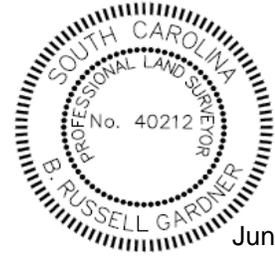




# SCDOT CCR PH3 QLA



June 6, 2024

## Test Hole # 1 Vacuum Excavation Report

<b>TIP#:</b>	N/A	<b>Project #:</b>	24-00642	<b>Project Description:</b>	00349-W-4 ccr QLA ph3 SUE
<b>Date:</b>	5/15/2024	<b>Client:</b>	SCDOT		

### Test Hole Utility Information

Horizontal coordinates shown below represent the estimated center of the utility, top elevation noted indicates the top of utility

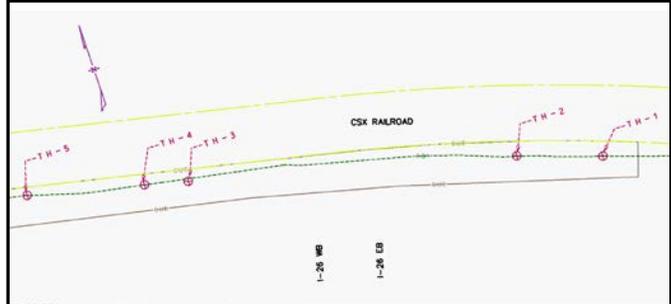
<b>Owner</b>	City of Columbia
<b>Type</b>	Sewer Force Main
<b>Size and Material</b>	30" DI
<b>Existing Surface</b>	Grass
<b>Existing Grade of Survey Mark (Hub A - Feet)</b>	174.97
<b>Field Measurement from Hub A (by ruler - Feet)</b>	3.16
<b>Top Elevation (Feet)</b>	171.81
<b>Bottom Elevation</b>	N/A
<b>Utility Northing</b>	797786.37
<b>Utility Easting</b>	1969239.63
<b>Baseline Station and Offset (BL)</b>	N/A
<b>Design Alignment Station and Offset (L)</b>	N/A

### Additional Comments

Measured from probe due to soil conditions.



**ESP**  
 CLIENT SC DOT  
 JOB # 24-00642  
 PROJECT SC DOT  
 EM WSD  
 CREW FAH/SDG/JSS  
 DATE 5-15-24  
 TH-1  
 UTILITY FM  
 SIZE 30"  
 MATERIAL DI  
 DEPTH 3.16'  
 SURFACE GRASS



Coordinates for this survey based on SC State Plane NAD83, NAVD88 datums. Horizontal and vertical accuracies are consistent with standards set forth in the SUE standard ASCE 38-22.

Location of Electronic File:	N/A	ESP Project #: 24-00642
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**ESP Associates, Inc.**  
 2154 North Center St. E-503  
 North Charleston, SC 29406  
 843-721-2040



# SCDOT CCR PH3 QLA



June 6, 2024

## Test Hole # 2 Vacuum Excavation Report

<b>TIP#:</b>	N/A	<b>Project #:</b>	24-00642	<b>Project Description:</b>	00349-W-4 ccr QLA ph3 SUE
<b>Date:</b>	5/15/2024	<b>Client:</b>	SCDOT		



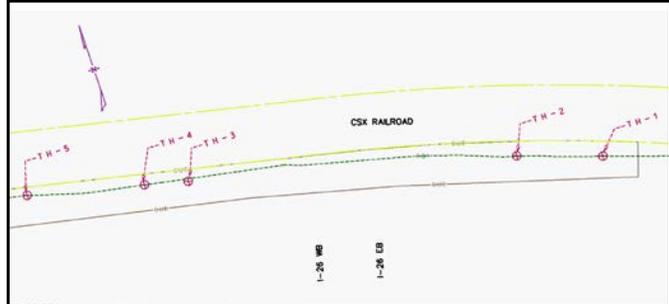
**ESP**  
 CLIENT: SCDOT  
 JOB #: 24-00642  
 PROJECT: SCDOT  
 PM: WSO  
 CREW: FAH/SDG/JSS  
 DATE: 5-15-24  
 TH: 2  
 UTILITY: FM  
 SIZE: 30"  
 MATERIAL: DI  
 DEPTH: 2.20'  
 SURFACE: GRASS

### Test Hole Utility Information

Horizontal coordinates shown below represent the estimated center of the utility, top elevation noted indicates the top of utility

<b>Owner</b>	City of Columbia
<b>Type</b>	Sewer Force Main
<b>Size and Material</b>	30" DI
<b>Existing Surface</b>	Grass/soil
<b>Existing Grade of Survey Mark (Hub A - Feet)</b>	175.96
<b>Field Measurement from Hub A (by ruler - Feet)</b>	2.2
<b>Top Elevation (Feet)</b>	173.76
<b>Bottom Elevation</b>	N/A
<b>Utility Northing</b>	797809.30
<b>Utility Easting</b>	1969165.96
<b>Baseline Station and Offset (BL)</b>	N/A
<b>Design Alignment Station and Offset (L)</b>	N/A

### Additional Comments



Coordinates for this survey based on SC State Plane NAD83, NAVD88 datums. Horizontal and vertical accuracies are consistent with standards set forth in the SUE standard ASCE 38-22.

Location of Electronic File:	N/A	ESP Project #: 24-00642
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# SCDOT CCR PH3 QLA



June 6, 2024

## Test Hole # 3 Vacuum Excavation Report

<b>TIP#:</b>	N/A	<b>Project #:</b>	24-00642	<b>Project Description:</b>	00349-W-4 ccr QLA ph3 SUE
<b>Date:</b>	5/15/2024	<b>Client:</b>	SCDOT		



ESP  
 CLIENT SCDOT  
 JOB # 24-00642  
 PROJECT SCDOT  
 PH - W-4  
 OPER. FAH/SDG/JSS  
 DATE 5/15-24  
 TH - 3  
 UTILITY FM  
 SIZE 30"  
 MATERIAL DI/Concrete  
 DEPTH 1.09' corr  
 SURFACE GRASS

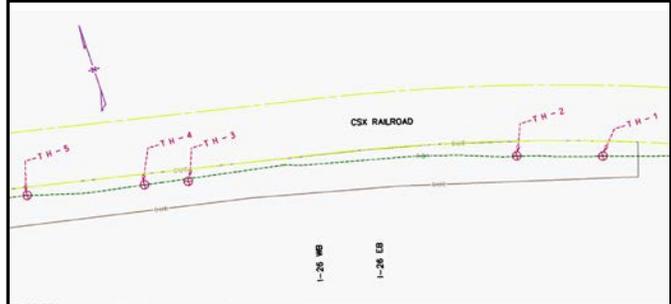
### Test Hole Utility Information

Horizontal coordinates shown below represent the estimated center of the utility, top elevation noted indicates the top of utility

<b>Owner</b>	City of Columbia
<b>Type</b>	Sewer Force Main
<b>Size and Material</b>	30" DI
<b>Existing Surface</b>	Grass/soil
<b>Existing Grade of Survey Mark (Hub A - Feet)</b>	173.75
<b>Field Measurement from Hub A (by ruler - Feet)</b>	1.09
<b>Top Elevation (Feet)</b>	172.66
<b>Bottom Elevation</b>	N/A
<b>Utility Northing</b>	797874.17
<b>Utility Easting</b>	1968878.09
<b>Baseline Station and Offset (BL)</b>	N/A
<b>Design Alignment Station and Offset (L)</b>	N/A

### Additional Comments

Concrete casing around the pipe at this site.



Coordinates for this survey based on SC State Plane NAD83, NAVD88 datums. Horizontal and vertical accuracies are consistent with standards set forth in the SUE standard ASCE 38-22.

Location of Electronic File:	N/A	ESP Project #: 24-00642
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# SCDOT CCR PH3 QLA



June 6, 2024

## Test Hole # 4 Vacuum Excavation Report

<b>TIP#:</b>	N/A	<b>Project #:</b>	24-00642	<b>Project Description:</b>	00349-W-4 ccr QLA ph3 SUE
<b>Date:</b>	5/15/2024	<b>Client:</b>	SCDOT		



**ESP**

CLIENT	SCDOT	TH - 4	
JOB #	24-00642	UTILITY	FM
PROJECT	SCDOT	SIZE	30"
PM	WSD	MATERIAL	DI/Concrete casing
CREW	FAH/SDG/JSS	DEPTH	2.01'
DATE	5-15-24	SURFACE	GRASS

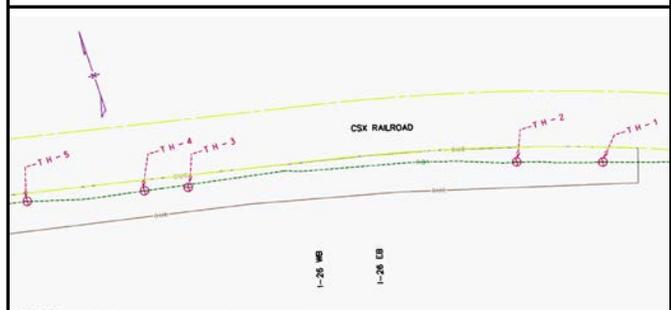
### Test Hole Utility Information

Horizontal coordinates shown below represent the estimated center of the utility, top elevation noted indicates the top of utility

<b>Owner</b>	City of Columbia
<b>Type</b>	Sewer Force Main
<b>Size and Material</b>	30" DI
<b>Existing Surface</b>	Grass
<b>Existing Grade of Survey Mark (Hub A - Feet)</b>	172.86
<b>Field Measurement from Hub A (by ruler - Feet)</b>	2.01
<b>Top Elevation (Feet)</b>	170.85
<b>Bottom Elevation</b>	N/A
<b>Utility Northing</b>	797882.74
<b>Utility Easting</b>	1968839.67
<b>Baseline Station and Offset (BL)</b>	N/A
<b>Design Alignment Station and Offset (L)</b>	N/A

### Additional Comments

Pipe has concrete casing at this TH

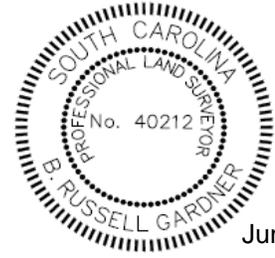


Coordinates for this survey based on SC State Plane NAD83, NAVD88 datums. Horizontal and vertical accuracies are consistent with standards set forth in the SUE standard ASCE 38-22.

Location of Electronic File:	N/A	ESP Project #: 24-00642
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# SCDOT CCR PH3 QLA



June 6, 2024

## Test Hole # 5 Vacuum Excavation Report

<b>TIP#:</b>	N/A	<b>Project #:</b>	24-00642	<b>Project Description:</b>	00349-W-4 ccr QLA ph3 SUE
<b>Date:</b>	5/15/2024	<b>Client:</b>	SCDOT		

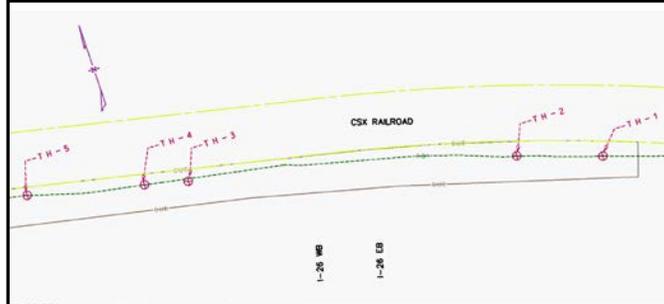
### Test Hole Utility Information

Horizontal coordinates shown below represent the estimated center of the utility, top elevation noted indicates the top of utility

<b>Owner</b>	City of Columbia
<b>Type</b>	Sewer Force Main
<b>Size and Material</b>	30" DI
<b>Existing Surface</b>	Grass/soil
<b>Existing Grade of Survey Mark (Hub A - Feet)</b>	170.72
<b>Field Measurement from Hub A (by ruler - Feet)</b>	3.75
<b>Top Elevation (Feet)</b>	166.97
<b>Bottom Elevation</b>	N/A
<b>Utility Northing</b>	797904.61
<b>Utility Easting</b>	1968736.68
<b>Baseline Station and Offset (BL)</b>	N/A
<b>Design Alignment Station and Offset (L)</b>	N/A

### Additional Comments

Measure from probe due to soil conditions.

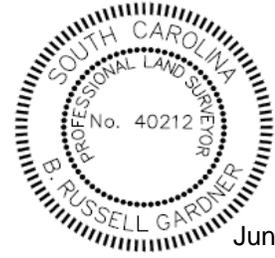


Coordinates for this survey based on SC State Plane NAD83, NAVD88 datums. Horizontal and vertical accuracies are consistent with standards set forth in the SUE standard ASCE 38-22.

Location of Electronic File:	N/A	ESP Project #: 24-00642
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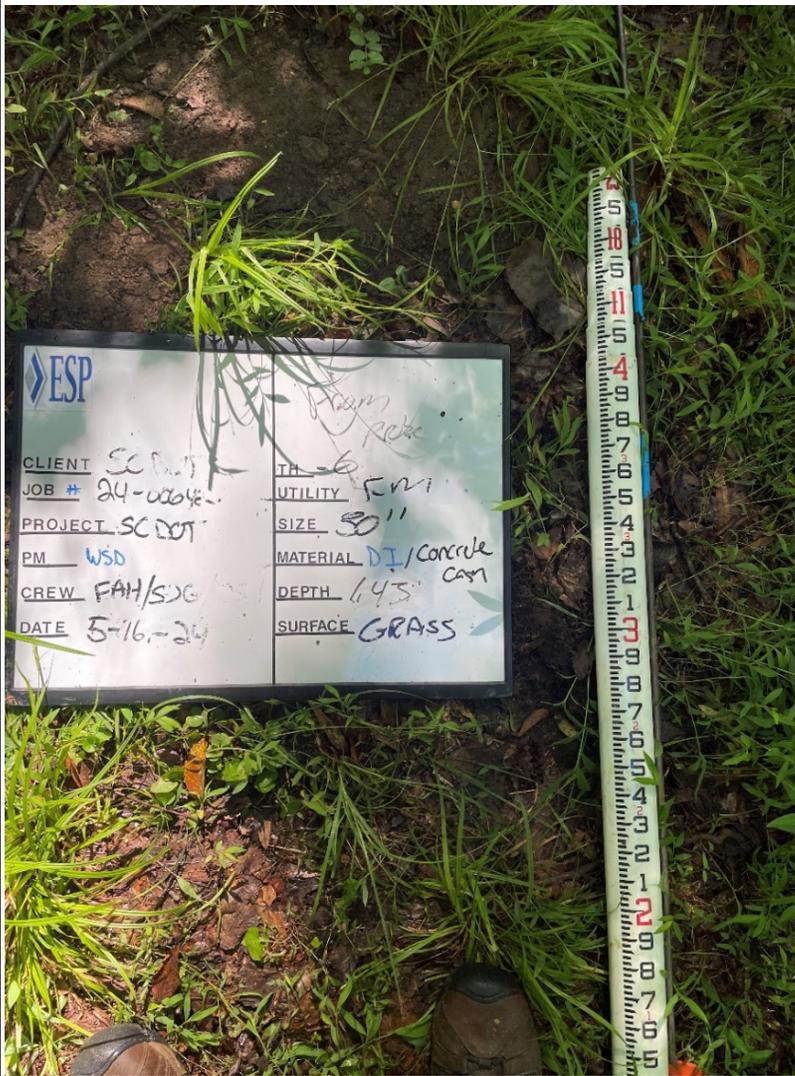
# SCDOT CCR PH3 QLA



June 6, 2024

## Test Hole # 6 Vacuum Excavation Report

<b>TIP#:</b>	N/A	<b>Project #:</b>	24-00642	<b>Project Description:</b>	00349-W-4 ccr QLA ph3 SUE
<b>Date:</b>	5/16/2024	<b>Client:</b>	SCDOT		



### Test Hole Utility Information

Horizontal coordinates shown below represent the estimated center of the utility, top elevation noted indicates the top of utility

<b>Owner</b>	City of Columbia
<b>Type</b>	Sewer Force Main
<b>Size and Material</b>	30" DI
<b>Existing Surface</b>	Grass
<b>Existing Grade of Survey Mark (Hub A - Feet)</b>	179.07
<b>Field Measurement from Hub A (by ruler - Feet)</b>	1.43
<b>Top Elevation (Feet)</b>	177.64
<b>Bottom Elevation</b>	N/A
<b>Utility Northing</b>	798295.30
<b>Utility Easting</b>	1961941.55
<b>Baseline Station and Offset (BL)</b>	N/A
<b>Design Alignment Station and Offset (L)</b>	N/A

### Additional Comments

Pipe has a concrete casting at this TH per City of Columbia employee who observed work. Measured from probe due to soil conditions.

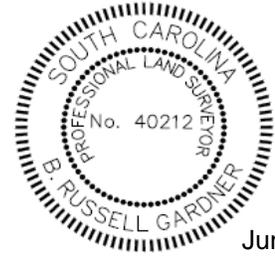


Coordinates for this survey based on SC State Plane NAD83, NAVD88 datums. Horizontal and vertical accuracies are consistent with standards set forth in the SUE standard ASCE 38-22.

Location of Electronic File:	N/A	ESP Project #: 24-00642
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# SCDOT CCR PH3 QLA



June 6, 2024

## Test Hole # 7 Vacuum Excavation Report

<b>TIP#:</b>	N/A	<b>Project #:</b>	24-00642	<b>Project Description:</b>	00349-W-4 ccr QLA ph3 SUE
<b>Date:</b>	5/16/2024	<b>Client:</b>	SCDOT		



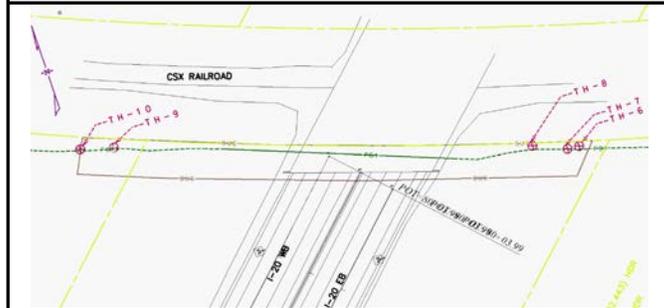
### Test Hole Utility Information

Horizontal coordinates shown below represent the estimated center of the utility, top elevation noted indicates the top of utility

<b>Owner</b>	City of Columbia
<b>Type</b>	Sewer Force Main
<b>Size and Material</b>	30" DI
<b>Existing Surface</b>	Grass
<b>Existing Grade of Survey Mark (Hub A - Feet)</b>	178.93
<b>Field Measurement from Hub A (by ruler - Feet)</b>	2.27
<b>Top Elevation (Feet)</b>	176.66
<b>Bottom Elevation</b>	N/A
<b>Utility Northing</b>	798295.96
<b>Utility Easting</b>	1961931.35
<b>Baseline Station and Offset (BL)</b>	N/A
<b>Design Alignment Station and Offset (L)</b>	N/A

### Additional Comments

Pipe was measured from probe due to soil conditions.

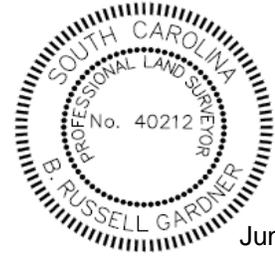


Coordinates for this survey based on SC State Plane NAD83, NAVD88 datums. Horizontal and vertical accuracies are consistent with standards set forth in the SUE standard ASCE 38-22.

Location of Electronic File:	N/A	ESP Project #: 24-00642
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# SCDOT CCR PH3 QLA



June 6, 2024

## Test Hole # 8 Vacuum Excavation Report

<b>TIP#:</b>	N/A	<b>Project #:</b>	24-00642	<b>Project Description:</b>	00349-W-4 ccr QLA ph3 SUE
<b>Date:</b>	5/16/2024	<b>Client:</b>	SCDOT		



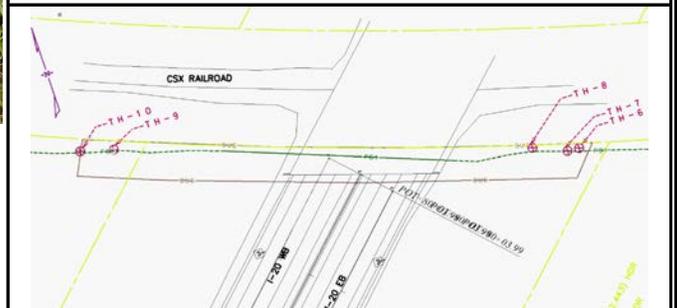
### Test Hole Utility Information

Horizontal coordinates shown below represent the estimated center of the utility, top elevation noted indicates the top of utility

<b>Owner</b>	City of Columbia
<b>Type</b>	Sewer Force Main
<b>Size and Material</b>	30" DI
<b>Existing Surface</b>	Grass
<b>Existing Grade of Survey Mark (Hub A - Feet)</b>	176.97
<b>Field Measurement from Hub A (by ruler - Feet)</b>	2.66
<b>Top Elevation (Feet)</b>	174.31
<b>Bottom Elevation</b>	N/A
<b>Utility Northing</b>	798307.30
<b>Utility Easting</b>	1961903.46
<b>Baseline Station and Offset (BL)</b>	N/A
<b>Design Alignment Station and Offset (L)</b>	N/A

### Additional Comments

Pipe was measured from probe due to soil conditions.

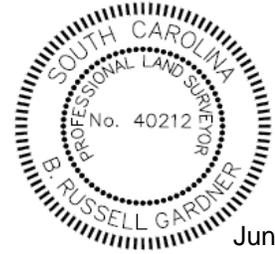


Coordinates for this survey based on SC State Plane NAD83, NAVD88 datums. Horizontal and vertical accuracies are consistent with standards set forth in the SUE standard ASCE 38-22.

Location of Electronic File:	N/A	ESP Project #: 24-00642
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# SCDOT CCR PH3 QLA



June 6, 2024

## Test Hole # 9 Vacuum Excavation Report

<b>TIP#:</b>	N/A	<b>Project #:</b>	24-00642	<b>Project Description:</b>	00349-W-4 ccr QLA ph3 SUE
<b>Date:</b>	5/16/2024	<b>Client:</b>	SCDOT		



### Test Hole Utility Information

Horizontal coordinates shown below represent the estimated center of the utility, top elevation noted indicates the top of utility

<b>Owner</b>	City of Columbia
<b>Type</b>	Sewer Force Main
<b>Size and Material</b>	30" DI
<b>Existing Surface</b>	Grass/swamp
<b>Existing Grade of Survey Mark (Hub A - Feet)</b>	175.91
<b>Field Measurement from Hub A (by ruler - Feet)</b>	4.54
<b>Top Elevation (Feet)</b>	171.37
<b>Bottom Elevation</b>	N/A
<b>Utility Northing</b>	798411.00
<b>Utility Easting</b>	1961561.94
<b>Baseline Station and Offset (BL)</b>	N/A
<b>Design Alignment Station and Offset (L)</b>	N/A

### Additional Comments

Pipe was measured from probe rod due to soil conditions.



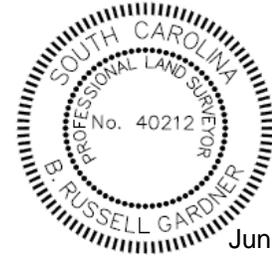
Coordinates for this survey based on SC State Plane NAD83, NAVD88 datums. Horizontal and vertical accuracies are consistent with standards set forth in the SUE standard ASCE 38-22.

Location of Electronic File:	N/A	ESP Project #: 24-00642
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**ESP Associates, Inc.**  
 2154 North Center St. E-503  
 North Charleston, SC 29406  
 843-721-2040



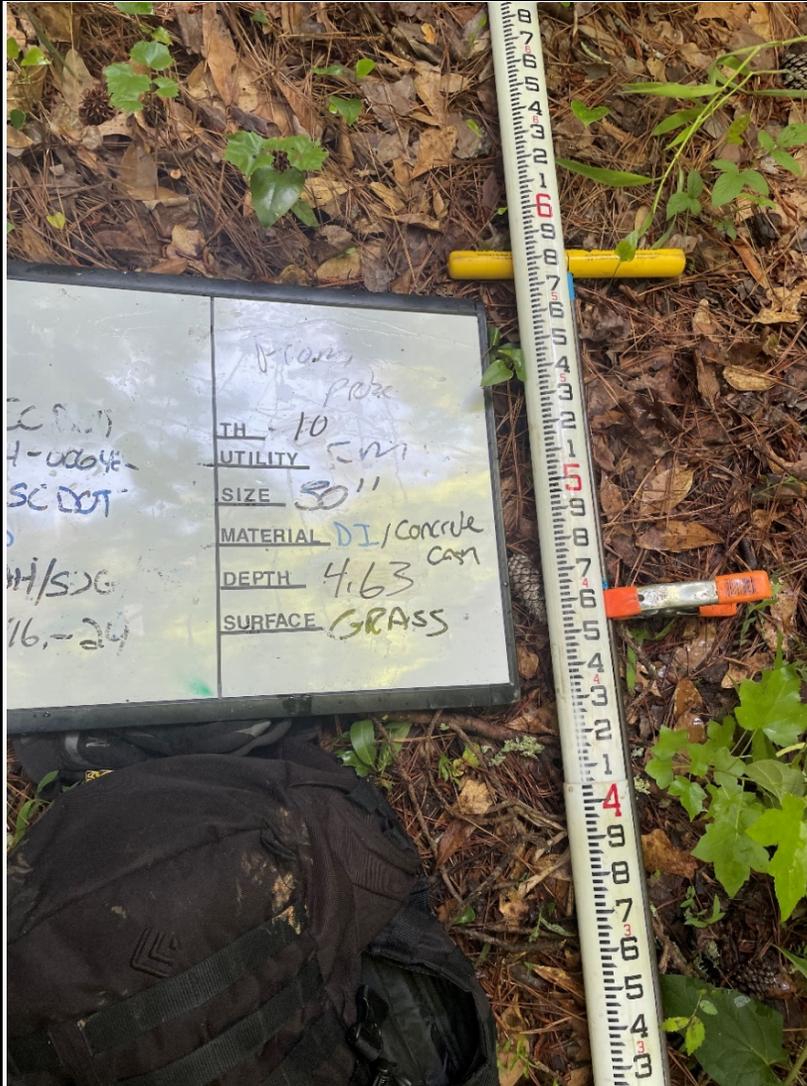
# SCDOT CCR PH3 QLA



June 6, 2024

## Test Hole # 10 Vacuum Excavation Report

<b>TIP#:</b>	N/A	<b>Project #:</b>	24-00642	<b>Project Description:</b>	00349-W-4 ccr QLA ph3 SUE
<b>Date:</b>	5/16/2024	<b>Client:</b>	SCDOT		

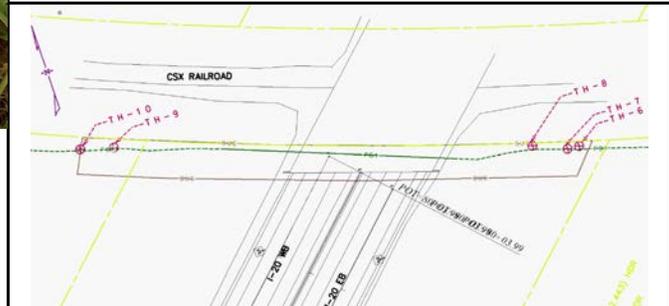


### Test Hole Utility Information

Horizontal coordinates shown below represent the estimated center of the utility, top elevation noted indicates the top of utility

<b>Owner</b>	City of Columbia
<b>Type</b>	Sewer Force Main
<b>Size and Material</b>	30" DI
<b>Existing Surface</b>	Grass/swamp
<b>Existing Grade of Survey Mark (Hub A - Feet)</b>	176.12
<b>Field Measurement from Hub A (by ruler - Feet)</b>	4.63
<b>Top Elevation (Feet)</b>	171.49
<b>Bottom Elevation</b>	N/A
<b>Utility Northing</b>	798417.93
<b>Utility Easting</b>	1961534.40
<b>Baseline Station and Offset (BL)</b>	N/A
<b>Design Alignment Station and Offset (L)</b>	N/A

### Additional Comments



Coordinates for this survey based on SC State Plane NAD83, NAVD88 datums. Horizontal and vertical accuracies are consistent with standards set forth in the SUE standard ASCE 38-22.

Location of Electronic File:	N/A	ESP Project #: 24-00642
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