	Property Name Performance Automall 1806 Fordham Blvd Chapel Hill, NC 27515 Facility ID #: 0-020696 Incident #: 8462 & 16492	Property Owner: Hendrick Automotive Group PO Box 2287 Chapel Hill, NC 27515 UST Owner: Hendrick Automotive Group 6000 Monroe Road Charlotte, NC 28212
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This facility currently operates as an Automotive Dealership. The property is located between US 15/501 and Old Durham Road. The paint shop and several BMW service bays with waste oil storage are located on the back side of the property. The oil storage is located 80 feet north of the Old Durham Road median. The UST registry shows that four tanks were removed between 1991 and 2002. GWI #'s 8462 and 16492 have been assigned to this facility. **This site is anticipated to present low geoenvironmental impacts to the project.**

4)	Property Name Former Gas Station 5520 Old Chapel Hill Road Durham, NC 27707 Facility ID #: N/A	Property Owner: John L. Jr. & Ann McKee 11 White Oak Drive Durham, NC 27707 UST Owner: N/A
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This facility is currently being used for private storage. It is located in the northeastern quadrant of N. White Oak Drive and Old Chapel Hill Road. Although no information was found in the UST registry for this facility, evidence of an old pump island was noted during the field reconnaissance. The building canopy is approximately 30 feet north of the Old Chapel Hill Road centerline. **This site is anticipated to present low geoenvironmental impacts to the project.**

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

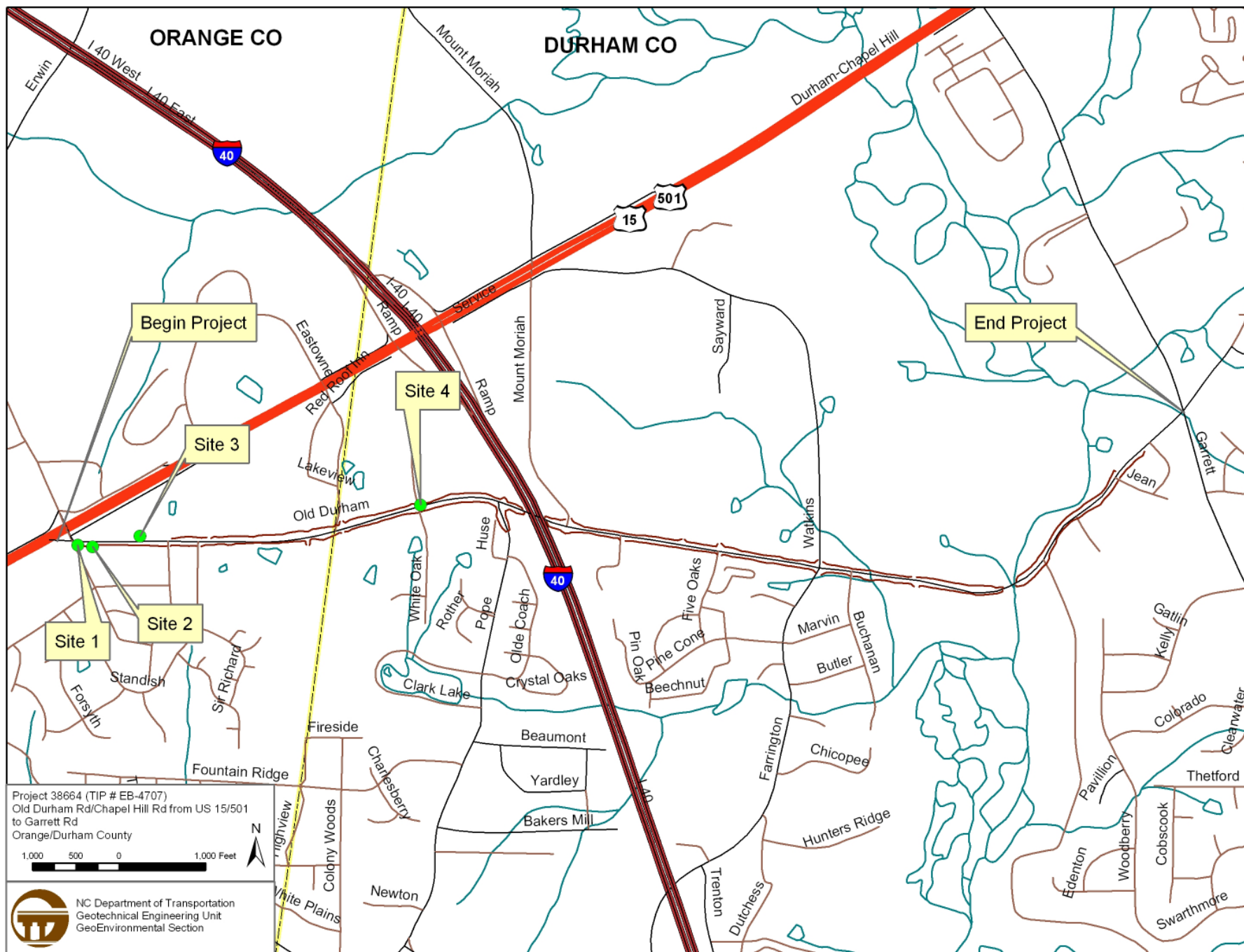
Jay Bennett, PE, State Roadway Design Engineer

Greg Perfetti, PE, State Bridge Engineer

D.R. Henderson, PE, State Hydraulics Engineer

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

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



Project 38664 (TIP # EB-4707)
Old Durham Rd/Chapel Hill Rd from US 15/501
to Garrett Rd
Orange/Durham County

1,000 500 0 1,000 Feet

NC Department of Transportation
Geotechnical Engineering Unit
GeoEnvironmental Section



Site #1: Former Chapel Hill Nursery. View to the east.

Site # 2: R & H Mini Mart. View to the southeast



Site # 3: Performance BMW waste oil storage. View to the northeast.



Site # 4: Former Gas Station. View to the northeast.