

APPENDIX H: NCCU Station Refinement Hazardous Materials

Durham-Orange Light Rail Transit Project



November 2016

1. Introduction

A limited Phase I Environmental Site Assessment (ESA) of the proposed Durham-Orange Light Rail Transit (D-O LRT) Project, specifically the North Carolina Central University (NCCU) Station Refinement, located in Durham county, North Carolina, was conducted by qualified professionals from AECOM (formerly URS Corporation). The limited Phase I ESA characterizes various environmental concerns based on the available information and the current level of design of the proposed NCCU Station Refinement. The assessment was made based on a database review and site visit.

2. Records Review

Regulatory information gathered from the database search provided by The EDR Radius Map™ Report with GeoCheck® dated September 14, 2016 was reviewed for possible recognized environmental conditions (RECs). Records reviewed as part of the EDR Report pertain to properties having the potential to be directly impacted by construction activities associated with the project. The EDR Report also provides information on properties within an additional search distance of one mile of the NCCU station refinement alignment and stations. However, based on information as provided by the original Limited Phase I Environmental Site Assessment for the D-O LRT Project, properties that are greater than 500 feet away from the alignment and stations have the least risks of environmental impacts. This is due to the fact that groundwater and subsurface contamination is significantly minimized at such a distance based on the geological information available for the area. Thus, only properties that are within the immediate vicinity and 500 feet of the NCCU Station Refinement alignment were assessed for the likelihood of encountering contaminated materials from migrating hazardous substances or petroleum products.

Databases reviewed using the EDR Report include the following:

- ECHO: Enforcement & Compliance History Information – ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.
- EDR Hist Auto: EDR Exclusive Historic Gas Stations – EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.
- EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners – EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary

data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

- FINDS: Facility Index System/Facility Registry System – FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).
- IMD: Incident Management Database – Groundwater and/or soil contamination incidents.
- LAST: Leaking Aboveground Storage Tanks – A listing of leaking aboveground storage tank site locations.
- LUST: Regional UST Database – This database contains information obtained from the Regional Offices. It provides a more detailed explanation of current and historic activity for individual sites, as well as what was previously found in the Incident Management Database. Sites in this database with Incident Numbers are considered leaking underground storage tanks (LUSTs).
- LUST TRUST: State Trust Fund Database – This database contains information about claims against the State Trust Funds for reimbursements for expenses incurred while remediating Leaking USTs.
- RCRA NonGen / NLR: RCRA–Non Generators / No Longer Regulated – RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.
- RGA LUST: Recovered Government Archive Leaking Underground Storage Tank – The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Environment, Health and Natural Resources in North Carolina.
- SWRCY: Recycling Center Listing – A listing of recycling center locations.
- UST: Petroleum Underground Storage Tank Database – Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

See Appendix A which includes a comprehensive listing of sites identified and reviewed as presented by the EDR report.

3. Site Reconnaissance

A site visit of the proposed NCCU Station Refinement area was conducted on September 26, 2016. A two-person team method was followed for the site reconnaissance where the team visually observed and walked along subject properties covered by the NCCU Station Refinement. Areas covered included urban areas and wooded areas; where accessible, some of the urban areas were traversed by car. Weather conditions during the site reconnaissance were overcast and fair. During the site walk, assessments were made of any signs of release or other mishandling of stored or used hazardous materials, as well as evidence of past releases of hazardous materials such as soil stains or impacted vegetation. Properties labeled as “PERSONAL PROPERTY” or “DO NOT ENTER” were only observed from public right-of-ways.

The site reconnaissance started at the corner of East Pettigrew Street and Grant Street. The team traveled south on Grant Street, cut across to Colfax Street, turned on Gillette Avenue, and then walked Murphy Street. Next, the team drove east down East Pettigrew Street and turned right on Chatham Place and walked Gann Street. After completing this block, the team drove south down South Alston Avenue and completed the site reconnaissance by walking the rest of the NCCU Station Refinement alignment and station areas on foot past Highway 147. The following observations were made:

- Stressed vegetation was not observed during site reconnaissance.
- A vacant lot was observed at 511 Grant Street where remnants of vinyl flooring were still visible.
- 55-gallon drums were observed without secondary containment in an outside cage at Orange Recycling Services, Inc.
- A lot of debris and trash was observed on and around the vacant lot at 1102 Gann Street and at the end of Gillette Avenue.

4. Findings

All properties of concern identified in this limited Phase I ESA were categorized into three significance levels: low, medium, and high. The methodology used to provide guidance on determining the level of environmental impact or risk was based on the ranking protocols as established for the DEIS (see DEIS section 4.11.1). The significance is as indicated below:

- Low – Based on the geological information available for the area, the properties that are greater than 500 feet away from the alignment have the least risks of environmental impacts. This is due to the fact that groundwater and subsurface contamination is significantly minimized at such a distance. In addition, waste generators or listing records (e.g., no recorded incident, FINDS database record, etc.) are classified as low risk.
- Medium – Properties that are within 500 feet of the alignment and are closed LUST sites, AST/UST sites, vehicle repair sites, junk yards, or have closed spill incidents.
- High – Properties that are within 500 feet of the alignment and are closed LUST sites that had no documented cleanup, are historical dry cleaners, historical auto stations (i.e., gas stations), active LUST sites, or have open spill incidents.

Based on information gathered from the database review and the site reconnaissance, the original findings as presented in the Limited Phase I Environmental Site Assessment for the D-O LRT Project need to be revised as follows:

- “Orange Recycling” located at 1010 East Pettigrew Street needs to be elevated from medium risk to high risk due to observation of 55-gallon drums without secondary containment in an outside cage during site reconnaissance.
- “Exxon-45383 Ruffins” located at 602 South Alston Avenue needs to be elevated from low risk to medium risk due to the change in distance (now less than 500 feet) from the alignment of the NCCU Station Refinement.
- “Parkview Convenience” located at 701 South Alston Avenue needs to be elevated from low risk to medium risk due to the change in distance (now less than 500 feet) from the alignment of the NCCU Station Refinement.
- “Evans M/M 2” located at 706 and 710 South Alston Avenue needs to be elevated from low risk to high risk due to the change in distance (now less than 500 feet) from the alignment of the NCCU Station Refinement and possible historical use as a dry cleaners.

New findings for the NCCU Station Refinement are as follows:

- Medium Risk – “Pettigrew Street Garage” located at 904 East Pettigrew Street due to its function as an automobile repair facility and associated petroleum products and storage.
- Low Risk – “Adams Jos Clothes Cleaner” located at 407 and 409 Murphy Street
- High Risk – “Aguilera, Filemon – Property” located at 1102 Gann Street due to report of an underground leak of petroleum to soil.
- Medium Risk – “High J Otis Garage” located at 1012 South Alston Avenue due to its function as an automobile repair facility and associated petroleum products and storage.
- High Risk – “NCCU Chidley Hall and McDougald House” located at East Lawson and Alston Avenue due to report of 1,000 gallon heating oil underground storage tank removed and contamination still present.

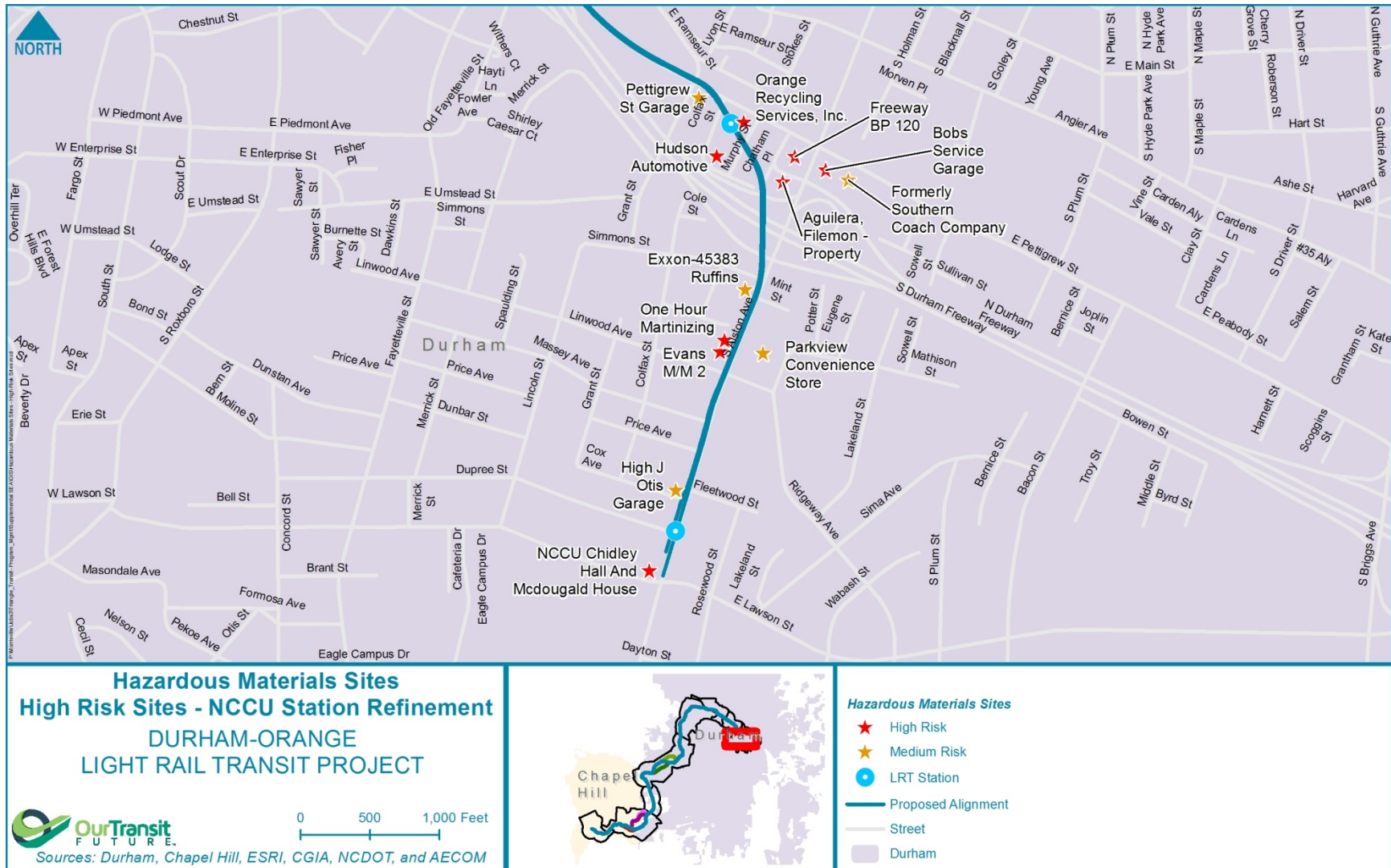
A summary of the high and medium risk sites as identified in the Combined FEIS/ROD and for the NCCU station refinement is provided in Table 1. The locations for the high and medium risk sites are illustrated on Figure 1.

Table 1: Summary of High and Medium Risk Sites

Site Risk	D-O LRT Project	NCCU Station Refinement	Total
High Risk	41	+4	45
Medium Risk	83	+3*	86

*A total of four (4) new sites were added to the medium category, but one (1) site was elevated from medium to high risk, therefore the net increase is three (3) sites.

Figure 1: Hazardous Materials High and Medium Risk Sites NCCU Station Refinement



Appendix A

EDR Records Search Properties List

EDR ID	PROPERTY NAME	PROPERTY ADDRESS	EDR DATABASE	EDR NOTES	ASSESSMENT COMMENTS
16	HIGH J OTIS GARAGE	1012 SOUTH ALSTON AVENUE	EDR HIST AUTO	1944 AND 1949, AUTOMOBILE REPAIRING	HISTORICAL AUTO SHOP; MEDIUM RISK
20	PETTIGREW ST GARAGE	904 EAST PETTIGREW STREET	EDR HIST AUTO	1949, AUTOMOBILE REPAIRING	HISTORICAL AUTO SHOP; MEDIUM RISK
32	FOWLER M M GAS STATIONS	600 GRANTHAM STREET	EDR HIST AUTO	1997, GASOLINE STATIONS	SITE COULD NOT BE GEO-LOCATED; ORPHAN SITE
A1	EXXON RAS #45383	602 SOUTH ALSTON AVENUE	FINDS, ECHO	ID: 110004047843 NO VIOLATIONS	EXISTING SITE UNDER DEIS, ELEVATE RISK FROM LOW TO MEDIUM DUE TO DISTANCE
A2	EXXON RAS #45383	602 SOUTH ALSTON AVENUE	RCRA NONGEN / NLR	FACILITY IS A HANDLER: NON-GENERATORS DO NOT PRESENTLY GENERATE HAZARDOUS WASTE	
A3	RUFFINS EXXON 4-5383	602 SOUTH ALSTON AVENUE	RGA LUST	2000 - 2002	
A4	BURTON EXXON SERVICE CENTER	602 SOUTH ALSTON AVENUE	EDR HIST AUTO	1983, GASOLINE STATIONS	
A5	SPLISH SPLASH LAUNDROMAT	602 SOUTH ALSTON AVENUE	EDR HIST CLEANER	2006 - 2008, 2010 - 2012	
A6	EXXON 4-5383 RUFFIN'S	602 SOUTH ALSTON AVENUE	LUST, IMD	DATE REPORTED: 07/19/1996 DATE OCCUR: 05/01/1990 CLOSE OUT: 08/28/1996 INCIDENT DESCRIPTION: MINOR SOIL CONTAMINATION CONFIRMED DURING THE REMOVAL OF FOUR USTS	
A7	EXXON 4-5383 RUFFIN'S	602 SOUTH ALSTON AVENUE	RGA LUST	2003 - 2012	
B8	NCCU-CHIDLEY HALL	EAST LAWSON STREET AND ALSTON AVENUE	RGA LUST	2003 - 2012	NEED TO DETERMINE CURRENT STATUS OF SITE CLOSURE WITH THE STATE: HIGH RISK
B9	NCCU MCDUGALD HOUSE-99	EAST LAWSON STREET AND ALSTON AVENUE	RGA LUST	2003 - 2012	
B10	NCCU MCDUGALD HOUSE-99	EAST LAWSON STREET AND ALSTON AVENUE	LUST, IMD	DATE REPORTED: 01/06/1999 DATE OCCUR: 10/19/1998 CLOSURE REQUEST: 12/15/1999 NORR ISSUE DATE: 08/02/2000 COMMENTS: CONTAM. STILL PRESENT AFTER LSA, FURTHER REMEDIAL WORK BEING DONE. NORR FOR SOIL CLEANUP PLAN ISSUED 08/02/00. REVIEWED LSA IN FILE AND COMPLETED RISK RANKING. L115D WITH SOILOVER THE STGW. REQUESTING NRP 5/28/15 INCIDENT DESCRIPTION: A 1,000 GALLON HEATING OIL UST WAS REMOVED. SOIL FROM THE REMOVAL WAS TAKEN FOR DISPOSAL. TPH-DRO WAS DETCTED AT 6,310 PPM	
B11	NCCU-CHIDLEY HALL	EAST LAWSON STREET AND ALSTON AVENUE	LUST, IMD	DATE REPORTED: 01/06/1999 DATE OCCUR: 10/19/1998 NORR ISSUE DATE: 08/02/2000 COMMENTS: SAR REC'D 12/6/99. NORR FOR SOIL CLEANUP PLAN ISSUED 08/02/00. REVIEWED LSA AGAIN AND RERANKED THE SITE. BASED ON ANALYTICAL DATA AND RECEPTOR INFORMATION, SITE IS A L70D. REQUESTING THE PERFORMANCE OF A NRP FOR SITE CLOSURE 4/13/15 INCIDENT DESCRIPTION: ONE 550 GALLON DIESEL UST WAS REMOVED. FIVE CONTAMINANTS WERE SLIGHTLY OVER THE SOIL-TO-GROUNDWATER MSCC. THE SOIL FROM THE EXCAVATION WAS PROPERLY DISPOSED	
C13	PARKVIEW CONVENIENCE	701 SOUTH ALSTON AVENUE	RGA LUST	2003 - 2012	EXISTING SITE UNDER DEIS, ELEVATE RISK FROM LOW TO MEDIUM DUE TO DISTANCE
C14	PARKVIEW CONVENIENCE	701 SOUTH ALSTON AVENUE	LUST, IMD	DATE REPORTED: 07/15/1986 DATE OCCUR: 07/15/1986 CLOSE OUT: 08/13/1986 INCIDENT DESCRIPTION: GASOLINE DISCOVERED ALONG GASOLINE SUPPLY LINES BETWEEN TANK AND PUMPS QTY RECOVERED: 10 GAL	
C15	PARKVIEW CONVENIENCE STORE	701 SOUTH ALSTON AVENUE	RGA LUST	1994 - 1997, 2000 - 2002	
C12	TERRYS ONE HOUR MARTINIZING	710 SOUTH ALSTON AVENUE	EDR HIST CLEANER	1983, CLEANERS AND DYERS	EXISTING SITE UNDER DEIS, ELEVATE RISK FROM LOW TO HIGH DUE TO DISTANCE AND HISTORICAL DRY CLEANER (NOTE: TWO ADDRESSES HAVE BEEN IDENTIFIED)
C18	ONE HOUR MARTINIZING	706 SOUTH ALSTON AVENUE	EDR HIST CLEANER	1979, CLEANERS AND LAUNDRIES-SELF SERVICE	
C19	EVANS M/M 2	710 SOUTH ALSTON AVENUE	LUST, UST	DATE REPORTED: 02/02/2011 DATE OCCUR: 01/05/2011 CLEANUP: 01/04/2011 CLOSE OUT: 08/16/2011 CLEANUPS TO ALTERNATE STANDARDS 3 TANKS PERMANENTLY REMOVED 01/05/2011	
D17	ADAMS JOS DCLO CLNR	409 MURPHY STREET	EDR HIST CLEANER	1949, CLEANERS AND DYERS	SANBORN MAPS INDICATE SITE IS UNDER HWY 147, WHICH WILL REMAIN UNDISTURBED, THUS LOW RISK
D21	ADAMS JOS CLO CLN	407 MURPHY STREET	EDR HIST CLEANER	1954, CLEANERS AND DYERS	
D23	HUDSON AUTOMOTIVE	1003 GILLETTE AVENUE	EDR HIST AUTO	HUDSON AUTOMOTIVE AUTO RPR, 1997, AUTOMOBILE REPAIRING & SERVICE HUDSON AUTOMOTIVE, 2002 - 2006	

EDR ID	PROPERTY NAME	PROPERTY ADDRESS	EDR DATABASE	EDR NOTES	ASSESSMENT COMMENTS
E22	AGUILERA, FILEMON - PROPERTY	1102 GANN STREET	LUST	DATE REPORTED: 10/04/2013 DATE OCCUR: 06/14/2013 CLEANUP: 06/14/2013 UNDERGROUND LEAK OF PETROLEUM TO SOIL DESCRIPTION OF INCIDENT: DOT PRELIMINARY SITE ASSESSMENT REPORT NO OTHER INFO AVAILABLE	NEED TO DETERMINE CURRENT STATUS OF SITE CLOSURE WITH THE STATE; HIGH RISK
F24	ORANGE RECYCLING SERVICES, INC.	1010 EAST PETTIGREW STREET	SWRCY		EXISTING SITE UNDER DEIS, OBSERVED
F25	PRO AUTO & TRUCK SERVICE	1010 EAST PETTIGREW STREET	EDR HIST AUTO	HECKS AUTO CARE AUTO RPR, 1997, AUTOMOBILE REPAIRING AND SERVICE PRO AUTO & TRUCK SERVICE, 2002	55-GALLON DRUMS WITHOUT LABELING AND SECONDARY CONTAINMENT IN AN OUTSIDE CAGE; ELEVATE RISK TO HIGH
F26	ORANGE RECYLING	1010 EAST PETTIGREW STREET	RCRA NONGEN / NLR	FACILITY IS A HANDLER: NON-GENERATORS DO NOT PRESENTLY GENERATE HAZARDOUS WASTE, FOCUSED COMPLIANCE INSPECTION OCCURRED ON 09/28/2006, NO VIOLATIONS FOUND	
E27	BATES GULF SERVICE	308 SOUTH ALSTON AVENUE	EDR HIST AUTO	BATES GULF SERVICE, 1975, 1979, AUTOMOBILE REPAIRING & SERVICE BOBS GULF GAS STATIONS, 1997, GASOLINE STATIONS BOBS BP SERVICE, 1999 - 2001 FREEWAY BP, 2010	EXISTING SITE UNDER DEIS, RISK REMAINS HIGH
E28	FREEWAY BP 120	308 SOUTH ALSTON AVENUE	LUST, LUST TRUST, UST, IMD	DATE REPORTED: 12/01/2000 DATE OCCUR: 10/11/2000 CLEANUP: 10/11/2000 CLOSE OUT: 04/14/2003 DESCRIPTION OF INCIDENT: SOIL CONTAMINATION DISCOVERED UPON UST REMOVAL	
G29	BATES GULF SERV STA GAS STA	317 SOUTH ALSTON AVENUE	EDR HIST AUTO	1958 AND 1963, GASOLINE STATIONS	
G33	BATES GULF SERVICE	308 SOUTH ALSTON AVENUE	EDR HIST AUTO	BATES GULF SERVICE, 1969, GASOLINE STATIONS BOBS GULF, 1983 AND 1990, GASOLINE STATIONS BOBS BP SERVICE, 1995, GASOLINE STATIONS	
G30	BOBS SERVICE GARAGE	309 SOUTH ALSTON AVENUE	LAST, IMD	DATE REPORTED: 07/06/2005 DATE OCCUR: 05/12/2005 CLEANUP: 05/12/2005 NOV ISSUED: 07/06/2005 INCIDENT DESCRIPTION: TPH OVER ACTION LEVELS IN SOIL. NORR ALSO SENT TO PROPERTY OWNER: TRIANGLE TRANSIT AUTHORITY, 68 TW ALEXANDER DRIVE, SECOND FLOOR, DURHAM, NC 27709	EXISTING SITE UNDER DEIS, RISK REMAINS HIGH
G31	DIXON JORDON C AUTO REPR	314 SOUTH ALSTON AVENUE	EDR HIST AUTO	DIXON JORDON C AUTO REPR, 1940, AUTOMOBILE REPAIRING DIXONS COWBOY GARAGE, 1949, AUTOMOBILE GARAGES AND REPAIRING ECONOMY SERV STA GAS STA, 1958, GASOLINE STATIONS	
G34	FORMERLY SOUTHERN COACH COMPANY	1300 EAST PETTIGREW STREET	UST	ONE 4,000 GALLON GASOLINE TANK, ONE 10,000 GALLON DIESEL TANK, BOTH TEMPORARILY CLOSED	EXISTING SITE UNDER DEIS, RISK REMAINS MEDIUM