REGION 4
ATLANTA, GA 30303

May 1, 2024

Mr. Perrin W. de Jong
Attorney for Petitioner
Center for Biological Diversity
P.O. Box 6414
Asheville, NC 28816

RE: Abbreviated Preliminary Assessment Letter Report
828 MLK CERCLA Petition
Chapel Hill, Orange County, North Carolina

Dear Mr. de Jong:

The U.S. Environmental Protection Agency, Region 4, received a petition to conduct a preliminary assessment (PA) from you on behalf of the Center for Biological Diversity on October 18, 2023. The PA petition listed several potential contaminant releases and environmental hazards associated with coal ash at the subject property. EPA reviewed the PA petition and determined that it met the requirements of 40 Code of Federal Regulation 300.420(b)(5), which allows any person who is, or may be, affected by a release or threatened release of hazardous substances, pollutants, or contaminants to petition the EPA to conduct a PA. EPA prepared this abbreviated PA (APA) to fulfill the petition expeditiously. The sections that follow summarize the APA conducted for the site.

Site Location and Description

The site is located at 828 MLK Blvd. in Chapel Hill, Orange County, North Carolina (Ref. 1; 26). The coordinates of the site, as measured from the center of the on-site building, are 35.926858 latitude north and 79.052908 longitude west (Ref. 2). The site is bounded to the north by Bolinwood Drive and residential properties beyond; on the east by the Stratford Hills Apartments; on the south by Bolin Creek with residential and commercial properties and Hillsborough Street beyond; and on the west by Martin Luther King Jr. Boulevard (Refs. 1; 2). The site is not located in a disadvantaged area or community with potential environmental justice concerns (Refs. 13; 14). The site is 10.9 acres and consists of a 21,154 square foot (ft^2) 2-story building housing the Chapel Hill Police Department in the northern portion and asphalt paved parking areas north-northwest and southeast of the building (Refs. 1; 3, p. 41). A portion

of the Bolin Creek Trail traverses the southern portion of the property, just north of Bolin Creek located along the southern property boundary (Ref. 4). The eastern and southern portions of the property are wooded (Ref. 2).

Site Background

The property was used as a borrow pit from the late 1950s to early 1960s. From the mid-1960s to the mid-1970s, the property was used as a fill site. During that time construction debris was used for structural fill followed by coal combustion products (CCPs) which were reportedly placed above the construction debris. The Town of Chapel Hill acquired the site in 1980 and constructed the building that houses its police department in 1981 (Ref. 1; 3, p. 6; 9, p. 11). The Orange County Tax Assessor's office lists one owner (Sparrow) prior to the Town of Chapel Hill acquiring the property in 1980 (Ref. 1).

Regulatory Activities

The Town of Chapel Hill is evaluating potential non-residential, mixed-use redevelopment options for the site that may include a new Municipal Services Center and commercial office and/or retail businesses. In April 2019, the Town of Chapel Hill applied for entry into the North Carolina Brownfields Program (NCBP) and on October 1, 2019, NCDEQ determined that the project is eligible for entry into the NCBP for continued evaluation for a Brownfields Agreement (BFA). The Town of Chapel Hill is working with the NCBP of NCDEQ on a BFA that will outline the allowed uses of the property as well as additional remediation and ongoing monitoring (Refs. 3, p. 5; 10; 32). As of April 30, 2024, a final BFA has not been executed.

Previous Investigations and Remedial Activities

Since 2013, The Town of Chapel Hill has conducted multiple investigations at the site including Phase I and II environmental site assessments (ESA), a data gap assessment, Brownfields assessment, and human health and ecological risk assessments, among others. Multimedia environmental samples have been collected during these investigations. Analytical results of samples collected indicate the presence of metals in on-site soil, underlying groundwater, and sediment and surface water in Bolin Creek. Some site-related contaminants have been detected at concentrations above NCDEQ soil remediation goals and groundwater standards (Refs. 3, pp. 2, 30 to 37).

For the purposes of this APA, only the most prevalent site-related constituents (arsenic, manganese, mercury, and selenium) detected throughout the site and in Bolin Creek will be discussed (Ref. 3, pp. 2, 32, 33, 36; 5, pp. 11, 63; 6, pp. 1, 54, 55). Arsenic, manganese, mercury, and selenium are metals known to be present in CCP (Ref. 27, p. 1). The highest concentrations detected per environmental media are listed below. In addition, the concentrations detected in background samples are presented. Concentrations in the on-site and downgradient samples are compared to concentrations in background samples to determine whether they are

elevated above background. Contaminant concentrations are considered elevated if they are greater than or equal to three times a detected concentration in the background or above the reporting limit if not detected in the background sample.

Soil and CCP samples

- **Background soil**: arsenic (up to 3.08 milligrams per kilogram [mg/kg]), manganese (up to 940 mg/kg), mercury (up to 0.280 mg/kg, and selenium (up to 1.7 mg/kg) (Ref. 3, pp. 2, 33).
- **CCP throughout the property**: arsenic (up to 95.9 mg/kg), manganese (up to 1,500 mg/kg), mercury (up to 11 mg/kg, and selenium (up to 13 mg/kg) (Ref. 3, pp. 2, 32).
- **On-site soil**: arsenic (up to 9.9 mg/kg), manganese (up to 1,480 mg/kg), mercury (up to 0.085 mg/kg), and selenium (up to 2.4 mg/kg) (3, pp. 2, 32).
- **Drainage pathway soil along Bolin Creek**: arsenic (up to 14.5 mg/kg), manganese (up to 563 mg/kg), mercury (up to 0.12 mg/kg), and selenium (up to 3.07 mg/kg) (3, pp. 2, 32).
- Arsenic is elevated above background in on-site soil, CCP, and drainage pathway samples.

Sediment Samples

- **Background (upstream) sediment in Bolin Creek**: arsenic (up to 2.74 mg/kg), manganese (up to 811 mg/kg), mercury (up to 0.0078 mg/kg), and selenium (up to 0.409J mg/kg [estimated value]) (Ref. 6, pp. 1, 54).
- **Sediments in Bolin Creek**: arsenic (up to 2.35 mg/kg), manganese (up to 860 mg/kg), mercury (up to 0.0080 mg/kg), and selenium (up to 0.344J mg/kg) (Ref. 5, p. 11, 63; 6, pp. 1, 54).
- Elevated concentrations of site-related contaminants were not detected in sediment.

Surface Water Samples

- **Background (upstream) surface water in Bolin Creek**: arsenic (up to 27 micrograms per liter [µg/L]), manganese (up to 22.2 µg/L), mercury (Not detected (ND) at reporting limit 0.20 µg/L), and selenium (up to 0.11J µg/L) (Ref. 6, pp. 1, 55).
- **Surface water in Bolin Creek**: arsenic (up to 0.90 micrograms per liter [µg/L]), manganese (up to 37.4 µg/L), mercury (Not detected (ND) at reporting limit 0.20 µg/L), and selenium (up to 0.12J µg/L) (Ref. 6, pp. 1, 55).
- Elevated concentrations of site-related contaminants were not detected in surface water samples.

Groundwater Samples

- **Background groundwater**: arsenic (0.25J µg/L), manganese (614 µg/L), mercury (ND at reporting limit 0.20 µg/L), and selenium (ND at reporting limit 0.20 µg/L) (3, pp. 2, 36).
- **On-site groundwater**: arsenic (up to 37 µg/L), manganese (up to 1,430 µg/L), mercury (up to 0.14J µg/L), and selenium (up to 7 µg/L) (Ref. 3, pp. 2, 36).
- Arsenic and selenium are present at elevated concentrations in groundwater samples.

In addition to the investigative activities mentioned above, from January to November 2020, interim remedial measures (IRM) were conducted at the site and include (1) hydroseeding, silt fencing, and stabilizing and covering exposed CCP along the Bolin Creek embankment to prevent erosion; (2) construction of a new stormwater diversion channel at the top of the embankment; and (3) excavation and off-site disposal of exposed CCPs from areas along Bolin Creek Trail in the lower portion of the site (Ref. 7, pp. 4, 11 to 19).

In 2021, the Town of Chapel Hill prepared a risk assessment report that evaluated potential human health and ecological risks to exposures from contaminants in CCPs at the site based on the current and future redevelopment of the property. The human health risk assessment concluded unacceptable risk levels for future residential use and acceptable risk levels for current and future non-residential uses including future greenway users. Further, if background results are removed from the evaluation, acceptable risk levels are exceeded for construction workers in the upper and embankment portions of the property. The screening level ecological risk assessment indicated no significant risk for Bolin Creek. However, ecological screening values were exceeded in selected soil samples at the site. Exceedances of ecological screening values were localized apart from those in the embankment where there was exposed ash. The Town of Chapel Hill and NCDEQ are negotiating a BFA, which will help guide exposure scenarios based on the anticipated reuse/redevelopment plans (Ref. 6, pp. 1, 36 to 38).

EPA human health and ecological risk assessors conducted reviews of the 2021 risk assessment report (Refs. 24; 25). The human health review indicated that if commercial development is considered, additional screening should be conducted to determine whether risk levels are exceeded for less conservative scenarios because residential use is not planned for the property (Refs. 24; 32). The ecological review concluded that the metals in the soils containing exposed ash could potentially pose a risk to plants and soil invertebrates. Detections of metals in the ash in the drainage ditch leading towards Bolin Creek indicates some transport may be occurring off the site. However, sediments and surface water are not impacted (Ref. 25).

In 2022, representatives of Duke and Appalachian State Universities collected nine samples of soil and coal ash from three borings along the embankment at the site. Specific sampling locations were not identified; however, they appear to have been collected in the west-central portion of the property near MLK Jr. Blvd. (Ref. 26, pp. 33, 35). Of the nine samples collected, eight were analyzed for metals and radionuclides. One sample consisted of native soil below coal ash but was not analyzed. Field notes and laboratory data sheets were not provided. Average metals concentrations in each boring were reported in tabular form. Results for manganese and mercury were not reported. Average concentrations for arsenic ranged from 39.5 mg/kg to 58.2 mg/kg and selenium ranged from 6.1 mg/kg to 12.9 mg/kg (Ref. 26, pp. 69, 70). These concentrations are below the EPA Removal Management Levels of 300 mg/kg for arsenic and 5,800 mg/kg for selenium in industrial soil (Ref. 28, pp. 1, 10).

Analytical results for samples that representatives of Duke and Appalachian State Universities collected were not compared to those that Chapel Hill collected because sampling locations,

filed notes, and analytical data sheets were not provided; therefore, sample comparability could not be determined.

Sources and Waste Characteristics

The source evaluated for this APA is an undetermined amount of contaminated soil mixed with coal ash or CCP located throughout the property. The amount of coal ash/CCP is not consistent across the property and is exposed at the surface in some areas (along the embankment area) (Ref. 5, p. 70). The estimated thickness of CCP is less than 1 foot to greater than 20 feet with an average thickness of about 8 feet (Ref. 5, p. 51). File information indicates that about 60,000 cubic yards of CCP were placed throughout the property over a 4.5-acre area with an average depth of about 8 feet. About 1,004 tons of CCP in depositional areas downgradient of the embankment near the Bolin Creek Trail were excavated and disposed off-site in 2020 (see Previous Investigations above) (Refs. 3, p. 7; 5, pp. 51, 52). Soil and CCP samples collected throughout the site indicate the presence of various metals, including arsenic, cadmium, manganese, mercury, and selenium (Ref. 3, pp. 32, 33).

Pathways Not Evaluated

The soil exposure and subsurface intrusion and air migration pathways were not evaluated for this APA due to low target populations associated with these pathways.

Groundwater Migration Pathway

The site is in the Piedmont Physiographic Province, which is underlain my massive crystalline and metamorphic rocks that are covered by clayey or sandy regolith consisting of weathered parent rock material and alluvium (Ref. 29, 9, 329). The boring log of on-site monitoring well number 7 indicates that the lithology beneath the site comprises fill material, silty clays, and alternating layers of partially weathered bedrock and competent bedrock (Ref. 6, pp. 92, 93, 94). The main aquifer in this area is the Crystalline Rock Aquifer. Well yield in this aquifer is dependent on the interception of water-bearing fracture systems overlain by saturated regolith (Ref. 29, pp. 331, 332). Groundwater follows the site topography, which slopes to the south with elevations ranging from 378 feet above mean sea level (amsl) in the northern portion to 288 feet amsl in the southern portion near Bolin Creek (Ref. 6, p. 46).

Seven community wells that provide drinking water to about 566 people are located within a 4-mile radius of the site. These wells are located at subdivisions and a community park between 2.8 and 3.75 from the site (Refs. 16; 17; 18). The depths of these wells range between 100 and 400 feet below land surface (Ref. 18).

Surface Water Migration Pathway

The surface water migration pathway is of primary concern. The topography of the site consists of a relatively flat upland portion where the on-site building and parking areas are located. A steep embankment is in the middle portion of the property and slopes to the south to the lower portion where Bolin Creek forms the southern boundary of the property (Refs. 3, p. 41; 4). Bolin Creek, a minimal stream (less than 10 cubic feet per second [cfs]), receives non-point source runoff in the Chapel Hill area. From the site, Bolin Creek flows east-southeast for about 2 miles before merging with Little Creek. Little Creek, a small stream (10 to 100 cfs), flows southeast for about 2 miles before entering B. Everett Jordan Lake. The 15-mile surface water migration pathway target distance limit (TDL) ends in the B. Everett Jordan Lake (Refs. 11; 12). The lower portion of the site is located in a 100-year flood zone (Ref. 15).

Residents in the Chapel Hill area primarily obtain drinking water from the Orange County Water and Sewer Authority (OWASA) (Refs. 16; 17; 18). OWASA maintains surface water intakes on Cane Creek and University Lake, which are not located within the 15-mile surface water migration pathway TDL. OWASA has secured two additional surface water drinking water sources for future use (Quarry Reservoir and B. Everett Jordan Lake near Bells, North Carolina); however, these intakes are also not within the 15-mile TDL (Refs. 17; 18). The Quarry Reservoir intake is located west of the site and the B. Everett Jordan Lake intake, operated by Chatham County Utilities, is located beyond the 15-mile TDL (Ref. 17).

The flow rate of Bolin Creek is less than 10 cfs and it is not expected to support fish large enough for human consumption. It is assumed that fishing for consumption occurs on Little Creek (NC Wildlife Resources for Lake Jordan) (Ref. 19). B. Everett Jordan Lake is a designated recreational area that is used for fishing, swimming, and boating. About 10 miles of wetlands frontage are located along Little Creek (5 miles estimated on either side of the in-water segment of the creek) (Ref. 11). Federally listed endangered species that inhabit Orange County, North Carolina include: the Dwarf Wedgemussel (*Alasmidonta heterodon*) and the Atlantic Pigtoe Mussel (*Fusconaia Masoni*). State designated endangered and threatened species that inhabit Orange County, North Carolina include: the Brook Floater mussel (A*lasmidonta Varicosa*), Yellow Lampmussel (*Lampsilis Cariosa*), Green Floater Mussel (*Lasmigona Subviridis*), Savannah Lilliput Mussel (*Toxolasma Pullus*), Bald Eagle (*Haliaeetus Leucocephalus*), Triangle Floater Mussel (*Alasmidonta Undulata*), Carolina Fatmucket Mussel (*Lampsilis Radiate Conspicua*), and the Creeper Mussel (*Strophitus Undulates*). These species may occur in Orange County, North Carolina; however, they are not present within the immediate site vicinity (Refs. 20; 21, p. 488; 22;). The U.S. Fish and Wildlife Service has designated a critical habitat for the Atlantic Pigtoe Mussel on New Hope Creek; however, this location is not within the 15-mile surface water migration pathway TDL (Refs. 30; 31).

Conclusion

The Town of Chapel Hill and the NCBP are negotiating a BFA. In addition to the assessment and IRM activities already conducted, the BFA will outline the need for additional assessment and remediation, if any, based on the intended future reuse/redevelopment plans, which does not include residential use. The Town of Chapel Hill anticipates that a draft of the agreement will be available for public comment in Spring 2024. As a result, the EPA recommends that future activities at the site be conducted under the purview of the NCBP.

Sincerely,

Bramble, Sandra

Digitally signed by Bramble, Sandra
Date: 2024.05.01 11:35:49 -04'00'

Sandra Bramble
Site Assessment Manager
Restoration & Site Evaluation Section
Restoration & Site Evaluation Branch
Superfund & Emergency Management Division

Enclosures

cc: Caroline Freeman, Director, SEMD
Derek Matory, Manager, RSEB
Meredith Clark, Manager, RSES
William Hunneke, NCDEQ

References Consulted

1. Orange County Tax Assessor. Property Card for Parcel 9789413949. 828 Martin Luther King JR BLVD. Accessed online at: https://gis.orangecountync.gov/orangeNCGIS/default.htm. Accessed online on March 12, 2024.
2. Google Maps. 828 MLK Jr. Blvd. Accessed Online on April 19, 2024.
3. Hart and Hickman. Brownfields Assessment Report. 828 Martin Luther King Jr. Blvd. Property. Chapel Hill, North Carolina. Brownfields Project No. 23022-19-068. December 13, 2022.
4. Town of Chapel Hill, North Carolina (NC). Bolin Creek Trail. Accessed Online at: https://www.townofchapelhill.org/government/departments-services/parks-and-recreation/greenways/bolin-creek-trail. Accessed on March 5, 2024.
5. Steve Hart, Principal Hydrogeologist. Hart & Hickman. Electronic Mail with Attachments to Amy Axon, Hydrogeologist, North Carolina Department of Environmental Quality, Division of Waste Management, Superfund Section. August 30, 2017. Attachments: Response to Comments and Submittal Letter dated August 25, 2017 and Phase II Remedial Investigation Report, Revision 2. 828 Martin Luther King Jr. Blvd. Property. August 14, 2017.
6. Hart and Hickman. Risk Assessment Report. 828 Martin Luther King Jr. Blvd. Property. IHSB Site No. NONCD0001486, Brownfields Project No. 21061-17-060. October 7, 2021.
7. Hart & Hickman. Interim Remedial Measures Report. 828 Martin Luther King Jr. Blvd. Property. Chapel Hill, North Carolina. Brownfields Project No. 21061-17-060. April 19, 2021.
8. Steve Hart, Principal, Hart & Hickman. Letter with Attachments to John Richardson, Town of Chapel Hill. Subject: Updated Remedial Alternatives Evaluation. Chapel Hill Police Department, 828 Martin Luther King Jr. Blvd. Property. Chapel Hill, North Carolina. Brownfields Project No. 23022-19-068. March 2, 2023.
9. Falcon Engineering. Phase I and Limited Phase II Environmental Site Asse4ssment. Chapel Hill Police Department Property. 828 MLK Jr. Blvd. Chapel Hill, Orange County, North Carolina. July 18, 2013.
10. Bruce Nicholson, Brownfields Program Manager, NCDEQ. Letter to Maurice Jones, Town Manager, Town of Chapel Hill. Subject: Lette of Eligibility, Chapel Hill Police Department, 828 MLK Jr. Blvd. October 1, 2019.
11. U.S. Fish and Wildlife Service, National Wetlands Inventory. 828 MLK Blvd. Property., 15-Mile SW TDL Map with Attachments. Accessed Online at: https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/. Attachments: NCDEQ Surface Water Classifications Maps for Bolin and Little Creeks.
12. U.S. Geological Survey (USGS). National Water Information System Web Interface. USGS Surface Water Annual Statistics for the Nation. Annual Statistics for USGS Stations: 0209734440 -Bolin Creek at Village Drive at Chapel Hill, NC; 02097517, Morgan Creek Near Chapel Hill, NC; 02097314 New Hope Creek Near Blands, NC; 02098205 Haw River Near Moncure, NC. March 8, 2024.
13. Environmental Justice Screen Community Report. 1-Mile Ring Centered at 35.926918, -79.052893. Source: U.S. Census Bureau, American Community Survey 2017 – 2021. Accessed Online at: www.epa.gov/ejscreen. Accessed on December 6, 2023.

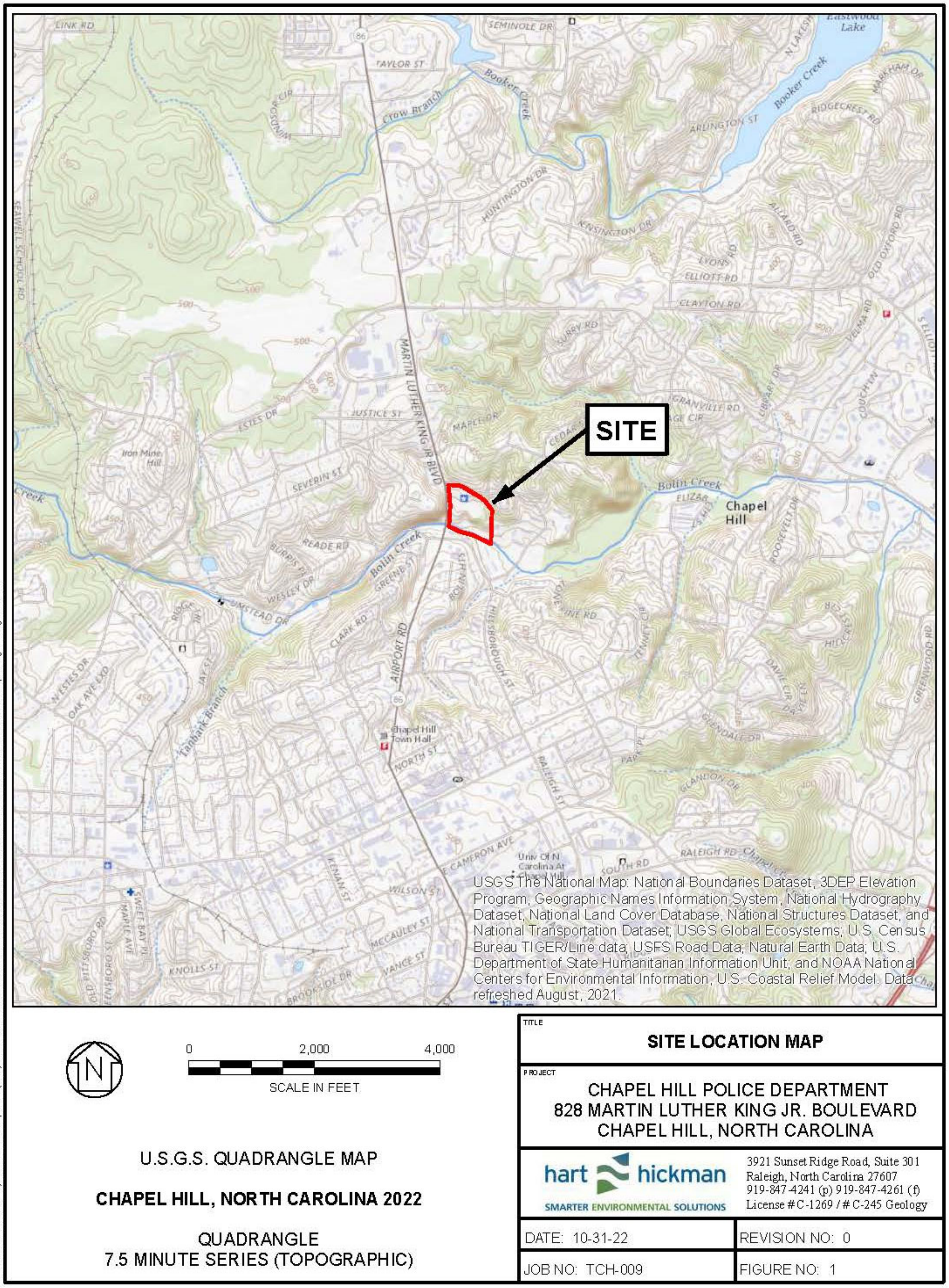
14. Climate and Economic Justice Screening Tool. Zip Code 27514. Accessed Online at: https://screeningtool.geoplatform.gov/en/#13.69/35.91666/-79.03985. Accessed on March 13, 2024.
15. Federal Emergency Management Agency. Flood Insurance Rate Map. Firmette for Panel 3710978900J, Effective February 2, 2007. Accessed Online at: https://msc.fema.gov/portal/search?AddressQuery=35.926918%2C%20-79.052893. Accessed on February 1, 2024.
16. EPA Safe Drinking Water Search for North Carolina. Accessed Online at: https://enviro.epa.gov/envirofacts/sdwis/search/form?state_abbr=NC. Accessed on March 13, 2024.
17. Orange Water and Sewer Authority. Annual Water Quality Report Card for 2022.
18. NCDEQ, Source Water Assessment Program. SWAPINfo 2.0. Accessed Online at: https://www.arcgis.com/apps/webappviewer/index.html?id=26f4e2b3140f4e58825e48781ccebf5e/ . Accessed on March 5, 2024.
19. U.S. Army Corps of Engineers, Wilmington District. B. Everett Jordan Lake. Accessed Online at: https://www.saw.usace.army.mil/Locations/District-Lakes-and-Dams/B-Everett-Jordan/. Accessed on January 31, 2024.
20. U.S. Fish and Wildlife Service (USFWS). Environmental Conservation Online System. Listed Species with Spatial Current Range Believed to or Known to Occur in North Carolina. Accessed Online at: https://ecos.fws.gov/ecp/report/species-listings-by-state?stateAbbrev=NC&stateName=North%20Carolina&statusCategory=Listed . Accessed on February 28, 2024.
21. Orange County, North Carolina 2030 Comprehensive Plan. Adopted November 18, 2008.
22. USFWS. Guide to Federally Listed Endangered and Threatened Species of North Carolina. 2001.
23. **CONFIDENTIAL REFERENCE**. North Carolina Natural Heritage Program. Letter with Attachment to Sandra Bramble. EPA. Subject: Project Number NCNHDE-24958. Attachment: Element Occurrences, Natural Areas, and Managed Areas Intersecting Bolin Creek. February 14, 2024.
24. EPA SEMD, Scientific Support Section (SSS), Human Health Risk Assessment Review, Technical Memorandum, March 27, 2024.
25. EPA SEMD, SSS, Ecological Risk Assessment Review, Technical Memorandum, April 9, 2024.
26. Perrin W. de Jong, Southeast Staff Attorney. Center for Biological Diversity. Letter with Attachments to Jeaneanne Gettle, Acting Regional Administrator, EPA, Region 4. Subject: Revised Petition for Assessment of Release Pursuant ot Section 105(d) of the Comprehensive Emergency Response, Compensation and Liability Act: 828 Martin Luther King Boulevard, Chapel Hill, NC, 27514. Attachment: Preliminary Assessment Petition. October 18, 2023.
27. USGS. Trace Elements in Coal Ash. Fact Sheet 2015-3037. May 2015.
28. EPA Removal Management Levels. November 2023.
29. USGS. National Water Summary 1984. Hydrologic Events, Selected Water-Quality Trends, and Ground-water Resources. Water-Supply Paper 2275. Published 1985.

30. Jennifer M. Archambault, PhD, Deputy Field Supervisor, USFWS. Electronic Mail to Sandra Bramble, Site Assessment Manager, EPA Region 4. Attachments: Critical Habitat for Threatened & Endangered Species. April 2, 2024.
31. 50 Code of Federal Regulations Part 17, Endangered and Threatened Wildlife and Plants; Threatened Species Status with Section 4(d) Rule for Atlantic Pigtoe and Designation of Critical Habitat. November 16, 2021.
32. Coal Ash at 828 Site. Town of Chapel Hill. Current Updates, April 4, 2024. Accessed online at: https://www.townofchapelhill.org/residents/community-sustainability/municipal-services-center-project. Access on April 19, 2024.

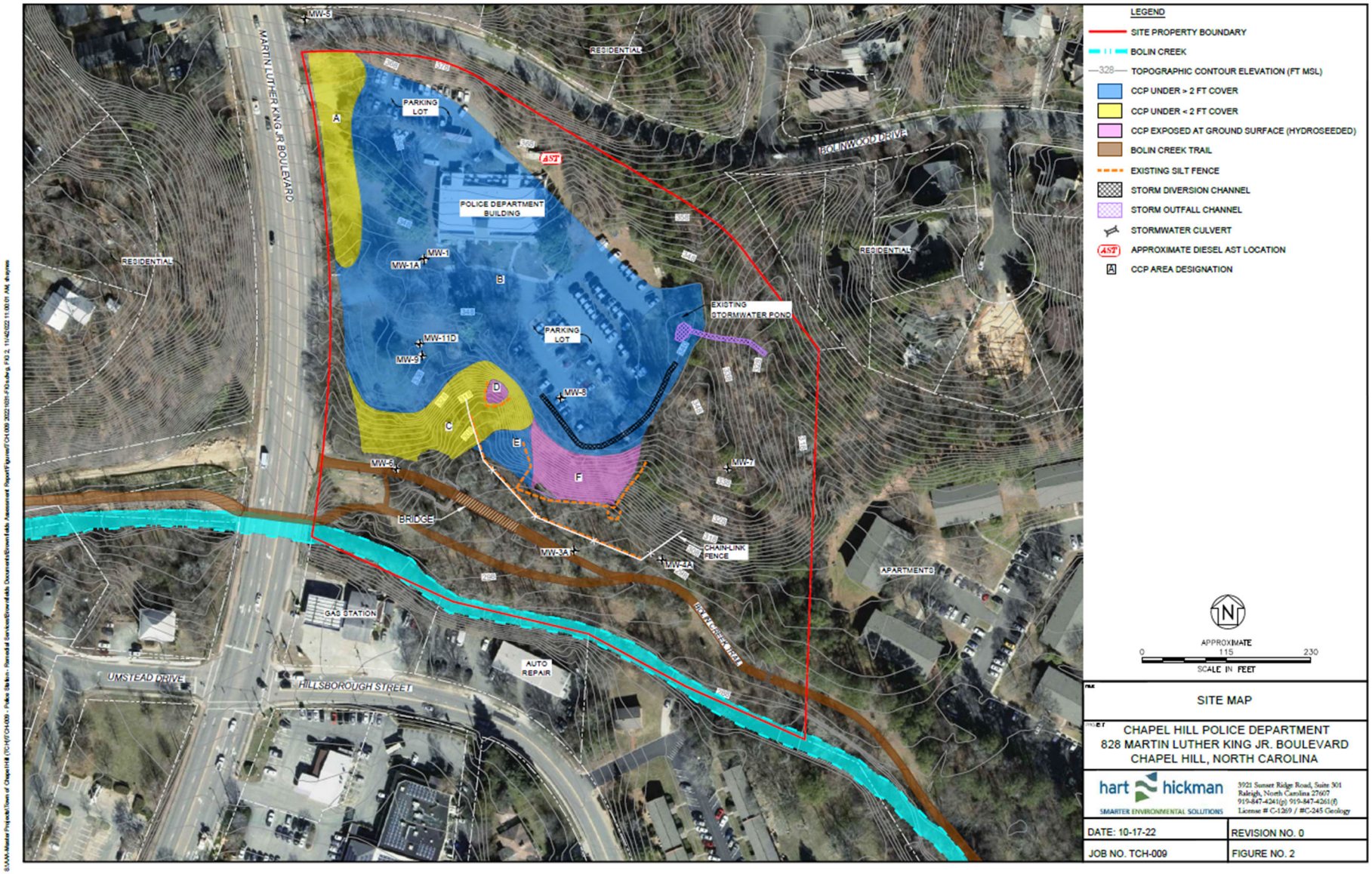
FIGURES

(Figures 1 and 2 were obtained from Reference No. 3 of this APA letter report. Hart and Hickman. Brownfields Assessment Report. 828 Martin Luther King Jr. Blvd. Property. Chapel Hill, North Carolina. Brownfields Project No. 23022-19-068. December 13, 2022)

Figure 1 – Site Location Map
Figure 2 – Site Layout Map



Path: S:\AAA-Master Projects\Town of Chapel Hill (TCH)\TCH-009 - Police Station - Remedial Services\Brownfields Documents\Brownfields Assessment Report\Figures\Figure 1.mxd


MW-5
MARTIN LUTHER KING JR BOULEVARD
RESIDENTIAL
PARKING LOT
A
AST
POLICE DEPARTMENT BUILDING
BOLINWOOD DRIVE
MW-1
MW-1A
B
EXISTING STORMWATER POND
PARKING LOT
MW-11D
MW-9
D
MW-8
C
E
F
MW-6
MW-7
BRIDGE
MW-3A
MW-4A
CHAIN-LINK FENCE
APARTMENTS
GAS STATION
AUTO REPAIR
UMSTEAD DRIVE
HILLSBOROUGH STREET
LEGEND
SITE PROPERTY BOUNDARY
BOLIN CREEK
328 TOPOGRAPHIC CONTOUR ELEVATION (FT MSL)
CCP UNDER > 2 FT COVER
CCP UNDER < 2 FT COVER
CCP EXPOSED AT GROUND SURFACE (HYDROSEEDED)
BOLIN CREEK TRAIL
EXISTING SILT FENCE
STORM DIVERSION CHANNEL
STORM OUTFALL CHANNEL
STORMWATER CULVERT
AST APPROXIMATE DIESEL AST LOCATION
A CCP AREA DESIGNATION
N
APPROXIMATE
0 115 230
SCALE IN FEET
SITE MAP
CHAPEL HILL POLICE DEPARTMENT
828 MARTIN LUTHER KING JR. BOULEVARD
CHAPEL HILL, NORTH CAROLINA
hart hickman
SMARTER ENVIRONMENTAL SOLUTIONS
3921 Sunset Ridge Road, Suite 301
Raleigh, North Carolina 27607
919-847-4241(p) 919-847-4261(f)
License # C-1269 / #C-245 Geology
DATE: 10-17-22
REVISION NO. 0
JOB NO. TCH-009
FIGURE NO. 2