



Discuss Budget Proposal for Interim Measures to Begin Addressing Coal Ash Clean-up and Monitoring

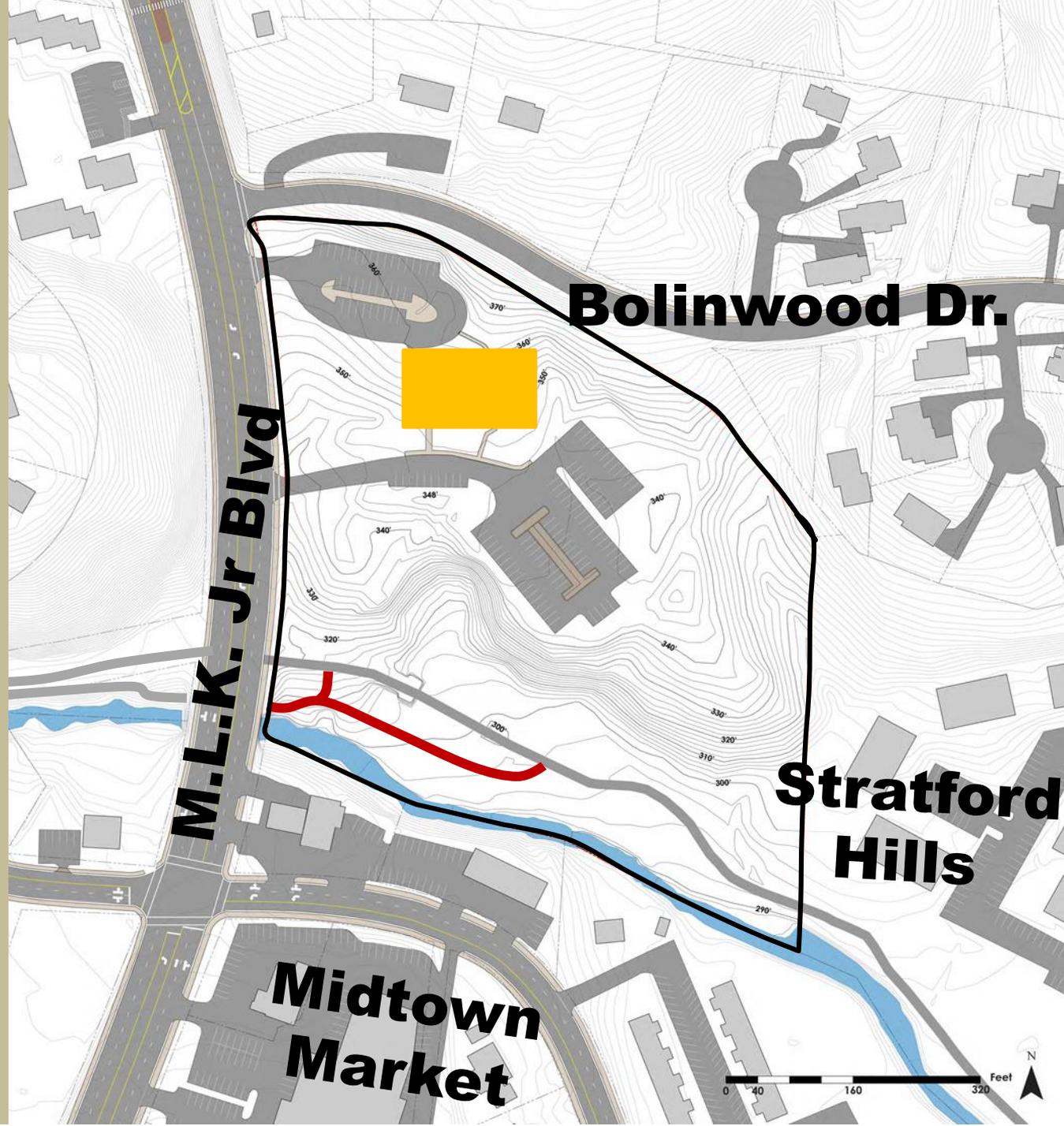
May 15, 2019



Police Station Property

828 Martin Luther King Jr Blvd

-  Police Station
-  New Bolin Creek Greenway Connection



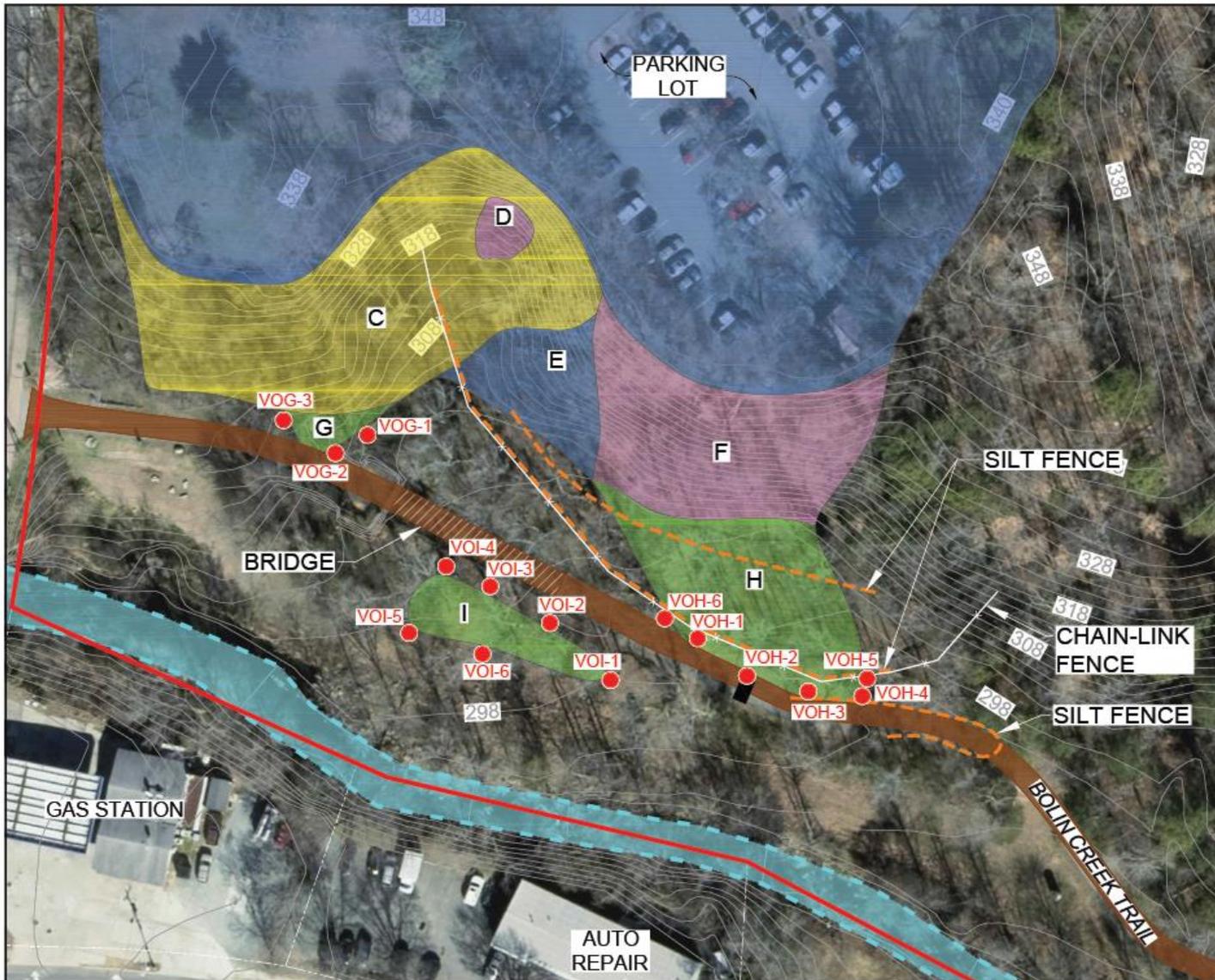
BIKE
WAY
SLOW IN FOREST
→





Coal Ash Disposal Site Remediation Project

TownofChapelHill.org/coal-ash



LEGEND

- SITE PROPERTY BOUNDARY
- BOLIN CREEK
- 101— TOPOGRAPHIC CONTOUR ELEVATION (FT MSL)
- FENCE LINE (APPROXIMATE LOCATION)
- SILT FENCE (APPROXIMATE LOCATION)
- CCP UNDER > 2 FT COVER
- CCP UNDER < 2 FT COVER
- CCP EXPOSED AT GROUND SURFACE
- CCP DEPOSITIONAL LAYER OBSERVED BY H&H
- STORMWATER CULVERT
- DEPOSITIONAL CCP AREA STAKES


 APPROXIMATE
 0 50 100
 SCALE IN FEET

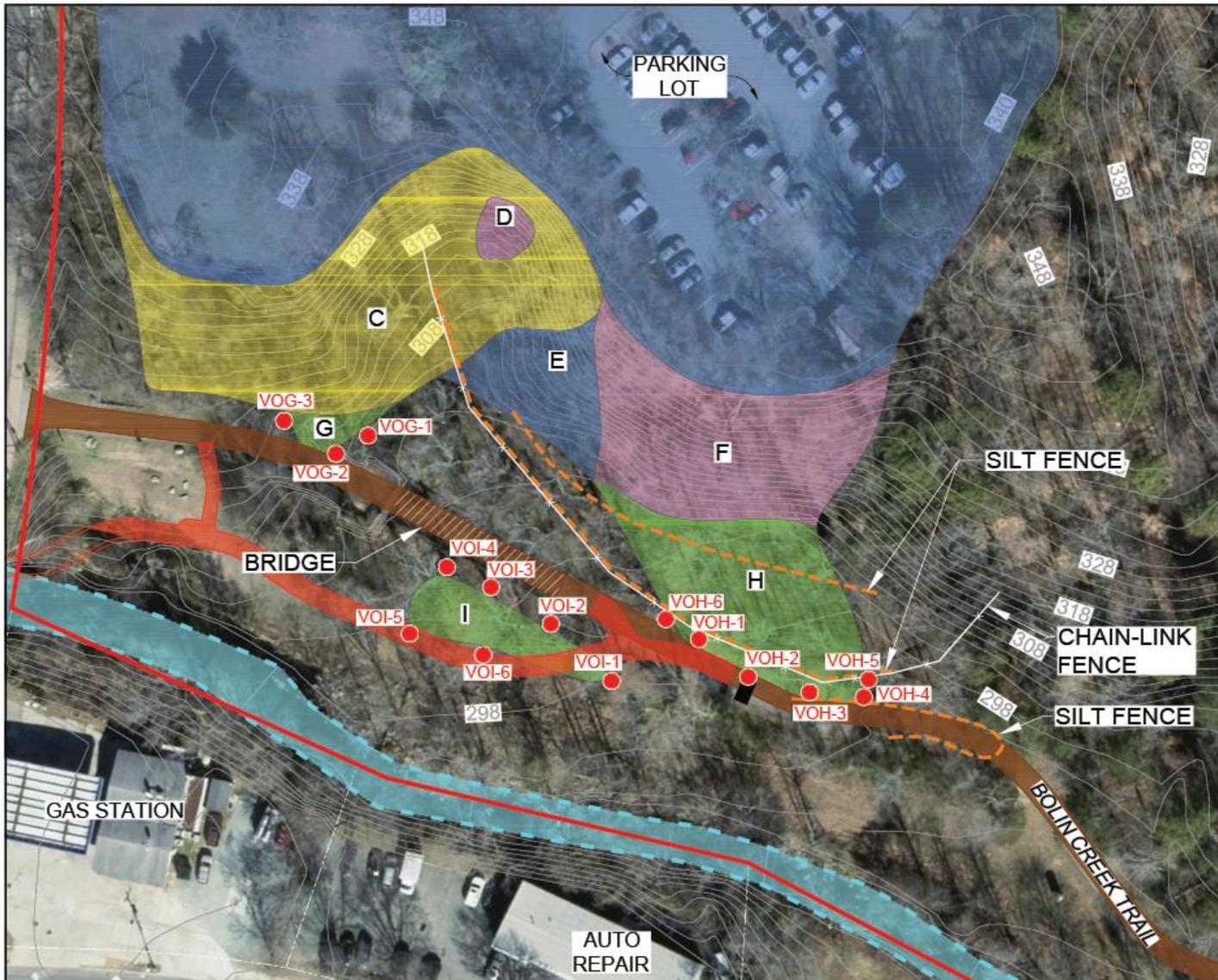
SITE MAP - EXISTING CONDITIONS

TOWN OF CHAPEL HILL
 828 MARTIN LUTHER KING JR. BOULEVARD
 CHAPEL HILL, NORTH CAROLINA


 2923 South Tryon Street, Suite 100
 Charlotte, North Carolina 28205
 704-586-0007(p) 704-586-0373(f)
 License # C-1269 / #C-245 Geology
 SMARTER ENVIRONMENTAL SOLUTIONS

DATE: 5-10-19	REVISION NO. 0
JOB NO. TCH-003	FIGURE NO. 1

WMA Master Project/Owner of Chapel Hill (TCH) VOH-000 - Pelican Station/PA - B. Wood/Project/PA/MS, W. B. Wood/PA/MS, FIG. 1, 5/10/2019 5:26:13 PM, ArcGIS



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- DEPOSITIONAL CCP AREA STAKES
- PROPOSED TRAIL

0 50 100
APPROXIMATE
SCALE IN FEET

SITE MAP - PROPOSED TRAIL LOCATION

TOWN OF CHAPEL HILL
828 MARTIN LUTHER KING JR. BOULEVARD
CHAPEL HILL, NORTH CAROLINA

hart hickman
SMARTER ENVIRONMENTAL SOLUTIONS
2525 South Tryon Street, Suite 100
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DATE: 5-10-19 REVISION NO. 0
JOB NO. TCH-003 FIGURE NO. 2

P:\M\Master Projects\Town of Chapel Hill (TCH)\TCH-003 - Public Stations\PH 8 - West\Figures\Figures_3, 10, 15.dwg, FIG. 2, 5/10/2019 5:40:23 PM, hickman

Options for Consideration

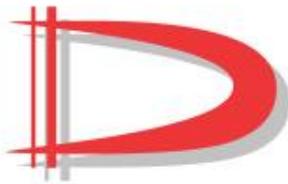
- \$315,000 Investment:
 - Begin clean-up and continue managing and monitoring coal materials in the area closest to Bolin Creek;
 - Maximize safety for people using the Bolin Creek Greenway
- Anticipate Police Station relocation within 2-3 years
- Measures estimated to last 3-5 years

Bolin Creek Trail Risk Assessment

By:

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Kenneth M. Rudo, Ph.D.



DUNCKLEE & DUNHAM
ENVIRONMENTAL GEOLOGISTS & ENGINEERS

HYDROGEOLOGY • ENGINEERING • BROWNFIELDS • REMEDIATION

Our Work Scope

- Human Health Risk Assessment
 - Toxicologist
 - Data Gap Sampling (April)
 - Interim Measures Evaluation
 - Trail Construction Project
- Ecological Risk Assessment
- Report



Comparison to NCDEQ Risk Evaluation

- NCDEQ used different calculator tool in 2016
- We used new NCDEQ Risk Calculator Tool
 - EPA risk data changed slightly
 - Tested additional coal ash samples, higher levels of contaminants found than in 2014 data set
 - Six metals higher, arsenic and manganese the most prominent
- We used more conservative default assumptions across the board
- We used new data set collected after recent storms



Key Findings, So Far

- 52 Additional Samples Collected
- Using Worst Case Scenarios, Evaluated Risk for 17 Contaminant Pathways
- Found Elevated Risk with 2 Current Pathways:
 - Future Construction Worker – Arsenic and Manganese non-cancer risks from soil
 - Recreational User – Arsenic non-cancer risks from soil exposure
- No cancer risks exceeded NCDEQ or USEPA criteria
- No increased risk for adolescent exposures along or in Bolin Creek



Completing the Greenway Project and Opening the Bridge Underpass



- Manage Risk to Construction Workers with Proper Training
- There is Currently Risk To Trail Users By Crossing Martin Luther King, Jr. Blvd.



Interim Measures to Keep Trail Open

- These Measures Control Risk to Recreational Users of Greenway Trail
 - a) Surficial Soil Removal / Backfill
 - b) Additional Signage Along Trail
 - c) Polling of Users
 - d) Additional Silt Fencing
 - e) Limit Embankment Disturbance
 - f) Periodic Inspections and Sampling
- Post-Construction Sampling and Update Risk Assessment



Next Steps

- Complete Underpass
- Signage on Path
- Interim Measures
- Post-Construction Sampling
- Report to Update Risk Assessment and Include Ecological Risk Assessment



Questions?

