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December 9, 2021

TRANSMITTED VIA EMAIL

Craig Haden
GeoEnvironmental Project Engineer
Geotechnical Engineering Unit
North Carolina Department of Transportation
1020 Birch Ridge Drive
Raleigh, NC 27610

RE: UST Closure Report
Former Jeffrey Teague Property – Parcel # 008 PSH 4
222 Gumtree Road, Winston Salem (Midway), Davidson County, NC
NCDOT TIP Number: B-5765
NCDOT WBS Number: 45721.1.1
CES Project Number: 7798.1121ED

Dear Mr. Haden:

Please find attached an electronic copy of the UST Closure Report for the Former Jeffrey Teague Property, identified as Parcel # 008 PSH 4, located at 222 Gumtree Road, Winston Salem (Midway), in Davidson County, North Carolina. This UST Closure Report was performed in accordance with our Technical and Cost Proposal, dated November 12, 2021, and was initiated by a Notice to Proceed (NTP), issued by NCDOT on November 15, 2021, under our GeoEnvironmental Contract, No.: 7000020453, dated April 20, 2020.

Upon your review, please return via DocuSign for final signatures.

Should you have any questions in regards to this UST Closure Report, please do not hesitate to contact me at (704) 325-5408.

Regards,

CES Group Engineers, LLP.

Greg Hans, PMP
Environmental Scientist/ Environmental
Division Manager

Charles Heleine, PE, REPA
Senior Environmental Engineer

Enclosures: UST Closure Report



UST CLOSURE REPORT

NCDOT TIP Number: B-5765

NCDOT WBS Number: 45721.1.1

**Former Jeffrey Teague Property – Parcel # 008 PSH 4
222 Gumtree Road, Winston Salem (Midway), Davidson County, NC**



Prepared for:

**North Carolina Department of Transportation
Geotechnical Engineering Unit
1020 Birch Ridge Drive
Raleigh, NC 27610**

Prepared by:

**CES Group Engineers, LLP
274 North Highway 16 Business, Suite 300
Denver, NC 28037**

CES Project No.: 7798.1121ED

December 9, 2021

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- APPENDIX C MANIFESTS



A. SITE INFORMATION

A.1 Site Identification

Date of Report: December 9, 2021
Facility ID: Not Applicable
UST Incident Number: Not Applicable / Not Assigned
Site Risk: Not Applicable / Not Assigned
Site Name: NCDOT Parcel # 008 PSH 4 (Former Jeffrey Teague Property)
Street Address: 222 Gumtree Road
City/Town: Winston Salem (Midway), North Carolina
Zip Code: 27107
County: Davidson
Geographical Data Point: Heating Oil UST Fill Port
Location Method: GPS (via iPhone mapping application)
Latitude/Longitude: 35.974515/-80.222978

A.2 Contact Information

UST Owner: Jeffrey Teague
222 Gumtree Road
Winston Salem (Midway), North Carolina 27107

UST Operator: Former Jeffrey Teague Property (inactive at time of closure)

Property Owner: North Carolina Department of Transportation (acquired property in September 2021 from Jeffrey Teague)

Property Occupant: Former Jeffrey Teague Property (unoccupied at time of closure)

Consultant: CES Group Engineers, LLP
274 N NC Highway 16 Business, Suite 300
Denver, North Carolina 28037
(704) 489-1500
ghans@ces-group.net

Closure Contractor: Carolina Environmental Response Team
5648 Daphne Drive
Charlotte, North Carolina 28269
(877) 505-6799
slucas@cert-usa.com

Analytical Laboratory: Not Applicable (no samples collected for laboratory analysis)



A.3 Release Information

| | |
|--------------------------------|--|
| Date Discovered: | Not Applicable (no release discovered) |
| Estimated Quantity of Release: | Not Applicable |
| Cause of Release: | Not Applicable |
| Source of Release: | Not Applicable |
| UST System Contamination: | Not Applicable |

A.4 Certification

I, Charles D. Heleine, a North Carolina Licensed Professional Engineer employed by CES, do certify that the information contained in this report is accurate, to the best of my knowledge.



E-Signature 12/9/2021

Charles D. Heleine, NC PE No. 027196

CES Group Engineers, LLP (CES) is licensed to practice engineering in North Carolina. The firm license number is F-1240.



B. EXECUTIVE SUMMARY

This Underground Storage Tank (UST) Closure Report summarizes the removal of one (1) 550-gallon heating oil UST from North Carolina Department of Transportation (NCDOT) Parcel # 008 – PSH 4, identified as the Former Jeffrey Teague Property, located at 222 Gumtree Road, Winston Salem (Midway), in Davidson County, North Carolina (the subject site). This UST Closure was performed in accordance with our Technical and Cost Proposal, dated November 12, 2021, and was initiated by a Notice to Proceed (NTP), issued by NCDOT on November 15, 2021, under our GeoEnvironmental Contract, No. 7000020453, dated April 20, 2020.

The scope of work performed by CES for this UST Closure included the extraction of an estimated two hundred fifty (250) gallons of residual heating oil from the UST, the removal of the 550-gallon heating oil UST from the subsurface, offsite transportation and disposal/recycling of the steel 550-gallon heating oil UST and its residual contents, and backfilling the subsurface void with native soils to approximate grade level.

During the excavation and removal of the 550-gallon UST on December 1, 2021, no visual or olfactory evidence of petroleum hydrocarbon contamination was observed, and therefore, no soil samples were screened in the field, nor were any soil samples collected and submitted for laboratory analysis. Similarly, because no groundwater or surface water was encountered during excavation activities, no groundwater or surface water samples were collected.

Information relative to the removed UST is provided below:

| UST ID | PRODUCT STORED | CAPACITY (gals.) | CONSTRUCTED MATERIALS | INSTALLATION DATE | REMOVAL DATE | RELEASE (Yes or No) |
|--------|----------------|------------------|-----------------------|-------------------|------------------|---------------------|
| Tank 1 | Heating Oil | 550 | Steel | Unknown | December 1, 2021 | No |

An Area Site Map and Approximate Parcel 8 Boundaries, depicting the general location of the subject site, is included as Figure 1. A NCDOT plan sheet depicting Parcel # 008 – PSH 4, and the design elements for the planned replacement of Bridge 115 on SR 1711 over Winston-Salem Southbound (WSSB) Railway under NCDOT Project Number B-5765, is included in Appendix A.



C. TABLES OF CONTENTS

A table of contents has been included on page *i*.



D. SITE HISTORY AND CHARACTERIZATION

D.1 Site History and Description

The subject site, NCDOT Parcel # 008 – PSH 4, has been identified as the Former Jeffrey Teague Property, and is located at 222 Gumtree Road, Winston Salem (Midway), in Davidson County, North Carolina. According to a review of Davidson County GIS Real Estate Maps, NCDOT acquired the property from Jeffrey Teague in September 2021.

The subject site is bordered on the north by Gumtree Road, on the east and south by a railroad right-of-way (WSSB Railway), on the west by a single-family residence, and is generally located in an area of residential, commercial and institutional uses. The subject property previously contained a single-family residential structure with basement, an attached carport, a concrete driveway, and landscaped areas. The subject UST was observed to be installed on a downward slope, located adjacent to the west facing exterior wall of the carport and basement, was orientated in a north-south direction, was reported to be approximately 550-gallons in size, and was reportedly utilized as a heating oil storage vessel for the onsite residential structure. The gradient of the subject site and surrounding area generally slopes to the south-southeast, towards the WSSB Railway, which traverses along the subject property's eastern and southern property boundaries. NCDOT Bridge 115 is located approximately fifty (50) to seventy-five (75) feet to the east of the subject site's residential structure, along Gumtree Road.

At the time of the UST Closure on December 1, 2021, a general contractor was in the process of demolishing the onsite residential structure, and continued with their planned demolition activities while the heating oil UST was being removed from the subsurface.

D.2 Site Geology and Hydrogeology

The subject site is located in the Charlotte Belt of the Piedmont Physiographic Province. During UST closure activities, subsurface soils generally consisted of a light brown/reddish sandy loam. Groundwater was not encountered at the maximum depth of excavation, approximately six (6) feet below grade. It has been determined that natural surface drainage at the subject property generally flows in a south-southeasterly direction. While not always the case, groundwater flow direction typically follows the direction of surface water flow, and is, therefore, anticipated to flow south-southeasterly. Man-made improvements, including cut and fill operations, may alter natural local drainage patterns to some degree.



E. CLOSURE PROCEDURE

E.1 Closure Preparation

Prior to the removal of the heating oil UST on December 1, 2021, underground utilities were cleared through the North Carolina 811 public locating service, and a site-specific Emergency Management and Health and Safety Plan (EMP-HASP) with Job Hazardous Analysis (JHA) form was generated to address safety related concerns associated with the scope of work to be performed at the subject site. Additionally, Christopher Shonk – Assistant Fire Marshal for the Davidson County Fire Marshal’s Office and Johnathan Goode – Part Time Fire Fighter for the Gumtree Fire & Rescue Department were contacted by CES, and both Mr. Shonk and Mr. Goode reported that their respective offices did not require any formal notifications or permits to remove a residential heating oil UST.

E.2 Closure Procedures

On December 1, 2021, Carolina Environmental Response Team (CERT) of Charlotte, North Carolina, under the direction of a CES environmental scientist, performed the UST closure activities. After exposing the top of the UST, and prior to the excavation and removal of the UST from the subsurface, the contents of the UST were extracted utilizing a trailer mounted vacuum extractor unit (Vermeer – VX50-500). An estimated two hundred fifty (250) gallons of residual heating oil was extracted and transported by CERT for disposal/recycling at their facility in Charlotte, NC, under a Non-Hazardous Waste Manifest.

After extracting the residual heating oil from the UST, a mini-excavator continued to expose the sides of the UST, until the UST could be safely hoisted from the tank grave. Upon removal from the subsurface, the UST remained intact and was subsequently placed on ground surface for a visual inspection. The visual inspection reported the tank was constructed of steel, measured seventy-two (72)-inches in length with a forty-eight (48)-inch diameter, and was observed to be in good condition, with minor corrosion and no signs of pitting, holes or breaches. After the visual inspection was completed, the UST was loaded onto a CERT trailer and delivered to Auto Pasts U Pull & Scrap Metal of Charlotte, NC.

During the UST removal process, soils encountered from the top, sidewalls and from immediately below the UST did not exhibit signs of contamination through visual and olfactory observations. Since no soil staining, petroleum odors or petroleum-saturated soils were encountered in the field, it was determined that no field screening or soil sampling for laboratory analysis of subsurface soils would be required.

A Site Map and Location of Removed Underground Storage Tank is included in Figure 2. A photographic log, depicting UST closure activities on December 1, 2021, is included as Appendix B. Waste manifests, covering both the extracted heating oil and disposal/recycling of the UST, are included in Appendix C.

E.3 Soil Excavation Activities

During the UST closure on December 1, 2021, over-excavation of contaminated soils did not occur, as no evidence of contamination was observed. Excavated soils were returned to the tank grave and utilized as backfill. The dimensions of the excavated area to remove the UST in a safe manner measured ten (10) feet in length, by seven (7) feet in width, to a maximum depth of six (6) feet



below grade. Groundwater was not observed entering the open excavated area.



F. SITE INVESTIGATION

F.1 Field Screening

Field screening of soils utilizing a photoionization detector (PID) meter did not occur during UST closure activities, as no visual or olfactory evidence of petroleum hydrocarbon contamination was observed.

F.2 Soil Sampling

Soil samples were not collected during UST closure activities, as no visual or olfactory evidence of petroleum hydrocarbon contamination was observed.

F.3 Groundwater and Surface Water Sampling

Groundwater and/or surface water samples were not collected during UST closure activities, as groundwater and/or surface water was not encountered.

F.4 Quality Control Measures

Quality control measures were not implemented, as soil, groundwater and/or surface water samples were not collected during the UST closure activities.

F.5 Laboratory Analytical Results

Not Applicable.



G. CONCLUSIONS AND RECOMMENDATIONS

G.1 Conclusions

On December 1, 2021, CES supervised the the removal of one (1) 550-gallon heating oil UST from the Former Jeffrey Teague Property, located at 222 Gumtree Road, Winston Salem (Midway), North Carolina.

During the excavation and removal of the 550-gallon UST on December 1, 2021, no visual or olfactory evidence of contamination was observed, and therefore, no soil samples were screened in the field, nor were any soil samples collected and submitted for laboratory analysis.

G.2 Recommendations

Based upon the absence of contamination observed during the heating oil UST removal on December 1, 2021, no further response actions are recommended at this time.



H. SIGNATURE PAGE

This UST Closure Report was prepared by:

DocuSigned by:
 Dec 14, 2021
17CA85CB2CDF4C7...

Greg Hans, PMP
Environmental Scientist/Environmental Division Manager
CES Group Engineers, LLP

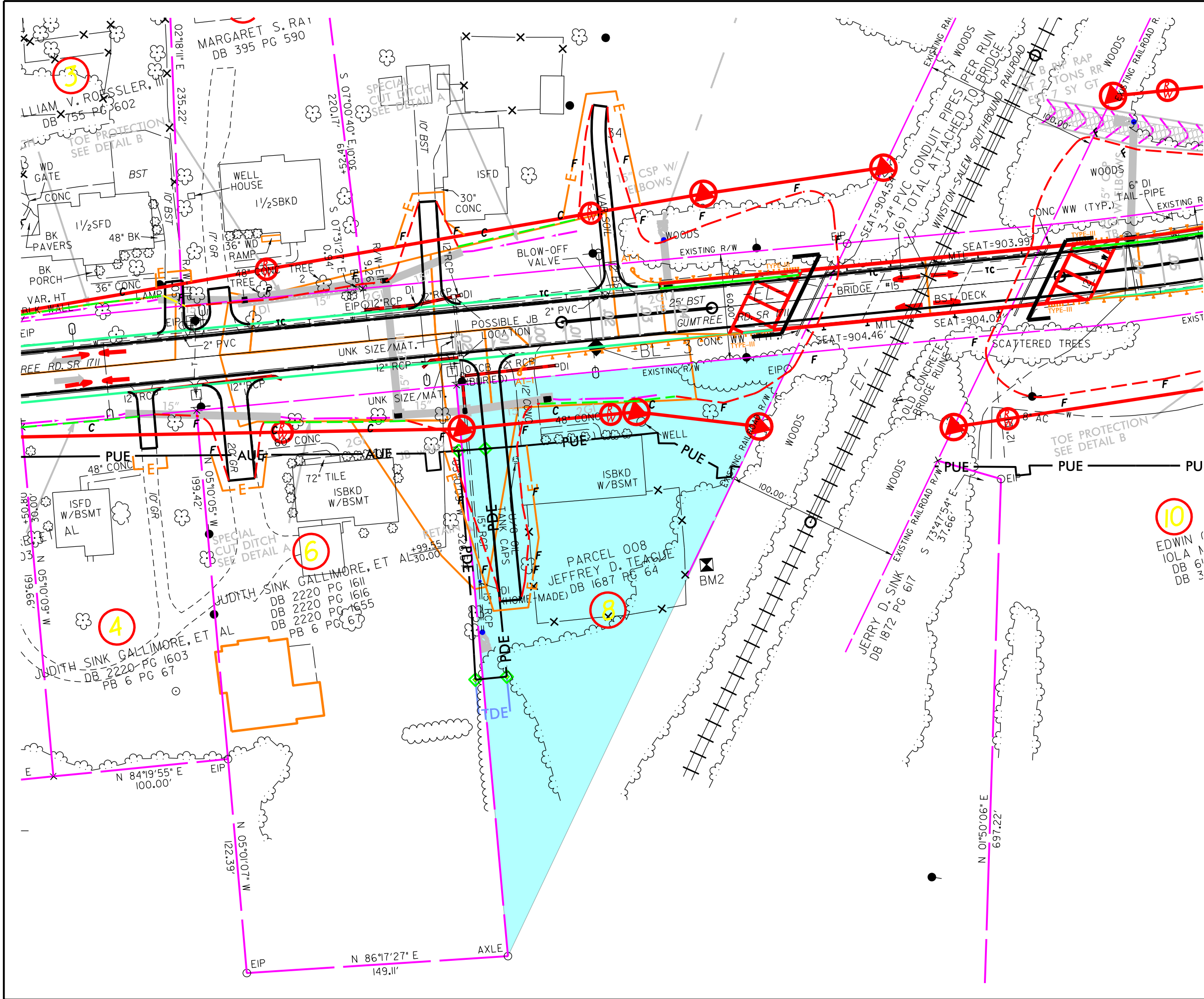
This UST Closure Report was reviewed by:

DocuSigned by:
 Dec 14, 2021
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Charles Heleine, PE, REPA
Senior Environmental Engineer
CES Group Engineers, LLP

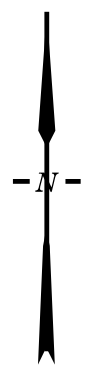


FIGURES

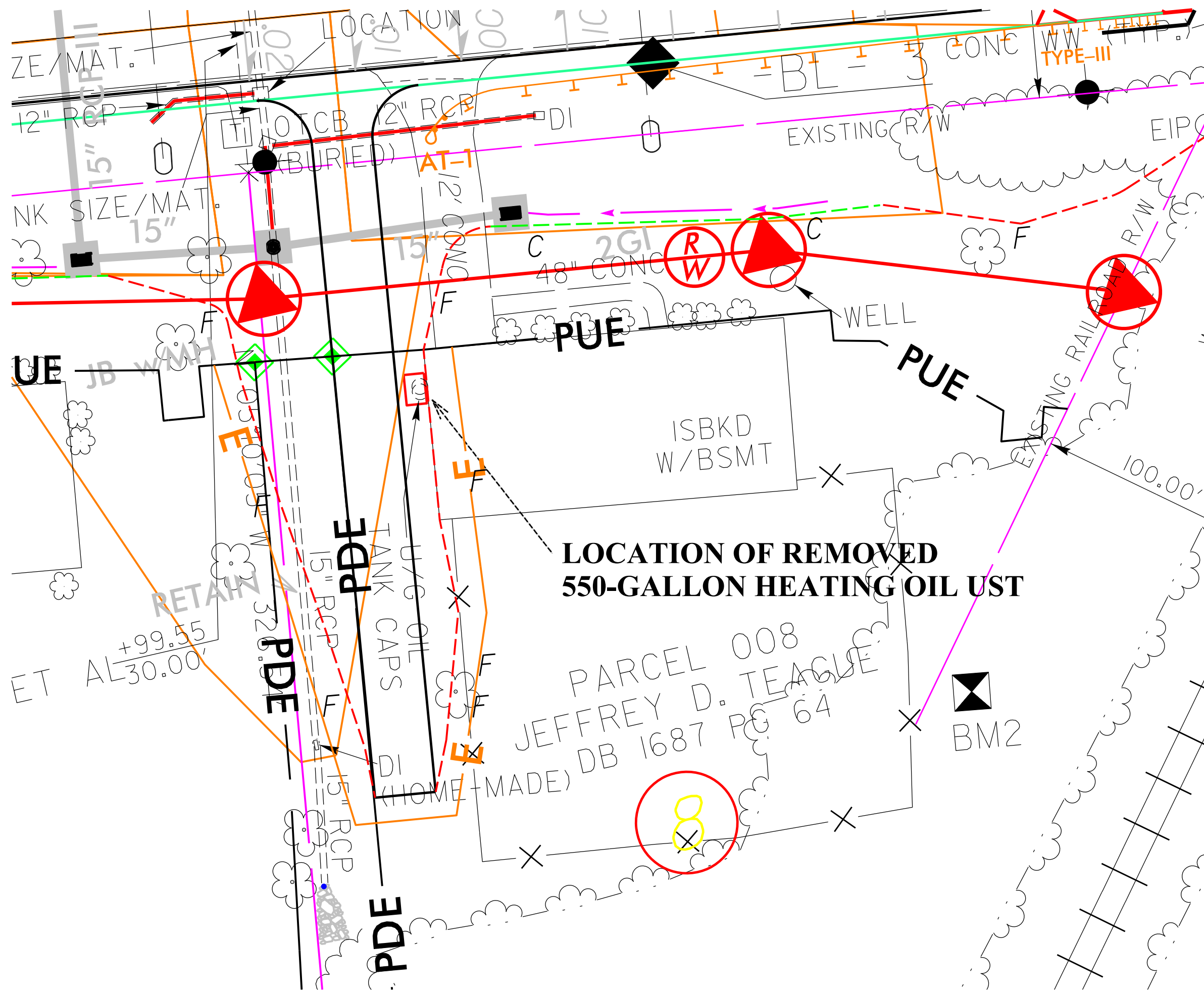


LEGEND

- EXISTING ROW
- EXISTING PROPERTY BOUNDARY
- PROPOSED ROW LINE
- TEMPORARY CONSTRUCTION EASEMENT
- PROPOSED SS CUT LINE
- PROPOSED SS FILL LINE
- PUE PROPOSED UTILITY EASEMENT
- PDE PROPOSED DRAINAGE EASEMENT
- APPROXIMATE PARCEL 8 BOUNDARIES



| | |
|--|-----------------------|
| <p>TITLE</p> <p>AREA SITE MAP AND APPROXIMATE PARCEL 8 BOUNDARIES</p> | |
| <p>PROJECT</p> <p>PARCEL 8 WINSTON-SALEM, NORTH CAROLINA NCDOT PROJECT B-5765</p> | |
| <p>274 N. HIGHWAY 16 BUSINESS SUITE 300 DENVER, NC 28037 704-325-5408 (p)</p> | |
| <p>DATE: 12-7-2021</p> | <p>REVISION NO. 0</p> |
| <p>CES PROJECT NO. 7798.1121ED</p> | <p>FIGURE NO. 1</p> |

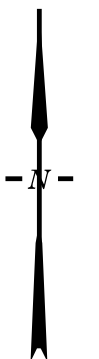
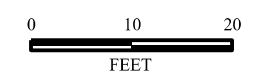


LEGEND

- EXISTING ROW
- EXISTING PROPERTY BOUNDARY
- PROPOSED ROW LINE
- TEMPORARY CONSTRUCTION EASEMENT
- PROPOSED SS CUT LINE
- PROPOSED SS FILL LINE
- PUE PROPOSED UTILITY EASEMENT
- PDE PROPOSED DRAINAGE EASEMENT
- REMOVED HEATING OIL UST

**LOCATION OF REMOVED
550-GALLON HEATING OIL UST**

PARCEL 008
JEFFREY D. TEAGUE
DB 1687 PG 64



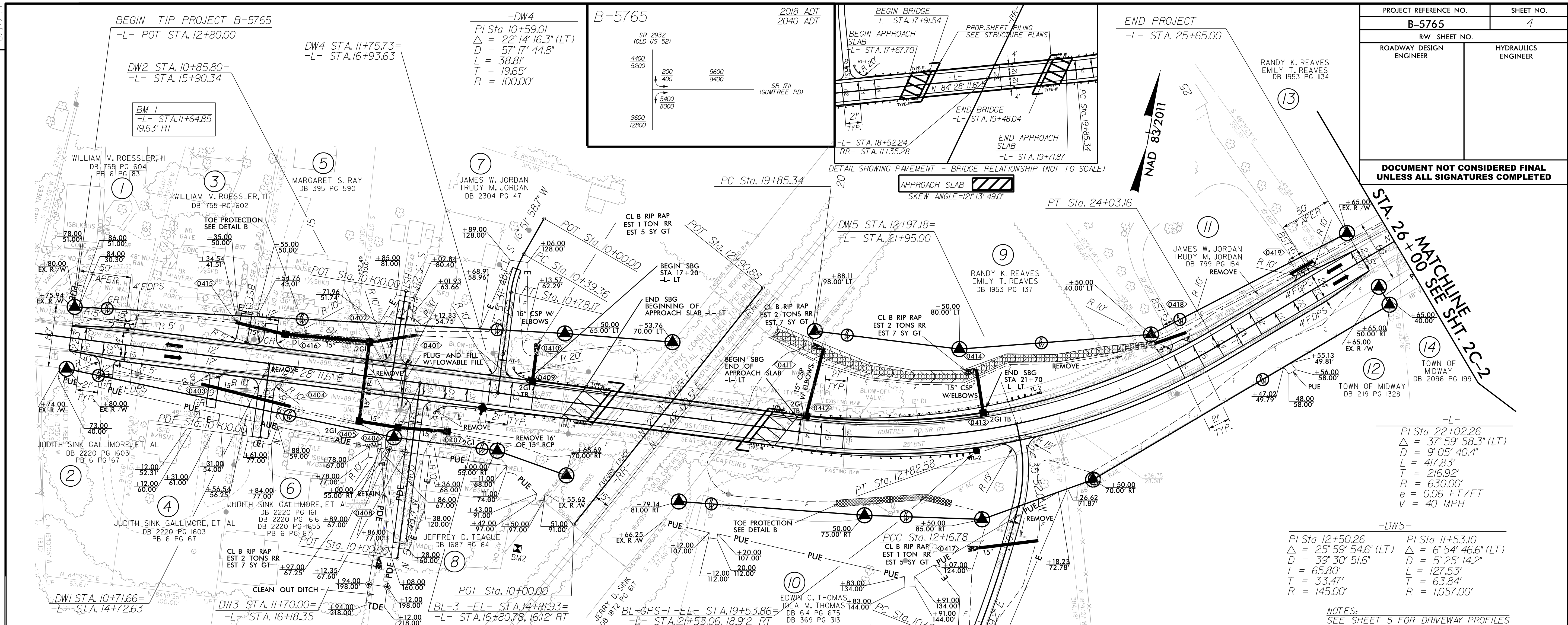
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|-----------------------------|---|--|
| TITLE | SITE MAP AND LOCATION OF REMOVED UNDERGROUND STORAGE TANK | |
| PROJECT | PARCEL 8 WINSTON-SALEM, NORTH CAROLINA NCDOT PROJECT B-5765 | |
| | 274 N. HIGHWAY 16 BUSINESS SUITE 300 DENVER, NC 28037 704-325-5408 (p) | |
| DATE: 12-7-2021 | REVISION NO. 0 | |
| CES PROJECT NO. 7798.1121ED | FIGURE NO. 2 | |

APPENDIX A

NCDOT PROJECT (RIGHT OF WAY)
PLAN SHEET NO.4

| | |
|--|---------------------|
| PROJECT REFERENCE NO. | SHEET NO. |
| B-5765 | 4 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| | |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | |

RANDY K. REAVES
EMILY T. REAVES
DB 1953 PG 1134

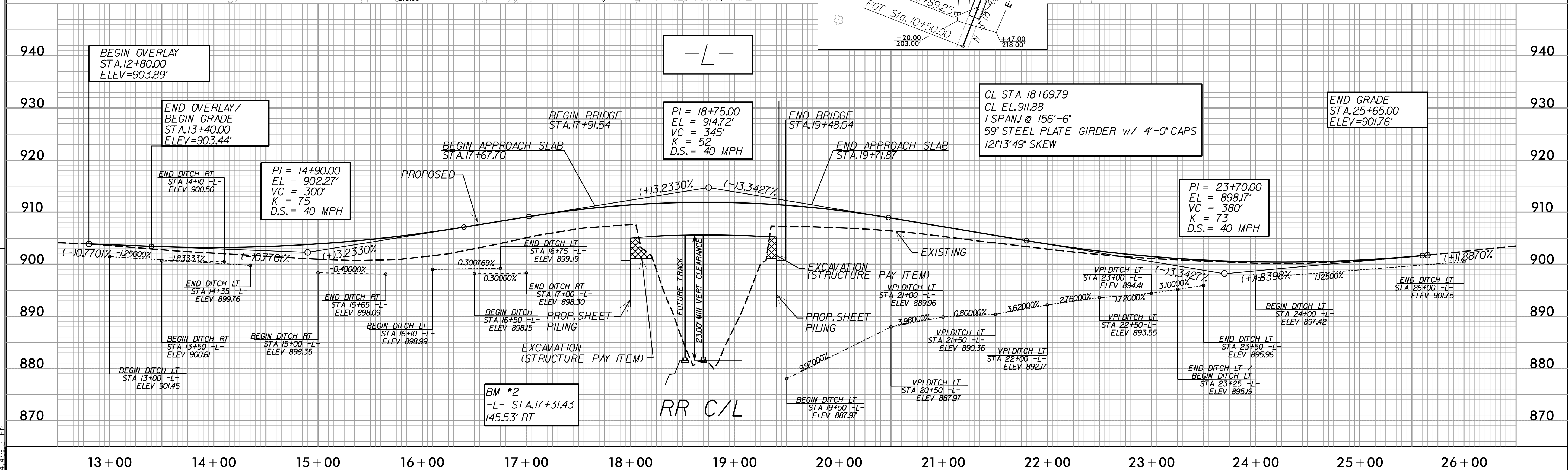


-L-
PI Sta 22+02.26
Δ = 37°59'58.3" (LT)
D = 9'05'40.4"
L = 417.83'
T = 216.92'
R = 630.00'
e = 0.06 FT/FT
V = 40 MPH

-DW5-
PI Sta 12+50.26
Δ = 25°59'54.6" (LT)
D = 39°30'51.6"
L = 65.80'
T = 33.47'
R = 145.00'

PI Sta 11+53.10
Δ = 6°54'46.6" (LT)
D = 5°25'14.2"
L = 127.53'
T = 63.84'
R = 1,057.00'

NOTES:
SEE SHEET 5 FOR DRIVEWAY PROFILES



REVISIONS

9/27/2018
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APPENDIX B
PHOTOGRAPHIC LOG

Photographic Log

Heating Oil UST Removal (222 Gumtree Road, Winston Salem, NC)

NCDOT Parcel # 008 PSH 4

NCDOT Project # B-5765



Heating Oil UST located adjacent to the west facing exterior wall of the single-family residential structure (11.16.2021)



Uncovering the top of the Heating Oil UST (12.01.2021)

Photographic Log

Heating Oil UST Removal (222 Gumtree Road, Winston Salem, NC)

NCDOT Parcel # 008 PSH 4

NCDOT Project # B-5765



Vacuum extraction of Heating Oil UST contents prior to removal (12.01.2021)



Uncovering the west sidewall of the Heating Oil UST (12.01.2021)

Photographic Log

Heating Oil UST Removal (222 Gumtree Road, Winston Salem, NC)

NCDOT Parcel # 008 PSH 4

NCDOT Project # B-5765



Removal of the Heating Oil UST from the subsurface (12.01.2021)



Tank grave upon removal (12.01.2021)

Photographic Log

Heating Oil UST Removal (222 Gumtree Road, Winston Salem, NC)

NCDOT Parcel # 008 PSH 4

NCDOT Project # B-5765



Transportation of Heating Oil UST by CERT (12.01.2021)



View of former Heating Oil UST location upon site departure (12.01.2021)

APPENDIX C

MANIFESTS

WC-3868

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number

2. Page 1 of

3. Emergency Response Phone
877-505-6799

4. Waste Tracking Number

5. Generator's Name and Mailing Address

CES Group Engineers

Generator's Site Address (if different than mailing address)

222 Gumtree rd
Winston Salem NC

Generator's Phone:

6. Transporter 1 Company Name
CERT

U.S. EPA ID Number
NCR 000155499

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address

U.S. EPA ID Number

Facility's Phone:

9. Waste Shipping Name and Description

10. Containers
No. Type

11. Total Quantity

12. Unit Wt./Vol.

1. heating oil

250 991

2. oil tank removed

1 500 991

3.

4.

13. Special Handling Instructions and Additional Information

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

Generator's/Offoror's Printed/Typed Name

Greg Hans / NCDOT B-5765

Signature

Greg Hans

Month Day Year
12 1 21

15. International Shipments

Import to U.S.

Export from U.S.

Port of entry/exit:

Date leaving U.S.:

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name

Cliff Walker

Signature

Cliff Walker

Month Day Year
12 1 21

Transporter 2 Printed/Typed Name

Signature

Month Day Year

17. Discrepancy

17a. Discrepancy Indication Space

Quantity

Type

Residue

Partial Rejection

Full Rejection

17b. Alternate Facility (or Generator)

CERT-5640 Daphne Dr.

Manifest Reference Number:

U.S. EPA ID Number

Facility's Phone:

877-505-6799

Charlotte, NC

17c. Signature of Alternate Facility (or Generator)

Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name

Scott W. Lucas / CERT

Signature

Scott W. Lucas

Month Day Year
12 1 21

GENERATOR

INT'L

TRANSPORTER

DESIGNATED FACILITY

- 79743

*Auto Parts U Pull
& Scrap Metal of Charlotte*

9820 Statesville Road • Charlotte, NC 28269
704-509-5550

Weighed on NC Certified Scales

Date 12/2

Customer Jason Singarella
CERT

Commodity shred - (1) steel 50 GAL. UST

Vehicle Description Silverado
Tag # K1 70

Where did you get the material? 222 Guntree Rd.
Winston Salem, NC

People in Truck Including Driver _____

Do you have the legal right to sale this material? Yes

Weighed By _____

Signature 