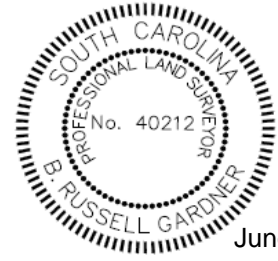




SCDOT CCR PH3 QLA



June 6, 2024

Test Hole # 1 Vacuum Excavation Report

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

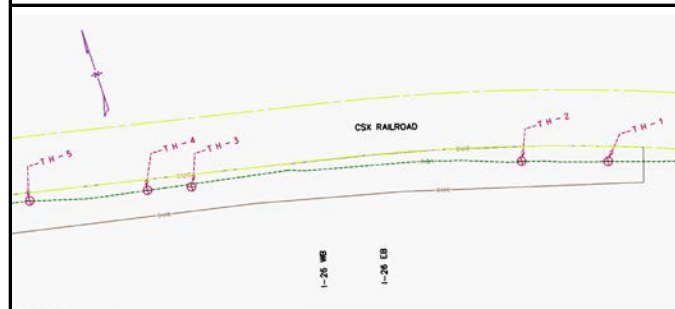
Test Hole Utility Information

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

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

Additional Comments

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

ESP Associates, Inc.

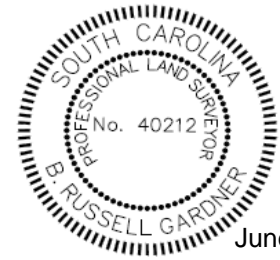
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North Charleston, SC 29406

843-721-2040



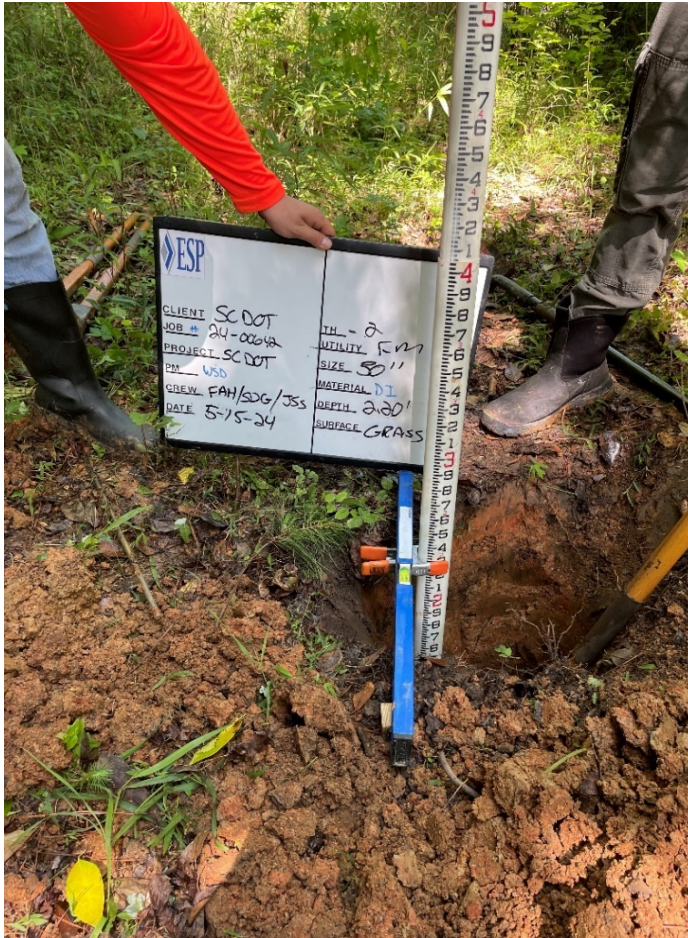
SCDOT CCR PH3 QLA



June 6, 2024

Test Hole # 2 Vacuum Excavation Report

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

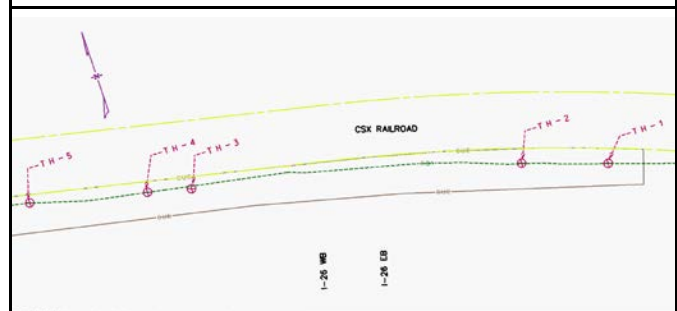


Test Hole Utility Information

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

Owner	City of Columbia
Type	Sewer Force Main
Size and Material	30" DI
Existing Surface	Grass/soil
Existing Grade of Survey Mark (Hub A - Feet)	175.96
Field Measurement from Hub A (by ruler - Feet)	2.2
Top Elevation (Feet)	173.76
Bottom Elevation	N/A
Utility Northing	797809.30
Utility Easting	1969165.96
Baseline Station and Offset (BL)	N/A
Design Alignment Station and Offset (L)	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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Test Hole # 3 Vacuum Excavation Report

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



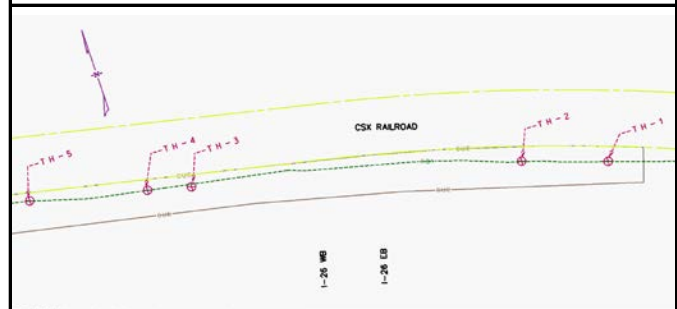
Test Hole Utility Information

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

Owner	City of Columbia
Type	Sewer Force Main
Size and Material	30" DI
Existing Surface	Grass/soil
Existing Grade of Survey Mark (Hub A - Feet)	173.75
Field Measurement from Hub A (by ruler - Feet)	1.09
Top Elevation (Feet)	172.66
Bottom Elevation	N/A
Utility Northing	797874.17
Utility Easting	1968878.09
Baseline Station and Offset (BL)	N/A
Design Alignment Station and Offset (L)	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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Test Hole # 4 Vacuum Excavation Report

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



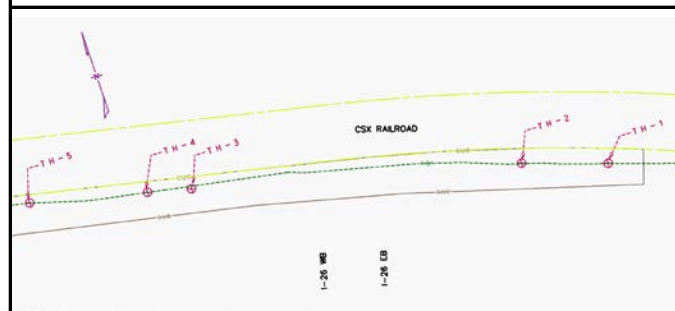
Test Hole Utility Information

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

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

ESP Associates, Inc.

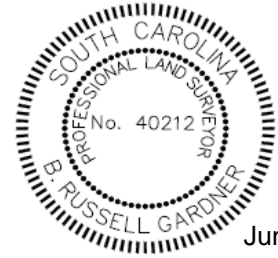
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SCDOT CCR PH3 QLA



June 6, 2024

Test Hole # 5 Vacuum Excavation Report

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



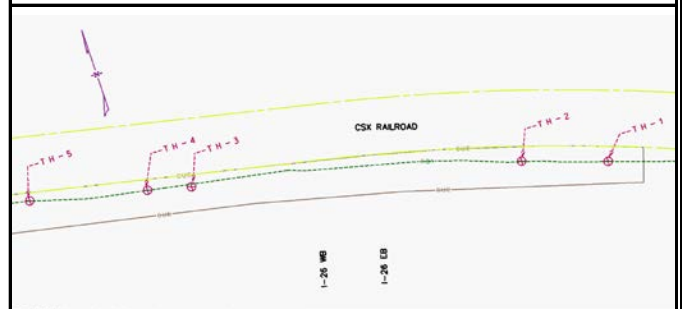
Test Hole Utility Information

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

Owner	City of Columbia
Type	Sewer Force Main
Size and Material	30" DI
Existing Surface	Grass/soil
Existing Grade of Survey Mark (Hub A - Feet)	170.72
Field Measurement from Hub A (by ruler - Feet)	3.75
Top Elevation (Feet)	166.97
Bottom Elevation	N/A
Utility Northing	797904.61
Utility Easting	1968736.68
Baseline Station and Offset (BL)	N/A
Design Alignment Station and Offset (L)	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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Test Hole # 6 Vacuum Excavation Report

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



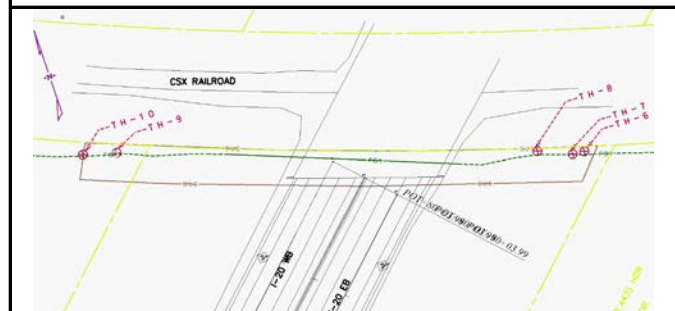
Test Hole Utility Information

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

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

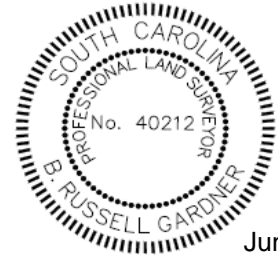
Location of Electronic File:	N/A	ESP Project #: 24-00642
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Test Hole # 7 Vacuum Excavation Report

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



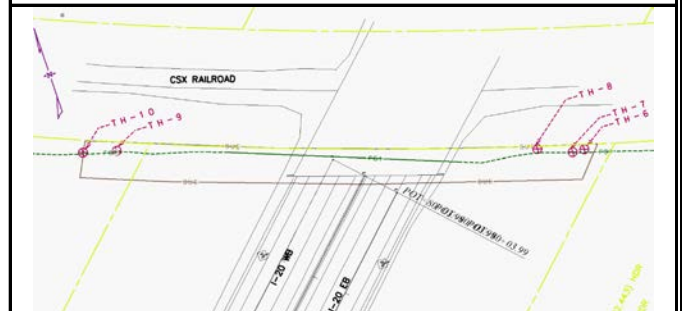
Test Hole Utility Information

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

Owner	City of Columbia
Type	Sewer Force Main
Size and Material	30" DI
Existing Surface	Grass
Existing Grade of Survey Mark (Hub A - Feet)	178.93
Field Measurement from Hub A (by ruler - Feet)	2.27
Top Elevation (Feet)	176.66
Bottom Elevation	N/A
Utility Northing	798295.96
Utility Easting	1961931.35
Baseline Station and Offset (BL)	N/A
Design Alignment Station and Offset (L)	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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Test Hole # 8 Vacuum Excavation Report

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



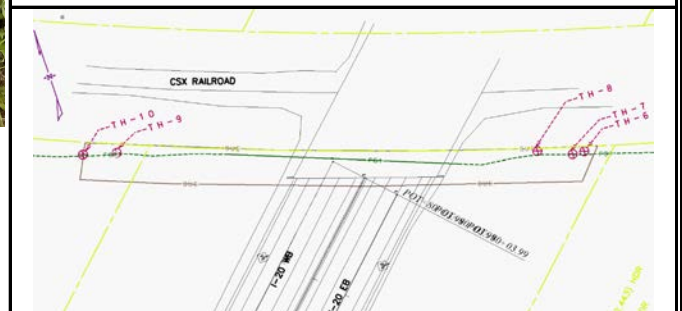
Test Hole Utility Information

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

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

Additional Comments

Pipe was measured from probe due to soil conditions.



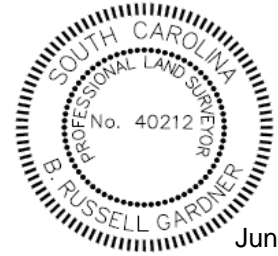
Coordinates for this survey based on SC State Plane NAD83, NAVD88 datums. Horizontal and vertical accuracies are consistent with standards set forth in the SUE standard ASCE 38-22.

Location of Electronic File:	N/A	ESP Project #: 24-00642
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Test Hole # 9 Vacuum Excavation Report

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



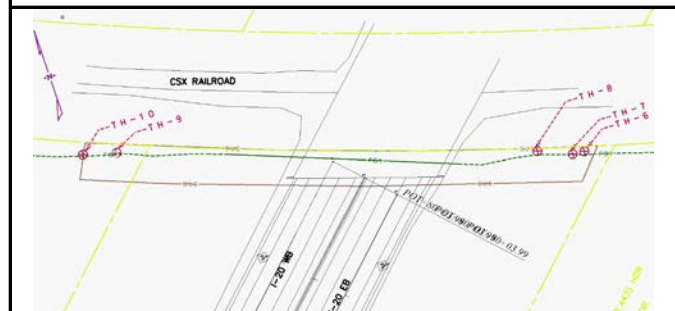
Test Hole Utility Information

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

Owner	City of Columbia
Type	Sewer Force Main
Size and Material	30" DI
Existing Surface	Grass/swamp
Existing Grade of Survey Mark (Hub A - Feet)	175.91
Field Measurement from Hub A (by ruler - Feet)	4.54
Top Elevation (Feet)	171.37
Bottom Elevation	N/A
Utility Northing	798411.00
Utility Easting	1961561.94
Baseline Station and Offset (BL)	N/A
Design Alignment Station and Offset (L)	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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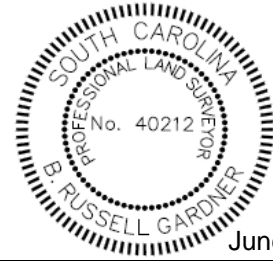
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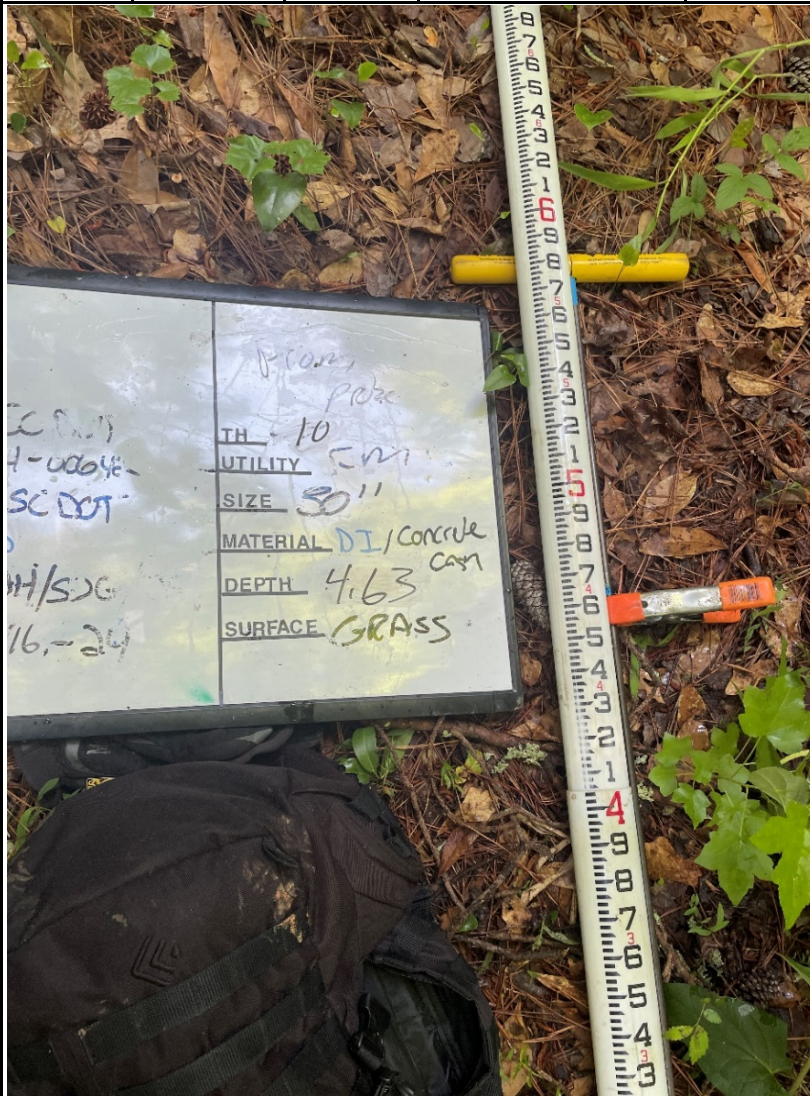
SCDOT CCR PH3 QLA



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Test Hole # 10 Vacuum Excavation Report

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

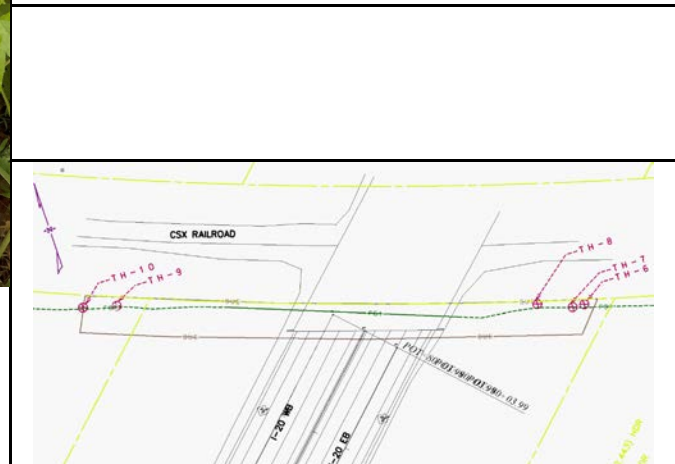


Test Hole Utility Information

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

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