DRAINAGE REPORT

BEL-70-19.19

PID # 123722

RICHLAND TOWNSHIP
BELMONT COUNTY

Prepared by:
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2024045

GPD GROUP

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Introduction

The project consists of the replacement of the existing 108" cmp (BEL-70-19.188 SFN 0702104) with a 108" tunnel liner plate structure with a paved invert and a headwall replacement. Proposed drainage work was determined by the spreadsheet from District 11 found in Appendix A.

The BEL-70-19.19 project is located within the Ohio River Watershed.

The Ohio Department of Transportation Location and Design Manual Volume 2, Drainage Design regulations were adhered to for the hydraulic design of the BEL-70-19.19 project. See Appendix B for the required LD-33 and LD-35 forms.

Culvert Design

Culvert location and proposed work:

- Culvert #1 – ex. 108" CMP at Sta. 1018+82.44, I-70
  Reconstructed as Tunnel Liner Plate with Paved Invert

For culvert durability spreadsheet, see Appendix C.

The 108" CMP culvert at SLM 19.92, aka the Orphan Bridge BEL-70-19.188, is slated for replacement due to the poor condition of the existing pipe. Per the internal LiDAR inspection performed, the existing pipe has deformed under the weight of the roadway embankment. See Appendix E for Culvert Assessment memo dated 6/5/24. Hydraulics have also been performed, and the proposed solution is a Tunnel Liner Plate with Paved Invert. See Appendix D for Hydraulic memo dated 7/23/25.

Outlet Velocity Protection

As per ODOT L&D Vol. 2, Section 1104.3.8 and Section 1105.2.5 rock channel protection has been provided at the culvert outlet that requires it due to the velocity at the outlets. For rock channel protection calculations (L&D Vol 2 Figure 1107-1), see Appendix F.

Post Construction Storm Water Management

As per ODOT L&D Vol. 2, Section 1111, this project disturbs less than 1 acre of earth and is considered a routine maintenance project therefore it does not require the use of Post Construction Storm Water Structural Best Management Practices (PCSWM BMP).

APPENDIX A – PROPOSED DRAINAGE WORK

BEL-70-19.17, PID 107533 (SLM 19.17 to 23.69)
Conduits along Major Rehab Project
Updated 5/24/2023

Culverts requiring hydraulics per ODOT email dated 01/22/24

Hydraulics	CFN	CRS	Status	Installation Date	Special Designation	Maintenance	Broken-Back (Y/N)	Shape	Material	Span (in)	Length (ft)	GA	Latest Inspection	Recommended Repair
1	1847725	BEL-70-19.716	Active	1/2/57	Mainline	State DOT	No	Circular	Corrugated Metal - Sectional Plate	84	478	5	11/30/21	Invert field paving and scour countermeasures
	1992298	BEL-70-19.822	Active	5/9/78	Mainline	State DOT	Yes	Circular	Corrugated Metal - Pipe	12	85	5	5/9/23	Replace broken-back (CMP) section of conduit
2	1853991	BEL-70-20.168	Active	1/2/78	Mainline	State DOT	No	Circular	Plain or Reinforced Concrete	15	84	5	3/31/21	Complete replacement
3	1856661	BEL-70-20.666	Active	1/2/57	Mainline	State DOT	No	Circular	Corrugated Metal - Pipe	42	582	5	10/13/22	Dewater, cleanout, and liner. Inlet and outlet scour protection
4	1853995	BEL-70-21.144	Active	5/11/81	Mainline	State DOT	No	Circular	Corrugated Metal - Pipe	15	90	5	5/11/23	Complete replacement
	1992338	BEL-70-21.232	Active	5/11/81	Mainline	State DOT	Yes	Circular	Corrugated Metal - Pipe	15	80	4	5/11/23	Replace broken-back (CMP) section of conduit
	1992378	BEL-70-21.340	Active	5/16/81	Mainline	State DOT	Yes	Circular	Corrugated Metal - Pipe	15	158	5	5/16/23	Replace broken-back (CMP) section of conduit
	1992395	BEL-70-21.931	Active	5/18/61	Mainline	State DOT	No	Circular	Corrugated Metal - Pipe	12	52	No GA	5/18/23	Reroute to ditch?
5	1853971	BEL-70-21.932	Active	1/2/61	Mainline	State DOT	No	Circular	Corrugated Metal - Pipe	30	220	No GA	5/18/23	Fill and reroute to ditch?
6	1992398	BEL-70-22.256	Active	5/18/61	Mainline	State DOT	No	Circular	Corrugated Plastic	30	308	5	5/18/23	Replace outlet (20'± and scour protection at outlet)
7	1992393	BEL-70-22.303	Active	5/18/61	Mainline	State DOT	Yes	Circular	Corrugated Metal - Pipe	12	26	3	5/18/23	Complete replacement and added scour protection
8	1992402	BEL-70-22.333	Active	5/22/61	Mainline	State DOT	No	Circular	Corrugated Metal - Pipe	30	602	5	5/22/23	Dewater, cleanout, and liner. Inlet and outlet scour protection
9	1992394	BEL-70-22.341	Active	5/18/61	Mainline	State DOT	Yes	Circular	Corrugated Metal - Pipe	12	124	3	5/18/23	Replace broken-back (CMP) section of conduit and scour protection
10	1992636	BEL-70-22.342	Active		Mainline	State DOT	No	Circular	Corrugated Metal - Pipe	24	300	No GA	none	Rehab - CIPP liner. Install new manhole at "T"
	1992425	BEL-70-22.714	Active	5/23/61	Mainline	State DOT	Yes	Circular	Corrugated Metal - Pipe	24	48	3	5/23/23	Replace broken-back (CMP) section of conduit
11	1848332	BEL-70-22.768	Active	1/2/62	Mainline	State DOT	Yes	Circular	Corrugated Metal - Sectional Plate	36	644	5	10/11/22	Rehab - Liner and scour protection
	1992422	BEL-70-22.866	Active	5/23/61	Mainline	State DOT	Yes	Circular	Corrugated Metal - Pipe	12	38	3	5/23/23	Replace broken-back (CMP) section of conduit
	1992417	BEL-70-22.902	Active	5/23/61	Mainline	State DOT	Yes	Circular	Corrugated Metal - Pipe	12	42	4	5/23/23	Replace broken-back (CMP) section of conduit
	1857541	BEL-70-22.924	Active	1/2/61	Mainline	State DOT	No	Circular	Plain or Reinforced Concrete	21	54	5	5/22/23	Replace misaligned inlet section
12	1992406	BEL-70-22.929	Active	5/22/61	Mainline	State DOT	No	Circular	Corrugated Metal - Pipe	21	112	5	5/22/23	Rehab - Liner and scour protection
13	1856662	BEL-70-23.092	Active	1/2/62	Mainline	State DOT	No	Circular	Corrugated Metal - Sectional Plate	42	291	5	10/11/22	Replace outlet end (30'±), field pave, and outlet scour protection
	1992405	BEL-70-23.414	Active	5/22/61	Mainline	State DOT	Yes	Circular	Corrugated Metal - Pipe	12	56	4	5/22/23	Replace broken-back (CMP) section of conduit
14	1856663	BEL-70-23.484	Active	1/2/62	Mainline	State DOT	No	Circular	Corrugated Metal - Sectional Plate	48	382	5	9/29/22	Dewater, cleanout, and liner. Inlet and outlet scour protection
	1992404	BEL-70-23.554	Active	5/22/61	Mainline	State DOT	Yes	Circular	Corrugated Metal - Pipe	12	62	4	5/22/23	Replace broken-back (CMP) section of conduit
	Ramps													
	1992296	BEL-7024-0.203	Active	5/9/78	Ramp	State DOT	Yes	Circular	Corrugated Metal - Pipe	15	107	3	5/9/23	Replace broken-back (CMP) section of conduit
	1992294	BEL-7024-0.159	Active	5/9/78	Ramp	State DOT	Yes	Circular	Corrugated Metal - Pipe	18	48	3	5/9/23	Replace broken-back (CMP) section of conduit
	1992303	BEL-7024-0.285	Active	5/9/78	Ramp	State DOT	Yes	Circular	Corrugated Metal - Pipe	15	74	4	5/9/23	Replace broken-back (CMP) section of conduit
	1992335	BEL-7024-0.40	Active	5/11/78	Ramp	State DOT	Yes	Circular	Corrugated Metal - Pipe	15	62	5	5/11/23	Replace broken-back (CMP) section of conduit
	Questionable areas near 70/47													
15	1992326	BEL-470-0.090	Active	5/10/80	Mainline	State DOT	No	Circular	Corrugated Metal - Pipe	21	82	5	5/10/23	Complete replacement
16	1853966	BEL-70-20.607	Active	1/2/80	Ramp	State DOT	No	Circular	Corrugated Metal - Pipe	27	106	5	5/10/23	Rehab - CIPP liner and inlet catch basin replacement
17	1992324	BEL-470-0.103	Active	5/10/80	Ramp	State DOT	No	Circular	Corrugated Metal - Pipe	21	126	5	5/10/23	Complete replacement
18	1853994	BEL-70-20.842	Active	5/11/82	Ramp	State DOT	No	Circular	Corrugated Metal - Pipe	18	700	5	9/24/20	Rehab - liner
19	1992334	BEL-470-0.326	Active	5/11/81	Mainline	State DOT	No	Circular	Corrugated Metal - Pipe	15	98	5	5/11/23	Rehab - liner
20	1848329	BEL-470-0.849	Active	1/1/83	Mainline	State DOT	No	Circular	Corrugated Metal - Pipe	42	414	5	6/26/16	Paved invert

APPENDIX B – DRAINAGE CRITERIA (LD-33 & LD-35)

Form LD-33
Revised July 2022

Ohio Department of Transportation
County Engineer Approval Form

Date Submitted to District: Nov 12th, 2024

Date Submitted to County Engineer:

County - Route - Section: BEL-70-19.17

PID: 107533

Station	Size & Type	Culvert Invert Elevation		Ex. Channel Elevation		Skew
		Inlet	Outlet	Inlet	Outlet	
1018+82.44	108" CMP	1049.18	1036.38	1048.67	1035.57	42
1045+18.00	84" CMP	1057.70	1051.49	1057.55	1048.83	0
1093+87.25	42" CMP	Unknown	1137.72	Unknown	1137.80	20
1129+98.98	42" CMP	1179.47	1163.38	1179.73	1163.38	48
1162+05.74	30" CMP	1082.13	Unknown	1082.75	Unknown	1
1183+61.53	30" CMP	Unknown	863.27	Unknown	863.57	24
1184+41.40	24" CMP	946.03	Unknown	946.25	N/A	90
1206+19.55	36" CMP	804.77	720.23	804.83	720.23	0
1222+96.39	42" CMP	793.14	772.63	794.94	769.31	32
1223+55.27	48" CMP	Unknown	730.42	Unknown	729.40	5

I have reviewed and hereby approve the drainage proposed for the highway designated hereon in accordance with the provisions of the Ohio Revised Code, Section 6131.631.

County

County Engineer's Signature

Date

Comments:

Form LD-35
Revised January 2015

PROJECT INFORMATION:

COUNTY	ROUTE	SECTION	PID
BEL	70	19.19	123722

PIPE POLICY:

The Pipe Policy of ODOT L&D Vol. 2 will be used for this project.

(Attach a copy of the written pipe policy or furnish a link to the policy. In lieu of a written policy, documentation of locally funded construction practices may be provided)

POST CONSTRUCTION BMP POLICY:

The Post Construction BMP Policy of ODOT L&D Vol. 2 will be used for this project.

If a policy other than ODOT's is being used, the following BMP's are permitted:

DRAINAGE WATERSHED(S):

Wheeling Creek

McMahon Creek

Ohio River

PROJECT SPECIFIC INFORMATION AFFECTING DRAINAGE:

APPENDIX C – CULVERT DURABILITY SPREADSHEETS

County	BELMONT	Route	70	Section	19.17	PID	107533	Shape	Circular
Station	1018+82.44 (CULVERT #1)	Station	1018+82.44 (CULVERT #1)		Invert Submerged From Tailwater?	No		Span x Rise	108
					AOP Design?	No			

User Input	
pH_w	Abrasion Level
7.7	4.0

Constants and Calculated Values			
pHs	Sediment/Rise	End of Service Life GA	Service Life Required
7.6	0	4	75

Zinc or Aluminum Coated Corrugated Steel Pipe Conduit Durability Results

Material		707.01 , or 707.02 Metallic Coated (galvanized)	707.01 or 707.02 Metallic Coated (galvanized) with Concrete Field Paving	707.01 or 707.02 Metallic coated (Aluminized)	***707.01 or 707.02 Metallic coated (aluminized) with Concrete Field Paving	707.04 Polymeric Precoated Galvanized Steel	***707.04 Polymeric Precoated with Concrete Field Paving	**707.11 Polymer Precoated Spiral Rib Steel	**707.12 or 707.17 Aluminum Coated Spiral Rib Steel	**707.18 Polymer Precoated, Galvanized Steel Conduits with Polymer Precoated Galvanized Smooth Steel Interior Liner
Conduit Use and Shape		Culvert or Liner Pipe - Round or Pipe Arch	Culvert-Round, Pipe Arch, and Arch	Culvert or Liner Pipe - Round or Pipe Arch	Culvert -Round or Pipe Arch	Culvert or Liner Pipe -Round or Pipe Arch	Culvert-Round or Pipe Arch	Storm Sewer or Liner Pipe-Round	Liner Pipe- Round or Pipe Arch	Culvert, Storm Sewer, or Liner Pipe -Round
	Corr. Depth (inches)									
min gauge or thickness	1/4 or 1/2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10
	1	12	12	12	12	12	12	N/A	N/A	N/A
	3/4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10	N/A
max gauge or thickness	1/4 or 1/2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10
	1	8	8	10	10	10	10	N/A	N/A	N/A
	3/4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10	N/A
Gauge	*Thickness (inches)*									
16	0.004									
14	0.079									
12	0.109									
10	0.138									
8	0.168									

Corrugated Aluminum Pipe Durability Results

Material		707.21 or 707.22 Aluminum	707.21 or 707.22 Aluminum Alloy with Concrete Invert Paving	707.24 Aluminum Spiral Rib
Conduit Use and Shape		Culvert or Liner Pipe-Round or Pipe Arch	Culvert - Round or Pipe Arch	Storm Sewer or Liner Pipe -Round
	Corr. Depth (inches)			
min gauge or thickness	1/4 or 1/2	N/A	N/A	N/A
	1	N/A	10	N/A
	3/4	N/A	N/A	N/A
max gauge or thickness	1/4 or 1/2	N/A	N/A	N/A
	1	N/A	8	N/A
	3/4	N/A	N/A	N/A
Gauge	*Thickness (inches)*			
16	0.06			
14	0.075			
12	0.105			
10	0.135			
8	0.164			

Steel Casing Pipe

		**748.06 Steel Casing Pipe non-galvanized
		Culvert or Liner Pipe-Round, Pipe Arch, or Box
	Corr. Depth (inches)	
min gauge or thickness	1/4 or 1/2	0.5
	1	
	3/4	
max gauge or thickness	1/4 or 1/2	0.5
	1	
	3/4	
Gauge	*Thickness (inches)*	
16	0.06	
14	0.075	
12	0.105	
10	0.135	
8	0.164	

Corrugated Aluminum Structural Plate Conduit Durability Results

Material		707.23 Aluminum Structural Plate	707.23 Aluminum Alloy Structural Plate with Concrete Invert Paving	707.25 Aluminum Box
Conduit Use and Shape		Culvert or Liner Pipe - Round or Pipe Arch	Culvert - Round or Pipe Arch	Culvert or Liner Pipe - Box Shape
	Corr. Depth (inches)			
min gauge or thickness	3	N/A	0.10	N/A
max gauge or thickness	3	N/A	0.25	N/A
Gauge	*Thickness (inches)*			
12	0.1			
10	0.125			
8	0.15			
7	0.175			
5	0.2			
3	0.225			
1	0.25			

Corrugated Steel Structural Plate Conduit Durability Results

Material		707.03 Metallic coated (galvanized)	707.03 Metallic coated (galvanized) with Concrete Field Paving	707.15 Galvanized steel box
Conduit Use and Shape		Culvert or Liner Pipe -Round or Pipe Arch	Culvert-Round, Pipe Arch, and Arch	Culvert or Liner Pipe -Box Shape
	Corr. Depth (inches)			
min gauge or thickness	2	12	12	N/A
max gauge or thickness	2	1	1	N/A
Gauge	*Thickness (inches)*			
12	0.109			
10	0.138			
8	0.168			
7	0.188			
5	0.218			
3	0.249			
1	0.28			

Concrete Conduit Durability Results						
Material	**706.01 Non-reinforced Concrete Pipe	**706.02 Reinforced Concrete Circular Pipe	**706.03 Reinforced Concrete Pipe, Epoxy Coated	**706.04 Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe	**706.05 Precast Reinforced Concrete Box Sections	706.08 Clay Drain Tile
Conduit Use and Shape	Culvert or Storm Sewer - Round	Culvet or Storm Sewer -Round	Culvert or Storm Sewer - Round or Elliptical	Culvert or Storm Sewer - Elliptical	Culvert or Storm Sewer -Box	Culvert or Storm Sewer - Round

Plastic Conduit Durability Results													
Material	707.33 Corrugated Polyethylene Smooth Lined Pipe	707.34 Polyethylene Plastic Pipe Based on Outside Diameter (OD)	707.35 Polyethylene Profile Wall Pipe	707.42 Polyvinyl Chloride Corrugated Smooth Interior Pipe	707.43 Polyvinyl Chloride Profile Wall Pipe	707.45 Polyvinyl Chloride Solid Wall Pipe	707.46 Polyvinyl Chloride Drain Waste and Vent Pipe	707.47 ABS and Polyvinyl Chloride Composite Pipe	707.48 Polyvinyl Chloride Large Diameter Solid Wall Pipe	707.65 Corrugated Polypropylene Smooth Lined Pipe	707.75 Glass-Fiber-Reinforced Polymer Mortar Pipe	707.85 Steel Reinforced Thermoplastic Ribbed Pipe	748.02 Polyvinyl Chloride (PVC) Pipe, Joints, and Fittings
Conduit Use and Shape	Culvert, Storm Sewer, or Liner Pipe - Round	Culvert, Storm Sewer, or Liner Pipe - Round	Culvert, Storm Sewer, or Liner Pipe - Round	Storm Sewer or Liner Pipe - Round	Storm Sewer or Liner Pipe - Round	Storm Sewer - Round	Storm Sewer - Round	Storm Sewer - Round	Storm Sewer - Round	Culvert or Storm Sewer - Round	Culvert, Storm Sewer, or Liner Pipe - Round	Culvert, Storm Sewer, or Liner Pipe - Round	Storm Sewer - Round

APPENDIX D - ORPHAN BRIDGE (BEL-70-19.188)

HYDRAULIC MEMO

To:	ODOT District 11	No. of Pages: 9 (not including attachments)
From:	Jesse Rufener, PE	Reviewed by: Andrew Long, PE
Cc:	Mark Grossman, PE	
Date:	September 23, 2024 Revised July 23, 2025	
Subject:	BEL-070-19.17 (PID 107533) – Orphan Bridge Hydraulic Analysis	

1 Purpose

This technical memorandum (TM) will provide a hydraulic analysis for the Orphan Bridge 19.92, 108-in corrugated metal pipe storm sewer, that is included as part of the BEL-070-19.17 ODOT project.

2 Introduction

In November 2023, ODOT retained GPD Group (GPD) to prepare construction plans for the rehabilitation of a section of I.R. 70 in Belmont County. As part of this project, GPD was tasked to perform a hydraulic analysis of the 108" corrugated metal pipe (CMP), Orphan Bridge 19.92, beneath I.R. 70 that conveys the storm flow of Aults Run. A condition assessment of the 108" CMP was completed previously which found defects that require improvements to the pipe. This technical memorandum will summarize our hydraulic analyses, which determined the original pipe's level of service and analyzed several rehabilitation options.

2.1 Culvert Overview

The 108-in CMP storm culvert is approximately 700-ft in length and conveys Aults Run beneath I.R. 70. The storm sewer was originally installed in 1957 and was lengthened from its downstream end in 1973 as part of a roadway widening project. See **Figure 2-1** for an overview of the site.

Figure 2-1 Site Overview

3 Culvert Hydraulics

GPD performed an analysis of the existing culvert assuming the original condition before the deformity to the culvert began to occur. In the proposed condition, several liner types were analyzed with the key outputs evaluated being inlet headwater and outlet velocity. FHWA HY-8 software was utilized to analyze the existing condition and the initial proposed condition alternatives. It was difficult to reduce the headwater for the alternatives with standard approaches and so PCSWMM software was utilized to evaluate alternatives that were able to reduce the headwater to or below existing conditions. PCSWMM is software that utilizes EPA SWMM as its computational engine. EPA SWMM allows the user to apply culvert codes to conduits and thus produce results similar to HY-8. It has added flexibility where the user can change the shape of the culvert mid-length or add relief culverts which we believe may be necessary for this project to keep the headwater at acceptable levels.

3.1 Hydrology

Per the project scope, GPD utilized StreamStats to develop the peak flow rates used in the analysis. StreamStats estimated the watershed at the downstream side of the culvert at 0.9-sq. miles (576-acres), see **Figure 3-1**. Immediately upstream of the culvert, the channel splits with the main stem

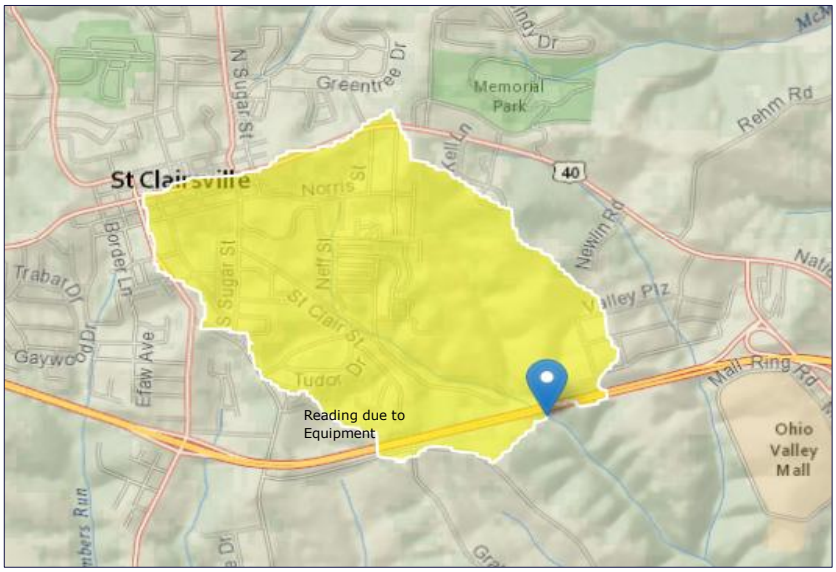


Figure 3-1 StreamStats Watershed

going to the northwest with a drainage area of approximately 0.62-sq. miles (397-acres) and smaller tributary heading to the north with a drainage area of approximately 0.28-Sq. miles (179-acres) The peak flows estimated by StreamStats are shown in **Table 3-1**.

Table 3-1 Peak Flows

Recurrence Interval	Peak Flow
2-year	120
5-year	226
10-year	315
25-year	448
50-year	560
100-year	683
500-year	1010

3.2 Existing Condition Hydraulics

The existing culvert was modeled as 108-inch CMP round pipe culvert. The headwater for the culvert was calculated with both HY-8 and PCSWMM software, see **Table 3-2**. The inverts and length were defined utilizing survey data. The entrance loss coefficient was 0.9 because the inlet has a half height headwall, and the top of the pipe is projecting from the embankment fill. An exit loss coefficient of 0.5 and culvert code of 6 was used within the PCSWMM software. An n-value of 0.024 was assigned to the CMP pipe which is the suggested value within the HY-8 software for a steel, corrugated metal pipe with a diameter of 108-inches. The culvert appears to have had an asphalt type coating when it was initially installed which has been worn away for some time. Since the draft TM was submitted in September of 2024, additional investigation and analysis has been completed. The culvert is not simply a corrugated metal pipe, but a corrugated multi-plate pipe which has a higher n-value of 0.032. The culvert headwater was evaluated in HY-8 for the higher n-value and the results are presented in the HY-8 (n=0.032) column of **Table 3-2.** The headwater elevation for both the 10-year and 100-year were the same as they were inlet controlled, while the 25-year and 50-year are higher for the n-value of 0.032 due to being outlet controlled. The tailwater for the existing condition and alternatives analysis was an irregular channel taken from survey data with a slope of 1.4%, channel Manning's of 0.05 and floodplain Manning's of 0.1.

Table 3-2 Existing Culvert Headwater

Recurrence Interval	HY-8 (n=0.024)	HY-8 (n=0.032)	PCSWMM
10-year	1055.83	1055.83	1055.78
25-year	1057.60	1058.38	1057.51
50-year	1059.18	1059.63	1059.15
100-year	1061.16	1061.16	1060.83

There is a road/private drive approximately 110-feet upstream on the main stem that has an overtopping elevation of approximately 1059.3 +/-. There is a 72-inch CMP culvert that carries the flow under the road/private drive.

3.3 Alternatives Analysis

Slip Liner Alternatives

The existing 108-inch CMP pipe has experienced deformation along the majority of its length. A 3D scan of the pipe was completed to determine the severity of the deformation. Near the center of the culvert, the pipe experiences nearly 11% ovality with dimensions of approximately 97-inches vertically

and 120-inches horizontally. Slip liners were evaluated that had a maximum outside dimension of 93-inches. The following slip liners were evaluated for the full length of the existing culvert:

- 85-inch inside diameter Hobas
- 90-inch insider diameter CMP
- 78-inch insider diameter RCP

The reason for the different types of slip liners evaluated is due to depth of cover over the culvert, hydraulic capacity, and outlet velocity. All three of the pipe liners evaluated, Hobas, CMP and RCP pipe all have the structural capacity. The CMP and RCP pipes have limited hydraulic capacity relative to the existing culvert. Full height headwalls were assumed at the entrance for all three scenarios. The headwater and outlet velocity results from HY-8 are displayed in **Table 3-3**.

Table 3-3 Full Length Alternatives

Rec. Interval	85-inch Hobas			90-inch CMP			78-inch RCP		
	Hdwtr.	Vel.	Diff.*	Hdwtr.	Vel.	Diff.*	Hdwtr.	Vel.	Diff.*
10-year	1056.84	22.6	+1.01	1056.43	12.7	+0.60	1058.09	21.5	+2.26
25-year	1059.40	24.5	+1.80	1058.60	13.7	+1.00	1061.66	23.4	+4.06
50-year	1062.24	25.7	+3.06	1060.80	14.6	+1.62	1065.76	24.5	+6.58
100-year	1066.17	26.8	+5.01	1069.83	16.6	+8.67	1071.42	25.5	+10.26

*Difference in headwater between the values in this table and the HY-8 (n=0.024) column in **Table 3-2**

The 50-year headwater for all the alternatives is approximately 1.6-ft or higher than existing and the 100-year headwater for all the alternatives is approximately 5.0-ft or higher than existing. Also, the outlet velocities for the Hobas and RCP alternatives are above 20-ft/s which would require a designed energy dissipator at the outlet. The CMP alternative has outlet velocities that are similar to the existing condition, but between the 50- and 100-year events the culvert becomes outlet controlled due to its lesser discharge capacity.

Slip Liner Modification Alternatives

As the headwater elevations for the alternatives above were all higher than the existing condition, scenarios that looked at utilizing a modified entrance or a relief culvert were evaluated. For the modified entrance alternative, a larger, new culvert for the first 30-ft and then transitioning to one of the slip lined options above was evaluated. The following alternatives were evaluated in PCSWMM as the configurations shown could not be input into HY-8. Full height headwalls were assumed at the entrance for all scenarios.

- 85-inch Hobas slip liner with the first 30-ft being a 108-inch RCP pipe
- 85-inch Hobas slip liner with the first 30-ft being a 7-ft by 9-ft RCP box culvert
- 90-inch CMP slip liner with a 48-inch CMP relief culvert
- 78-inch RCP slip liner with a 48-inch smooth barrel relief culvert

The headwater and velocity results from PCSWMM are displayed in **Table 3-4**. Please note that PCSWMM only provides an average culvert velocity and not a specific outlet velocity as does HY-8.

Table 3-4 Modified Entrance Alternatives

Rec. Interval	85-inch Hobas w/ 108-inch RCP Inlet			85-inch Hobas w/ 7-ft by 9-ft box culvert Inlet		
	Hdwtr.	Vel.	Diff.*	Hdwtr.	Vel.	Diff.*
10-year	1055.77	20.3	-0.01	1055.19	20.3	-0.59
25-year	1057.33	21.8	-0.18	1056.72	21.4	-0.79
50-year	1058.59	22.6	-0.56	1057.92	23.4	-1.23
100-year	1060.21	22.4	-0.62	1059.26	22.9	-1.57

Rec. Interval	90-inch CMP w/ 48-inch CMP Relief Culvert			78-inch RCP w/ 48-inch Smooth Pipe Relief Culvert		
	Hdwtr.	Vel.	Diff.*	Hdwtr.	Vel.	Diff.*
10-year	1055.13	9.5	-0.65	1055.85	10.4	+0.07
25-year	1056.85	10.4	-0.66	1057.51	12.5	0.00
50-year	1058.57	12.9	-0.58	1058.40	15.8	-0.75
100-year	1060.75	15.8	-0.08	1060.80	17.3	-0.03

*Difference in headwater between the values in this table and the PCSWMM column in **Table 3-2**.

The culverts with the modified entrances and relief culverts keep the headwater below existing condition elevations, however, the Hobas options have exit velocities in excess of 20-ft/s which would require a designed energy dissipator.

Spray Applied Structural Liner Alternative

An additional alternative evaluated was a Spray Applied Structural Liner (SASL). The SASL process would first involve applying material to the sides of the pipe with the greatest ovality to create a round finished product. Next a 2-inch lining would be applied with the surface filled smooth and the appearance of corrugations would be removed. Due to the ovality a weighted diameter of 98.5-inches was calculated. A diameter of 98-inches was used in the hydraulic analysis within HY-8. **Table 3-5** lists the results of the analysis compared with the existing condition (HY-8 (n=0.024) column from **Table 3-2**.

Table 3-5 SASL Alternative

Rec. Interval	98-inch SASL Liner		
	Hdwtr.	Vel.	Diff.
10-year	1055.70	18.5	-0.13
25-year	1057.19	20.4	-0.41
50-year	1058.51	21.3	-0.67
100-year	1060.20	22.3	-0.96

If a full height headwall is used with a groove end constructed in the headwall, the SASL alternative meets or exceeds the existing condition headwater requirements. The velocity at the outlet is greater than 20-ft/s for a majority of the design storms evaluated and therefore would require an energy dissipator.

Tunnel Liner Plate Alternative

An additional alternative was evaluated since the September 2024 TM. A tunnel liner plate was evaluated per direction from ODOT provided in as an attachment to an email on January 9, 2025. To meet the existing 100-year headwater elevation a 108-inch diameter liner plate with paved invert and full height headwall was required. According to literature provided by Contech, a 108-inch tunnel liner plate has an n-value of 0.037. Since the culvert will have a paved invert, the n-value was adjusted to 0.033 per the following sources:

- Online HEC-RAS Hydraulic Reference Manual (https://www.hec.usace.army.mil/confluence/rasdocs/ras1dtechref/6.5/modeling-culverts/culvert-data-and-coefficients/manning-s-roughness-coefficient)
- Contech Corrugated Steel Pipe – Manning's n reference (https://www.conteches.com/media/xczfmbot/csp_chart.pdf)

The installation of the tunnel liner plate will require the existing culvert to be removed as the tunnel liner plate is installed. This type of installation is completed primarily with manual labor and is very time-consuming. **Table 3-6** lists the results of the analysis compared with the existing condition (HY-8 (n=0.024) column from **Table 3-2**.

Table 3-6 Tunnel Liner Plate Alternative

Rec. Interval	98-inch SASL Liner		
	Hdwtr.	Vel.	Diff.
10-year	1056.42	10.4	0.59
25-year	1057.92	11.8	0.32
50-year	1059.11	12.8	-0.07
100-year	1060.49	14.0	-0.66

If a full height headwall is used with a groove end constructed in the headwall, the tunnel liner plate alternative meets or exceeds the existing condition headwater requirements for the 50 and 100-year events. The velocity at the outlet is less than 20-ft/s for all the design storms evaluated and therefore can utilize standard ODOT Rock Channel Protection.

3.4 Energy Dissipation Alternatives

ODOT allows for the use of ring chambers to provide energy dissipation for culverts. They are most effective for steeply sloped culverts that have a Froude number higher than 4. The highest Froude number for the culvert scenarios analyzed is approximately 2.3 and only a 15% reduction could be achieved in velocity with a ring chamber, which would not reduce the velocities enough for the Hobas alternative. Therefore, a preliminary evaluation of several types of energy dissipators was completed within HY-8 to provide an estimate of the size of energy dissipator that may be needed. The evaluation was based on the 100-yr event velocity from the Hobas liner scenario as it presents the highest velocities and therefore is a worst-case scenario from a size perspective. The primary purpose of the evaluation was to determine the footprint required to construct each as there is limited right-of-way available at the downstream end of the culvert. The following types of streambed level structure energy dissipators were evaluated:

- Colorado State University (CSU) rigid boundary basin
- Contra Costa basin
- Hook basin
- Riprap basin

The United States Bureau of Reclamation Type VI impact basin is also a streambed level structure option within HY-8, however, it was not evaluated as it is only considered suitable for flows less than 400-cfs. There are also drop structures and stilling basin options available for energy dissipation structures, however, the invert of the structures would require excavation well below the invert of the existing culvert and the lengths required are similar to the streambed level structures and therefore they weren't pursued any further. **Table 3-6** lists the estimated length and width for each of the four types of energy dissipators listed above. Please note that detailed design would need to be completed to verify the actual dimension of the method chosen for energy dissipation.

Table 3-6 Modified Entrance Alternatives

Energy Dissipator	Length (ft)	Width (ft)	Exit Velocity
CSU Basin	56	15	11.6
Contra Costa Basin	53	15	9.9
Hook basin	42	36	17.3
Riprap basin[1]	77	60	12.1
Riprap basin[2]	45	38	19.5

[1]The basin dimensions are based on the envelope curve as described in HEC-14 and should be used if the consequence of failure at the downstream end of culvert is severe.
[2] The basin dimensions are based on the best curve as described in HEC-14 and should be used if the consequence of basin failure is minimal and can be easily addressed as part of routine maintenance.

The only option above that would safely fit within the available right-of-way is the Hook basin, however, the velocities leaving the structure are still high which could have a detrimental effect on the downstream channel. The other option would be to shorten the length of the existing culvert similar to what is shown in **Figure 3-2**. The option to shorten the length of the existing culvert by removing embankment will require a large amount of tree removal in addition to the earthwork that was not initially anticipated for the project.

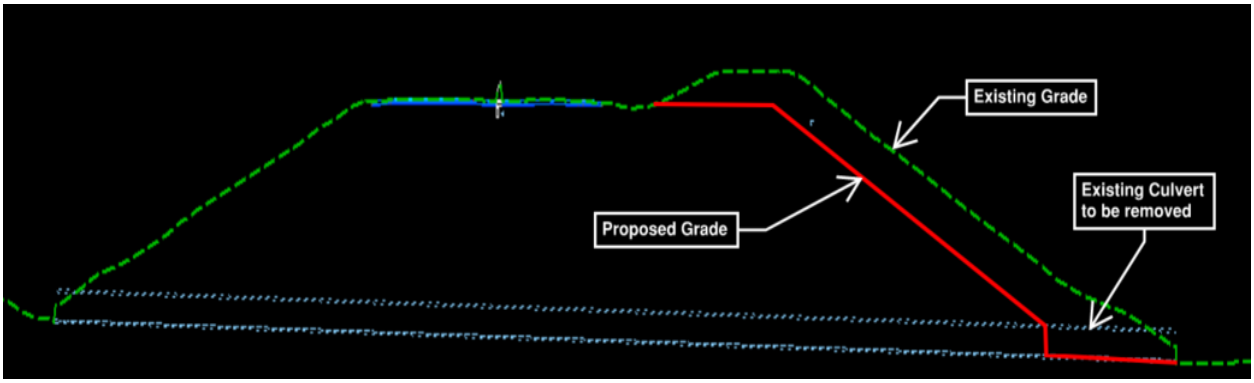


Figure 3-2 Culvert Length Reduction

If a large energy dissipator is not preferred, then the only options that meets the headwater requirements plus velocities under 20-ft/s at the outlet are the 90-inch CMP liner with a 42-inch relief culvert or the 108-inch tunnel liner plate with paved invert. The predicted velocities at the outlet are approximately 17-ft/s and 14-ft/s respectively. Per figure 1002-4 in the ODOT L & D Volume II, 25- to 30-ft of ODOT Type A rock, 48-inches thick would be required for energy dissipation for the 90-inch CMP liner with relief culvert or 25- to 30-ft of ODOT Type A rock, 38-inches thick for the tunnel liner plate option.

4 Conclusions / Recommendations

The scenarios presented above can meet the project objectives of maintaining headwater elevations at or below existing conditions and controlling velocities at the outlet of the culvert. For the options that require a relief culvert to maintain the desired headwater elevations, there are considerable challenges to constructing the relief culverts. First, the length of almost 700-ft is beyond the length for traditional jack and bore installations. It is likely that micro tunneling, or horizontal directional drilling type installations would have to be considered if an alternative with a relief culvert is pursued. Geotechnical investigations will have to be completed to verify that a trenchless methodology is appropriate for a relief culvert. **Table 4-1** summarizes the similarities and differences for each of the alternatives presented in this document, which can all meet the project objectives.

Table 4-1 Alternatives Comparison

Alternative	Requires Inlet Full Height Headwall	Requires Modified Inlet	Requires Relief Culvert	Standard Energy Dissipation	Requires additional R/W or Embankment Removal
85-inch Hobas	Yes	Yes	No	No	Yes
90-inch CMP	Yes	No	Yes	Yes	No
78-inch RCP	Yes	No	Yes	Yes	No
98-inch SASL	Yes	No	No	No	Yes
108-inch Tunnel Liner Plate	Yes	No	No	Yes	No

Based on the results of the hydraulic analysis and the necessary impacts for each scenario evaluated, GPD has ranked the alternatives as follows from most practical to least practical.

1. 108-inch tunnel liner plate with paved invert. This option does not require a modified inlet or extensive cast-in-place concrete energy dissipator at the downstream end. This option can utilize standard rock channel protection for energy dissipation at the downstream end, but will require non-traditional construction methods for installation of the tunnel liner plate.

2. 90-inch CMP liner with 48-inch CMP relief culvert. This option does not require a modified inlet or extensive cast-in-place concrete energy dissipator at the downstream end. The CMP liner and relief culvert are standard materials and standard rock channel protection can be used for energy dissipation at the outlet. The 48-inch CMP relief culvert would need to be installed in a larger, likely steel, carrier pipe. In addition, the CMP piping can be handled easier than RCP piping.

3. 78-inch RCP liner with 48-inch smooth barrel relief culvert. This option does not require a modified inlet or extensive cast-in-place concrete energy dissipator at the downstream end. The RCP liner and relief culvert are standard materials and standard rock channel protection can be used for energy dissipation at the outlet.

4. 98-inch SASL. This option does not require a modified inlet or a relief culvert. It does however require the construction of a cast-in-place concrete energy dissipation structure at the outlet. Due to the increased ovality and resulting span width of the existing culvert, it is recommended ODOT's SASL supplemental specification be modified to accommodate this characteristic in order provide long-term viability. The conduit is at the upper end of the applicable span width of 120" listed in the supplemental specification, which does not account for the ovality observed in this scenario. The modification would require the conduit's ovality to be reduced with a

initial application followed by the required thickness application provided by the manufacturer.

5. 85-inch Hobas with modified entrance. This option would require a larger pipe for the first 30-ft +/- to bring the headwater down to existing conditions. It would also require the construction of a cast-in-place concrete energy dissipation structure at the outlet.

Results of the HY-8 and PCSWMM analysis can be found in **Attachment A** and **Attachment B**, respectively.

ATTACHMENT A

HY-8 ANALYSIS

HY-8 Culvert Analysis Report

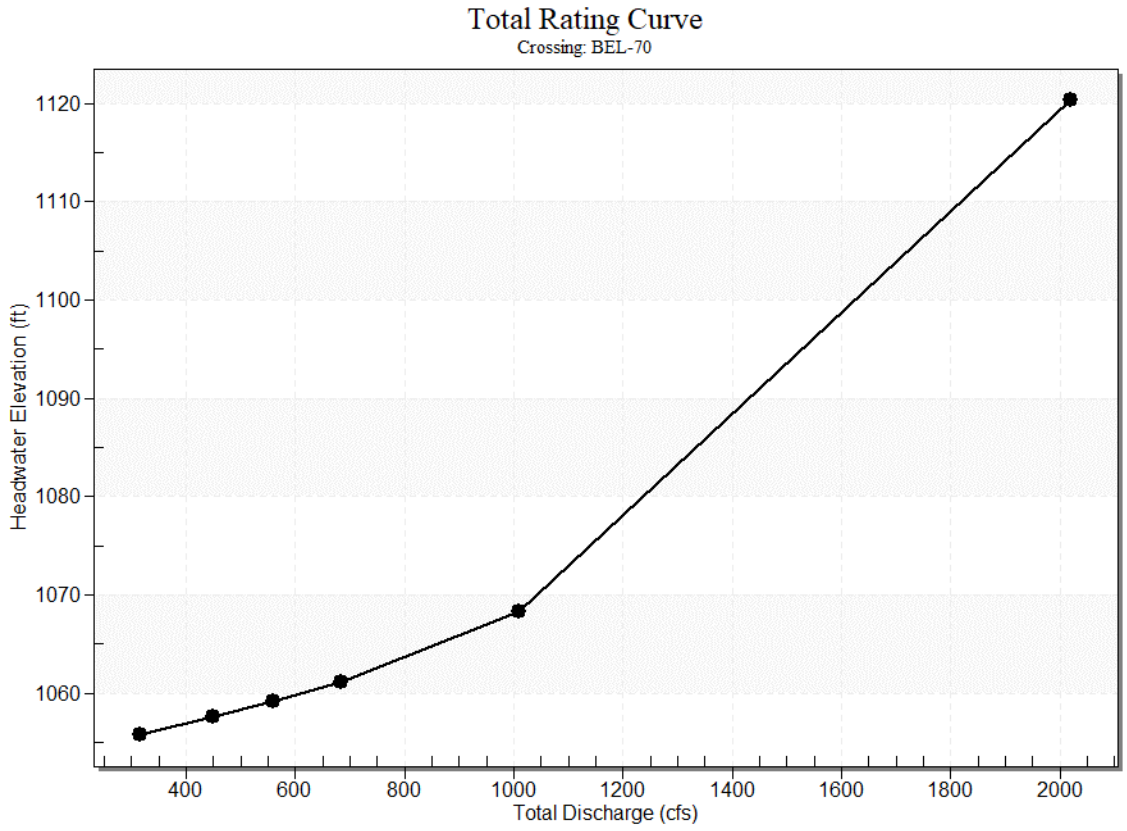
Crossing Discharge Data

Discharge Selection Method: Recurrence

Table 1 - Summary of Culvert Flows at Crossing: BEL-70

Headwater Elevation (ft)	Discharge Names	Total Discharge (cfs)	BEL-70-19.92 Discharge (cfs)	Roadway Discharge (cfs)	Iterations
1055.83	10 year	315.00	315.00	0.00	1
1057.60	25 year	448.00	448.00	0.00	1
1059.18	50 year	560.00	560.00	0.00	1
1061.16	100 year	683.00	683.00	0.00	1
1068.34	500 year	1010.00	1010.00	0.00	1
1120.00	Overtopping	1818.13	1818.13	0.00	Overtopping

Rating Curve Plot for Crossing: BEL-70



Culvert Data: BEL-70-19.92

Table 1 - Culvert Summary Table: BEL-70-19.92

Discharge Names	Total Discharge (cfs)	Culvert Discharge (cfs)	Headwater Elevation (ft)	Inlet Control Depth (ft)	Outlet Control Depth (ft)	Flow Type	Normal Depth (ft)	Critical Depth (ft)	Outlet Depth (ft)	Tailwater Depth (ft)	Outlet Velocity (ft/s)	Tailwater Velocity (ft/s)
10 year	315.00 cfs	315.00 cfs	1055.83	6.65	0.0*	1-S2n	3.64	4.33	3.64	2.47	13.05	5.32
25 year	448.00 cfs	448.00 cfs	1057.60	8.42	0.0*	1-S2n	4.45	5.20	4.45	3.04	14.30	5.67
50 year	560.00 cfs	560.00 cfs	1059.18	10.00	0.124	5-S2n	5.09	5.85	5.09	3.38	15.10	6.11
100 year	683.00 cfs	683.00 cfs	1061.16	11.98	4.199	5-S2n	5.80	6.47	5.80	3.71	15.76	6.53
500 year	1010.00 cfs	1010.00 cfs	1068.34	19.16	17.887	7-M2c	9.00	7.75	7.75	4.47	17.34	7.44

* Full Flow Headwater elevation is below inlet invert.

Culvert Barrel Data

Culvert Barrel Type Straight Culvert

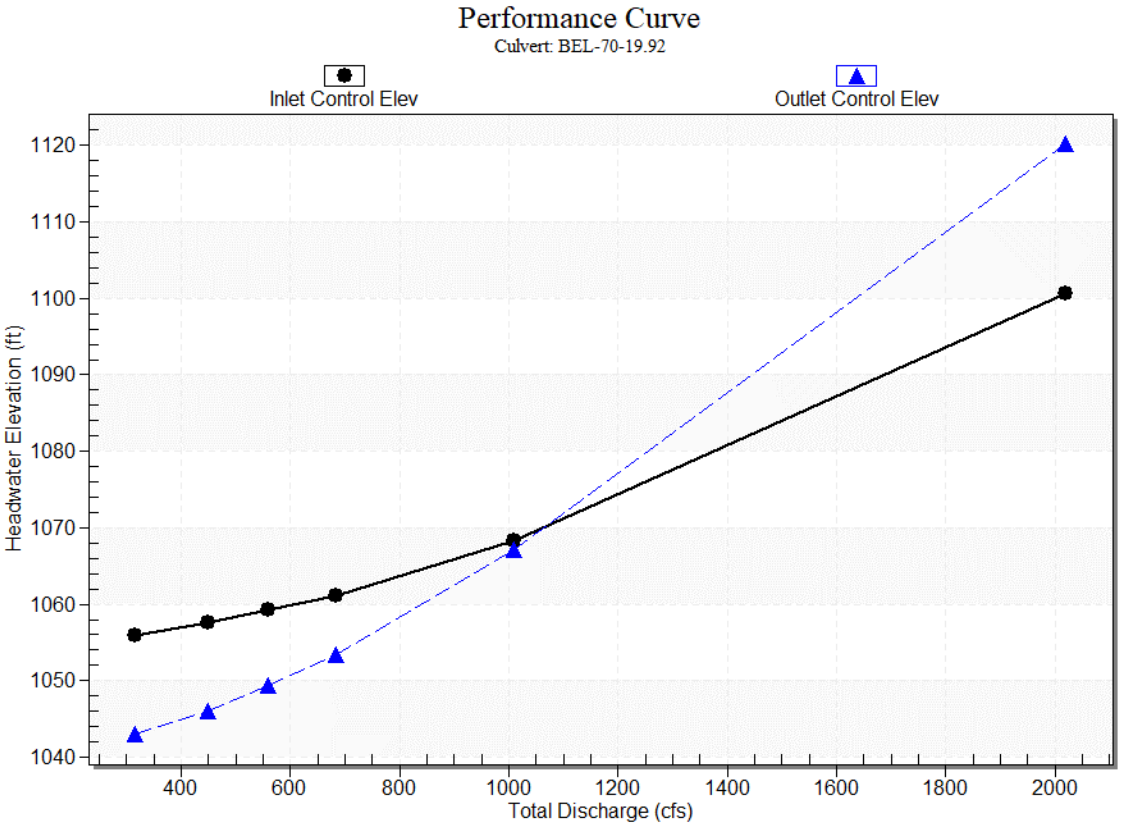
Inlet Elevation (invert): 1049.18 ft,

Outlet Elevation (invert): 1036.38 ft

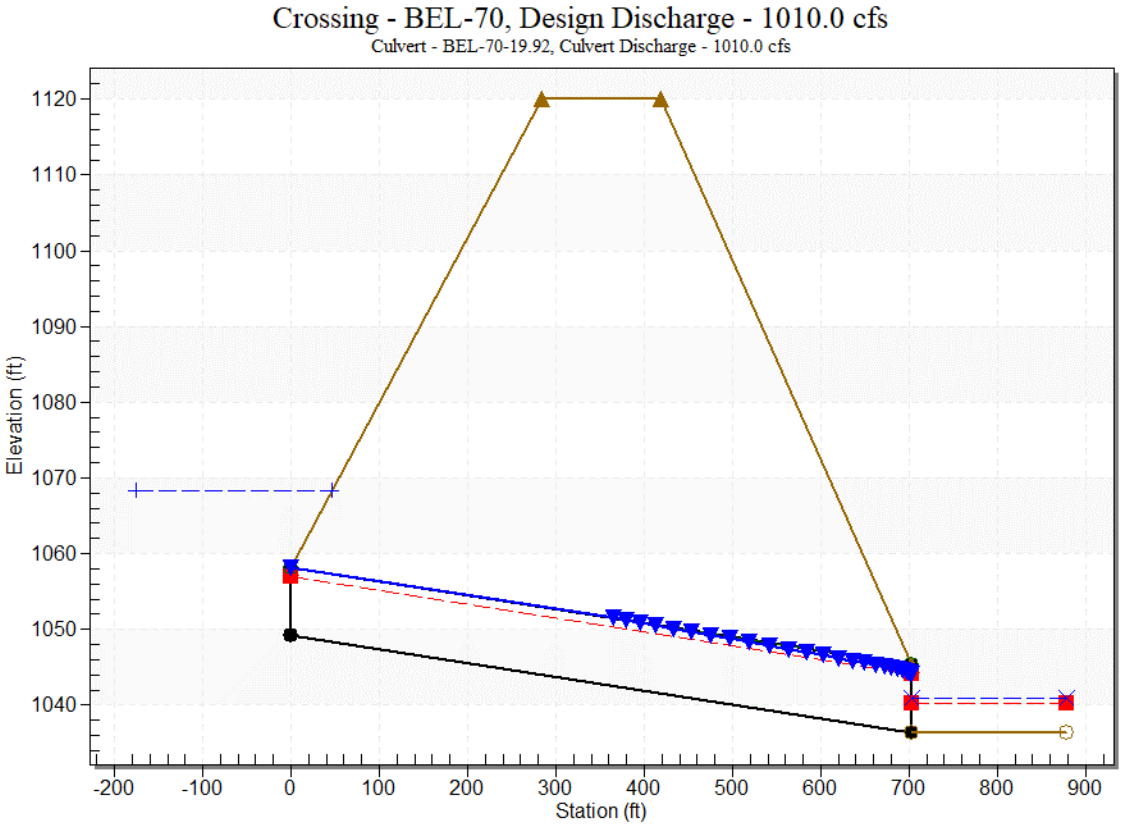
Culvert Length: 703.12 ft,

Culvert Slope: 0.0182

Culvert Performance Curve Plot: BEL-70-19.92



Water Surface Profile Plot for Culvert: BEL-70-19.92



Site Data - BEL-70-19.92

Site Data Option: Culvert Invert Data

Inlet Station: 0.00 ft

Inlet Elevation: 1049.18 ft

Outlet Station: 703.00 ft

Outlet Elevation: 1036.38 ft

Number of Barrels: 1

Culvert Data Summary - BEL-70-19.92

Barrel Shape: Circular

Barrel Diameter: 9.00 ft

Barrel Material: Corrugated Steel

Embedment: 0.00 in

Barrel Manning's n: 0.0240

Culvert Type: Straight

Inlet Configuration: Thin Edge Projecting (Ke=0.9)

Inlet Depression: None

Tailwater Data for Crossing: BEL-70

Table 2 - Downstream Channel Rating Curve (Crossing: BEL-70)

Flow (cfs)	Water Surface Elev (ft)	Velocity (ft/s)	Depth (ft)	Shear (psf)	Froude Number
315.00	1038.85	2.47	5.32	2.16	0.67
448.00	1039.42	3.04	5.67	2.66	0.69
560.00	1039.76	3.38	6.11	2.95	0.70
683.00	1040.09	3.71	6.53	3.24	0.71
1010.00	1040.85	4.47	7.44	3.91	0.73

Tailwater Channel Data - BEL-70

Tailwater Channel Option: Irregular Channel

Channel Slope: Irregular Channel

User Defined Channel Cross-Section

Coord No.	Station (ft)	Elevation (ft)	Manning's n
1	0.00	1057.73	0.1000
2	1.00	1057.31	0.1000
3	2.00	1056.97	0.1000
4	3.00	1056.59	0.1000
5	4.00	1056.22	0.1000
6	5.00	1055.84	0.1000
7	6.00	1055.52	0.1000
8	7.00	1055.14	0.1000
9	8.00	1054.92	0.1000
10	9.00	1054.67	0.1000
11	10.00	1054.36	0.1000
12	11.00	1054.04	0.1000
13	12.00	1053.53	0.1000
14	13.00	1053.26	0.1000
15	14.00	1052.80	0.1000
16	15.00	1052.44	0.1000
17	16.00	1052.06	0.1000
18	17.00	1051.73	0.1000
19	18.00	1051.33	0.1000
20	19.00	1051.00	0.1000
21	20.00	1050.57	0.1000
22	21.00	1050.24	0.1000
23	22.00	1049.76	0.1000
24	23.00	1049.28	0.1000

25	24.00	1048.54	0.1000
26	25.00	1048.09	0.1000
27	26.00	1047.43	0.1000
28	27.00	1047.05	0.1000
29	28.00	1046.72	0.1000
30	29.00	1046.44	0.1000
31	30.00	1045.91	0.1000
32	31.00	1045.47	0.1000
33	32.00	1044.92	0.1000
34	33.00	1044.63	0.1000
35	34.00	1044.27	0.1000
36	35.00	1044.04	0.1000
37	36.00	1043.83	0.1000
38	37.00	1043.43	0.1000
39	38.00	1043.26	0.1000
40	39.00	1043.09	0.1000
41	40.00	1042.95	0.1000
42	41.00	1042.82	0.1000
43	42.00	1042.77	0.1000
44	43.00	1042.78	0.1000
45	44.00	1042.81	0.1000
46	45.00	1042.83	0.1000
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48	47.00	1042.79	0.1000
49	48.00	1042.82	0.1000
50	49.00	1042.84	0.1000
51	50.00	1042.84	0.1000
52	51.00	1042.94	0.1000
53	52.00	1042.99	0.1000
54	53.00	1042.97	0.1000
55	54.00	1042.90	0.1000
56	55.00	1042.84	0.1000
57	56.00	1042.80	0.1000
58	57.00	1042.73	0.1000
59	58.00	1042.74	0.1000
60	59.00	1042.71	0.1000
61	60.00	1042.68	0.1000
62	61.00	1042.70	0.1000
63	62.00	1042.73	0.1000
64	63.00	1042.76	0.1000
65	64.00	1042.75	0.1000
66	65.00	1042.73	0.1000
67	66.00	1042.74	0.1000
68	67.00	1042.77	0.1000
69	68.00	1042.81	0.1000
70	69.00	1042.79	0.1000
71	70.00	1042.77	0.1000
72	71.00	1042.79	0.1000
73	72.00	1042.83	0.1000
74	73.00	1042.84	0.1000

75	74.00	1042.88	0.1000
76	75.00	1042.89	0.1000
77	76.00	1042.90	0.1000
78	77.00	1042.89	0.1000
79	78.00	1042.83	0.1000
80	79.00	1042.78	0.1000
81	80.00	1042.72	0.1000
82	81.00	1042.70	0.1000
83	82.00	1042.76	0.1000
84	83.00	1042.79	0.1000
85	84.00	1042.79	0.1000
86	85.00	1042.78	0.1000
87	86.00	1042.77	0.1000
88	87.00	1042.73	0.1000
89	88.00	1042.70	0.1000
90	89.00	1042.68	0.1000
91	90.00	1042.66	0.1000
92	91.00	1042.63	0.1000
93	92.00	1042.55	0.1000
94	93.00	1042.41	0.1000
95	94.00	1042.29	0.1000
96	95.00	1042.02	0.0500
97	96.00	1041.74	0.0500
98	97.00	1041.22	0.0500
99	98.00	1040.79	0.0500
100	99.00	1040.30	0.0500
101	100.00	1039.86	0.0500
102	101.00	1039.46	0.0500
103	102.00	1039.25	0.0500
104	103.00	1039.04	0.0500
105	104.00	1038.97	0.0500
106	105.00	1038.94	0.0500
107	106.00	1038.92	0.0500
108	107.00	1038.88	0.0500
109	108.00	1038.77	0.0500
110	109.00	1038.42	0.0500
111	110.00	1038.11	0.0500
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114	113.00	1036.85	0.0500
115	114.00	1036.74	0.0500
116	115.00	1036.63	0.0500
117	116.00	1036.60	0.0500
118	117.00	1036.57	0.0500
119	118.00	1036.51	0.0500
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121	120.00	1036.38	0.0500
122	121.00	1036.38	0.0500
123	122.00	1036.43	0.0500
124	123.00	1036.48	0.0500

125	124.00	1036.52	0.0500
126	125.00	1036.52	0.0500
127	126.00	1036.53	0.0500
128	127.00	1036.55	0.0500
129	128.00	1036.58	0.0500
130	129.00	1036.60	0.0500
131	130.00	1036.59	0.0500
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133	132.00	1036.54	0.0500
134	133.00	1036.58	0.0500
135	134.00	1036.69	0.0500
136	135.00	1036.80	0.0500
137	136.00	1037.23	0.0500
138	137.00	1037.81	0.0500
139	138.00	1039.04	0.0500
140	139.00	1040.07	0.0500
141	140.00	1041.31	0.0500
142	141.00	1042.00	0.0500
143	142.00	1042.74	0.1000
144	143.00	1043.40	0.1000
145	144.00	1043.76	0.1000
146	145.00	1044.10	0.1000
147	146.00	1044.21	0.1000
148	147.00	1044.23	0.1000
149	148.00	1044.11	0.1000
150	149.00	1043.93	0.1000
151	150.00	1043.68	0.1000
152	151.00	1043.39	0.1000
153	152.00	1043.25	0.1000
154	153.00	1043.05	0.1000
155	154.00	1042.92	0.1000
156	155.00	1042.82	0.1000
157	156.00	1042.76	0.1000
158	157.00	1042.71	0.1000
159	158.00	1042.65	0.1000
160	159.00	1042.63	0.1000
161	160.00	1042.62	0.1000
162	161.00	1042.64	0.1000
163	162.00	1042.66	0.1000
164	163.00	1042.75	0.1000
165	164.00	1042.83	0.1000
166	165.00	1043.03	0.1000
167	166.00	1043.28	0.1000
168	167.00	1043.66	0.1000
169	168.00	1044.20	0.1000
170	169.00	1045.04	0.1000
171	170.00	1045.51	0.1000
172	171.00	1046.23	0.1000
173	172.00	1046.97	0.1000
174	173.00	1047.80	0.1000

175	174.00	1049.12	0.1000
176	175.00	1049.73	0.1000
177	176.00	1050.83	0.1000
178	177.00	1051.47	0.1000
179	178.00	1052.31	0.1000
180	179.00	1052.93	0.1000
181	180.00	1053.48	0.1000
182	181.00	1053.90	0.1000
183	182.50	1054.07	0.0000

Roadway Data for Crossing: BEL-70

Roadway Profile Shape: Constant Roadway Elevation

Crest Length: 400.00 ft

Crest Elevation: 1120.00 ft

Roadway Surface: Paved

Roadway Top Width: 135.00 ft

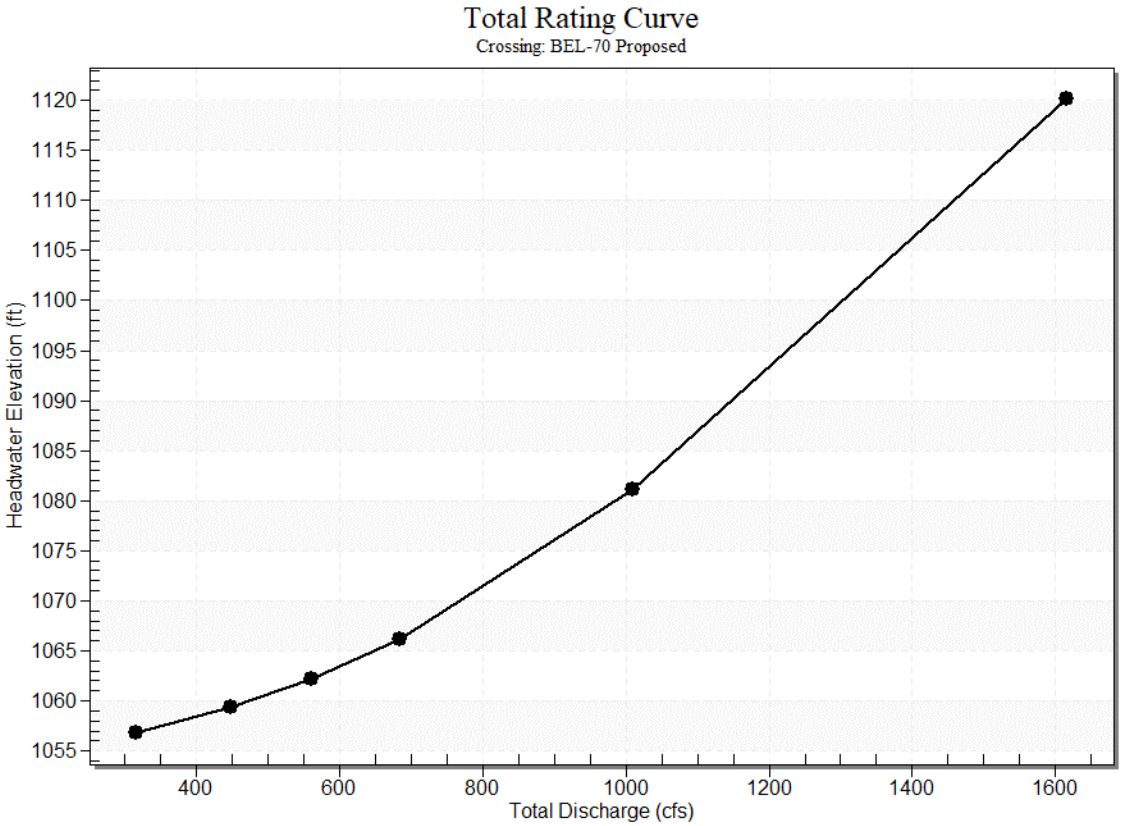
Crossing Discharge Data

Discharge Selection Method: Recurrence

Table 3 - Summary of Culvert Flows at Crossing: BEL-70 Proposed

Headwater Elevation (ft)	Discharge Names	Total Discharge (cfs)	BEL-70-19.92_Prop_Hobas Discharge (cfs)	Roadway Discharge (cfs)	Iterations
1056.84	10 year	315.00	315.00	0.00	1
1059.40	25 year	448.00	448.00	0.00	1
1062.24	50 year	560.00	560.00	0.00	1
1066.17	100 year	683.00	683.00	0.00	1
1081.06	500 year	1010.00	1010.00	0.00	1
1120.00	Overtopping	1562.57	1562.57	0.00	Overtopping

Rating Curve Plot for Crossing: BEL-70 Proposed



Culvert Data: BEL-70-19.92_Prop_Hobas

Table 2 - Culvert Summary Table: BEL-70-19.92_Prop_Hobas

Discharge Names	Total Discharge (cfs)	Culvert Discharge (cfs)	Headwater Elevation (ft)	Inlet Control Depth (ft)	Outlet Control Depth (ft)	Flow Type	Normal Depth (ft)	Critical Depth (ft)	Outlet Depth (ft)	Tailwater Depth (ft)	Outlet Velocity (ft/s)	Tailwater Velocity (ft/s)
10 year	315.00 cfs	315.00 cfs	1056.84	7.26	0.0*	5-S2n	2.65	4.66	2.72	2.47	22.60	5.32
25 year	448.00 cfs	448.00 cfs	1059.40	9.82	0.0*	5-S2n	3.23	5.55	3.34	3.04	24.49	5.67
50 year	560.00 cfs	560.00 cfs	1062.24	12.66	2.132	5-S2n	3.67	6.12	3.84	3.38	25.71	6.11
100 year	683.00 cfs	683.00 cfs	1066.17	16.59	6.403	5-S2n	4.15	6.53	4.36	3.71	26.84	6.53

500 year	1010.00 cfs	1010.00 cfs	1081.06	31.48	21.386	5-S2n	5.56	7.08	5.93	4.47	28.69	7.44

* Full Flow Headwater elevation is below inlet invert.

Culvert Barrel Data

Culvert Barrel Type Straight Culvert

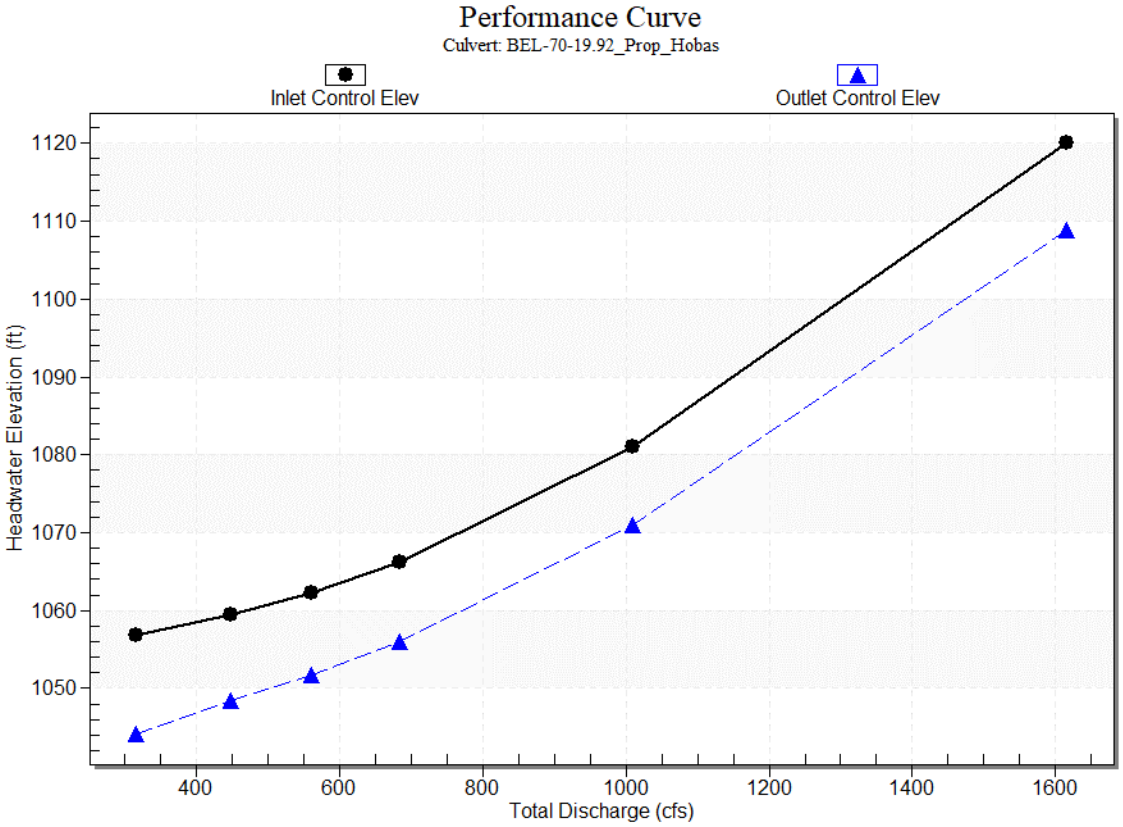
Inlet Elevation (invert): 1049.58 ft,

Outlet Elevation (invert): 1036.78 ft

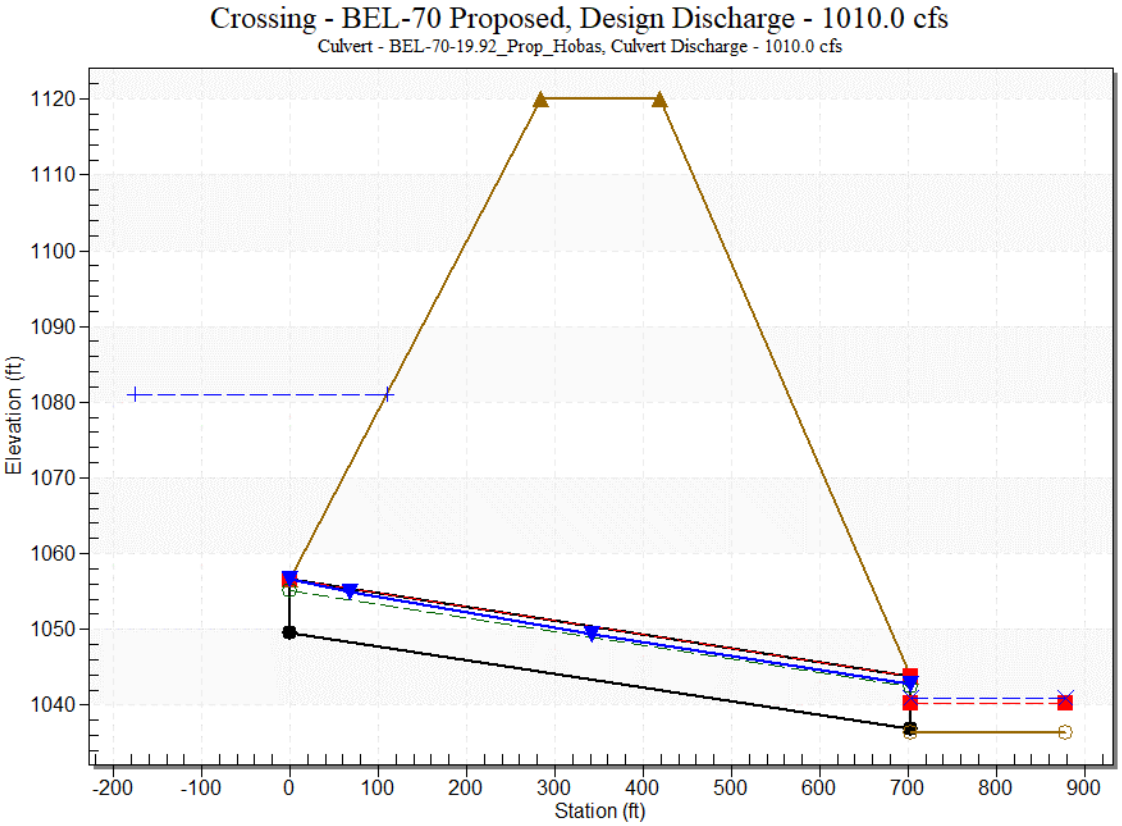
Culvert Length: 703.12 ft,

Culvert Slope: 0.0182

Culvert Performance Curve Plot: BEL-70-19.92_Prop_Hobas



Water Surface Profile Plot for Culvert: BEL-70-19.92_Prop_Hobas



Site Data - BEL-70-19.92_Prop_Hobas

Site Data Option: Culvert Invert Data

Inlet Station: 0.00 ft

Inlet Elevation: 1049.58 ft

Outlet Station: 703.00 ft

Outlet Elevation: 1036.78 ft

Number of Barrels: 1

Culvert Data Summary - BEL-70-19.92_Prop_Hobas

Barrel Shape: Circular

Barrel Diameter: 7.08 ft

Barrel Material: Concrete

Embedment: 0.00 in

Barrel Manning's n: 0.0110

Culvert Type: Straight

Inlet Configuration: Square Edge with Headwall (Ke=0.5)

Inlet Depression: None

Tailwater Data for Crossing: BEL-70 Proposed

Table 4 - Downstream Channel Rating Curve (Crossing: BEL-70 Proposed)

Flow (cfs)	Water Surface Elev (ft)	Velocity (ft/s)	Depth (ft)	Shear (psf)	Froude Number
315.00	1038.85	2.47	5.32	2.16	0.67
448.00	1039.42	3.04	5.67	2.66	0.69
560.00	1039.76	3.38	6.11	2.95	0.70
683.00	1040.09	3.71	6.53	3.24	0.71
1010.00	1040.85	4.47	7.44	3.91	0.73

Tailwater Channel Data - BEL-70 Proposed

Tailwater Channel Option: Irregular Channel

Channel Slope: Irregular Channel

User Defined Channel Cross-Section

Coord No.	Station (ft)	Elevation (ft)	Manning's n
1	0.00	1057.73	0.1000
2	1.00	1057.31	0.1000
3	2.00	1056.97	0.1000
4	3.00	1056.59	0.1000
5	4.00	1056.22	0.1000
6	5.00	1055.84	0.1000
7	6.00	1055.52	0.1000
8	7.00	1055.14	0.1000
9	8.00	1054.92	0.1000
10	9.00	1054.67	0.1000
11	10.00	1054.36	0.1000
12	11.00	1054.04	0.1000
13	12.00	1053.53	0.1000
14	13.00	1053.26	0.1000
15	14.00	1052.80	0.1000
16	15.00	1052.44	0.1000
17	16.00	1052.06	0.1000
18	17.00	1051.73	0.1000
19	18.00	1051.33	0.1000
20	19.00	1051.00	0.1000
21	20.00	1050.57	0.1000
22	21.00	1050.24	0.1000
23	22.00	1049.76	0.1000
24	23.00	1049.28	0.1000

25	24.00	1048.54	0.1000
26	25.00	1048.09	0.1000
27	26.00	1047.43	0.1000
28	27.00	1047.05	0.1000
29	28.00	1046.72	0.1000
30	29.00	1046.44	0.1000
31	30.00	1045.91	0.1000
32	31.00	1045.47	0.1000
33	32.00	1044.92	0.1000
34	33.00	1044.63	0.1000
35	34.00	1044.27	0.1000
36	35.00	1044.04	0.1000
37	36.00	1043.83	0.1000
38	37.00	1043.43	0.1000
39	38.00	1043.26	0.1000
40	39.00	1043.09	0.1000
41	40.00	1042.95	0.1000
42	41.00	1042.82	0.1000
43	42.00	1042.77	0.1000
44	43.00	1042.78	0.1000
45	44.00	1042.81	0.1000
46	45.00	1042.83	0.1000
47	46.00	1042.81	0.1000
48	47.00	1042.79	0.1000
49	48.00	1042.82	0.1000
50	49.00	1042.84	0.1000
51	50.00	1042.84	0.1000
52	51.00	1042.94	0.1000
53	52.00	1042.99	0.1000
54	53.00	1042.97	0.1000
55	54.00	1042.90	0.1000
56	55.00	1042.84	0.1000
57	56.00	1042.80	0.1000
58	57.00	1042.73	0.1000
59	58.00	1042.74	0.1000
60	59.00	1042.71	0.1000
61	60.00	1042.68	0.1000
62	61.00	1042.70	0.1000
63	62.00	1042.73	0.1000
64	63.00	1042.76	0.1000
65	64.00	1042.75	0.1000
66	65.00	1042.73	0.1000
67	66.00	1042.74	0.1000
68	67.00	1042.77	0.1000
69	68.00	1042.81	0.1000
70	69.00	1042.79	0.1000
71	70.00	1042.77	0.1000
72	71.00	1042.79	0.1000
73	72.00	1042.83	0.1000
74	73.00	1042.84	0.1000

75	74.00	1042.88	0.1000
76	75.00	1042.89	0.1000
77	76.00	1042.90	0.1000
78	77.00	1042.89	0.1000
79	78.00	1042.83	0.1000
80	79.00	1042.78	0.1000
81	80.00	1042.72	0.1000
82	81.00	1042.70	0.1000
83	82.00	1042.76	0.1000
84	83.00	1042.79	0.1000
85	84.00	1042.79	0.1000
86	85.00	1042.78	0.1000
87	86.00	1042.77	0.1000
88	87.00	1042.73	0.1000
89	88.00	1042.70	0.1000
90	89.00	1042.68	0.1000
91	90.00	1042.66	0.1000
92	91.00	1042.63	0.1000
93	92.00	1042.55	0.1000
94	93.00	1042.41	0.1000
95	94.00	1042.29	0.1000
96	95.00	1042.02	0.0500
97	96.00	1041.74	0.0500
98	97.00	1041.22	0.0500
99	98.00	1040.79	0.0500
100	99.00	1040.30	0.0500
101	100.00	1039.86	0.0500
102	101.00	1039.46	0.0500
103	102.00	1039.25	0.0500
104	103.00	1039.04	0.0500
105	104.00	1038.97	0.0500
106	105.00	1038.94	0.0500
107	106.00	1038.92	0.0500
108	107.00	1038.88	0.0500
109	108.00	1038.77	0.0500
110	109.00	1038.42	0.0500
111	110.00	1038.11	0.0500
112	111.00	1037.69	0.0500
113	112.00	1037.22	0.0500
114	113.00	1036.85	0.0500
115	114.00	1036.74	0.0500
116	115.00	1036.63	0.0500
117	116.00	1036.60	0.0500
118	117.00	1036.57	0.0500
119	118.00	1036.51	0.0500
120	119.00	1036.46	0.0500
121	120.00	1036.38	0.0500
122	121.00	1036.38	0.0500
123	122.00	1036.43	0.0500
124	123.00	1036.48	0.0500

125	124.00	1036.52	0.0500
126	125.00	1036.52	0.0500
127	126.00	1036.53	0.0500
128	127.00	1036.55	0.0500
129	128.00	1036.58	0.0500
130	129.00	1036.60	0.0500
131	130.00	1036.59	0.0500
132	131.00	1036.56	0.0500
133	132.00	1036.54	0.0500
134	133.00	1036.58	0.0500
135	134.00	1036.69	0.0500
136	135.00	1036.80	0.0500
137	136.00	1037.23	0.0500
138	137.00	1037.81	0.0500
139	138.00	1039.04	0.0500
140	139.00	1040.07	0.0500
141	140.00	1041.31	0.0500
142	141.00	1042.00	0.0500
143	142.00	1042.74	0.1000
144	143.00	1043.40	0.1000
145	144.00	1043.76	0.1000
146	145.00	1044.10	0.1000
147	146.00	1044.21	0.1000
148	147.00	1044.23	0.1000
149	148.00	1044.11	0.1000
150	149.00	1043.93	0.1000
151	150.00	1043.68	0.1000
152	151.00	1043.39	0.1000
153	152.00	1043.25	0.1000
154	153.00	1043.05	0.1000
155	154.00	1042.92	0.1000
156	155.00	1042.82	0.1000
157	156.00	1042.76	0.1000
158	157.00	1042.71	0.1000
159	158.00	1042.65	0.1000
160	159.00	1042.63	0.1000
161	160.00	1042.62	0.1000
162	161.00	1042.64	0.1000
163	162.00	1042.66	0.1000
164	163.00	1042.75	0.1000
165	164.00	1042.83	0.1000
166	165.00	1043.03	0.1000
167	166.00	1043.28	0.1000
168	167.00	1043.66	0.1000
169	168.00	1044.20	0.1000
170	169.00	1045.04	0.1000
171	170.00	1045.51	0.1000
172	171.00	1046.23	0.1000
173	172.00	1046.97	0.1000
174	173.00	1047.80	0.1000

175	174.00	1049.12	0.1000
176	175.00	1049.73	0.1000
177	176.00	1050.83	0.1000
178	177.00	1051.47	0.1000
179	178.00	1052.31	0.1000
180	179.00	1052.93	0.1000
181	180.00	1053.48	0.1000
182	181.00	1053.90	0.1000
183	182.50	1054.07	0.0000

Roadway Data for Crossing: BEL-70 Proposed

Roadway Profile Shape: Constant Roadway Elevation

Crest Length: 400.00 ft

Crest Elevation: 1120.00 ft

Roadway Surface: Paved

Roadway Top Width: 135.00 ft

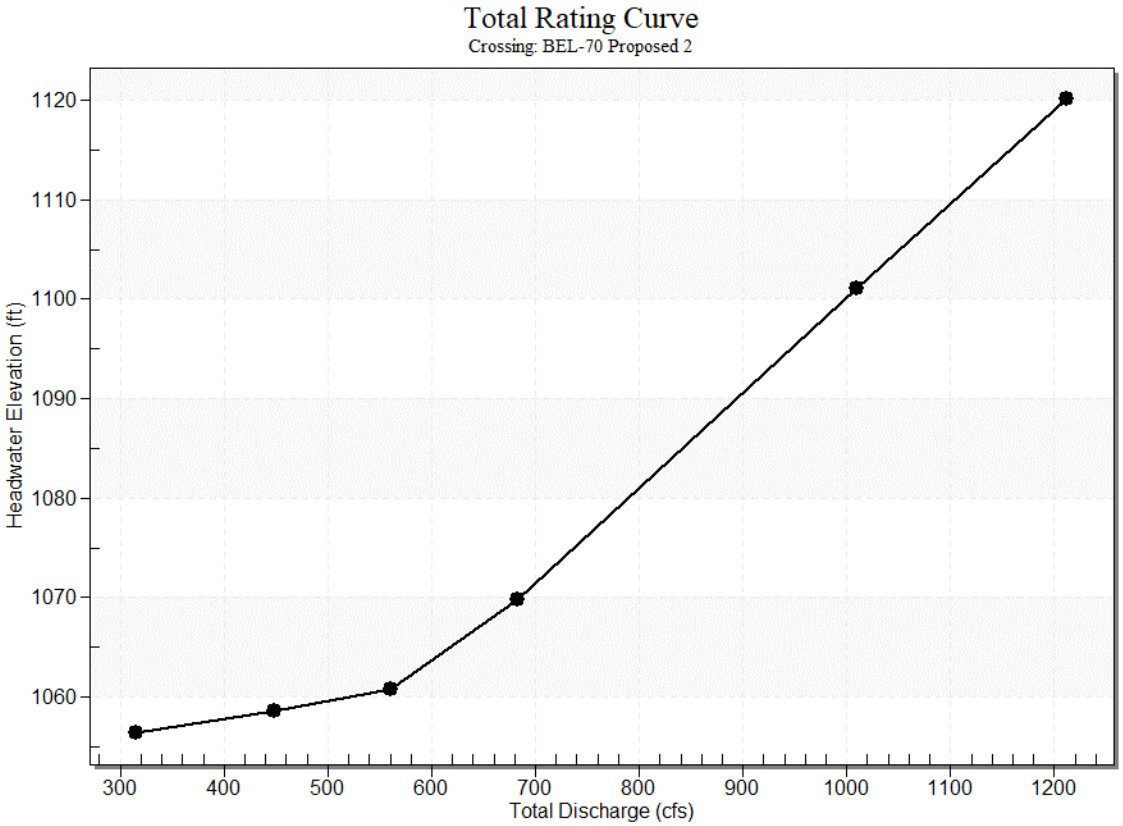
Crossing Discharge Data

Discharge Selection Method: Recurrence

Table 5 - Summary of Culvert Flows at Crossing: BEL-70 Proposed 2

Headwater Elevation (ft)	Discharge Names	Total Discharge (cfs)	BEL-70-19.92_Prop_CMP Discharge (cfs)	Roadway Discharge (cfs)	Iterations
1056.43	10 year	315.00	315.00	0.00	1
1058.60	25 year	448.00	448.00	0.00	1
1060.80	50 year	560.00	560.00	0.00	1
1069.83	100 year	683.00	683.00	0.00	1
1101.12	500 year	1010.00	1010.00	0.00	1
1120.00	Overtopping	1165.04	1165.04	0.00	Overtopping

Rating Curve Plot for Crossing: BEL-70 Proposed 2



Culvert Data: BEL-70-19.92_Prop_CMP

Table 3 - Culvert Summary Table: BEL-70-19.92_Prop_CMP

Discharge Names	Total Discharge (cfs)	Culvert Discharge (cfs)	Headwater Elevation (ft)	Inlet Control Depth (ft)	Outlet Control Depth (ft)	Flow Type	Normal Depth (ft)	Critical Depth (ft)	Outlet Depth (ft)	Tailwater Depth (ft)	Outlet Velocity (ft/s)	Tailwater Velocity (ft/s)
10 year	315.00 cfs	315.00 cfs	1056.43	6.85	0.0*	1-S2n	4.12	4.58	4.12	2.47	12.69	5.32
25 year	448.00 cfs	448.00 cfs	1058.60	9.02	3.880	5-S2n	5.21	5.48	5.21	3.04	13.66	5.67
50 year	560.00 cfs	560.00 cfs	1060.80	11.22	10.926	7-M2c	6.44	6.10	6.10	3.38	14.56	6.11
100 year	683.00 cfs	683.00 cfs	1069.83	14.19	20.250	7-M2c	7.50	6.61	6.61	3.71	16.56	6.53

500 year	1010.00 cfs	1010.00 cfs	1101.12	25.30	51.542	7-M 2c	7.50	7.40	7.40	4.47	22.92	7.44

* Full Flow Headwater elevation is below inlet invert.

Culvert Barrel Data

Culvert Barrel Type Straight Culvert

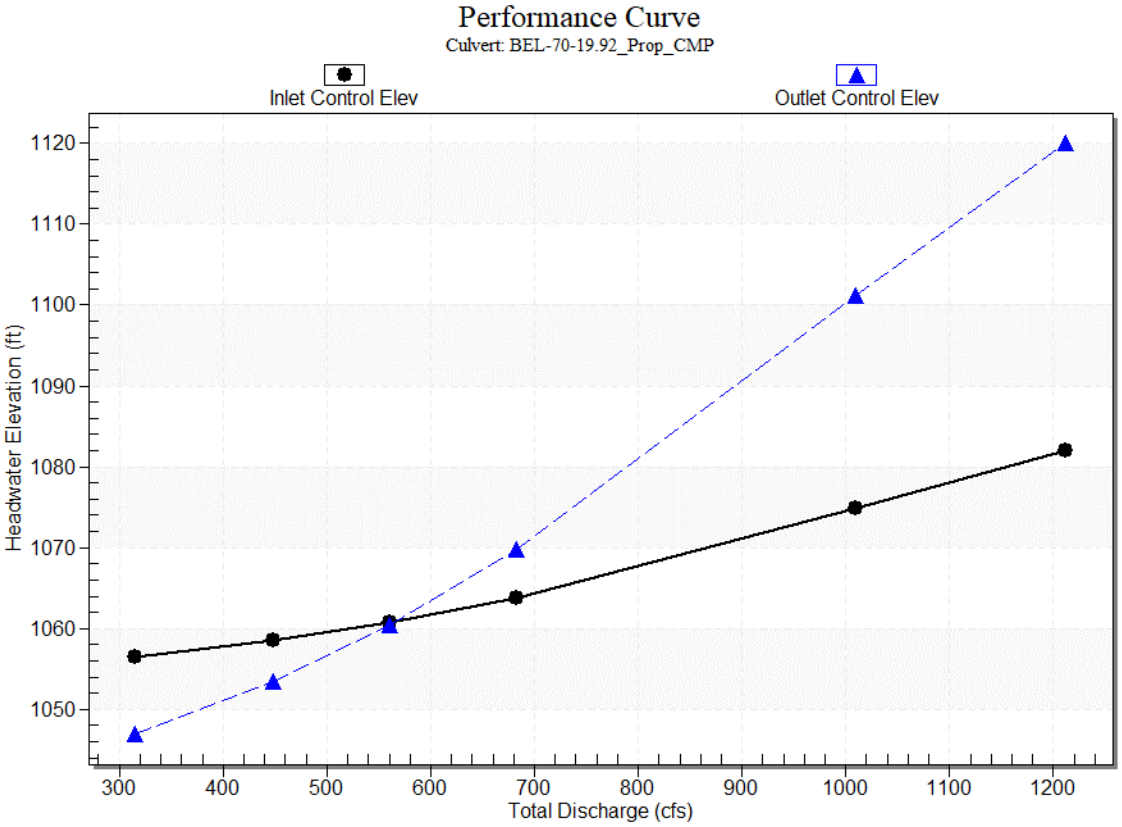
Inlet Elevation (invert): 1049.58 ft,

Outlet Elevation (invert): 1036.78 ft

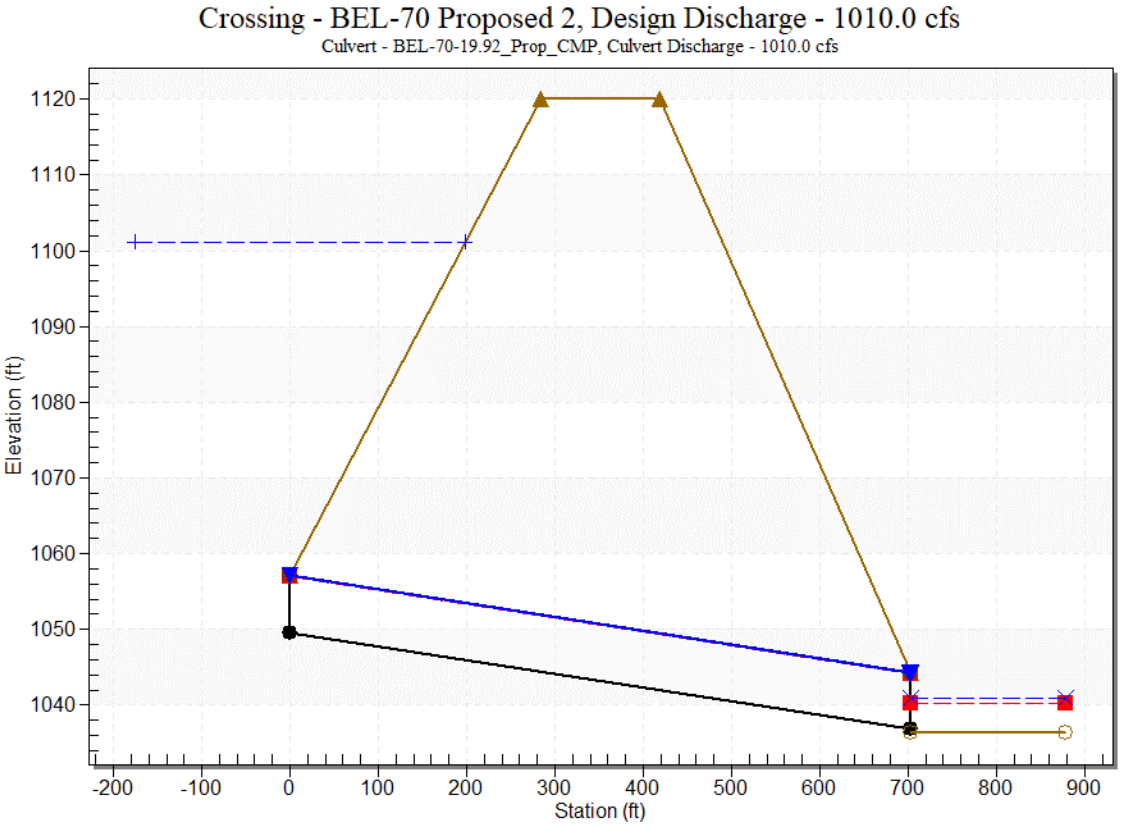
Culvert Length: 703.12 ft,

Culvert Slope: 0.0182

Culvert Performance Curve Plot: BEL-70-19.92_Prop_CMP



Water Surface Profile Plot for Culvert: BEL-70-19.92_Prop_CMP



Site Data - BEL-70-19.92_Prop_CMP

Site Data Option: Culvert Invert Data

Inlet Station: 0.00 ft

Inlet Elevation: 1049.58 ft

Outlet Station: 703.00 ft

Outlet Elevation: 1036.78 ft

Number of Barrels: 1

Culvert Data Summary - BEL-70-19.92_Prop_CMP

Barrel Shape: Circular

Barrel Diameter: 7.50 ft

Barrel Material: Corrugated Steel

Embedment: 0.00 in

Barrel Manning's n: 0.0250

Culvert Type: Straight

Inlet Configuration: Square Edge with Headwall (Ke=0.5)

Inlet Depression: None

Tailwater Data for Crossing: BEL-70 Proposed 2

Table 6 - Downstream Channel Rating Curve (Crossing: BEL-70 Proposed 2)

Flow (cfs)	Water Surface Elev (ft)	Velocity (ft/s)	Depth (ft)	Shear (psf)	Froude Number
315.00	1038.85	2.47	5.32	2.16	0.67
448.00	1039.42	3.04	5.67	2.66	0.69
560.00	1039.76	3.38	6.11	2.95	0.70
683.00	1040.09	3.71	6.53	3.24	0.71
1010.00	1040.85	4.47	7.44	3.91	0.73

Tailwater Channel Data - BEL-70 Proposed 2

Tailwater Channel Option: Irregular Channel

Channel Slope: Irregular Channel

User Defined Channel Cross-Section

Coord No.	Station (ft)	Elevation (ft)	Manning's n
1	0.00	1057.73	0.1000
2	1.00	1057.31	0.1000
3	2.00	1056.97	0.1000
4	3.00	1056.59	0.1000
5	4.00	1056.22	0.1000
6	5.00	1055.84	0.1000
7	6.00	1055.52	0.1000
8	7.00	1055.14	0.1000
9	8.00	1054.92	0.1000
10	9.00	1054.67	0.1000
11	10.00	1054.36	0.1000
12	11.00	1054.04	0.1000
13	12.00	1053.53	0.1000
14	13.00	1053.26	0.1000
15	14.00	1052.80	0.1000
16	15.00	1052.44	0.1000
17	16.00	1052.06	0.1000
18	17.00	1051.73	0.1000
19	18.00	1051.33	0.1000
20	19.00	1051.00	0.1000
21	20.00	1050.57	0.1000
22	21.00	1050.24	0.1000
23	22.00	1049.76	0.1000
24	23.00	1049.28	0.1000

25	24.00	1048.54	0.1000
26	25.00	1048.09	0.1000
27	26.00	1047.43	0.1000
28	27.00	1047.05	0.1000
29	28.00	1046.72	0.1000
30	29.00	1046.44	0.1000
31	30.00	1045.91	0.1000
32	31.00	1045.47	0.1000
33	32.00	1044.92	0.1000
34	33.00	1044.63	0.1000
35	34.00	1044.27	0.1000
36	35.00	1044.04	0.1000
37	36.00	1043.83	0.1000
38	37.00	1043.43	0.1000
39	38.00	1043.26	0.1000
40	39.00	1043.09	0.1000
41	40.00	1042.95	0.1000
42	41.00	1042.82	0.1000
43	42.00	1042.77	0.1000
44	43.00	1042.78	0.1000
45	44.00	1042.81	0.1000
46	45.00	1042.83	0.1000
47	46.00	1042.81	0.1000
48	47.00	1042.79	0.1000
49	48.00	1042.82	0.1000
50	49.00	1042.84	0.1000
51	50.00	1042.84	0.1000
52	51.00	1042.94	0.1000
53	52.00	1042.99	0.1000
54	53.00	1042.97	0.1000
55	54.00	1042.90	0.1000
56	55.00	1042.84	0.1000
57	56.00	1042.80	0.1000
58	57.00	1042.73	0.1000
59	58.00	1042.74	0.1000
60	59.00	1042.71	0.1000
61	60.00	1042.68	0.1000
62	61.00	1042.70	0.1000
63	62.00	1042.73	0.1000
64	63.00	1042.76	0.1000
65	64.00	1042.75	0.1000
66	65.00	1042.73	0.1000
67	66.00	1042.74	0.1000
68	67.00	1042.77	0.1000
69	68.00	1042.81	0.1000
70	69.00	1042.79	0.1000
71	70.00	1042.77	0.1000
72	71.00	1042.79	0.1000
73	72.00	1042.83	0.1000
74	73.00	1042.84	0.1000

75	74.00	1042.88	0.1000
76	75.00	1042.89	0.1000
77	76.00	1042.90	0.1000
78	77.00	1042.89	0.1000
79	78.00	1042.83	0.1000
80	79.00	1042.78	0.1000
81	80.00	1042.72	0.1000
82	81.00	1042.70	0.1000
83	82.00	1042.76	0.1000
84	83.00	1042.79	0.1000
85	84.00	1042.79	0.1000
86	85.00	1042.78	0.1000
87	86.00	1042.77	0.1000
88	87.00	1042.73	0.1000
89	88.00	1042.70	0.1000
90	89.00	1042.68	0.1000
91	90.00	1042.66	0.1000
92	91.00	1042.63	0.1000
93	92.00	1042.55	0.1000
94	93.00	1042.41	0.1000
95	94.00	1042.29	0.1000
96	95.00	1042.02	0.0500
97	96.00	1041.74	0.0500
98	97.00	1041.22	0.0500
99	98.00	1040.79	0.0500
100	99.00	1040.30	0.0500
101	100.00	1039.86	0.0500
102	101.00	1039.46	0.0500
103	102.00	1039.25	0.0500
104	103.00	1039.04	0.0500
105	104.00	1038.97	0.0500
106	105.00	1038.94	0.0500
107	106.00	1038.92	0.0500
108	107.00	1038.88	0.0500
109	108.00	1038.77	0.0500
110	109.00	1038.42	0.0500
111	110.00	1038.11	0.0500
112	111.00	1037.69	0.0500
113	112.00	1037.22	0.0500
114	113.00	1036.85	0.0500
115	114.00	1036.74	0.0500
116	115.00	1036.63	0.0500
117	116.00	1036.60	0.0500
118	117.00	1036.57	0.0500
119	118.00	1036.51	0.0500
120	119.00	1036.46	0.0500
121	120.00	1036.38	0.0500
122	121.00	1036.38	0.0500
123	122.00	1036.43	0.0500
124	123.00	1036.48	0.0500

125	124.00	1036.52	0.0500
126	125.00	1036.52	0.0500
127	126.00	1036.53	0.0500
128	127.00	1036.55	0.0500
129	128.00	1036.58	0.0500
130	129.00	1036.60	0.0500
131	130.00	1036.59	0.0500
132	131.00	1036.56	0.0500
133	132.00	1036.54	0.0500
134	133.00	1036.58	0.0500
135	134.00	1036.69	0.0500
136	135.00	1036.80	0.0500
137	136.00	1037.23	0.0500
138	137.00	1037.81	0.0500
139	138.00	1039.04	0.0500
140	139.00	1040.07	0.0500
141	140.00	1041.31	0.0500
142	141.00	1042.00	0.0500
143	142.00	1042.74	0.1000
144	143.00	1043.40	0.1000
145	144.00	1043.76	0.1000
146	145.00	1044.10	0.1000
147	146.00	1044.21	0.1000
148	147.00	1044.23	0.1000
149	148.00	1044.11	0.1000
150	149.00	1043.93	0.1000
151	150.00	1043.68	0.1000
152	151.00	1043.39	0.1000
153	152.00	1043.25	0.1000
154	153.00	1043.05	0.1000
155	154.00	1042.92	0.1000
156	155.00	1042.82	0.1000
157	156.00	1042.76	0.1000
158	157.00	1042.71	0.1000
159	158.00	1042.65	0.1000
160	159.00	1042.63	0.1000
161	160.00	1042.62	0.1000
162	161.00	1042.64	0.1000
163	162.00	1042.66	0.1000
164	163.00	1042.75	0.1000
165	164.00	1042.83	0.1000
166	165.00	1043.03	0.1000
167	166.00	1043.28	0.1000
168	167.00	1043.66	0.1000
169	168.00	1044.20	0.1000
170	169.00	1045.04	0.1000
171	170.00	1045.51	0.1000
172	171.00	1046.23	0.1000
173	172.00	1046.97	0.1000
174	173.00	1047.80	0.1000

175	174.00	1049.12	0.1000
176	175.00	1049.73	0.1000
177	176.00	1050.83	0.1000
178	177.00	1051.47	0.1000
179	178.00	1052.31	0.1000
180	179.00	1052.93	0.1000
181	180.00	1053.48	0.1000
182	181.00	1053.90	0.1000
183	182.50	1054.07	0.0000

Roadway Data for Crossing: BEL-70 Proposed 2

Roadway Profile Shape: Constant Roadway Elevation

Crest Length: 400.00 ft

Crest Elevation: 1120.00 ft

Roadway Surface: Paved

Roadway Top Width: 135.00 ft

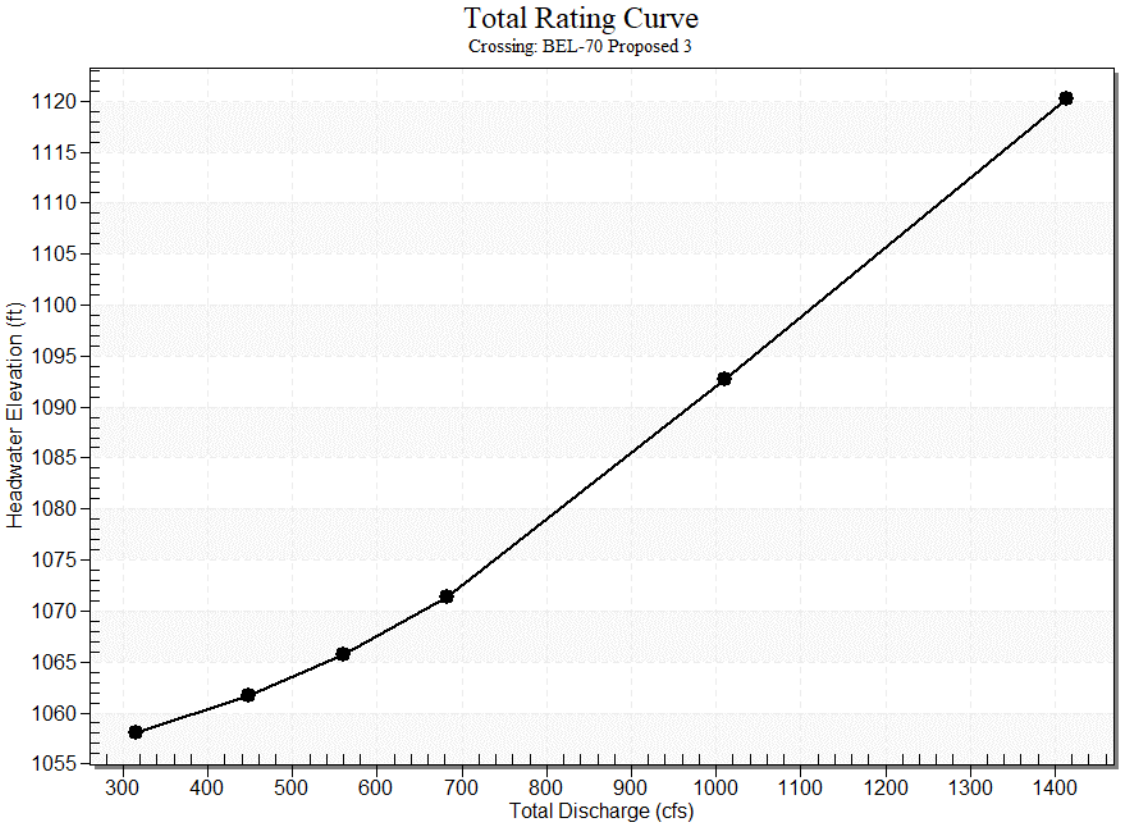
Crossing Discharge Data

Discharge Selection Method: Recurrence

Table 7 - Summary of Culvert Flows at Crossing: BEL-70 Proposed 3

Headwater Elevation (ft)	Discharge Names	Total Discharge (cfs)	BEL-70-19.92_Prop_RCP Discharge (cfs)	Roadway Discharge (cfs)	Iterations
1058.09	10 year	315.00	315.00	0.00	1
1061.66	25 year	448.00	448.00	0.00	1
1065.76	50 year	560.00	560.00	0.00	1
1071.42	100 year	683.00	683.00	0.00	1
1092.76	500 year	1010.00	1010.00	0.00	1
1120.00	Overtopping	1313.99	1313.99	0.00	Overtopping

Rating Curve Plot for Crossing: BEL-70 Proposed 3



Culvert Data: BEL-70-19.92_Prop_RCP

Table 4 - Culvert Summary Table: BEL-70-19.92_Prop_RCP

Discharge Names	Total Discharge (cfs)	Culvert Discharge (cfs)	Headwater Elevation (ft)	Inlet Control Depth (ft)	Outlet Control Depth (ft)	Flow Type	Normal Depth (ft)	Critical Depth (ft)	Outlet Depth (ft)	Tailwater Depth (ft)	Outlet Velocity (ft/s)	Tailwater Velocity (ft/s)
10 year	315.00 cfs	315.00 cfs	1058.09	7.91	0.0*	5-S2n	2.90	4.77	2.95	2.47	21.52	5.32
25 year	448.00 cfs	448.00 cfs	1061.66	11.48	1.843	5-S2n	3.57	5.60	3.65	3.04	23.38	5.67
50 year	560.00 cfs	560.00 cfs	1065.76	15.58	6.892	5-S2n	4.12	6.02	4.23	3.38	24.51	6.11
100 year	683.00 cfs	683.00 cfs	1071.42	21.24	13.370	5-S2n	4.77	5.88	4.89	3.71	25.49	6.53

500 year	1010.00 cfs	1010.00 cfs	1092.76	42.58	37.387	6-FFc	6.50	6.50	6.50	4.47	30.44	7.44

* Full Flow Headwater elevation is below inlet invert.

Culvert Barrel Data

Culvert Barrel Type Straight Culvert

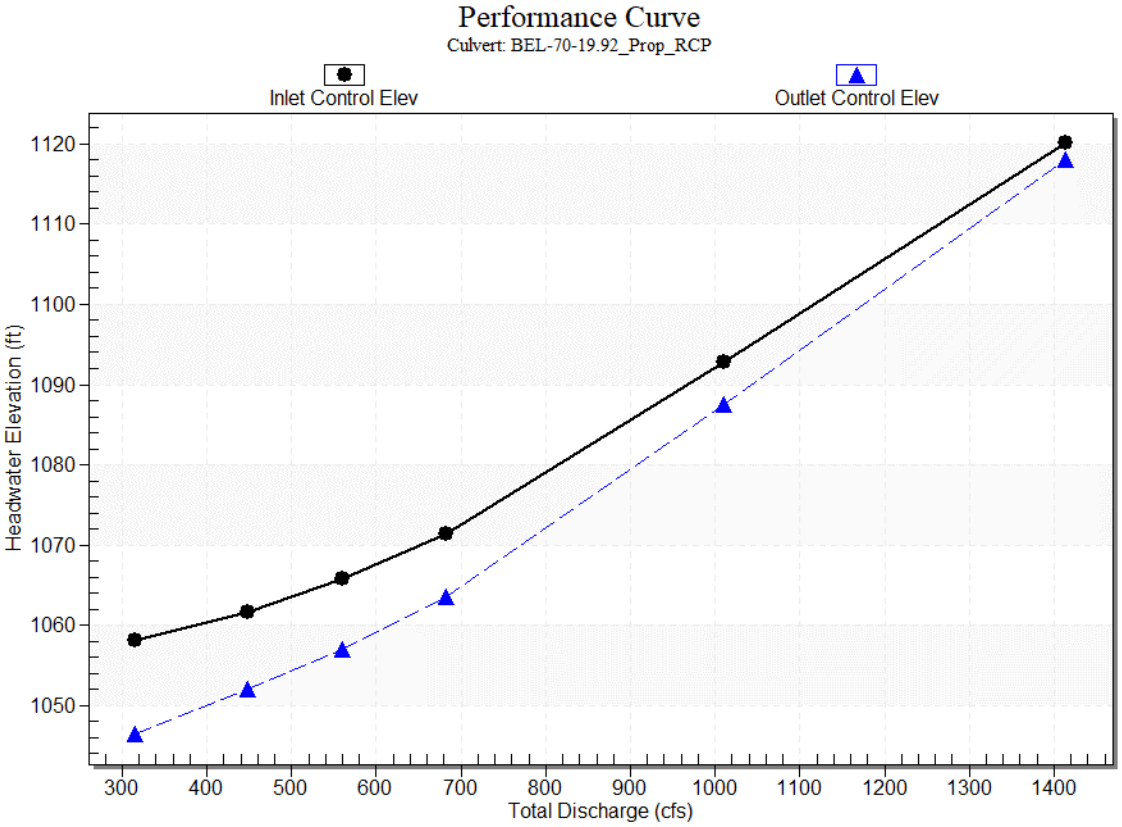
Inlet Elevation (invert): 1050.18 ft,

Outlet Elevation (invert): 1037.38 ft

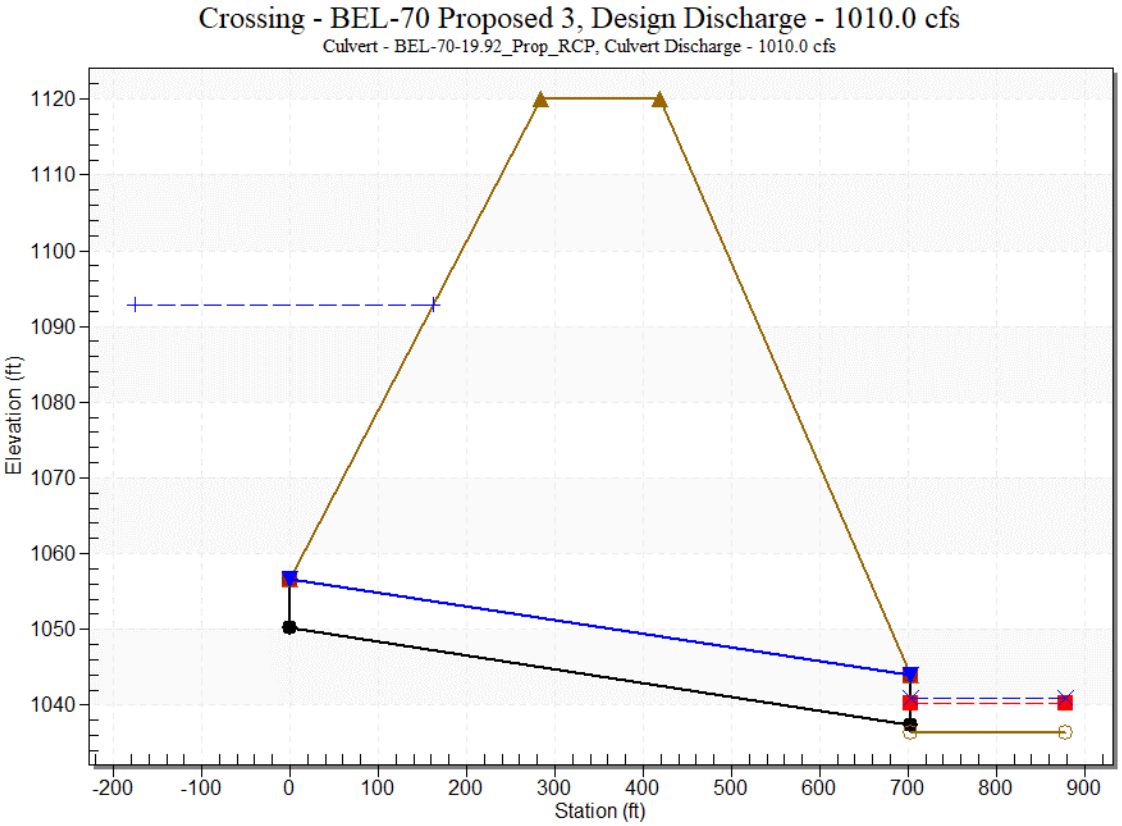
Culvert Length: 703.12 ft,

Culvert Slope: 0.0182

Culvert Performance Curve Plot: BEL-70-19.92_Prop_RCP



Water Surface Profile Plot for Culvert: BEL-70-19.92_Prop_RCP



Site Data - BEL-70-19.92_Prop_RCP

Site Data Option: Culvert Invert Data

Inlet Station: 0.00 ft

Inlet Elevation: 1050.18 ft

Outlet Station: 703.00 ft

Outlet Elevation: 1037.38 ft

Number of Barrels: 1

Culvert Data Summary - BEL-70-19.92_Prop_RCP

Barrel Shape: Circular

Barrel Diameter: 6.50 ft

Barrel Material: Concrete

Embedment: 0.00 in

Barrel Manning's n: 0.0120

Culvert Type: Straight

Inlet Configuration: Square Edge with Headwall (Ke=0.5)

Inlet Depression: None

Tailwater Data for Crossing: BEL-70 Proposed 3

Table 8 - Downstream Channel Rating Curve (Crossing: BEL-70 Proposed 3)

Flow (cfs)	Water Surface Elev (ft)	Velocity (ft/s)	Depth (ft)	Shear (psf)	Froude Number
315.00	1038.85	2.47	5.32	2.16	0.67
448.00	1039.42	3.04	5.67	2.66	0.69
560.00	1039.76	3.38	6.11	2.95	0.70
683.00	1040.09	3.71	6.53	3.24	0.71
1010.00	1040.85	4.47	7.44	3.91	0.73

Tailwater Channel Data - BEL-70 Proposed 3

Tailwater Channel Option: Irregular Channel

Channel Slope: Irregular Channel

User Defined Channel Cross-Section

Coord No.	Station (ft)	Elevation (ft)	Manning's n
1	0.00	1057.73	0.1000
2	1.00	1057.31	0.1000
3	2.00	1056.97	0.1000
4	3.00	1056.59	0.1000
5	4.00	1056.22	0.1000
6	5.00	1055.84	0.1000
7	6.00	1055.52	0.1000
8	7.00	1055.14	0.1000
9	8.00	1054.92	0.1000
10	9.00	1054.67	0.1000
11	10.00	1054.36	0.1000
12	11.00	1054.04	0.1000
13	12.00	1053.53	0.1000
14	13.00	1053.26	0.1000
15	14.00	1052.80	0.1000
16	15.00	1052.44	0.1000
17	16.00	1052.06	0.1000
18	17.00	1051.73	0.1000
19	18.00	1051.33	0.1000
20	19.00	1051.00	0.1000
21	20.00	1050.57	0.1000
22	21.00	1050.24	0.1000
23	22.00	1049.76	0.1000
24	23.00	1049.28	0.1000

25	24.00	1048.54	0.1000
26	25.00	1048.09	0.1000
27	26.00	1047.43	0.1000
28	27.00	1047.05	0.1000
29	28.00	1046.72	0.1000
30	29.00	1046.44	0.1000
31	30.00	1045.91	0.1000
32	31.00	1045.47	0.1000
33	32.00	1044.92	0.1000
34	33.00	1044.63	0.1000
35	34.00	1044.27	0.1000
36	35.00	1044.04	0.1000
37	36.00	1043.83	0.1000
38	37.00	1043.43	0.1000
39	38.00	1043.26	0.1000
40	39.00	1043.09	0.1000
41	40.00	1042.95	0.1000
42	41.00	1042.82	0.1000
43	42.00	1042.77	0.1000
44	43.00	1042.78	0.1000
45	44.00	1042.81	0.1000
46	45.00	1042.83	0.1000
47	46.00	1042.81	0.1000
48	47.00	1042.79	0.1000
49	48.00	1042.82	0.1000
50	49.00	1042.84	0.1000
51	50.00	1042.84	0.1000
52	51.00	1042.94	0.1000
53	52.00	1042.99	0.1000
54	53.00	1042.97	0.1000
55	54.00	1042.90	0.1000
56	55.00	1042.84	0.1000
57	56.00	1042.80	0.1000
58	57.00	1042.73	0.1000
59	58.00	1042.74	0.1000
60	59.00	1042.71	0.1000
61	60.00	1042.68	0.1000
62	61.00	1042.70	0.1000
63	62.00	1042.73	0.1000
64	63.00	1042.76	0.1000
65	64.00	1042.75	0.1000
66	65.00	1042.73	0.1000
67	66.00	1042.74	0.1000
68	67.00	1042.77	0.1000
69	68.00	1042.81	0.1000
70	69.00	1042.79	0.1000
71	70.00	1042.77	0.1000
72	71.00	1042.79	0.1000
73	72.00	1042.83	0.1000
74	73.00	1042.84	0.1000

75	74.00	1042.88	0.1000
76	75.00	1042.89	0.1000
77	76.00	1042.90	0.1000
78	77.00	1042.89	0.1000
79	78.00	1042.83	0.1000
80	79.00	1042.78	0.1000
81	80.00	1042.72	0.1000
82	81.00	1042.70	0.1000
83	82.00	1042.76	0.1000
84	83.00	1042.79	0.1000
85	84.00	1042.79	0.1000
86	85.00	1042.78	0.1000
87	86.00	1042.77	0.1000
88	87.00	1042.73	0.1000
89	88.00	1042.70	0.1000
90	89.00	1042.68	0.1000
91	90.00	1042.66	0.1000
92	91.00	1042.63	0.1000
93	92.00	1042.55	0.1000
94	93.00	1042.41	0.1000
95	94.00	1042.29	0.1000
96	95.00	1042.02	0.0500
97	96.00	1041.74	0.0500
98	97.00	1041.22	0.0500
99	98.00	1040.79	0.0500
100	99.00	1040.30	0.0500
101	100.00	1039.86	0.0500
102	101.00	1039.46	0.0500
103	102.00	1039.25	0.0500
104	103.00	1039.04	0.0500
105	104.00	1038.97	0.0500
106	105.00	1038.94	0.0500
107	106.00	1038.92	0.0500
108	107.00	1038.88	0.0500
109	108.00	1038.77	0.0500
110	109.00	1038.42	0.0500
111	110.00	1038.11	0.0500
112	111.00	1037.69	0.0500
113	112.00	1037.22	0.0500
114	113.00	1036.85	0.0500
115	114.00	1036.74	0.0500
116	115.00	1036.63	0.0500
117	116.00	1036.60	0.0500
118	117.00	1036.57	0.0500
119	118.00	1036.51	0.0500
120	119.00	1036.46	0.0500
121	120.00	1036.38	0.0500
122	121.00	1036.38	0.0500
123	122.00	1036.43	0.0500
124	123.00	1036.48	0.0500

125	124.00	1036.52	0.0500
126	125.00	1036.52	0.0500
127	126.00	1036.53	0.0500
128	127.00	1036.55	0.0500
129	128.00	1036.58	0.0500
130	129.00	1036.60	0.0500
131	130.00	1036.59	0.0500
132	131.00	1036.56	0.0500
133	132.00	1036.54	0.0500
134	133.00	1036.58	0.0500
135	134.00	1036.69	0.0500
136	135.00	1036.80	0.0500
137	136.00	1037.23	0.0500
138	137.00	1037.81	0.0500
139	138.00	1039.04	0.0500
140	139.00	1040.07	0.0500
141	140.00	1041.31	0.0500
142	141.00	1042.00	0.0500
143	142.00	1042.74	0.1000
144	143.00	1043.40	0.1000
145	144.00	1043.76	0.1000
146	145.00	1044.10	0.1000
147	146.00	1044.21	0.1000
148	147.00	1044.23	0.1000
149	148.00	1044.11	0.1000
150	149.00	1043.93	0.1000
151	150.00	1043.68	0.1000
152	151.00	1043.39	0.1000
153	152.00	1043.25	0.1000
154	153.00	1043.05	0.1000
155	154.00	1042.92	0.1000
156	155.00	1042.82	0.1000
157	156.00	1042.76	0.1000
158	157.00	1042.71	0.1000
159	158.00	1042.65	0.1000
160	159.00	1042.63	0.1000
161	160.00	1042.62	0.1000
162	161.00	1042.64	0.1000
163	162.00	1042.66	0.1000
164	163.00	1042.75	0.1000
165	164.00	1042.83	0.1000
166	165.00	1043.03	0.1000
167	166.00	1043.28	0.1000
168	167.00	1043.66	0.1000
169	168.00	1044.20	0.1000
170	169.00	1045.04	0.1000
171	170.00	1045.51	0.1000
172	171.00	1046.23	0.1000
173	172.00	1046.97	0.1000
174	173.00	1047.80	0.1000

175	174.00	1049.12	0.1000
176	175.00	1049.73	0.1000
177	176.00	1050.83	0.1000
178	177.00	1051.47	0.1000
179	178.00	1052.31	0.1000
180	179.00	1052.93	0.1000
181	180.00	1053.48	0.1000
182	181.00	1053.90	0.1000
183	182.50	1054.07	0.0000

Roadway Data for Crossing: BEL-70 Proposed 3

Roadway Profile Shape: Constant Roadway Elevation

Crest Length: 400.00 ft

Crest Elevation: 1120.00 ft

Roadway Surface: Paved

Roadway Top Width: 135.00 ft

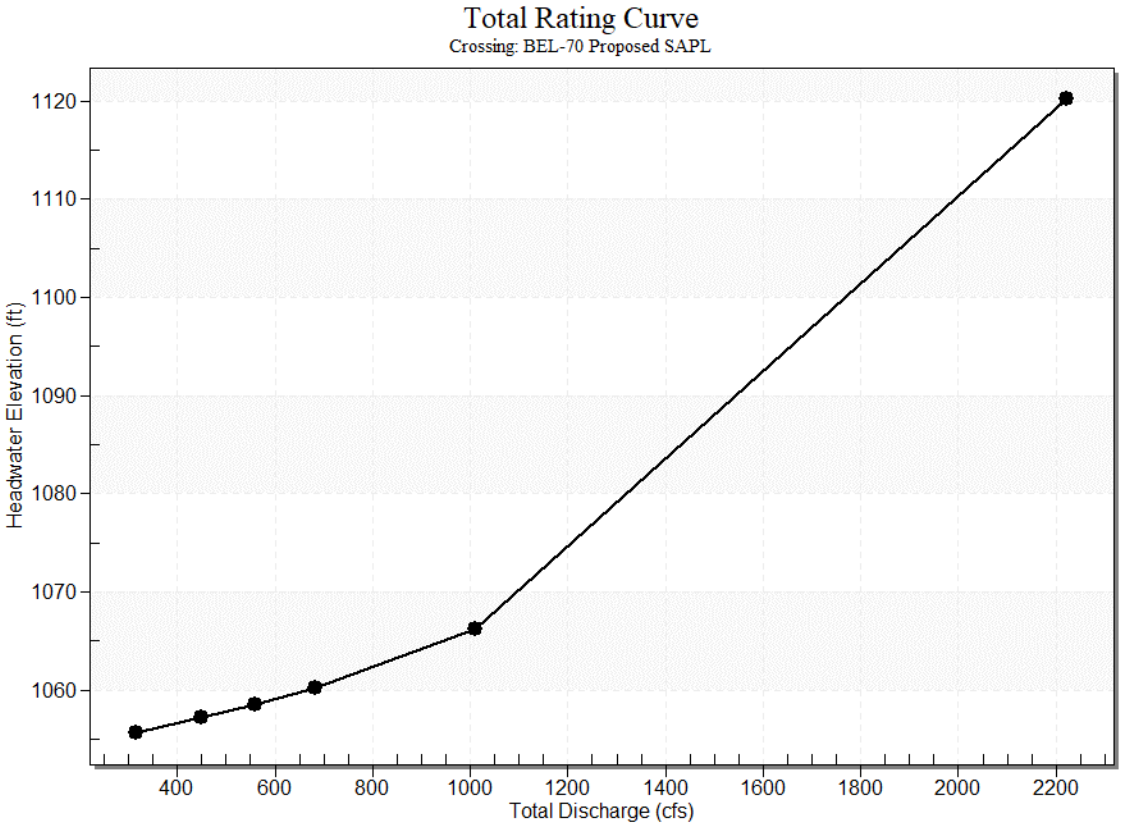
Crossing Discharge Data

Discharge Selection Method: Recurrence

Table 9 - Summary of Culvert Flows at Crossing: **BEL-70 Proposed SAPL**

Headwater Elevation (ft)	Discharge Names	Total Discharge (cfs)	BEL-70-19.92_Prop_SAPL Discharge (cfs)	Roadway Discharge (cfs)	Iterations
1055.70	10 year	315.00	315.00	0.00	1
1057.19	25 year	448.00	448.00	0.00	1
1058.51	50 year	560.00	560.00	0.00	1
1060.20	100 year	683.00	683.00	0.00	1
1066.18	500 year	1010.00	1010.00	0.00	1
1120.00	Overtopping	2115.69	2115.69	0.00	Overtopping

Rating Curve Plot for Crossing: **BEL-70 Proposed SAPL**



Culvert Data: BEL-70-19.92_Prop_SAPL

Table 5 - Culvert Summary Table: **BEL-70-19.92_Prop_SAPL**

Discharge Names	Total Discharge (cfs)	Culvert Discharge (cfs)	Headwater Elevation (ft)	Inlet Control Depth (ft)	Outlet Control Depth (ft)	Flow Type	Normal Depth (ft)	Critical Depth (ft)	Outlet Depth (ft)	Tailwater Depth (ft)	Outlet Velocity (ft/s)	Tailwater Velocity (ft/s)
10 year	315.00 cfs	315.00 cfs	1055.70	6.32	0.0*	1-S2n	2.95	4.46	2.95	2.47	18.47	5.32
25 year	448.00 cfs	448.00 cfs	1057.19	7.81	0.0*	1-S2n	3.58	5.36	3.61	3.04	20.08	5.67
50 year	560.00 cfs	560.00 cfs	1058.51	9.13	0.0*	5-S2n	4.06	6.00	4.10	3.38	21.27	6.11
100 year	683.00 cfs	683.00 cfs	1060.20	10.82	2.425	5-S2n	4.58	6.60	4.64	3.71	22.25	6.53

500 year	1010.00 cfs	1010.00 cfs	1066.18	16.80	12.235	5-S2n	6.03	7.60	6.10	4.47	24.06	7.44

* Full Flow Headwater elevation is below inlet invert.

Culvert Barrel Data

Culvert Barrel Type Straight Culvert

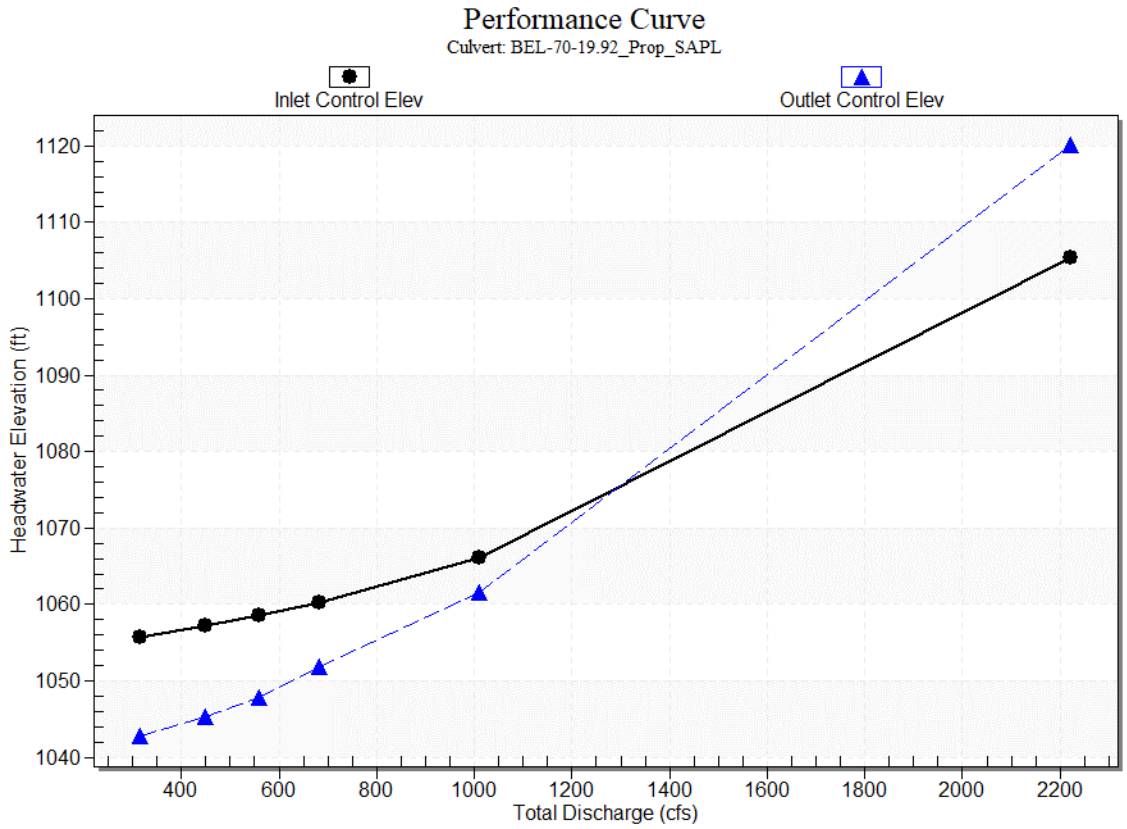
Inlet Elevation (invert): 1049.38 ft,

Outlet Elevation (invert): 1036.58 ft

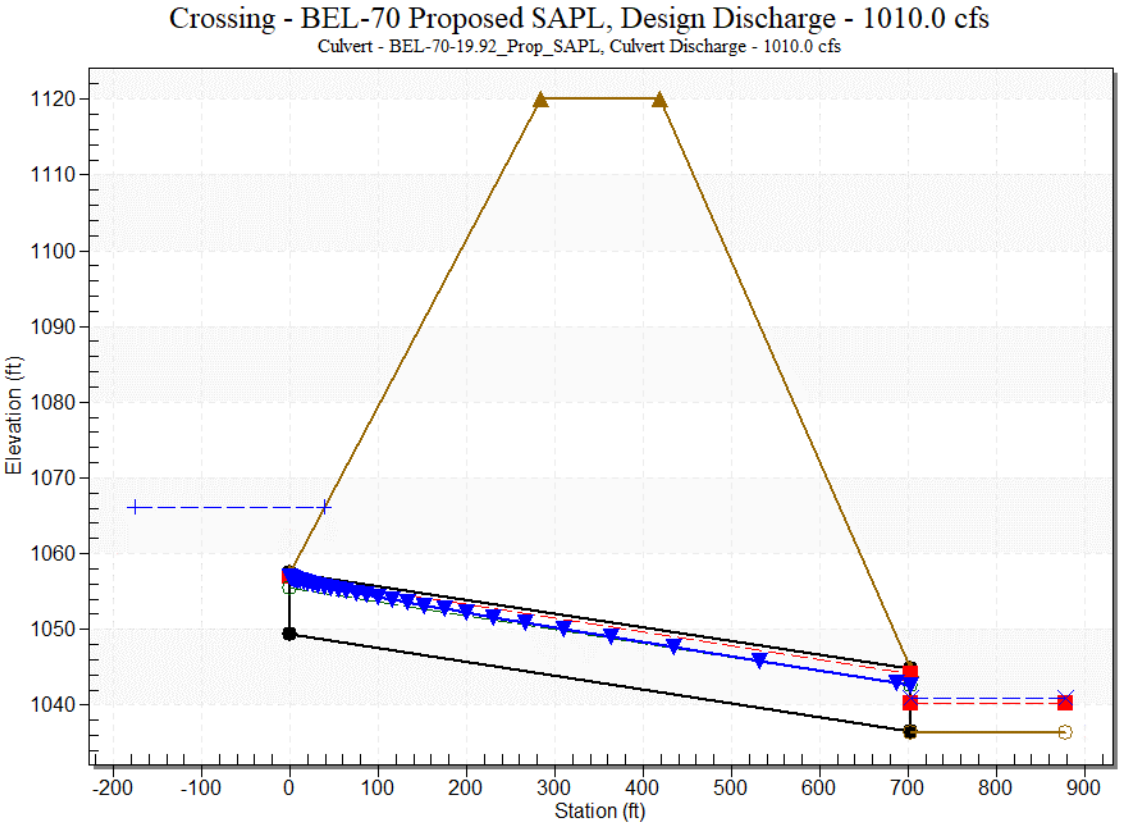
Culvert Length: 703.12 ft,

Culvert Slope: 0.0182

Culvert Performance Curve Plot: **BEL-70-19.92_Prop_SAPL**



Water Surface Profile Plot for Culvert: **BEL-70-19.92_Prop_SAPL**



Site Data - **BEL-70-19.92_Prop_SAPL**

Site Data Option: Culvert Invert Data

Inlet Station: 0.00 ft

Inlet Elevation: 1049.38 ft

Outlet Station: 703.00 ft

Outlet Elevation: 1036.58 ft

Number of Barrels: 1

Culvert Data Summary - **BEL-70-19.92_Prop_SAPL**

Barrel Shape: Circular

Barrel Diameter: 8.17 ft

Barrel Material: Concrete

Embedment: 0.00 in

Barrel Manning's n: 0.0150

Culvert Type: Straight

Inlet Configuration: Grooved End in Headwall (Ke=0.2)

Inlet Depression: None

Tailwater Data for Crossing: BEL-70 Proposed SAPL

Table 10 - Downstream Channel Rating Curve (Crossing: BEL-70 Proposed SAPL)

Flow (cfs)	Water Surface Elev (ft)	Velocity (ft/s)	Depth (ft)	Shear (psf)	Froude Number
315.00	1038.85	2.47	5.32	2.16	0.67
448.00	1039.42	3.04	5.67	2.66	0.69
560.00	1039.76	3.38	6.11	2.95	0.70
683.00	1040.09	3.71	6.53	3.24	0.71
1010.00	1040.85	4.47	7.44	3.91	0.73

Tailwater Channel Data - BEL-70 Proposed SAPL

Tailwater Channel Option: Irregular Channel

Channel Slope: Irregular Channel

User Defined Channel Cross-Section

Coord No.	Station (ft)	Elevation (ft)	Manning's n
1	0.00	1057.73	0.1000
2	1.00	1057.31	0.1000
3	2.00	1056.97	0.1000
4	3.00	1056.59	0.1000
5	4.00	1056.22	0.1000
6	5.00	1055.84	0.1000
7	6.00	1055.52	0.1000
8	7.00	1055.14	0.1000
9	8.00	1054.92	0.1000
10	9.00	1054.67	0.1000
11	10.00	1054.36	0.1000
12	11.00	1054.04	0.1000
13	12.00	1053.53	0.1000
14	13.00	1053.26	0.1000
15	14.00	1052.80	0.1000
16	15.00	1052.44	0.1000
17	16.00	1052.06	0.1000
18	17.00	1051.73	0.1000
19	18.00	1051.33	0.1000
20	19.00	1051.00	0.1000
21	20.00	1050.57	0.1000
22	21.00	1050.24	0.1000
23	22.00	1049.76	0.1000
24	23.00	1049.28	0.1000

25	24.00	1048.54	0.1000
26	25.00	1048.09	0.1000
27	26.00	1047.43	0.1000
28	27.00	1047.05	0.1000
29	28.00	1046.72	0.1000
30	29.00	1046.44	0.1000
31	30.00	1045.91	0.1000
32	31.00	1045.47	0.1000
33	32.00	1044.92	0.1000
34	33.00	1044.63	0.1000
35	34.00	1044.27	0.1000
36	35.00	1044.04	0.1000
37	36.00	1043.83	0.1000
38	37.00	1043.43	0.1000
39	38.00	1043.26	0.1000
40	39.00	1043.09	0.1000
41	40.00	1042.95	0.1000
42	41.00	1042.82	0.1000
43	42.00	1042.77	0.1000
44	43.00	1042.78	0.1000
45	44.00	1042.81	0.1000
46	45.00	1042.83	0.1000
47	46.00	1042.81	0.1000
48	47.00	1042.79	0.1000
49	48.00	1042.82	0.1000
50	49.00	1042.84	0.1000
51	50.00	1042.84	0.1000
52	51.00	1042.94	0.1000
53	52.00	1042.99	0.1000
54	53.00	1042.97	0.1000
55	54.00	1042.90	0.1000
56	55.00	1042.84	0.1000
57	56.00	1042.80	0.1000
58	57.00	1042.73	0.1000
59	58.00	1042.74	0.1000
60	59.00	1042.71	0.1000
61	60.00	1042.68	0.1000
62	61.00	1042.70	0.1000
63	62.00	1042.73	0.1000
64	63.00	1042.76	0.1000
65	64.00	1042.75	0.1000
66	65.00	1042.73	0.1000
67	66.00	1042.74	0.1000
68	67.00	1042.77	0.1000
69	68.00	1042.81	0.1000
70	69.00	1042.79	0.1000
71	70.00	1042.77	0.1000
72	71.00	1042.79	0.1000
73	72.00	1042.83	0.1000
74	73.00	1042.84	0.1000

75	74.00	1042.88	0.1000
76	75.00	1042.89	0.1000
77	76.00	1042.90	0.1000
78	77.00	1042.89	0.1000
79	78.00	1042.83	0.1000
80	79.00	1042.78	0.1000
81	80.00	1042.72	0.1000
82	81.00	1042.70	0.1000
83	82.00	1042.76	0.1000
84	83.00	1042.79	0.1000
85	84.00	1042.79	0.1000
86	85.00	1042.78	0.1000
87	86.00	1042.77	0.1000
88	87.00	1042.73	0.1000
89	88.00	1042.70	0.1000
90	89.00	1042.68	0.1000
91	90.00	1042.66	0.1000
92	91.00	1042.63	0.1000
93	92.00	1042.55	0.1000
94	93.00	1042.41	0.1000
95	94.00	1042.29	0.1000
96	95.00	1042.02	0.0500
97	96.00	1041.74	0.0500
98	97.00	1041.22	0.0500
99	98.00	1040.79	0.0500
100	99.00	1040.30	0.0500
101	100.00	1039.86	0.0500
102	101.00	1039.46	0.0500
103	102.00	1039.25	0.0500
104	103.00	1039.04	0.0500
105	104.00	1038.97	0.0500
106	105.00	1038.94	0.0500
107	106.00	1038.92	0.0500
108	107.00	1038.88	0.0500
109	108.00	1038.77	0.0500
110	109.00	1038.42	0.0500
111	110.00	1038.11	0.0500
112	111.00	1037.69	0.0500
113	112.00	1037.22	0.0500
114	113.00	1036.85	0.0500
115	114.00	1036.74	0.0500
116	115.00	1036.63	0.0500
117	116.00	1036.60	0.0500
118	117.00	1036.57	0.0500
119	118.00	1036.51	0.0500
120	119.00	1036.46	0.0500
121	120.00	1036.38	0.0500
122	121.00	1036.38	0.0500
123	122.00	1036.43	0.0500
124	123.00	1036.48	0.0500

125	124.00	1036.52	0.0500
126	125.00	1036.52	0.0500
127	126.00	1036.53	0.0500
128	127.00	1036.55	0.0500
129	128.00	1036.58	0.0500
130	129.00	1036.60	0.0500
131	130.00	1036.59	0.0500
132	131.00	1036.56	0.0500
133	132.00	1036.54	0.0500
134	133.00	1036.58	0.0500
135	134.00	1036.69	0.0500
136	135.00	1036.80	0.0500
137	136.00	1037.23	0.0500
138	137.00	1037.81	0.0500
139	138.00	1039.04	0.0500
140	139.00	1040.07	0.0500
141	140.00	1041.31	0.0500
142	141.00	1042.00	0.0500
143	142.00	1042.74	0.1000
144	143.00	1043.40	0.1000
145	144.00	1043.76	0.1000
146	145.00	1044.10	0.1000
147	146.00	1044.21	0.1000
148	147.00	1044.23	0.1000
149	148.00	1044.11	0.1000
150	149.00	1043.93	0.1000
151	150.00	1043.68	0.1000
152	151.00	1043.39	0.1000
153	152.00	1043.25	0.1000
154	153.00	1043.05	0.1000
155	154.00	1042.92	0.1000
156	155.00	1042.82	0.1000
157	156.00	1042.76	0.1000
158	157.00	1042.71	0.1000
159	158.00	1042.65	0.1000
160	159.00	1042.63	0.1000
161	160.00	1042.62	0.1000
162	161.00	1042.64	0.1000
163	162.00	1042.66	0.1000
164	163.00	1042.75	0.1000
165	164.00	1042.83	0.1000
166	165.00	1043.03	0.1000
167	166.00	1043.28	0.1000
168	167.00	1043.66	0.1000
169	168.00	1044.20	0.1000
170	169.00	1045.04	0.1000
171	170.00	1045.51	0.1000
172	171.00	1046.23	0.1000
173	172.00	1046.97	0.1000
174	173.00	1047.80	0.1000

175	174.00	1049.12	0.1000
176	175.00	1049.73	0.1000
177	176.00	1050.83	0.1000
178	177.00	1051.47	0.1000
179	178.00	1052.31	0.1000
180	179.00	1052.93	0.1000
181	180.00	1053.48	0.1000
182	181.00	1053.90	0.1000
183	182.50	1054.07	0.0000

Roadway Data for Crossing: **BEL-70 Proposed SAPL**

Roadway Profile Shape: Constant Roadway Elevation

Crest Length: 400.00 ft

Crest Elevation: 1120.00 ft

Roadway Surface: Paved

Roadway Top Width: 135.00 ft

HY-8 Culvert Analysis Report

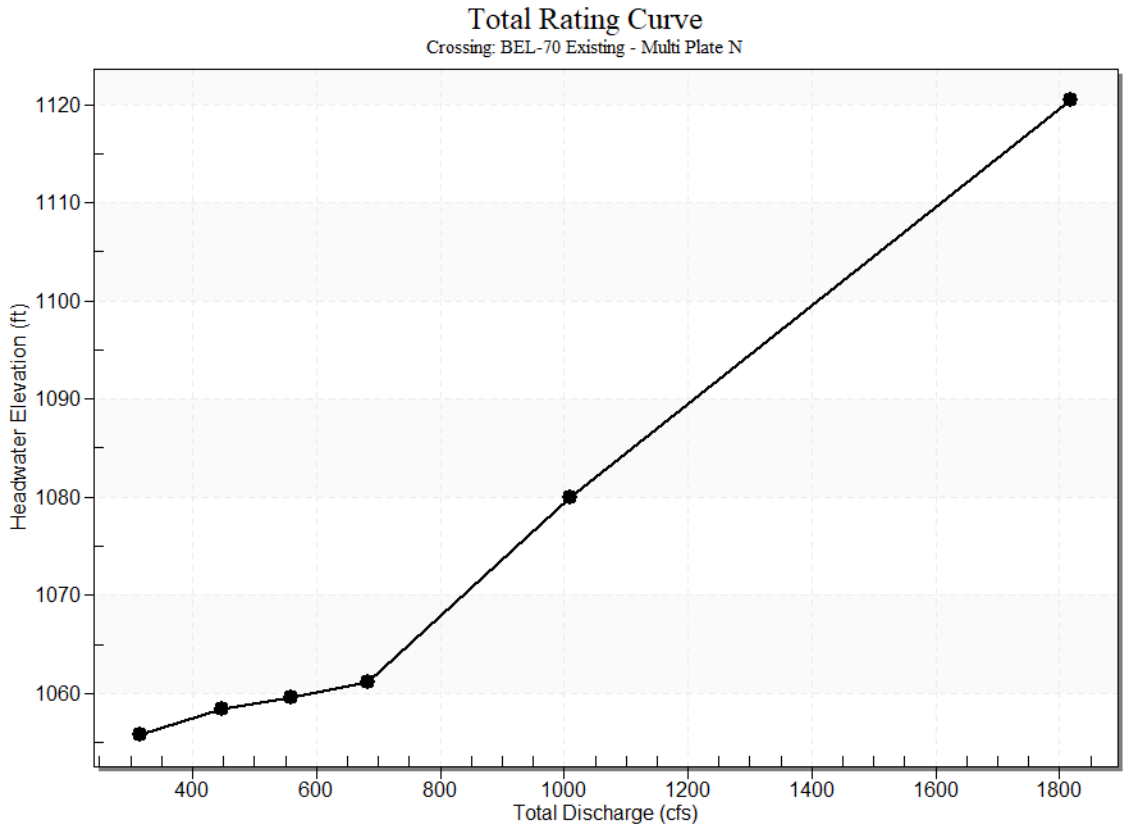
Crossing Discharge Data

Discharge Selection Method: Recurrence

Table 1 - Summary of Culvert Flows at Crossing: BEL-70 Existing - Multi Plate N

Headwater Elevation (ft)	Discharge Names	Total Discharge (cfs)	BEL-70-19.92 Discharge (cfs)	Roadway Discharge (cfs)	Iterations
1055.83	10 year	315.00	315.00	0.00	1
1058.38	25 year	448.00	448.00	0.00	1
1059.63	50 year	560.00	560.00	0.00	1
1061.16	100 year	683.00	683.00	0.00	1
1079.91	500 year	1010.00	1010.00	0.00	1
1120.00	Overtopping	1472.94	1472.94	0.00	Overtopping

Rating Curve Plot for Crossing: BEL-70 Existing - Multi Plate N



Culvert Data: BEL-70-19.92

Table 1 - Culvert Summary Table: BEL-70-19.92

Discharge Names	Total Discharge (cfs)	Culvert Discharge (cfs)	Headwater Elevation (ft)	Inlet Control Depth (ft)	Outlet Control Depth (ft)	Flow Type	Normal Depth (ft)	Critical Depth (ft)	Outlet Depth (ft)	Tailwater Depth (ft)	Outlet Velocity (ft/s)	Tailwater Velocity (ft/s)
10 year	315.00 cfs	315.00 cfs	1055.83	6.65	0.0*	1-S2n	4.28	4.33	4.28	2.47	10.55	5.32
25 year	448.00 cfs	448.00 cfs	1058.38	8.42	9.200	7-M2c	5.30	5.20	5.20	3.04	11.75	5.67
50 year	560.00 cfs	560.00 cfs	1059.63	10.00	10.448	7-M2c	6.18	5.85	5.85	3.38	12.80	6.11
100 year	683.00 cfs	683.00 cfs	1061.16	11.98	11.803	7-M2c	7.34	6.47	6.47	3.71	13.95	6.53
500 year	1010.00 cfs	1010.00 cfs	1079.91	19.16	30.734	7-M2c	9.00	7.75	7.75	4.47	17.34	7.44

* Full Flow Headwater elevation is below inlet invert.

Culvert Barrel Data

Culvert Barrel Type Straight Culvert

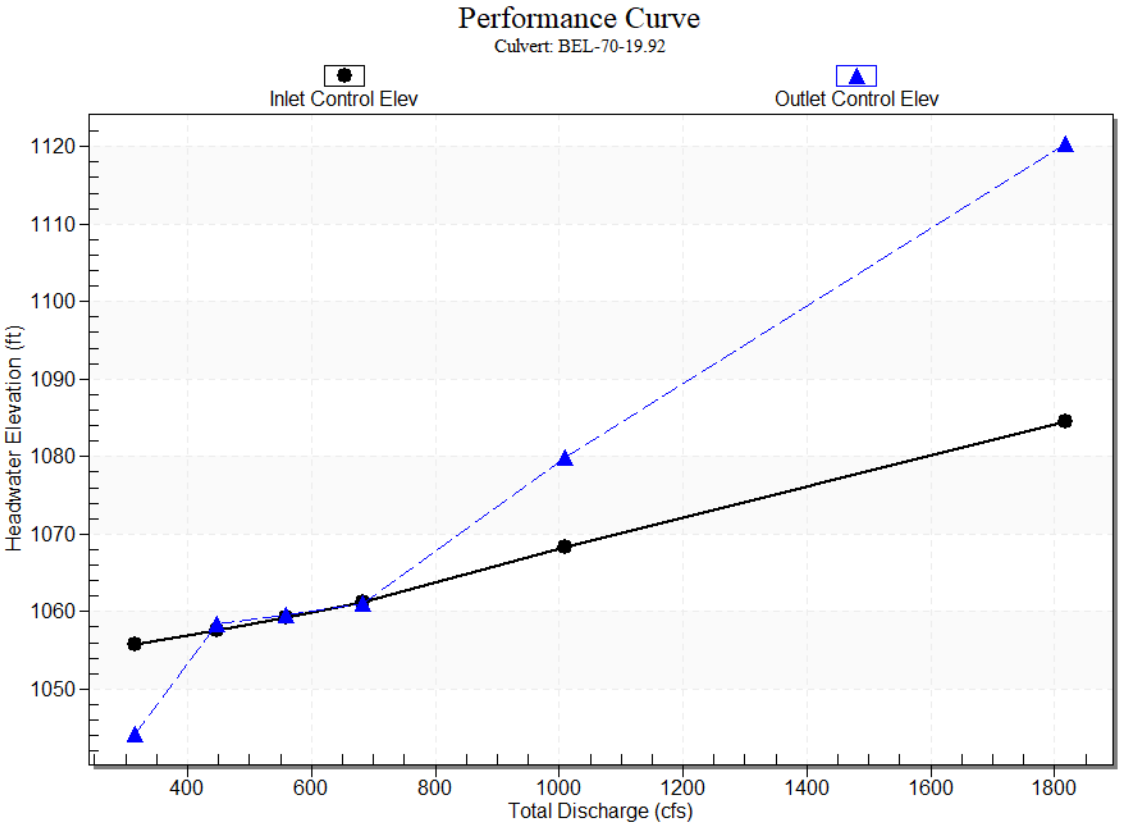
Inlet Elevation (invert): 1049.18 ft,

Outlet Elevation (invert): 1036.38 ft

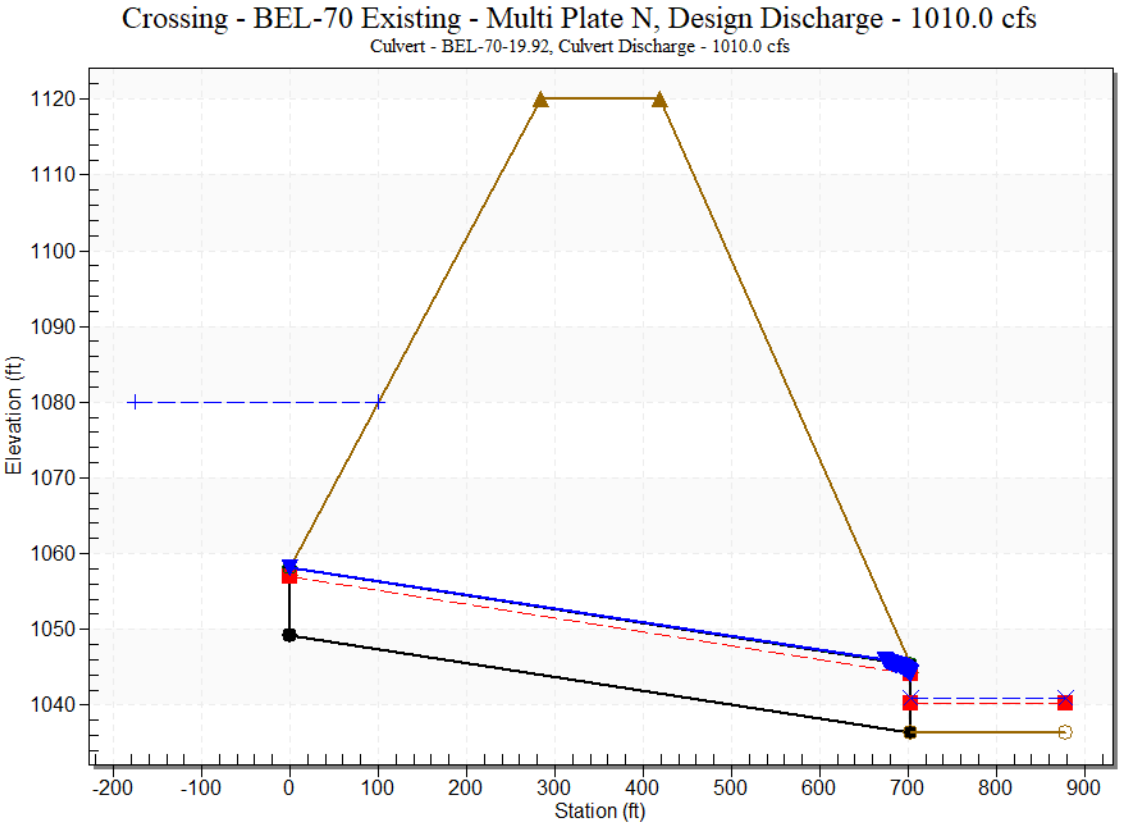
Culvert Length: 703.12 ft,

Culvert Slope: 0.0182

Culvert Performance Curve Plot: BEL-70-19.92



Water Surface Profile Plot for Culvert: BEL-70-19.92



Site Data - BEL-70-19.92

Site Data Option: Culvert Invert Data

Inlet Station: 0.00 ft

Inlet Elevation: 1049.18 ft

Outlet Station: 703.00 ft

Outlet Elevation: 1036.38 ft

Number of Barrels: 1

Culvert Data Summary - BEL-70-19.92

Barrel Shape: Circular

Barrel Diameter: 9.00 ft

Barrel Material: Corrugated Steel

Embedment: 0.00 in

Barrel Manning's n: 0.0320

Culvert Type: Straight

Inlet Configuration: Thin Edge Projecting (Ke=0.9)

Inlet Depression: None

Tailwater Data for Crossing: BEL-70 Existing - Multi Plate N

Table 2 - Downstream Channel Rating Curve (Crossing: BEL-70 Existing - Multi Plate N)

Flow (cfs)	Water Surface Elev (ft)	Velocity (ft/s)	Depth (ft)	Shear (psf)	Froude Number
315.00	1038.85	2.47	5.32	2.16	0.67
448.00	1039.42	3.04	5.67	2.66	0.69
560.00	1039.76	3.38	6.11	2.95	0.70
683.00	1040.09	3.71	6.53	3.24	0.71
1010.00	1040.85	4.47	7.44	3.91	0.73

Tailwater Channel Data - BEL-70 Existing - Multi Plate N

Tailwater Channel Option: Irregular Channel

Channel Slope: Irregular Channel

User Defined Channel Cross-Section

Coord No.	Station (ft)	Elevation (ft)	Manning's n
1	0.00	1057.73	0.1000
2	1.00	1057.31	0.1000
3	2.00	1056.97	0.1000
4	3.00	1056.59	0.1000
5	4.00	1056.22	0.1000
6	5.00	1055.84	0.1000
7	6.00	1055.52	0.1000
8	7.00	1055.14	0.1000
9	8.00	1054.92	0.1000
10	9.00	1054.67	0.1000
11	10.00	1054.36	0.1000
12	11.00	1054.04	0.1000
13	12.00	1053.53	0.1000
14	13.00	1053.26	0.1000
15	14.00	1052.80	0.1000
16	15.00	1052.44	0.1000
17	16.00	1052.06	0.1000
18	17.00	1051.73	0.1000
19	18.00	1051.33	0.1000
20	19.00	1051.00	0.1000
21	20.00	1050.57	0.1000
22	21.00	1050.24	0.1000
23	22.00	1049.76	0.1000
24	23.00	1049.28	0.1000

25	24.00	1048.54	0.1000
26	25.00	1048.09	0.1000
27	26.00	1047.43	0.1000
28	27.00	1047.05	0.1000
29	28.00	1046.72	0.1000
30	29.00	1046.44	0.1000
31	30.00	1045.91	0.1000
32	31.00	1045.47	0.1000
33	32.00	1044.92	0.1000
34	33.00	1044.63	0.1000
35	34.00	1044.27	0.1000
36	35.00	1044.04	0.1000
37	36.00	1043.83	0.1000
38	37.00	1043.43	0.1000
39	38.00	1043.26	0.1000
40	39.00	1043.09	0.1000
41	40.00	1042.95	0.1000
42	41.00	1042.82	0.1000
43	42.00	1042.77	0.1000
44	43.00	1042.78	0.1000
45	44.00	1042.81	0.1000
46	45.00	1042.83	0.1000
47	46.00	1042.81	0.1000
48	47.00	1042.79	0.1000
49	48.00	1042.82	0.1000
50	49.00	1042.84	0.1000
51	50.00	1042.84	0.1000
52	51.00	1042.94	0.1000
53	52.00	1042.99	0.1000
54	53.00	1042.97	0.1000
55	54.00	1042.90	0.1000
56	55.00	1042.84	0.1000
57	56.00	1042.80	0.1000
58	57.00	1042.73	0.1000
59	58.00	1042.74	0.1000
60	59.00	1042.71	0.1000
61	60.00	1042.68	0.1000
62	61.00	1042.70	0.1000
63	62.00	1042.73	0.1000
64	63.00	1042.76	0.1000
65	64.00	1042.75	0.1000
66	65.00	1042.73	0.1000
67	66.00	1042.74	0.1000
68	67.00	1042.77	0.1000
69	68.00	1042.81	0.1000
70	69.00	1042.79	0.1000
71	70.00	1042.77	0.1000
72	71.00	1042.79	0.1000
73	72.00	1042.83	0.1000
74	73.00	1042.84	0.1000

75	74.00	1042.88	0.1000
76	75.00	1042.89	0.1000
77	76.00	1042.90	0.1000
78	77.00	1042.89	0.1000
79	78.00	1042.83	0.1000
80	79.00	1042.78	0.1000
81	80.00	1042.72	0.1000
82	81.00	1042.70	0.1000
83	82.00	1042.76	0.1000
84	83.00	1042.79	0.1000
85	84.00	1042.79	0.1000
86	85.00	1042.78	0.1000
87	86.00	1042.77	0.1000
88	87.00	1042.73	0.1000
89	88.00	1042.70	0.1000
90	89.00	1042.68	0.1000
91	90.00	1042.66	0.1000
92	91.00	1042.63	0.1000
93	92.00	1042.55	0.1000
94	93.00	1042.41	0.1000
95	94.00	1042.29	0.1000
96	95.00	1042.02	0.0500
97	96.00	1041.74	0.0500
98	97.00	1041.22	0.0500
99	98.00	1040.79	0.0500
100	99.00	1040.30	0.0500
101	100.00	1039.86	0.0500
102	101.00	1039.46	0.0500
103	102.00	1039.25	0.0500
104	103.00	1039.04	0.0500
105	104.00	1038.97	0.0500
106	105.00	1038.94	0.0500
107	106.00	1038.92	0.0500
108	107.00	1038.88	0.0500
109	108.00	1038.77	0.0500
110	109.00	1038.42	0.0500
111	110.00	1038.11	0.0500
112	111.00	1037.69	0.0500
113	112.00	1037.22	0.0500
114	113.00	1036.85	0.0500
115	114.00	1036.74	0.0500
116	115.00	1036.63	0.0500
117	116.00	1036.60	0.0500
118	117.00	1036.57	0.0500
119	118.00	1036.51	0.0500
120	119.00	1036.46	0.0500
121	120.00	1036.38	0.0500
122	121.00	1036.38	0.0500
123	122.00	1036.43	0.0500
124	123.00	1036.48	0.0500

125	124.00	1036.52	0.0500
126	125.00	1036.52	0.0500
127	126.00	1036.53	0.0500
128	127.00	1036.55	0.0500
129	128.00	1036.58	0.0500
130	129.00	1036.60	0.0500
131	130.00	1036.59	0.0500
132	131.00	1036.56	0.0500
133	132.00	1036.54	0.0500
134	133.00	1036.58	0.0500
135	134.00	1036.69	0.0500
136	135.00	1036.80	0.0500
137	136.00	1037.23	0.0500
138	137.00	1037.81	0.0500
139	138.00	1039.04	0.0500
140	139.00	1040.07	0.0500
141	140.00	1041.31	0.0500
142	141.00	1042.00	0.0500
143	142.00	1042.74	0.1000
144	143.00	1043.40	0.1000
145	144.00	1043.76	0.1000
146	145.00	1044.10	0.1000
147	146.00	1044.21	0.1000
148	147.00	1044.23	0.1000
149	148.00	1044.11	0.1000
150	149.00	1043.93	0.1000
151	150.00	1043.68	0.1000
152	151.00	1043.39	0.1000
153	152.00	1043.25	0.1000
154	153.00	1043.05	0.1000
155	154.00	1042.92	0.1000
156	155.00	1042.82	0.1000
157	156.00	1042.76	0.1000
158	157.00	1042.71	0.1000
159	158.00	1042.65	0.1000
160	159.00	1042.63	0.1000
161	160.00	1042.62	0.1000
162	161.00	1042.64	0.1000
163	162.00	1042.66	0.1000
164	163.00	1042.75	0.1000
165	164.00	1042.83	0.1000
166	165.00	1043.03	0.1000
167	166.00	1043.28	0.1000
168	167.00	1043.66	0.1000
169	168.00	1044.20	0.1000
170	169.00	1045.04	0.1000
171	170.00	1045.51	0.1000
172	171.00	1046.23	0.1000
173	172.00	1046.97	0.1000
174	173.00	1047.80	0.1000

175	174.00	1049.12	0.1000
176	175.00	1049.73	0.1000
177	176.00	1050.83	0.1000
178	177.00	1051.47	0.1000
179	178.00	1052.31	0.1000
180	179.00	1052.93	0.1000
181	180.00	1053.48	0.1000
182	181.00	1053.90	0.1000
183	182.50	1054.07	0.0000

Roadway Data for Crossing: BEL-70 Existing - Multi Plate N

Roadway Profile Shape: Constant Roadway Elevation

Crest Length: 400.00 ft

Crest Elevation: 1120.00 ft

Roadway Surface: Paved

Roadway Top Width: 135.00 ft

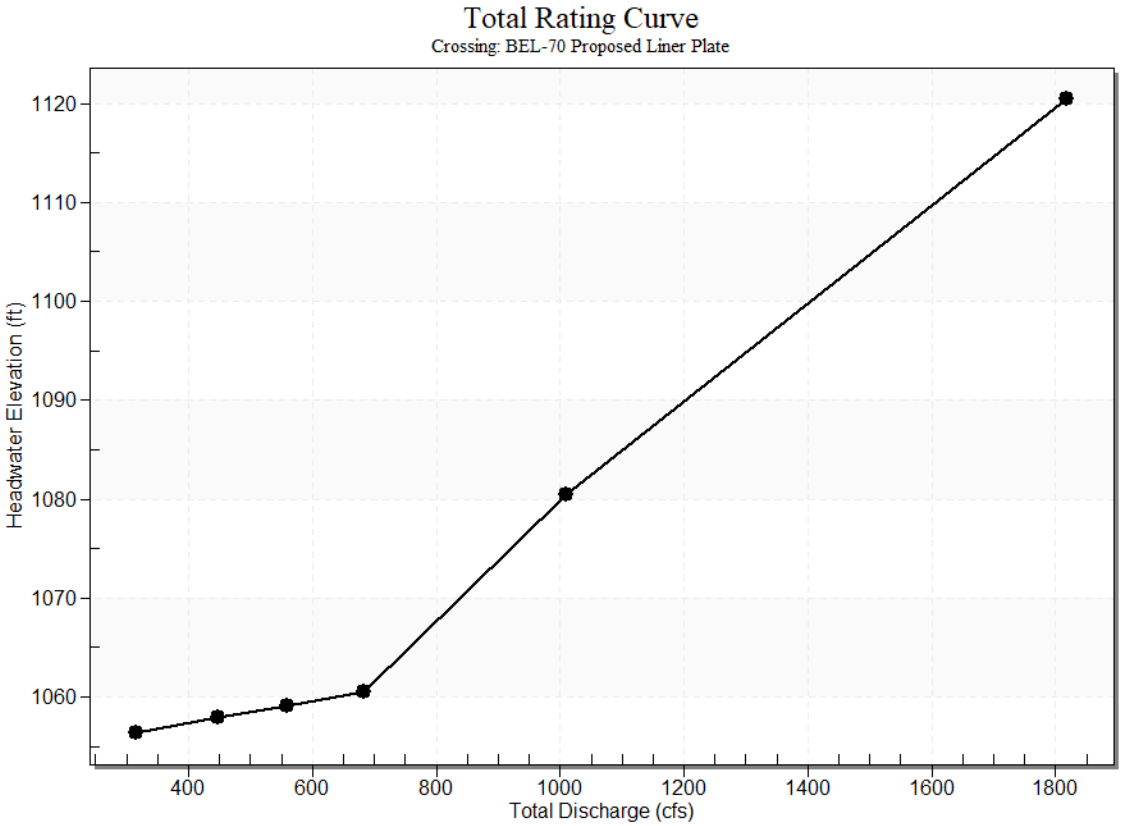
Crossing Discharge Data

Discharge Selection Method: Recurrence

Table 3 - Summary of Culvert Flows at Crossing: BEL-70 Proposed Liner Plate

Headwater Elevation (ft)	Discharge Names	Total Discharge (cfs)	BEL-70-19.92_Prop_Liner_Plate Discharge (cfs)	Roadway Discharge (cfs)	Iterations
1056.42	10 year	315.00	315.00	0.00	1
1057.92	25 year	448.00	448.00	0.00	1
1059.11	50 year	560.00	560.00	0.00	1
1060.49	100 year	683.00	683.00	0.00	1
1080.52	500 year	1010.00	1010.00	0.00	1
1120.00	Overtopping	1465.00	1465.00	0.00	Overtopping

Rating Curve Plot for Crossing: BEL-70 Proposed Liner Plate



Culvert Data: BEL-70-19.92_Prop_Liner_Plate

Table 2 - Culvert Summary Table: BEL-70-19.92_Prop_Liner_Plate

Discharge Names	Total Discharge (cfs)	Culvert Discharge (cfs)	Headwater Elevation (ft)	Inlet Control Depth (ft)	Outlet Control Depth (ft)	Flow Type	Normal Depth (ft)	Critical Depth (ft)	Outlet Depth (ft)	Tailwater Depth (ft)	Outlet Velocity (ft/s)	Tailwater Velocity (ft/s)
10 year	315.00 cfs	315.00 cfs	1056.42	6.13	6.839	2-M2c	4.36	4.33	4.33	2.47	10.41	5.32
25 year	448.00 cfs	448.00 cfs	1057.92	7.66	8.343	2-M2c	5.41	5.20	5.20	3.04	11.75	5.67
50 year	560.00 cfs	560.00 cfs	1059.11	8.96	9.528	7-M2c	6.33	5.85	5.85	3.38	12.80	6.11
100 year	683.00 cfs	683.00 cfs	1060.49	10.50	10.915	7-M2c	7.62	6.47	6.47	3.71	13.95	6.53

500 year	1010.00 cfs	1010.00 cfs	1080.52	15.71	30.935	7-M2c	9.00	7.75	7.75	4.47	17.34	7.44

Culvert Barrel Data

Culvert Barrel Type Straight Culvert

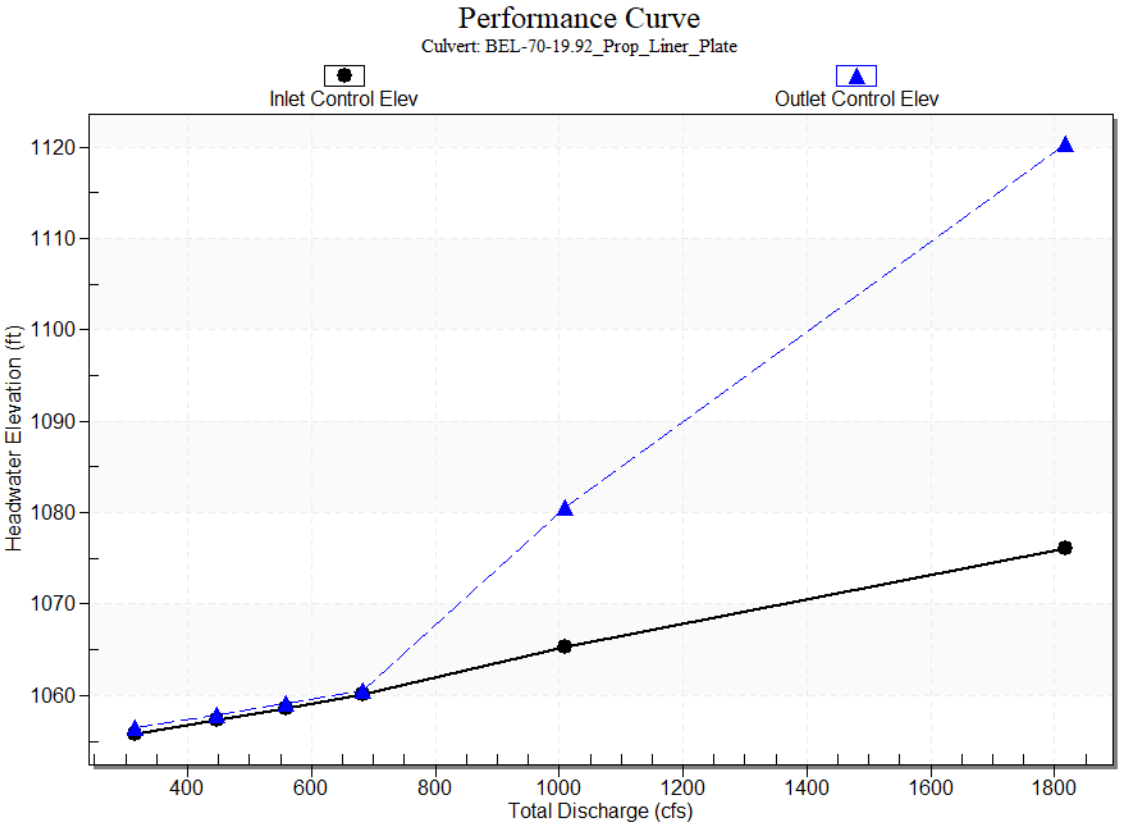
Inlet Elevation (invert): 1049.58 ft,

Outlet Elevation (invert): 1036.78 ft

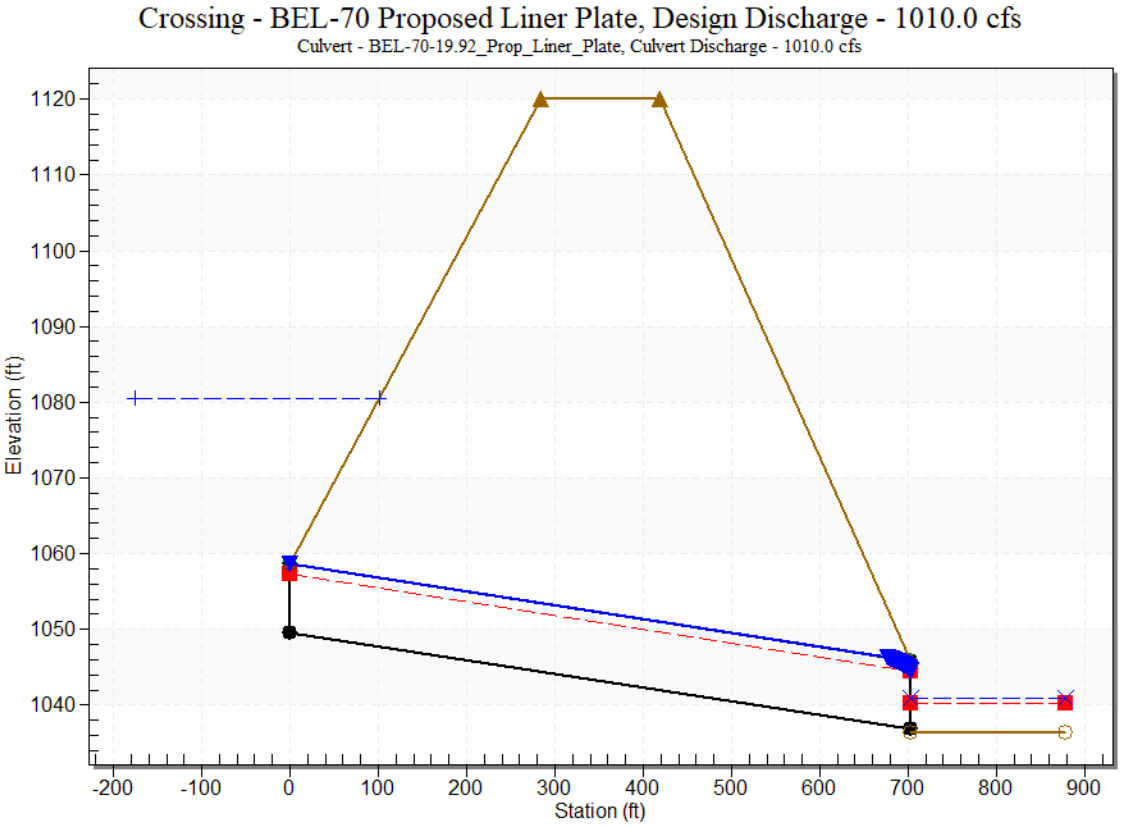
Culvert Length: 703.12 ft,

Culvert Slope: 0.0182

Culvert Performance Curve Plot: BEL-70-19.92_Prop_Liner_Plate



Water Surface Profile Plot for Culvert: BEL-70-19.92_Prop_Liner_Plate



Site Data - BEL-70-19.92_Prop_Liner_Plate

Site Data Option: Culvert Invert Data

Inlet Station: 0.00 ft

Inlet Elevation: 1049.58 ft

Outlet Station: 703.00 ft

Outlet Elevation: 1036.78 ft

Number of Barrels: 1

Culvert Data Summary - BEL-70-19.92_Prop_Liner_Plate

Barrel Shape: Circular

Barrel Diameter: 9.00 ft

Barrel Material: Corrugated Steel

Embedment: 0.00 in

Barrel Manning's n: 0.0330

Culvert Type: Straight

Inlet Configuration: Square Edge with Headwall (Ke=0.5)

Inlet Depression: None

Tailwater Data for Crossing: BEL-70 Proposed Liner Plate

Table 4 - Downstream Channel Rating Curve (Crossing: BEL-70 Proposed Liner Plate)

Flow (cfs)	Water Surface Elev (ft)	Velocity (ft/s)	Depth (ft)	Shear (psf)	Froude Number
315.00	1038.85	2.47	5.32	2.16	0.67
448.00	1039.42	3.04	5.67	2.66	0.69
560.00	1039.76	3.38	6.11	2.95	0.70
683.00	1040.09	3.71	6.53	3.24	0.71
1010.00	1040.85	4.47	7.44	3.91	0.73

Tailwater Channel Data - BEL-70 Proposed Liner Plate

Tailwater Channel Option: Irregular Channel

Channel Slope: Irregular Channel

User Defined Channel Cross-Section

Coord No.	Station (ft)	Elevation (ft)	Manning's n
1	0.00	1057.73	0.1000
2	1.00	1057.31	0.1000
3	2.00	1056.97	0.1000
4	3.00	1056.59	0.1000
5	4.00	1056.22	0.1000
6	5.00	1055.84	0.1000
7	6.00	1055.52	0.1000
8	7.00	1055.14	0.1000
9	8.00	1054.92	0.1000
10	9.00	1054.67	0.1000
11	10.00	1054.36	0.1000
12	11.00	1054.04	0.1000
13	12.00	1053.53	0.1000
14	13.00	1053.26	0.1000
15	14.00	1052.80	0.1000
16	15.00	1052.44	0.1000
17	16.00	1052.06	0.1000
18	17.00	1051.73	0.1000
19	18.00	1051.33	0.1000
20	19.00	1051.00	0.1000
21	20.00	1050.57	0.1000
22	21.00	1050.24	0.1000
23	22.00	1049.76	0.1000
24	23.00	1049.28	0.1000

25	24.00	1048.54	0.1000
26	25.00	1048.09	0.1000
27	26.00	1047.43	0.1000
28	27.00	1047.05	0.1000
29	28.00	1046.72	0.1000
30	29.00	1046.44	0.1000
31	30.00	1045.91	0.1000
32	31.00	1045.47	0.1000
33	32.00	1044.92	0.1000
34	33.00	1044.63	0.1000
35	34.00	1044.27	0.1000
36	35.00	1044.04	0.1000
37	36.00	1043.83	0.1000
38	37.00	1043.43	0.1000
39	38.00	1043.26	0.1000
40	39.00	1043.09	0.1000
41	40.00	1042.95	0.1000
42	41.00	1042.82	0.1000
43	42.00	1042.77	0.1000
44	43.00	1042.78	0.1000
45	44.00	1042.81	0.1000
46	45.00	1042.83	0.1000
47	46.00	1042.81	0.1000
48	47.00	1042.79	0.1000
49	48.00	1042.82	0.1000
50	49.00	1042.84	0.1000
51	50.00	1042.84	0.1000
52	51.00	1042.94	0.1000
53	52.00	1042.99	0.1000
54	53.00	1042.97	0.1000
55	54.00	1042.90	0.1000
56	55.00	1042.84	0.1000
57	56.00	1042.80	0.1000
58	57.00	1042.73	0.1000
59	58.00	1042.74	0.1000
60	59.00	1042.71	0.1000
61	60.00	1042.68	0.1000
62	61.00	1042.70	0.1000
63	62.00	1042.73	0.1000
64	63.00	1042.76	0.1000
65	64.00	1042.75	0.1000
66	65.00	1042.73	0.1000
67	66.00	1042.74	0.1000
68	67.00	1042.77	0.1000
69	68.00	1042.81	0.1000
70	69.00	1042.79	0.1000
71	70.00	1042.77	0.1000
72	71.00	1042.79	0.1000
73	72.00	1042.83	0.1000
74	73.00	1042.84	0.1000

75	74.00	1042.88	0.1000
76	75.00	1042.89	0.1000
77	76.00	1042.90	0.1000
78	77.00	1042.89	0.1000
79	78.00	1042.83	0.1000
80	79.00	1042.78	0.1000
81	80.00	1042.72	0.1000
82	81.00	1042.70	0.1000
83	82.00	1042.76	0.1000
84	83.00	1042.79	0.1000
85	84.00	1042.79	0.1000
86	85.00	1042.78	0.1000
87	86.00	1042.77	0.1000
88	87.00	1042.73	0.1000
89	88.00	1042.70	0.1000
90	89.00	1042.68	0.1000
91	90.00	1042.66	0.1000
92	91.00	1042.63	0.1000
93	92.00	1042.55	0.1000
94	93.00	1042.41	0.1000
95	94.00	1042.29	0.1000
96	95.00	1042.02	0.0500
97	96.00	1041.74	0.0500
98	97.00	1041.22	0.0500
99	98.00	1040.79	0.0500
100	99.00	1040.30	0.0500
101	100.00	1039.86	0.0500
102	101.00	1039.46	0.0500
103	102.00	1039.25	0.0500
104	103.00	1039.04	0.0500
105	104.00	1038.97	0.0500
106	105.00	1038.94	0.0500
107	106.00	1038.92	0.0500
108	107.00	1038.88	0.0500
109	108.00	1038.77	0.0500
110	109.00	1038.42	0.0500
111	110.00	1038.11	0.0500
112	111.00	1037.69	0.0500
113	112.00	1037.22	0.0500
114	113.00	1036.85	0.0500
115	114.00	1036.74	0.0500
116	115.00	1036.63	0.0500
117	116.00	1036.60	0.0500
118	117.00	1036.57	0.0500
119	118.00	1036.51	0.0500
120	119.00	1036.46	0.0500
121	120.00	1036.38	0.0500
122	121.00	1036.38	0.0500
123	122.00	1036.43	0.0500
124	123.00	1036.48	0.0500

125	124.00	1036.52	0.0500
126	125.00	1036.52	0.0500
127	126.00	1036.53	0.0500
128	127.00	1036.55	0.0500
129	128.00	1036.58	0.0500
130	129.00	1036.60	0.0500
131	130.00	1036.59	0.0500
132	131.00	1036.56	0.0500
133	132.00	1036.54	0.0500
134	133.00	1036.58	0.0500
135	134.00	1036.69	0.0500
136	135.00	1036.80	0.0500
137	136.00	1037.23	0.0500
138	137.00	1037.81	0.0500
139	138.00	1039.04	0.0500
140	139.00	1040.07	0.0500
141	140.00	1041.31	0.0500
142	141.00	1042.00	0.0500
143	142.00	1042.74	0.1000
144	143.00	1043.40	0.1000
145	144.00	1043.76	0.1000
146	145.00	1044.10	0.1000
147	146.00	1044.21	0.1000
148	147.00	1044.23	0.1000
149	148.00	1044.11	0.1000
150	149.00	1043.93	0.1000
151	150.00	1043.68	0.1000
152	151.00	1043.39	0.1000
153	152.00	1043.25	0.1000
154	153.00	1043.05	0.1000
155	154.00	1042.92	0.1000
156	155.00	1042.82	0.1000
157	156.00	1042.76	0.1000
158	157.00	1042.71	0.1000
159	158.00	1042.65	0.1000
160	159.00	1042.63	0.1000
161	160.00	1042.62	0.1000
162	161.00	1042.64	0.1000
163	162.00	1042.66	0.1000
164	163.00	1042.75	0.1000
165	164.00	1042.83	0.1000
166	165.00	1043.03	0.1000
167	166.00	1043.28	0.1000
168	167.00	1043.66	0.1000
169	168.00	1044.20	0.1000
170	169.00	1045.04	0.1000
171	170.00	1045.51	0.1000
172	171.00	1046.23	0.1000
173	172.00	1046.97	0.1000
174	173.00	1047.80	0.1000

175	174.00	1049.12	0.1000
176	175.00	1049.73	0.1000
177	176.00	1050.83	0.1000
178	177.00	1051.47	0.1000
179	178.00	1052.31	0.1000
180	179.00	1052.93	0.1000
181	180.00	1053.48	0.1000
182	181.00	1053.90	0.1000
183	182.50	1054.07	0.0000

Roadway Data for Crossing: BEL-70 Proposed Liner Plate

Roadway Profile Shape: Constant Roadway Elevation

Crest Length: 400.00 ft

Crest Elevation: 1120.00 ft

Roadway Surface: Paved

Roadway Top Width: 135.00 ft

ATTACHMENT B

PCSWMM ANALYSIS

****
Element Count
****
Number of rain gages 0
Number of subcatchments ... 0
Number of nodes 3
Number of links 2
Number of pollutants 0
Number of land uses 0

****
Node Summary
****

Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
J1	JUNCTION	1049.18	9.00	0.0	Yes
J2	JUNCTION	1036.38	21.35	0.0	
OF1	OUTFALL	1035.03	21.35	0.0	

****
Link Summary
****

Name	From Node	To Node	Type	Length	%Slope	Roughness
C1	J1	J2	CONDUIT	697.9	1.8345	0.0240
C2	J2	OF1	CONDUIT	96.4	1.4002	0.0500

****
Cross Section Summary
****

Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	No. of Barrels	Full Flow
C1	CIRCULAR	9.00	63.62	2.25	9.00	1	916.07
C2	Tailwater	21.35	2541.95	8.39	182.50	1	36907.40

****
Transect Summary
****

Transect Tailwater
Area:

0.0022	0.0060	0.0102	0.0146	0.0193
0.0244	0.0303	0.0367	0.0433	0.0501
0.0571	0.0644	0.0719	0.0797	0.0889
0.1074	0.1278	0.1491	0.1714	0.1943
0.2174	0.2408	0.2644	0.2883	0.3125

0.3370	0.3618	0.3867	0.4118	0.4371
0.4626	0.4883	0.5143	0.5405	0.5670
0.5938	0.6209	0.6483	0.6760	0.7040
0.7323	0.7611	0.7902	0.8195	0.8491
0.8789	0.9089	0.9391	0.9694	1.0000

Hrad:

0.0300	0.0748	0.1178	0.1586	0.1960
0.2156	0.2389	0.2751	0.3118	0.3482
0.3829	0.4165	0.4461	0.4830	0.5127
0.4876	0.4733	0.4687	0.4689	0.4753
0.4856	0.4984	0.5131	0.5288	0.5450
0.5621	0.5803	0.5989	0.6178	0.6371
0.6559	0.6749	0.6935	0.7123	0.7303
0.7487	0.7667	0.7846	0.8025	0.8198
0.8372	0.8531	0.8712	0.8884	0.9070
0.9254	0.9441	0.9628	0.9811	1.0000

Width:

0.1185	0.1317	0.1407	0.1490	0.1580
0.1804	0.2022	0.2114	0.2189	0.2256
0.2327	0.2402	0.2498	0.2635	0.4585
0.6465	0.6794	0.7096	0.7396	0.7498
0.7585	0.7674	0.7754	0.7847	0.7952
0.8038	0.8099	0.8162	0.8221	0.8274
0.8357	0.8431	0.8514	0.8595	0.8700
0.8789	0.8885	0.8982	0.9079	0.9189
0.9297	0.9444	0.9521	0.9620	0.9684
0.9752	0.9814	0.9876	0.9944	1.0000

****
Analysis Options
****
Flow Units ..... CFS
Process Models:
  Rainfall/Runoff ..... NO
  RDII ..... NO
  Snowmelt ..... NO
  Groundwater ..... NO
  Flow Routing ..... YES
  Ponding Allowed ..... NO
  Water Quality ..... NO
Flow Routing Method ..... DYNWAVE
Surcharge Method ..... EXTRAN
Starting Date 08/23/2024 00:00:00
Ending Date 08/24/2024 00:00:00
Antecedent Dry Days 0.0
Report Time Step 00:01:00
Routing Time Step ..... 1.00 sec
Variable Time Step ..... YES
Maximum Trials 8
Number of Threads 1
Head Tolerance ..... 0.005000 ft

Flow Routing Continuity	Volume acre-feet	Volume 10^6 gal
Dry Weather Inflow	0.000	0.000
Wet Weather Inflow	0.000	0.000
Groundwater Inflow	0.000	0.000
RDII Inflow	0.000	0.000
External Inflow	624.769	203.590
External Outflow	624.178	203.398
Flooding Loss	0.000	0.000
Evaporation Loss	0.000	0.000
Exfiltration Loss	0.000	0.000
Initial Stored Volume	0.000	0.000
Final Stored Volume	0.652	0.212
Continuity Error (%)	-0.010	

****
Time-Step Critical Elements
****
None

****
Highest Flow Instability Indexes
****
All links are stable.

****
Most Frequent Nonconverging Nodes
****
Convergence obtained at all time steps.

****
Routing Time Step Summary
****
Minimum Time Step : 0.50 sec
Average Time Step : 1.00 sec
Maximum Time Step : 1.00 sec
% of Time in Steady State : 0.00
Average Iterations per Step : 2.00
% of Steps Not Converging : 0.00
Time Step Frequencies :
1.000 - 0.871 sec : 100.00 %
0.871 - 0.758 sec : 0.00 %
0.758 - 0.660 sec : 0.00 %
0.660 - 0.574 sec : 0.00 %
0.574 - 0.500 sec : 0.00 %

****
Node Depth Summary

****

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
J1	JUNCTION	6.60	6.60	1055.78	0 00:22	6.60
J2	JUNCTION	2.52	2.52	1038.90	0 00:26	2.52
OF1	OUTFALL	2.52	2.52	1037.55	0 00:26	2.52

****
Node Inflow Summary
****

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Time of Max Occurrence days hr:min	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
J1	JUNCTION	315.00	315.00	0 00:00	204	204	0.060
J2	JUNCTION	0.00	315.00	0 00:22	0	203	0.034
OF1	OUTFALL	0.00	315.00	0 00:26	0	203	0.000

****
Node Surcharge Summary
****

No nodes were surcharged.

****
Node Flooding Summary
****

No nodes were flooded.

****
Outfall Loading Summary
****

Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
OF1	99.99	314.73	315.00	203.382
System	99.99	314.73	315.00	203.382

****
Link Flow Summary
****

Link	Type	Maximum |Flow| CFS	Time of Max Occurrence days hr:min	Maximum |Veloc| ft/sec	Max/ Full Flow	Max/ Full Depth
C1	CONDUIT	315.00	0 00:22	11.64	0.34	0.51
C2	CHANNEL	315.00	0 00:26	5.19	0.01	0.12

****
Flow Classification Summary
****

Conduit	Adjusted /Actual Length	Fraction of Time in Flow Class: Up Dry	Down Dry	Sub Dry	Sup Crit	Up Crit	Down Crit	Norm Crit	Inlet Ltd	Ctrl
C1	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00
C2	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00

****
Conduit Surcharge Summary
****

No conduits were surcharged.

****
Element Count
****
Number of rain gages 0
Number of subcatchments ... 0
Number of nodes 3
Number of links 2
Number of pollutants 0
Number of land uses 0

****
Node Summary
****

Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
J1	JUNCTION	1049.58	9.00	0.0	Yes
J2	JUNCTION	1036.78	21.35	0.0	
OF1	OUTFALL	1035.43	21.35	0.0	

****
Link Summary
****

Name	From Node	To Node	Type	Length	%Slope	Roughness
C1	J1	J2	CONDUIT	697.9	1.8345	0.0110
C2	J2	OF1	CONDUIT	96.4	1.4002	0.0500

****
Cross Section Summary
****

Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	No. of Barrels	Full Flow
C1	CIRCULAR	7.08	39.37	1.77	7.08	1	1054.04
C2	Tailwater	21.35	2541.95	8.39	182.50	1	36907.40

****
Transect Summary
****

Transect Tailwater
Area:
0.0022 0.0060 0.0102 0.0146 0.0193
0.0244 0.0303 0.0367 0.0433 0.0501
0.0571 0.0644 0.0719 0.0797 0.0889
0.1074 0.1278 0.1491 0.1714 0.1943

0.2174 0.2408 0.2644 0.2883 0.3125
0.3370 0.3618 0.3867 0.4118 0.4371
0.4626 0.4883 0.5143 0.5405 0.5670
0.5938 0.6209 0.6483 0.6760 0.7040
0.7323 0.7611 0.7902 0.8195 0.8491
0.8789 0.9089 0.9391 0.9694 1.0000
Hrad:
0.0300 0.0748 0.1178 0.1586 0.1960
0.2156 0.2389 0.2751 0.3118 0.3482
0.3829 0.4165 0.4461 0.4830 0.5127
0.4876 0.4733 0.4687 0.4689 0.4753
0.4856 0.4984 0.5131 0.5288 0.5450
0.5621 0.5803 0.5989 0.6178 0.6371
0.6559 0.6749 0.6935 0.7123 0.7303
0.7487 0.7667 0.7846 0.8025 0.8198
0.8372 0.8531 0.8712 0.8884 0.9070
0.9254 0.9441 0.9628 0.9811 1.0000
Width:
0.1185 0.1317 0.1407 0.1490 0.1580
0.1804 0.2022 0.2114 0.2189 0.2256
0.2327 0.2402 0.2498 0.2635 0.4585
0.6465 0.6794 0.7096 0.7396 0.7498
0.7585 0.7674 0.7754 0.7847 0.7952
0.8038 0.8099 0.8162 0.8221 0.8274
0.8357 0.8431 0.8514 0.8595 0.8700
0.8789 0.8885 0.8982 0.9079 0.9189
0.9297 0.9444 0.9521 0.9620 0.9684
0.9752 0.9814 0.9876 0.9944 1.0000

****
Analysis Options
****
Flow Units ..... CFS
Process Models:
Rainfall/Runoff ..... NO
RDII ..... NO
Snowmelt ..... NO
Groundwater ..... NO
Flow Routing ..... YES
Ponding Allowed ..... NO
Water Quality ..... NO
Flow Routing Method ..... DYNWAVE
Surcharge Method ..... EXTRAN
Starting Date 08/23/2024 00:00:00
Ending Date 08/24/2024 00:00:00
Antecedent Dry Days 0.0
Report Time Step 00:01:00
Routing Time Step ..... 1.00 sec
Variable Time Step ..... YES
Maximum Trials 8

Number of Threads 1
Head Tolerance ..... 0.005000 ft

Flow Routing Continuity	Volume acre-feet	Volume 10^6 gal
Dry Weather Inflow	0.000	0.000
Wet Weather Inflow	0.000	0.000
Groundwater Inflow	0.000	0.000
RDII Inflow	0.000	0.000
External Inflow	1354.657	441.435
External Outflow	1354.237	441.298
Flooding Loss	0.119	0.039
Evaporation Loss	0.000	0.000
Exfiltration Loss	0.000	0.000
Initial Stored Volume	0.000	0.000
Final Stored Volume	0.715	0.233
Continuity Error (%)	-0.031	

Time-Step Critical Elements

None

Highest Flow Instability Indexes

All links are stable.

Most Frequent Nonconverging Nodes

Convergence obtained at all time steps.

Routing Time Step Summary

Minimum Time Step : 0.50 sec
Average Time Step : 1.00 sec
Maximum Time Step : 1.00 sec
% of Time in Steady State : 0.00
Average Iterations per Step : 2.00
% of Steps Not Converging : 0.01
Time Step Frequencies :
1.000 - 0.871 sec : 100.00 %
0.871 - 0.758 sec : 0.00 %

0.758 - 0.660 sec : 0.00 %
0.660 - 0.574 sec : 0.00 %
0.574 - 0.500 sec : 0.00 %

****
Node Depth Summary
****

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
J1	JUNCTION	16.67	70.82	1120.40	0 00:00	16.66
J2	JUNCTION	3.71	3.83	1040.61	0 00:00	3.75
OF1	OUTFALL	3.71	3.79	1039.22	0 00:00	3.76

****
Node Inflow Summary
****

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Time of Max Occurrence days hr:min	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
J1	JUNCTION	683.00	683.00	0 00:00	441	441	-0.000
J2	JUNCTION	0.00	687.93	0 00:00	0	441	0.022
OF1	OUTFALL	0.00	713.45	0 00:00	0	441	0.000

****
Node Surcharge Summary
****

Surcharging occurs when water rises above the top of the highest conduit.

Node	Type	Hours Surcharged	Max. Height Above Crown Feet	Min. Depth Below Rim Feet
J1	JUNCTION	24.00	63.740	0.000

****
Node Flooding Summary
****

Flooding refers to all water that overflows a node, whether it ponds or not.

Node	Hours Flooded	Maximum Rate CFS	Time of Max Occurrence days hr:min	Total Flood Volume 10^6 gal	Maximum Ponded Depth Feet
J1	0.01	665.20	0 00:00	0.038	61.820

****
Outfall Loading Summary
****

Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
OF1	100.00	682.79	713.45	441.266
System	100.00	682.79	713.45	441.266

****
Link Flow Summary
****

Link	Type	Maximum |Flow| CFS	Time of Max Occurrence days hr:min	Maximum |Veloc| ft/sec	Max/ Full Flow	Max/ Full Depth
C1	CONDUIT	687.93	0 00:00	28.98	0.65	0.77
C2	CHANNEL	713.45	0 00:00	6.61	0.02	0.18

****
Flow Classification Summary
****

Conduit	Adjusted /Actual Length	Fraction of Time in Flow Class: Up Dry	Down Dry	Sub Dry	Sup Dry	Up Crit	Down Crit	Norm Crit	Inlet Ltd	Ctrl
C1	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
C2	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00

****

Conduit Surcharge Summary
****

Conduit	Hours Full: Both Ends	Hours Full: Upstream	Hours Full: Dnstream	Hours Above Full: Normal Flow	Capacity Limited
C1	0.01	24.00	0.01	0.01	0.01

****
Element Count
****
Number of rain gages 0
Number of subcatchments ... 0
Number of nodes 4
Number of links 3
Number of pollutants 0
Number of land uses 0

****
Node Summary
****

Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
J1	JUNCTION	1049.58	9.00	0.0	Yes
J2	JUNCTION	1036.78	21.35	0.0	
Prop_Transition	JUNCTION	1049.03	9.00	0.0	
OF1	OUTFALL	1035.43	21.35	0.0	

****
Link Summary
****

Name	From Node	To Node	Type	Length	%Slope	Roughness
C1_1	J1	Prop_Transition	CONDUIT	30.1	1.8336	0.0120
C1_2	Prop_Transition	J2	CONDUIT	667.7	1.8345	0.0110
C2	J2	OF1	CONDUIT	96.4	1.4002	0.0500

****
Cross Section Summary
****

Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	No. of Barrels	Full Flow
C1_1	CIRCULAR	9.00	63.62	2.25	9.00	1	1831.72
C1_2	CIRCULAR	7.08	39.37	1.77	7.08	1	1054.05
C2	Tailwater	21.35	2541.95	8.39	182.50	1	36907.40

****
Transect Summary
****

Transect Tailwater
Area:
0.0022 0.0060 0.0102 0.0146 0.0193
0.0244 0.0303 0.0367 0.0433 0.0501
0.0571 0.0644 0.0719 0.0797 0.0889
0.1074 0.1278 0.1491 0.1714 0.1943

0.2174	0.2408	0.2644	0.2883	0.3125
0.3370	0.3618	0.3867	0.4118	0.4371
0.4626	0.4883	0.5143	0.5405	0.5670
0.5938	0.6209	0.6483	0.6760	0.7040
0.7323	0.7611	0.7902	0.8195	0.8491
0.8789	0.9089	0.9391	0.9694	1.0000

Hrad:

0.0300	0.0748	0.1178	0.1586	0.1960
0.2156	0.2389	0.2751	0.3118	0.3482
0.3829	0.4165	0.4461	0.4830	0.5127
0.4876	0.4733	0.4687	0.4689	0.4753
0.4856	0.4984	0.5131	0.5288	0.5450
0.5621	0.5803	0.5989	0.6178	0.6371
0.6559	0.6749	0.6935	0.7123	0.7303
0.7487	0.7667	0.7846	0.8025	0.8198
0.8372	0.8531	0.8712	0.8884	0.9070
0.9254	0.9441	0.9628	0.9811	1.0000

Width:

0.1185	0.1317	0.1407	0.1490	0.1580
0.1804	0.2022	0.2114	0.2189	0.2256
0.2327	0.2402	0.2498	0.2635	0.4585
0.6465	0.6794	0.7096	0.7396	0.7498
0.7585	0.7674	0.7754	0.7847	0.7952
0.8038	0.8099	0.8162	0.8221	0.8274
0.8357	0.8431	0.8514	0.8595	0.8700
0.8789	0.8885	0.8982	0.9079	0.9189
0.9297	0.9444	0.9521	0.9620	0.9684
0.9752	0.9814	0.9876	0.9944	1.0000

****
Analysis Options
****
Flow Units ..... CFS
Process Models:
  Rainfall/Runoff ..... NO
  RDII ..... NO
  Snowmelt ..... NO
  Groundwater ..... NO
  Flow Routing ..... YES
  Ponding Allowed ..... NO
  Water Quality ..... NO
Flow Routing Method ..... DYNWAVE
Surcharge Method ..... EXTRAN
Starting Date 08/23/2024 00:00:00
Ending Date 08/24/2024 00:00:00
Antecedent Dry Days 0.0
Report Time Step 00:01:00
Routing Time Step ..... 1.00 sec
Variable Time Step ..... YES
Maximum Trials 8
Number of Threads 1
Head Tolerance ..... 0.005000 ft

Flow Routing Continuity	Volume acre-feet	Volume 10^6 gal
Dry Weather Inflow	0.000	0.000
Wet Weather Inflow	0.000	0.000
Groundwater Inflow	0.000	0.000
RDII Inflow	0.000	0.000
External Inflow	1354.657	441.435
External Outflow	1354.029	441.230
Flooding Loss	0.023	0.008
Evaporation Loss	0.000	0.000
Exfiltration Loss	0.000	0.000
Initial Stored Volume	0.000	0.000
Final Stored Volume	0.723	0.236
Continuity Error (%)	-0.009	

Time-Step Critical Elements

Link C1_1 (99.99%)

Highest Flow Instability Indexes

All links are stable.

Most Frequent Nonconverging Nodes

Node OF1 (0.02%)
Node J1 (0.02%)
Node Prop_Transition (0.01%)

Routing Time Step Summary

Minimum Time Step : 0.20 sec
Average Time Step : 0.75 sec
Maximum Time Step : 1.00 sec
% of Time in Steady State : 0.00
Average Iterations per Step : 2.00
% of Steps Not Converging : 0.02
Time Step Frequencies :
1.000 - 0.871 sec : 0.01 %
0.871 - 0.758 sec : 0.00 %
0.758 - 0.660 sec : 99.96 %
0.660 - 0.574 sec : 0.02 %
0.574 - 0.500 sec : 0.01 %

****
Node Depth Summary
****

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
J1	JUNCTION	10.63	70.82	1120.40	0 00:00	10.63
J2	JUNCTION	3.71	4.06	1040.84	0 00:01	4.06
Prop_Transition	JUNCTION	6.57	71.11	1120.13	0 00:00	8.03
OF1	OUTFALL	3.71	3.98	1039.41	0 00:01	3.84

****
Node Inflow Summary
****

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Time of Max Occurrence days hr:min	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
J1	JUNCTION	683.00	683.00	0 00:00	441	441	-0.000
J2	JUNCTION	0.00	875.33	0 00:00	0	441	0.022
Prop_Transition	JUNCTION	0.00	802.63	0 00:00	0	441	0.023
OF1	OUTFALL	0.00	789.84	0 00:01	0	441	0.000

****
Node Surcharge Summary
****

Surcharging occurs when water rises above the top of the highest conduit.

Node	Type	Hours Surcharged	Max. Height Above Crown Feet	Min. Depth Below Rim Feet
J1	JUNCTION	24.00	61.820	0.000
Prop_Transition	JUNCTION	0.01	62.106	0.000

****
Node Flooding Summary
****

Flooding refers to all water that overflows a node, whether it ponds or not.

Node	Type	Maximum Time of Max	Total Flood	Maximum Ponded

Node	Hours Flooded	Rate CFS	Occurrence days hr:min	Volume 10^6 gal	Depth Feet
J1	0.01	383.54	0 00:00	0.008	61.820

****
Outfall Loading Summary
****

Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
OF1	99.99	682.74	789.84	441.198
System	99.99	682.74	789.84	441.198

****
Link Flow Summary
****

Link	Type	Maximum |Flow| CFS	Time of Max Occurrence days hr:min	Maximum |Veloc| ft/sec	Max/ Full Flow	Max/ Full Depth
C1_1	CONDUIT	802.63	0 00:00	19.72	0.44	1.00
C1_2	CONDUIT	875.33	0 00:00	32.67	0.83	0.79
C2	CHANNEL	789.84	0 00:01	6.84	0.02	0.19

****
Flow Classification Summary
****

Conduit	Adjusted /Actual Length	Fraction of Time in Flow Class: Up Dry	Down Dry	Sub Dry	Sup Crit	Up Crit	Down Crit	Norm Crit	Inlet Ltd	Ctrl
C1_1	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00
C1_2	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
C2	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00

****
Conduit Surcharge Summary
****

	Hours	Hours

Conduit	--------- Hours Full -------- Both Ends	Upstream	Dnstream	Above Full Normal Flow	Capacity Limited
C1_1	0.01	24.00	0.01	0.01	0.01
C1_2	0.01	0.03	0.01	0.01	0.01

****
Element Count
****
Number of rain gages 0
Number of subcatchments ... 0
Number of nodes 4
Number of links 3
Number of pollutants 0
Number of land uses 0

****
Node Summary
****

Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
J1	JUNCTION	1049.58	9.00	0.0	Yes
J2	JUNCTION	1036.78	21.35	0.0	
Prop_Transition	JUNCTION	1049.03	9.00	0.0	
OF1	OUTFALL	1035.43	21.35	0.0	

****
Link Summary
****

Name	From Node	To Node	Type	Length	%Slope	Roughness
C1_1	J1	Prop_Transition	CONDUIT	30.1	1.8336	0.0120
C1_2	Prop_Transition	J2	CONDUIT	667.7	1.8345	0.0110
C2	J2	OF1	CONDUIT	96.4	1.4002	0.0500

****
Cross Section Summary
****

Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	No. of Barrels	Full Flow
C1_1	RECT_CLOSED	7.00	63.00	1.97	9.00	1	1659.45
C1_2	CIRCULAR	7.08	39.37	1.77	7.08	1	1054.05
C2	Tailwater	21.35	2541.95	8.39	182.50	1	36907.40

****
Transect Summary
****

Transect Tailwater
Area:
0.0022 0.0060 0.0102 0.0146 0.0193

0.0244 0.0303 0.0367 0.0433 0.0501
0.0571 0.0644 0.0719 0.0797 0.0889
0.1074 0.1278 0.1491 0.1714 0.1943
0.2174 0.2408 0.2644 0.2883 0.3125
0.3370 0.3618 0.3867 0.4118 0.4371
0.4626 0.4883 0.5143 0.5405 0.5670
0.5938 0.6209 0.6483 0.6760 0.7040
0.7323 0.7611 0.7902 0.8195 0.8491
0.8789 0.9089 0.9391 0.9694 1.0000

Hrad:
0.0300 0.0748 0.1178 0.1586 0.1960
0.2156 0.2389 0.2751 0.3118 0.3482
0.3829 0.4165 0.4461 0.4830 0.5127
0.4876 0.4733 0.4687 0.4689 0.4753
0.4856 0.4984 0.5131 0.5288 0.5450
0.5621 0.5803 0.5989 0.6178 0.6371
0.6559 0.6749 0.6935 0.7123 0.7303
0.7487 0.7667 0.7846 0.8025 0.8198
0.8372 0.8531 0.8712 0.8884 0.9070
0.9254 0.9441 0.9628 0.9811 1.0000

Width:
0.1185 0.1317 0.1407 0.1490 0.1580
0.1804 0.2022 0.2114 0.2189 0.2256
0.2327 0.2402 0.2498 0.2635 0.4585
0.6465 0.6794 0.7096 0.7396 0.7498
0.7585 0.7674 0.7754 0.7847 0.7952
0.8038 0.8099 0.8162 0.8221 0.8274
0.8357 0.8431 0.8514 0.8595 0.8700
0.8789 0.8885 0.8982 0.9079 0.9189
0.9297 0.9444 0.9521 0.9620 0.9684
0.9752 0.9814 0.9876 0.9944 1.0000

****
Analysis Options
****
Flow Units ..... CFS
Process Models:
 Rainfall/Runoff ..... NO
 RDII ..... NO
 Snowmelt ..... NO
 Groundwater ..... NO
 Flow Routing ..... YES
 Ponding Allowed ..... NO
 Water Quality ..... NO
Flow Routing Method ..... DYNWAVE
Surcharge Method ..... EXTRAN
Starting Date 08/23/2024 00:00:00
Ending Date 08/24/2024 00:00:00
Antecedent Dry Days 0.0
Report Time Step 00:01:00

Routing Time Step ..... 1.00 sec
Variable Time Step ..... YES
Maximum Trials 8
Number of Threads 1
Head Tolerance ..... 0.005000 ft

Flow Routing Continuity	Volume acre-feet	Volume 10^6 gal
Dry Weather Inflow	0.000	0.000
Wet Weather Inflow	0.000	0.000
Groundwater Inflow	0.000	0.000
RDII Inflow	0.000	0.000
External Inflow	624.769	203.590
External Outflow	624.429	203.479
Flooding Loss	0.000	0.000
Evaporation Loss	0.000	0.000
Exfiltration Loss	0.000	0.000
Initial Stored Volume	0.000	0.000
Final Stored Volume	0.405	0.132
Continuity Error (%)	-0.010	

Time-Step Critical Elements

None

Highest Flow Instability Indexes

All links are stable.

Most Frequent Nonconverging Nodes

Convergence obtained at all time steps.

Routing Time Step Summary

Minimum Time Step : 0.79 sec
Average Time Step : 1.00 sec
Maximum Time Step : 1.00 sec
% of Time in Steady State : 0.00
Average Iterations per Step : 2.00
% of Steps Not Converging : 0.00

Time Step Frequencies :
1.000 - 0.871 sec : 100.00 %
0.871 - 0.758 sec : 0.00 %
0.758 - 0.660 sec : 0.00 %
0.660 - 0.574 sec : 0.00 %
0.574 - 0.500 sec : 0.00 %

****
Node Depth Summary
****

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
J1	JUNCTION	5.61	12.00	1061.58	0 00:00	5.63
J2	JUNCTION	2.52	2.99	1039.77	0 00:01	2.67
Prop_Transition	JUNCTION	3.46	5.35	1054.38	0 00:00	5.12
OF1	OUTFALL	2.52	2.97	1038.40	0 00:01	2.67

****
Node Inflow Summary
****

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Time of Max Occurrence days hr:min	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
J1	JUNCTION	315.00	315.00	0 00:00	204	204	0.002
J2	JUNCTION	0.00	448.70	0 00:01	0	204	0.030
Prop_Transition	JUNCTION	0.00	433.89	0 00:00	0	204	0.022
OF1	OUTFALL	0.00	424.92	0 00:01	0	203	0.000

****
Node Surcharge Summary
****

Surcharging occurs when water rises above the top of the highest conduit.

Node	Type	Hours Surcharged	Max. Height Above Crown Feet	Min. Depth Below Rim Feet
J1	JUNCTION	0.01	4.997	0.000

****
Node Flooding Summary
****

No nodes were flooded.

****
Outfall Loading Summary
****

Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
OF1	99.99	314.86	424.92	203.464
System	99.99	314.86	424.92	203.464

****
Link Flow Summary
****

Link	Type	Maximum |Flow| CFS	Time of Max Occurrence days hr:min	Maximum |Veloc| ft/sec	Max/ Full Flow	Max/ Full Depth
C1_1	CONDUIT	433.89	0 00:00	12.51	0.26	0.79
C1_2	CONDUIT	448.70	0 00:01	22.38	0.43	0.52
C2	CHANNEL	424.92	0 00:01	5.57	0.01	0.14

****
Flow Classification Summary
****

Conduit	Adjusted /Actual Length	Fraction of Time in Flow Class: Up Dry	Down Dry	Sub Dry	Sup Crit	Up Crit	Down Crit	Norm Crit	Inlet Ltd	Ctrl
C1_1	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00
C1_2	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
C2	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00

****

Conduit Surcharge Summary
****

Conduit	Hours Full: Both Ends	Hours Full: Upstream	Hours Full: Dnstream	Hours Above Full: Normal Flow	Capacity Limited
C1_1	0.01	0.01	0.01	0.01	0.01

****
Element Count
****
Number of rain gages 0
Number of subcatchments ... 0
Number of nodes 3
Number of links 2
Number of pollutants 0
Number of land uses 0

****
Node Summary
****

Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
J1	JUNCTION	1049.18	9.00	0.0	Yes
J2	JUNCTION	1036.38	21.35	0.0	
OF1	OUTFALL	1035.03	21.35	0.0	

****
Link Summary
****

Name	From Node	To Node	Type	Length	%Slope	Roughness
C1	J1	J2	CONDUIT	697.9	1.8345	0.0250
C2	J2	OF1	CONDUIT	96.4	1.4002	0.0500

****
Cross Section Summary
****

Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	No. of Barrels	Full Flow
C1	CIRCULAR	7.50	44.18	1.88	7.50	1	540.82
C2	Tailwater	21.35	2541.95	8.39	182.50	1	36907.40

****
Transect Summary
****

Transect Tailwater
Area:

0.0022	0.0060	0.0102	0.0146	0.0193
0.0244	0.0303	0.0367	0.0433	0.0501
0.0571	0.0644	0.0719	0.0797	0.0889
0.1074	0.1278	0.1491	0.1714	0.1943
0.2174	0.2408	0.2644	0.2883	0.3125
0.3370	0.3618	0.3867	0.4118	0.4371
0.4626	0.4883	0.5143	0.5405	0.5670

0.5938 0.6209 0.6483 0.6760 0.7040
0.7323 0.7611 0.7902 0.8195 0.8491
0.8789 0.9089 0.9391 0.9694 1.0000
Hrad:
0.0300 0.0748 0.1178 0.1586 0.1960
0.2156 0.2389 0.2751 0.3118 0.3482
0.3829 0.4165 0.4461 0.4830 0.5127
0.4876 0.4733 0.4687 0.4689 0.4753
0.4856 0.4984 0.5131 0.5288 0.5450
0.5621 0.5803 0.5989 0.6178 0.6371
0.6559 0.6749 0.6935 0.7123 0.7303
0.7487 0.7667 0.7846 0.8025 0.8198
0.8372 0.8531 0.8712 0.8884 0.9070
0.9254 0.9441 0.9628 0.9811 1.0000
Width:
0.1185 0.1317 0.1407 0.1490 0.1580
0.1804 0.2022 0.2114 0.2189 0.2256
0.2327 0.2402 0.2498 0.2635 0.4585
0.6465 0.6794 0.7096 0.7396 0.7498
0.7585 0.7674 0.7754 0.7847 0.7952
0.8038 0.8099 0.8162 0.8221 0.8274
0.8357 0.8431 0.8514 0.8595 0.8700
0.8789 0.8885 0.8982 0.9079 0.9189
0.9297 0.9444 0.9521 0.9620 0.9684
0.9752 0.9814 0.9876 0.9944 1.0000

****
Analysis Options
****
Flow Units ..... CFS
Process Models:
Rainfall/Runoff ..... NO
RDII ..... NO
Snowmelt ..... NO
Groundwater ..... NO
Flow Routing ..... YES
Ponding Allowed ..... NO
Water Quality ..... NO
Flow Routing Method ..... DYNWAVE
Surcharge Method ..... EXTRAN
Starting Date 08/23/2024 00:00:00
Ending Date 08/24/2024 00:00:00
Antecedent Dry Days 0.0
Report Time Step 00:01:00
Routing Time Step ..... 1.00 sec
Variable Time Step ..... YES
Maximum Trials 8
Number of Threads 1
Head Tolerance ..... 0.005000 ft

********** Volume Volume
Flow Routing Continuity acre-feet 10^6 gal

**********	---------	---------
Dry Weather Inflow	0.000	0.000
Wet Weather Inflow	0.000	0.000
Groundwater Inflow	0.000	0.000
RDII Inflow	0.000	0.000
External Inflow	1354.657	441.435
External Outflow	1354.250	441.303
Flooding Loss	0.095	0.031
Evaporation Loss	0.000	0.000
Exfiltration Loss	0.000	0.000
Initial Stored Volume	0.000	0.000
Final Stored Volume	0.761	0.248
Continuity Error (%)	-0.033	

****
Time-Step Critical Elements
****
None

****
Highest Flow Instability Indexes
****
All links are stable.

****
Most Frequent Nonconverging Nodes
****
Convergence obtained at all time steps.

****
Routing Time Step Summary
****
Minimum Time Step : 0.50 sec
Average Time Step : 1.00 sec
Maximum Time Step : 1.00 sec
% of Time in Steady State : 0.00
Average Iterations per Step : 2.00
% of Steps Not Converging : 0.01
Time Step Frequencies :
1.000 - 0.871 sec : 100.00 %
0.871 - 0.758 sec : 0.00 %
0.758 - 0.660 sec : 0.00 %
0.660 - 0.574 sec : 0.00 %
0.574 - 0.500 sec : 0.00 %

****
Node Depth Summary
****

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
J1	JUNCTION	20.51	70.82	1120.00	0 00:00	20.50
J2	JUNCTION	3.71	3.81	1040.19	0 00:00	3.75
OF1	OUTFALL	3.71	3.77	1038.80	0 00:00	3.75

****
Node Inflow Summary
****

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Time of Max Occurrence days hr:min	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
J1	JUNCTION	683.00	683.00	0 00:00	441	441	-0.000
J2	JUNCTION	0.00	683.01	0 00:00	0	441	0.023
OF1	OUTFALL	0.00	707.50	0 00:00	0	441	0.000

****
Node Surcharge Summary
****

Surcharging occurs when water rises above the top of the highest conduit.

Node	Type	Hours Surcharged	Max. Height Above Crown Feet	Min. Depth Below Rim Feet
J1	JUNCTION	24.00	63.320	0.000

****
Node Flooding Summary
****

Flooding refers to all water that overflows a node, whether it ponds or not.

Node	Hours Flooded	Maximum Rate CFS	Time of Max Occurrence days hr:min	Total Flood Volume 10^6 gal	Maximum Ponded Depth Feet
J1	0.01	656.92	0 00:00	0.030	61.820

****
Outfall Loading Summary

****

Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
OF1	100.00	682.80	707.50	441.270
System	100.00	682.80	707.50	441.270

****
Link Flow Summary
****

Link	Type	Maximum |Flow| CFS	Time of Max Occurrence days hr:min	Maximum |Veloc| ft/sec	Max/ Full Flow	Max/ Full Depth
C1	CONDUIT	683.01	0 00:00	26.07	1.26	0.75
C2	CHANNEL	707.50	0 00:00	6.59	0.02	0.18

****
Flow Classification Summary
****

Conduit	Adjusted /Actual Length	Fraction of Time in Flow Class: Dry	Up Dry	Down Dry	Sub Crit	Sup Crit	Up Crit	Down Crit	Norm Ltd	Inlet Ctrl
C1	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
C2	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00

****
Conduit Surcharge Summary
****

Conduit	Hours Full: Both Ends	Hours Full: Upstream	Hours Full: Dnstream	Hours Above Full Normal Flow	Capacity Limited
C1	0.01	24.00	0.01	24.00	0.01

****
Element Count
****
Number of rain gages 0
Number of subcatchments ... 0
Number of nodes 3
Number of links 3
Number of pollutants 0
Number of land uses 0

****
Node Summary
****

Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
J1	JUNCTION	1049.58	9.00	0.0	Yes
J2	JUNCTION	1036.78	21.35	0.0	
OF1	OUTFALL	1035.43	21.35	0.0	

****
Link Summary
****

Name	From Node	To Node	Type	Length	%Slope	Roughness
C1	J1	J2	CONDUIT	697.9	1.8345	0.0250
C2	J2	OF1	CONDUIT	96.4	1.4002	0.0500
C3	J1	J2	CONDUIT	697.9	1.8345	0.0250

****
Cross Section Summary
****

Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	No. of Barrels	Full Flow
C1	CIRCULAR	7.50	44.18	1.88	7.50	1	540.82
C2	Tailwater	21.35	2541.95	8.39	182.50	1	36907.40
C3	CIRCULAR	4.00	12.57	1.00	4.00	1	101.17

****
Transect Summary
****

Transect Tailwater
Area:

0.0022	0.0060	0.0102	0.0146	0.0193
0.0244	0.0303	0.0367	0.0433	0.0501
0.0571	0.0644	0.0719	0.0797	0.0889
0.1074	0.1278	0.1491	0.1714	0.1943
0.2174	0.2408	0.2644	0.2883	0.3125

0.3370	0.3618	0.3867	0.4118	0.4371
0.4626	0.4883	0.5143	0.5405	0.5670
0.5938	0.6209	0.6483	0.6760	0.7040
0.7323	0.7611	0.7902	0.8195	0.8491
0.8789	0.9089	0.9391	0.9694	1.0000

Hrad:

0.0300	0.0748	0.1178	0.1586	0.1960
0.2156	0.2389	0.2751	0.3118	0.3482
0.3829	0.4165	0.4461	0.4830	0.5127
0.4876	0.4733	0.4687	0.4689	0.4753
0.4856	0.4984	0.5131	0.5288	0.5450
0.5621	0.5803	0.5989	0.6178	0.6371
0.6559	0.6749	0.6935	0.7123	0.7303
0.7487	0.7667	0.7846	0.8025	0.8198
0.8372	0.8531	0.8712	0.8884	0.9070
0.9254	0.9441	0.9628	0.9811	1.0000

Width:

0.1185	0.1317	0.1407	0.1490	0.1580
0.1804	0.2022	0.2114	0.2189	0.2256
0.2327	0.2402	0.2498	0.2635	0.4585
0.6465	0.6794	0.7096	0.7396	0.7498
0.7585	0.7674	0.7754	0.7847	0.7952
0.8038	0.8099	0.8162	0.8221	0.8274
0.8357	0.8431	0.8514	0.8595	0.8700
0.8789	0.8885	0.8982	0.9079	0.9189
0.9297	0.9444	0.9521	0.9620	0.9684
0.9752	0.9814	0.9876	0.9944	1.0000

****
Analysis Options
****
Flow Units ..... CFS
Process Models:
  Rainfall/Runoff ..... NO
  RDII ..... NO
  Snowmelt ..... NO
  Groundwater ..... NO
  Flow Routing ..... YES
  Ponding Allowed ..... NO
  Water Quality ..... NO
Flow Routing Method ..... DYNWAVE
Surcharge Method ..... EXTRAN
Starting Date 08/23/2024 00:00:00
Ending Date 08/24/2024 00:00:00
Antecedent Dry Days 0.0
Report Time Step 00:01:00
Routing Time Step ..... 1.00 sec
Variable Time Step ..... YES
Maximum Trials 8
Number of Threads 1
Head Tolerance ..... 0.005000 ft

Flow Routing Continuity	Volume acre-feet	Volume 10^6 gal
Dry Weather Inflow	0.000	0.000
Wet Weather Inflow	0.000	0.000
Groundwater Inflow	0.000	0.000
RDII Inflow	0.000	0.000
External Inflow	1354.657	441.435
External Outflow	1354.288	441.315
Flooding Loss	0.058	0.019
Evaporation Loss	0.000	0.000
Exfiltration Loss	0.000	0.000
Initial Stored Volume	0.000	0.000
Final Stored Volume	0.951	0.310
Continuity Error (%)	-0.047	

Time-Step Critical Elements

None

Highest Flow Instability Indexes

All links are stable.

Most Frequent Nonconverging Nodes

Convergence obtained at all time steps.

Routing Time Step Summary

Minimum Time Step	0.50 sec
Average Time Step	1.00 sec
Maximum Time Step	1.00 sec
% of Time in Steady State	0.00
Average Iterations per Step	2.00
% of Steps Not Converging	0.01

Time Step Frequencies :

1.000 - 0.871 sec	100.00 %
0.871 - 0.758 sec	0.00 %
0.758 - 0.660 sec	0.00 %
0.660 - 0.574 sec	0.00 %
0.574 - 0.500 sec	0.00 %

Node Depth Summary

****

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
J1	JUNCTION	11.18	70.82	1120.40	0 00:00	11.17
J2	JUNCTION	3.71	3.81	1040.59	0 00:00	3.74
OF1	OUTFALL	3.71	3.77	1039.20	0 00:00	3.74

****
Node Inflow Summary
****

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Time of Max Occurrence days hr:min	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
J1	JUNCTION	683.00	683.00	0 00:00	441	441	-0.000
J2	JUNCTION	0.00	683.02	0 00:00	0	441	0.023
OF1	OUTFALL	0.00	707.61	0 00:00	0	441	0.000

****
Node Surcharge Summary
****

Surcharging occurs when water rises above the top of the highest conduit.

Node	Type	Hours Surcharged	Max. Height Above Crown Feet	Min. Depth Below Rim Feet
J1	JUNCTION	24.00	63.320	0.000

****
Node Flooding Summary
****

Flooding refers to all water that overflows a node, whether it ponds or not.

Node	Hours Flooded	Maximum Rate CFS	Time of Max Occurrence days hr:min	Total Flood Volume 10^6 gal	Maximum Ponded Depth Feet
J1	0.01	627.37	0 00:00	0.018	61.820

****
Outfall Loading Summary
****

Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
OF1	100.00	682.82	707.61	441.282
System	100.00	682.82	707.61	441.282

****
Link Flow Summary
****

Link	Type	Maximum |Flow| CFS	Time of Max Occurrence days	hr:min	Maximum |Veloc| ft/sec	Max/ Full Flow	Max/ Full Depth
C1	CONDUIT	558.98	0	00:03	19.68	1.03	0.75
C2	CHANNEL	707.61	0	00:00	6.59	0.02	0.18
C3	CONDUIT	188.55	0	00:00	15.11	1.86	0.98

****
Flow Classification Summary
****

Conduit	Adjusted /Actual Length	Fraction of Time in Flow Class: Dry	Up Dry	Down Dry	Sub Crit	Sup Crit	Up Crit	Down Crit	Norm Ltd	Inlet Ctrl
C1	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
C2	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
C3	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00

****
Conduit Surcharge Summary
****

Conduit	Hours Full: Both Ends	Hours Full: Upstream	Hours Full: Dnstream	Hours Above Full Normal Flow	Capacity Limited
C1	0.01	24.00	0.01	24.00	0.01
C3	0.01	24.00	0.01	24.00	0.01

****
Element Count
****
Number of rain gages 0
Number of subcatchments ... 0
Number of nodes 3
Number of links 3
Number of pollutants 0
Number of land uses 0

****
Node Summary
****

Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
J1	JUNCTION	1050.18	9.00	0.0	Yes
J2	JUNCTION	1037.38	21.35	0.0	
OF1	OUTFALL	1035.43	21.35	0.0	

****
Link Summary
****

Name	From Node	To Node	Type	Length	%Slope	Roughness
C1	J1	J2	CONDUIT	697.9	1.8345	0.0120
C2	J2	OF1	CONDUIT	96.4	2.0227	0.0500
C3	J1	J2	CONDUIT	697.9	1.8345	0.0130

****
Cross Section Summary
****

Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	No. of Barrels	Full Flow
C1	CIRCULAR	6.50	33.18	1.62	6.50	1	769.28
C2	Tailwater	21.35	2541.95	8.39	182.50	1	44359.54
C3	CIRCULAR	4.00	12.57	1.00	4.00	1	194.56

****
Transect Summary
****

Transect Tailwater
Area:

0.0022	0.0060	0.0102	0.0146	0.0193
0.0244	0.0303	0.0367	0.0433	0.0501
0.0571	0.0644	0.0719	0.0797	0.0889
0.1074	0.1278	0.1491	0.1714	0.1943
0.2174	0.2408	0.2644	0.2883	0.3125

0.3370	0.3618	0.3867	0.4118	0.4371
0.4626	0.4883	0.5143	0.5405	0.5670
0.5938	0.6209	0.6483	0.6760	0.7040
0.7323	0.7611	0.7902	0.8195	0.8491
0.8789	0.9089	0.9391	0.9694	1.0000

Hrad:

0.0300	0.0748	0.1178	0.1586	0.1960
0.2156	0.2389	0.2751	0.3118	0.3482
0.3829	0.4165	0.4461	0.4830	0.5127
0.4876	0.4733	0.4687	0.4689	0.4753
0.4856	0.4984	0.5131	0.5288	0.5450
0.5621	0.5803	0.5989	0.6178	0.6371
0.6559	0.6749	0.6935	0.7123	0.7303
0.7487	0.7667	0.7846	0.8025	0.8198
0.8372	0.8531	0.8712	0.8884	0.9070
0.9254	0.9441	0.9628	0.9811	1.0000

Width:

0.1185	0.1317	0.1407	0.1490	0.1580
0.1804	0.2022	0.2114	0.2189	0.2256
0.2327	0.2402	0.2498	0.2635	0.4585
0.6465	0.6794	0.7096	0.7396	0.7498
0.7585	0.7674	0.7754	0.7847	0.7952
0.8038	0.8099	0.8162	0.8221	0.8274
0.8357	0.8431	0.8514	0.8595	0.8700
0.8789	0.8885	0.8982	0.9079	0.9189
0.9297	0.9444	0.9521	0.9620	0.9684
0.9752	0.9814	0.9876	0.9944	1.0000

****
Analysis Options
****
Flow Units ..... CFS
Process Models:
  Rainfall/Runoff ..... NO
  RDII ..... NO
  Snowmelt ..... NO
  Groundwater ..... NO
  Flow Routing ..... YES
  Ponding Allowed ..... NO
  Water Quality ..... NO
Flow Routing Method ..... DYNWAVE
Surcharge Method ..... EXTRAN
Starting Date 08/23/2024 00:00:00
Ending Date 08/24/2024 00:00:00
Antecedent Dry Days 0.0
Report Time Step 00:01:00
Routing Time Step ..... 1.00 sec
Variable Time Step ..... YES
Maximum Trials 8
Number of Threads 1
Head Tolerance ..... 0.005000 ft

Flow Routing Continuity	Volume acre-feet	Volume 10^6 gal
Dry Weather Inflow	0.000	0.000
Wet Weather Inflow	0.000	0.000
Groundwater Inflow	0.000	0.000
RDII Inflow	0.000	0.000
External Inflow	1354.657	441.435
External Outflow	1354.329	441.328
Flooding Loss	0.065	0.021
Evaporation Loss	0.000	0.000
Exfiltration Loss	0.000	0.000
Initial Stored Volume	0.000	0.000
Final Stored Volume	0.813	0.265
Continuity Error (%)	-0.041	

Time-Step Critical Elements

None

Highest Flow Instability Indexes

All links are stable.

Most Frequent Nonconverging Nodes

Convergence obtained at all time steps.

Routing Time Step Summary

Minimum Time Step	0.50 sec
Average Time Step	1.00 sec
Maximum Time Step	1.00 sec
% of Time in Steady State	0.00
Average Iterations per Step	2.00
% of Steps Not Converging	0.01

Time Step Frequencies :

1.000 - 0.871 sec	100.00 %
0.871 - 0.758 sec	0.00 %
0.758 - 0.660 sec	0.00 %
0.660 - 0.574 sec	0.00 %
0.574 - 0.500 sec	0.00 %

Node Depth Summary

****

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
J1	JUNCTION	10.62	70.82	1121.00	0 00:00	10.62
J2	JUNCTION	3.40	3.52	1040.90	0 00:00	3.42
OF1	OUTFALL	3.40	3.48	1038.91	0 00:00	3.42

****
Node Inflow Summary
****

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Time of Max Occurrence days hr:min	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
J1	JUNCTION	683.00	683.00	0 00:00	441	441	0.000
J2	JUNCTION	0.00	707.41	0 00:00	0	441	0.019
OF1	OUTFALL	0.00	715.54	0 00:00	0	441	0.000

****
Node Surcharge Summary
****

Surcharging occurs when water rises above the top of the highest conduit.

Node	Type	Hours Surcharged	Max. Height Above Crown Feet	Min. Depth Below Rim Feet
J1	JUNCTION	24.00	64.320	0.000

****
Node Flooding Summary
****

Flooding refers to all water that overflows a node, whether it ponds or not.

Node	Hours Flooded	Maximum Rate CFS	Time of Max Occurrence days hr:min	Total Flood Volume 10^6 gal	Maximum Ponded Depth Feet
J1	0.01	640.03	0 00:00	0.021	61.820

****
Outfall Loading Summary
****

Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
OF1	100.00	682.84	715.54	441.296
System	100.00	682.84	715.54	441.296

****
Link Flow Summary
****

Link	Type	Maximum |Flow| CFS	Time of Max Occurrence days	hr:min	Maximum |Veloc| ft/sec	Max/ Full Flow	Max/ Full Depth
C1	CONDUIT	470.30	0	00:04	22.62	0.61	0.77
C2	CHANNEL	715.54	0	00:00	7.47	0.02	0.16
C3	CONDUIT	274.90	0	00:00	21.88	1.41	1.00

****
Flow Classification Summary
****

Conduit	Adjusted /Actual Length	Fraction of Time in Flow Class: Dry	Up Dry	Down Dry	Sub Crit	Sup Crit	Up Crit	Down Crit	Norm Ltd	Inlet Ctrl
C1	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
C2	1.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
C3	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00

****
Conduit Surcharge Summary
****

Conduit	Hours Full: Both Ends	Hours Full: Upstream	Hours Full: Dnstream	Hours Above Full Normal Flow	Capacity Limited
C1	0.01	24.00	0.01	0.01	0.01
C3	24.00	24.00	24.00	24.00	24.00

APPENDIX E – ORPHAN BRIDGE (BEL-70-19.188)

CULVERT ASSESSMENT MEMO

To:	ODOT District 11	No. of Pages: 3
From:	Collin Getz, PE	Reviewed by: Dave Frank, PE
Cc:	Mark Grossman, PE	
Date:	June 5, 2024	
Subject:	BEL-070-19.17 (PID 107533) – Orphan Bridge Condition Assessment	

1 Purpose

This technical memorandum will provide a condition assessment for the Orphan Bridge 19.92, 108-in corrugated metal pipe storm sewer, that is included as part of the BEL-070-19.17 ODOT project.

2 Introduction

In November 2023, ODOT retained GPD Group (GPD) to prepare construction plans for the rehabilitation of a section of I.R. 70 in Belmont County. As part of this project, GPD was tasked to inspect and evaluate a crossing 108" corrugated metal pipe (CMP), Orphan Bridge 19.92, beneath I.R. 70 that conveys the storm flow of Aults Run. This technical memorandum will provide a summary of the condition assessment inspection performed of the storm culvert. A later, separate memorandum will provide a hydraulic analysis and a rehabilitation recommendation.

2.1 Sewer Overview

The 108-in CMP storm culvert is approximately 703-ft in length and conveys Aults Run beneath I.R. 70. The storm sewer was originally installed in 1957 and was lengthened from its downstream end in 1973 as part of a roadway widening project. See **Figure 2-1** for an overview of the site.

Figure 2-1 Site Overview

3 Sewer Assessment

GPD coordinated the 3D LiDAR inspection of the CMP culvert. The inspection was performed on April 9th, 2024, and consisted of LiDAR scanning equipment mounted on a crawler that produced 1-ft wide cross sections from scans performed every 10-ft. The inspection data was then later processed and reviewed for deficiencies such as deformity and its horizontal/vertical alignment deflections. See **Attachment A** for the inspection report data.

3.1 Condition Assessment - Deformity

The 3D LiDAR inspection showed that the height and width deviate from the 108-in diameter as-built condition. This deviation shows that the height decreases and the width increases resulting in deformation or the increase of ovality as shown in **Figure 3-1**. Ovality represents the degree of deviation from a perfectly circular shape. Whenever these dimensions begin to deviate, the ovality increases where readings over 5% can become significant. As shown in **Figure 3-2**, the ovality of the culvert is consistently over 5% and reaches a maximum value of 11.2% near 350', where the height is 98-in and the width is 120-in. Also, this figure shows a clear distinction where the culvert was extended in the early 1970's near 550-ft. Here, the ovality lessens below 5% to the outlet and highlights that the original 550-ft from the inlet experiences the greatest ovality.

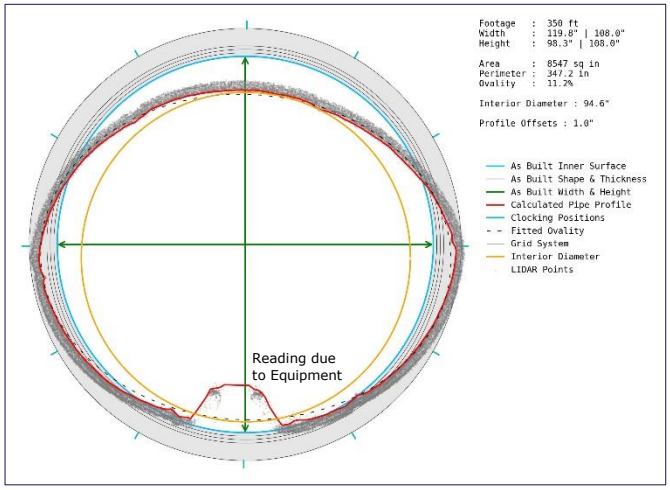


Figure 3-1 Cross Section Reading - 350-ft

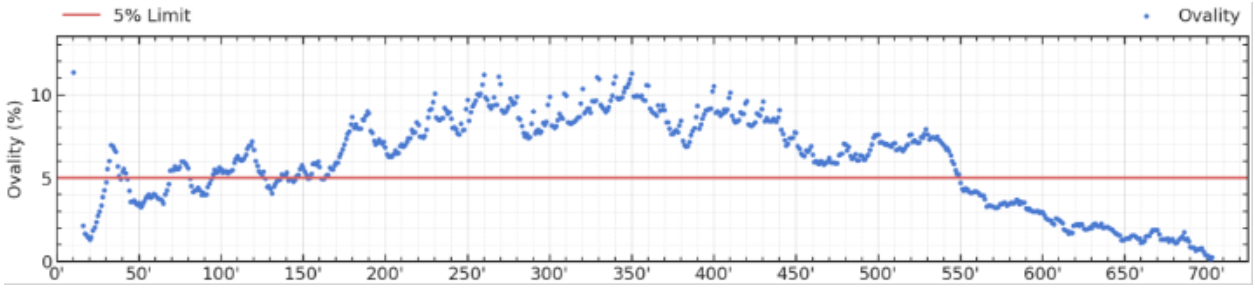


Figure 3-2 Ovality Graph

3.2 Condition Assessment – Horizontal/Vertical Layout

The 3D LiDAR scan data was processed to develop an overall model of the sewer piping to evaluate its horizontal/vertical alignments. This data shows that the piping contains four horizontal deflections, all less than 3-degrees with greatest near the inlet as shown in **Figure 3-3**. Per the record documents included in **Attachment B**, the culvert was constructed with a minor skew which is observed in the inspection. On the other hand, the vertical alignment is consistent except for a 5.5-degree deflection observed ~30-ft from the inlet, see **Figure 3-4**. From the inlet, the alignment is observed to be steep until it transitions to a lesser consistent slope to the outlet. This characteristic is assumed to have been part of the culvert's original construction.

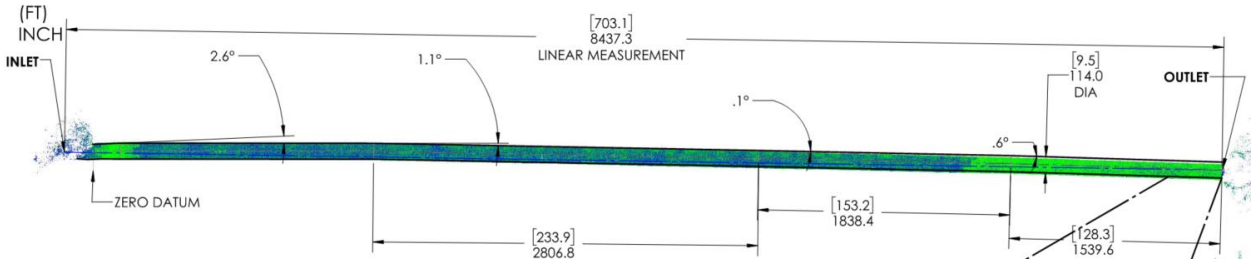


Figure 3-3 Horizontal Alignment Overview

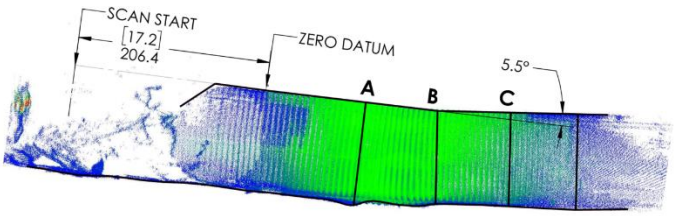


Figure 3-4 Vertical Alignment Deflection – Inlet

3.3 Condition Assessment Summary

Overall, the culvert piping was observed with continuous ovality over 5% and a vertical alignment deflection near the inlet. Other defects observed include corrosion along the invert where locations missing material occur exposing the underlying soils. These characteristics and deficiencies will be accounted for in the selection of the rehabilitation method.

4 Next Steps

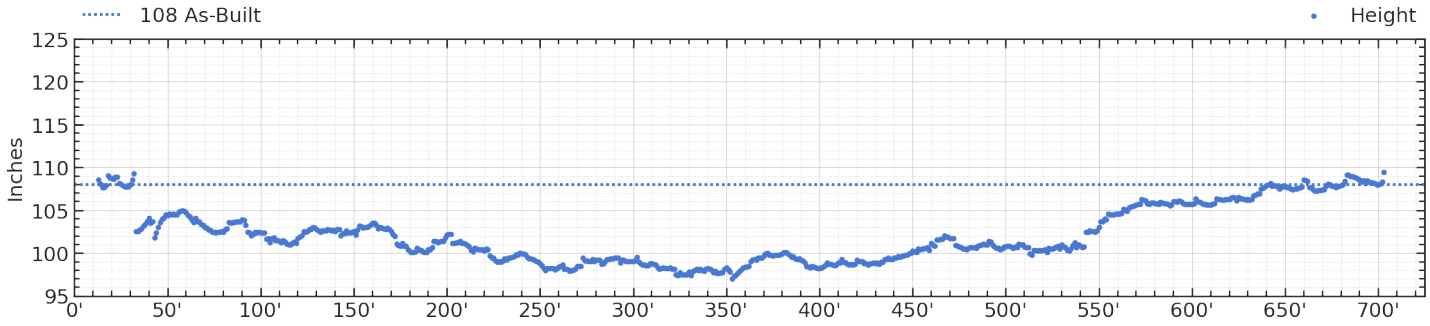
Going forward, a hydraulic analysis will be performed of the culvert and rehabilitation methods will be evaluated accounting for the deficiencies and characteristics noted above. The rehabilitation methods to be considered are Spray-Applied Pipe Liners (SAPL) and sliplining per ODOT Supplemental Specifications 833 and 837, respectively.

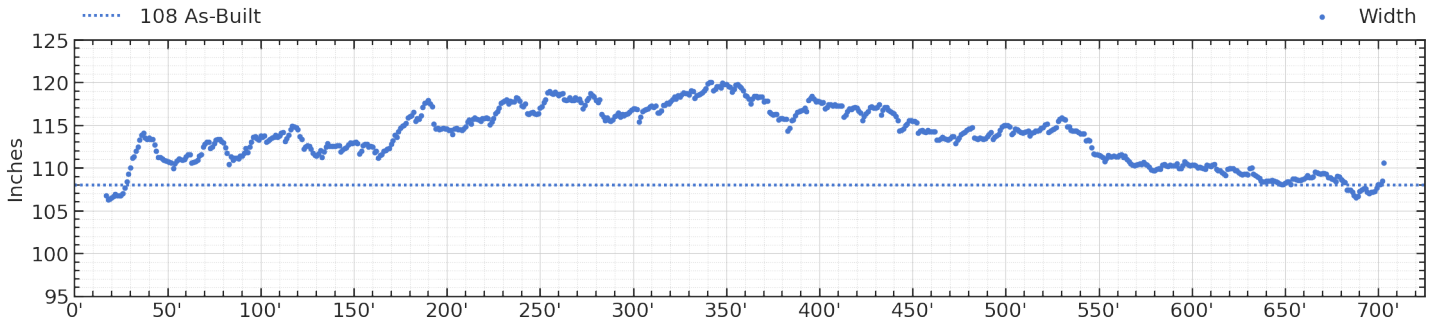
ATTACHMENT A – 3D LiDAR INSPECTION

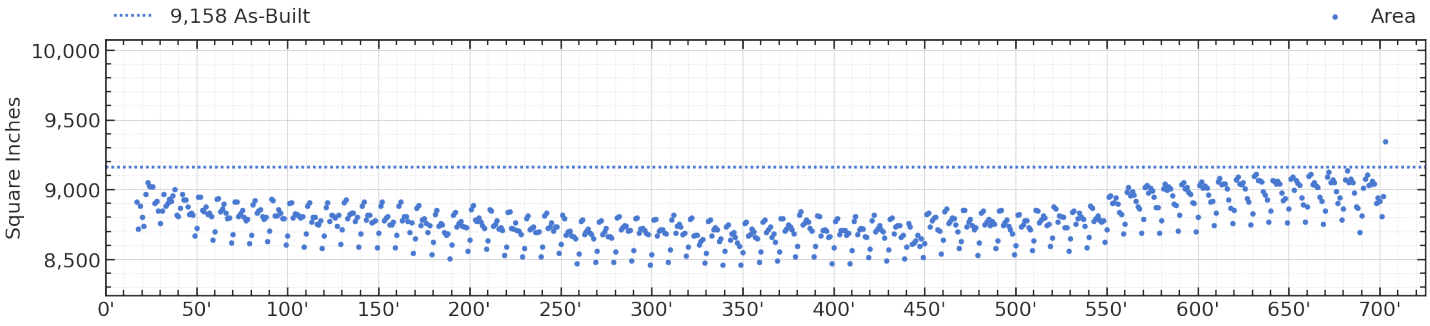
CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

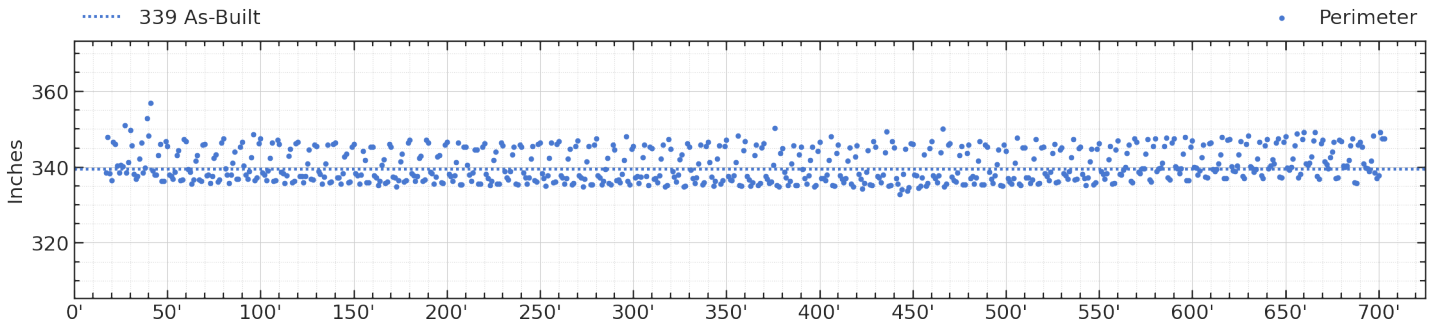
SFX-3D Condition Assessment Report
Inspection #1 : /

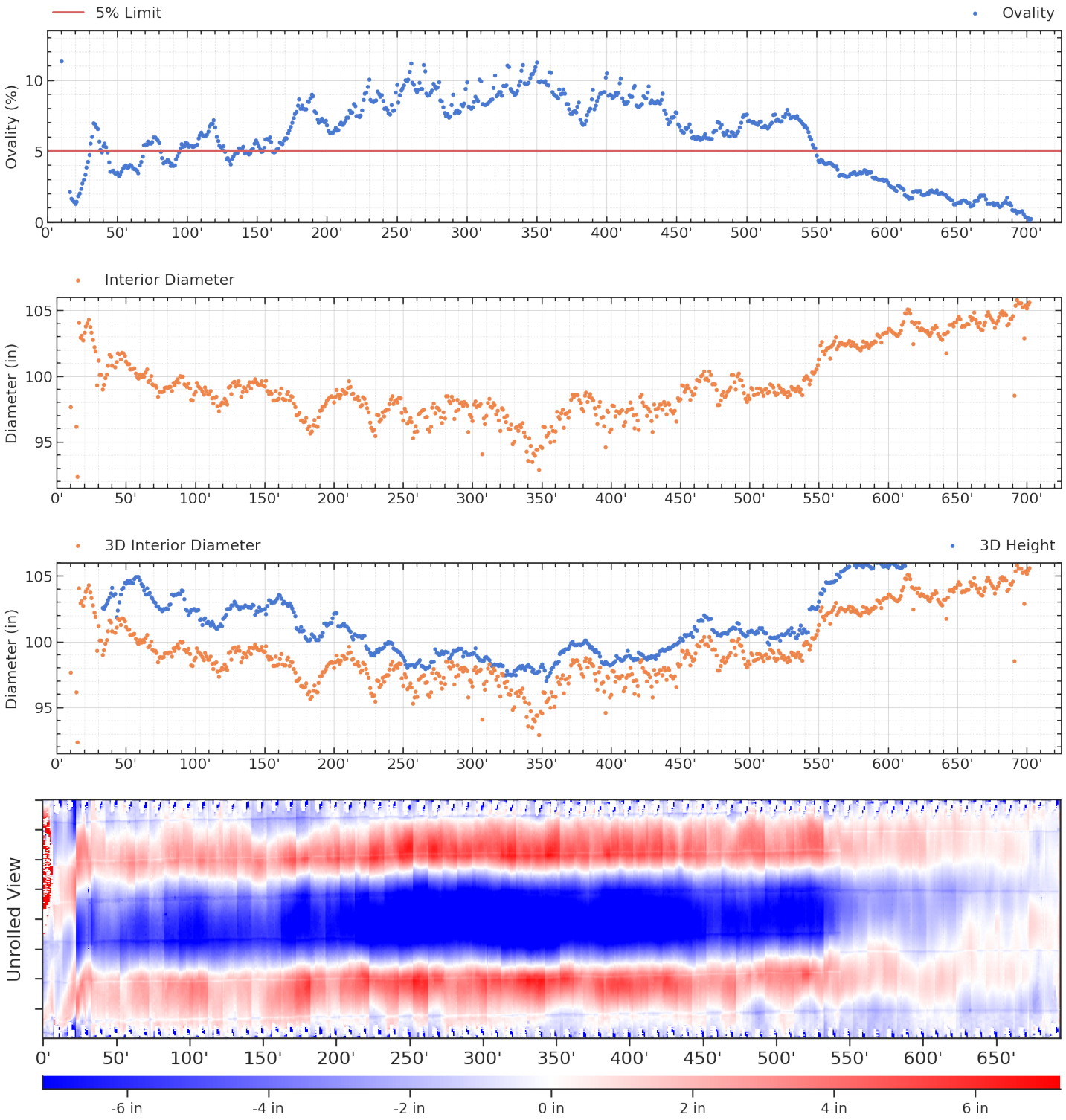
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in









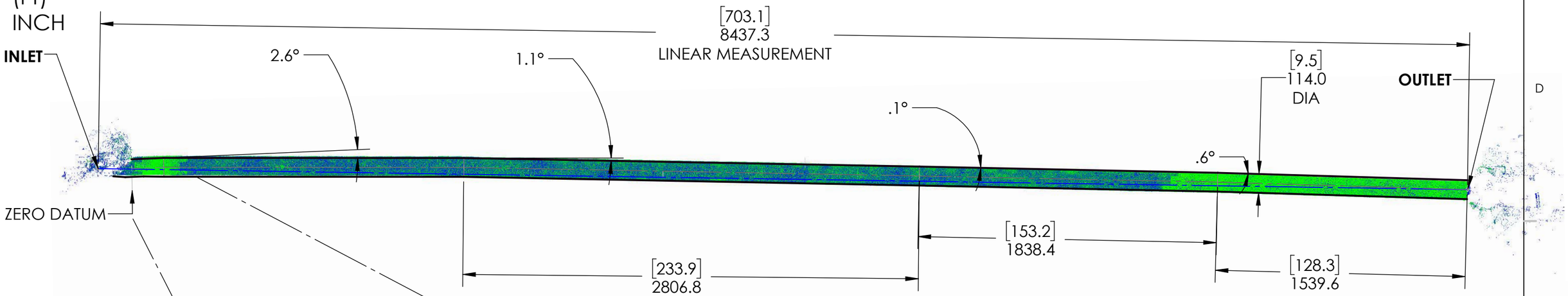

5% Limit
Ovality
Ovality (%)
0
5
10
0'
50'
100'
150'
200'
250'
300'
350'
400'
450'
500'
550'
600'
650'
700'
Interior Diameter
Diameter (in)
95
100
105
3D Interior Diameter
3D Height
Unrolled View
-6 in
-4 in
-2 in
0 in
2 in
4 in
6 in

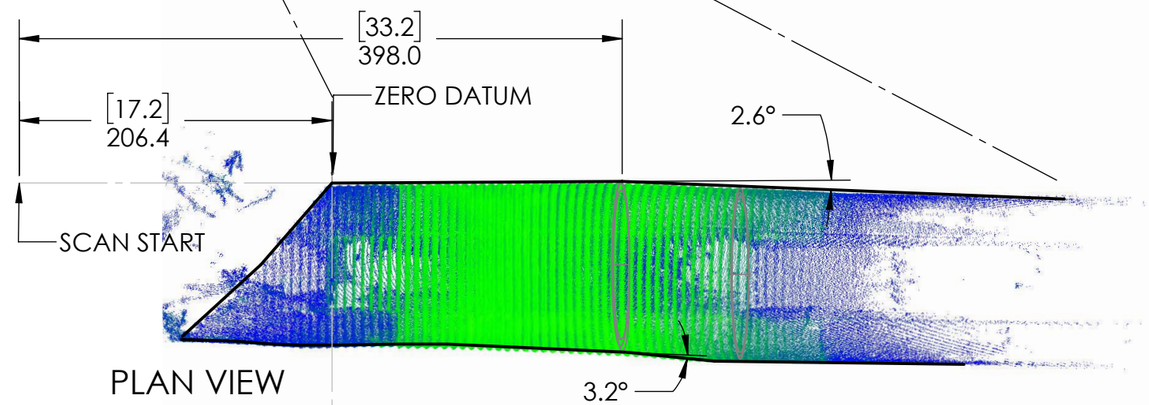
Pipe Metrics

Metric	Minimum	Maximum	Average	Standard Deviation
Height	97.0 in	109.3 in	101.8 in	3.1 in
Width	106.5 in	120.1 in	114.0 in	3.2 in
Area	8,458 in²	9,136 in²	8,779 in²	139 in²
Perimeter	332.8 in	356.9 in	340.3 in	4.4 in
Ovality	0.6%	11.2%	6.2%	2.6%
Interior Diameter	89.4 in	105.8 in	99.3 in	2.6 in

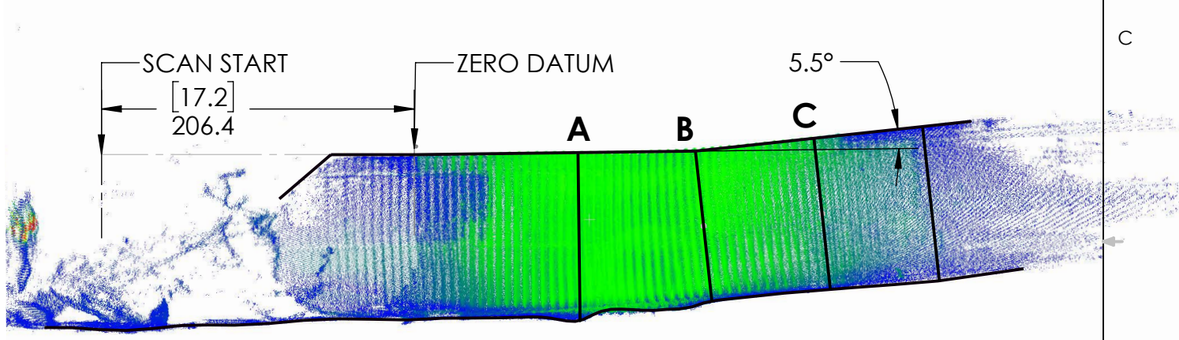
ALIGNMENT REPORT

(FT)
INCH

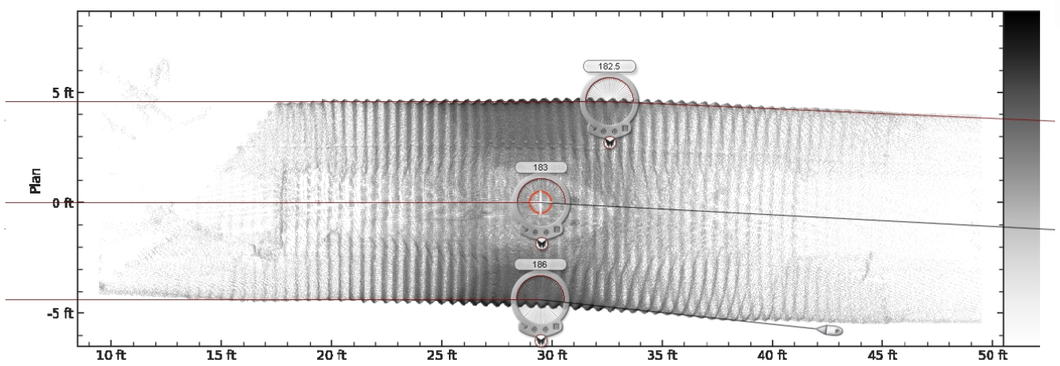


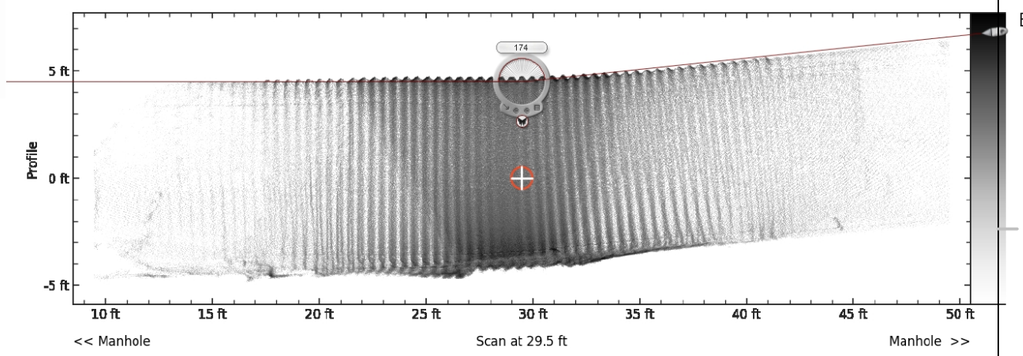


PLAN VIEW



PROFILE VIEW





RUN LENGTH
703.1 FT

CUES ORLANDO, FLORIDA

FSD24-1575

B	DWG NO INLET-OUTLET	01
		SHEET 1 OF 3

(FT)
INCH

[703.1]
8437.3
LINEAR MEASUREMENT

INLET

2.6°

1.1°

.1°

.6°

[9.5]
114.0
DIA

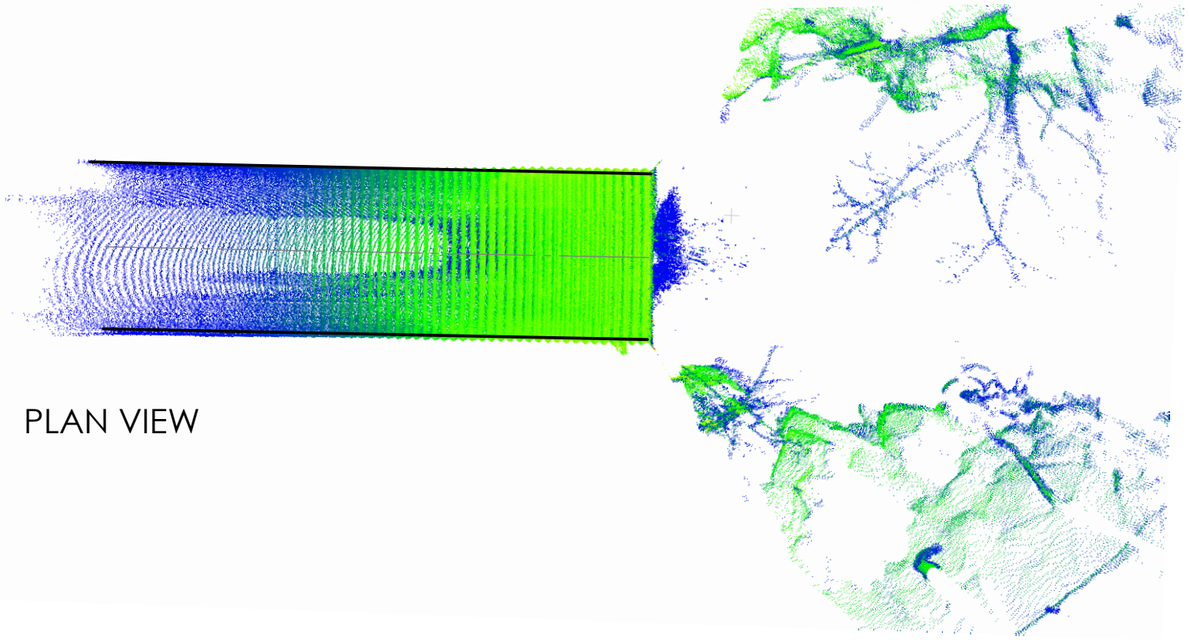
OUTLET

ZERO DATUM

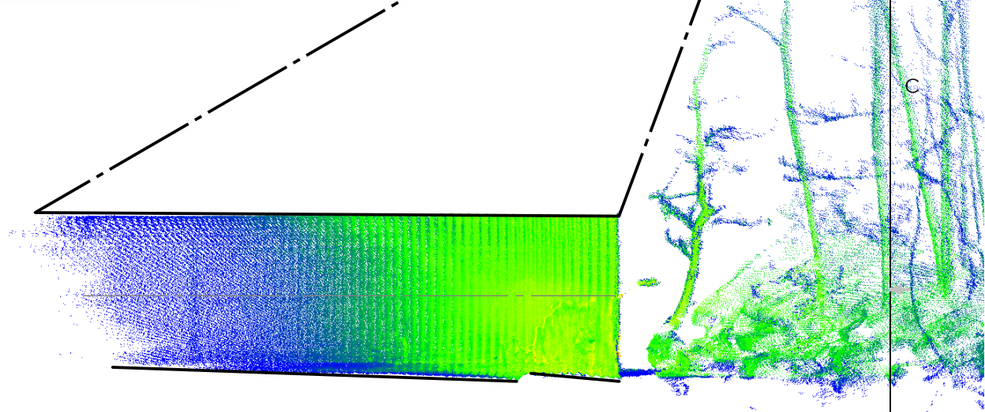
[233.9]
2806.8

[153.2]
1838.4

[128.3]
1539.6



PLAN VIEW



PROFILE VIEW

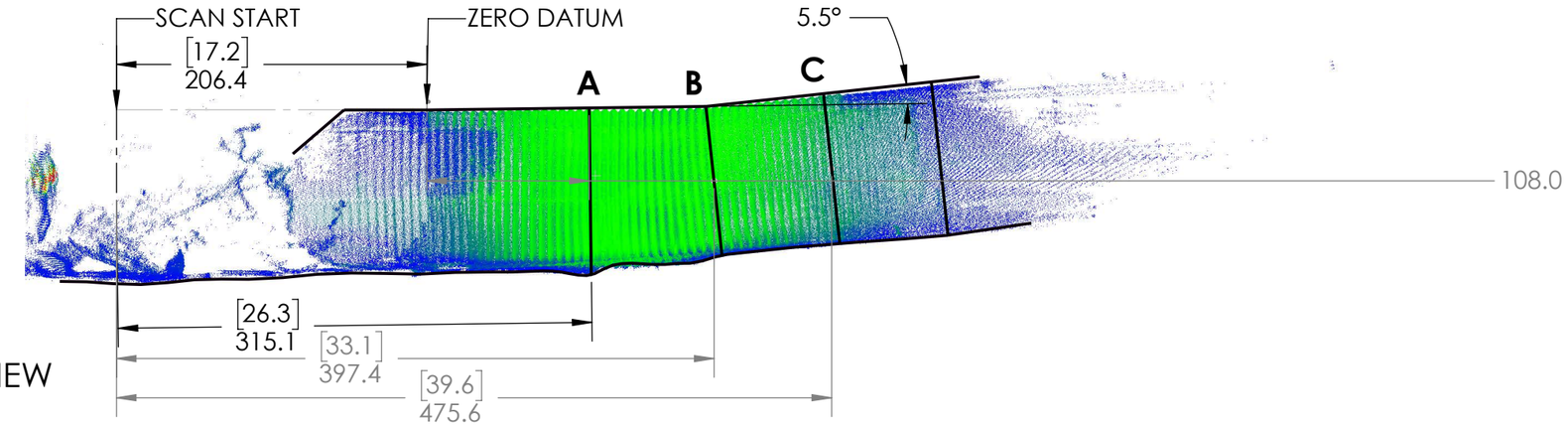
RUN LENGTH
703.1 FT

CUES ORLANDO, FLORIDA

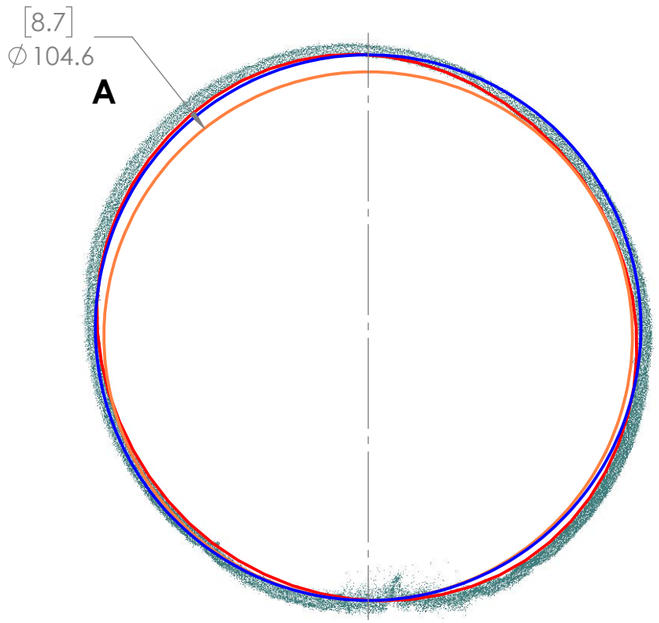
FSD24-1575

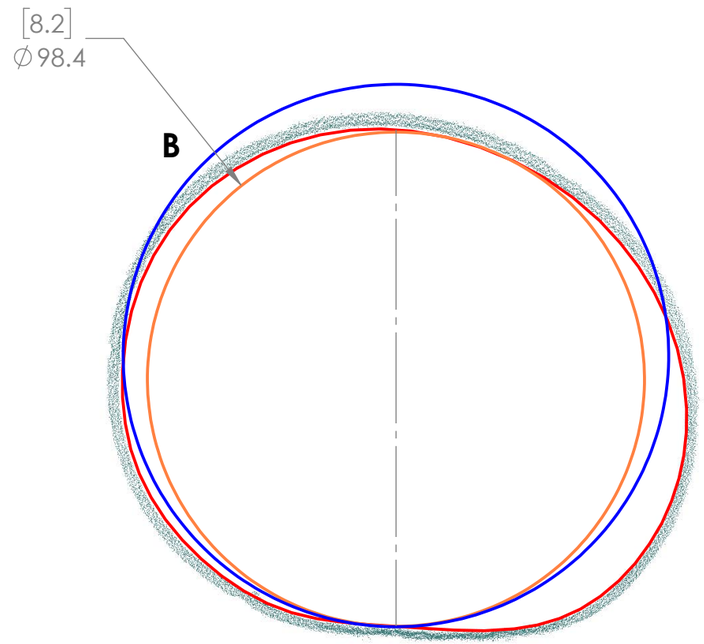
B	DWG NO INLET-OUTLET	01
		SHEET 2 OF 3

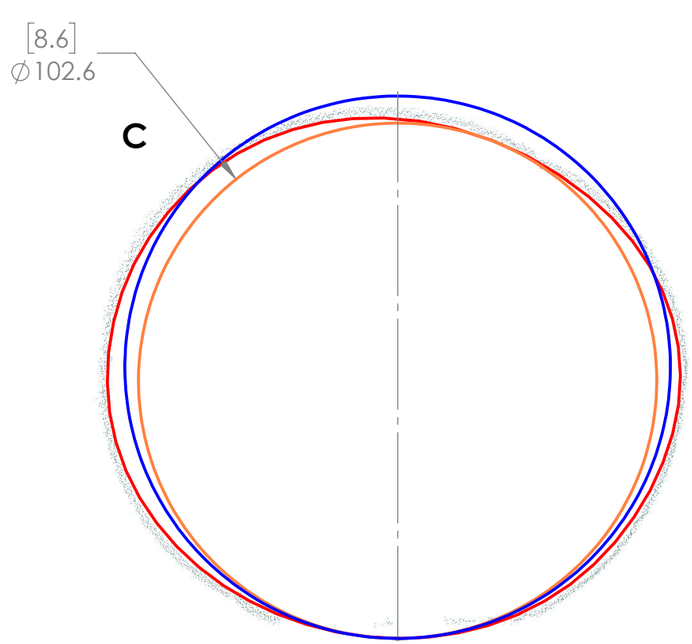
(FT)
INCH



PROFILE VIEW







CUES ORLANDO, FLORIDA

FSD24-1575

B	DWG NO INLET-OUTLET	01

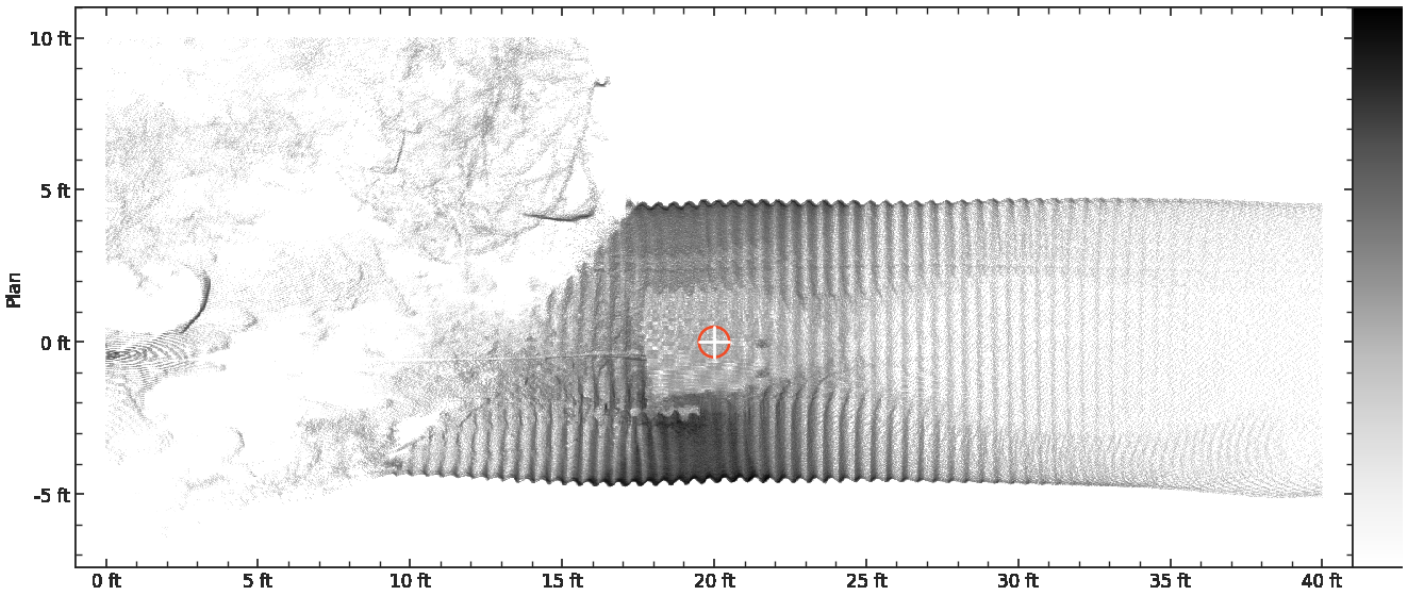
SHEET 3 OF 3

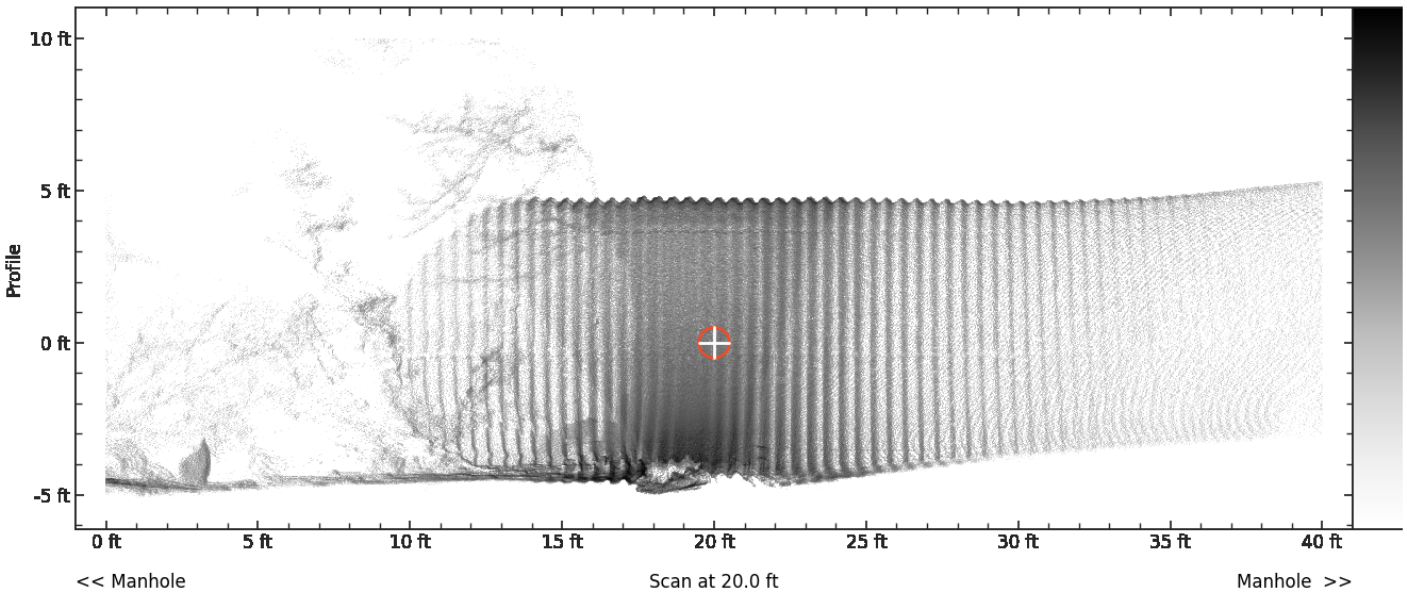
PLAN & PROFILE REPORT

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 20 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in

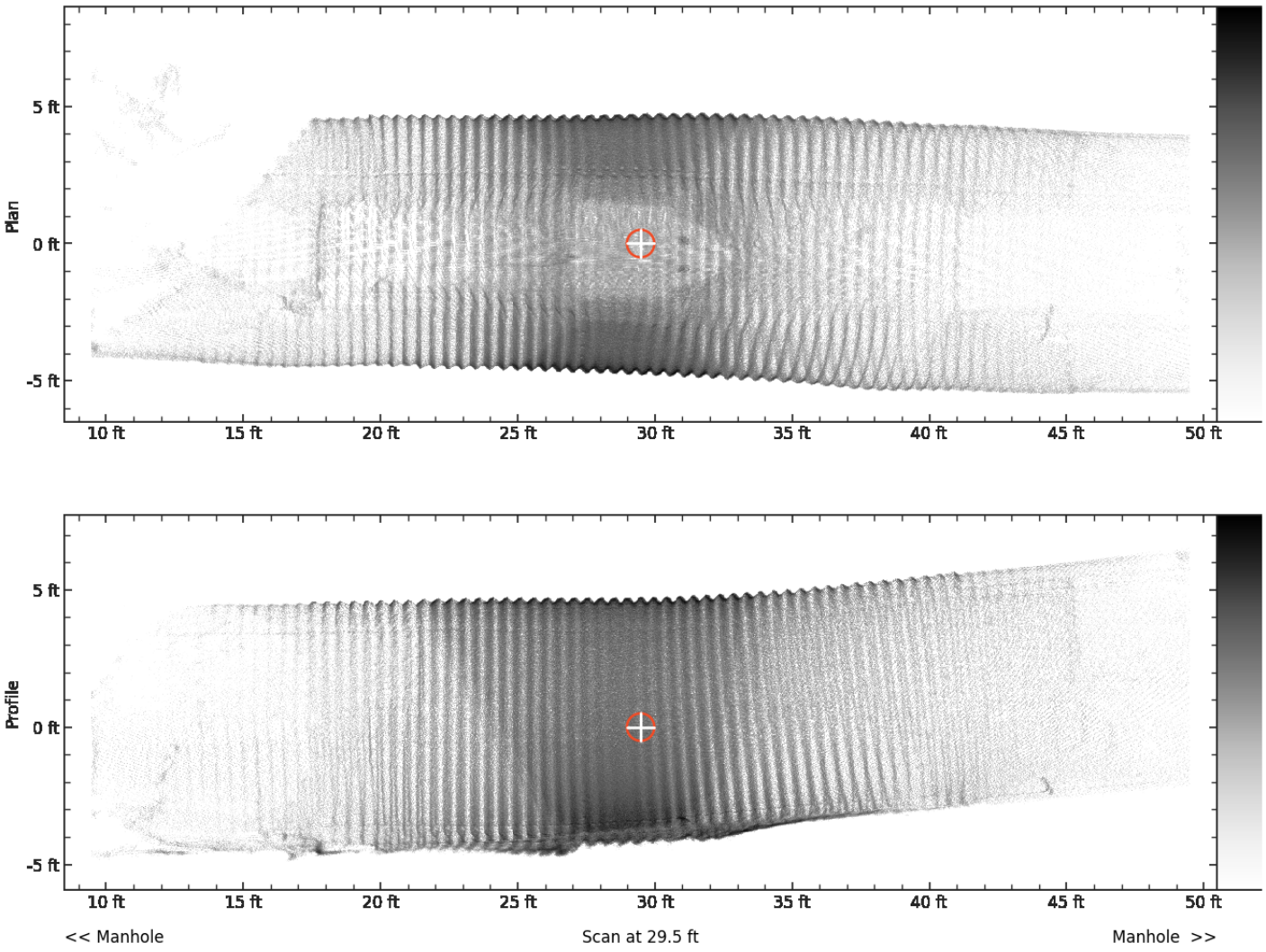




CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 29 ft

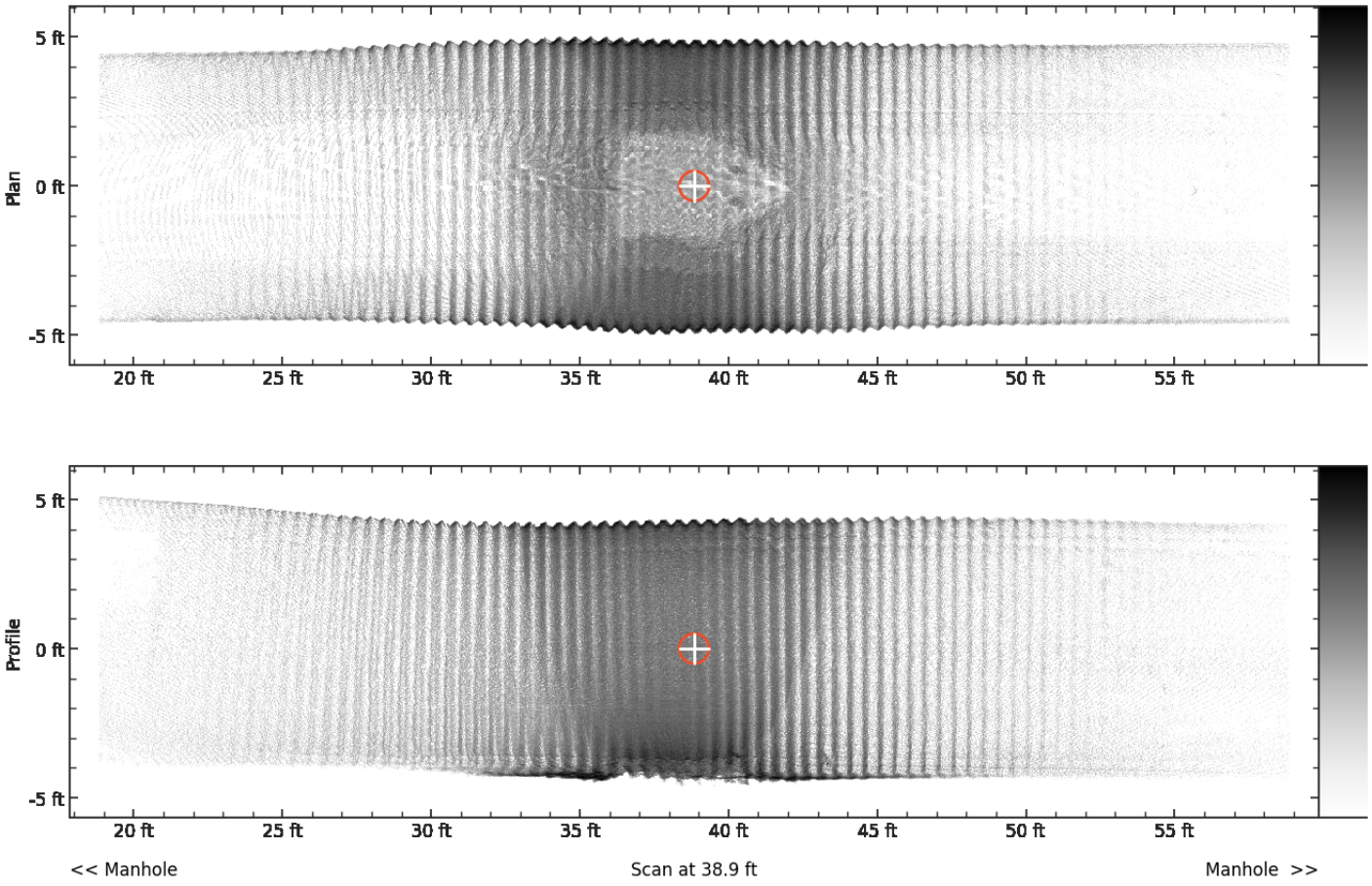
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 38 ft

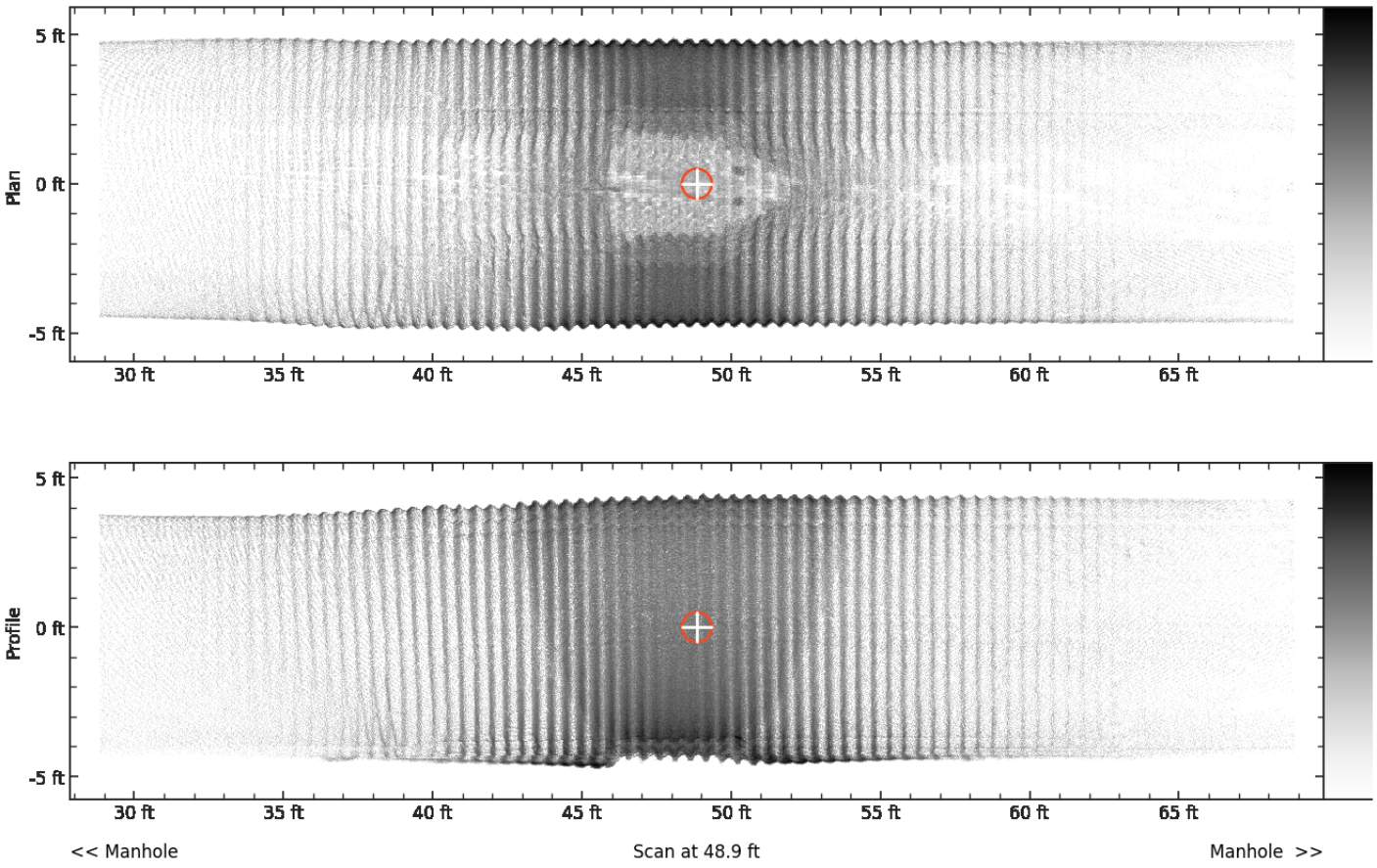
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 48 ft

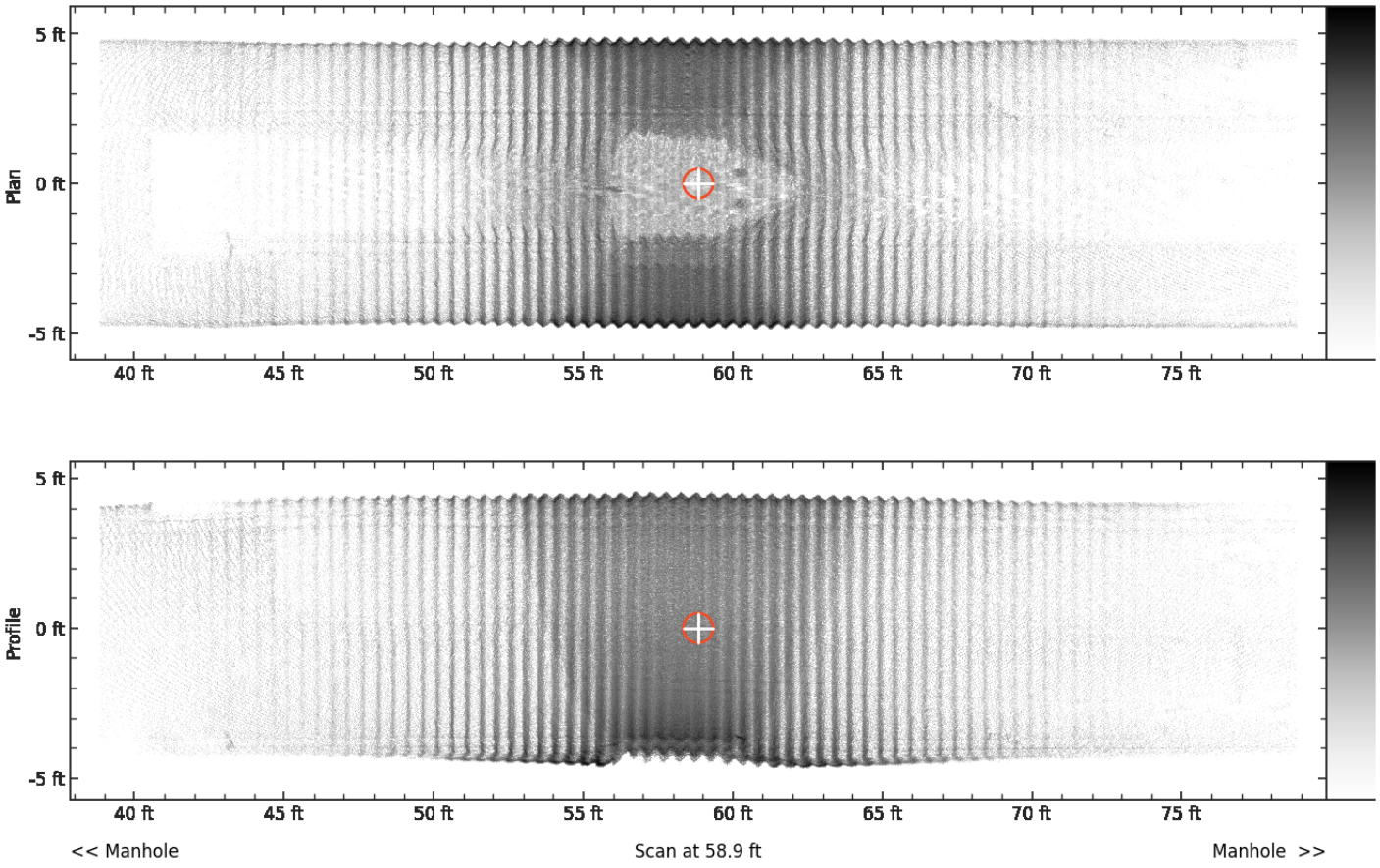
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 58 ft

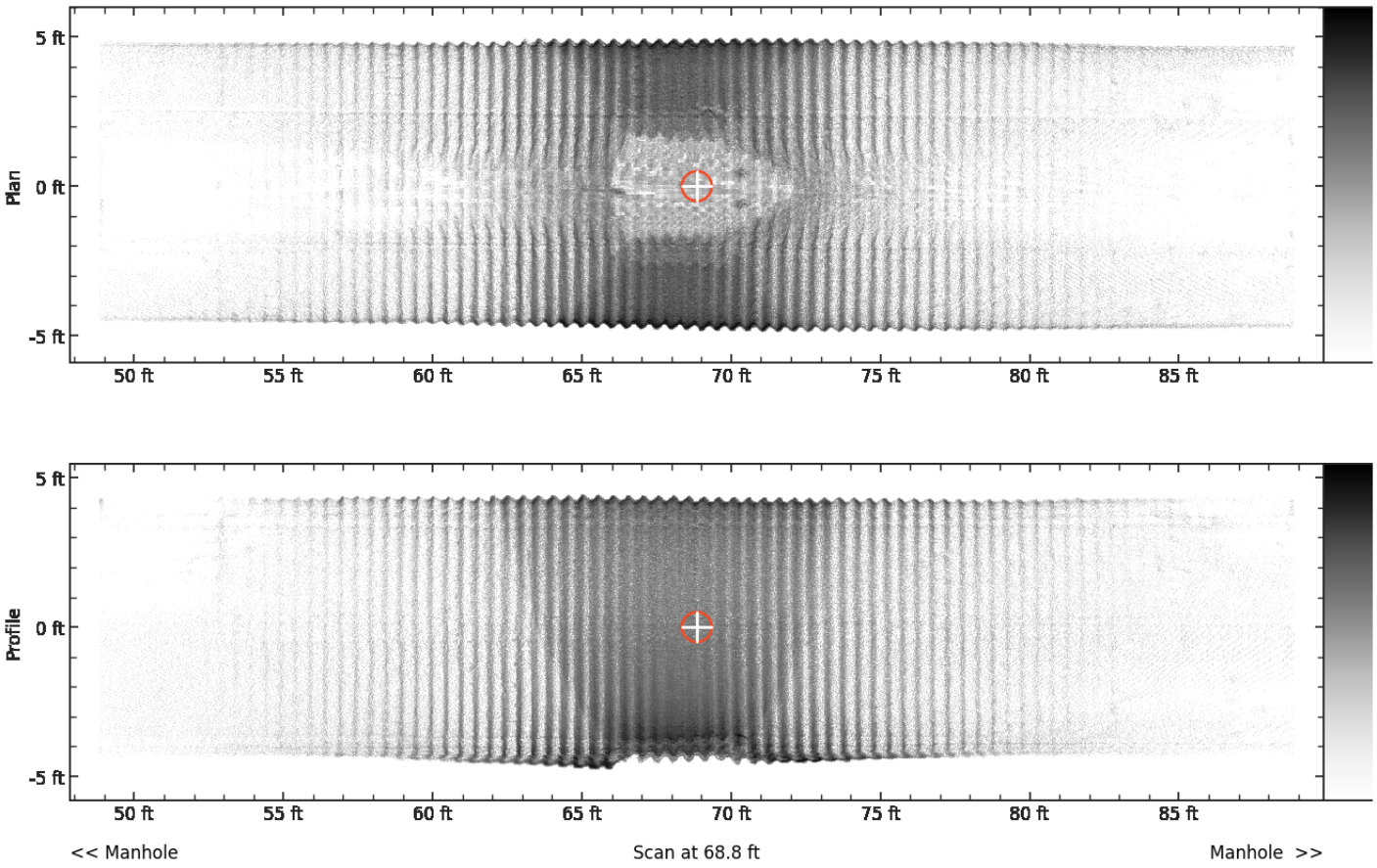
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 68 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 78 ft

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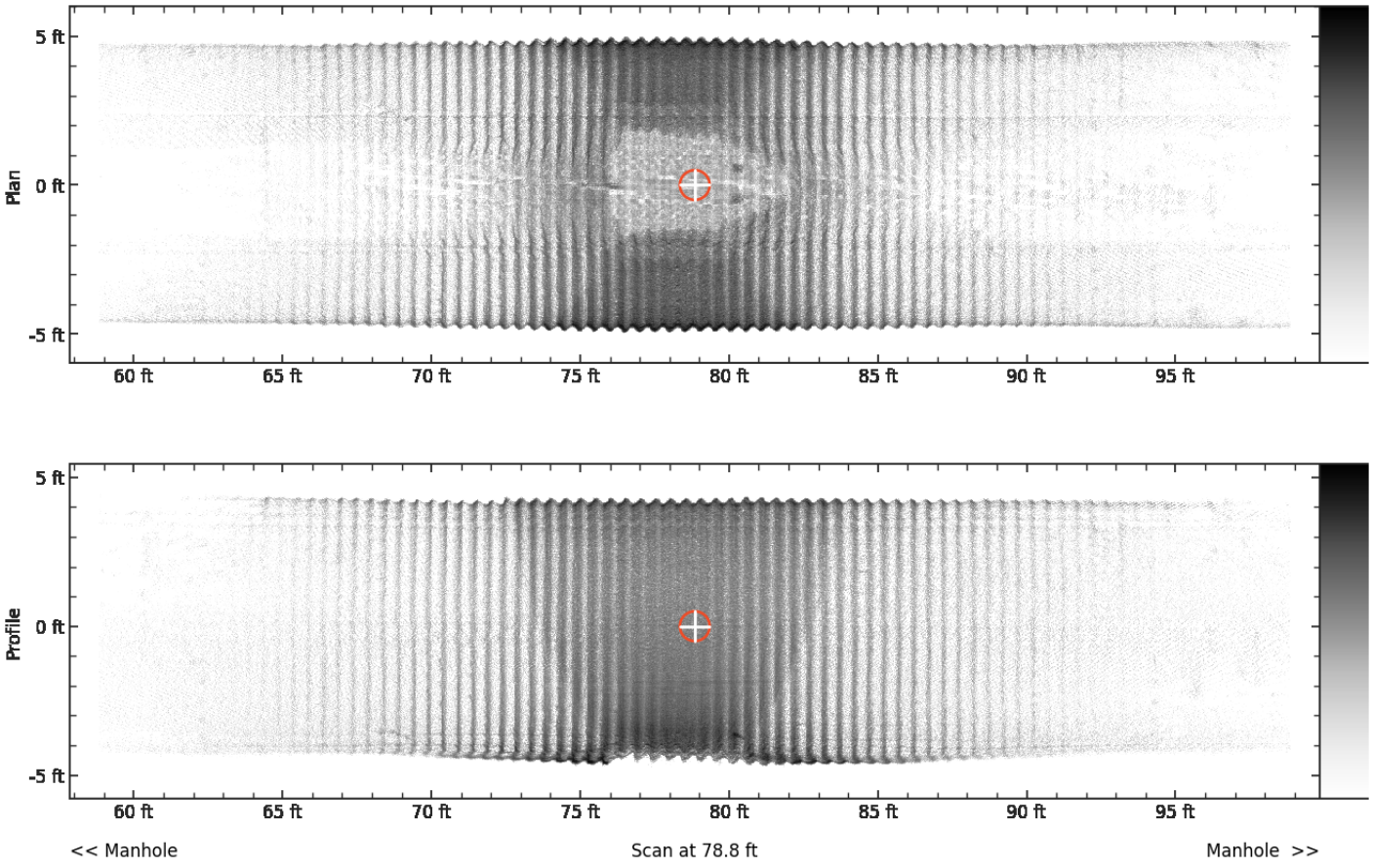
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 88 ft

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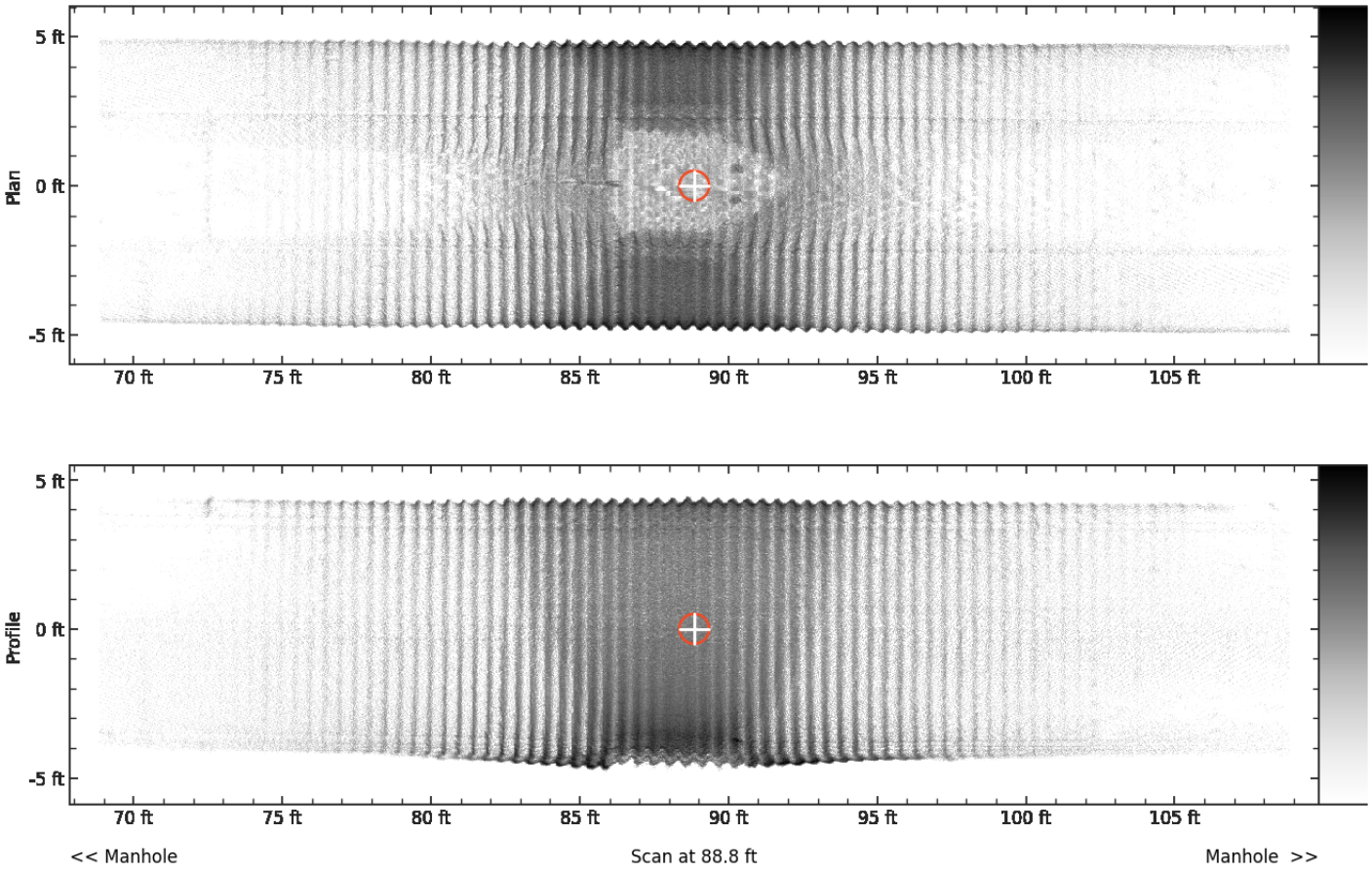
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
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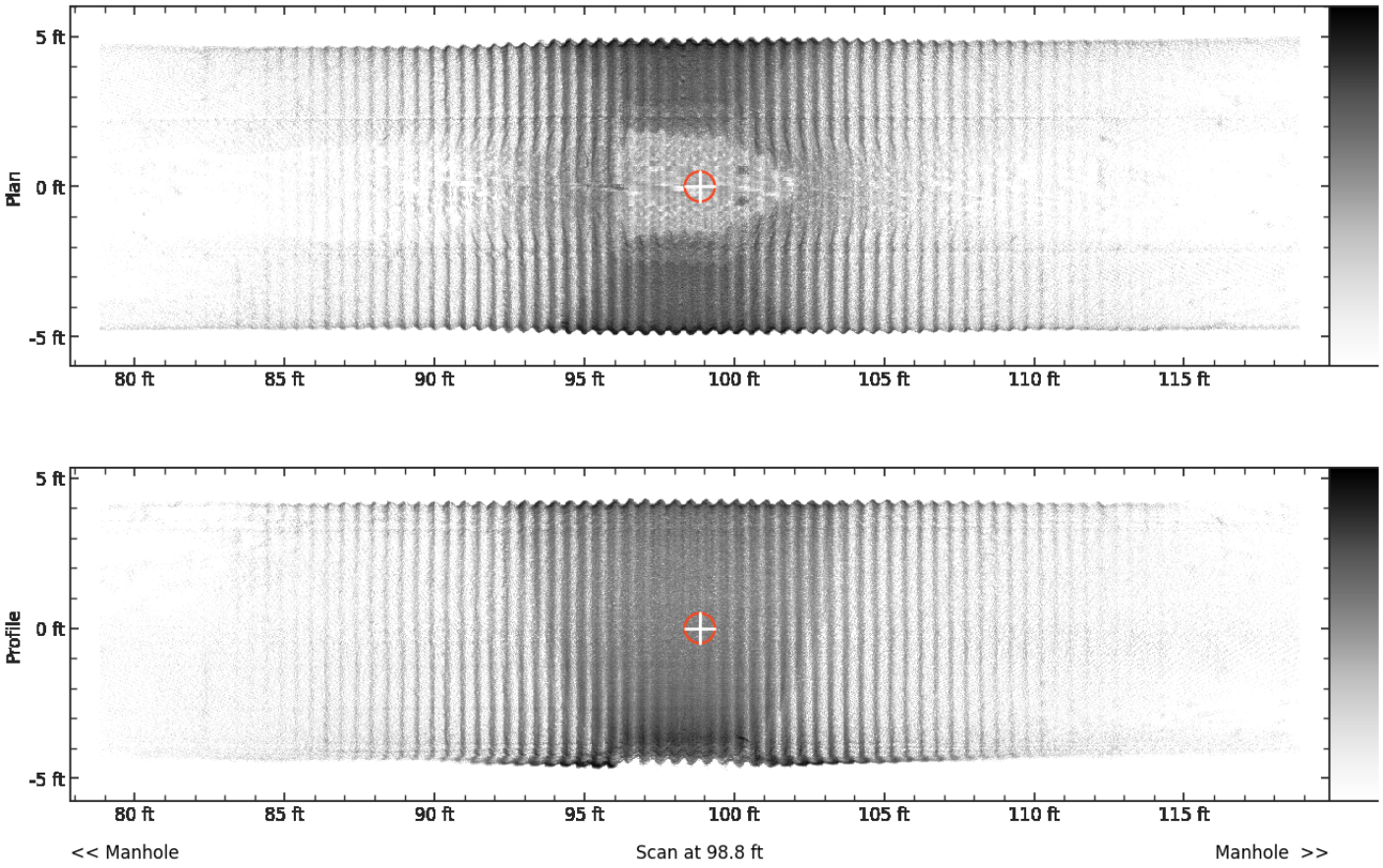
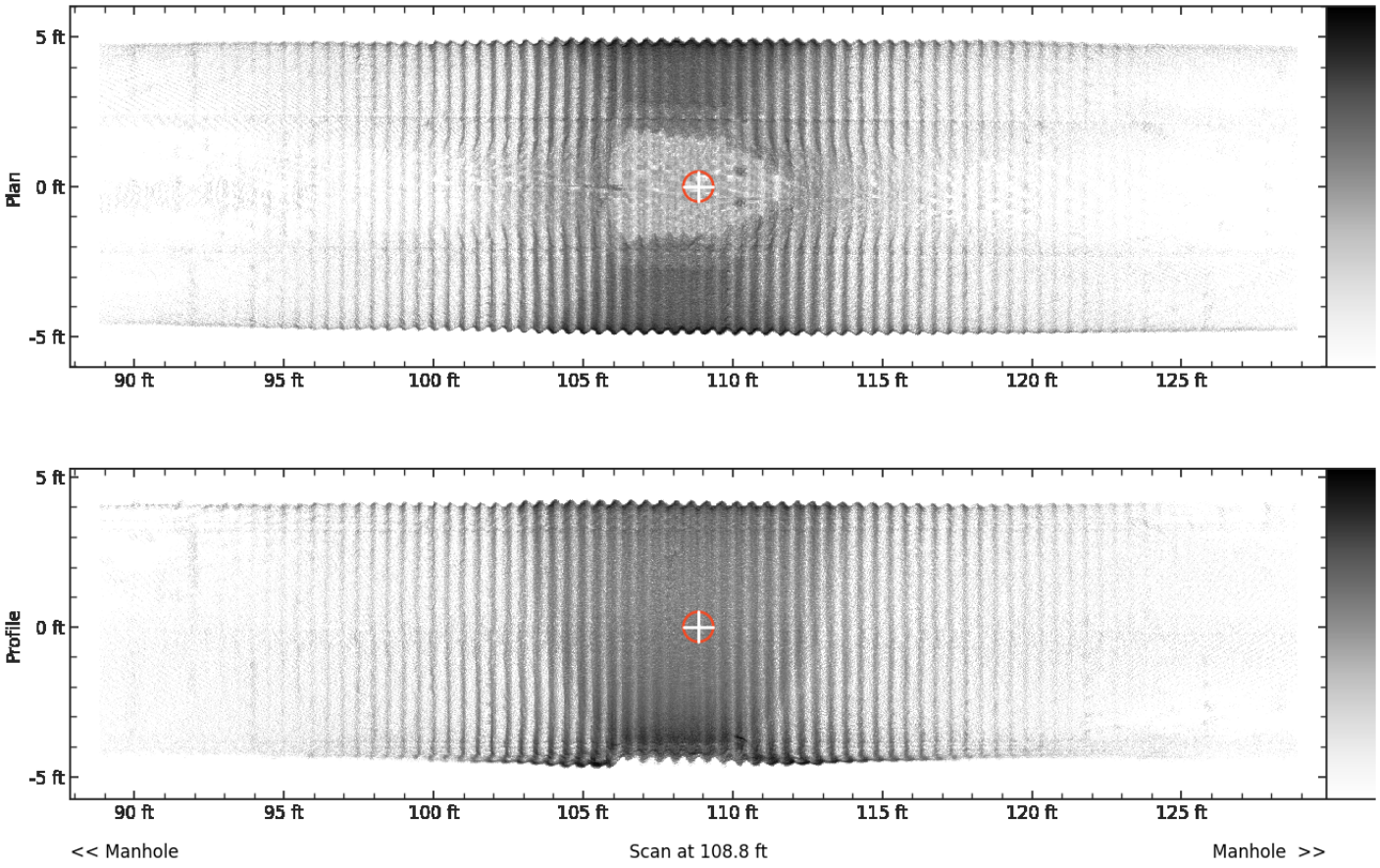
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 108 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 118 ft

Prepared Date	May 9, 2024	Shape	Circular
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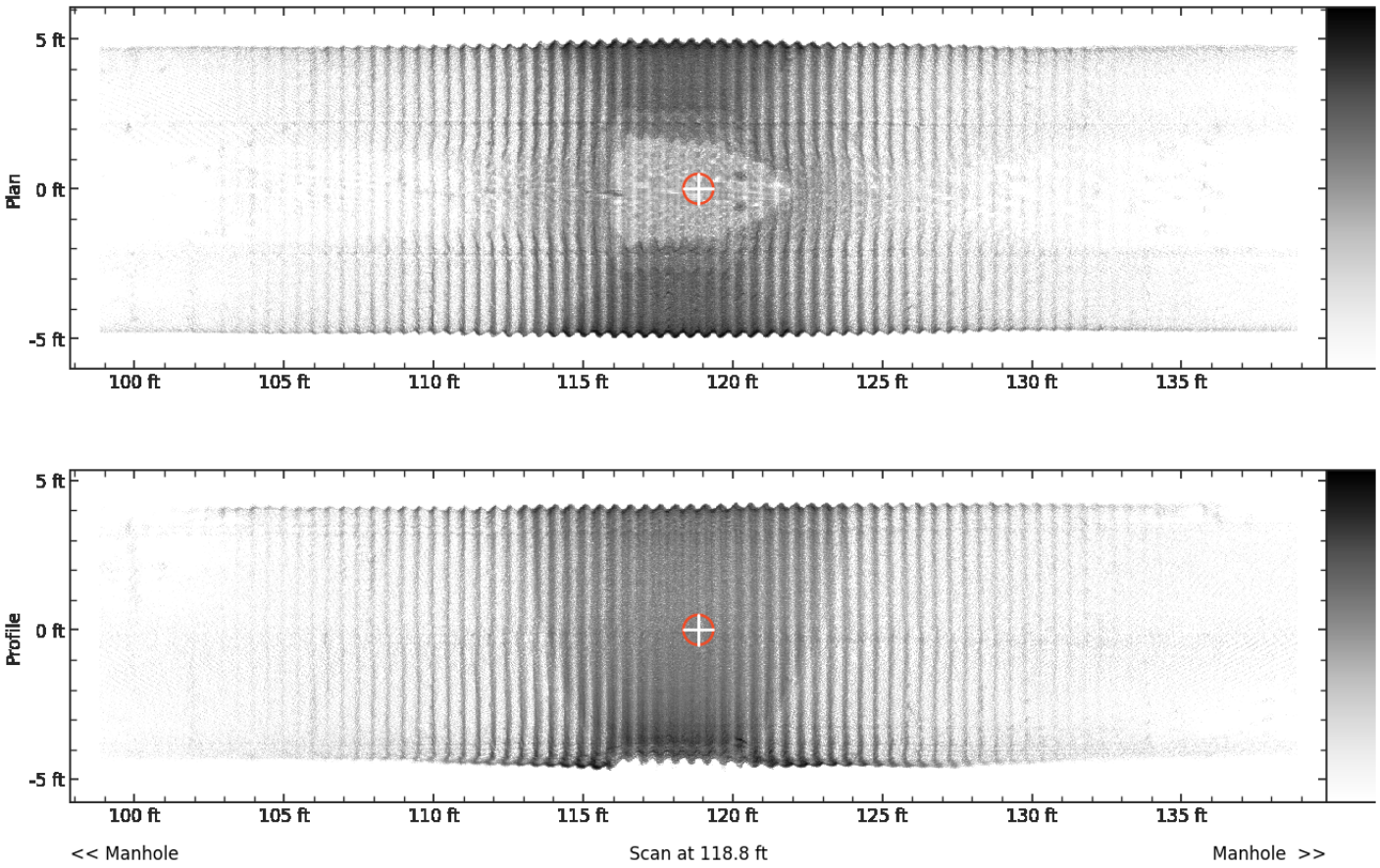
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 128 ft

Prepared Date	May 9, 2024	Shape	Circular
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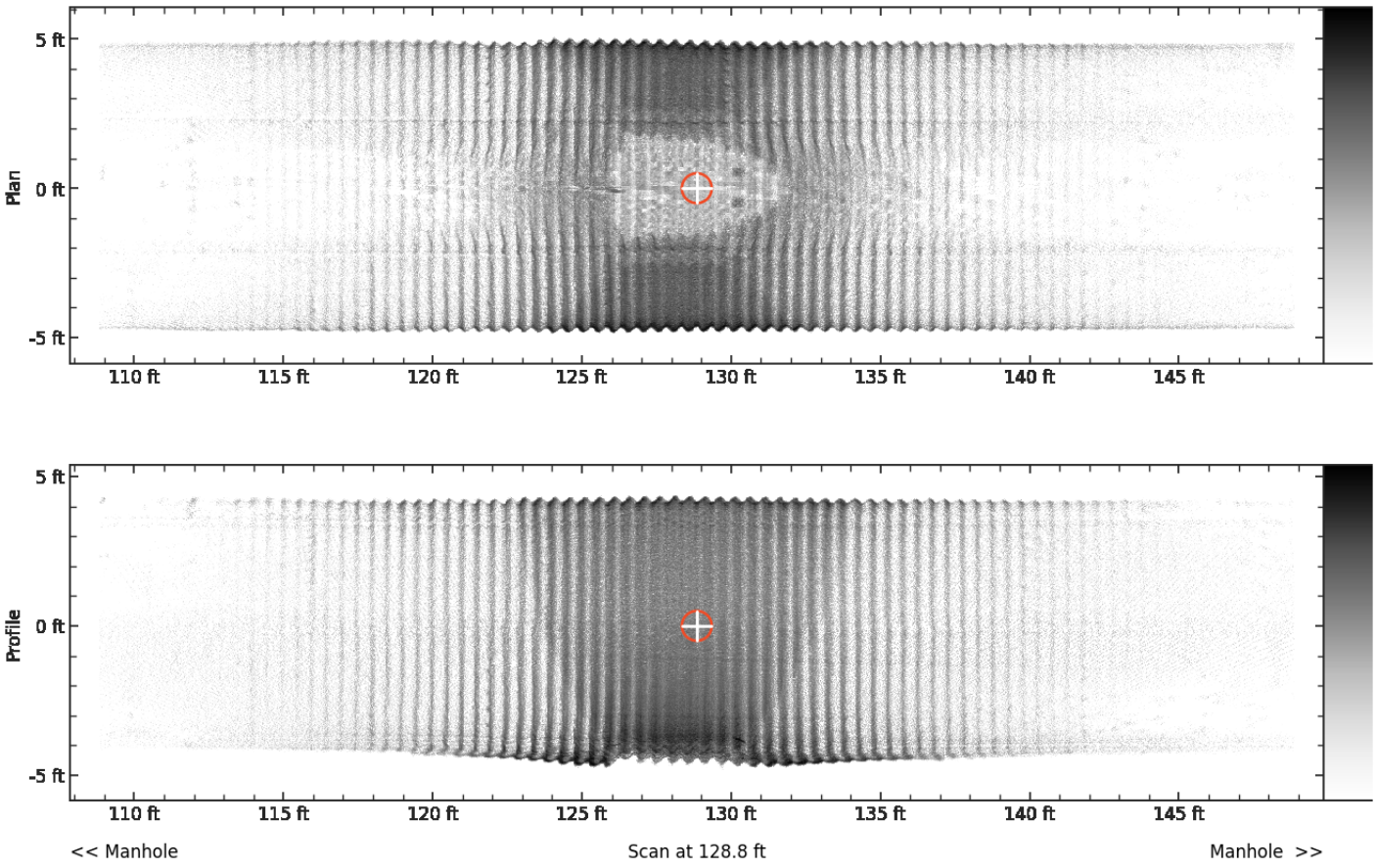
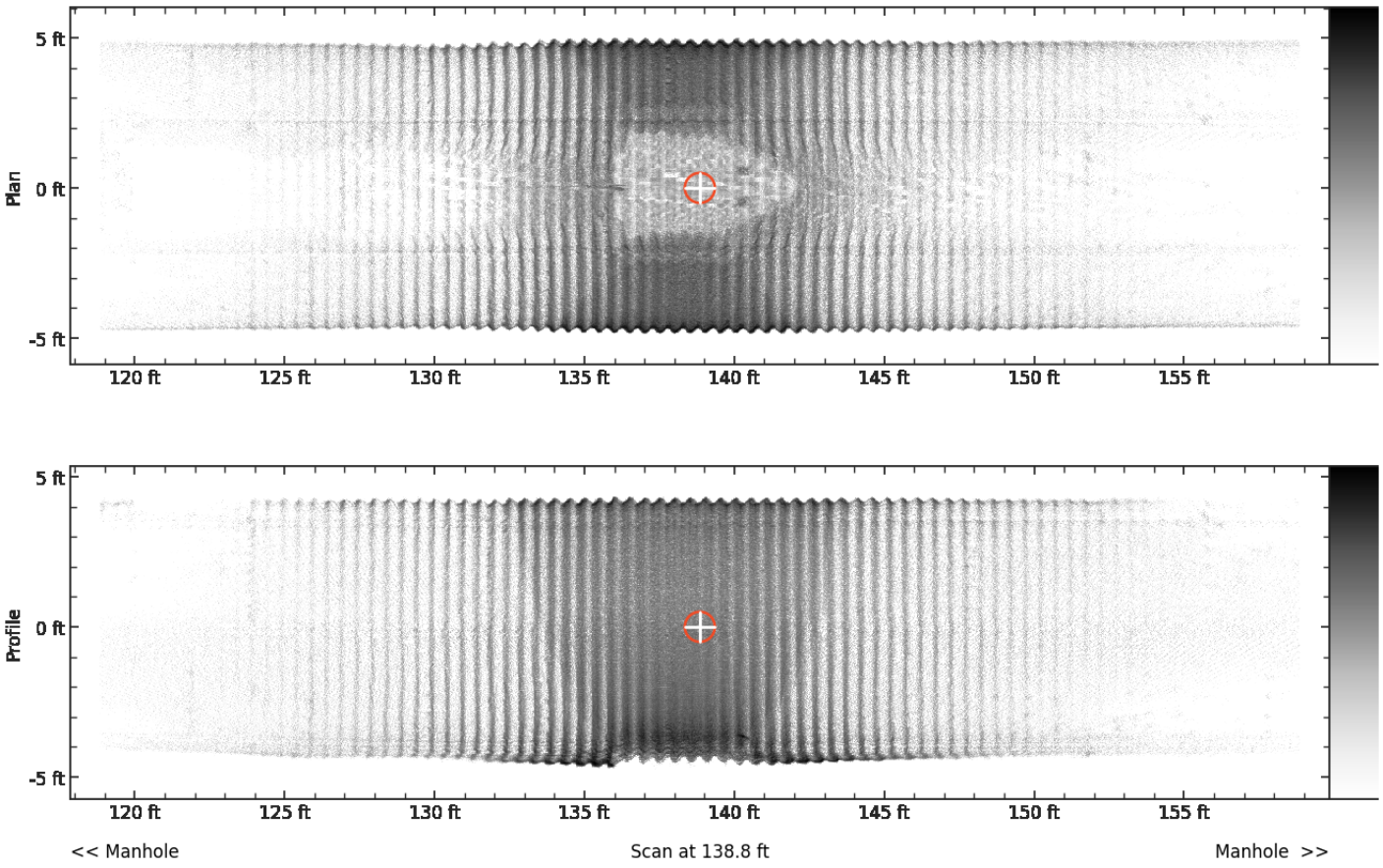
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 138 ft

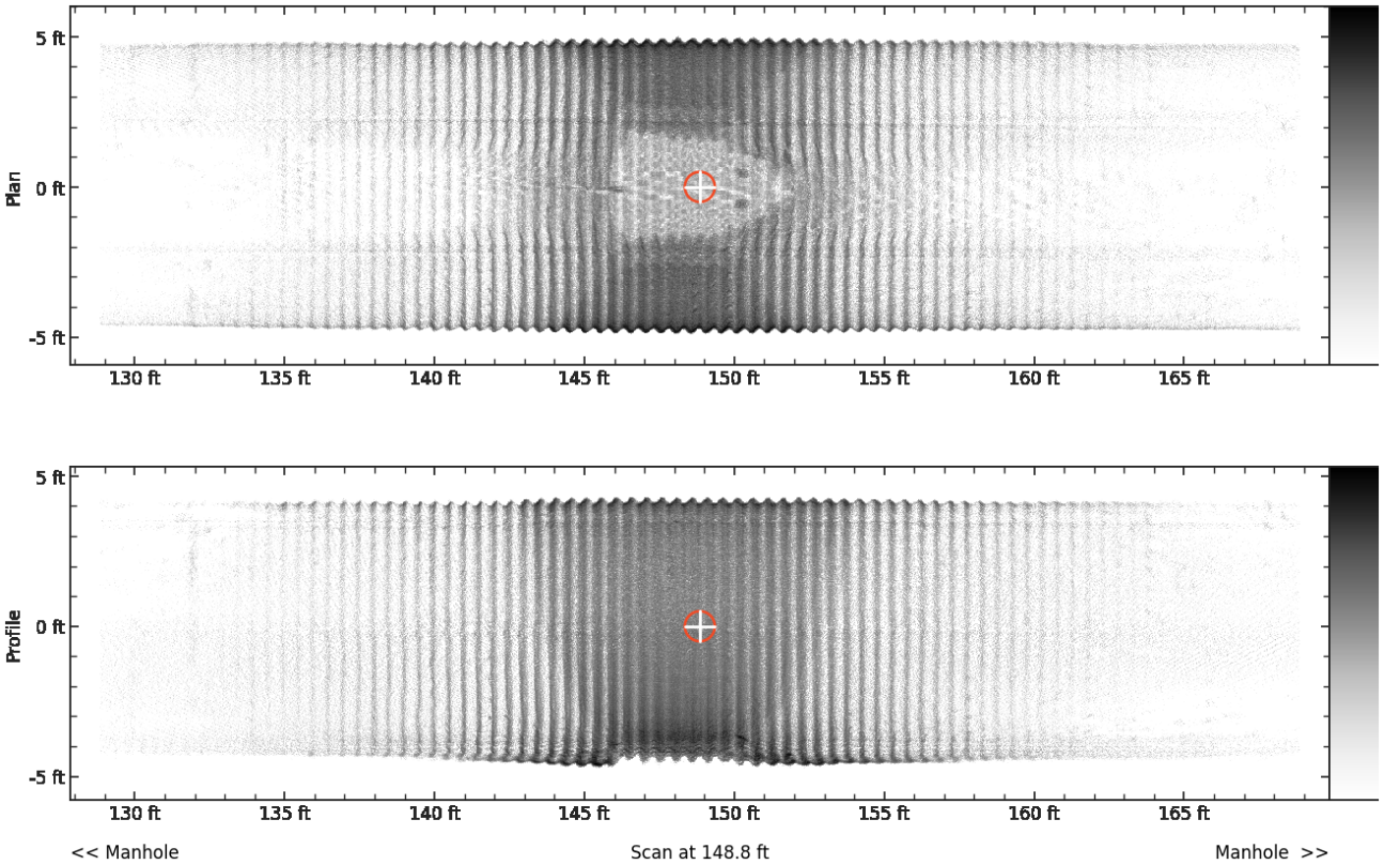
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 148 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 158 ft

Prepared Date	May 9, 2024	Shape	Circular
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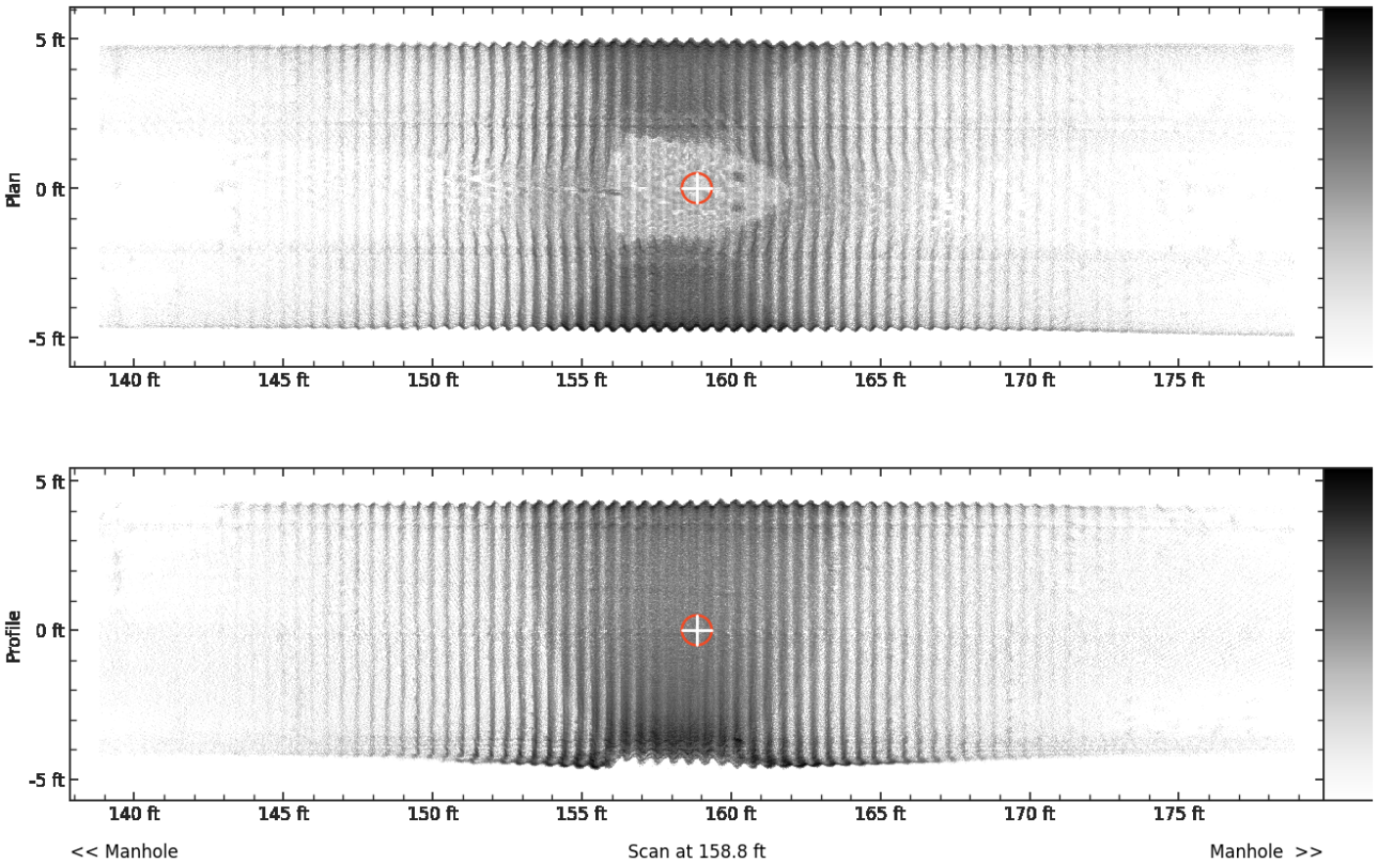
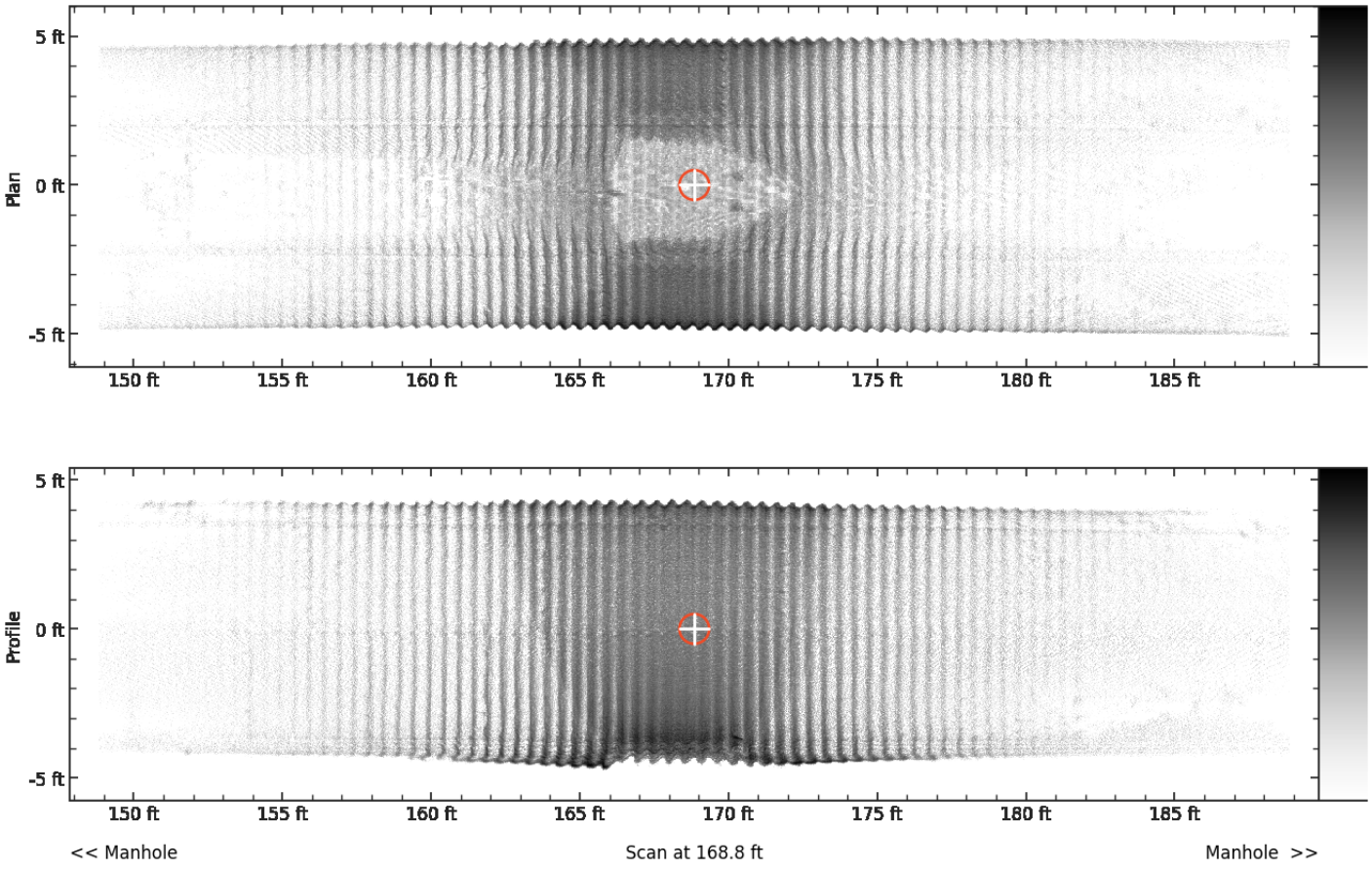
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 168 ft

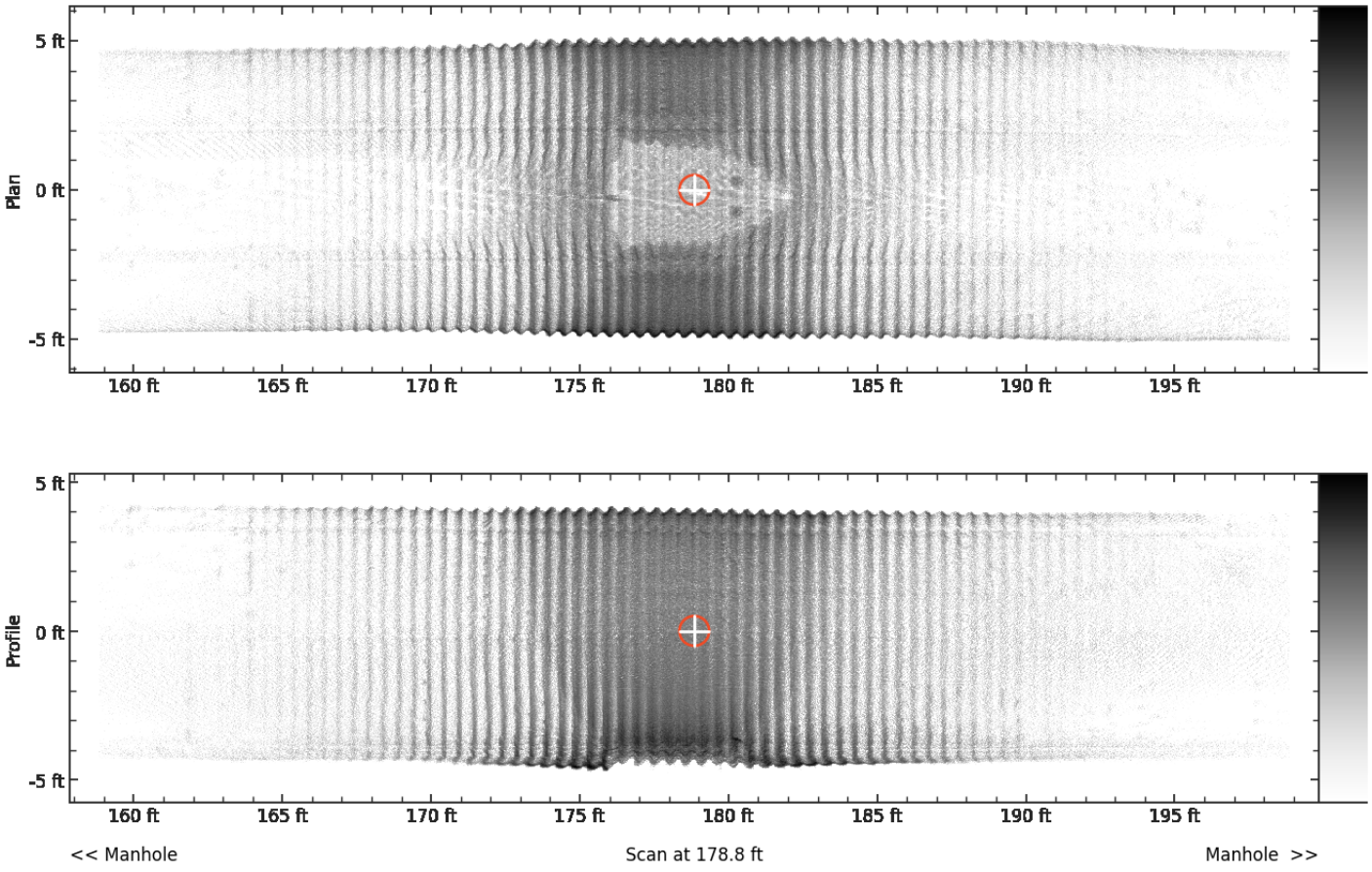
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 178 ft

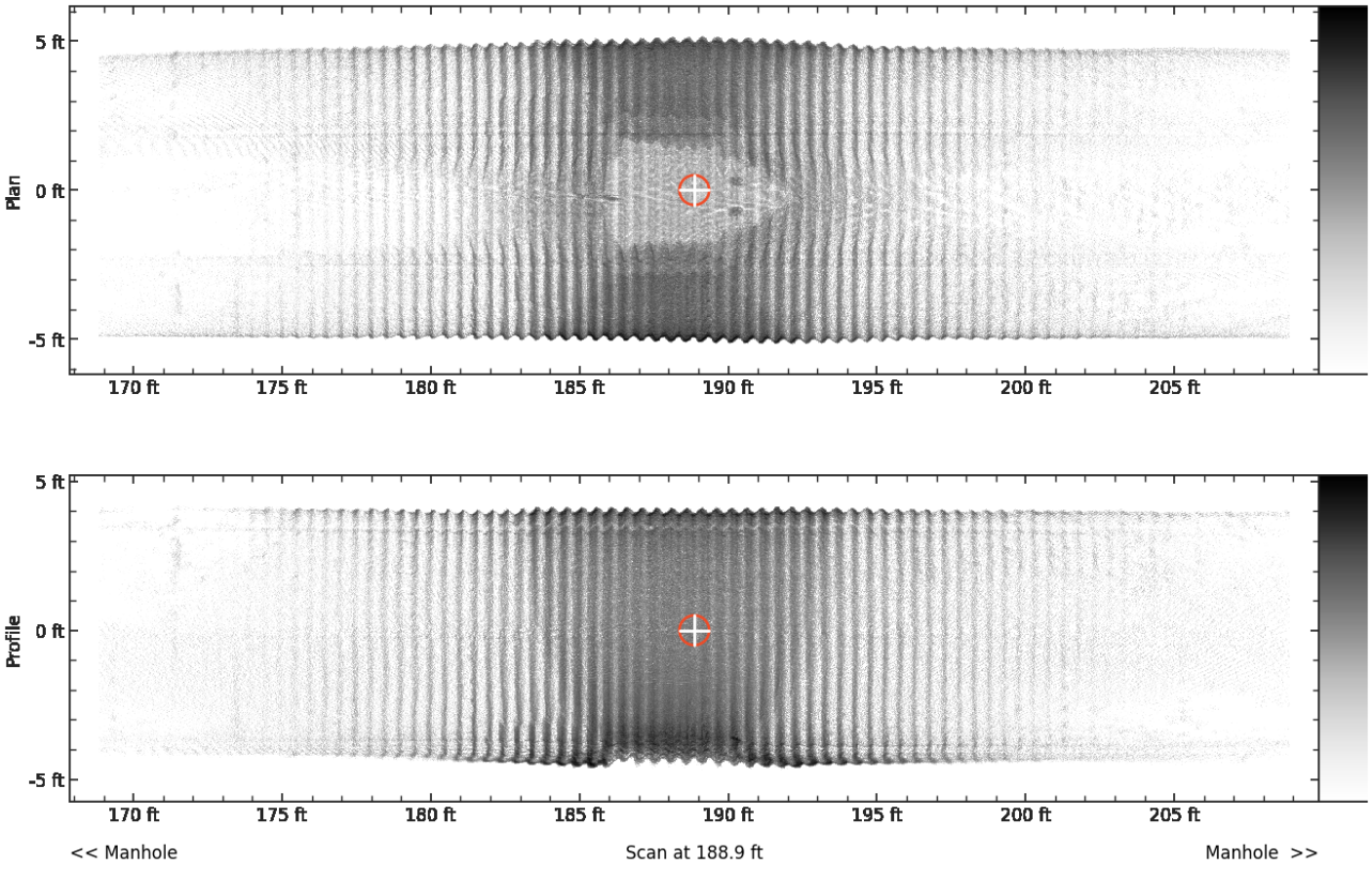
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 188 ft

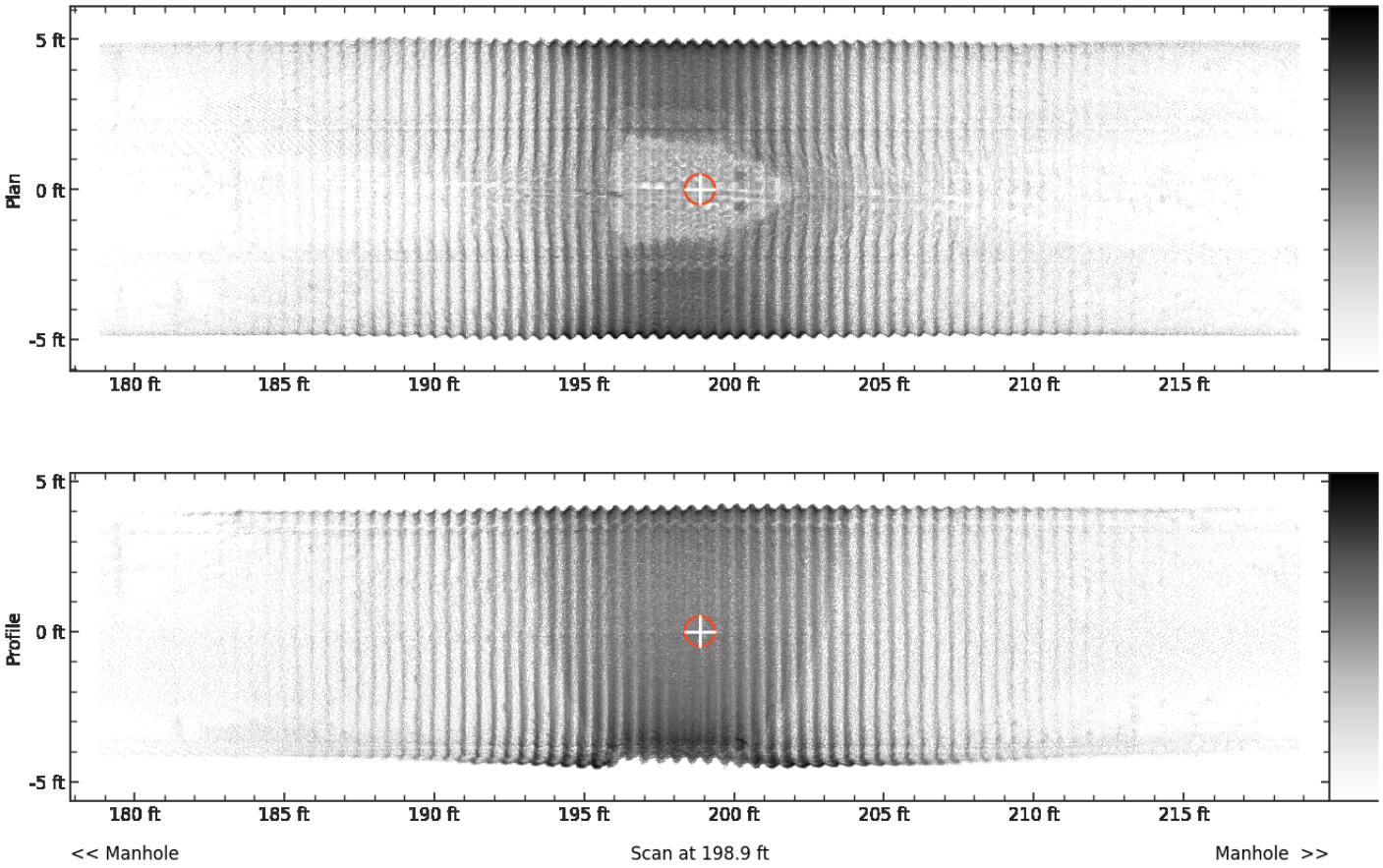
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 198 ft

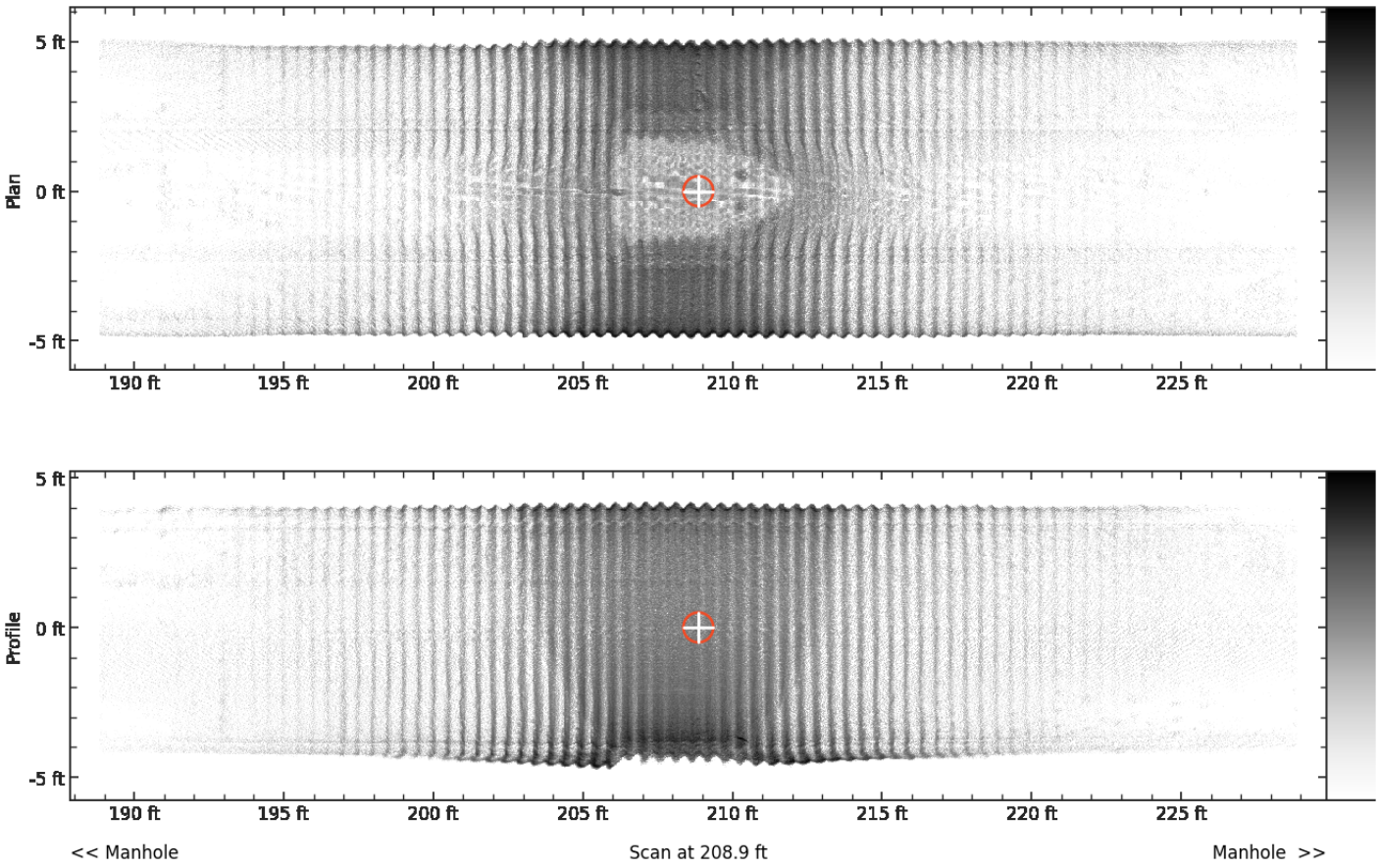
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 208 ft

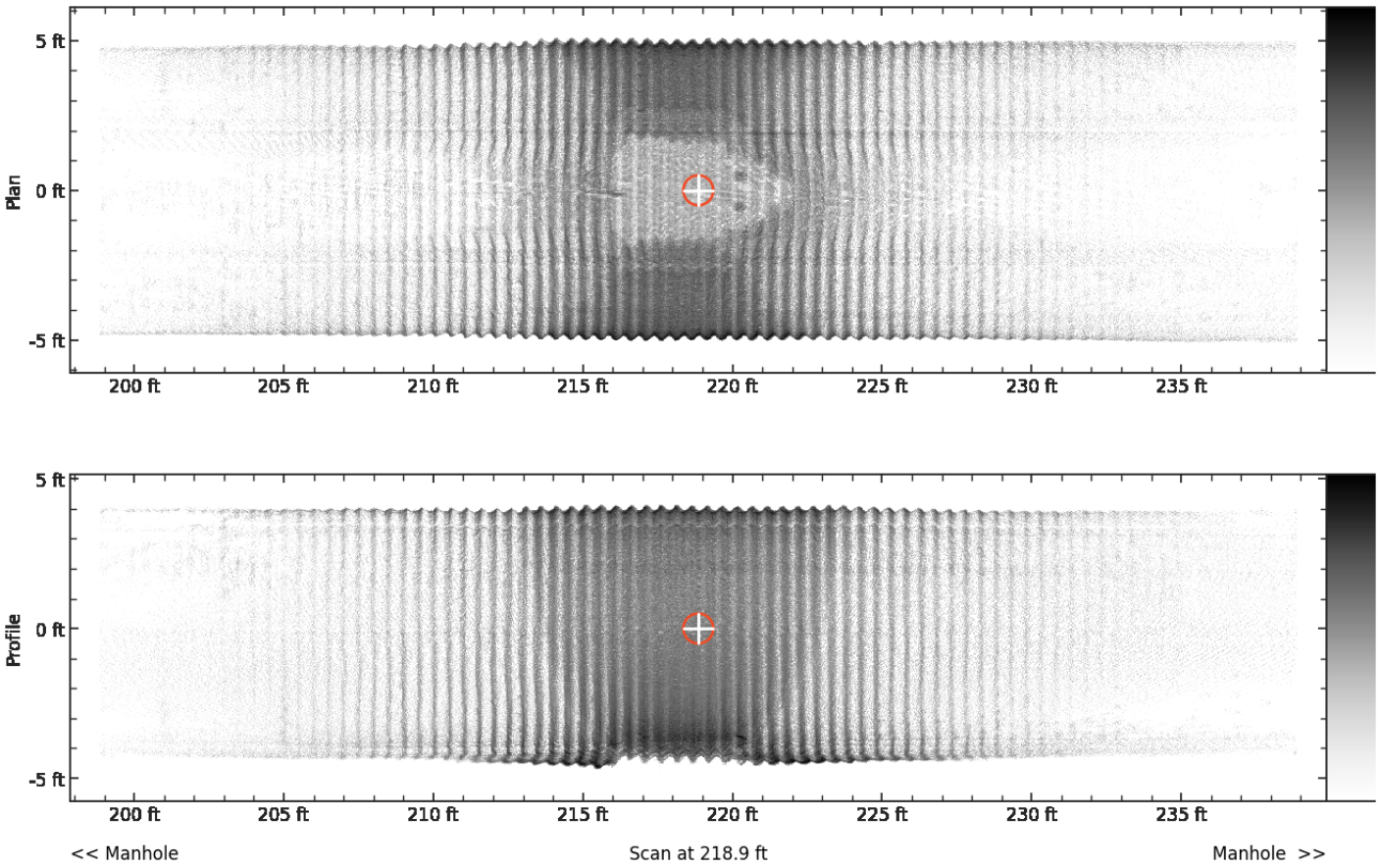
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 218 ft

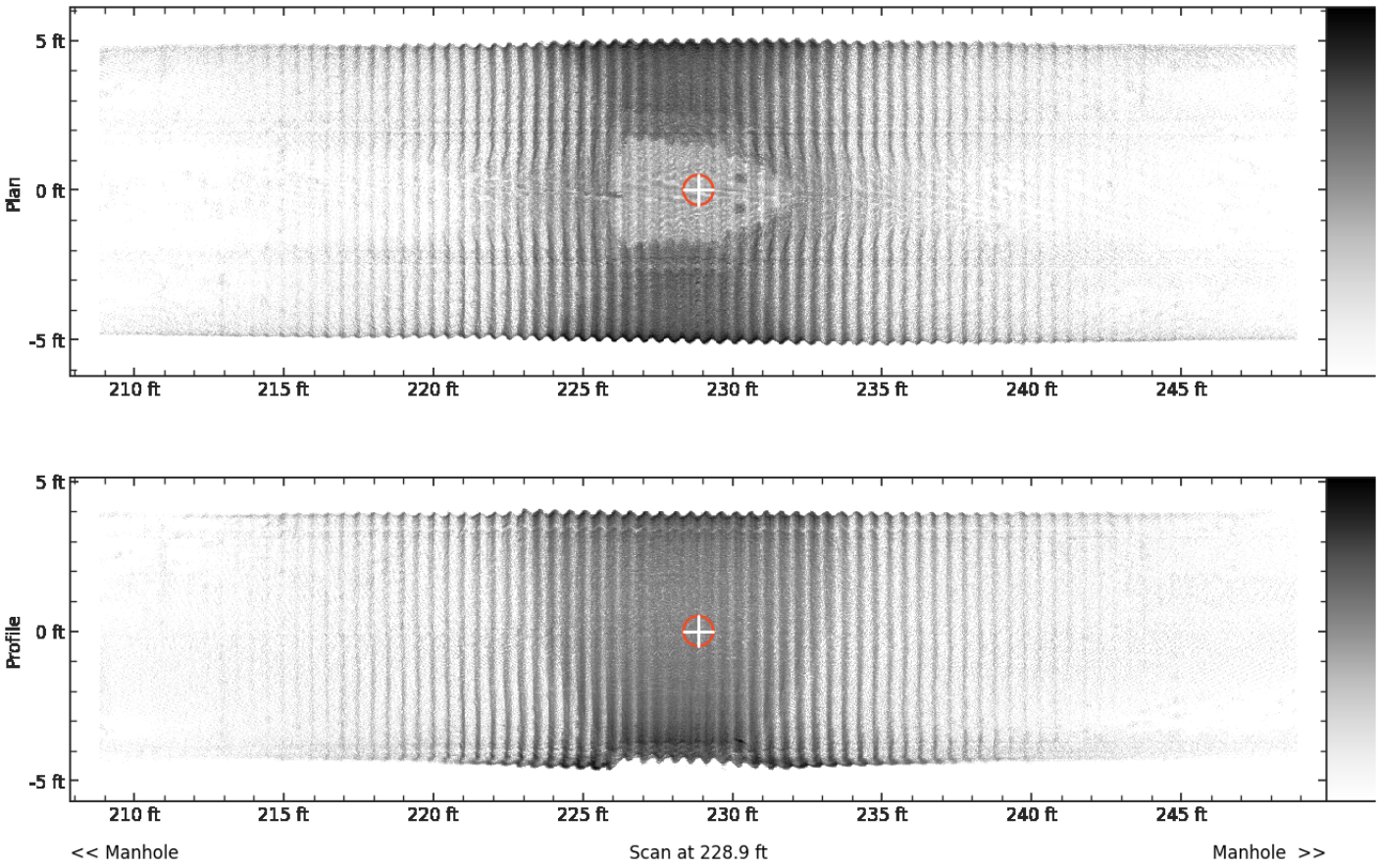
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 228 ft

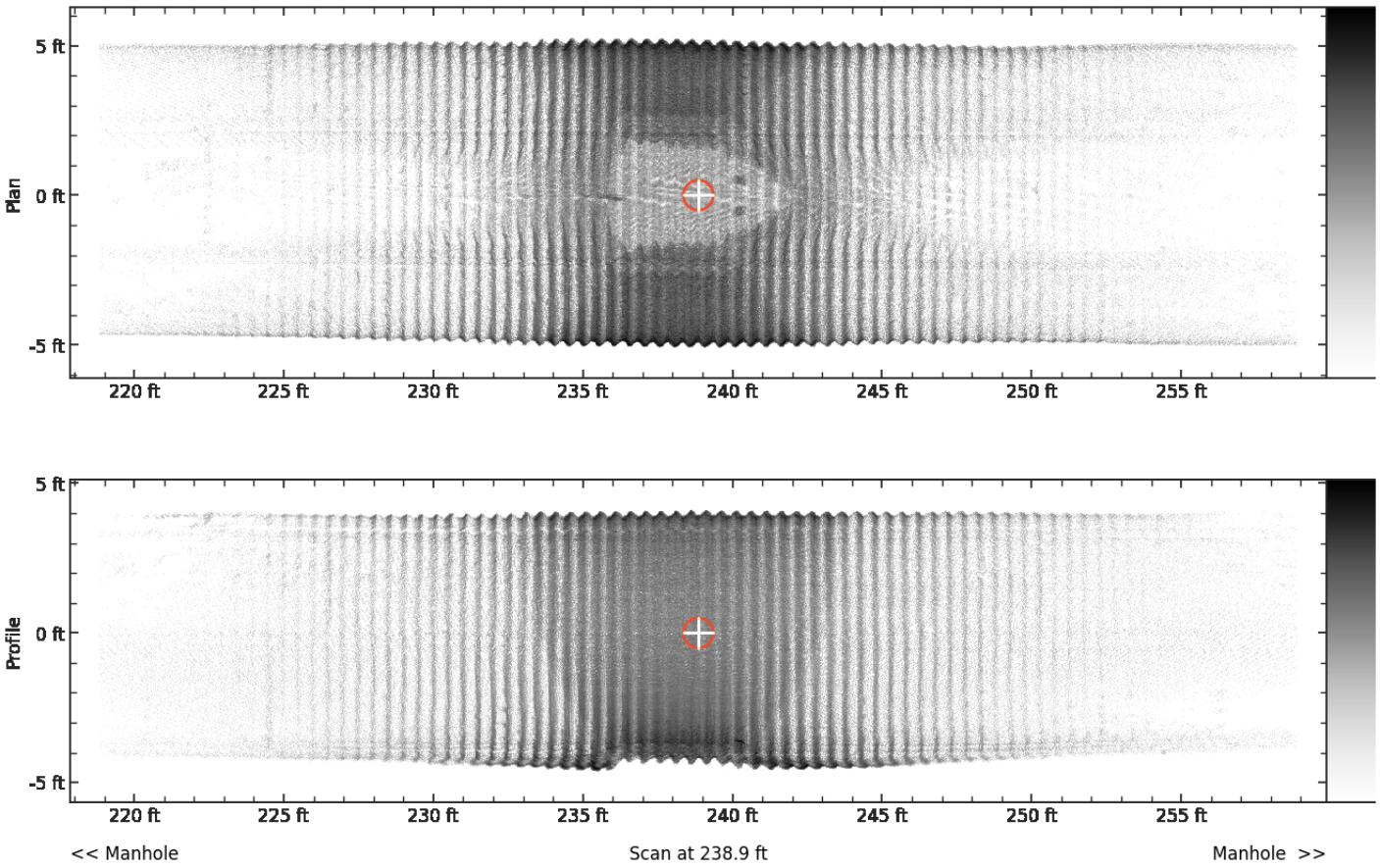
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 238 ft

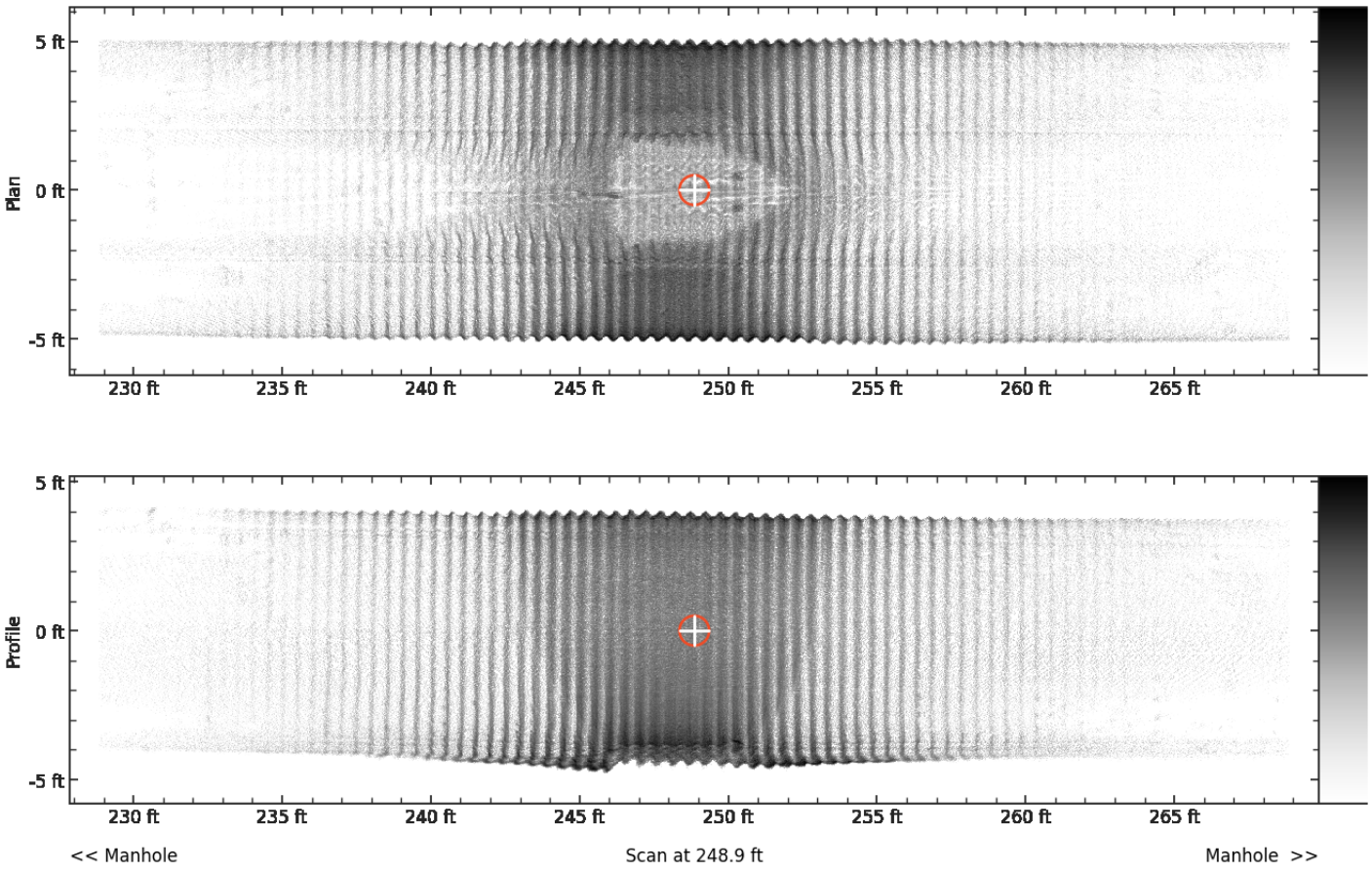
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 248 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



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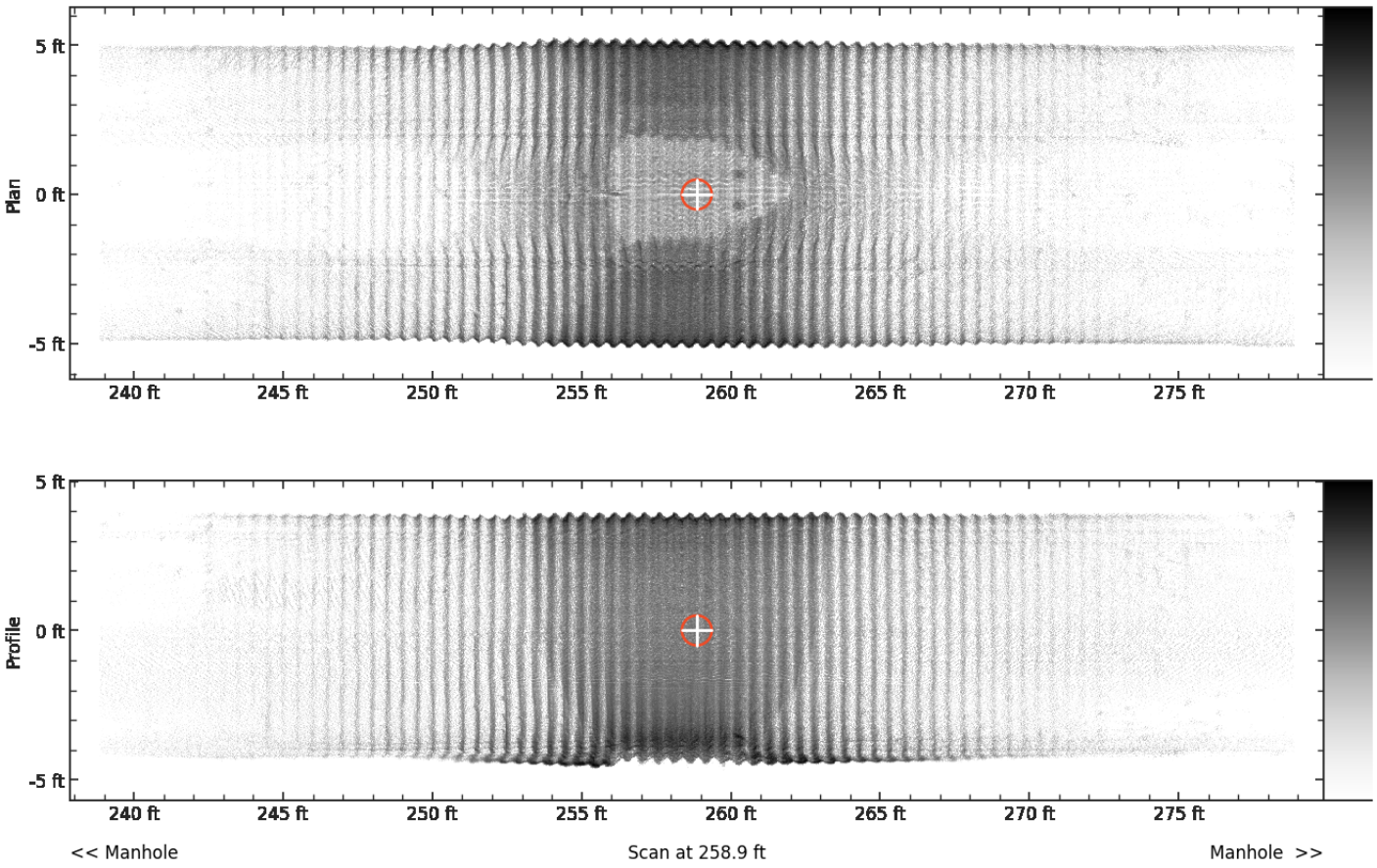
SFX-3D Plan & Profile Report
Inspection #1 : / , 258 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



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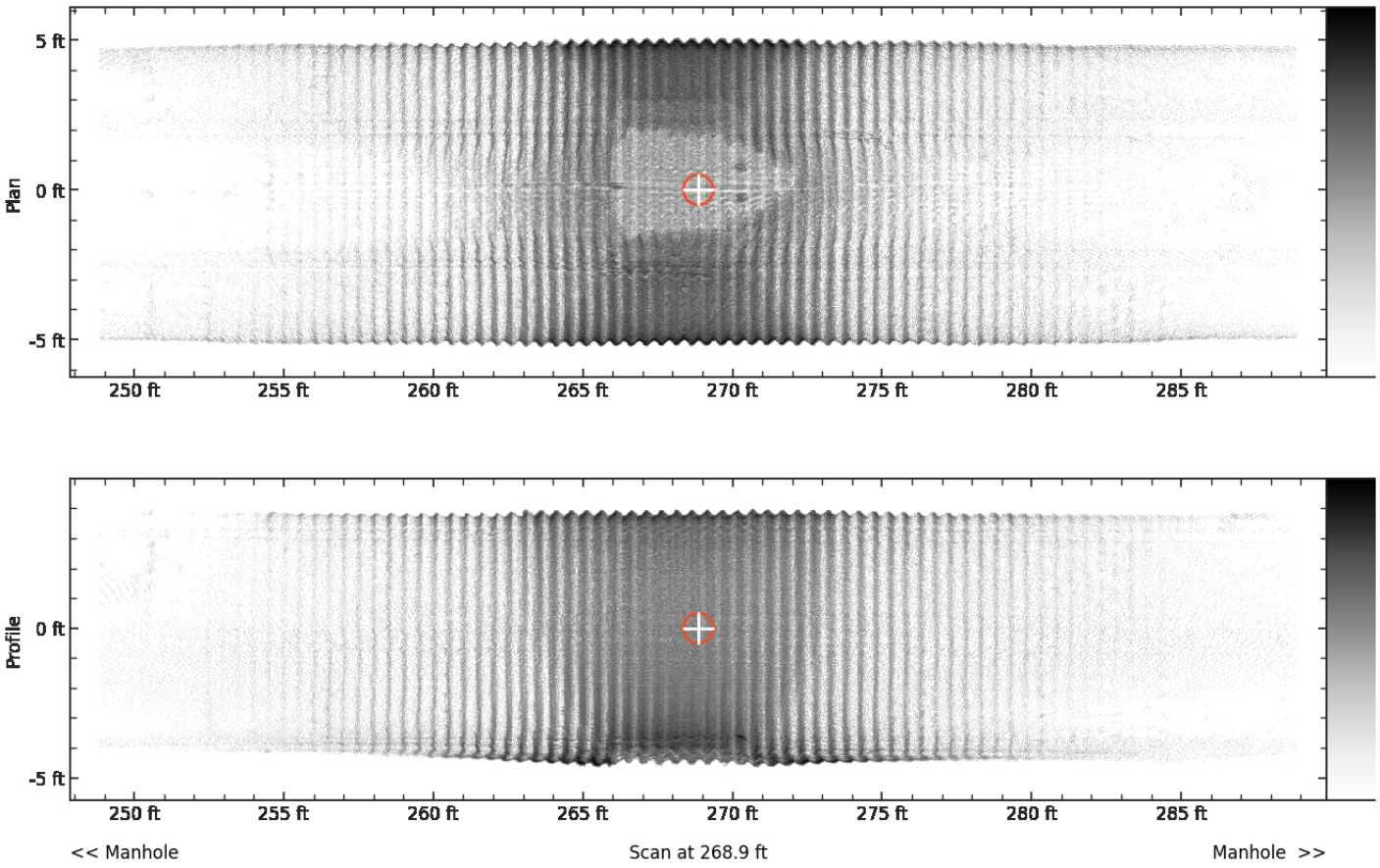
SFX-3D Plan & Profile Report
Inspection #1 : / , 268 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
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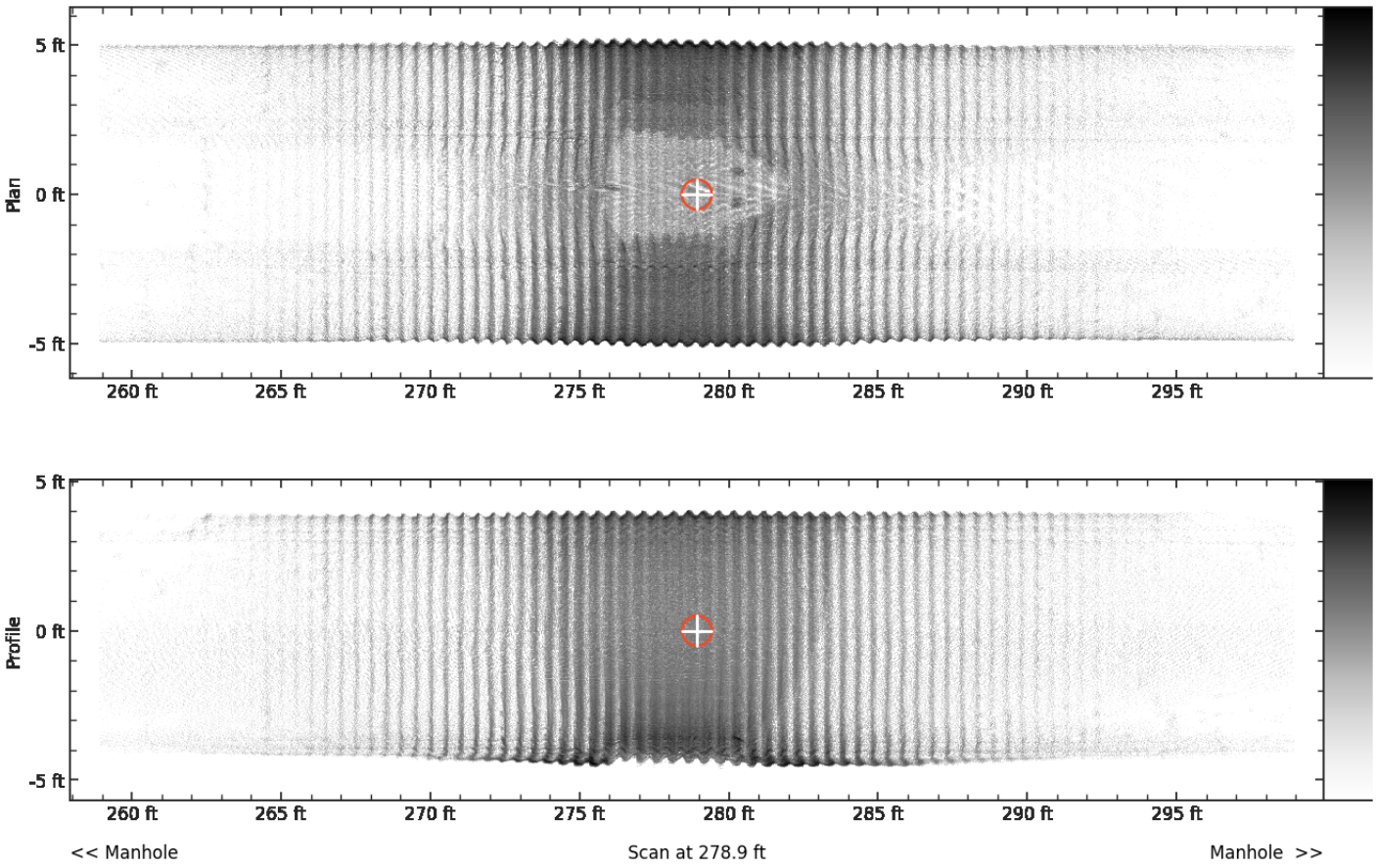
SFX-3D Plan & Profile Report
Inspection #1 : / , 278 ft

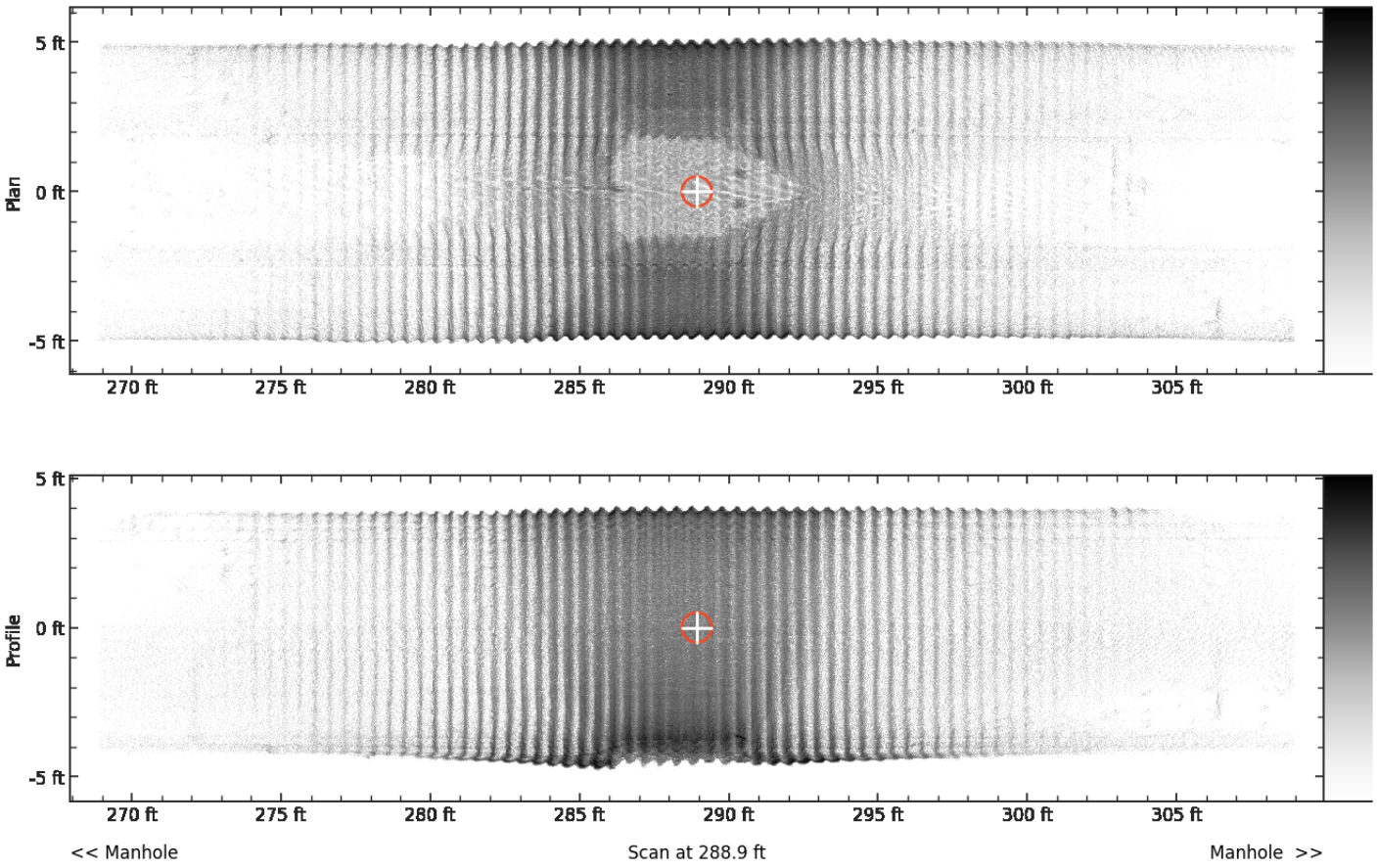
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 288 ft

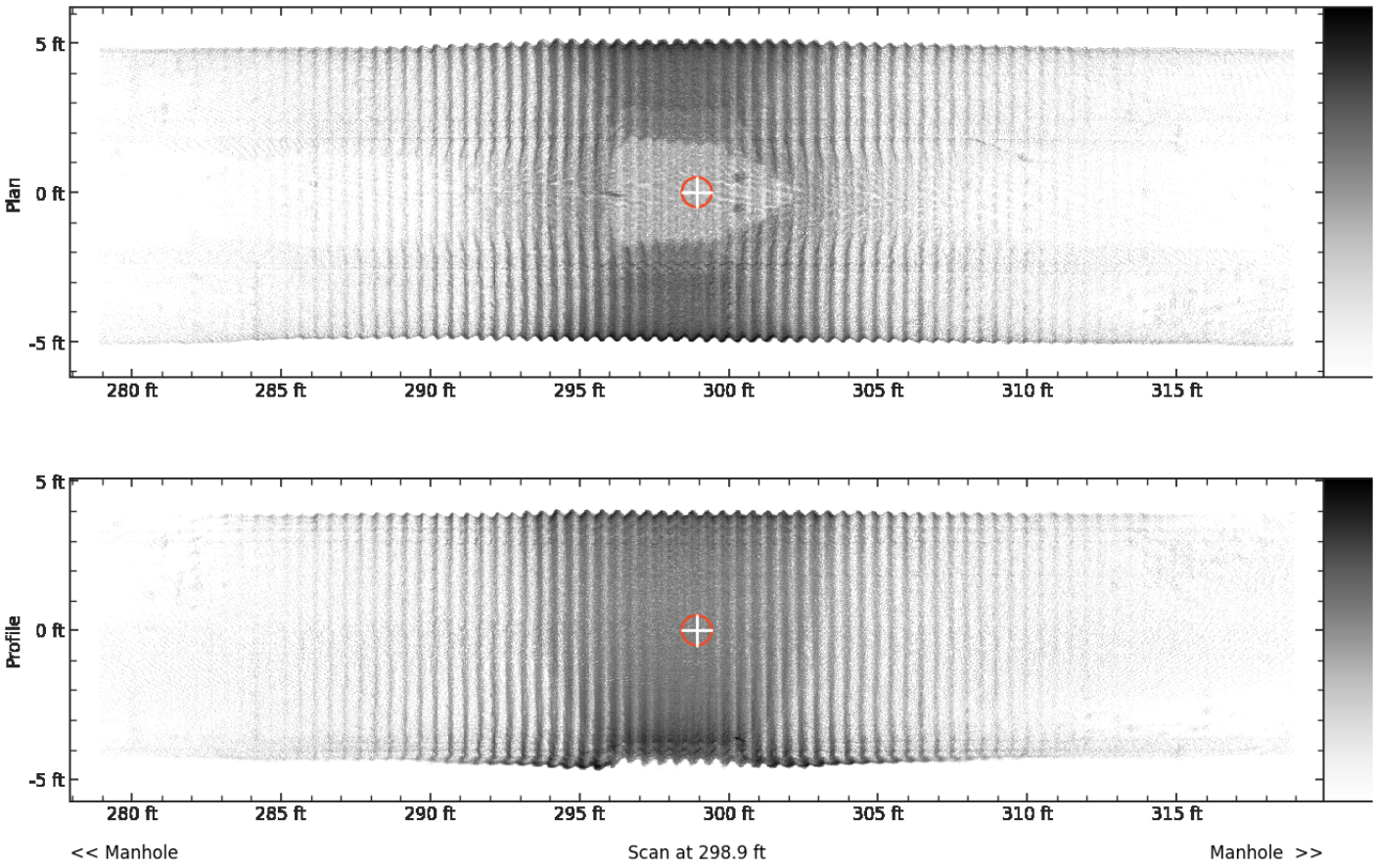
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 298 ft

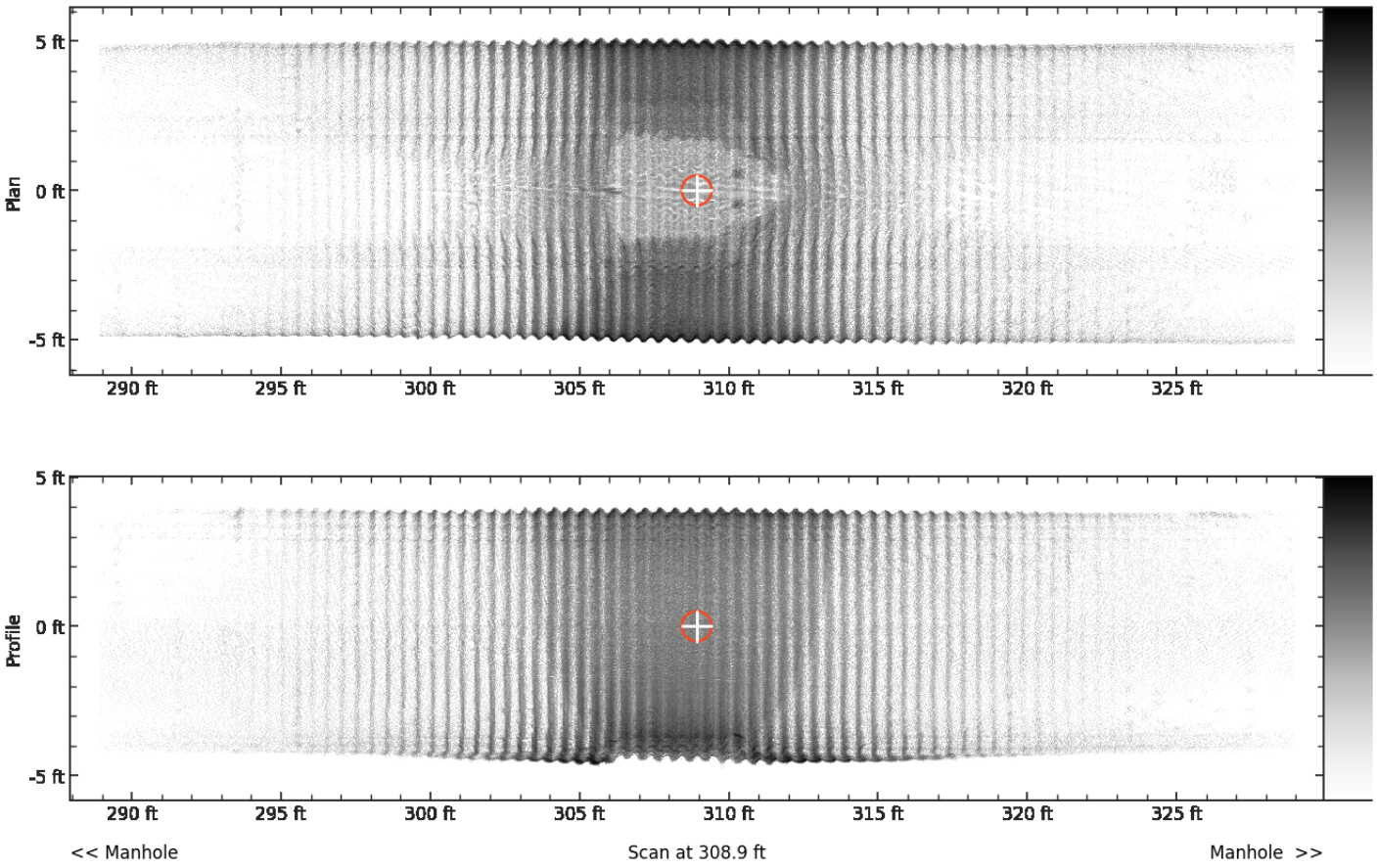
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 308 ft

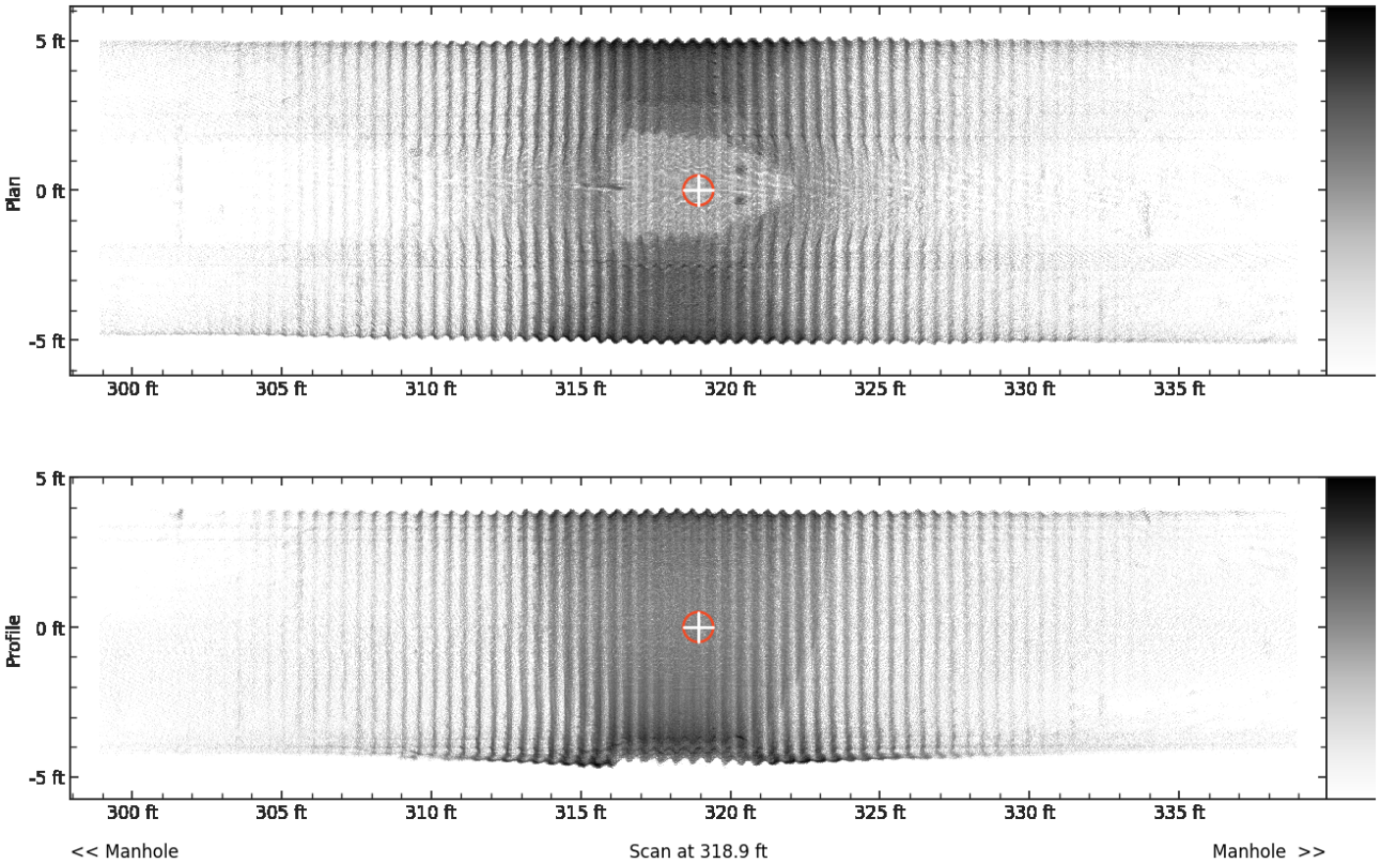
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 318 ft

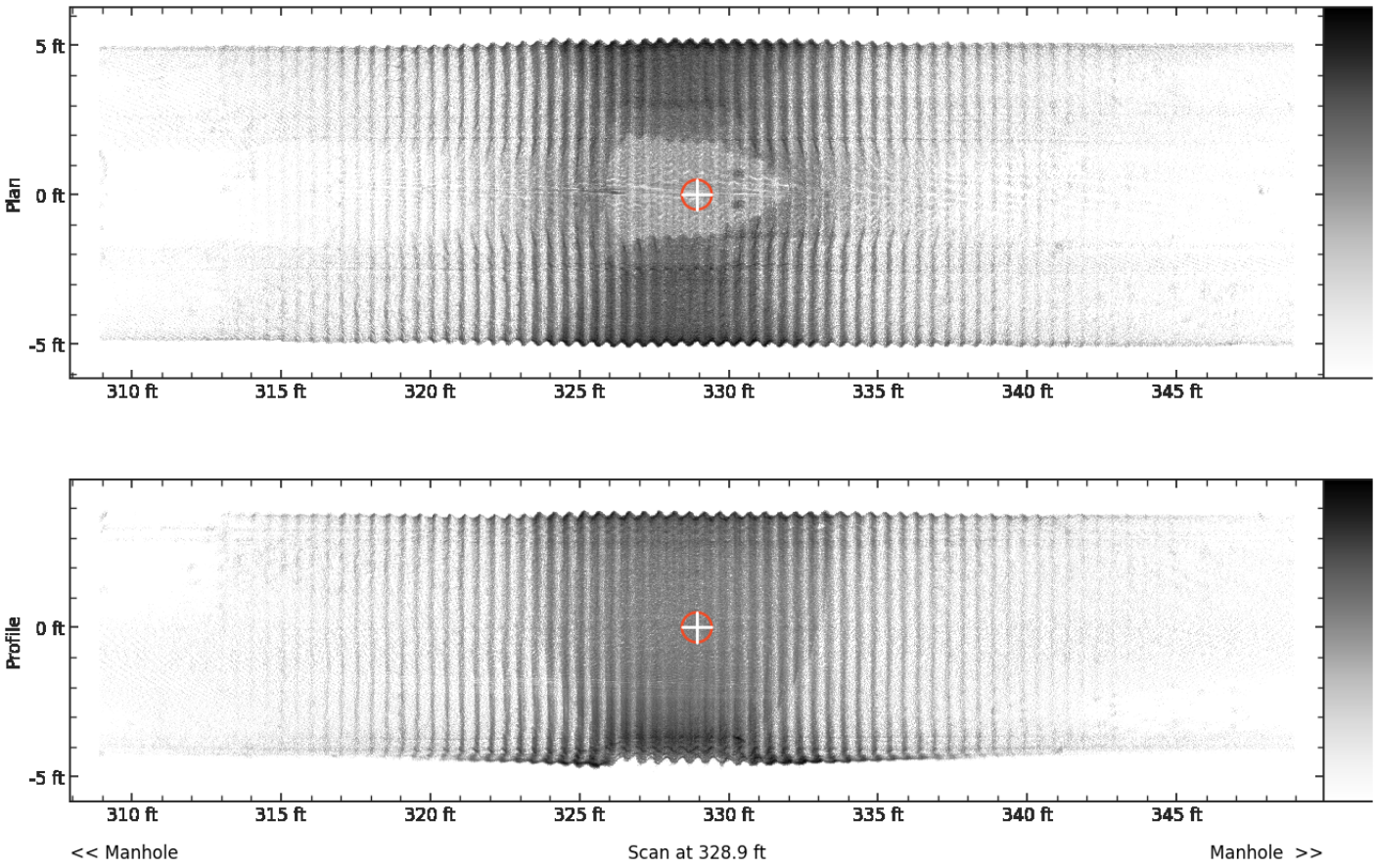
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 328 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
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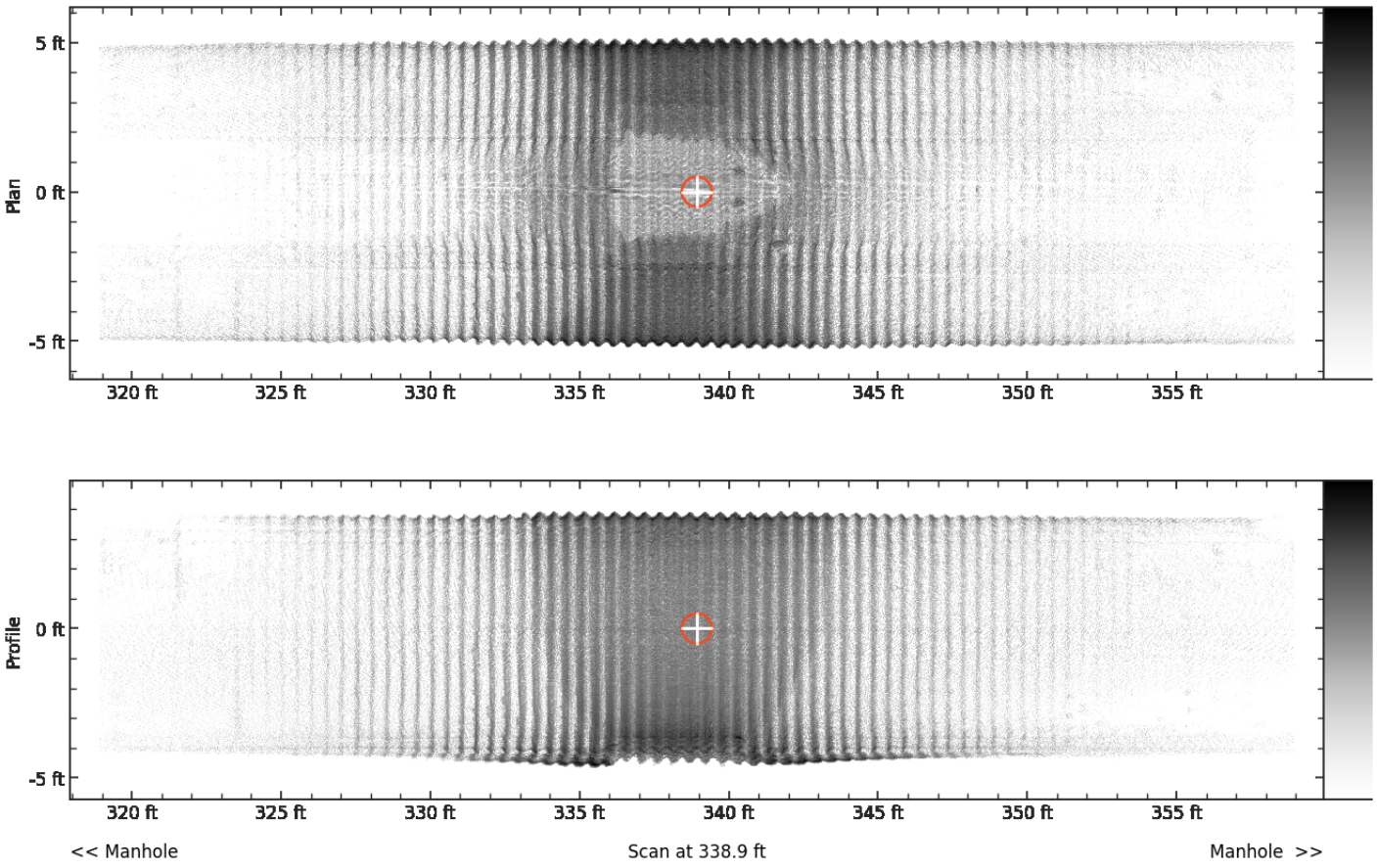
SFX-3D Plan & Profile Report
Inspection #1 : / , 338 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
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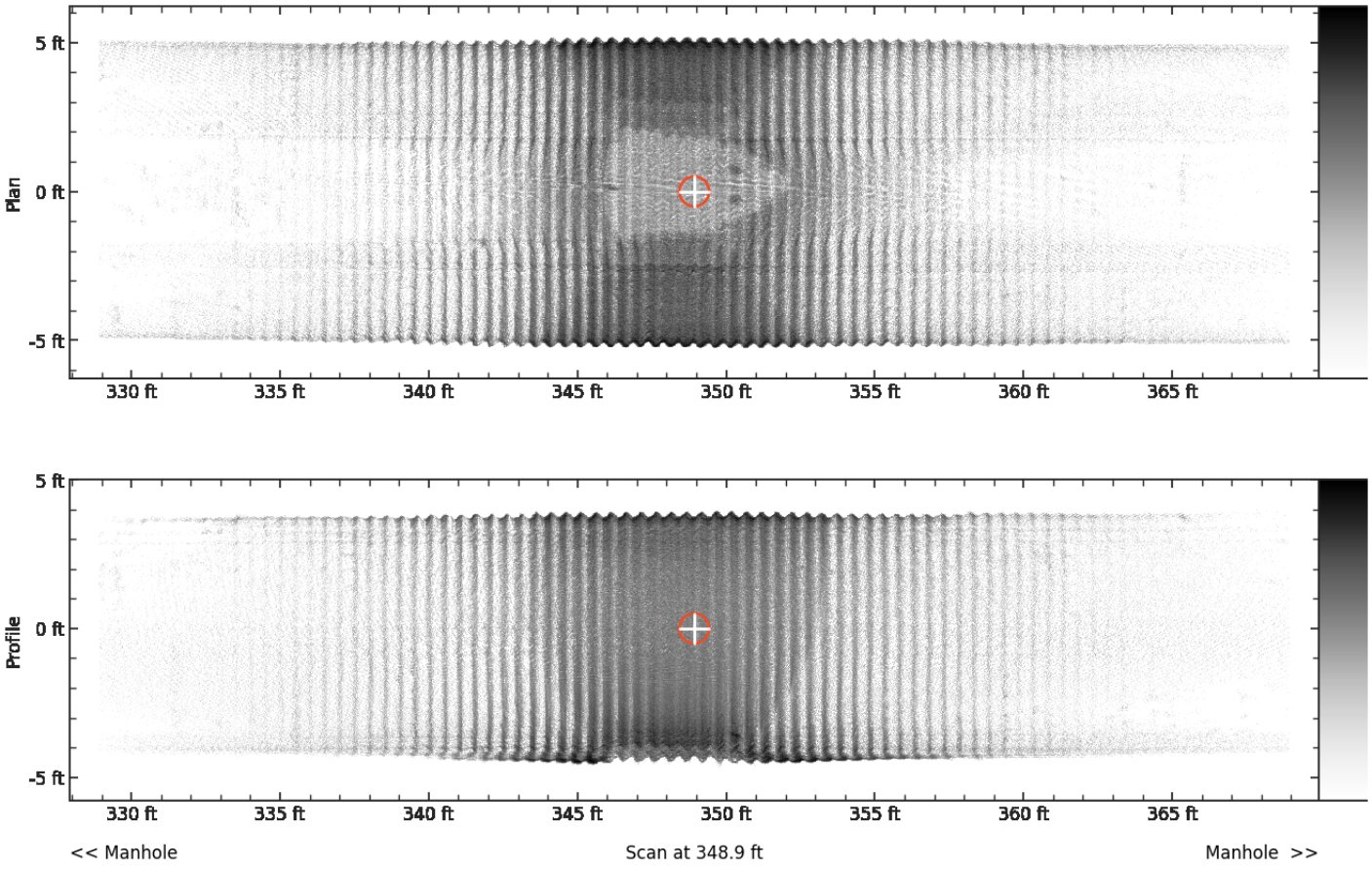
SFX-3D Plan & Profile Report
Inspection #1 : / , 348 ft

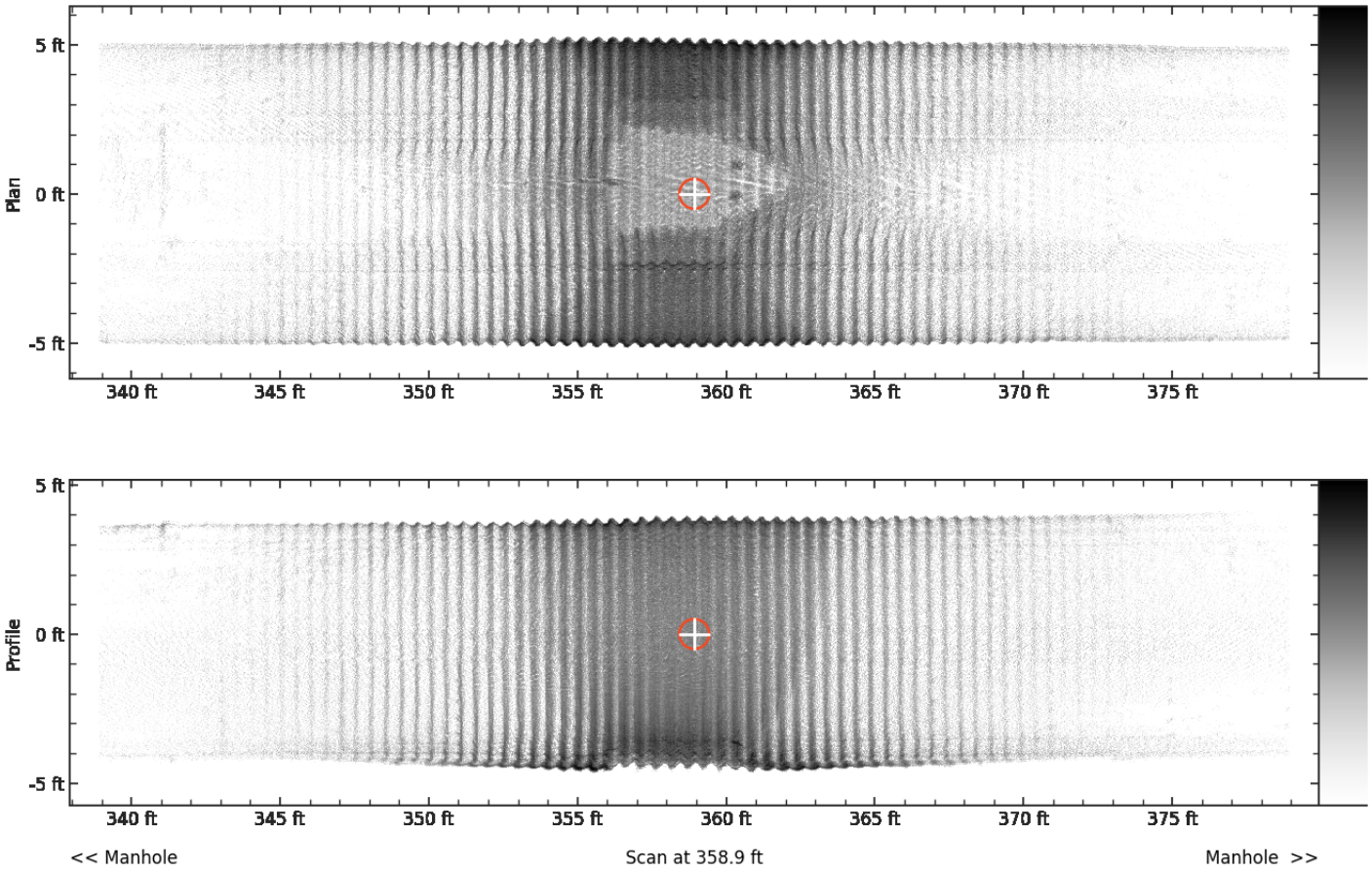
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 358 ft

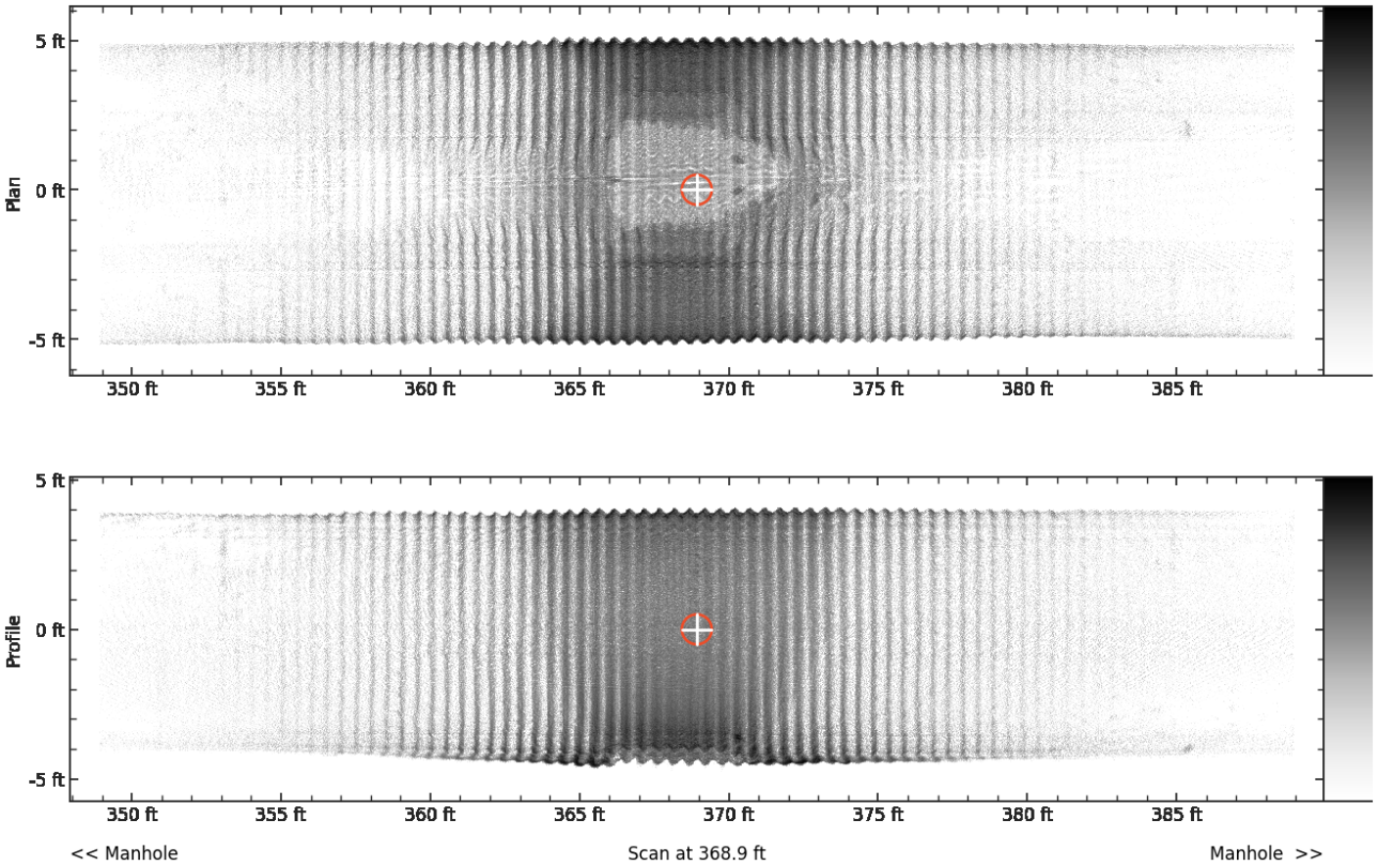
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 368 ft

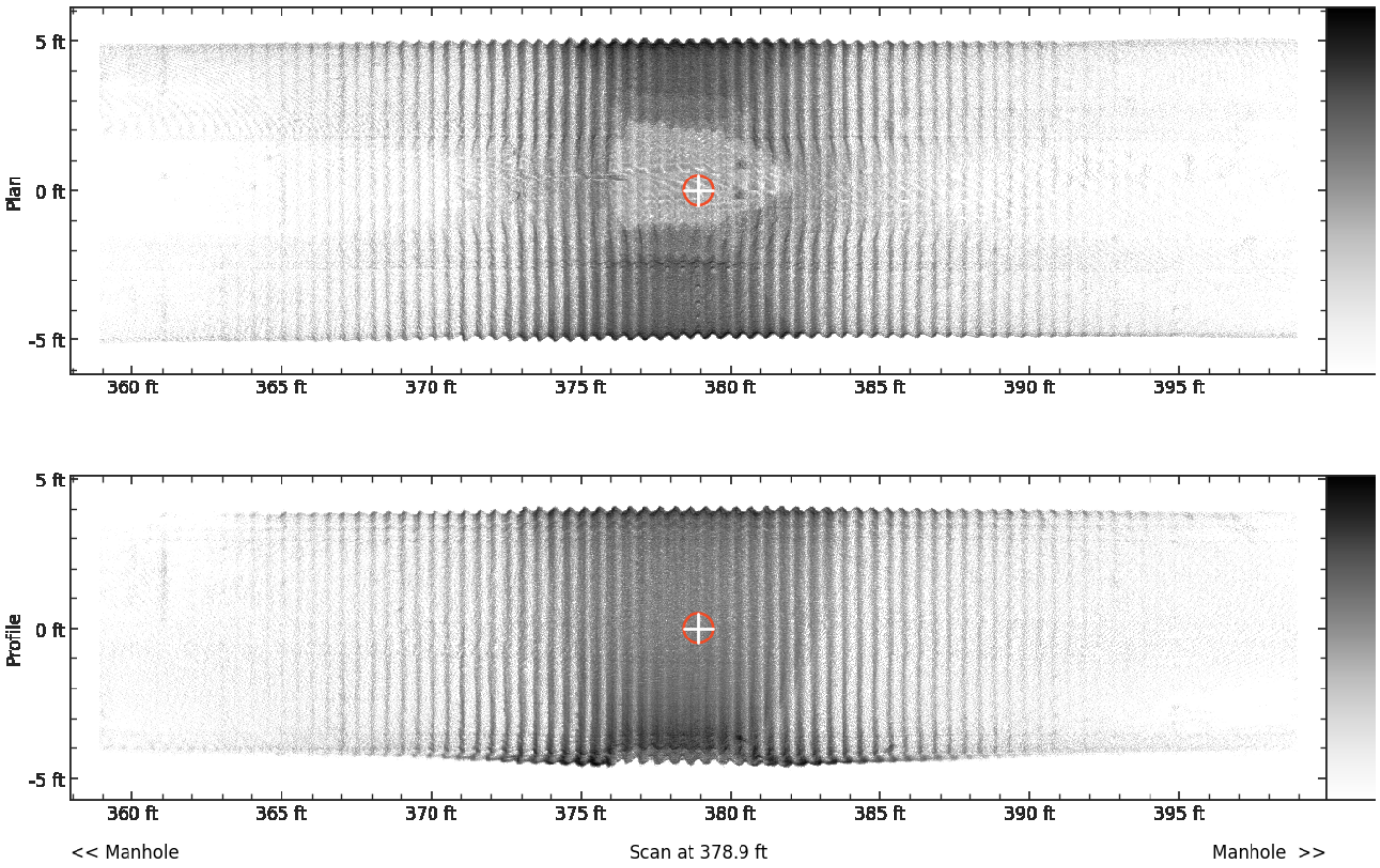
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 378 ft

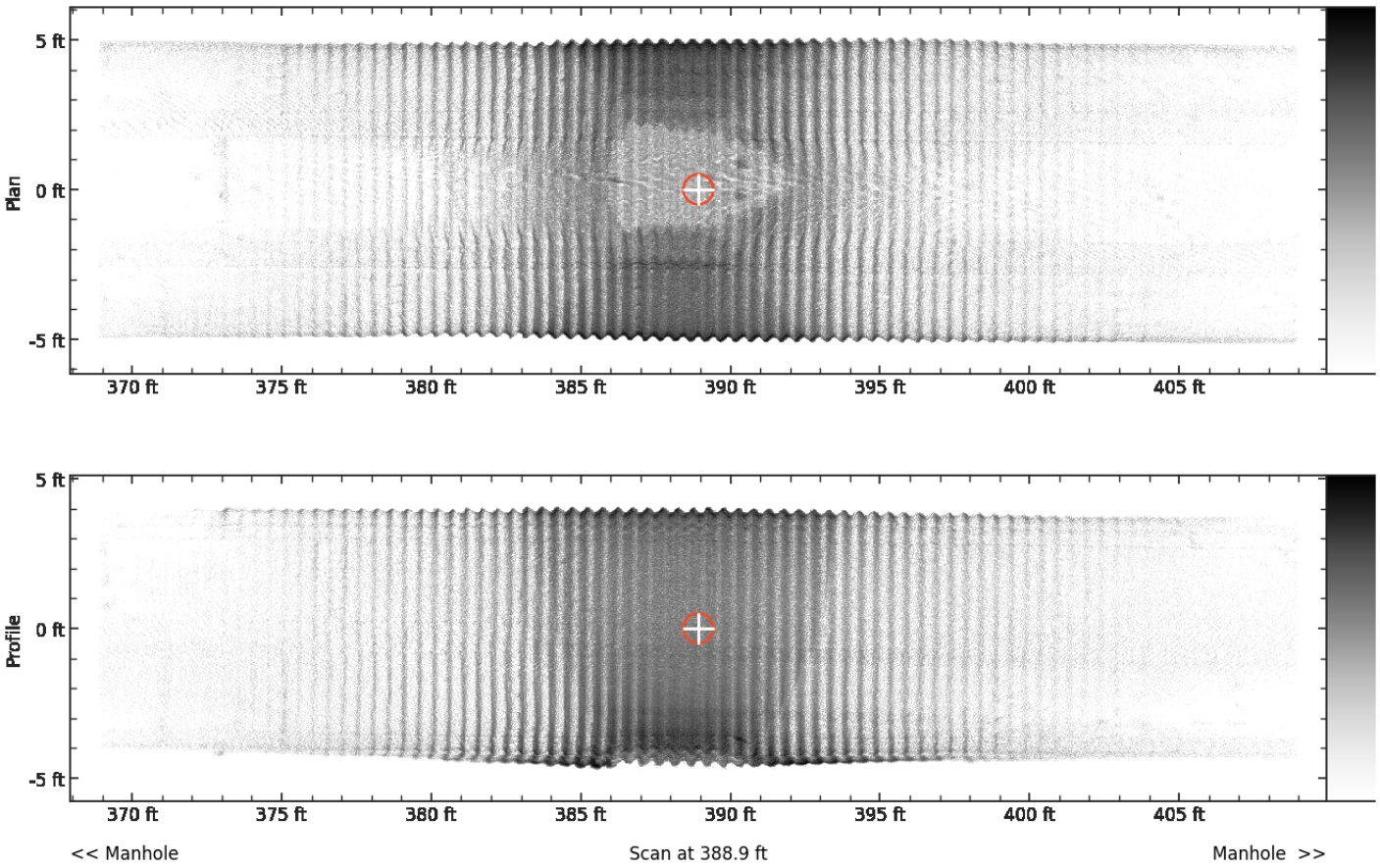
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 388 ft

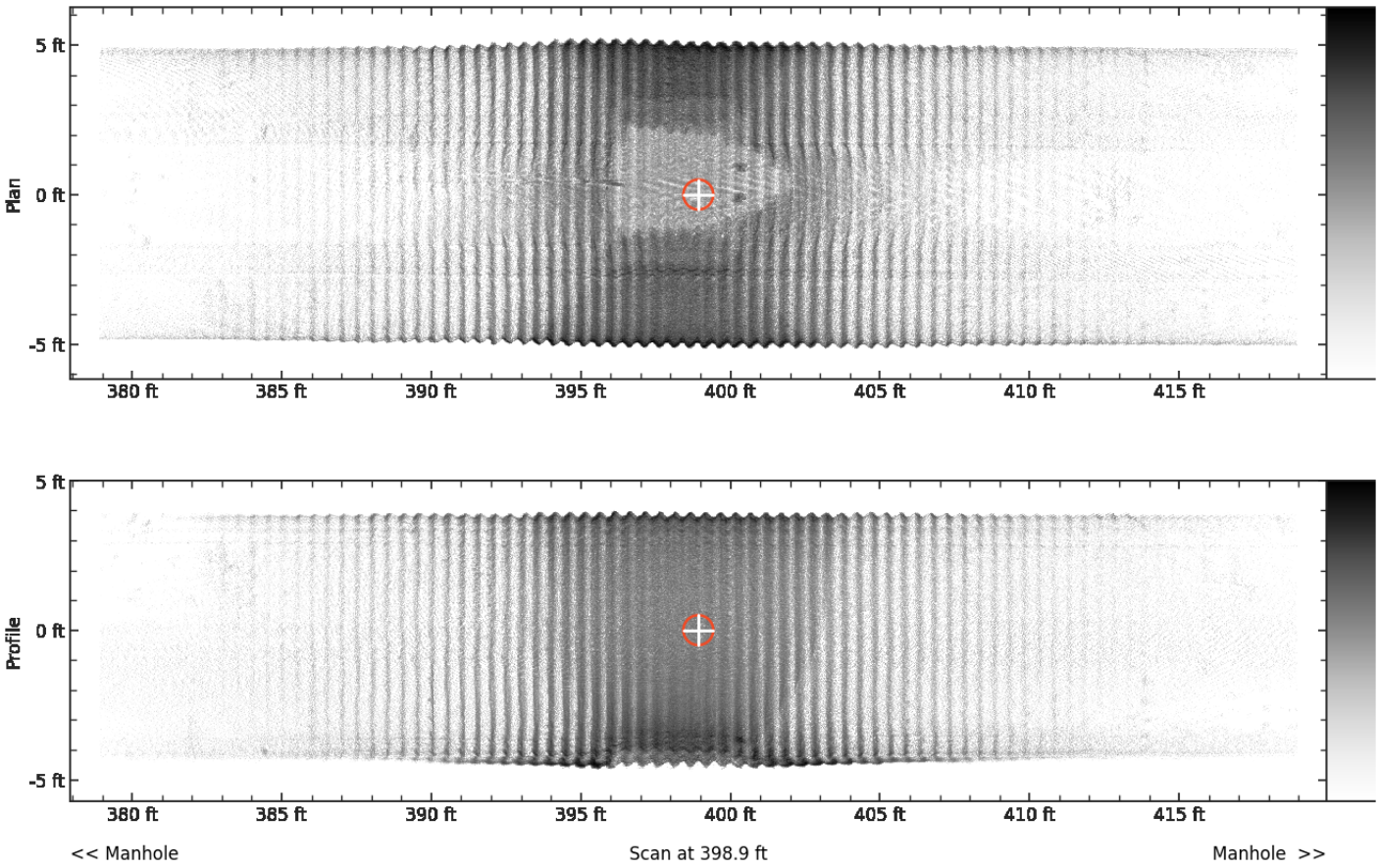
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 398 ft

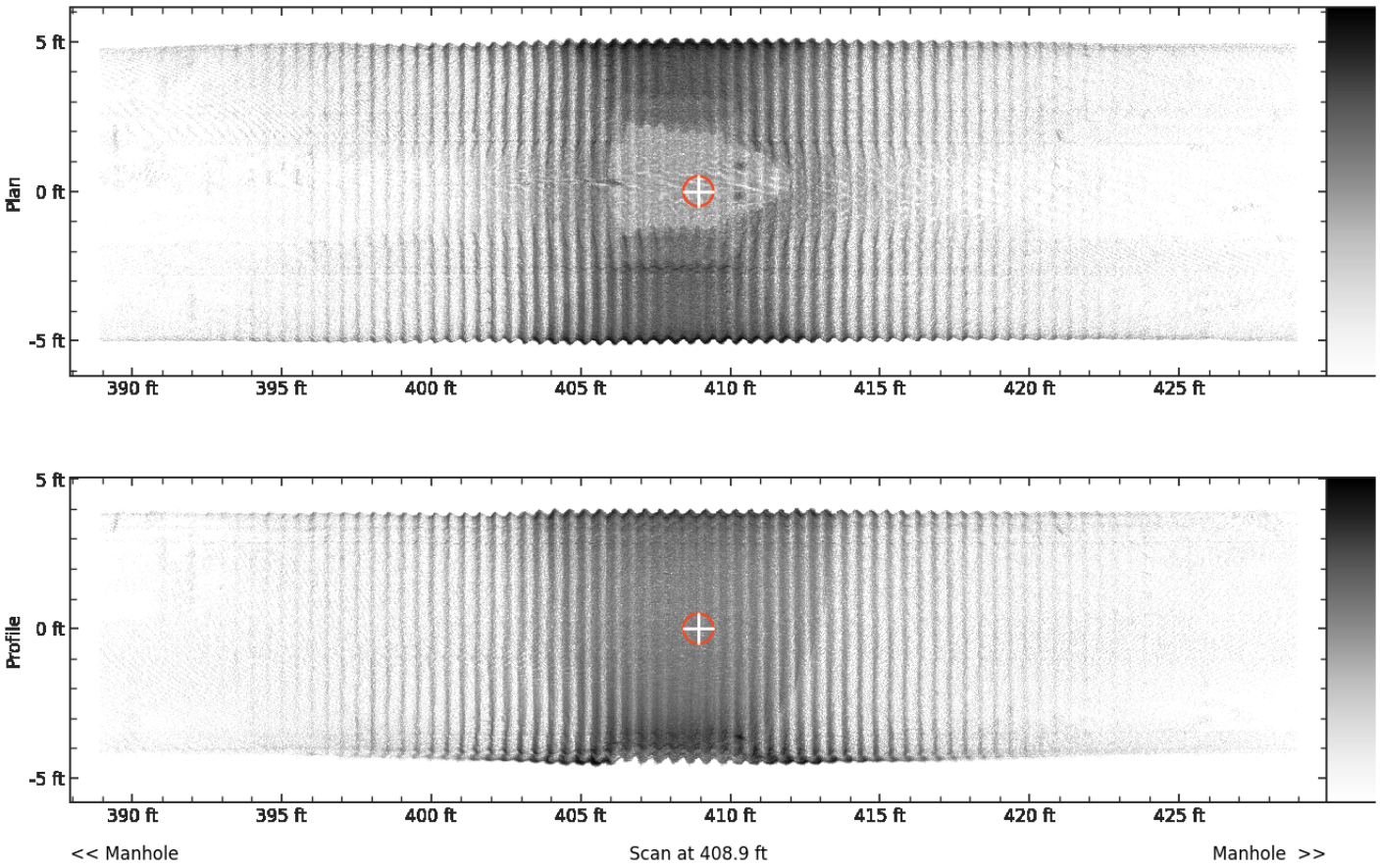
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 408 ft

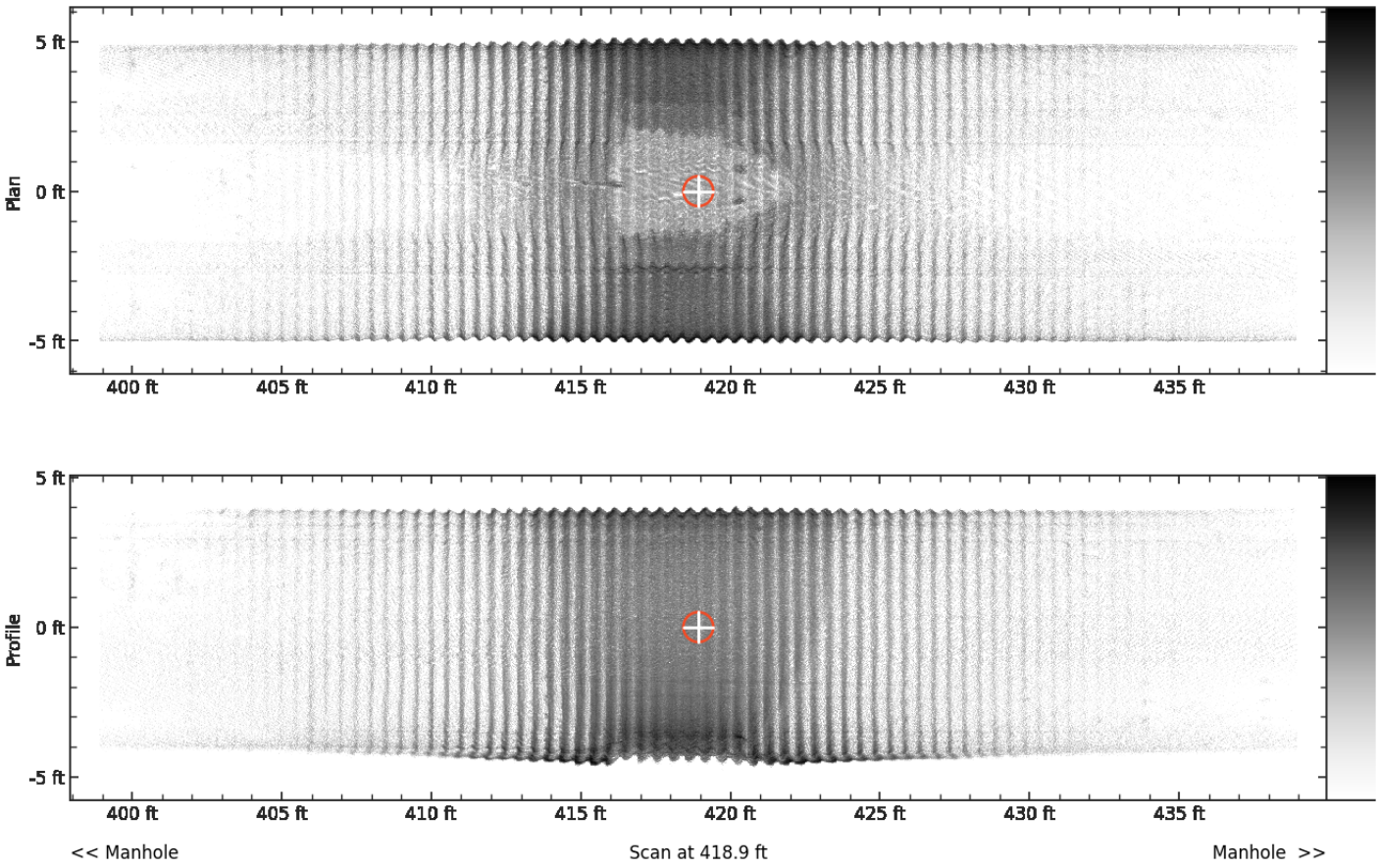
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 418 ft

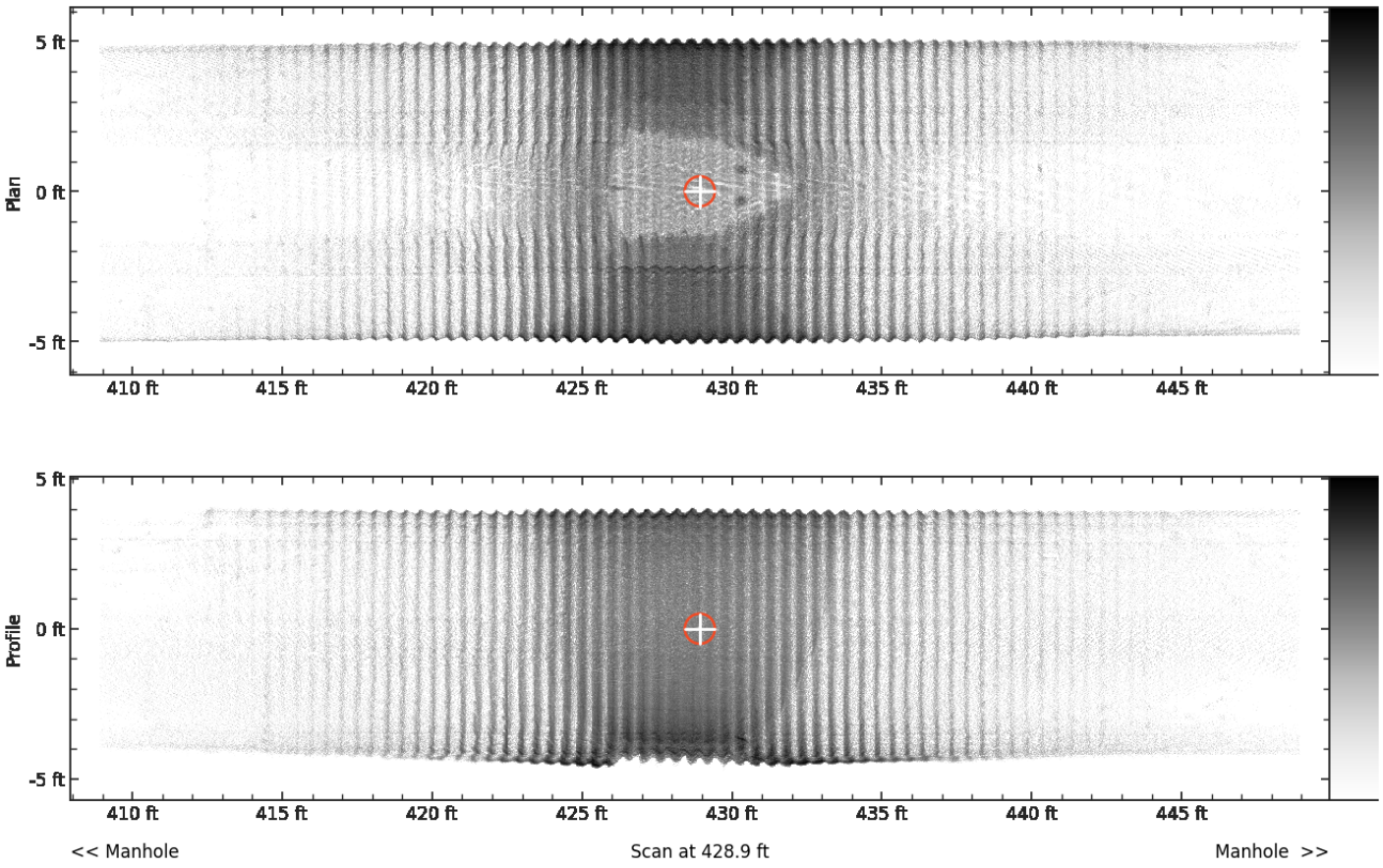
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 428 ft

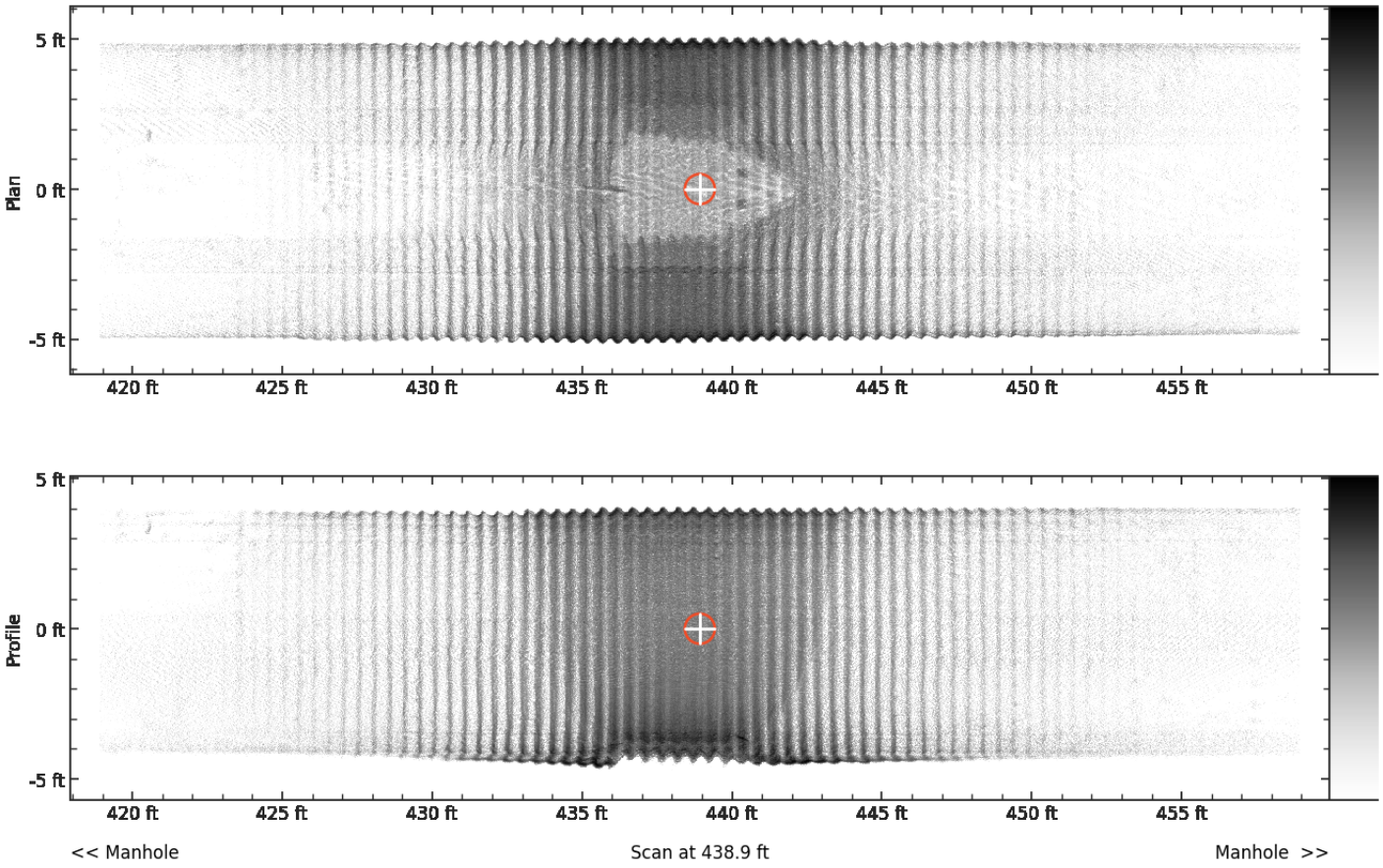
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 438 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
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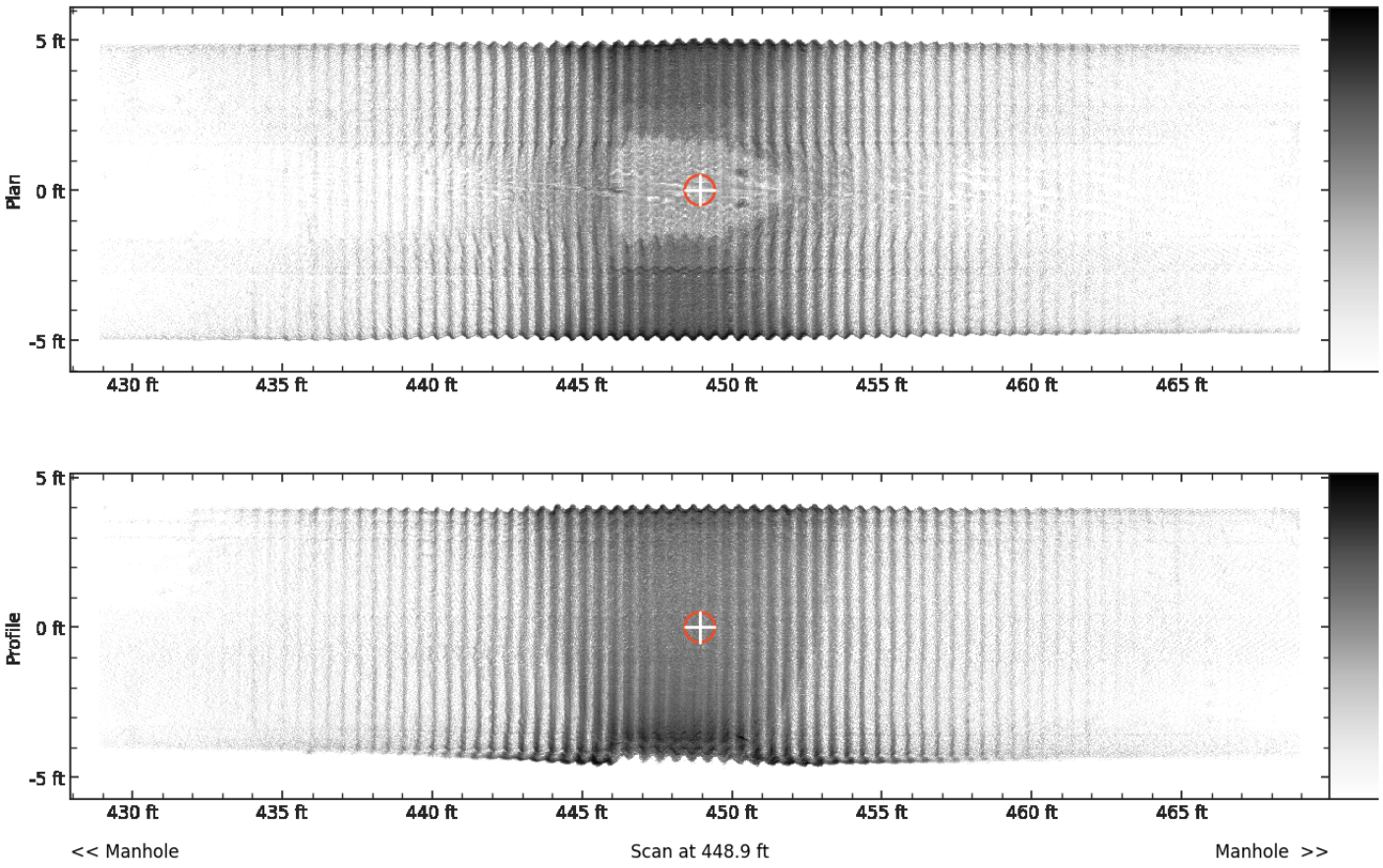
SFX-3D Plan & Profile Report
Inspection #1 : / , 448 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
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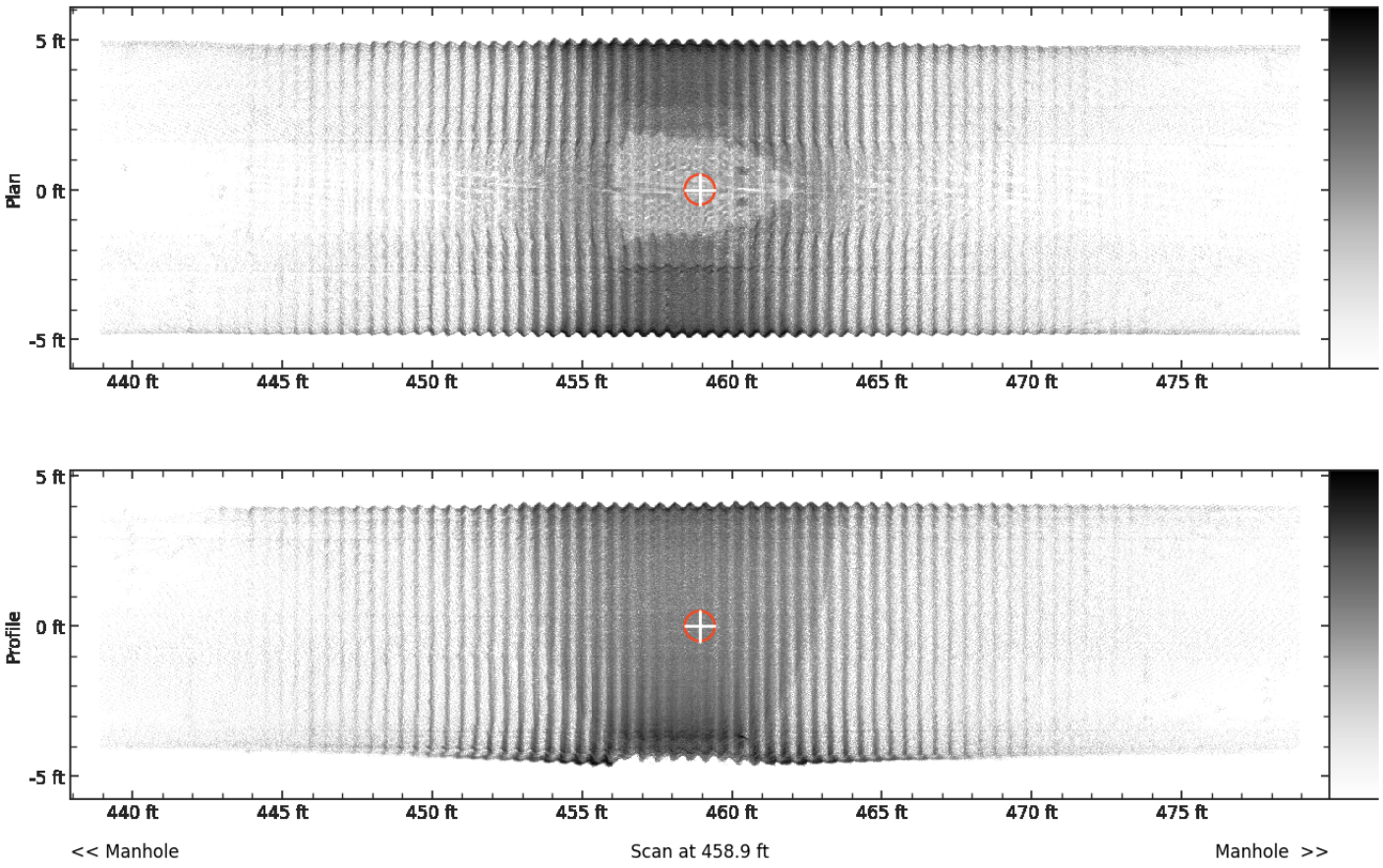
SFX-3D Plan & Profile Report
Inspection #1 : / , 458 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
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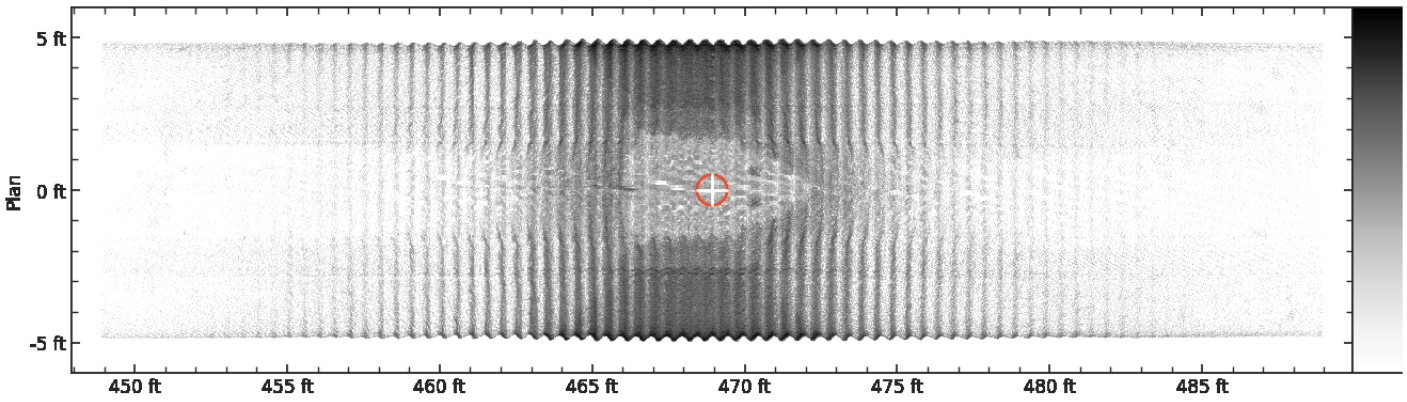
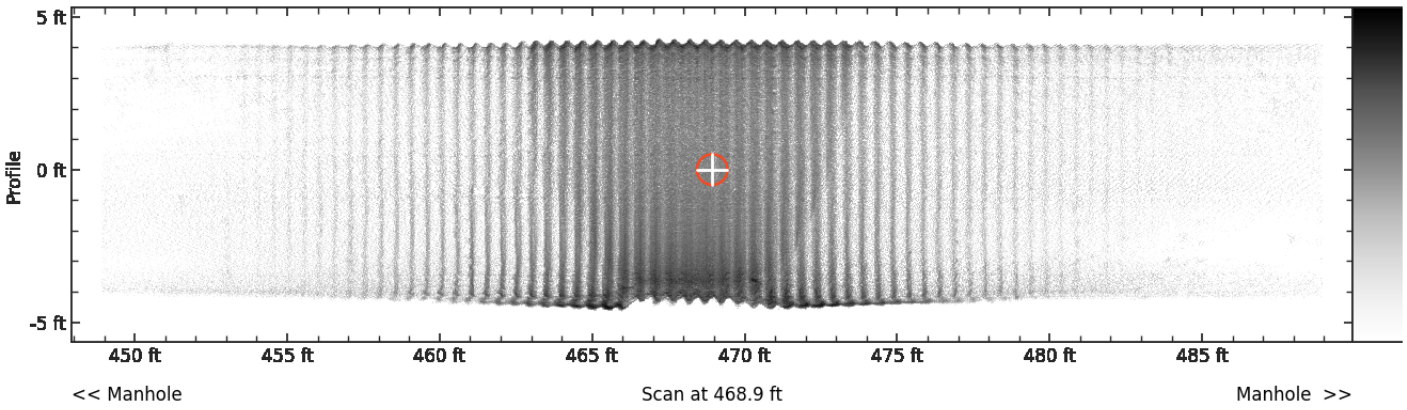
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 468 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in

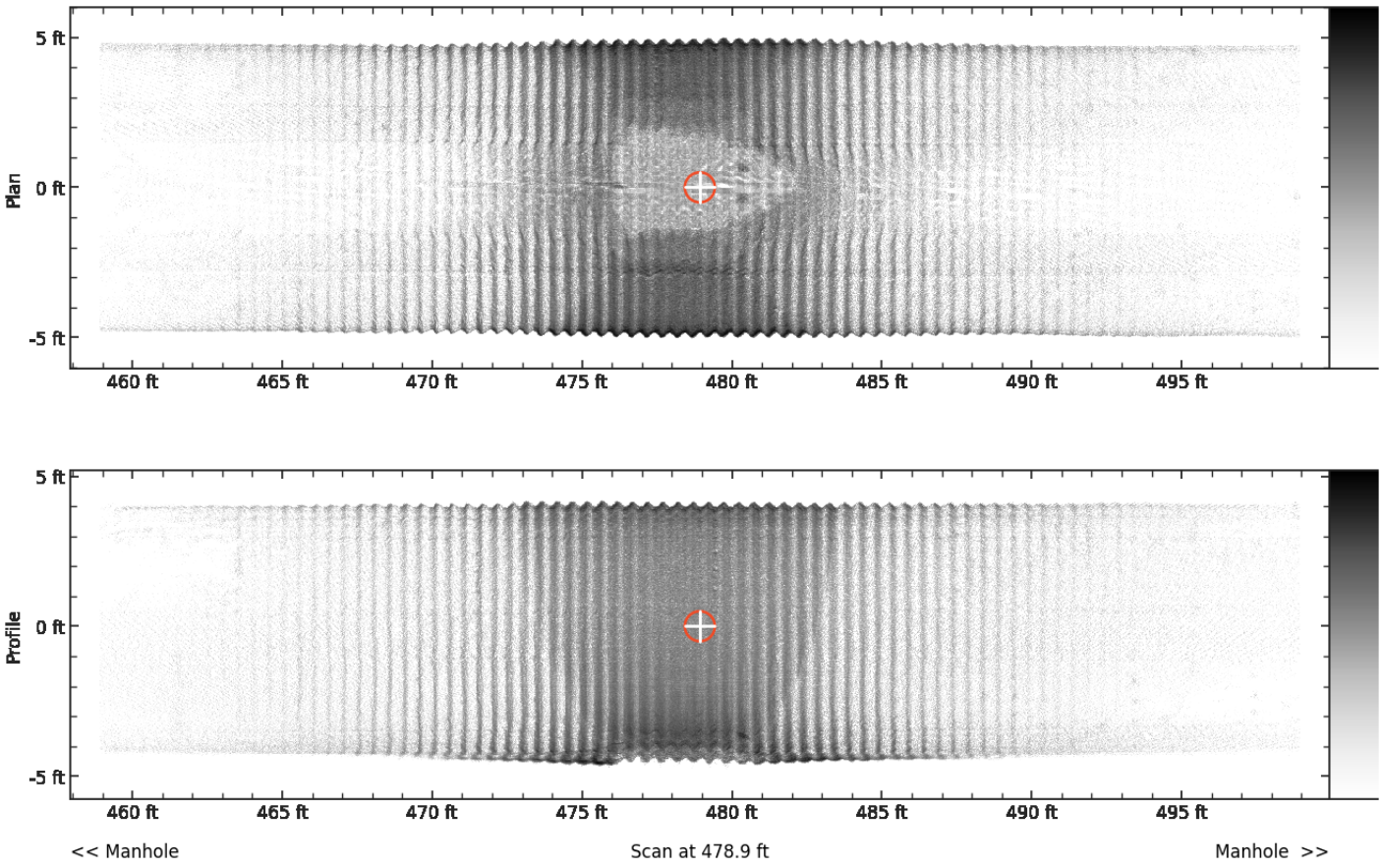




CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 478 ft

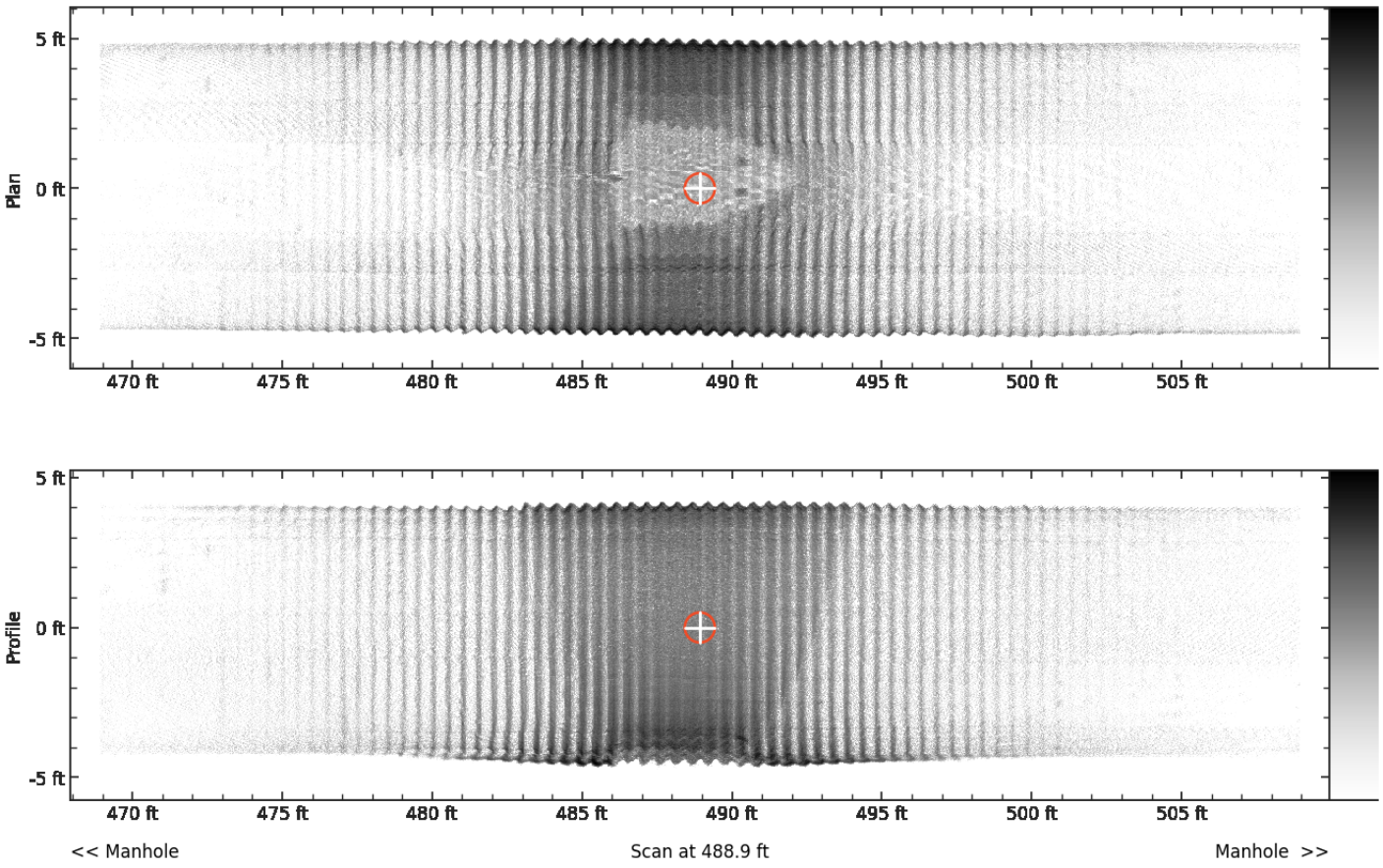
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 488 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
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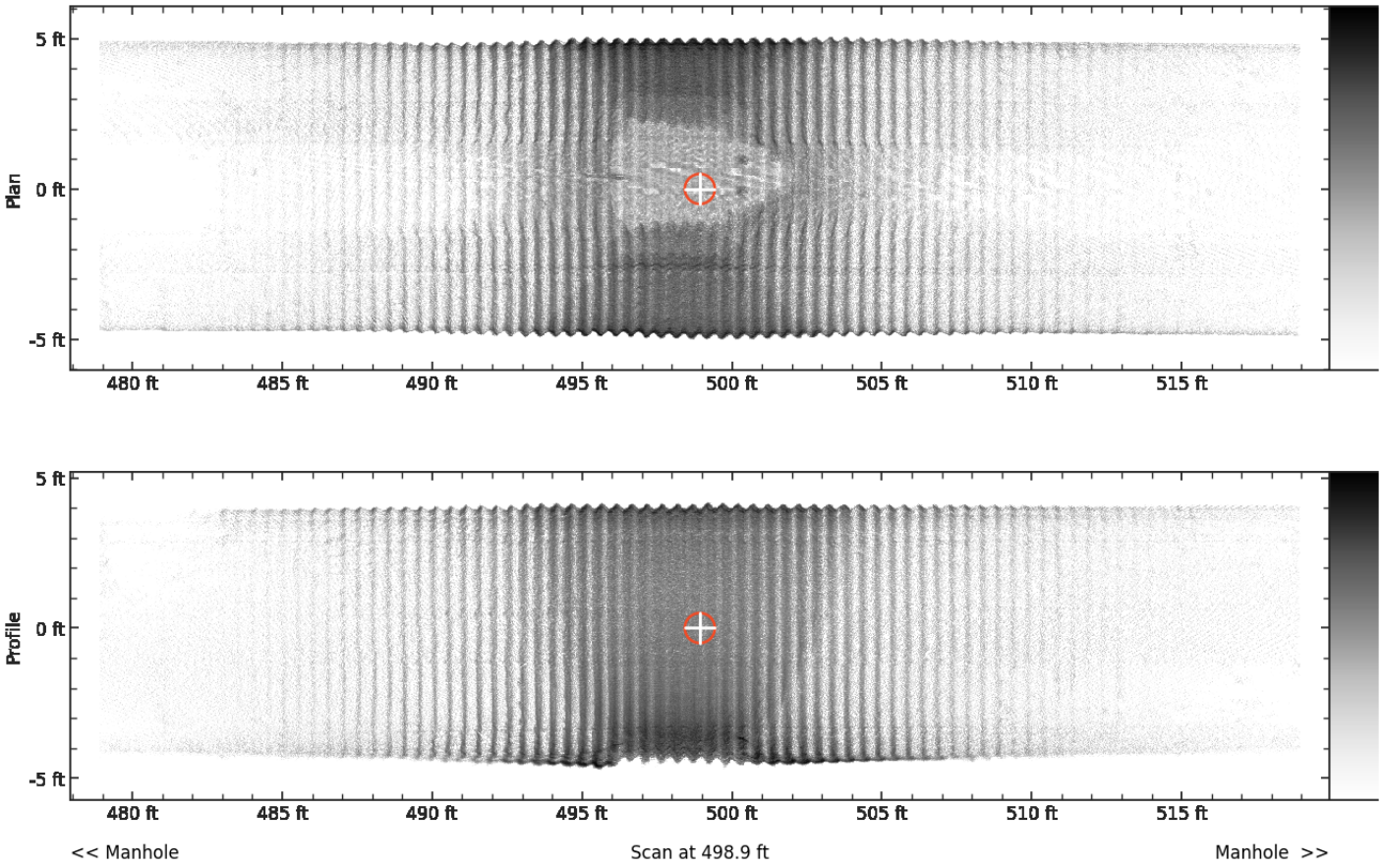
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 498 ft

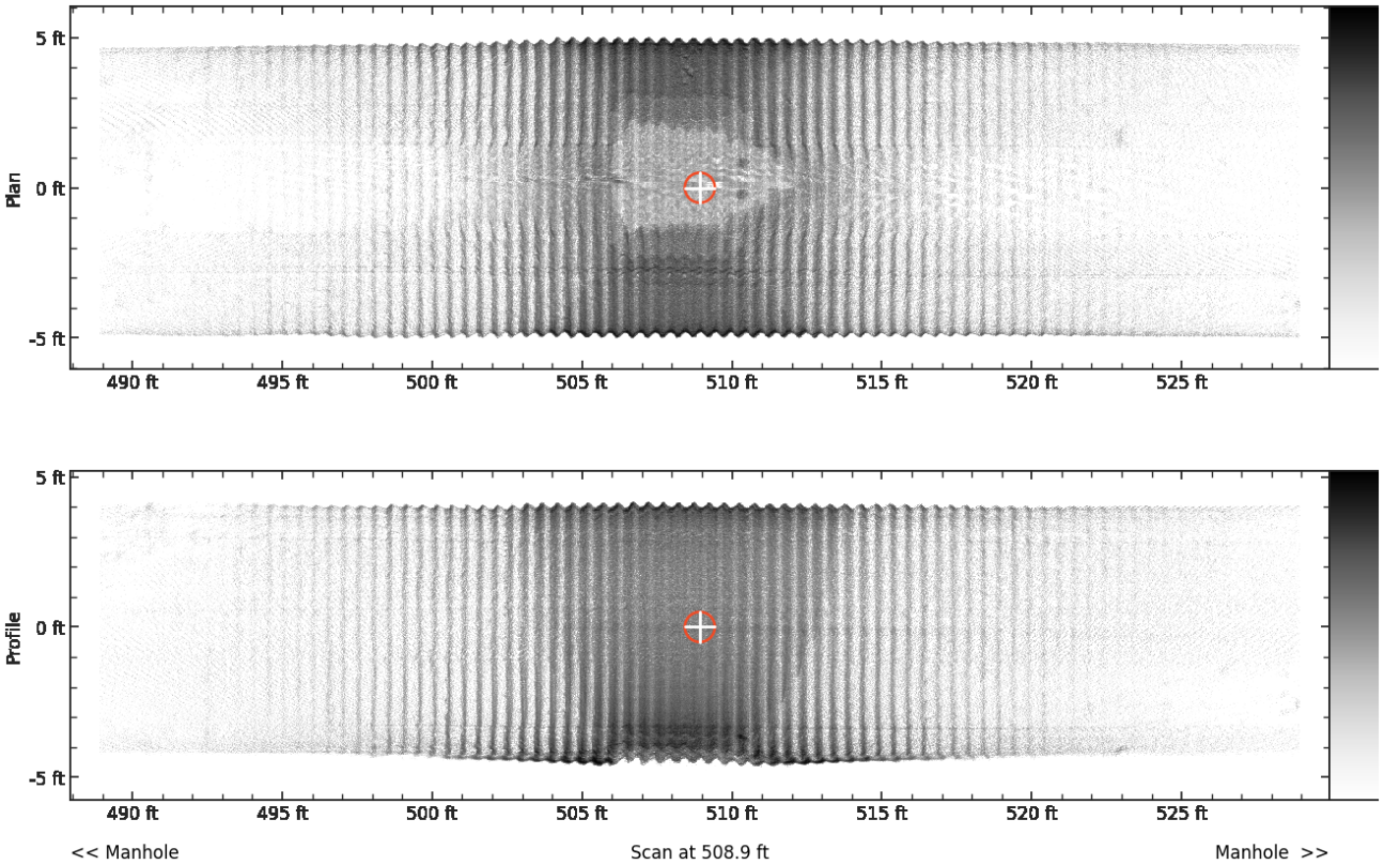
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 508 ft

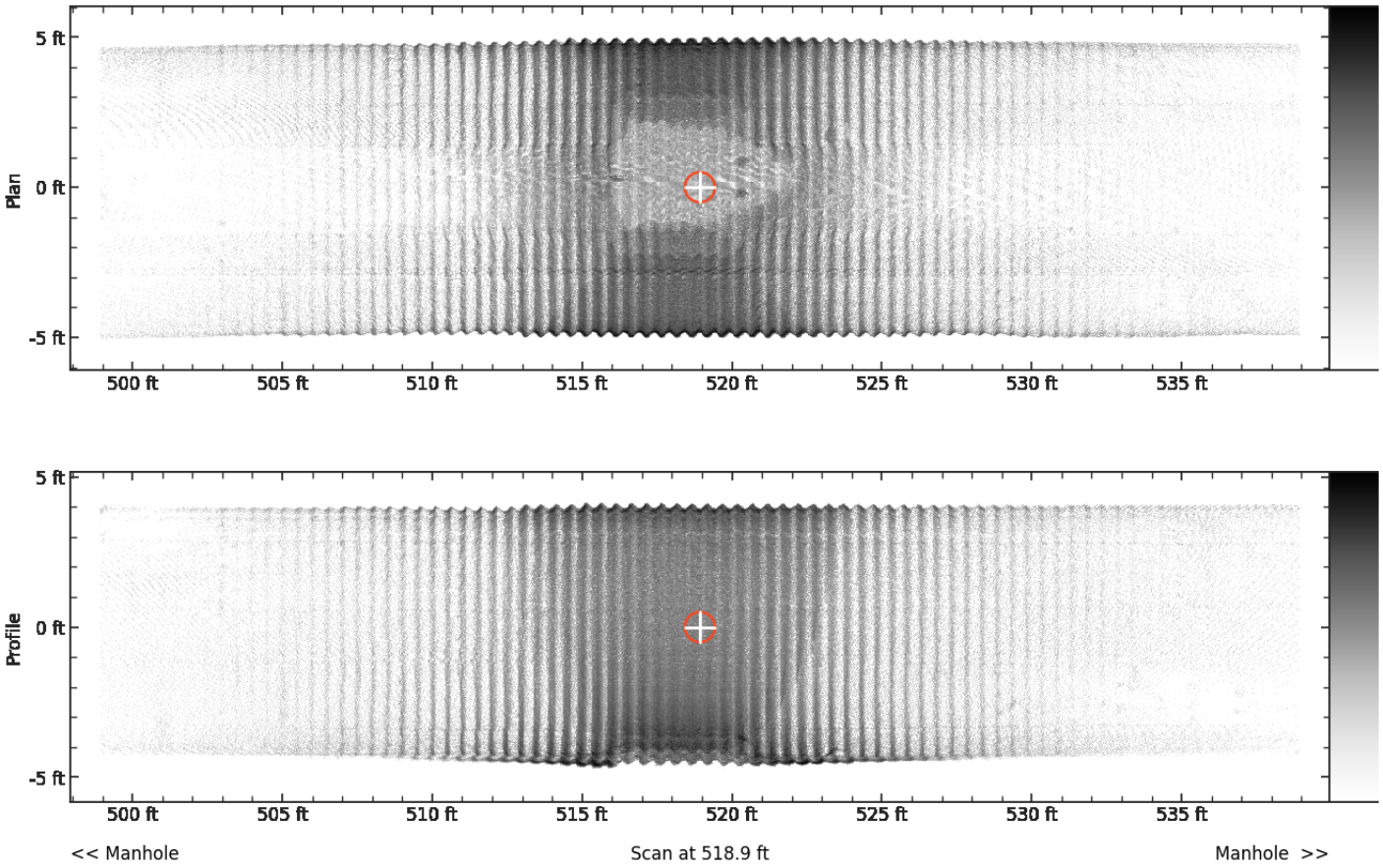
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 518 ft

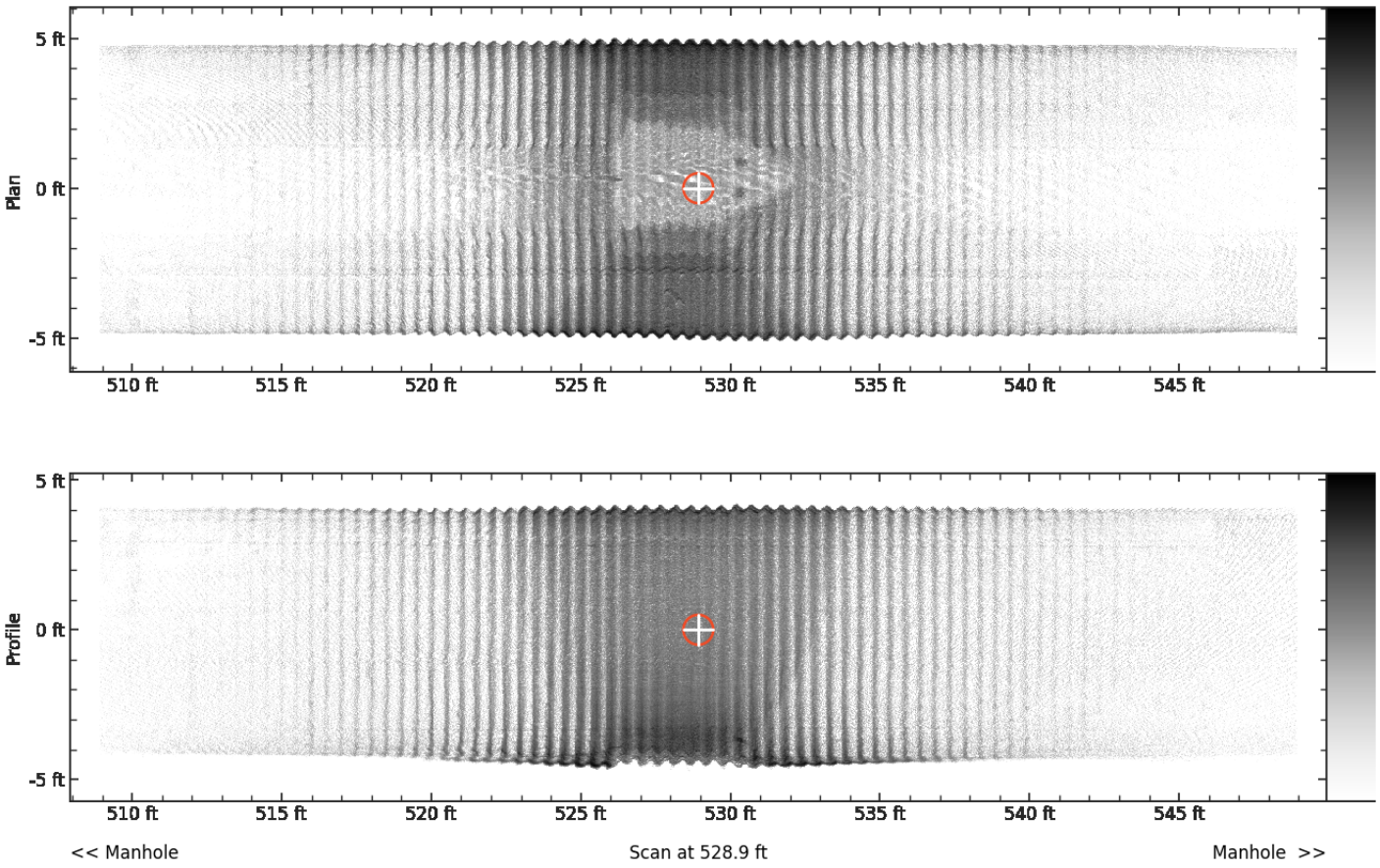
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 528 ft

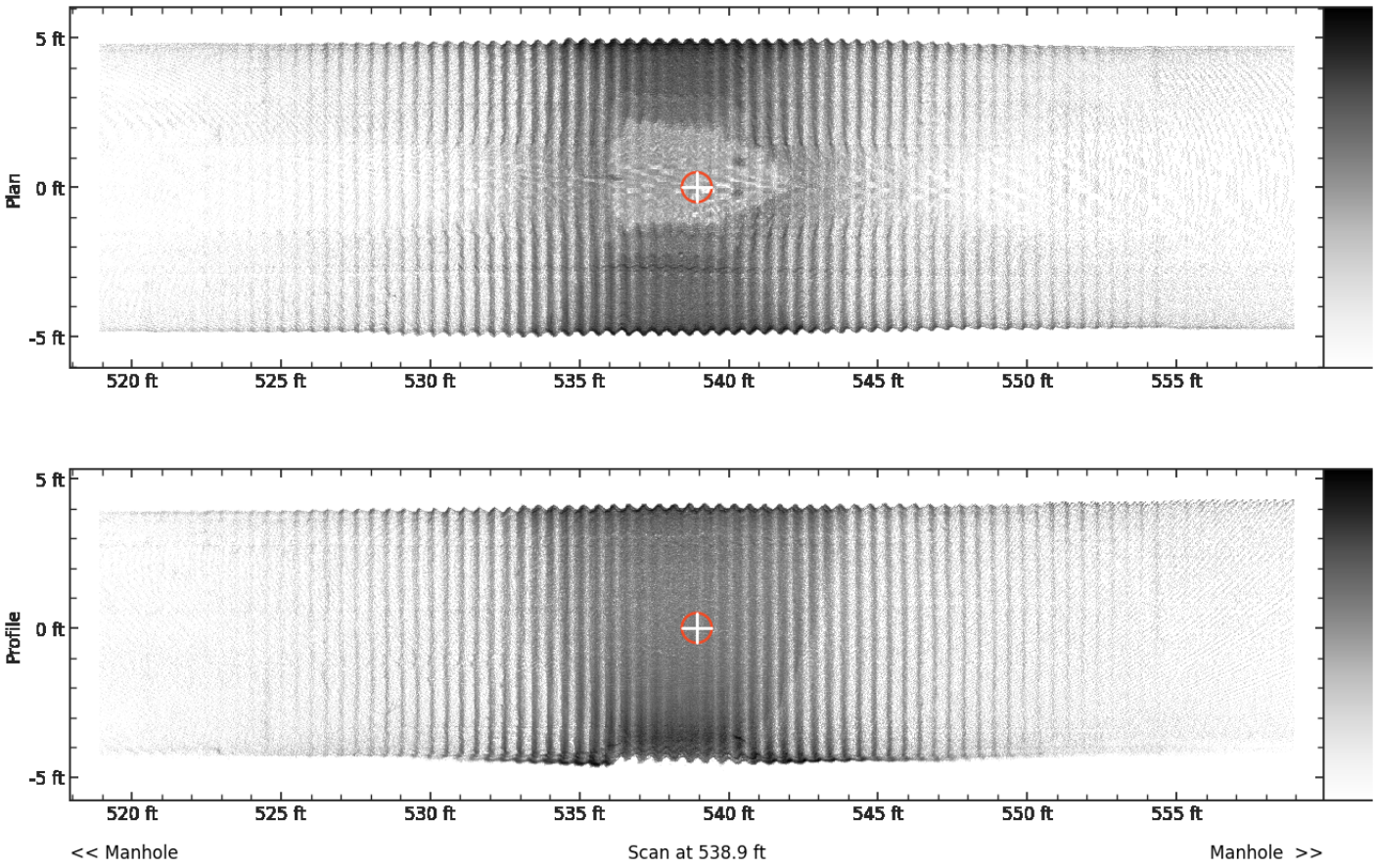
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 538 ft

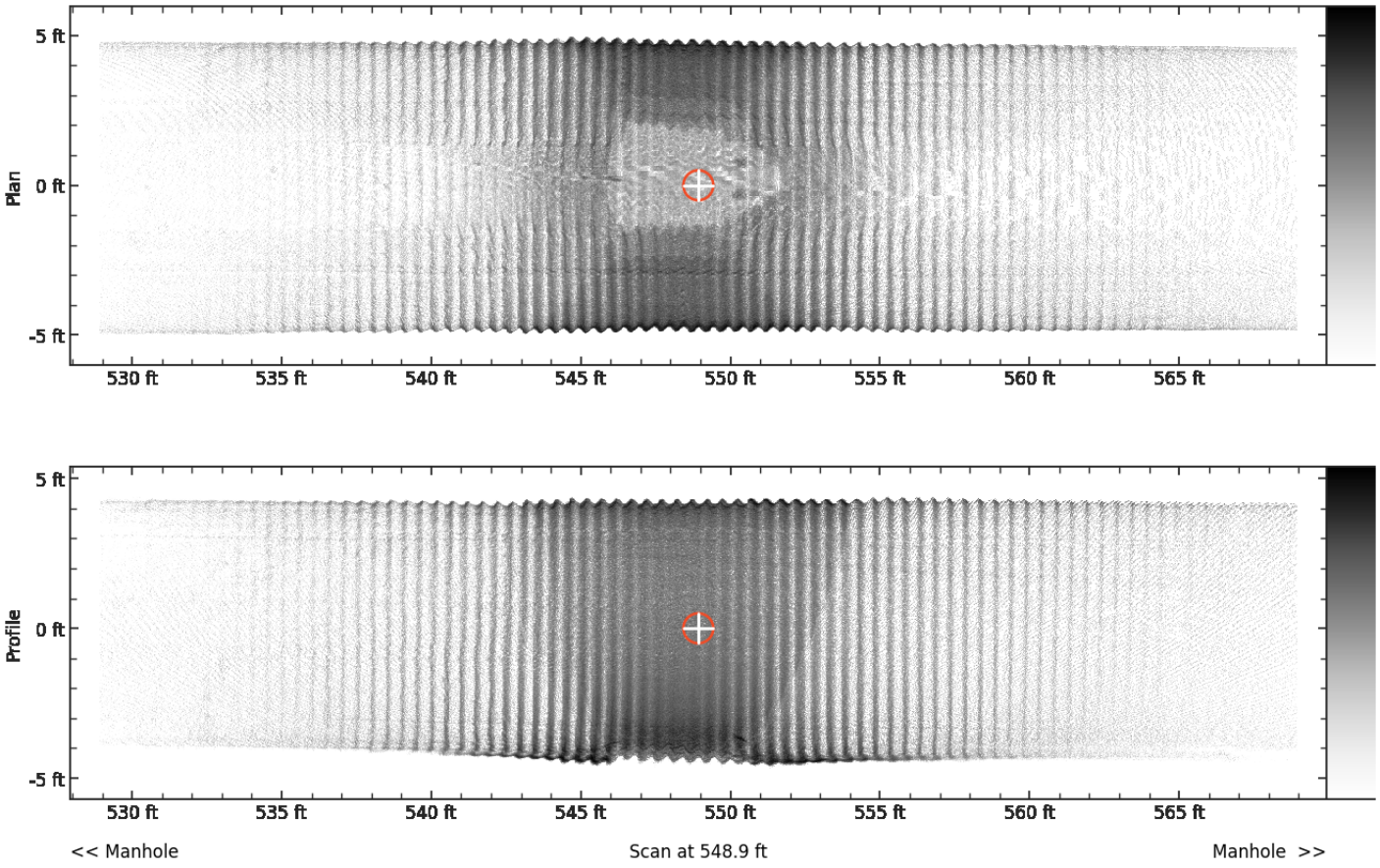
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 548 ft

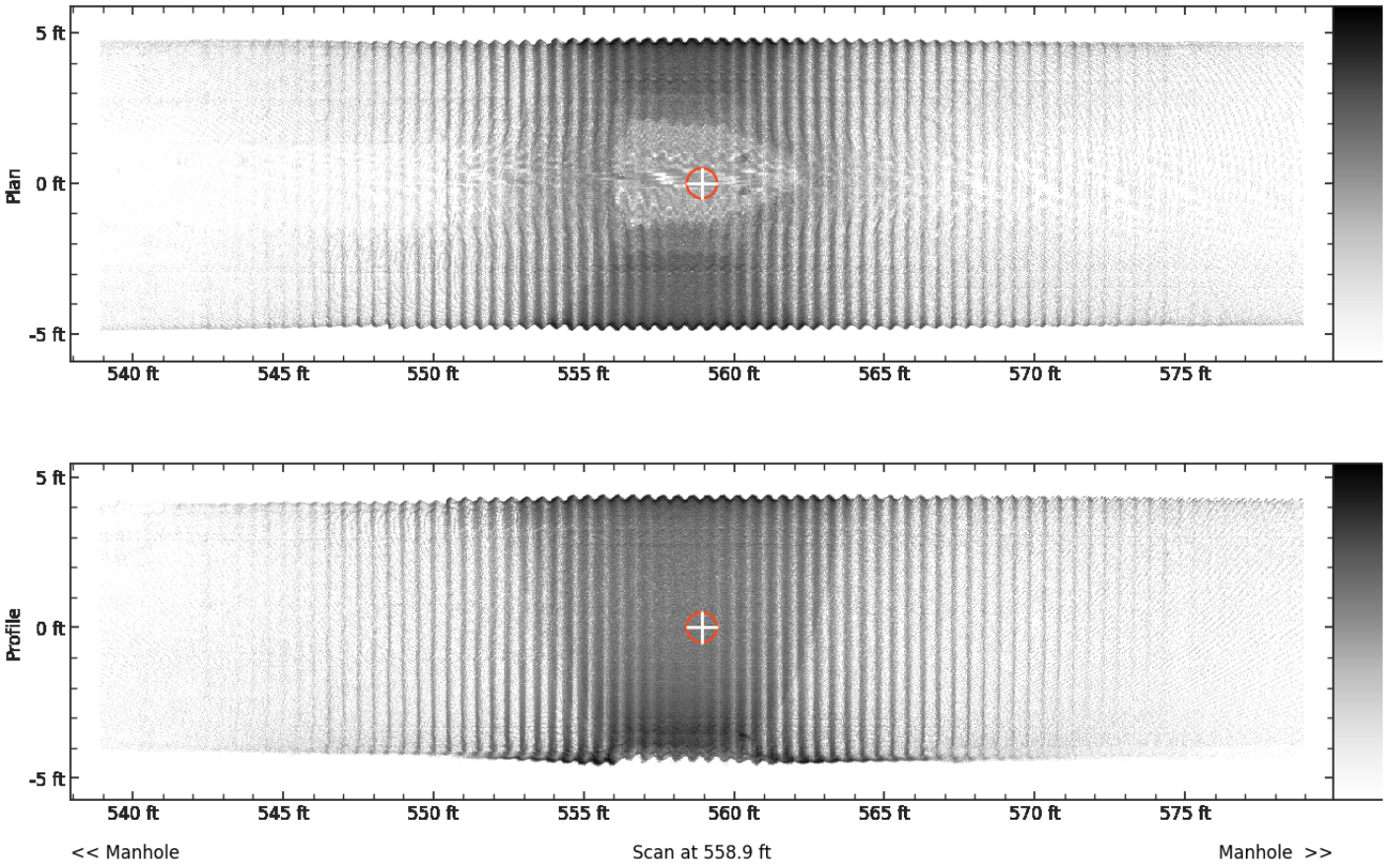
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 558 ft

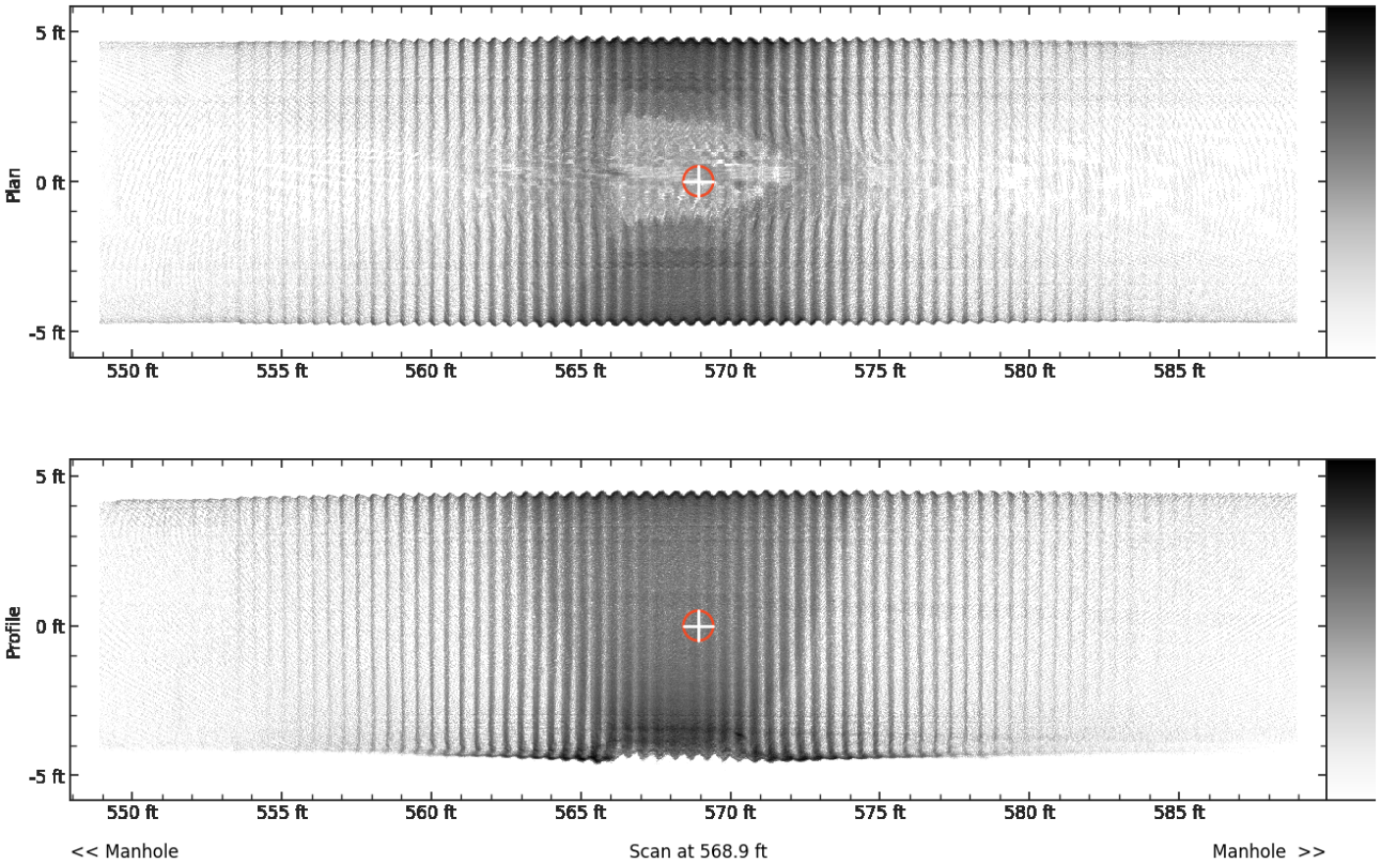
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 568 ft

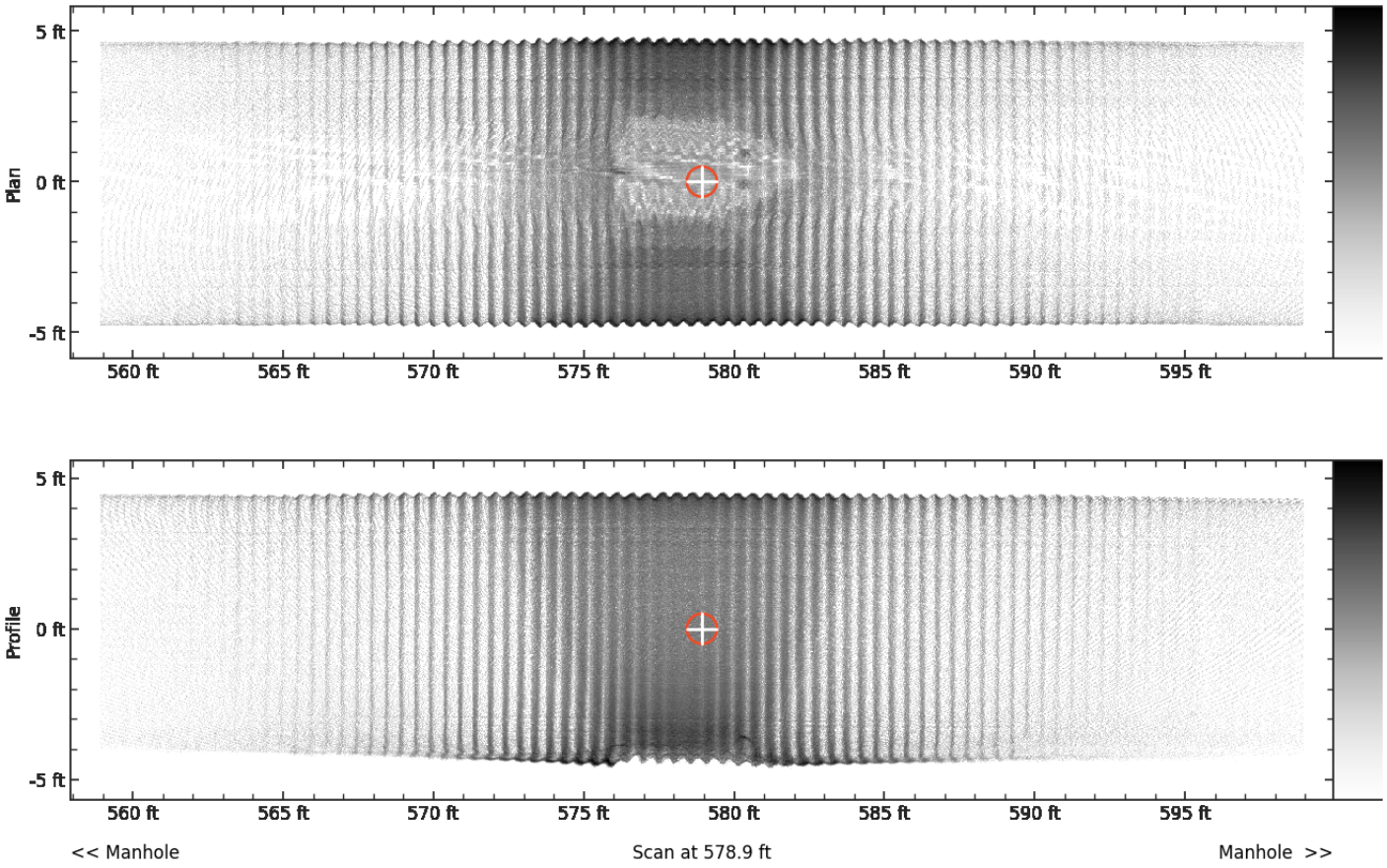
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 578 ft

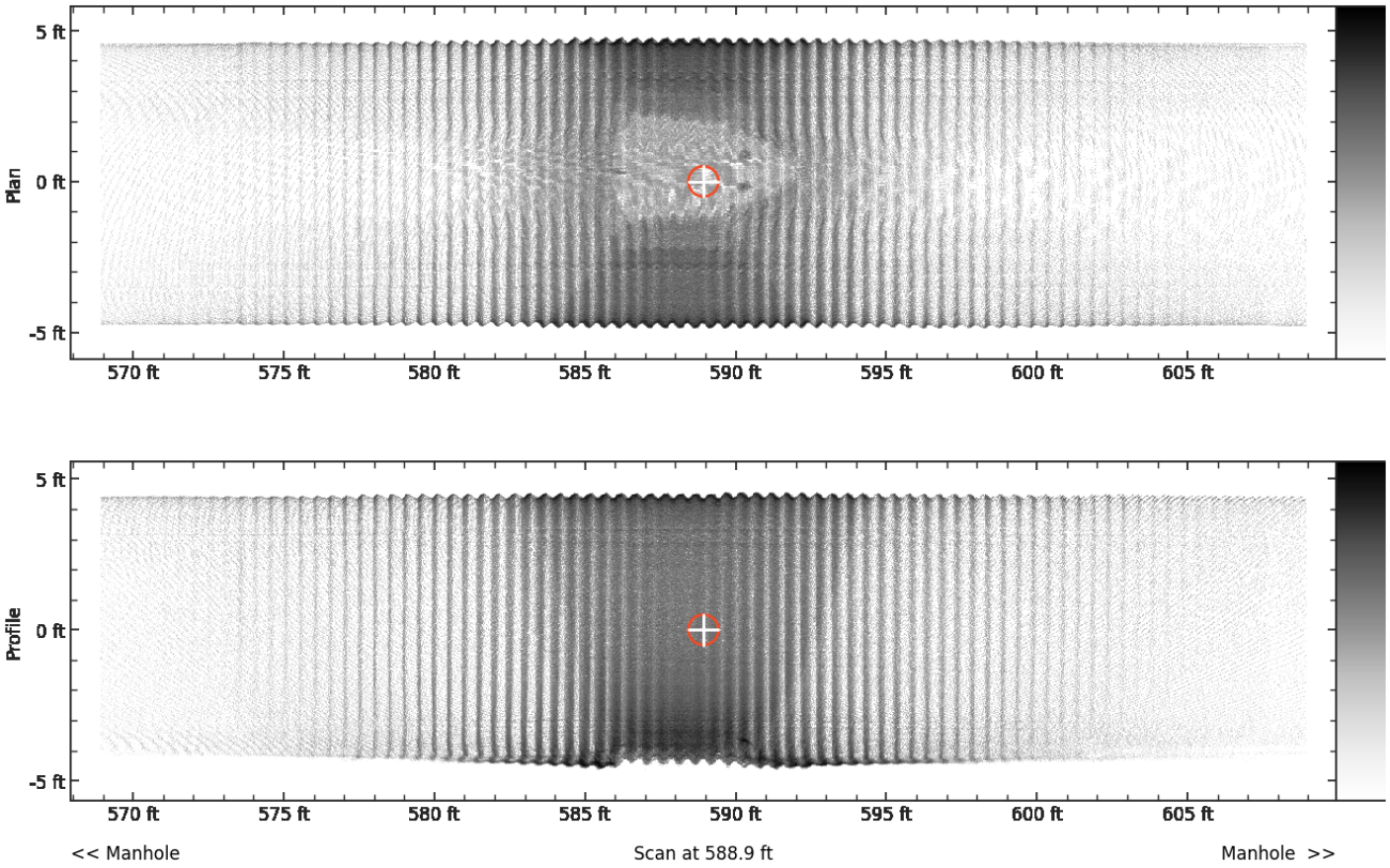
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 588 ft

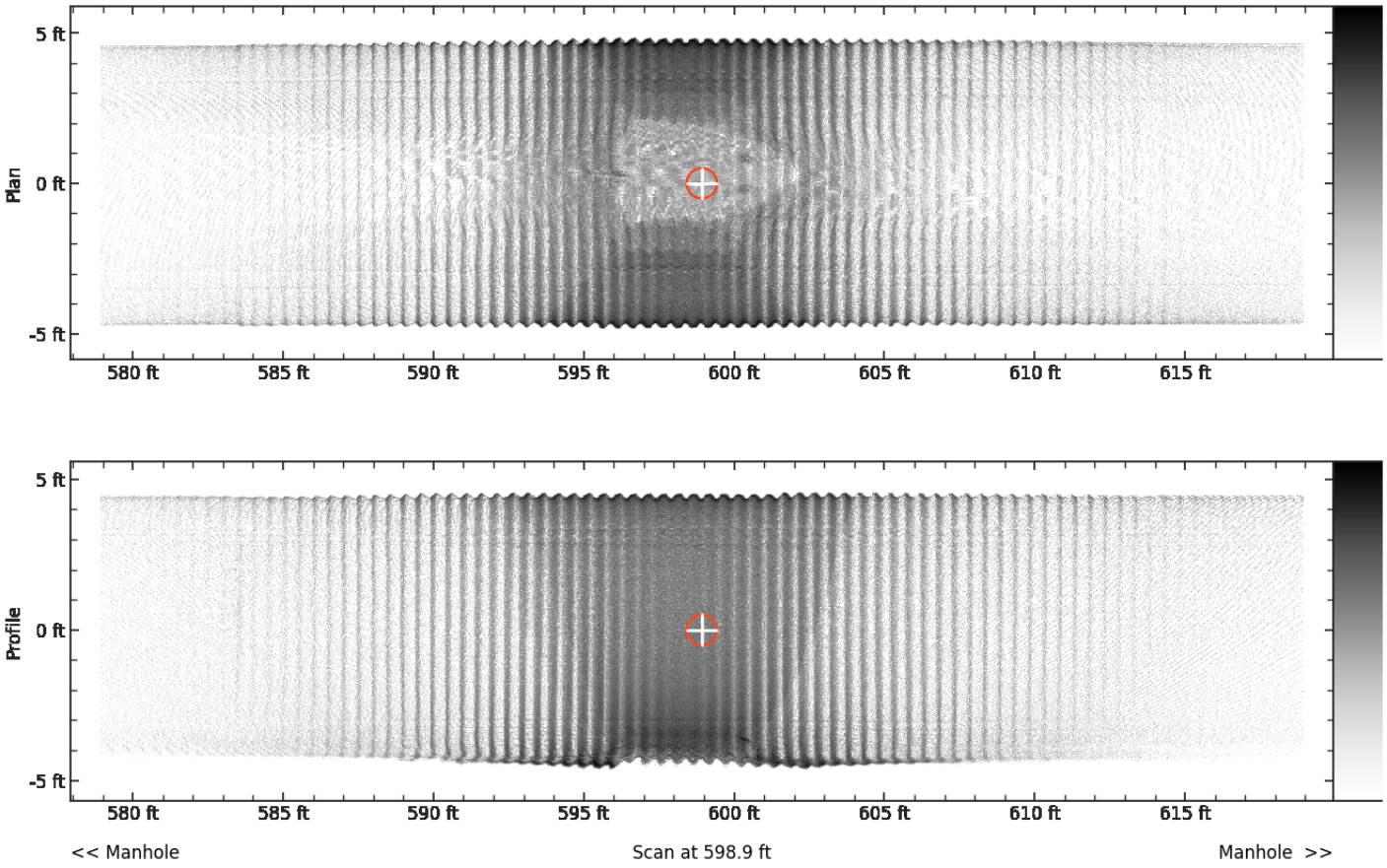
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 598 ft

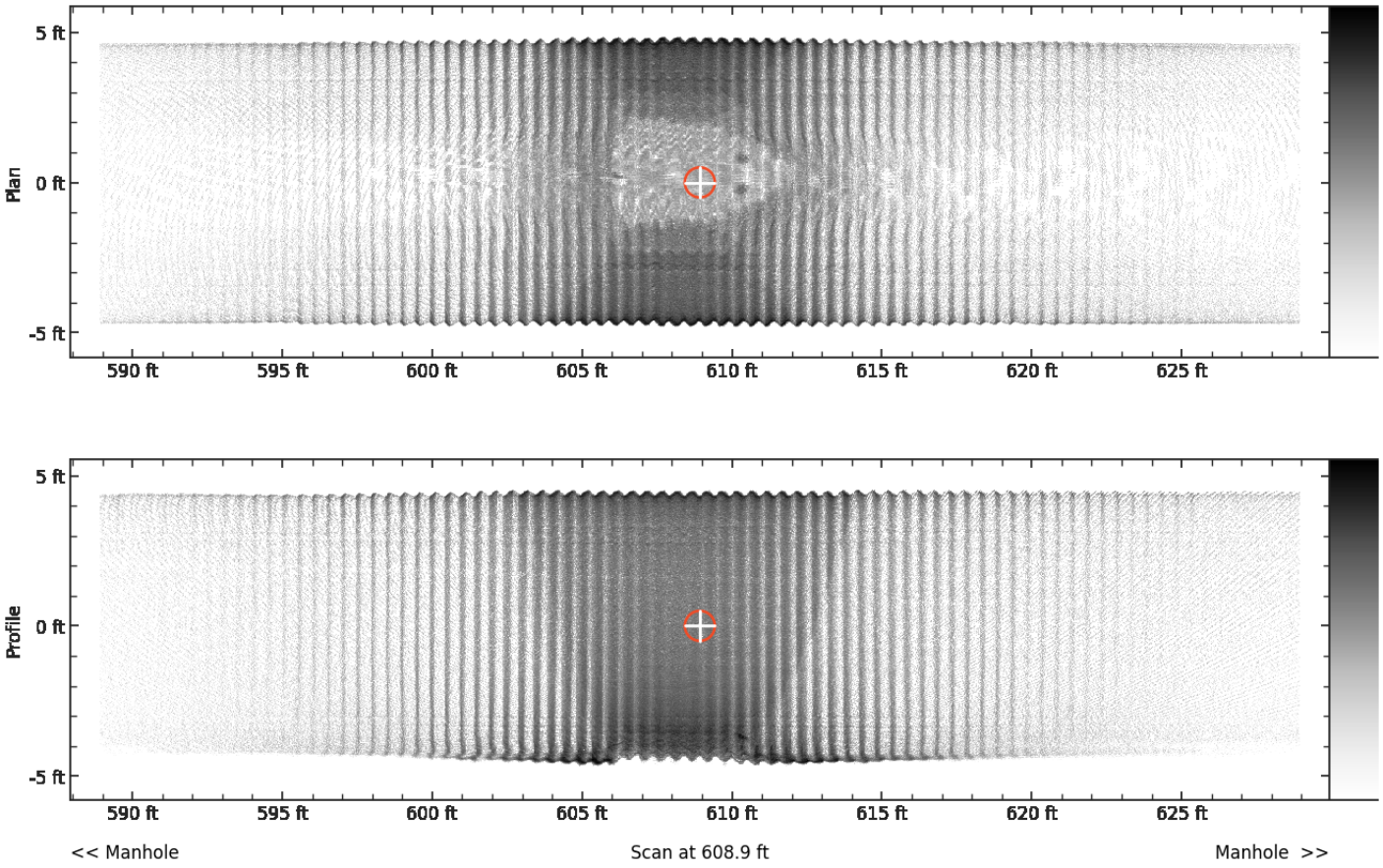
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 608 ft

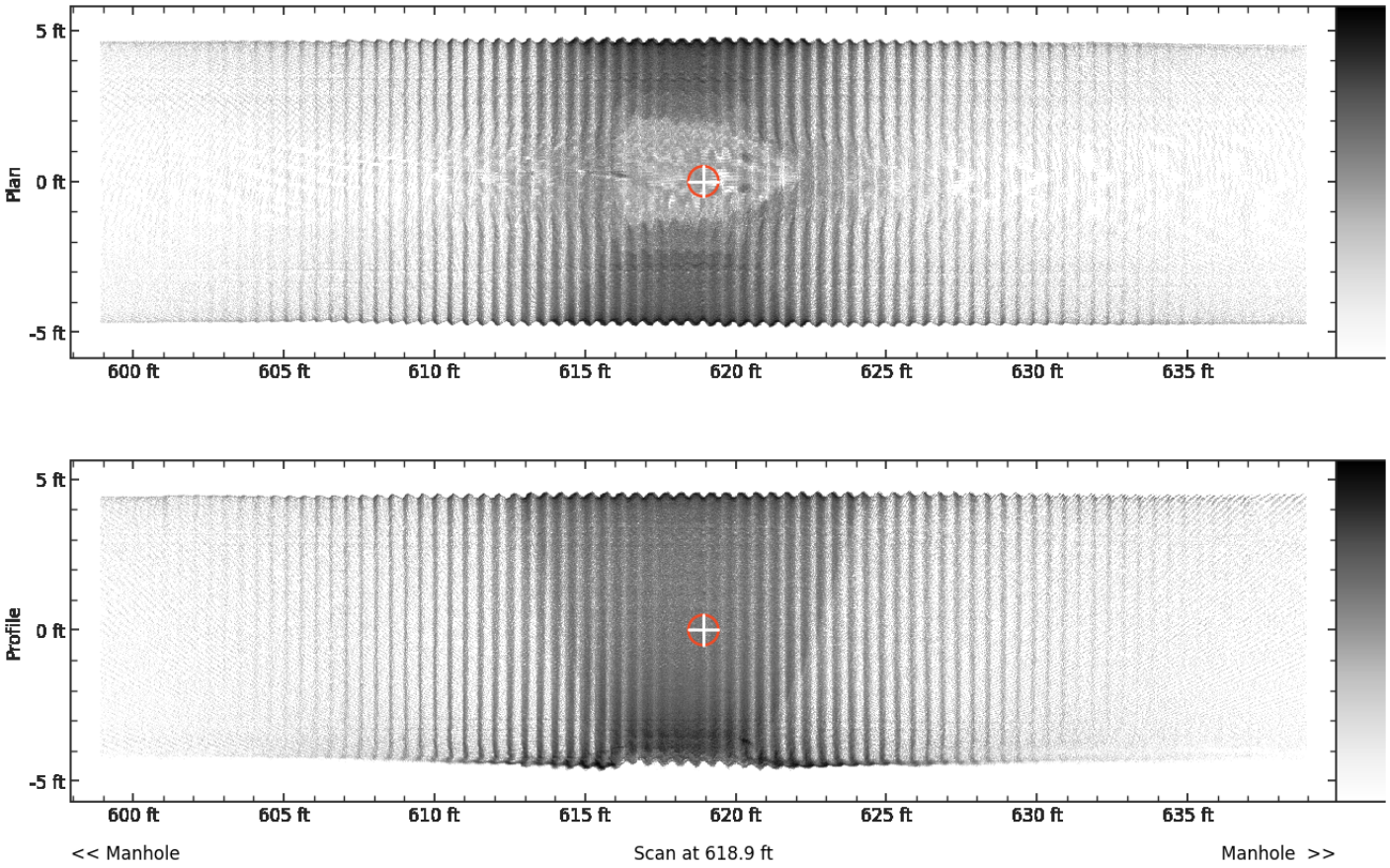
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 618 ft

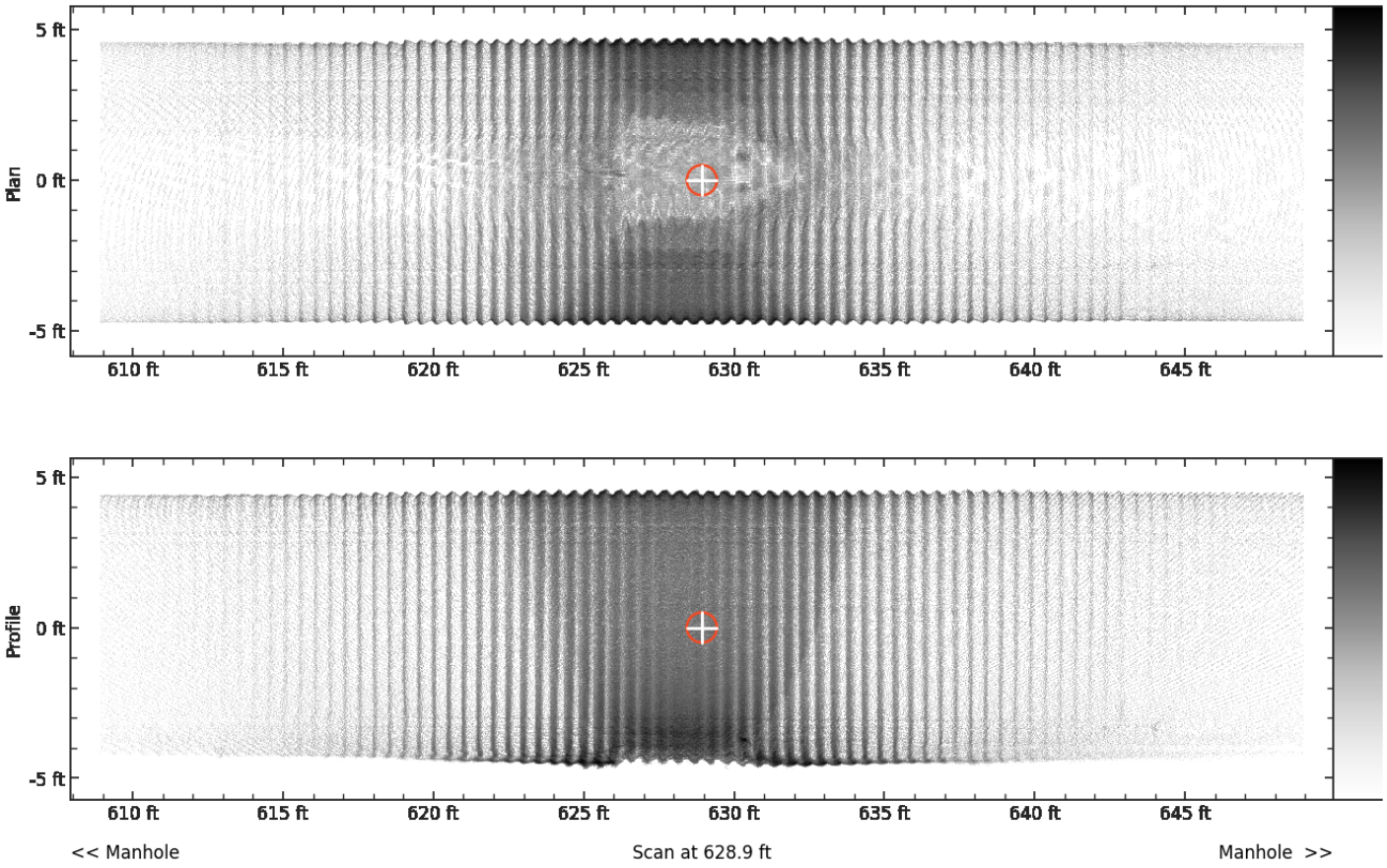
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 628 ft

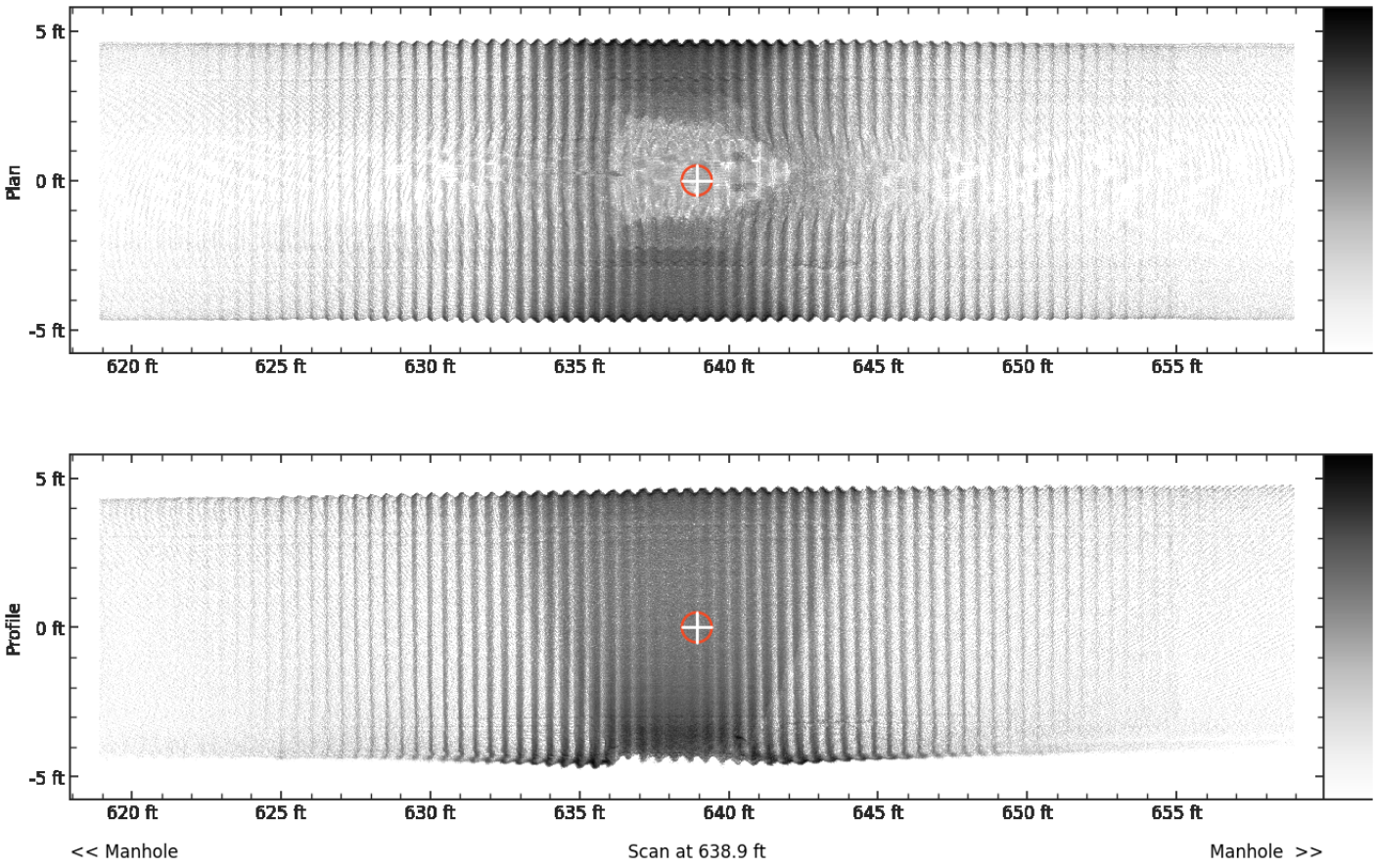
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 638 ft

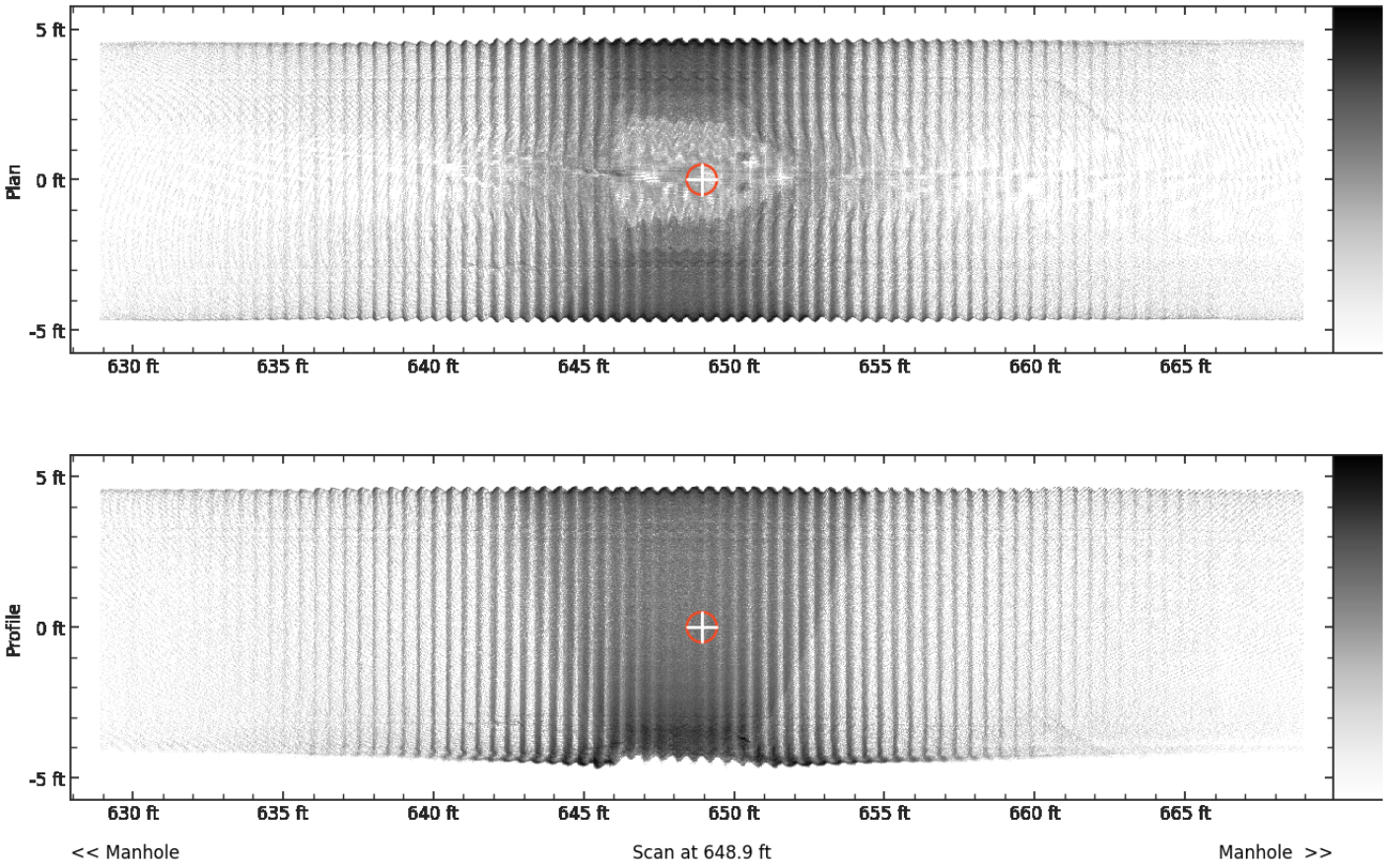
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 648 ft

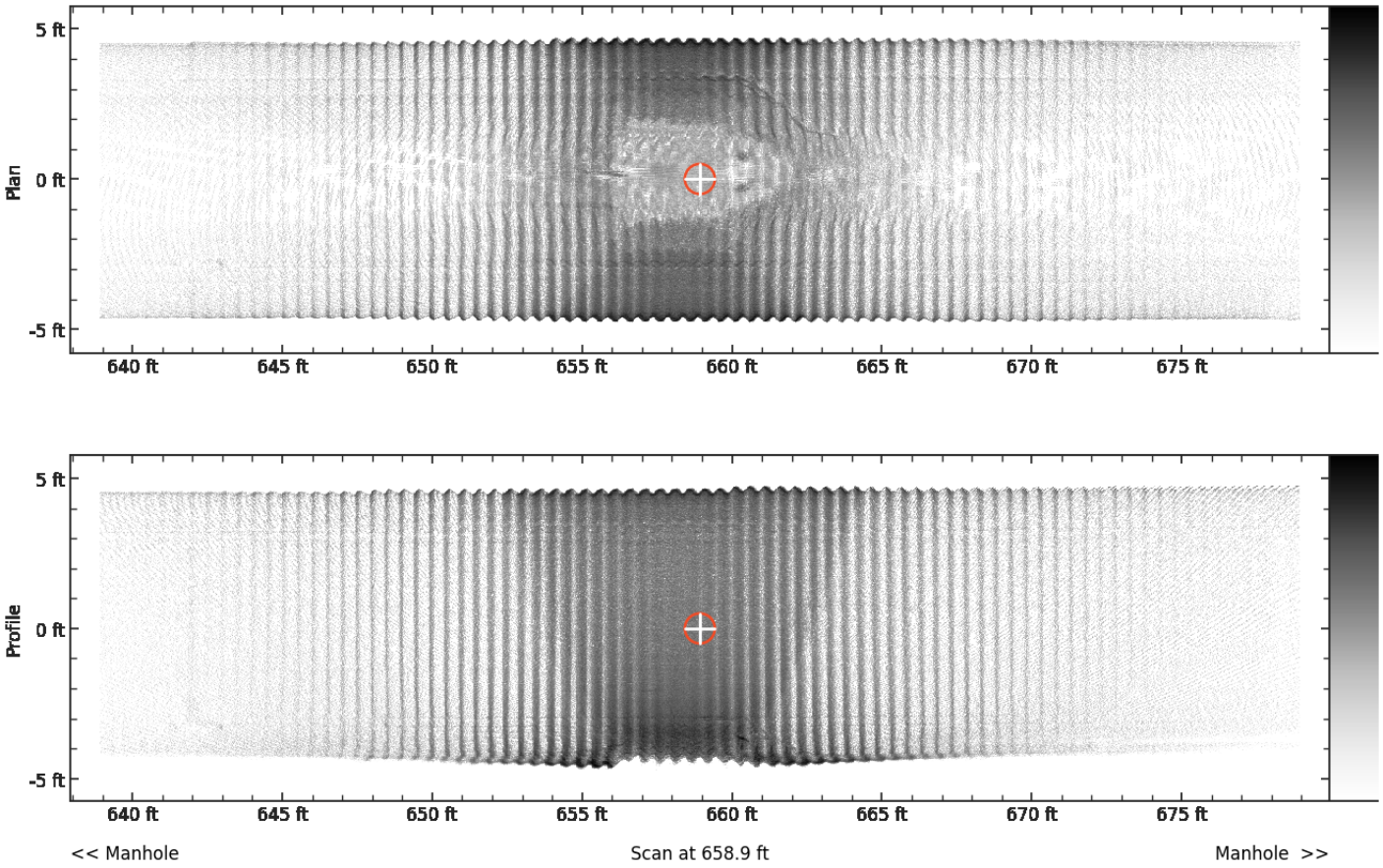
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 658 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
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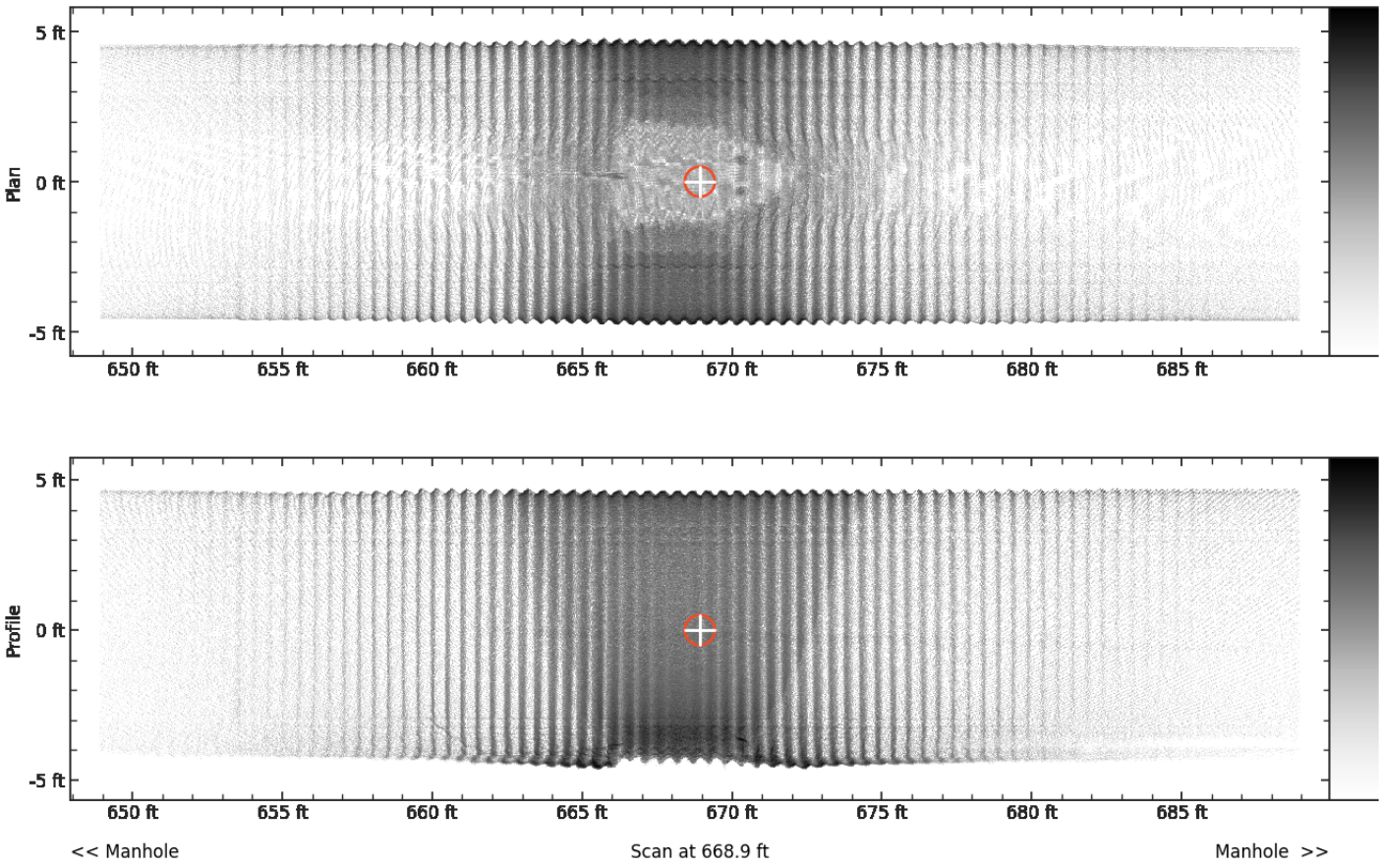
SFX-3D Plan & Profile Report
Inspection #1 : / , 668 ft

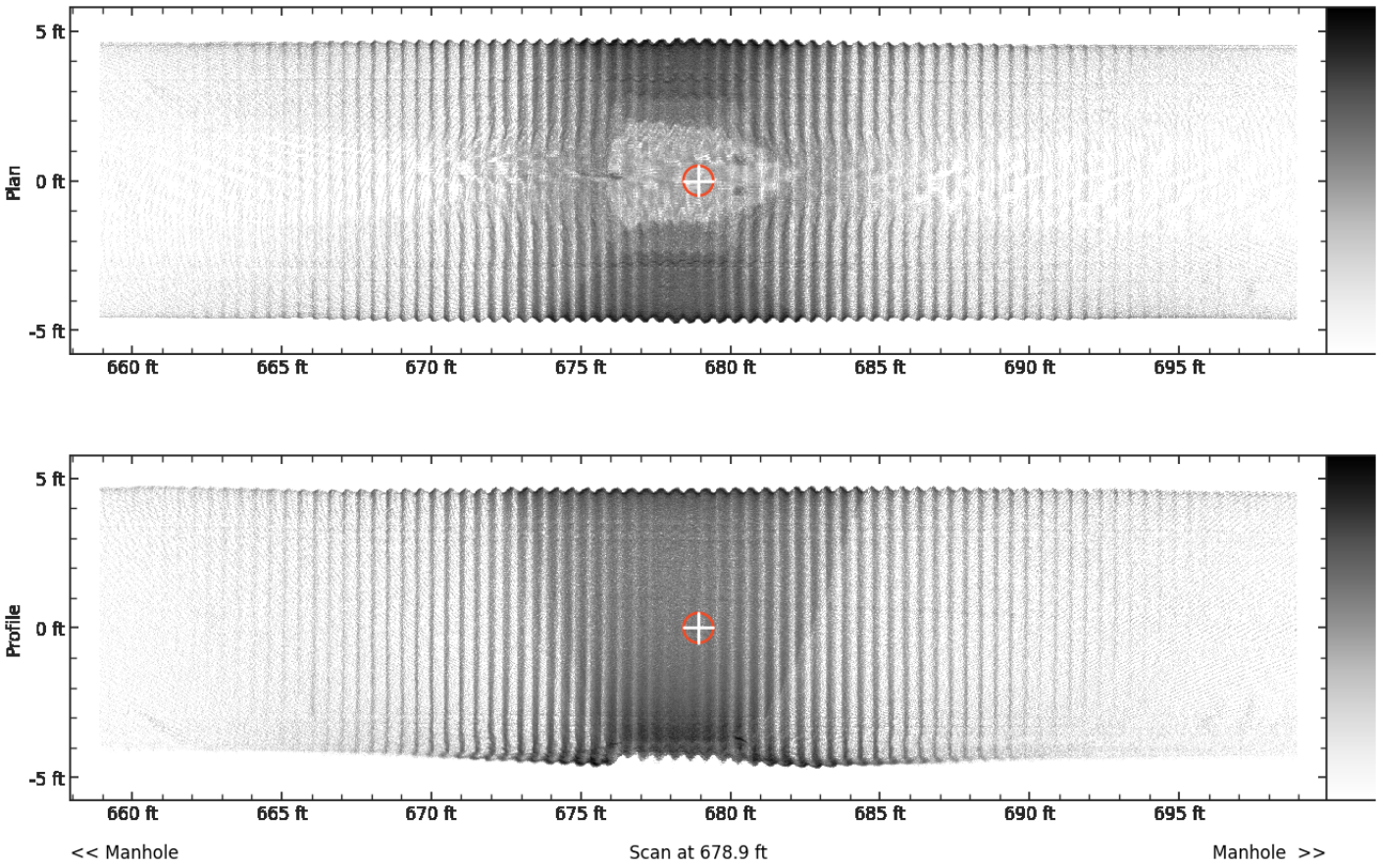
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 678 ft

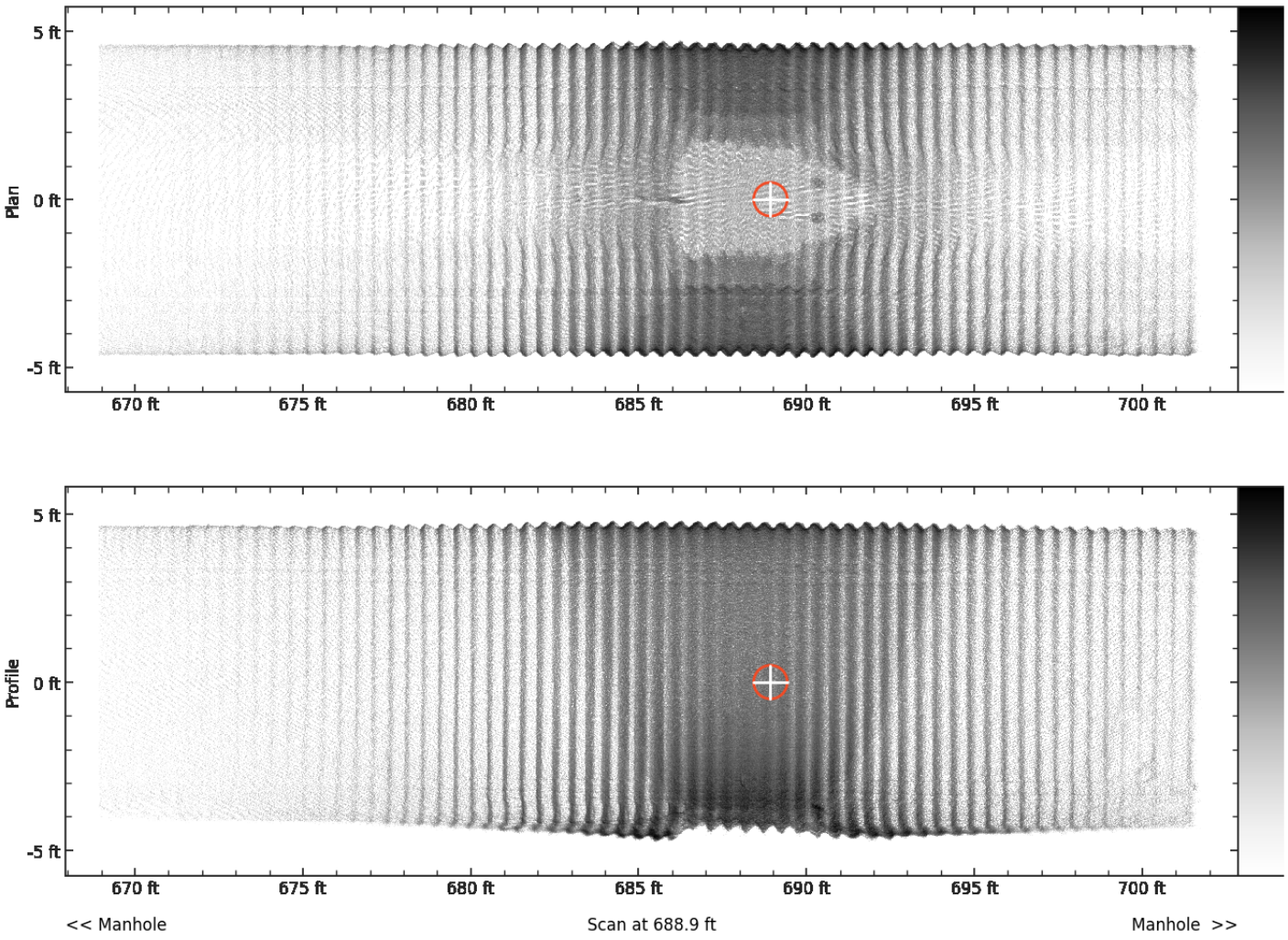
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 688 ft

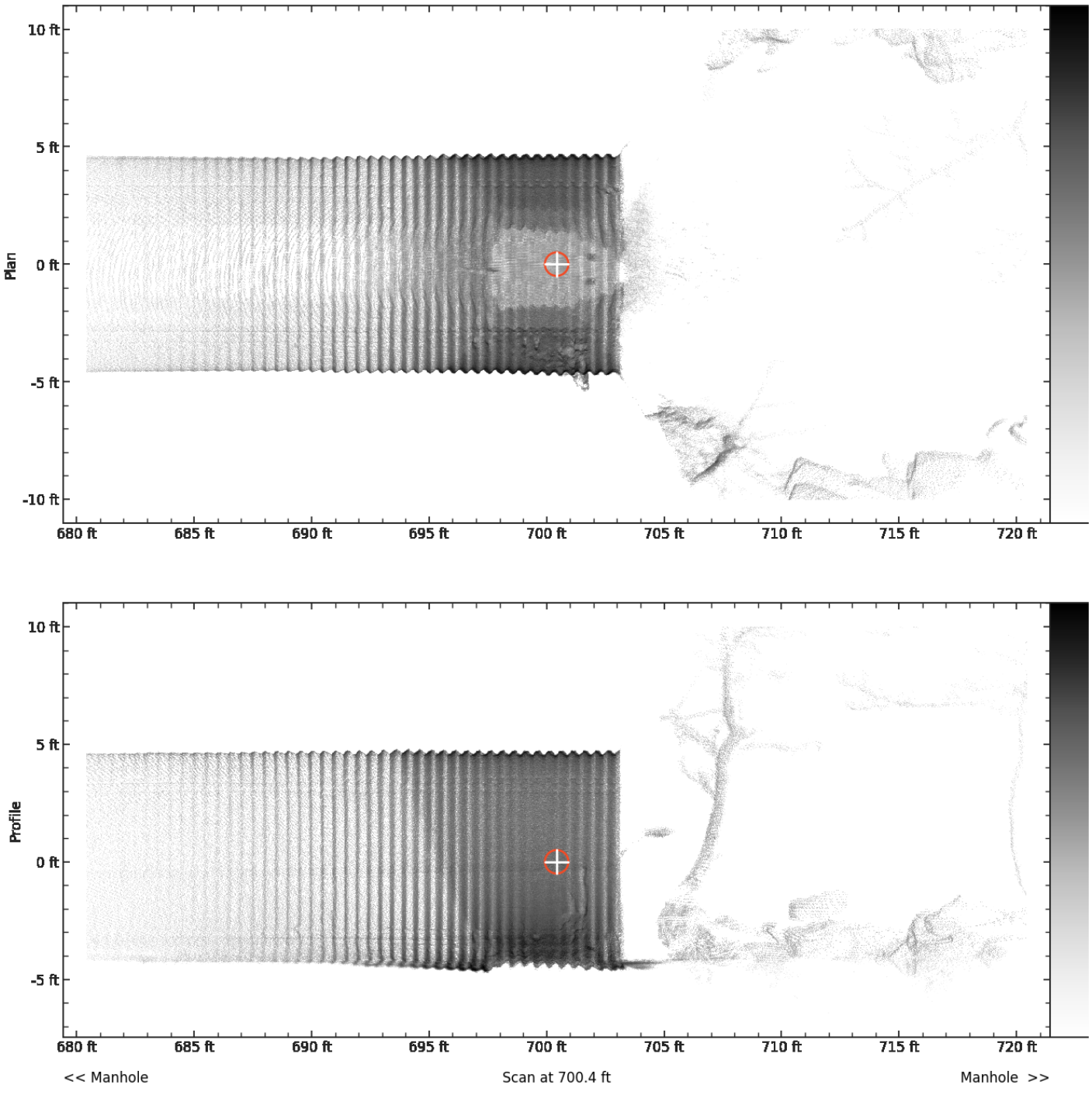
Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Plan & Profile Report
Inspection #1 : / , 700 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in

CROSS SECTION REPORT : This report provides a visual reference of the existing pipe cross section as compared to the as-built cross section. One foot (1 FT) thick cross sections are ‘sliced’ from full 3D point clouds which were captured approximately every 10-20 LF to provide full coverage of the pipeline. These 1 FT thick slices are aligned to the as-built pipe shape for direct comparison.

AS BUILT SHAPE : The GRAY shaded object in the cross section view. The inner wall surface is shown in BLUE and the wall thickness is represented as shaded GRAY.

AS BUILT WIDTH : A GREEN horizontal line with arrows. This is the expected width (@ spring line) of the pipe.

AS BUILT HEIGHT : A GREEN vertical line with arrows. This is the expected height of the pipe. In SE pipe, it is the ‘height’ from the spring line to the crown.

PROFILE OFFSET (GRID) : A series of offset GRAY lines at an even spacing. The offset ‘grid’ is used as a reference for estimating loss and corrosion.

FOOTAGE : Shown to the right of the cross section, this is the footage from the STARTING MH.

LIDAR POINTS : The DARK GRAY points in the cross section image.

CALCULATED CROSS SECTION : The RED line in the middle of the LIDAR points. The LIDAR points are traced by an algorithm that calculates the average radial distance. A pipe with no corrosion would show the RED line on top of the BLUE line.

MEASURED WIDTH : Shown to the right of the cross section, this is calculated as the minimum and maximum X-values of the LIDAR points in the cross section. The AS BUILT WIDTH is shown next to the MEASURED WIDTH.

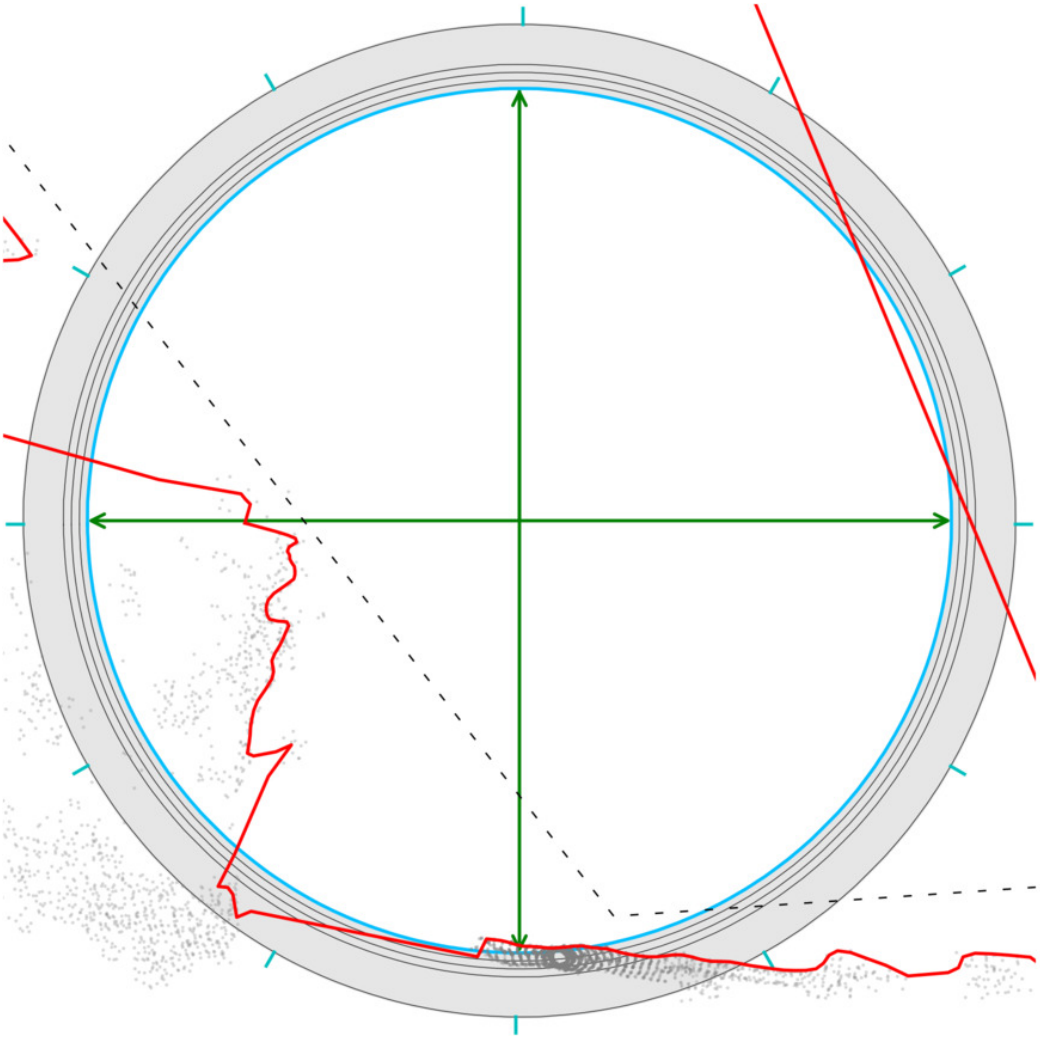
MEASURED HEIGHT : Shown to the right of the cross section, the HEIGHT is distance from the SPRINGLINE to the TRACED CROWN plus the AS-BUILT BOTTOM to SPRINGLINE . The AS-BUILT HEIGHT is shown next to the MEASURED HEIGHT.

CROSS SECTION REPORT

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 0.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



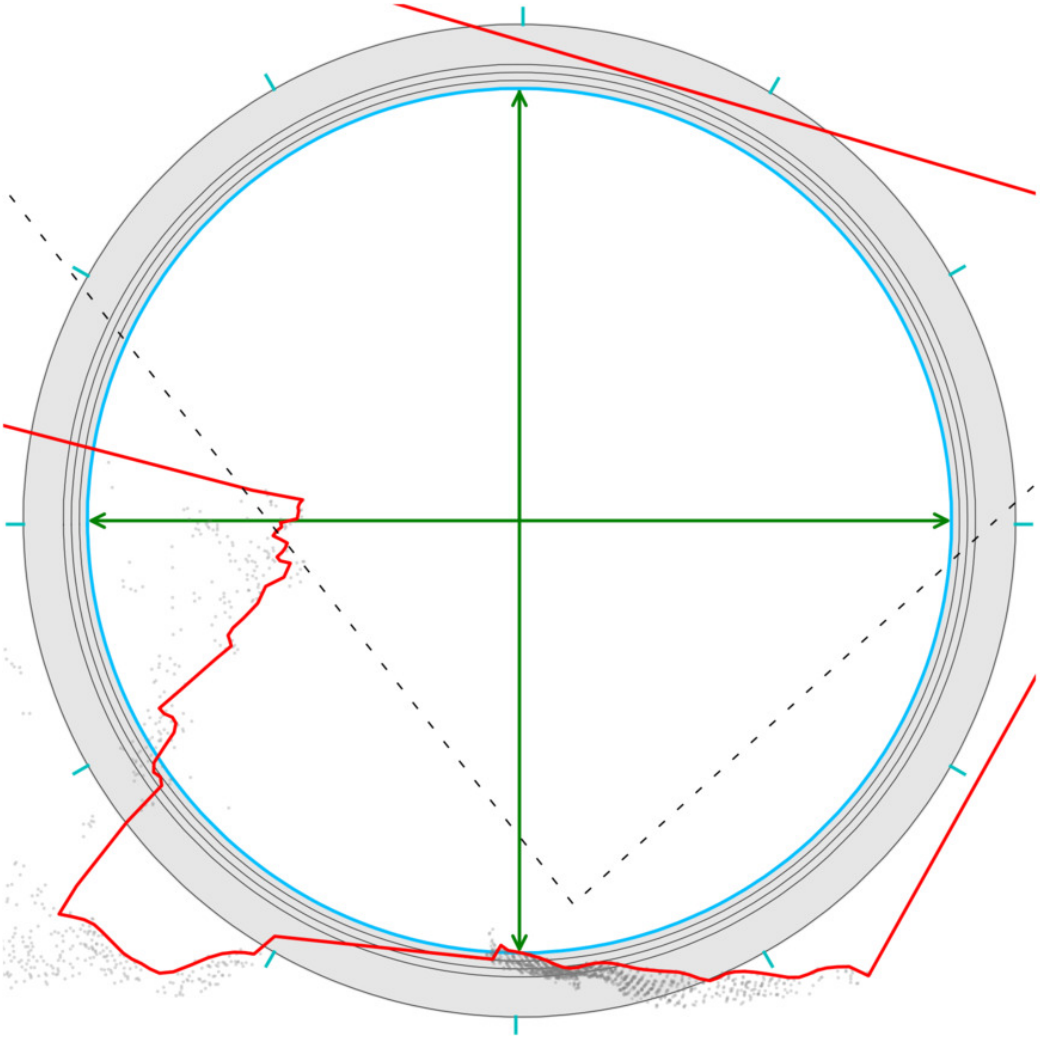
```
Footage    :  0 ft
Width      :  214.8" | 108.0"
Height     :  246.0" | 108.0"

Area       :  23870 sq in
Perimeter  :  816.0 in
Ovality    :  57.1%

Interior Diameter : 1104790.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 1.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



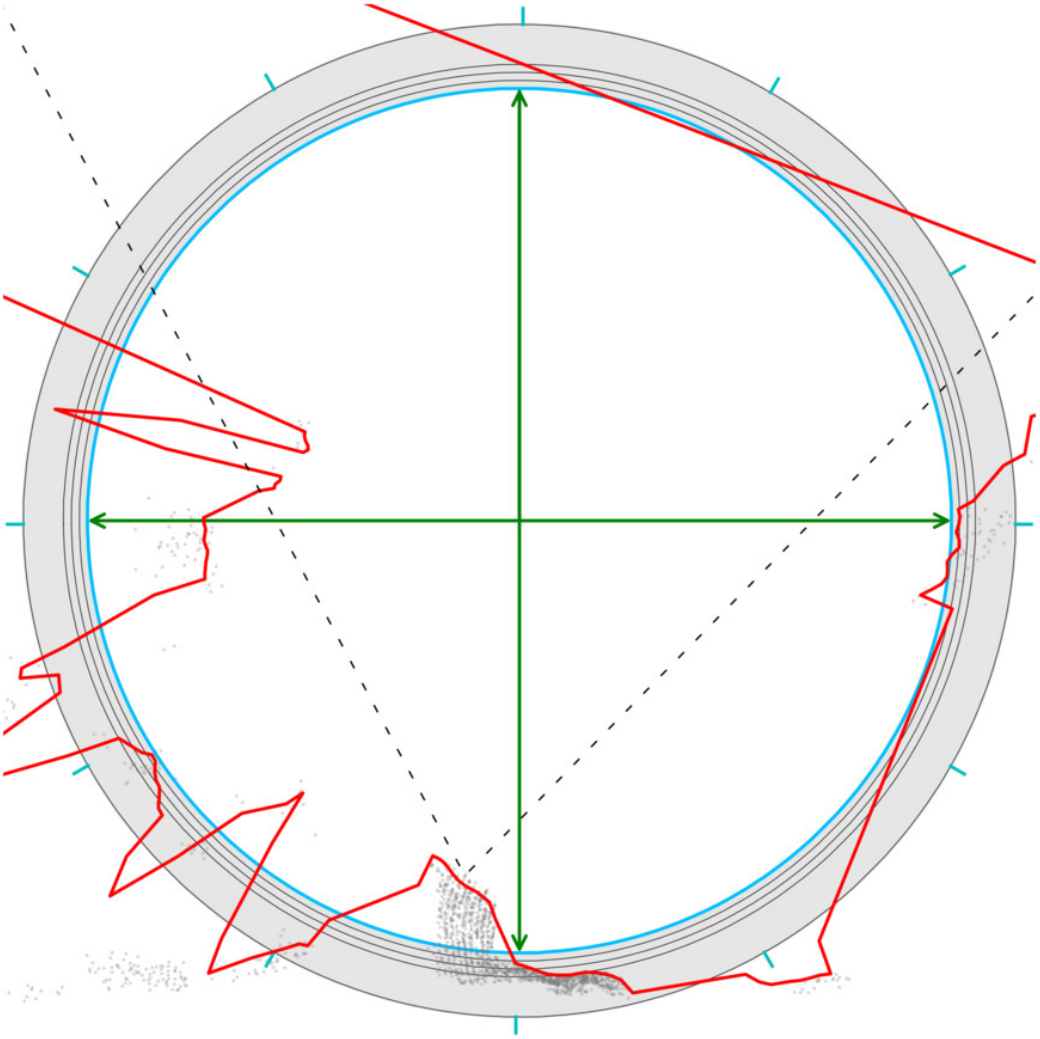
```
Footage   :  1 ft
Width     :  243.5" | 108.0"
Height    :  159.0" | 108.0"

Area      :  18214 sq in
Perimeter :  827.3 in
Ovality   :  57.2%

Interior Diameter : 2373823.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 2.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



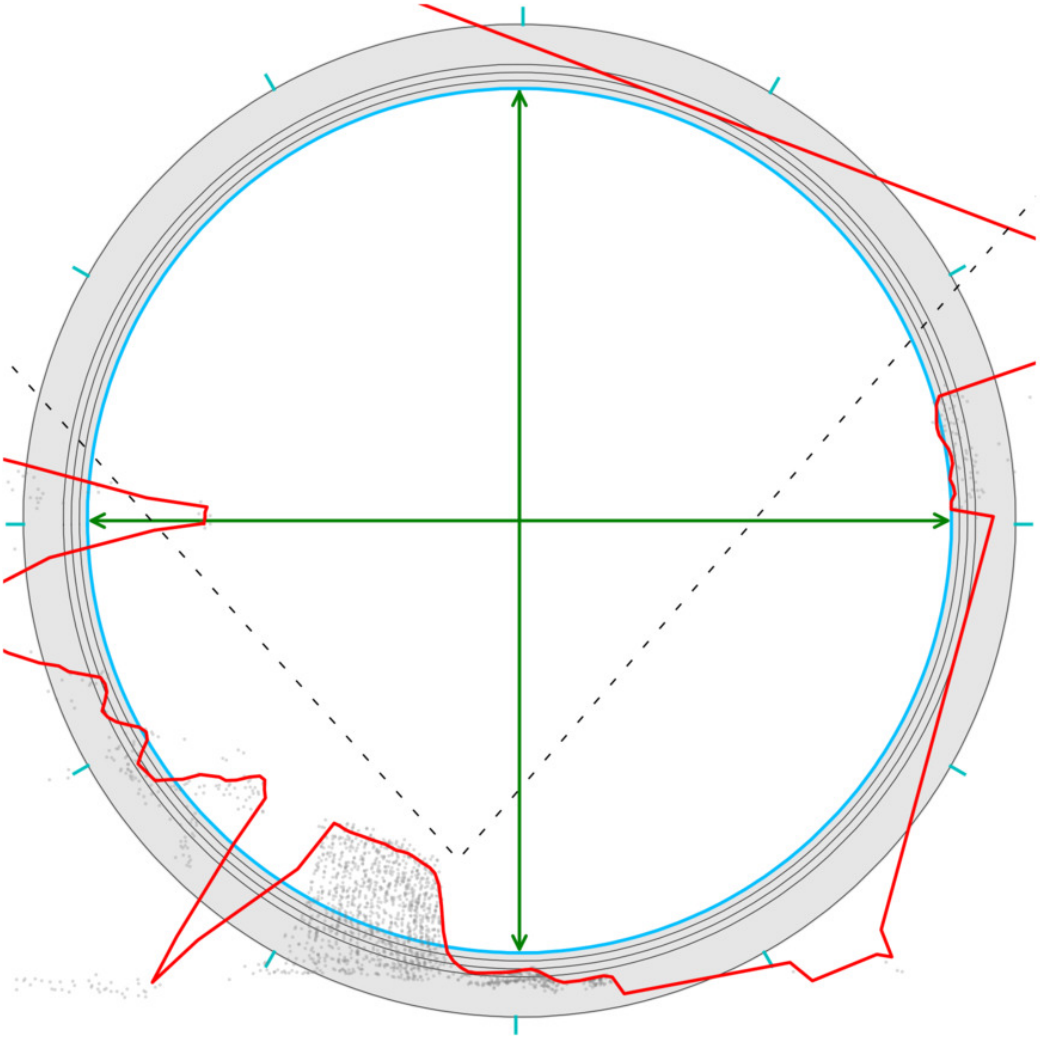
```
Footage   :  2 ft
Width     :  288.8" | 108.0"
Height    :  166.5" | 108.0"

Area      :  16719 sq in
Perimeter :  939.9 in
Ovality   :  57.2%

Interior Diameter : 2130188.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 3.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



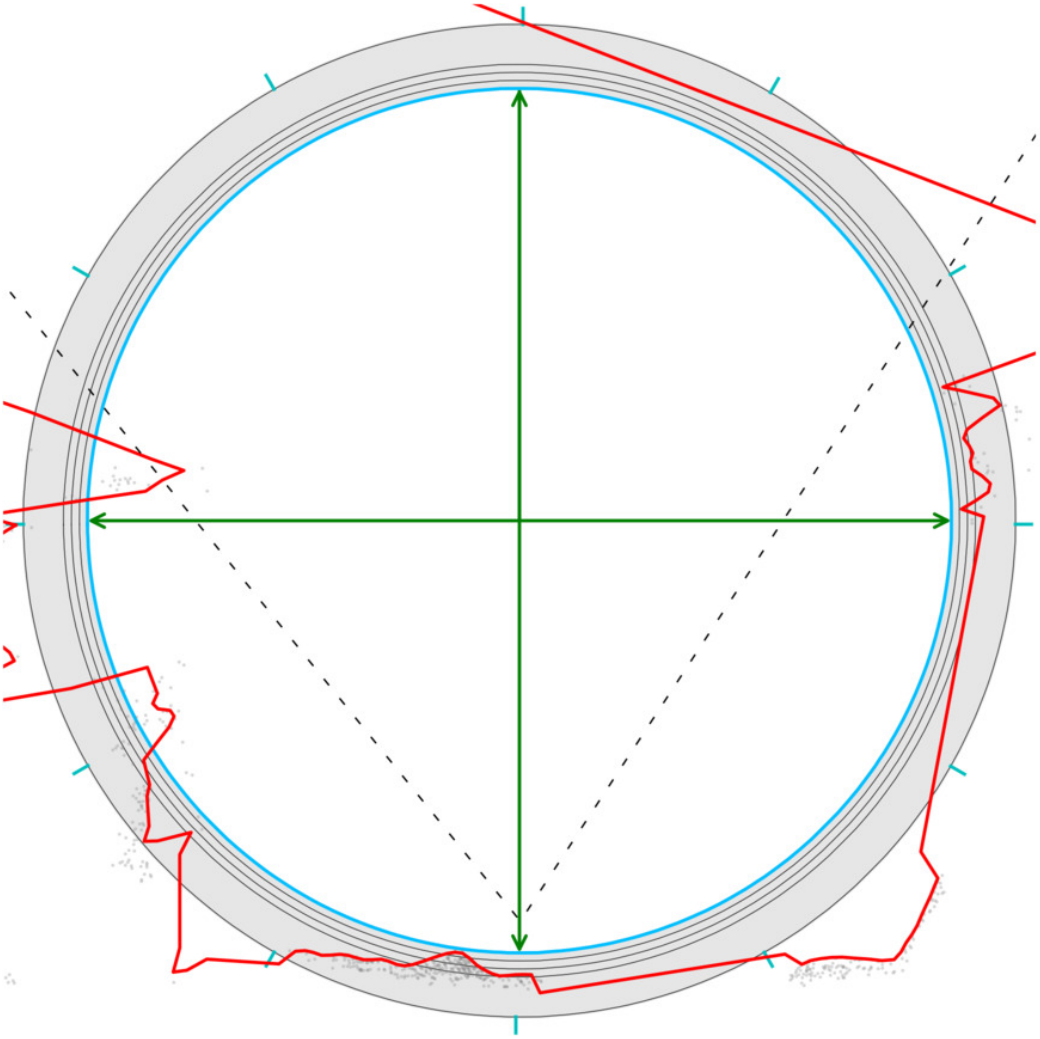
```
Footage   :  3 ft
Width     :  242.3" | 108.0"
Height    :  179.2" | 108.0"

Area      :  18781 sq in
Perimeter :  847.3 in
Ovality   :  57.2%

Interior Diameter : 1914034.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 4.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



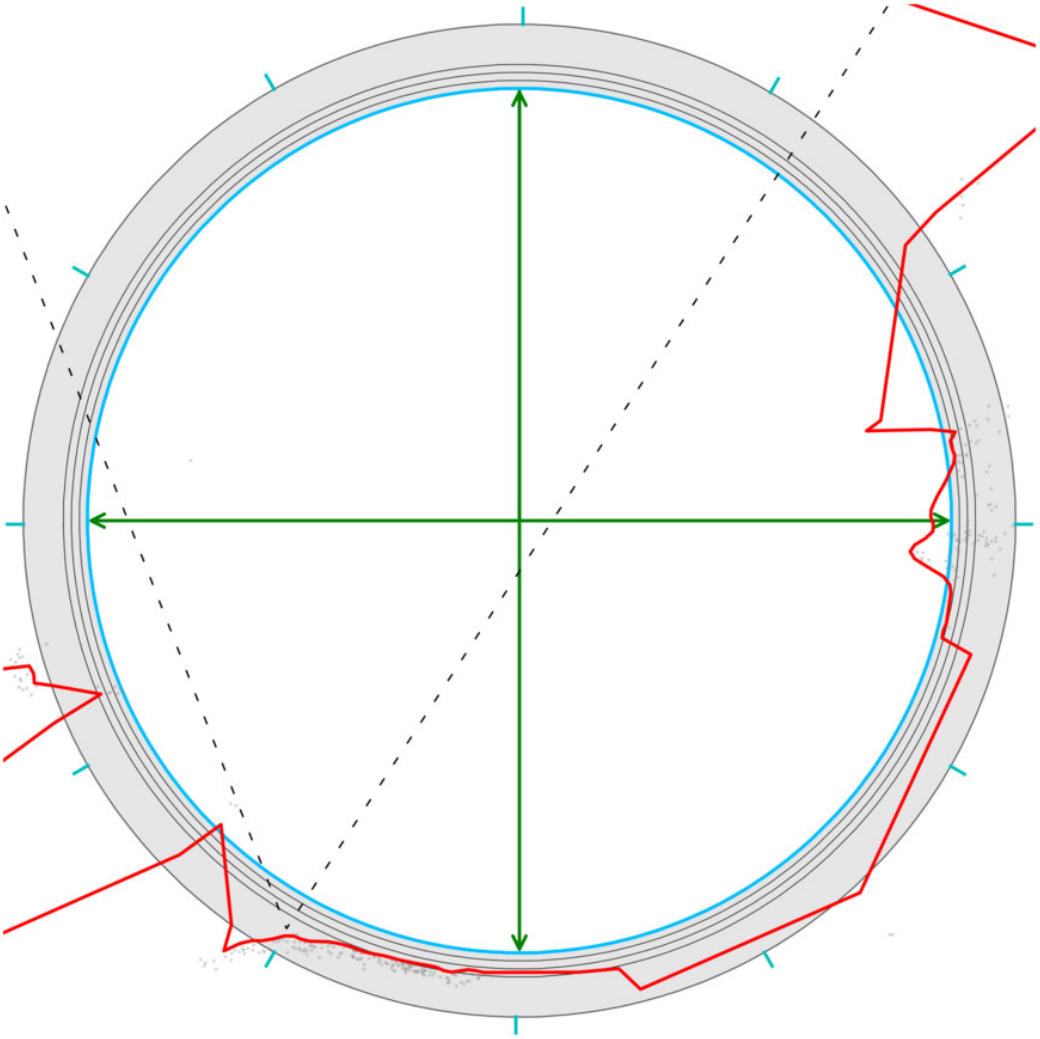
```
Footage   :  4 ft
Width     :  238.7" | 108.0"
Height    :  183.1" | 108.0"

Area      :  18768 sq in
Perimeter :  812.7 in
Ovality   :  57.2%

Interior Diameter : 2758305.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 5.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



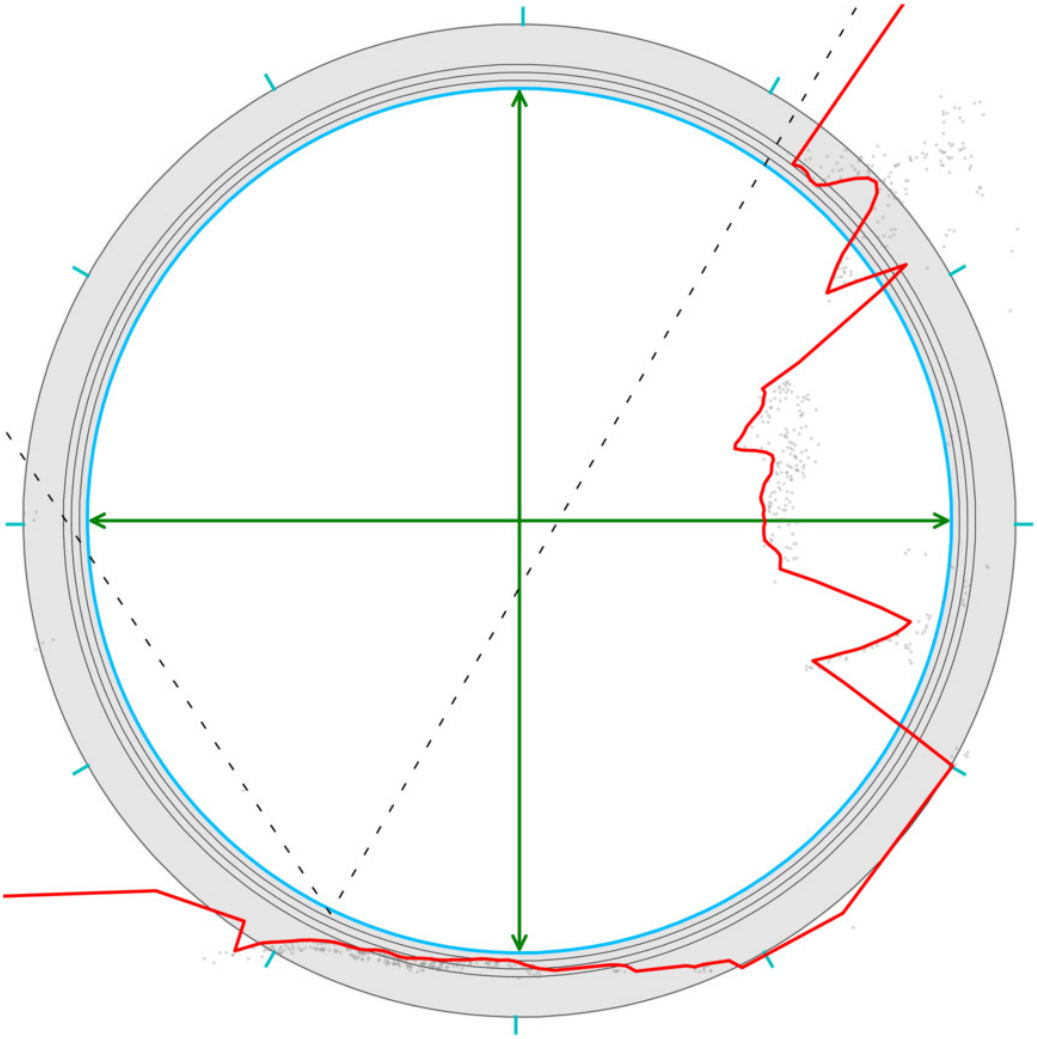
```
Footage    :  5 ft
Width      :  226.0" | 108.0"
Height     :  184.7" | 108.0"

Area       :  21920 sq in
Perimeter  :  833.6 in
Ovality    :  57.2%

Interior Diameter : 4863934.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 6.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  6 ft
Width     :  206.1" | 108.0"
Height    :  179.5" | 108.0"

Area      :  20512 sq in
Perimeter :  909.3 in
Ovality   :  57.2%

Interior Diameter : 2637819.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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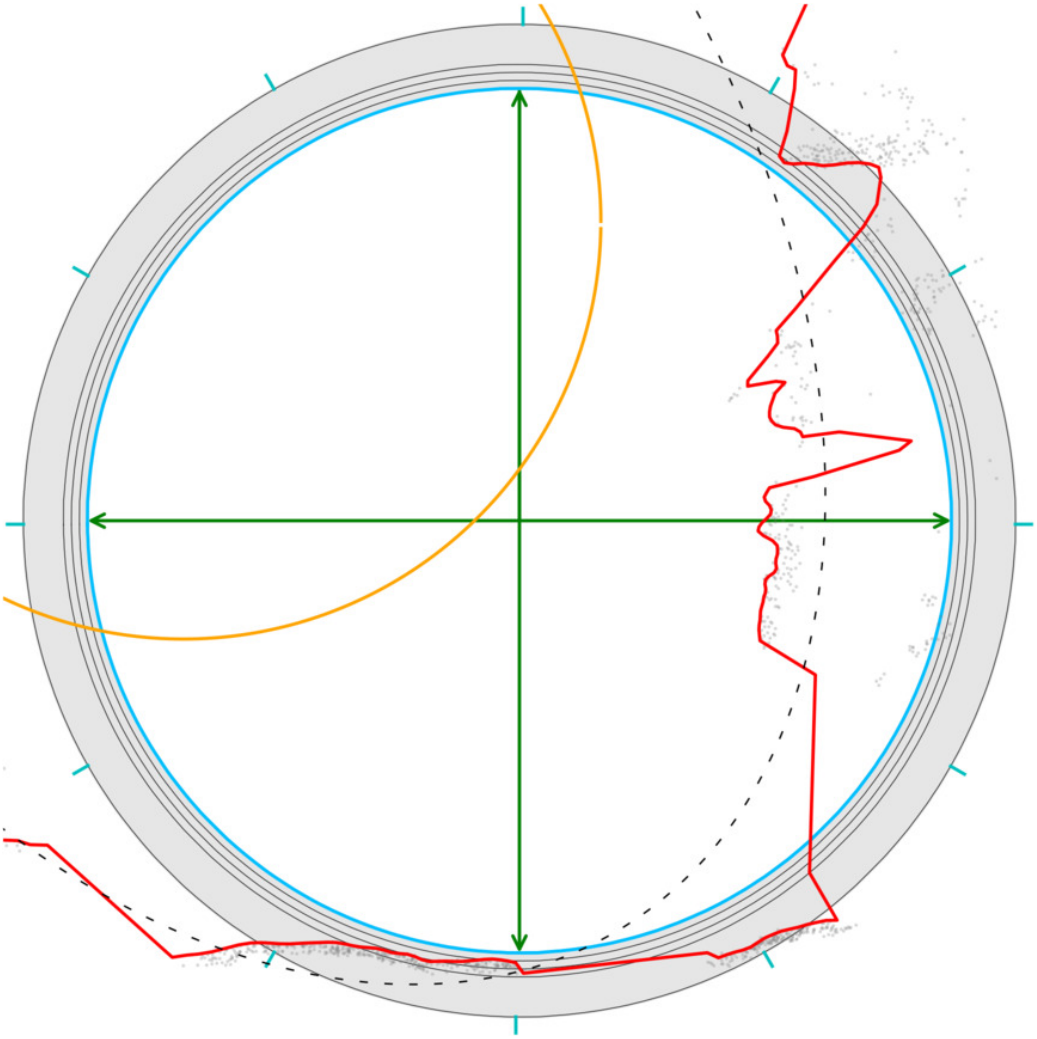
SFX-3D Cross Section Report
Inspection #1 : / , 7.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  7 ft
Width     :  211.7" | 108.0"
Height    :  174.8" | 108.0"

Area      :  23264 sq in
Perimeter :  974.4 in
Ovality   :  19.2%

Interior Diameter : 104.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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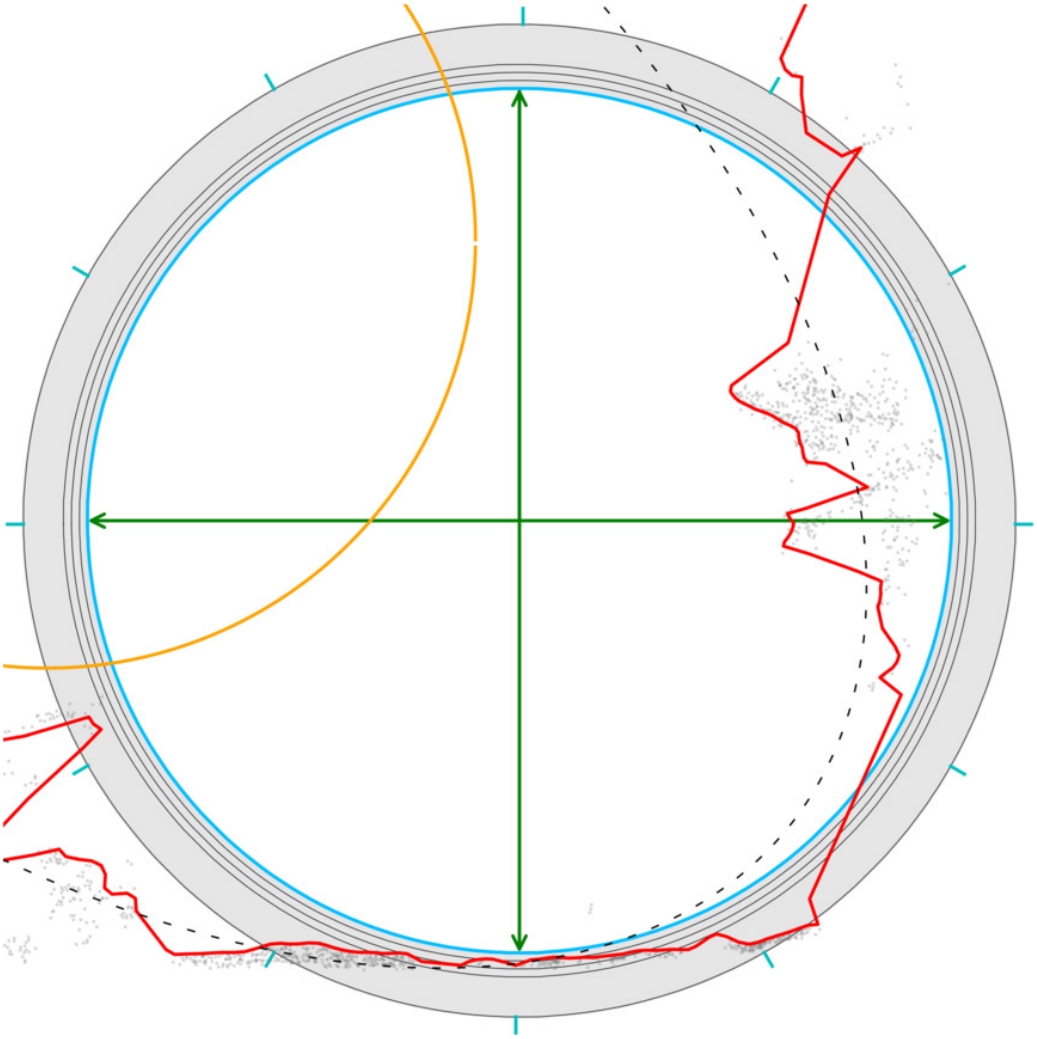
SFX-3D Cross Section Report
Inspection #1 : / , 8.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  8 ft
Width     :  217.5" | 108.0"
Height    :  185.1" | 108.0"

Area      :  24454 sq in
Perimeter :  827.8 in
Ovality   :  24.0%

Interior Diameter : 107.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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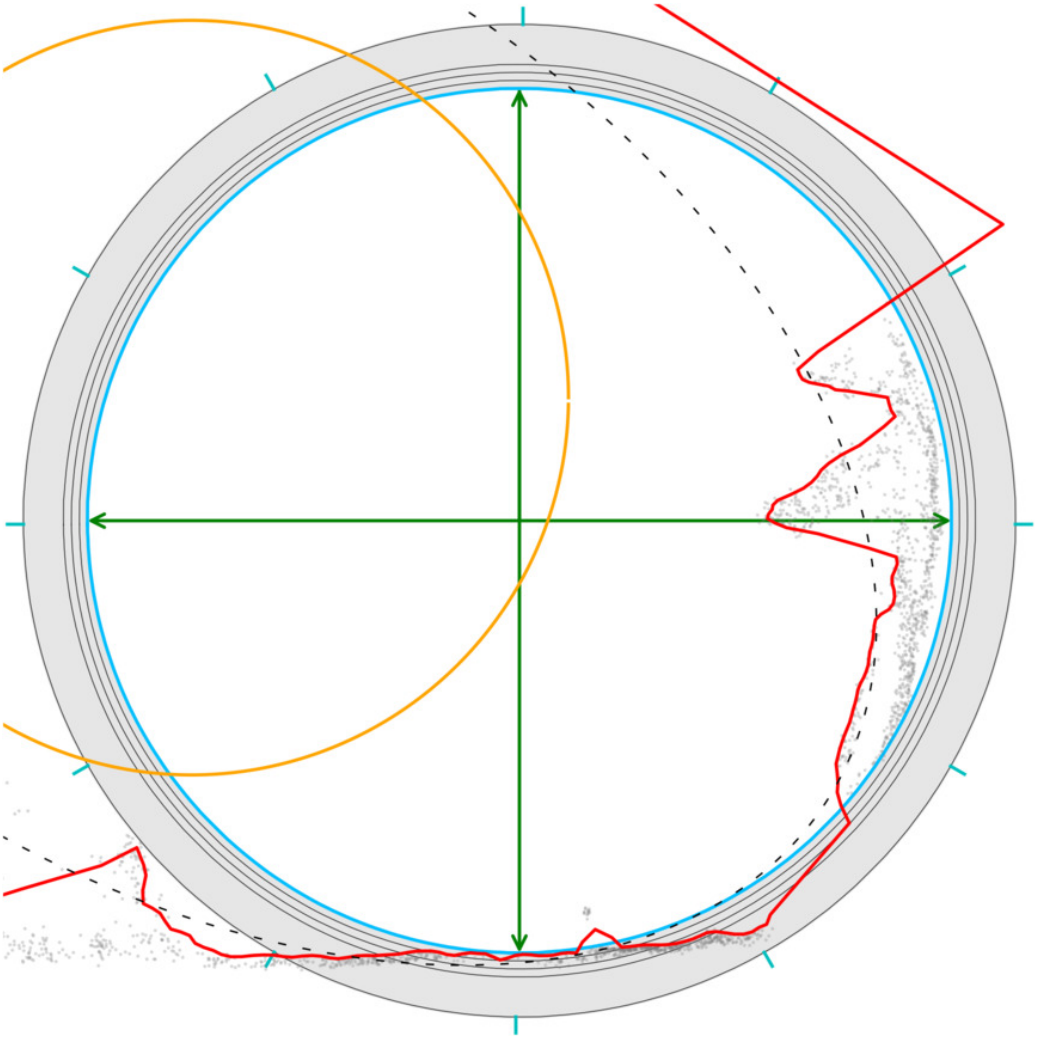
SFX-3D Cross Section Report
Inspection #1 : / , 9.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  9 ft
Width     :  243.8" | 108.0"
Height    :  187.8" | 108.0"

Area      :  22961 sq in
Perimeter :  1031.2 in
Ovality   :  21.2%

Interior Diameter : 94.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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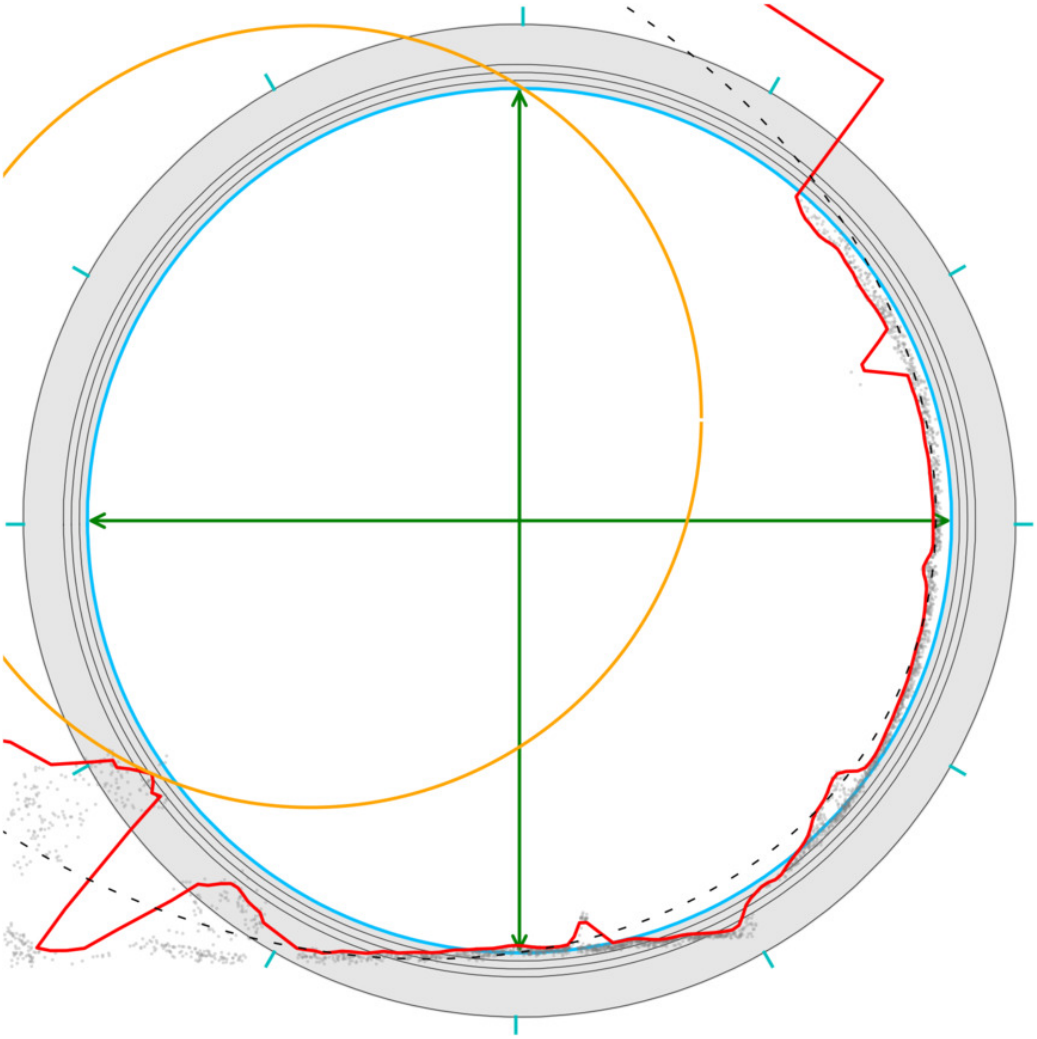
SFX-3D Cross Section Report
Inspection #1 : / , 10.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  10 ft
Width     :  236.9" | 108.0"
Height    :  175.8" | 108.0"

Area      :  19536 sq in
Perimeter :  912.9 in
Ovality   :  11.3%

Interior Diameter : 97.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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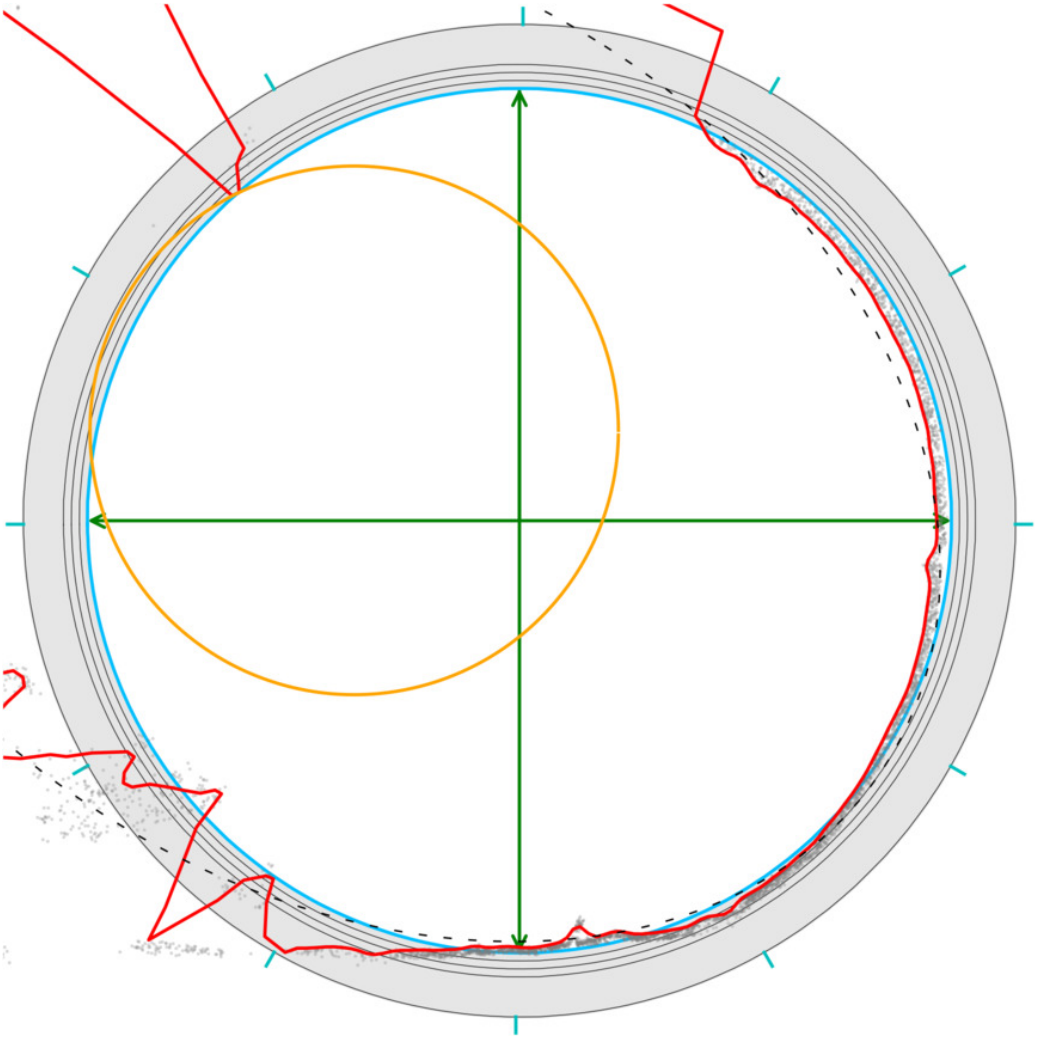
SFX-3D Cross Section Report
Inspection #1 : / , 11.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  11 ft
Width     :  217.4" | 108.0"
Height    :  148.0" | 108.0"

Area      :  16962 sq in
Perimeter :  831.4 in
Ovality   :  14.9%

Interior Diameter : 66.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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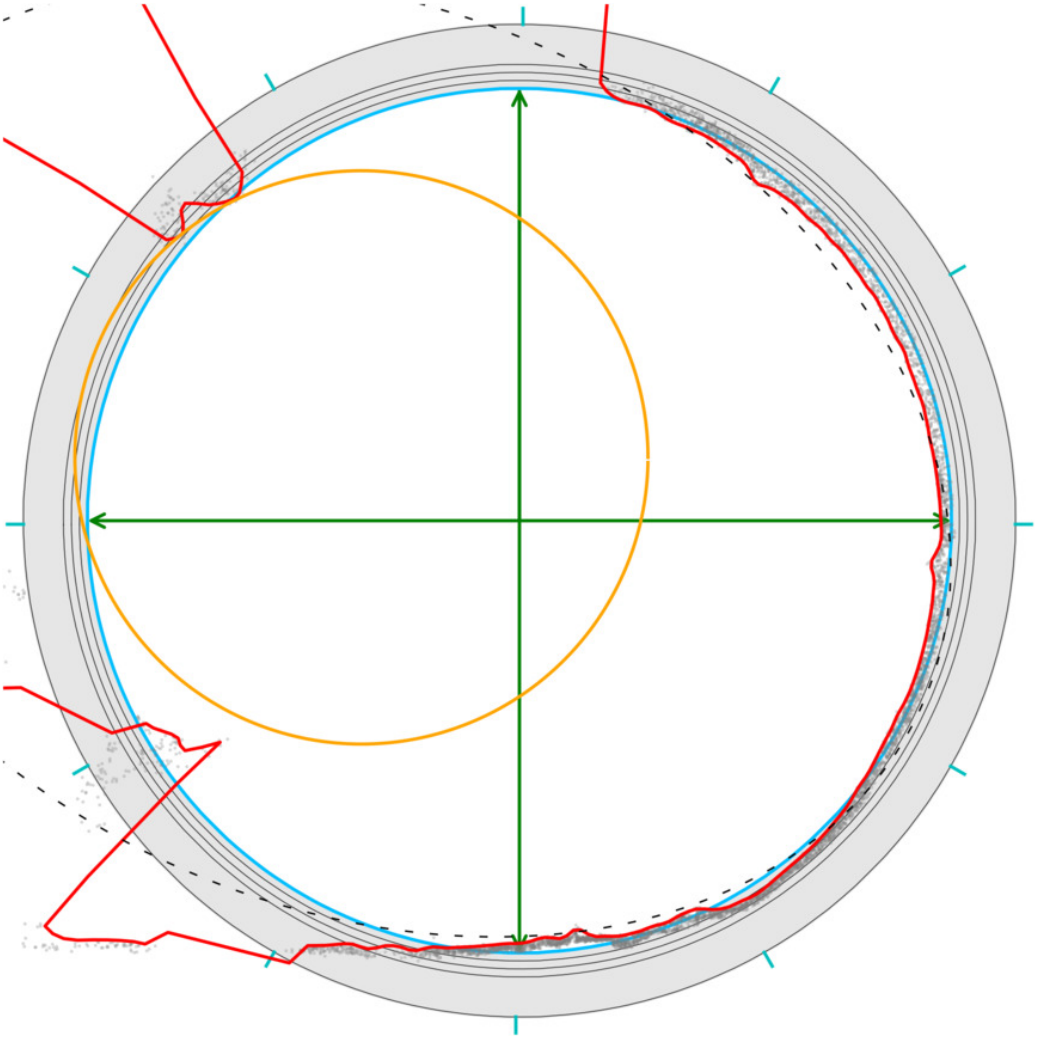
SFX-3D Cross Section Report
Inspection #1 : / , 12.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  12 ft
Width     :  219.4" | 108.0"
Height    :  149.7" | 108.0"

Area      :  15192 sq in
Perimeter :  757.5 in
Ovality   :  14.8%

Interior Diameter : 71.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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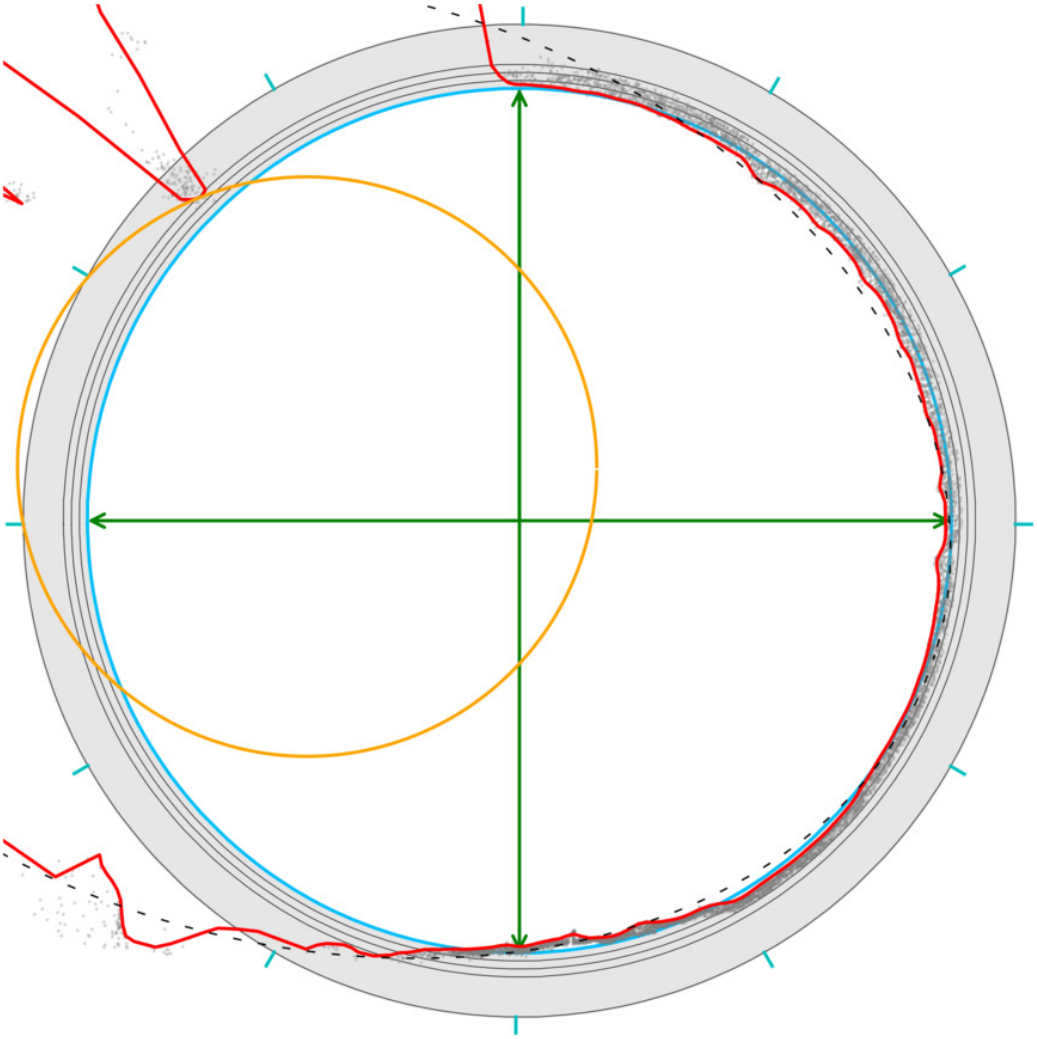
SFX-3D Cross Section Report
Inspection #1 : / , 13.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  13 ft
Width     :  227.5" | 108.0"
Height    :  108.5" | 108.0"

Area      :  17007 sq in
Perimeter :  846.6 in
Ovality   :  15.1%

Interior Diameter : 72.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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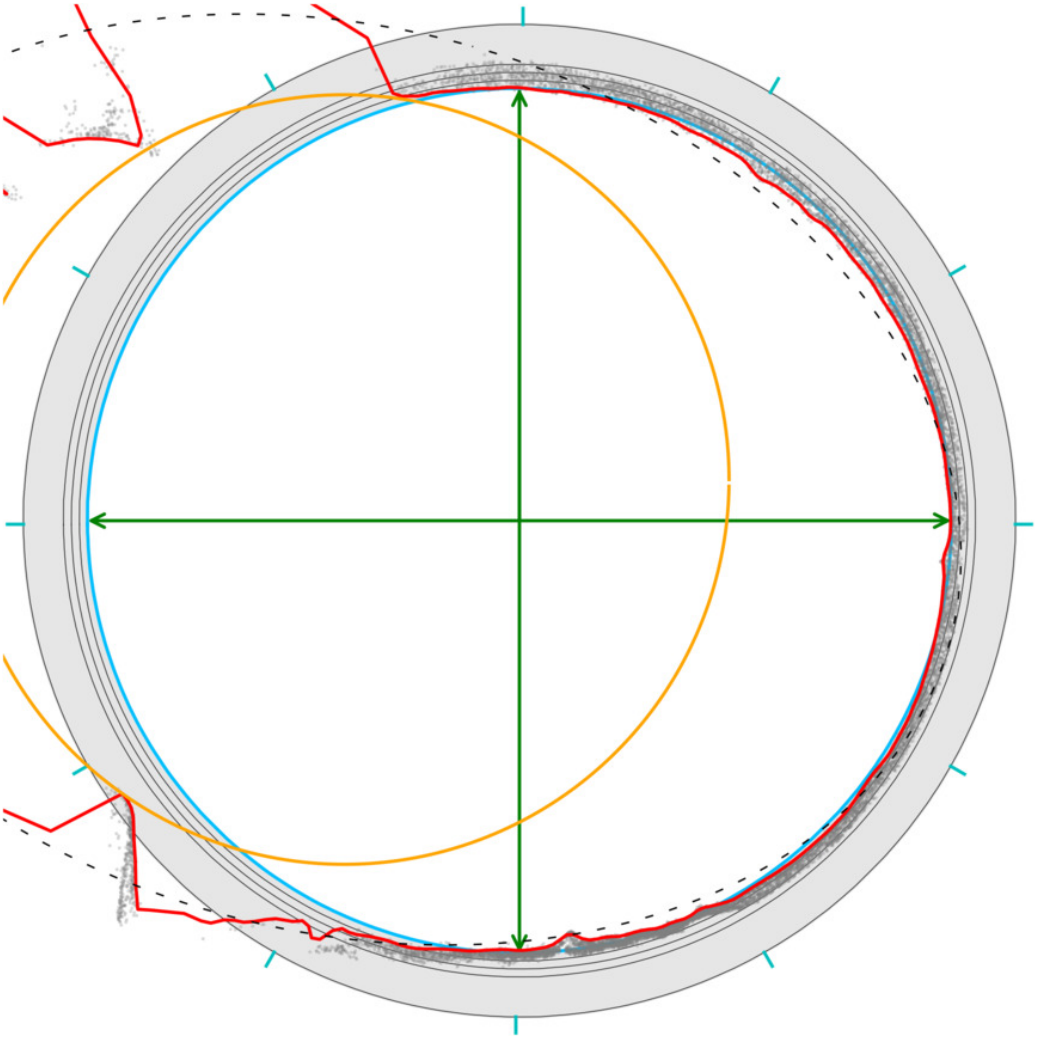
SFX-3D Cross Section Report
Inspection #1 : / , 14.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  14 ft
Width     :  215.9" | 108.0"
Height    :  108.1" | 108.0"

Area      :  15735 sq in
Perimeter :  690.6 in
Ovality   :  15.5%

Interior Diameter : 96.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

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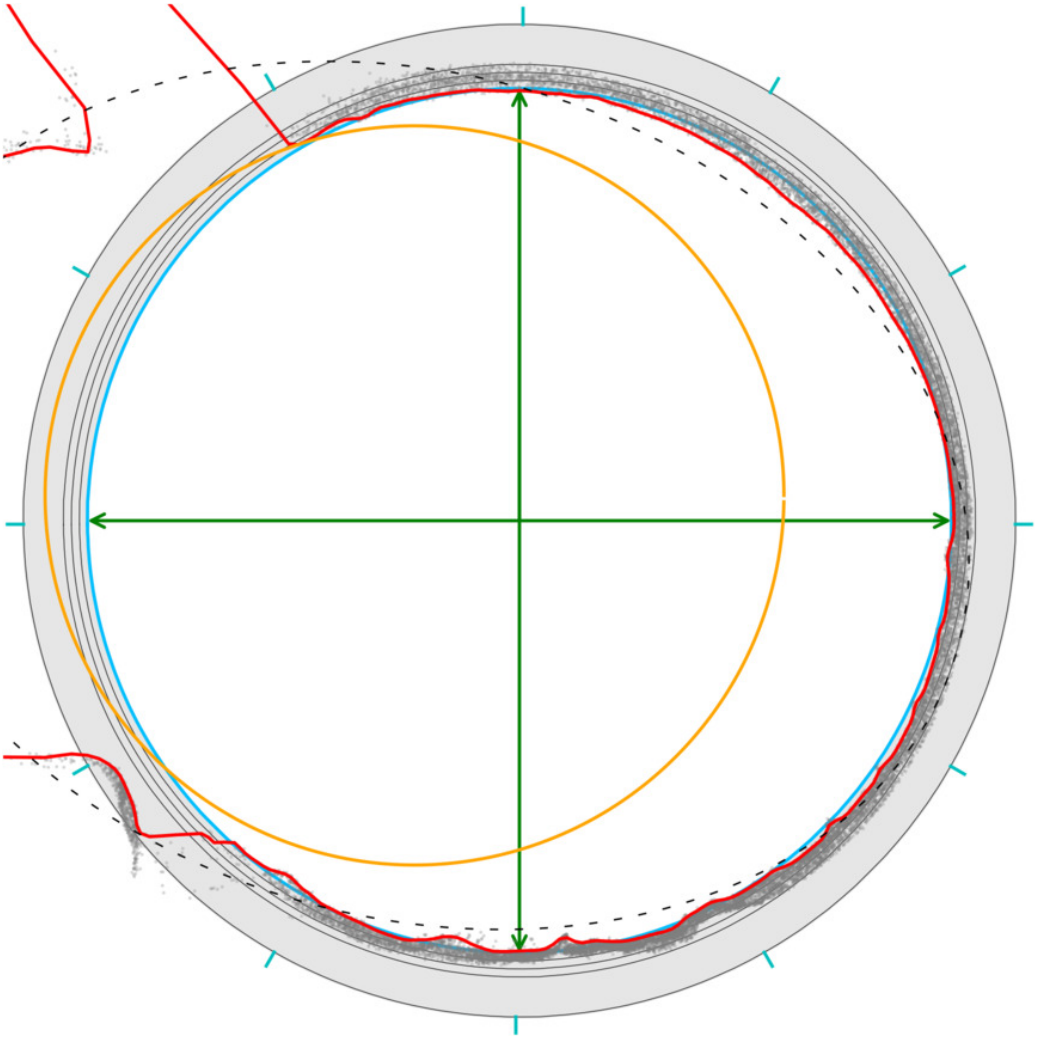
SFX-3D Cross Section Report
Inspection #1 : / , 15.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  15 ft
Width     :  195.4" | 108.0"
Height    :  107.7" | 108.0"

Area      :  14375 sq in
Perimeter :  578.1 in
Ovality   :  13.9%

Interior Diameter : 92.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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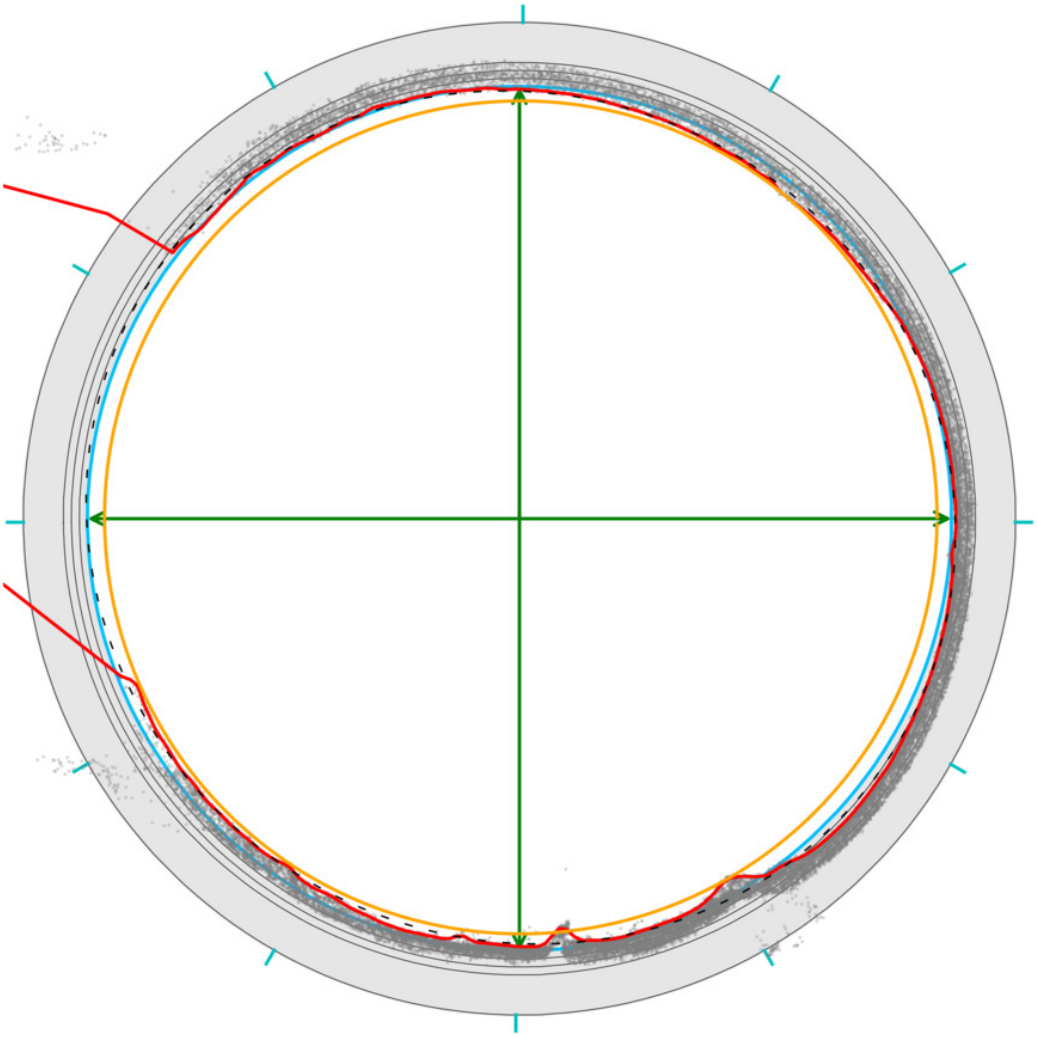
SFX-3D Cross Section Report
Inspection #1 : / , 16.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  16 ft
Width     :  156.0" | 108.0"
Height    :  107.6" | 108.0"

Area      :  10976 sq in
Perimeter :  433.4 in
Ovality   :  2.1%

Interior Diameter : 104.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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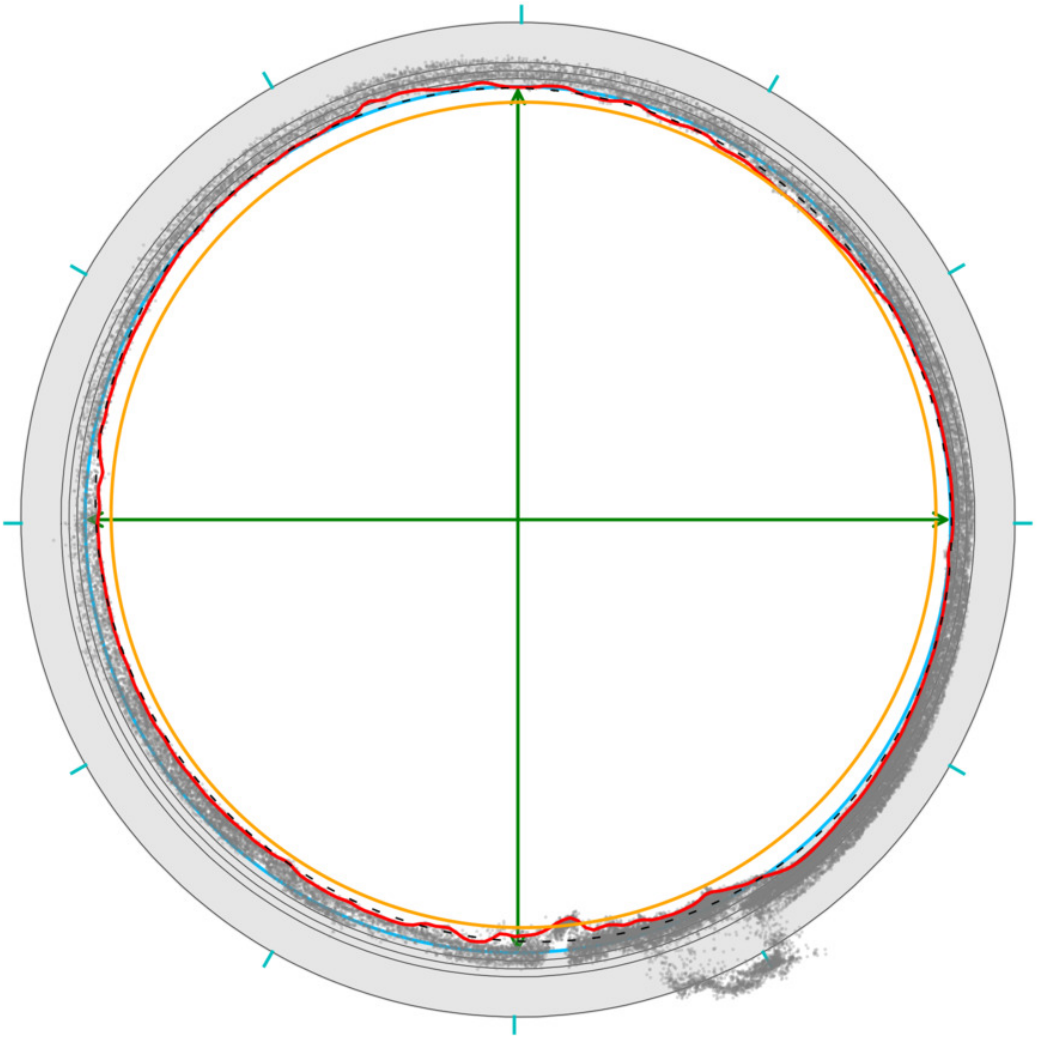
SFX-3D Cross Section Report
Inspection #1 : / , 17.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  17 ft
Width     :  106.7" | 108.0"
Height    :  107.9" | 108.0"

Area      :  8910 sq in
Perimeter :  338.6 in
Ovality   :  1.7%

Interior Diameter : 102.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- - - Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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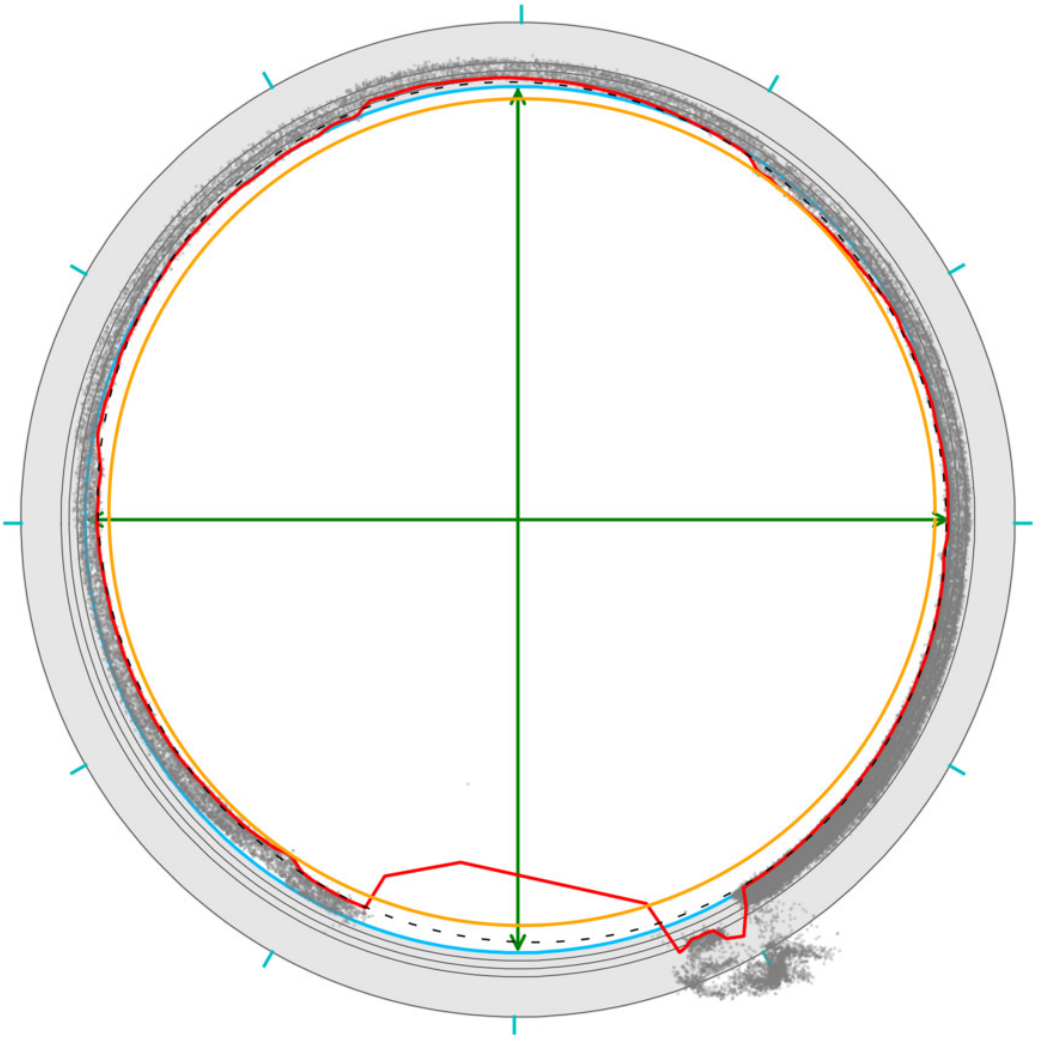
SFX-3D Cross Section Report
Inspection #1 : / , 18.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  18 ft
Width     :  106.3" | 108.0"
Height    :  109.1" | 108.0"

Area      :  8718 sq in
Perimeter :  347.8 in
Ovality   :  1.6%

Interior Diameter : 103.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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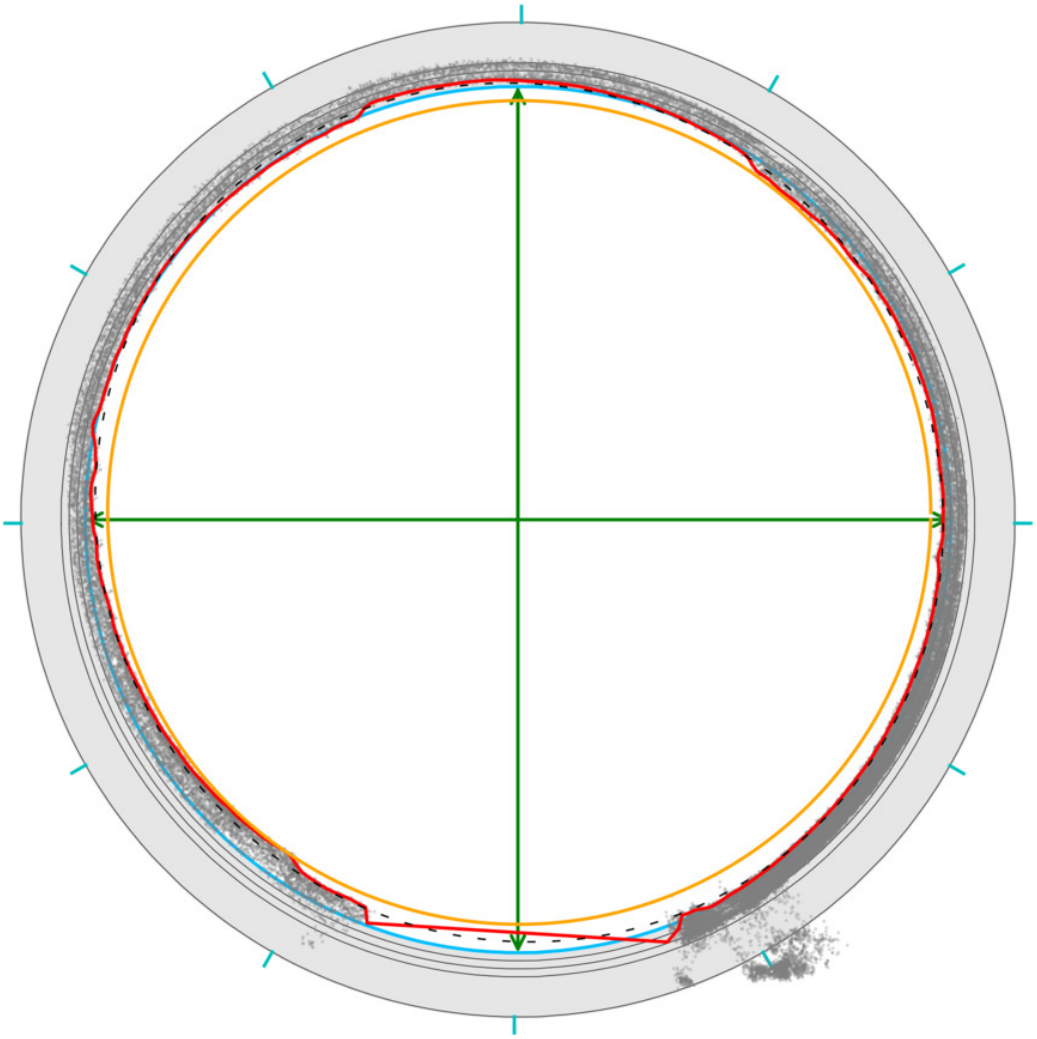
SFX-3D Cross Section Report
Inspection #1 : / , 19.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



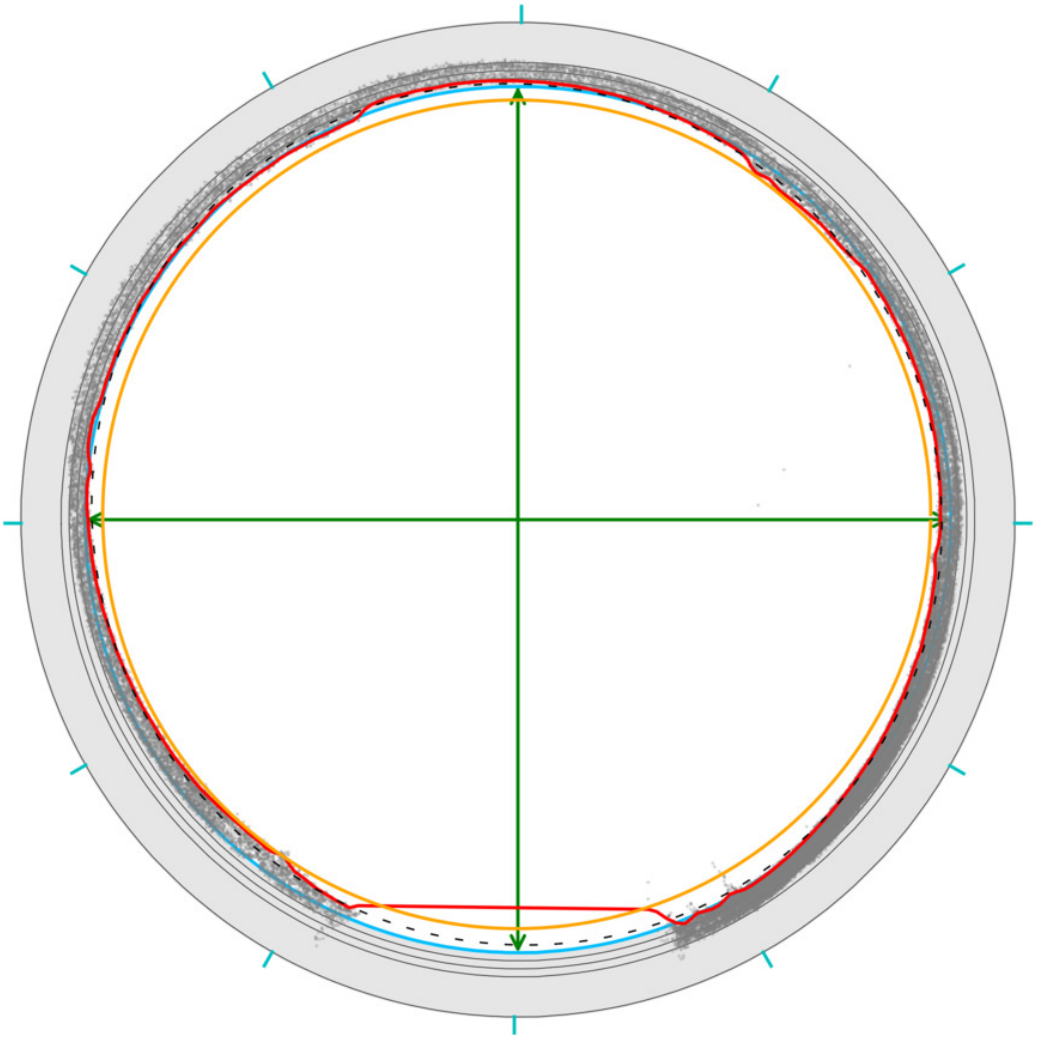
```
Footage   :  19 ft
Width     :  106.4" | 108.0"
Height    :  108.8" | 108.0"

Area      :  8880 sq in
Perimeter :  338.4 in
Ovality   :  1.4%

Interior Diameter : 102.7"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 20.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 20 ft
Width : 106.5" | 108.0"
Height : 108.7" | 108.0"

Area : 8803 sq in
Perimeter : 336.4 in
Ovality : 1.3%

Interior Diameter : 103.3"

Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

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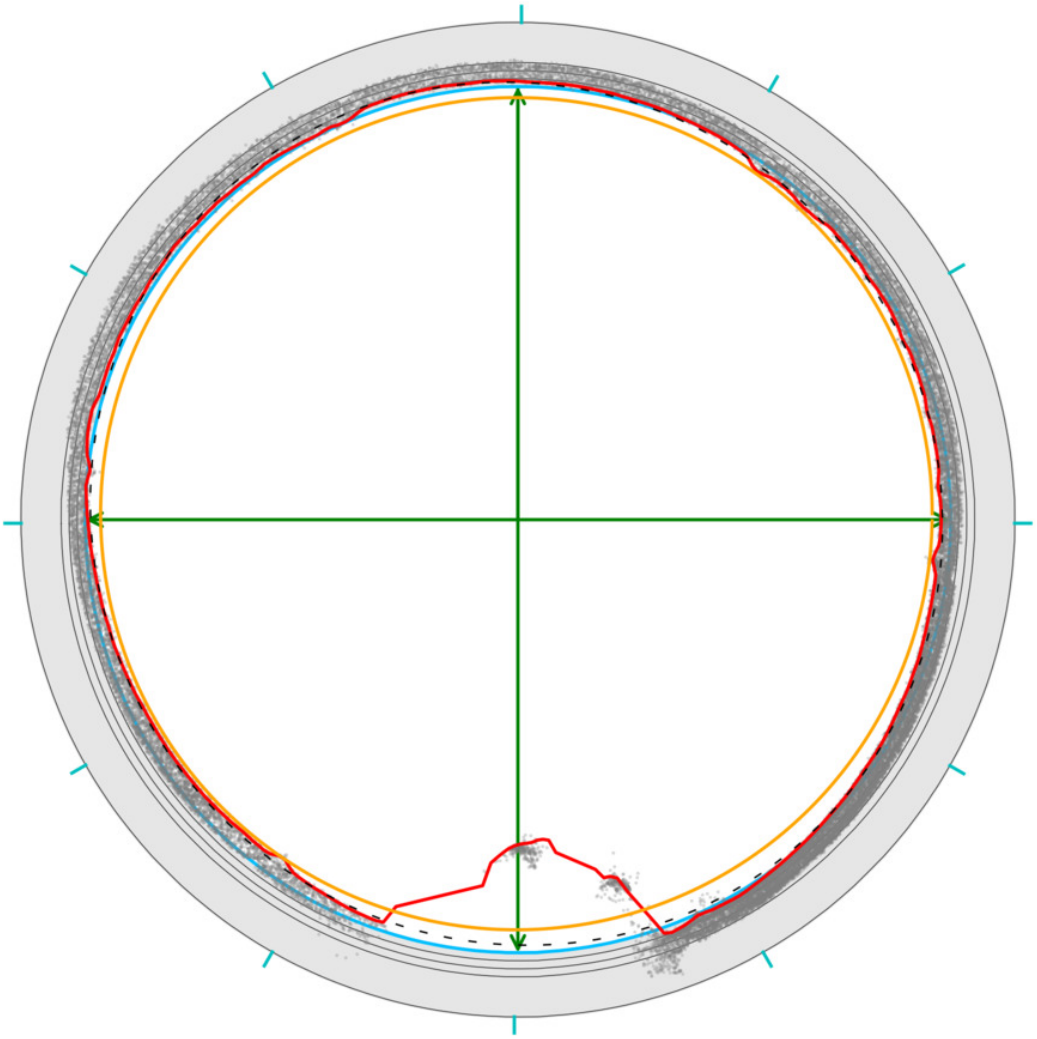
SFX-3D Cross Section Report
Inspection #1 : / , 21.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  21 ft
Width     :  106.7" | 108.0"
Height    :  108.7" | 108.0"

Area      :  8737 sq in
Perimeter :  346.6 in
Ovality   :  1.5%

Interior Diameter : 103.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

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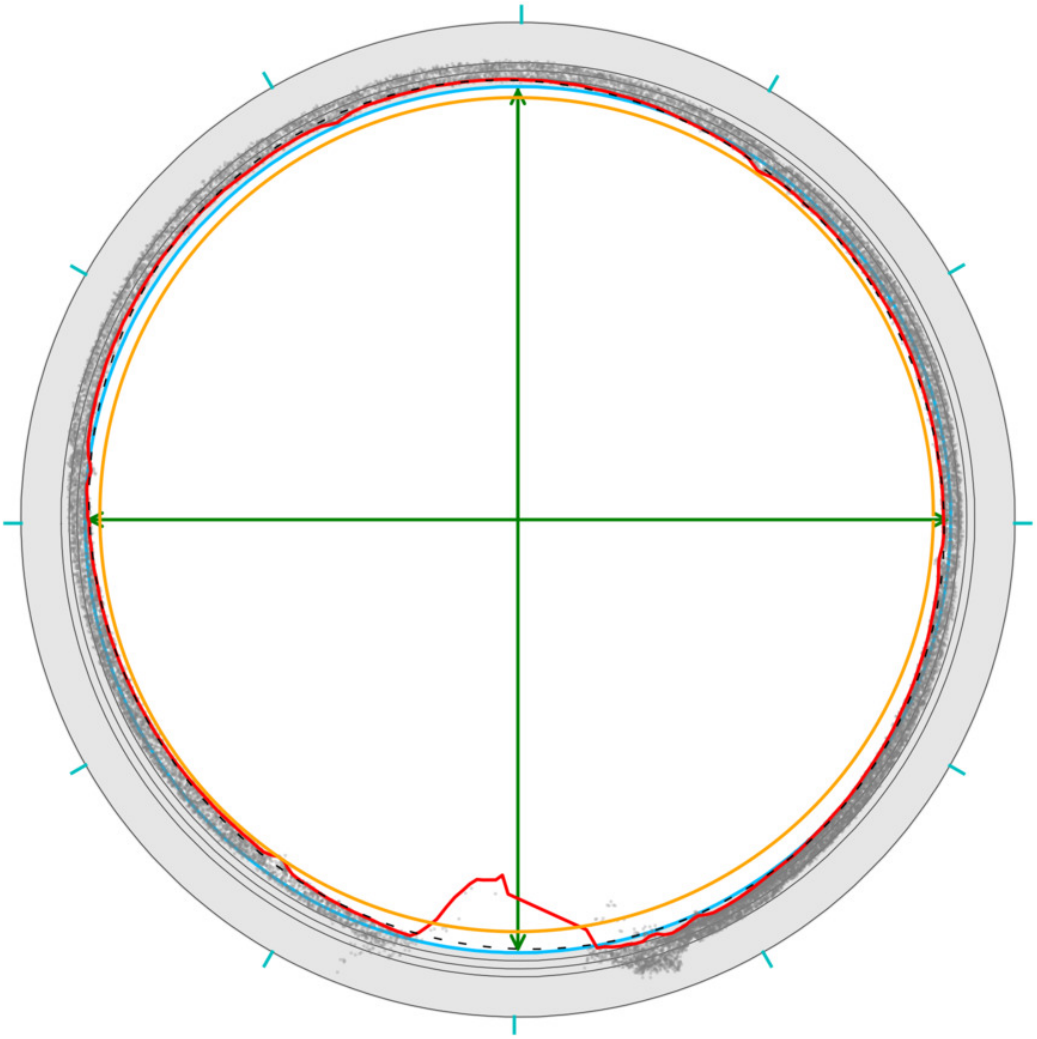
SFX-3D Cross Section Report
Inspection #1 : / , 22.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  22 ft
Width     :  106.9" | 108.0"
Height    :  108.9" | 108.0"

Area      :  8967 sq in
Perimeter :  346.0 in
Ovality   :  1.9%

Interior Diameter : 104.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
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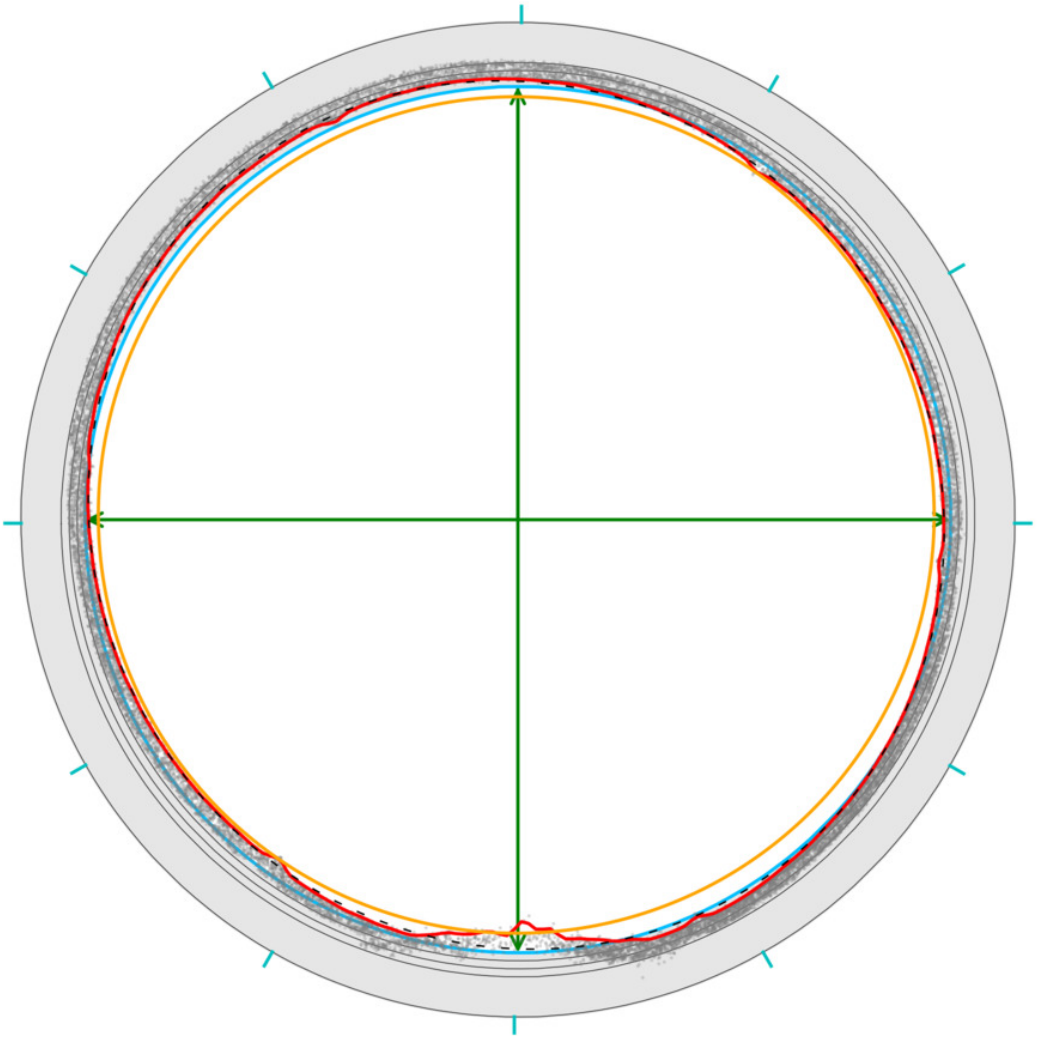
SFX-3D Cross Section Report
Inspection #1 : / , 23.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



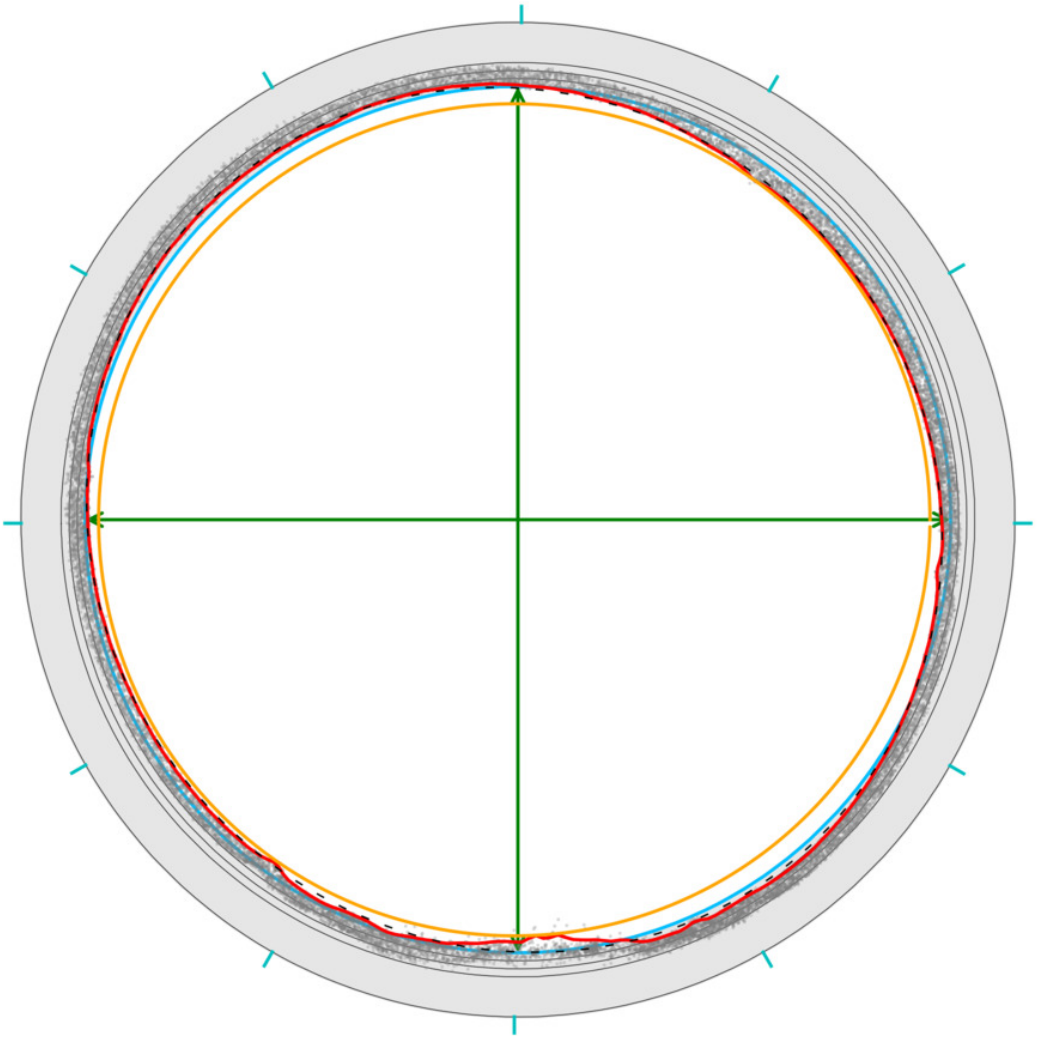
```
Footage   :  23 ft
Width     :  106.8" | 108.0"
Height    :  108.9" | 108.0"

Area      :  9052 sq in
Perimeter :  340.4 in
Ovality   :  2.0%

Interior Diameter : 104.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 24.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 24 ft
Width : 106.7" | 108.0"
Height : 108.2" | 108.0"

Area : 9026 sq in
Perimeter : 338.5 in
Ovality : 2.4%

Interior Diameter : 103.8"

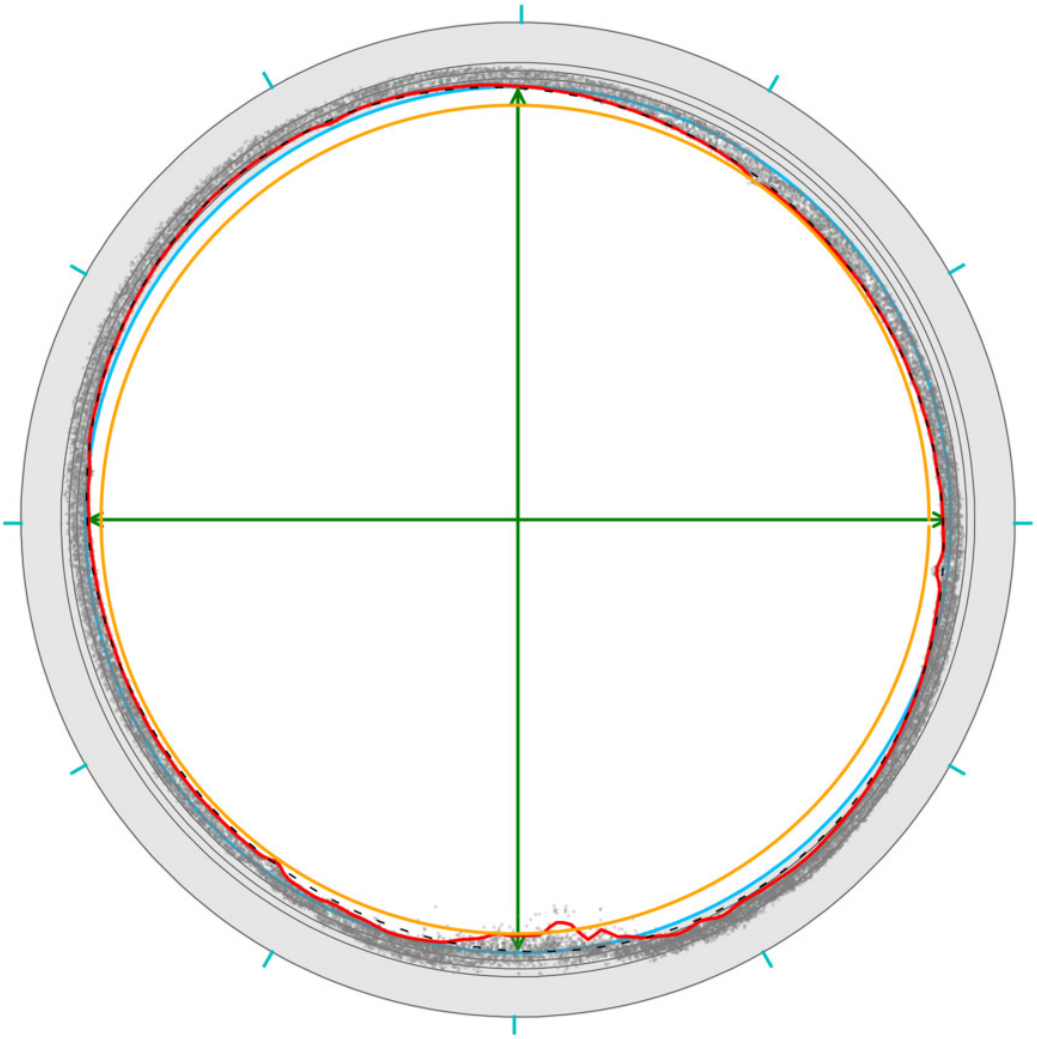
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 25.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



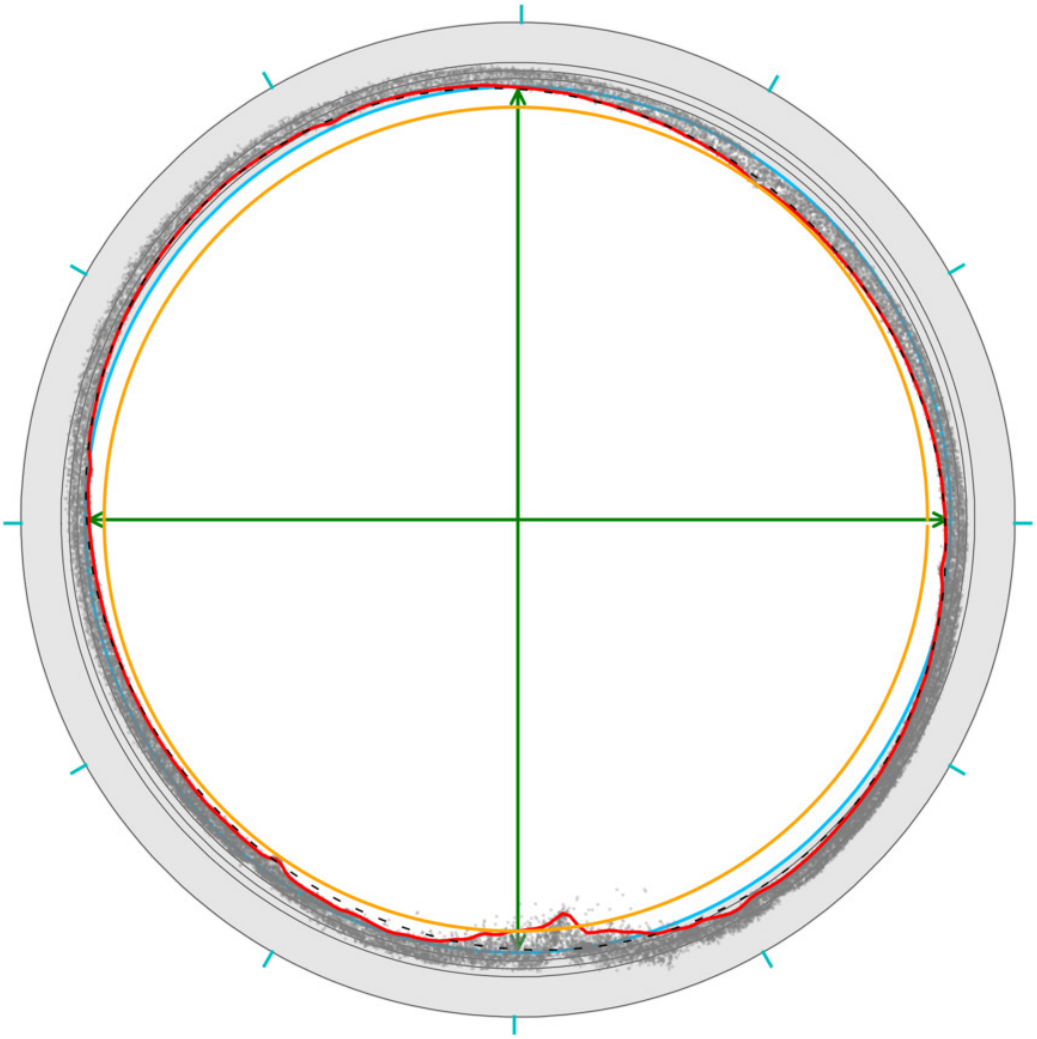
```
Footage   :  25 ft
Width     :  106.8" | 108.0"
Height    :  108.0" | 108.0"

Area      :  9021 sq in
Perimeter :  340.5 in
Ovality   :  2.7%

Interior Diameter : 103.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 26.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



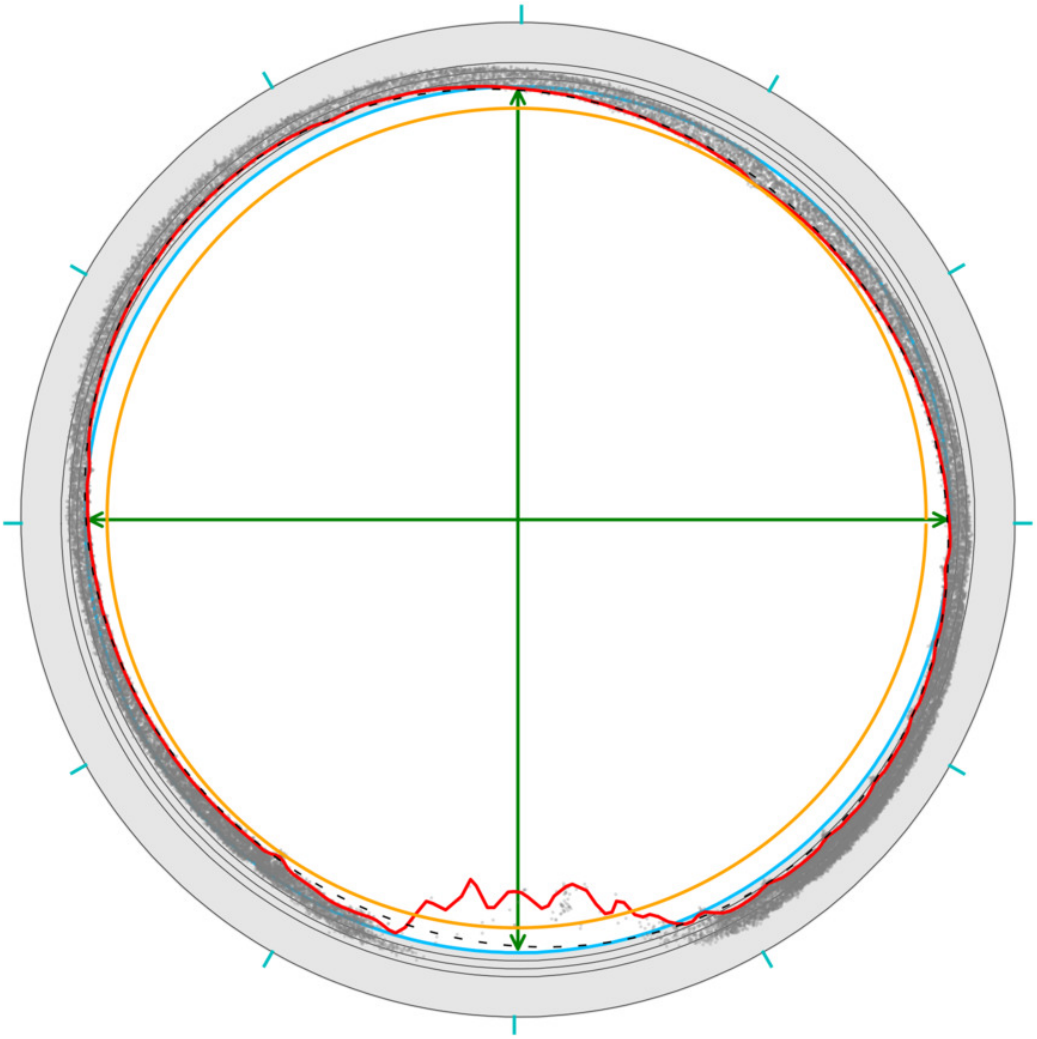
```
Footage   :  26 ft
Width     :  107.0" | 108.0"
Height    :  107.9" | 108.0"

Area      :  9018 sq in
Perimeter :  340.2 in
Ovality   :  3.0%

Interior Diameter : 102.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 27.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



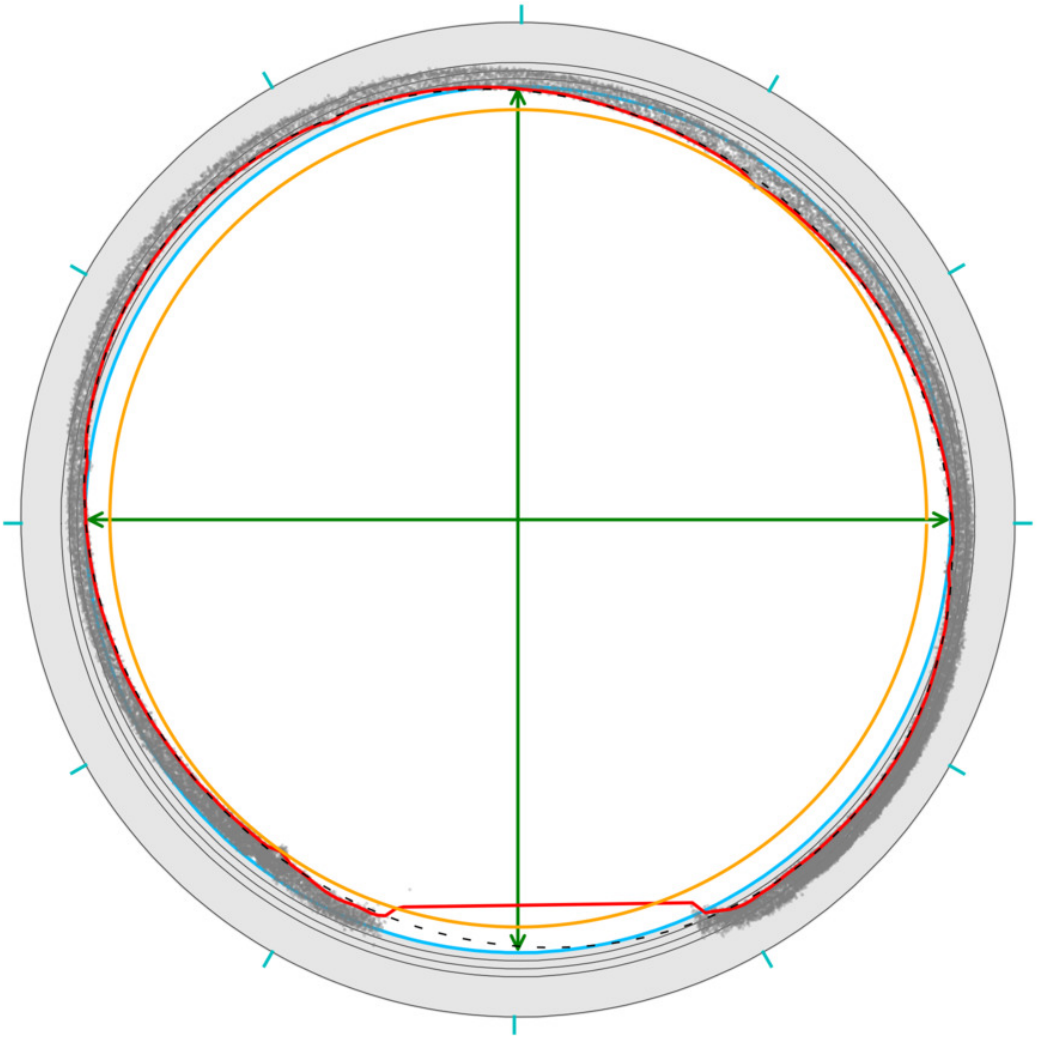
```
Footage   :  27 ft
Width     :  107.7" | 108.0"
Height    :  107.8" | 108.0"

Area      :  8899 sq in
Perimeter :  350.9 in
Ovality   :  3.3%

Interior Diameter : 102.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 28.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



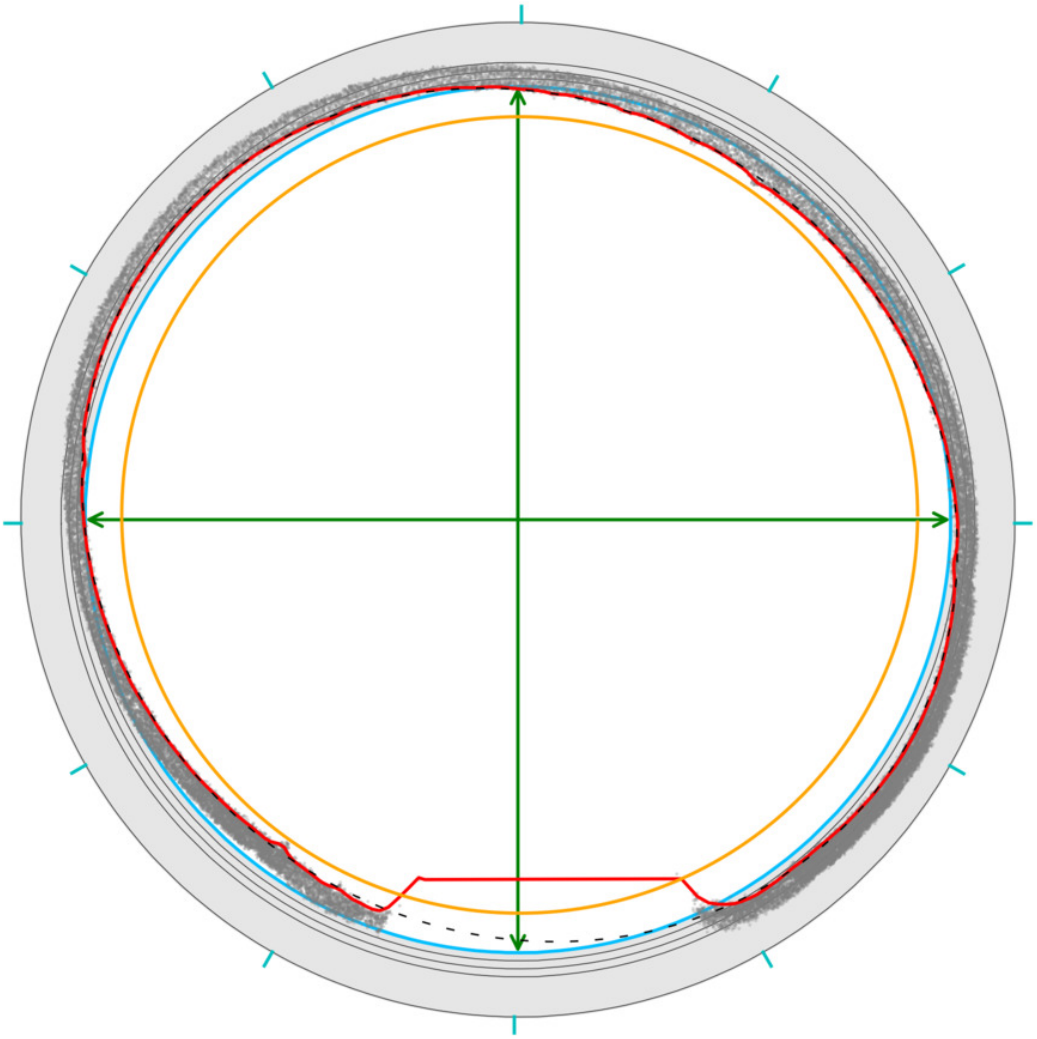
```
Footage   :  28 ft
Width     :  108.4" | 108.0"
Height    :  107.7" | 108.0"

Area      :  8917 sq in
Perimeter :  338.5 in
Ovality   :  3.9%

Interior Diameter : 101.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 29.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



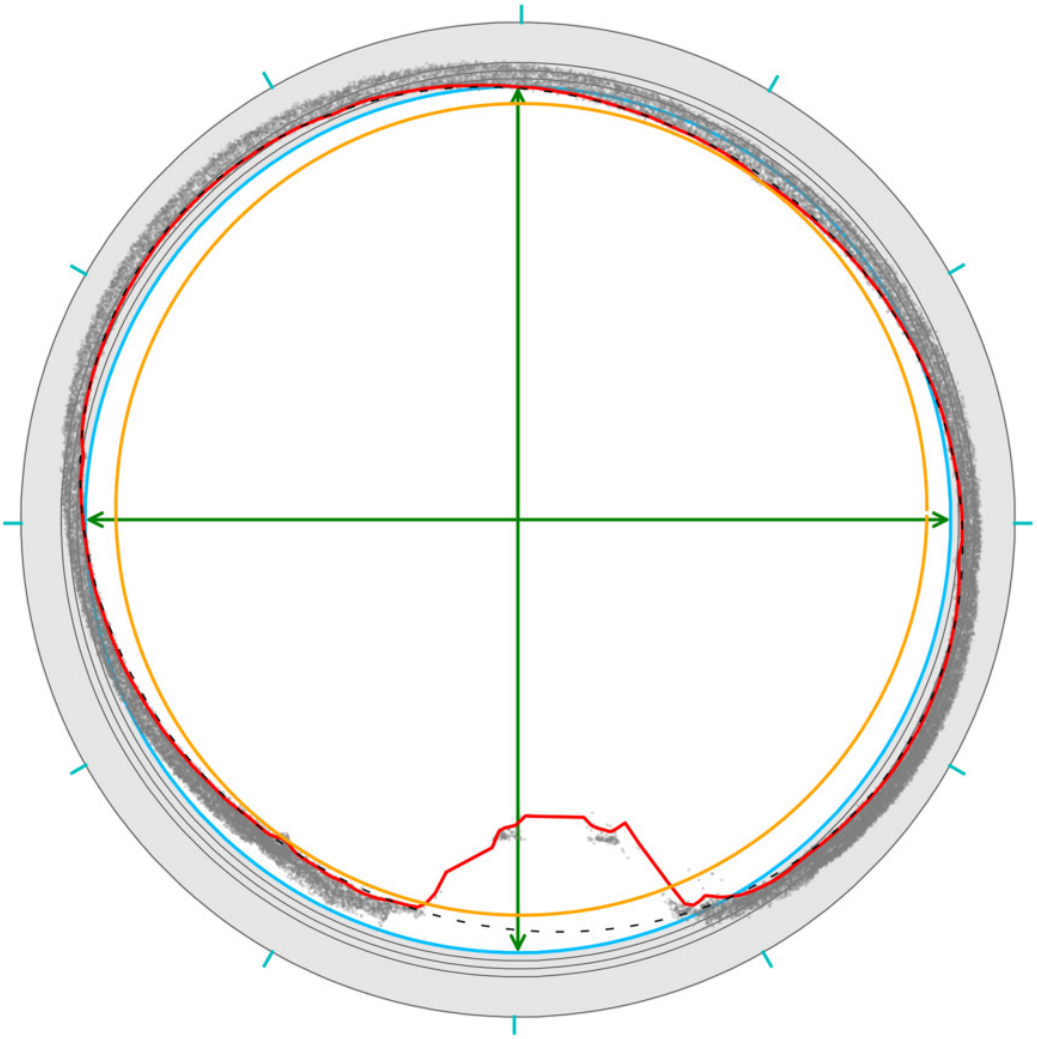
```
Footage   :  29 ft
Width     :  109.3" | 108.0"
Height    :  107.7" | 108.0"

Area      :  8846 sq in
Perimeter :  341.2 in
Ovality   :  4.3%

Interior Diameter : 99.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 30.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



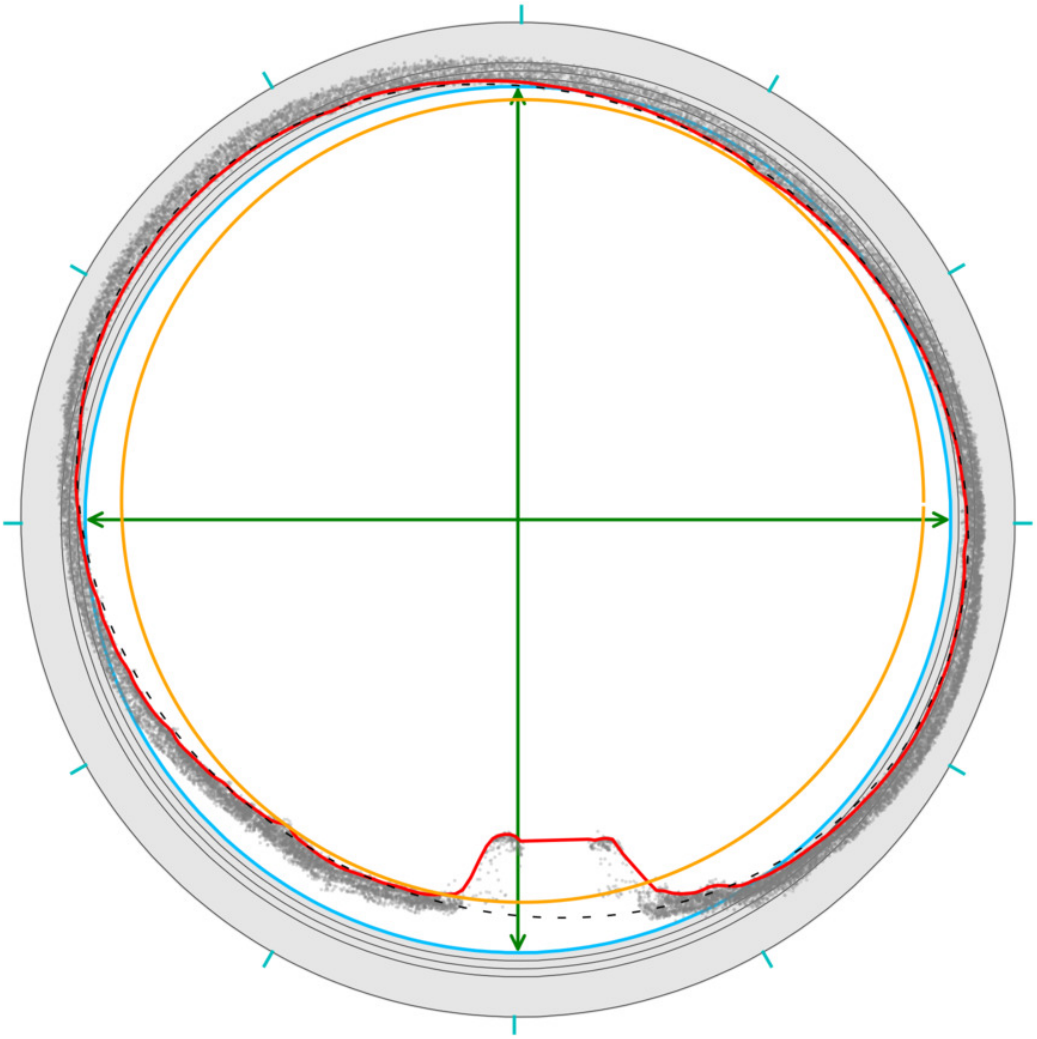
```
Footage   :  30 ft
Width     :  110.0" | 108.0"
Height    :  108.0" | 108.0"

Area      :  8758 sq in
Perimeter :  349.7 in
Ovality   :  4.8%

Interior Diameter : 101.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 31.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



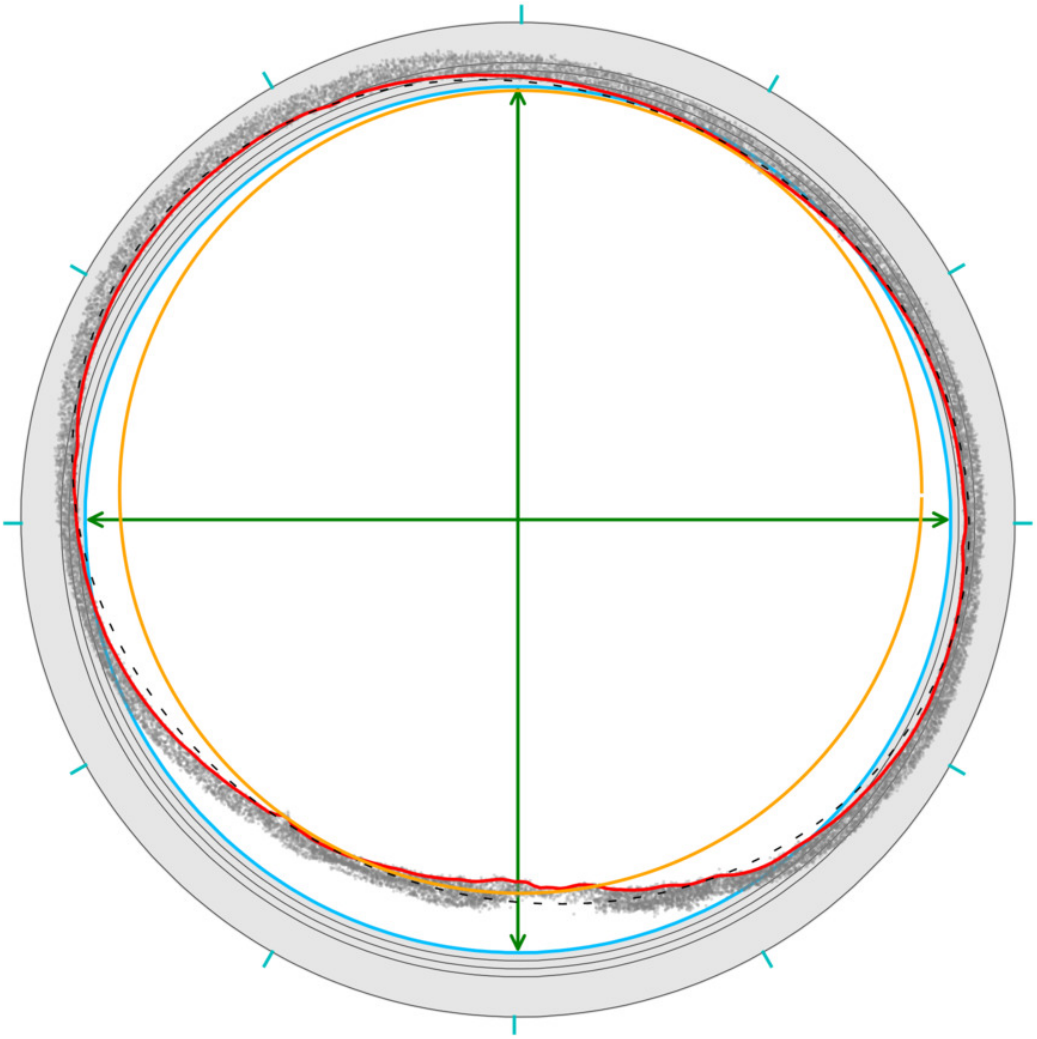
```
Footage   :  31 ft
Width     :  111.2" | 108.0"
Height    :  108.6" | 108.0"

Area      :  8847 sq in
Perimeter :  345.6 in
Ovality   :  5.5%

Interior Diameter : 100.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 32.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



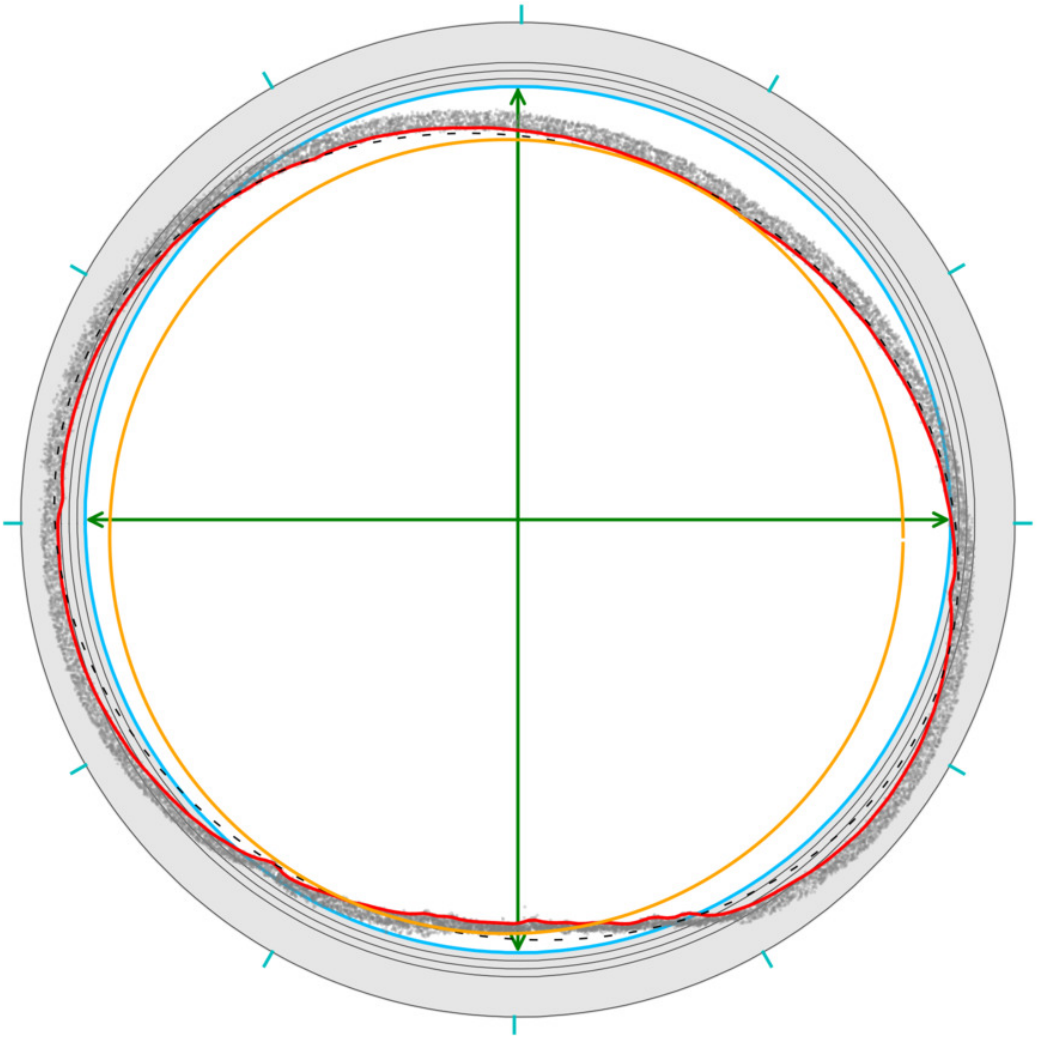
```
Footage   :  32 ft
Width     :  111.3" | 108.0"
Height    :  109.3" | 108.0"

Area      :  8968 sq in
Perimeter :  338.1 in
Ovality   :  6.0%

Interior Diameter : 100.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 33.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



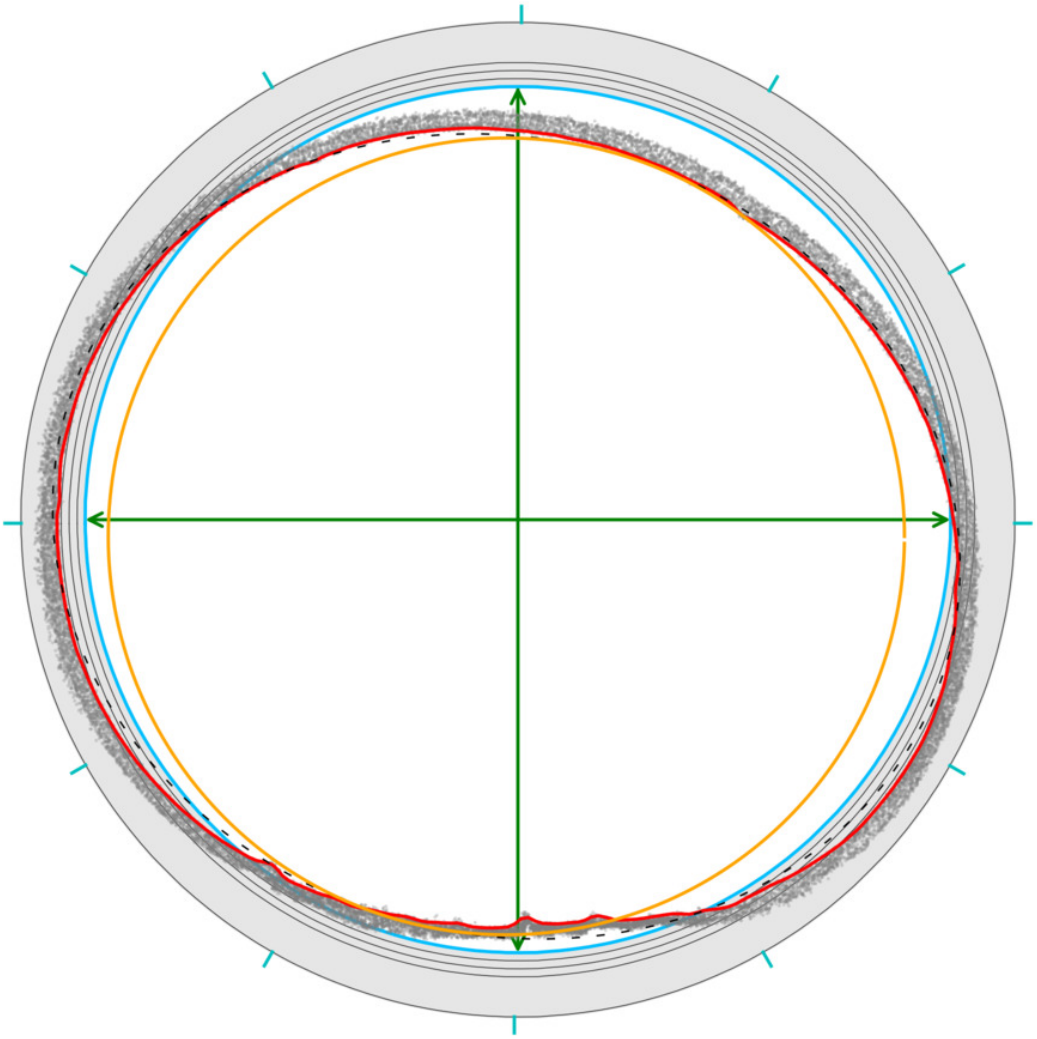
```
Footage   :  33 ft
Width     :  112.0" | 108.0"
Height    :  102.6" | 108.0"

Area      :  8879 sq in
Perimeter :  336.9 in
Ovality   :  7.0%

Interior Diameter : 99.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 34.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



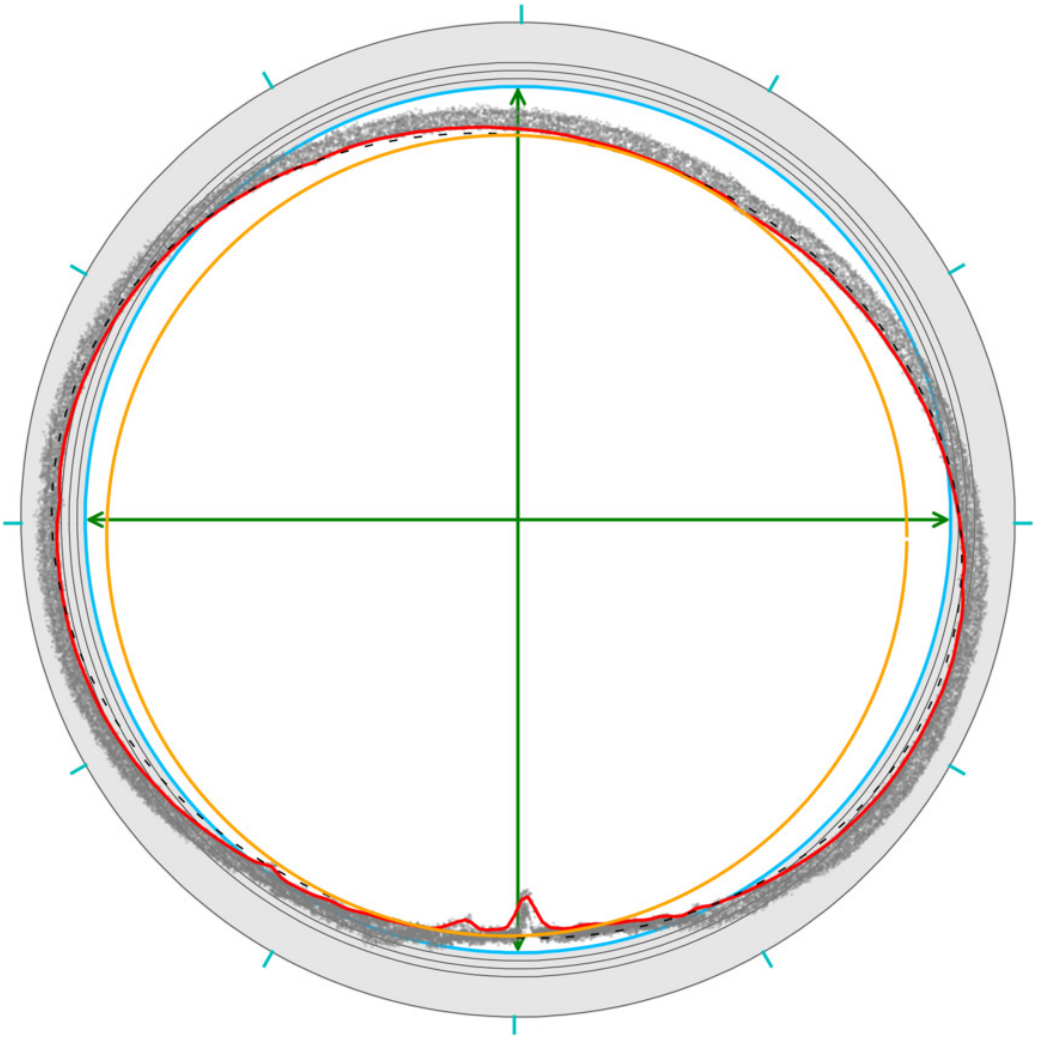
```
Footage   :  34 ft
Width     :  112.5" | 108.0"
Height    :  102.5" | 108.0"

Area      :  8899 sq in
Perimeter :  337.6 in
Ovality   :  6.9%

Interior Diameter : 99.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 35.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



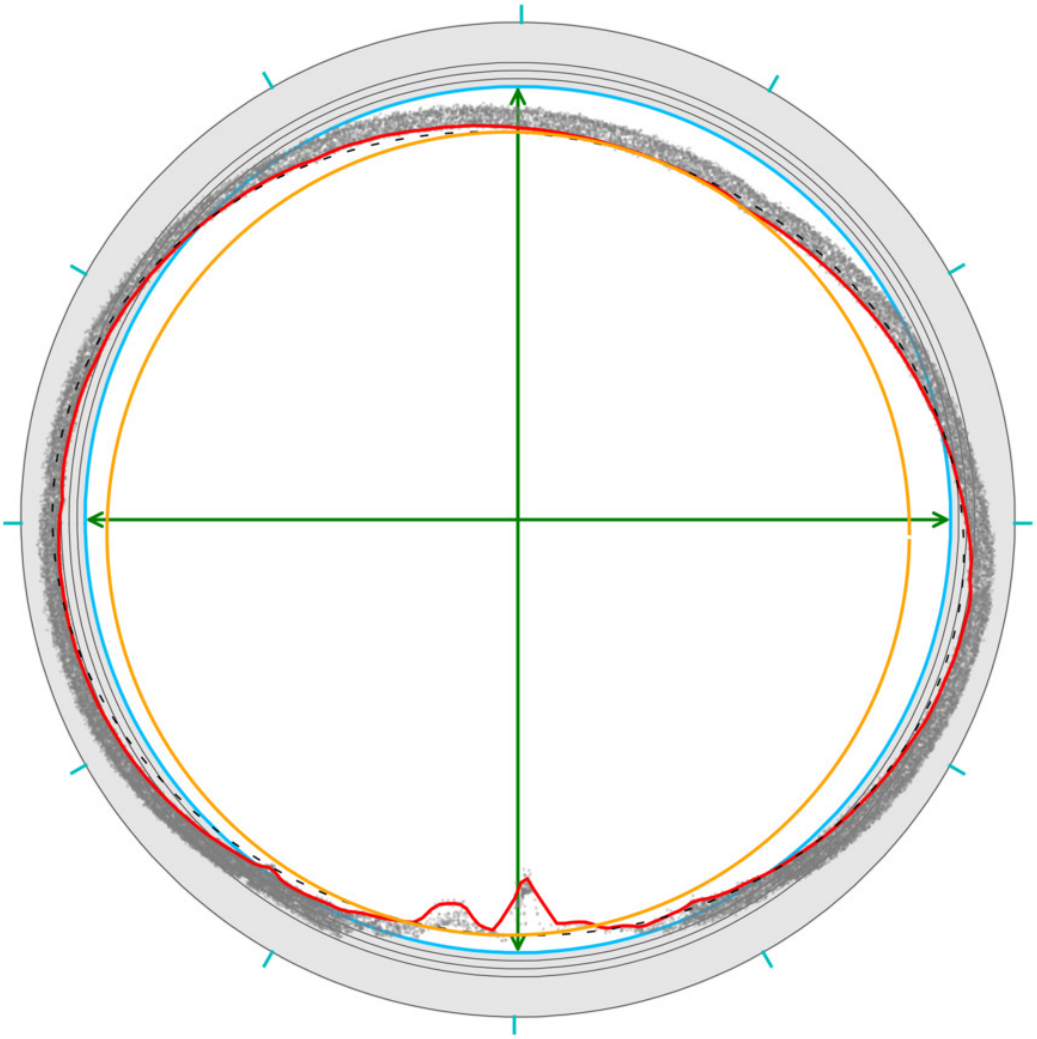
```
Footage   :  35 ft
Width     :  113.3" | 108.0"
Height    :  102.7" | 108.0"

Area      :  8931 sq in
Perimeter :  342.2 in
Ovality   :  6.7%

Interior Diameter : 99.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 36.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



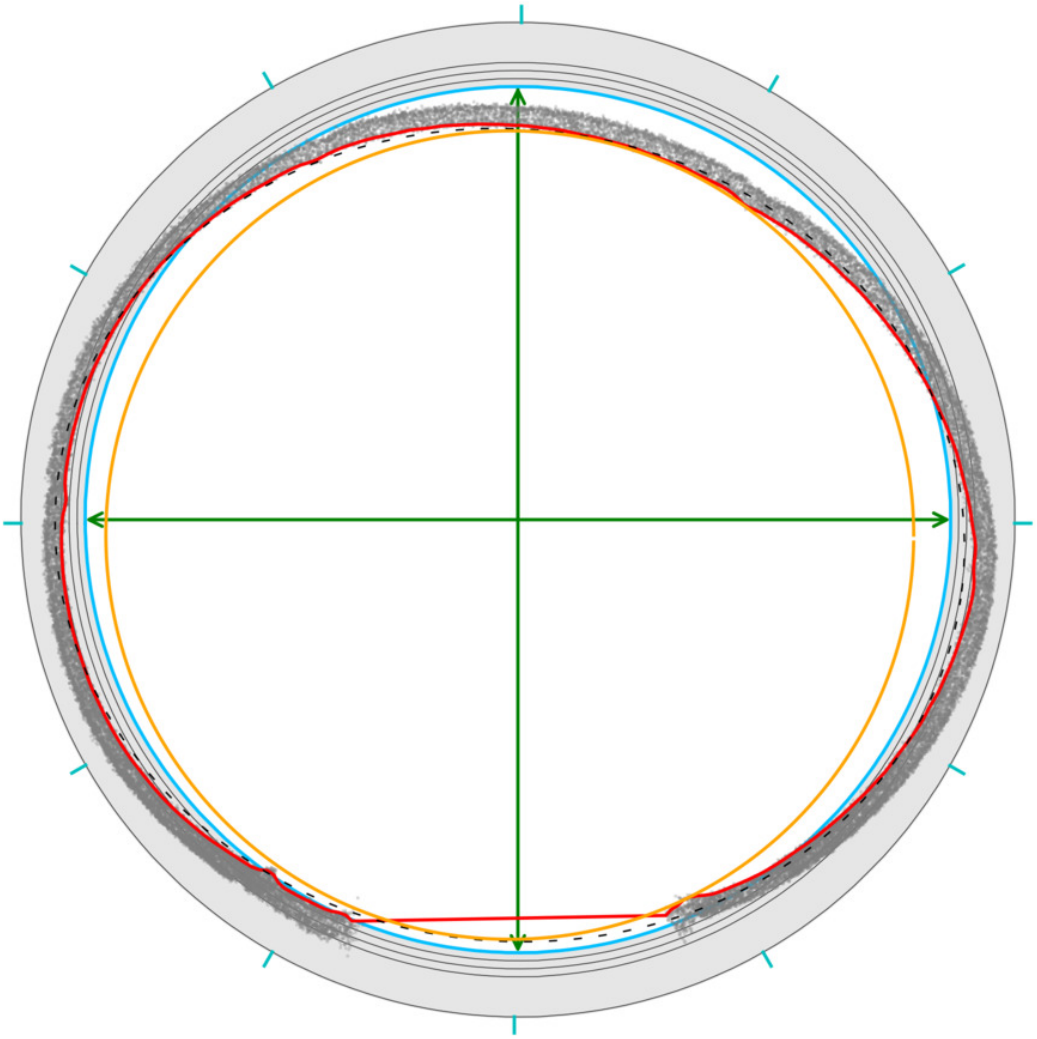
```
Footage    :  36 ft
Width      :  113.9" | 108.0"
Height     :  102.9" | 108.0"

Area       :  8917 sq in
Perimeter  :  346.3 in
Ovality    :  6.6%

Interior Diameter : 100.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 37.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



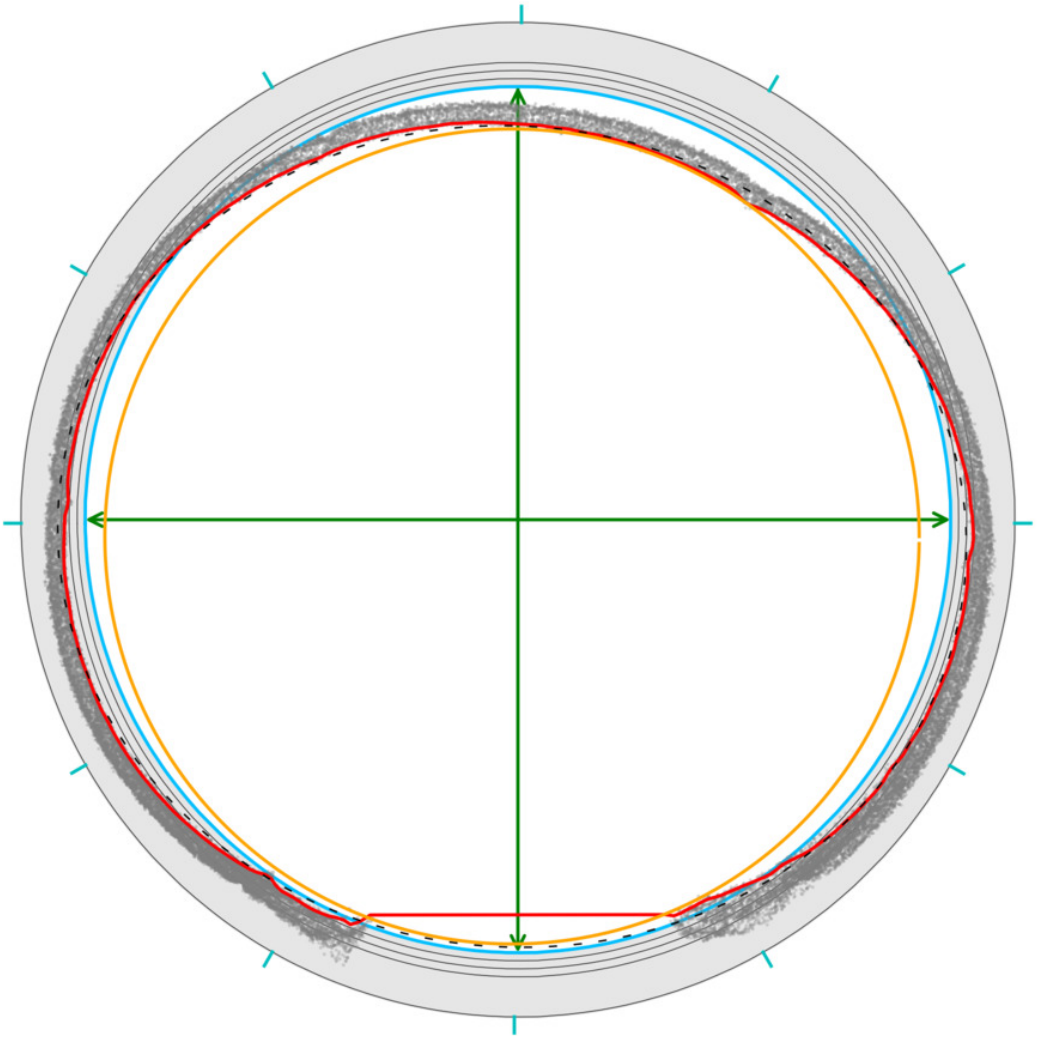
```
Footage   :  37 ft
Width     :  114.1" | 108.0"
Height    :  103.2" | 108.0"

Area      :  8955 sq in
Perimeter :  338.5 in
Ovality   :  5.7%

Interior Diameter : 100.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 38.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



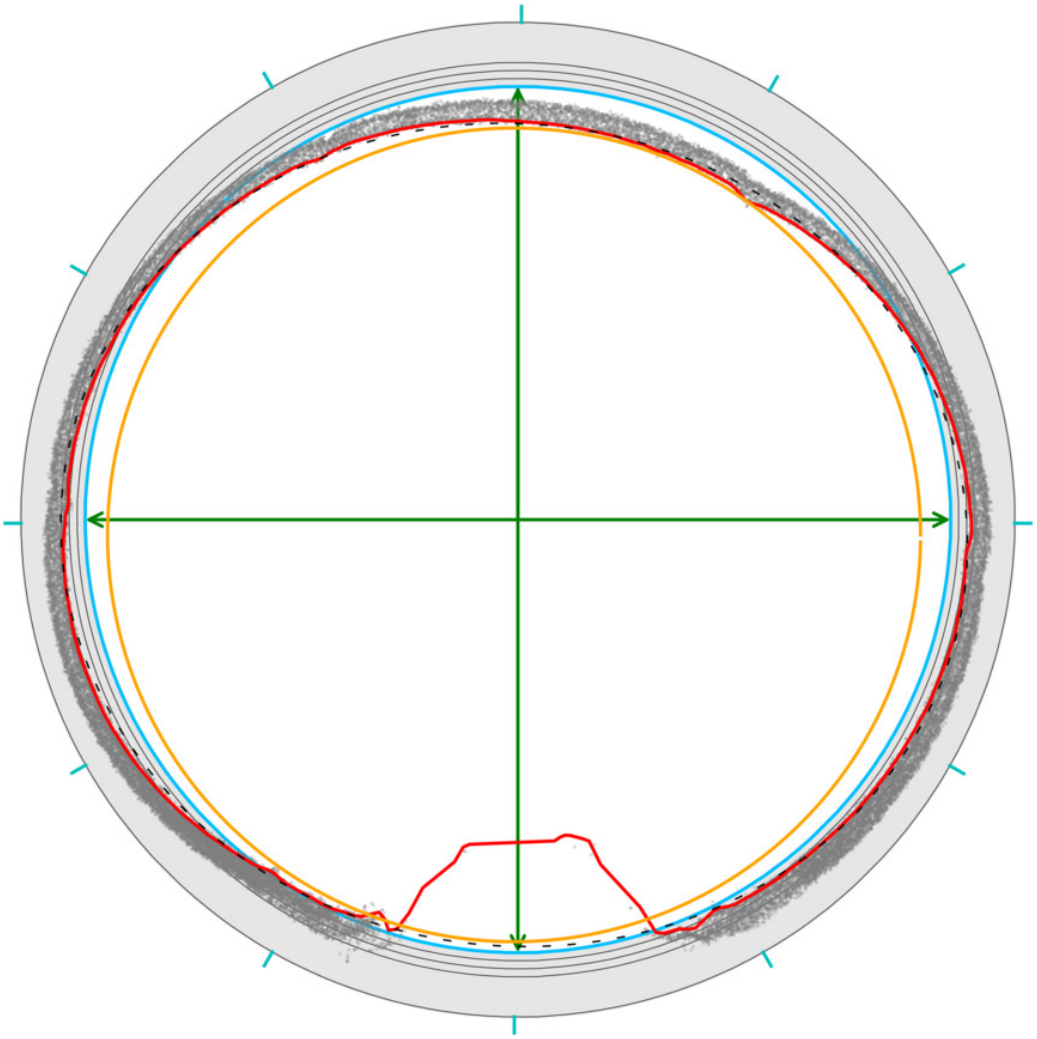
```
Footage   :  38 ft
Width     :  113.5" | 108.0"
Height    :  103.4" | 108.0"

Area      :  9001 sq in
Perimeter :  339.8 in
Ovality   :  5.1%

Interior Diameter : 101.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 39.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



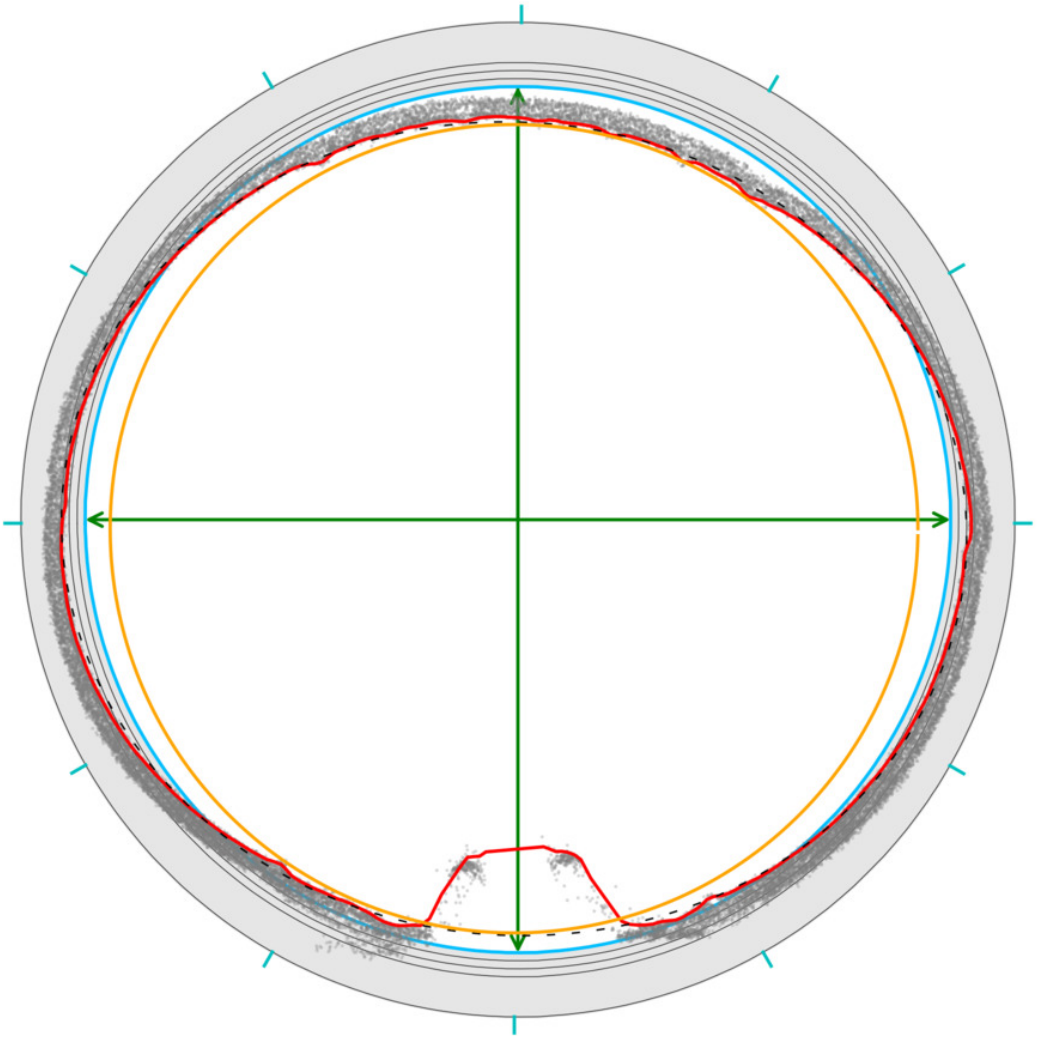
```
Footage   :  39 ft
Width     :  113.4" | 108.0"
Height    :  103.7" | 108.0"

Area      :  8819 sq in
Perimeter :  352.8 in
Ovality   :  4.9%

Interior Diameter : 101.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 40.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



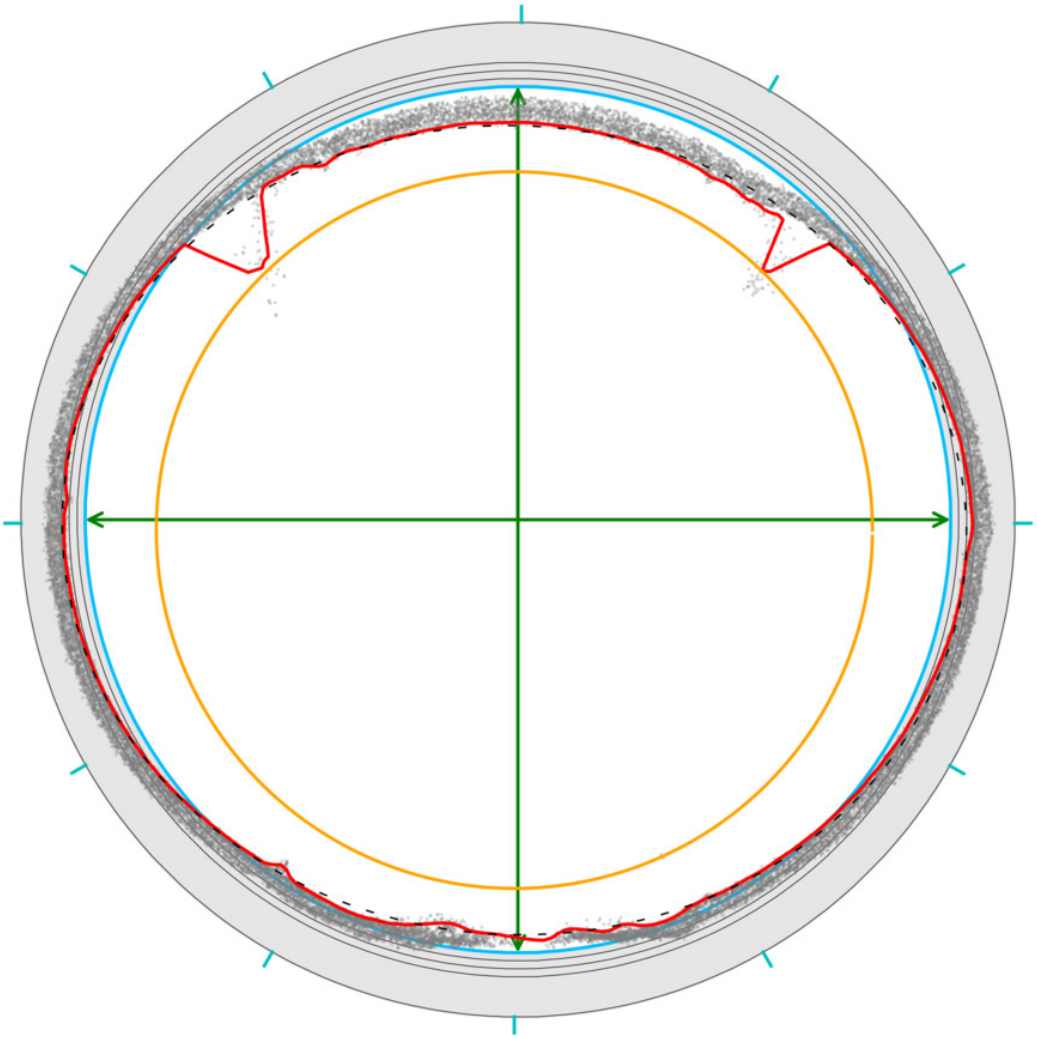
```
Footage   :  40 ft
Width     :  113.6" | 108.0"
Height    :  104.1" | 108.0"

Area      :  8806 sq in
Perimeter :  348.2 in
Ovality   :  5.4%

Interior Diameter : 100.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 41.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



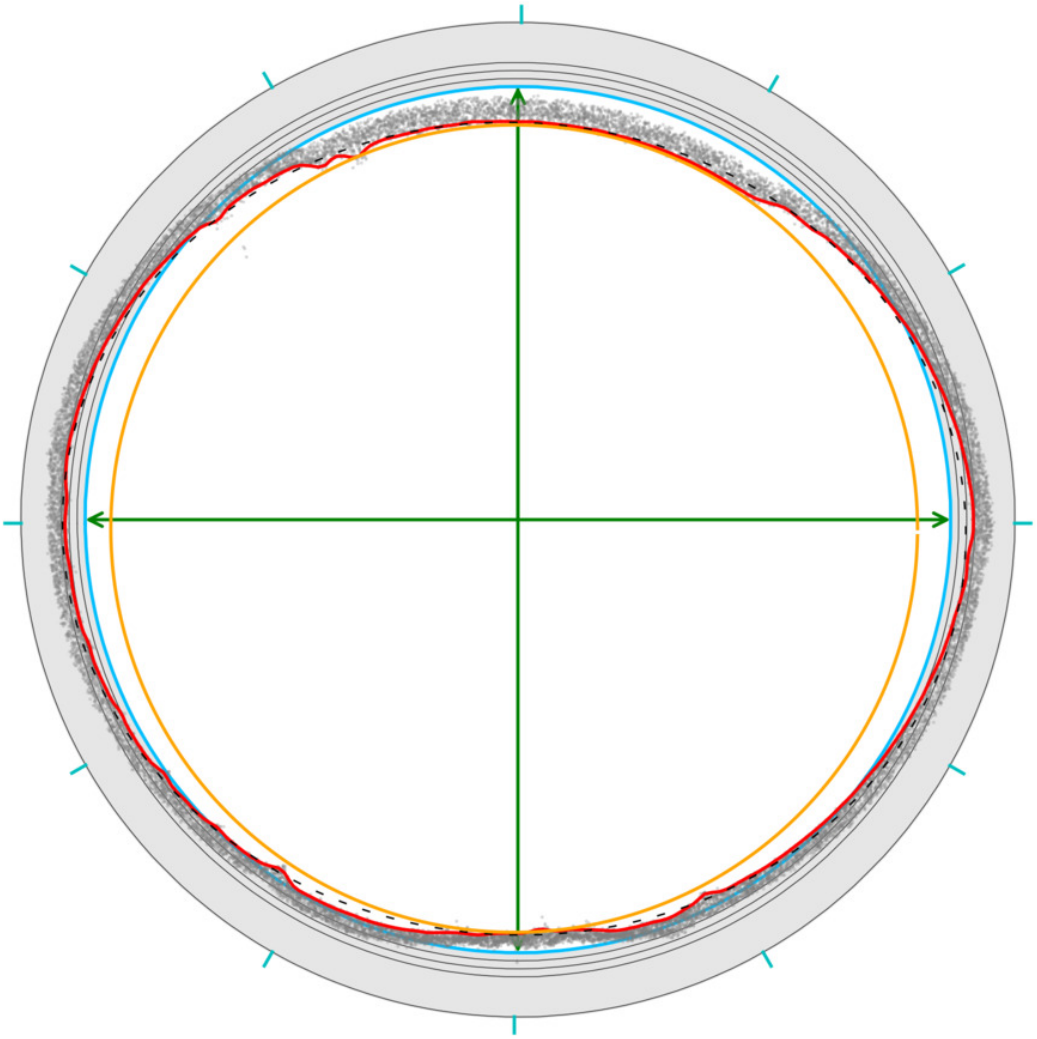
```
Footage   :  41 ft
Width     :  113.4" | 108.0"
Height    :  103.5" | 108.0"

Area      :  8864 sq in
Perimeter :  356.9 in
Ovality   :  5.5%

Interior Diameter : 89.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 42.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



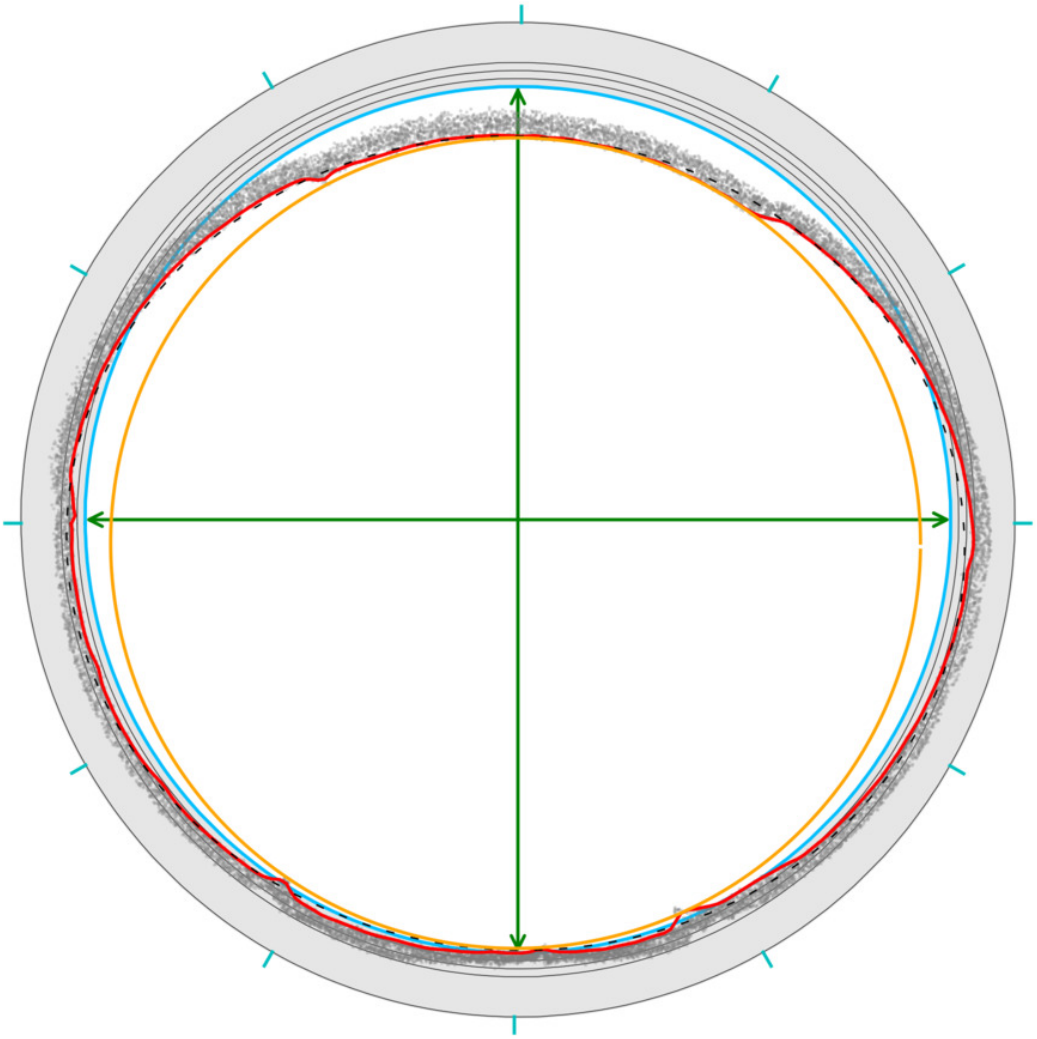
```
Footage   :  42 ft
Width     :  113.4" | 108.0"
Height    :  103.6" | 108.0"

Area      :  8967 sq in
Perimeter :  339.0 in
Ovality   :  5.3%

Interior Diameter : 100.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 43.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



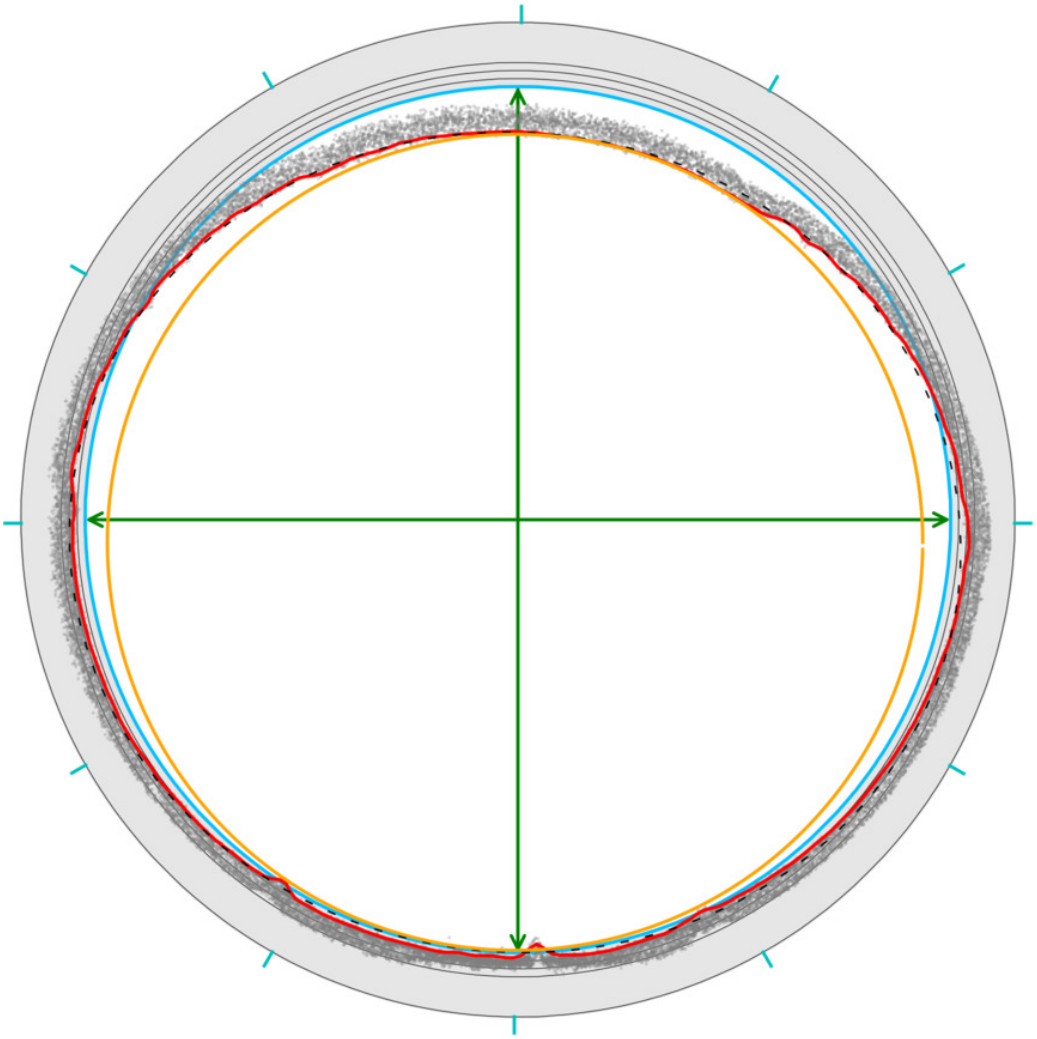
```
Footage   :  43 ft
Width     :  112.7" | 108.0"
Height    :  101.9" | 108.0"

Area      :  8928 sq in
Perimeter :  338.0 in
Ovality   :  4.9%

Interior Diameter : 101.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 44.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



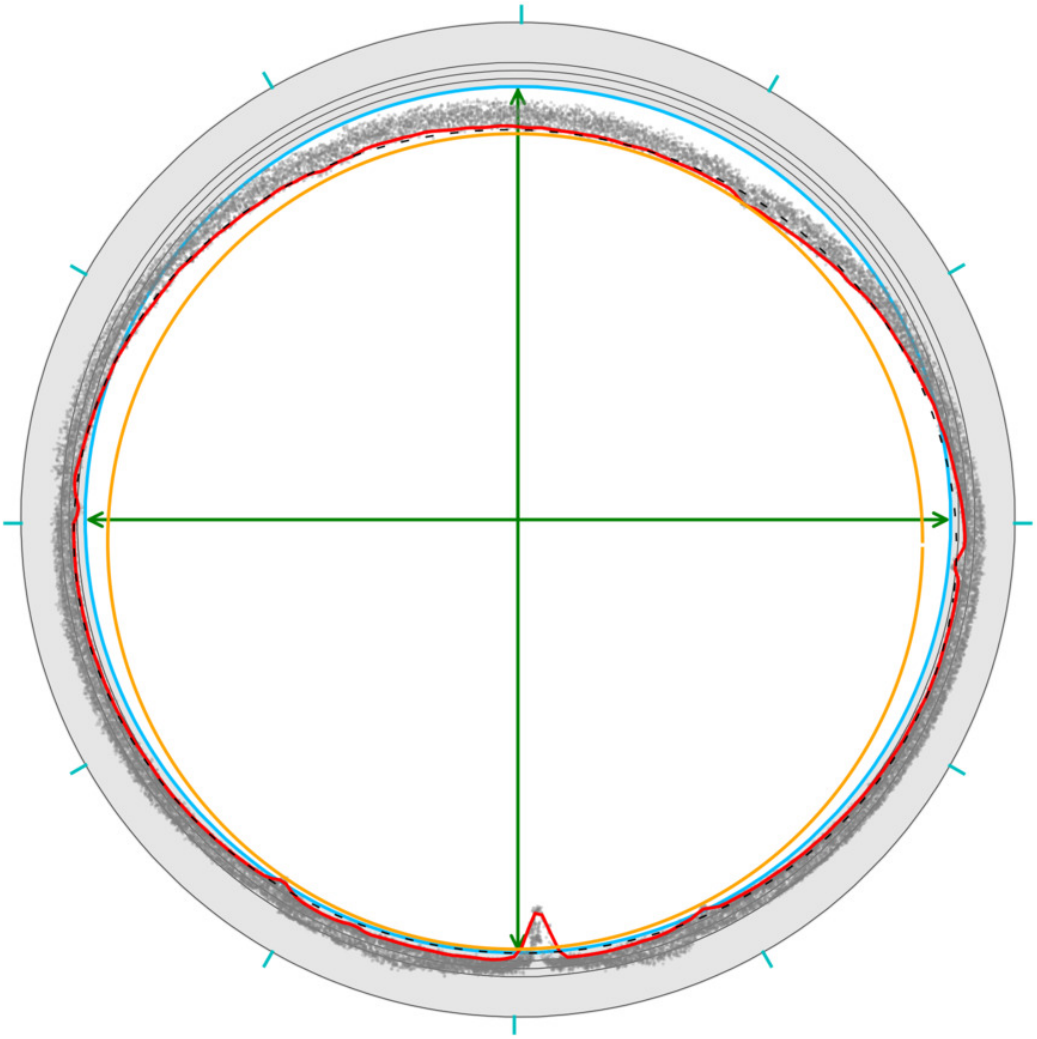
```
Footage   :  44 ft
Width     :  112.0" | 108.0"
Height    :  102.4" | 108.0"

Area      :  8928 sq in
Perimeter :  338.0 in
Ovality   :  4.2%

Interior Diameter : 101.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 45.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



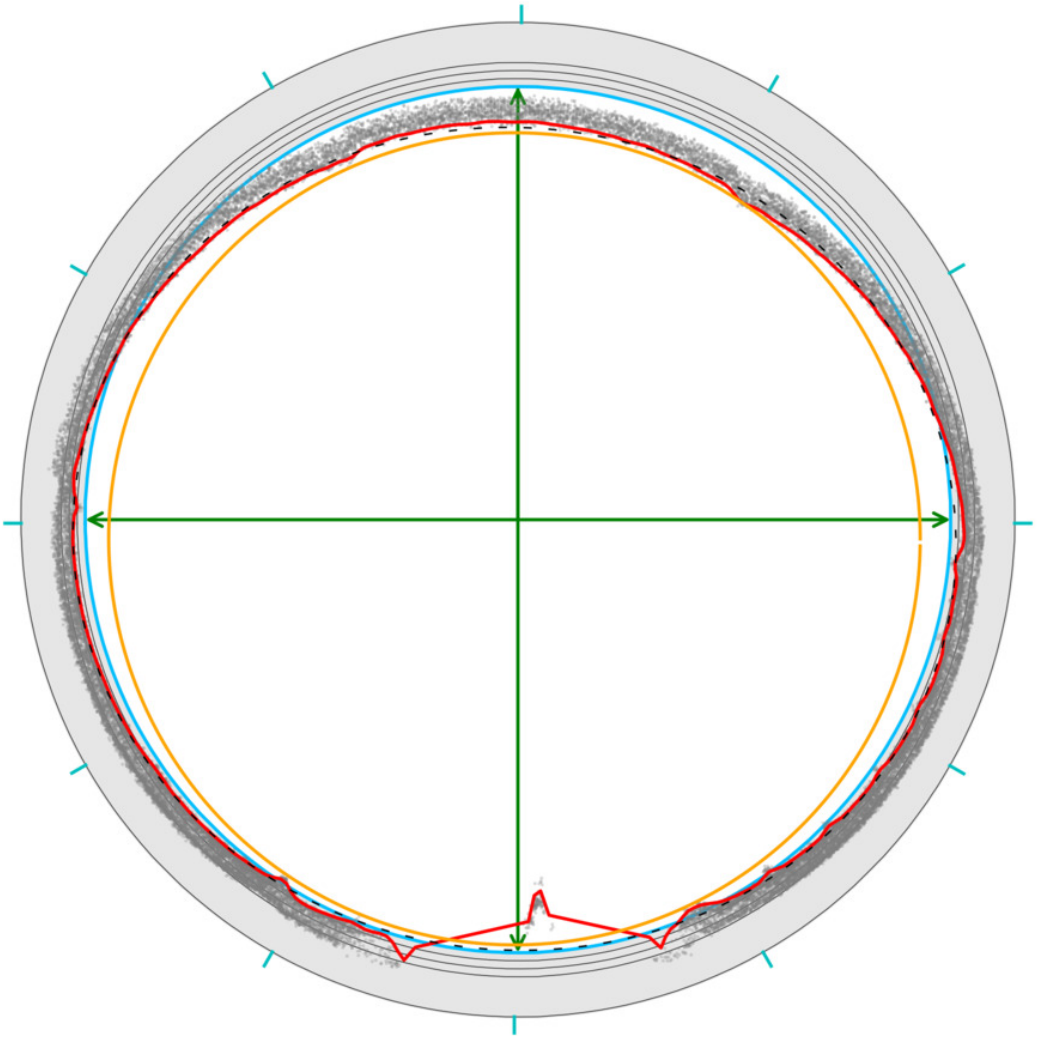
```
Footage   :  45 ft
Width     :  111.2" | 108.0"
Height    :  103.0" | 108.0"

Area      :  8878 sq in
Perimeter :  343.0 in
Ovality   :  3.6%

Interior Diameter : 101.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 46.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



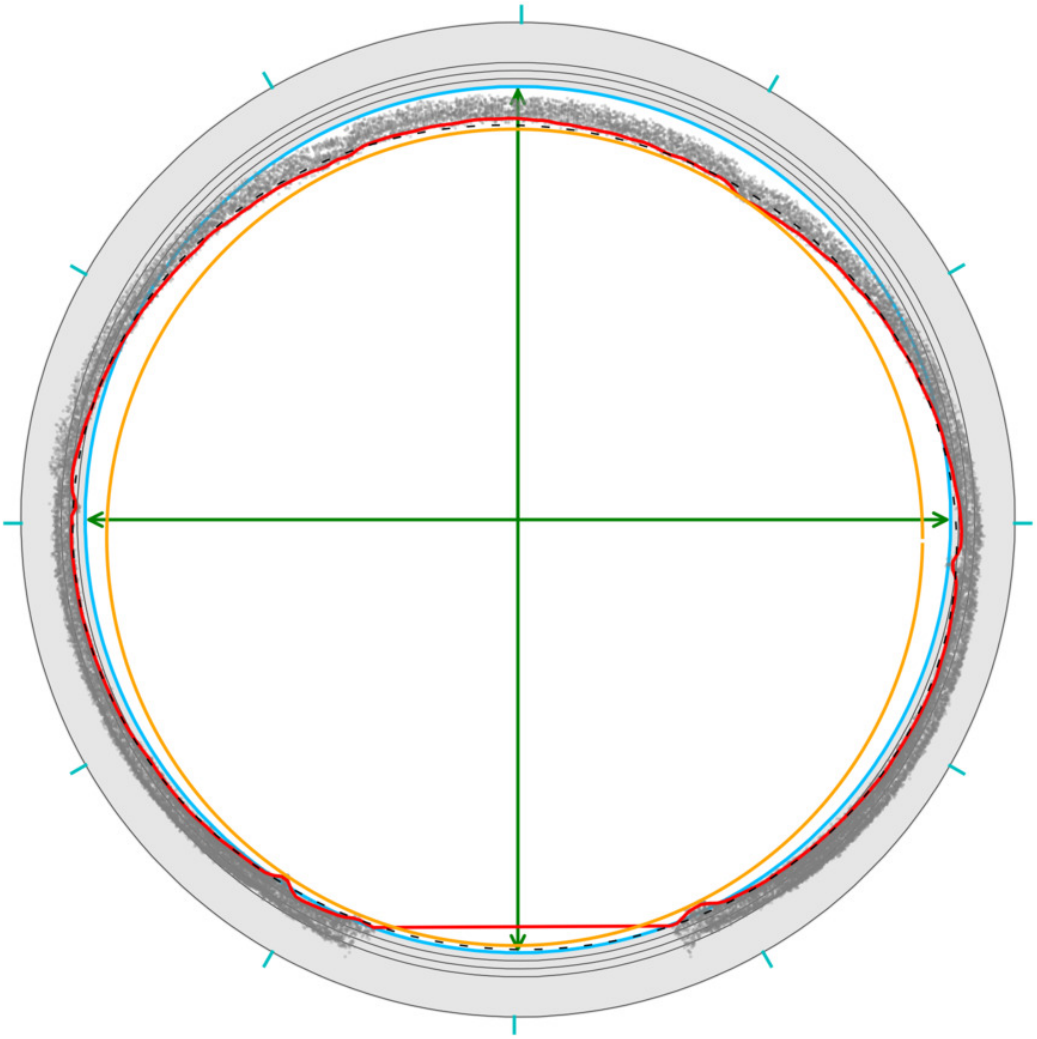
```
Footage   :  46 ft
Width     :  111.2" | 108.0"
Height    :  103.6" | 108.0"

Area      :  8820 sq in
Perimeter :  346.1 in
Ovality   :  3.6%

Interior Diameter : 101.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 47.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  47 ft
Width     :  111.1" | 108.0"
Height    :  104.0" | 108.0"

Area      :  8830 sq in
Perimeter :  336.3 in
Ovality   :  3.7%

Interior Diameter : 101.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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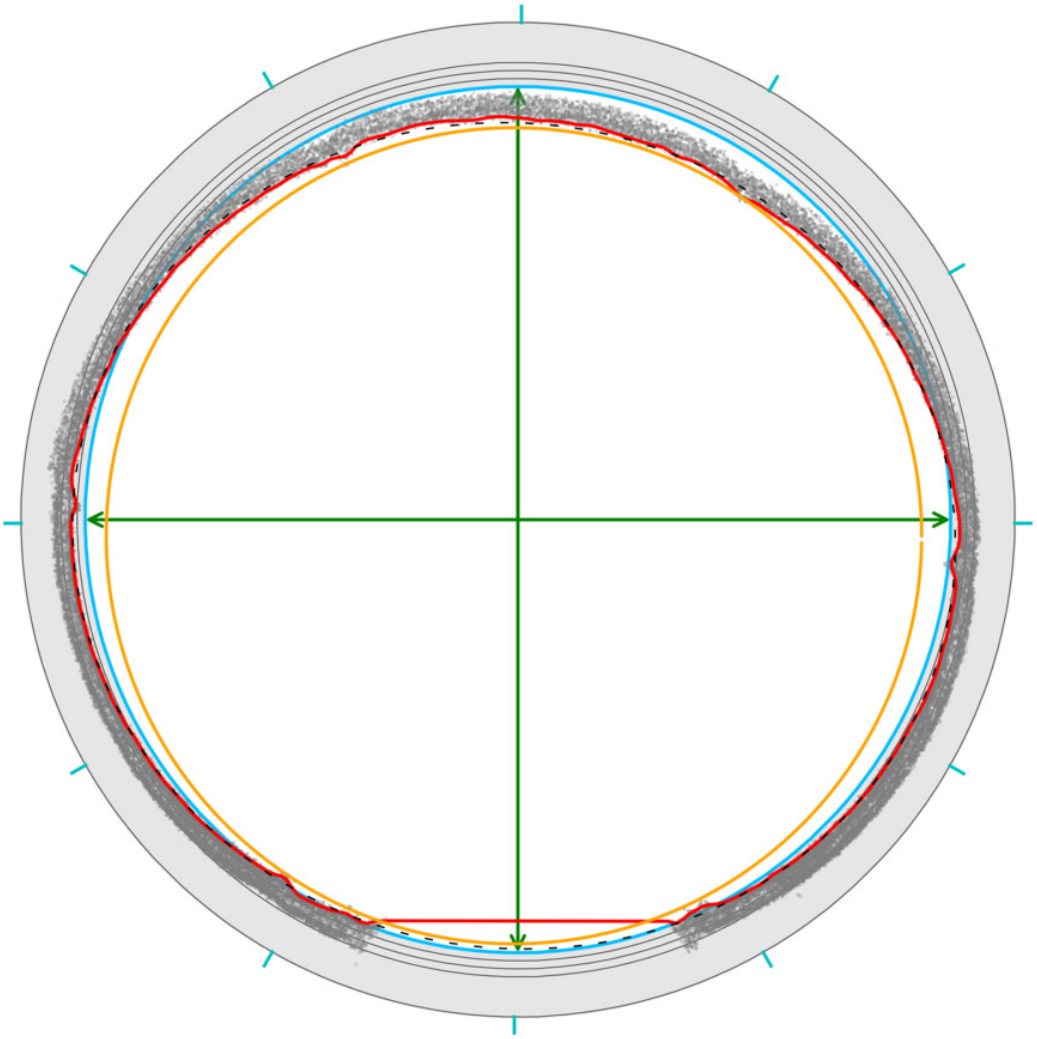
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 48.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  48 ft
Width     :  110.9" | 108.0"
Height    :  104.1" | 108.0"

Area      :  8815 sq in
Perimeter :  336.3 in
Ovality   :  3.5%

Interior Diameter : 101.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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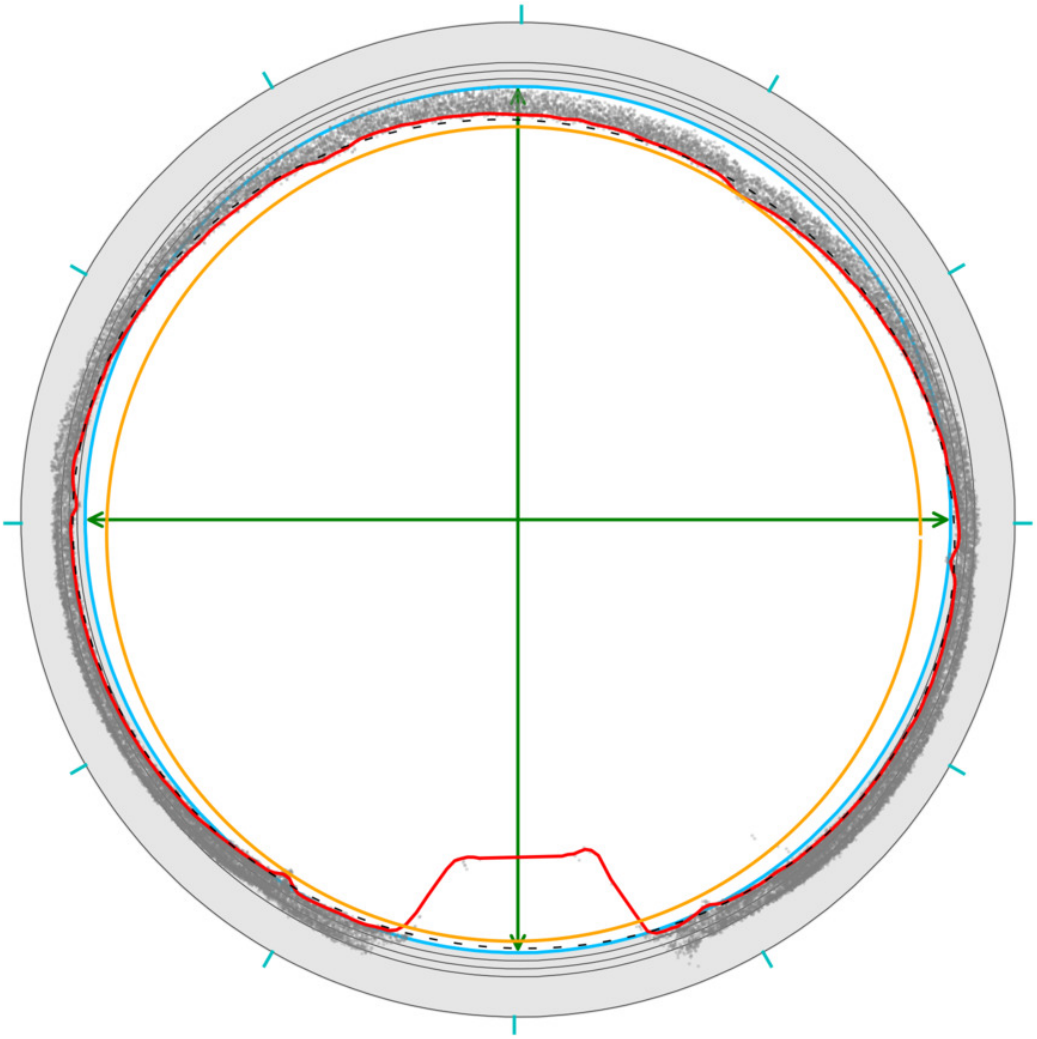
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 49.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  49 ft
Width     :  110.9" | 108.0"
Height    :  104.5" | 108.0"

Area      :  8668 sq in
Perimeter :  346.8 in
Ovality   :  3.4%

Interior Diameter : 101.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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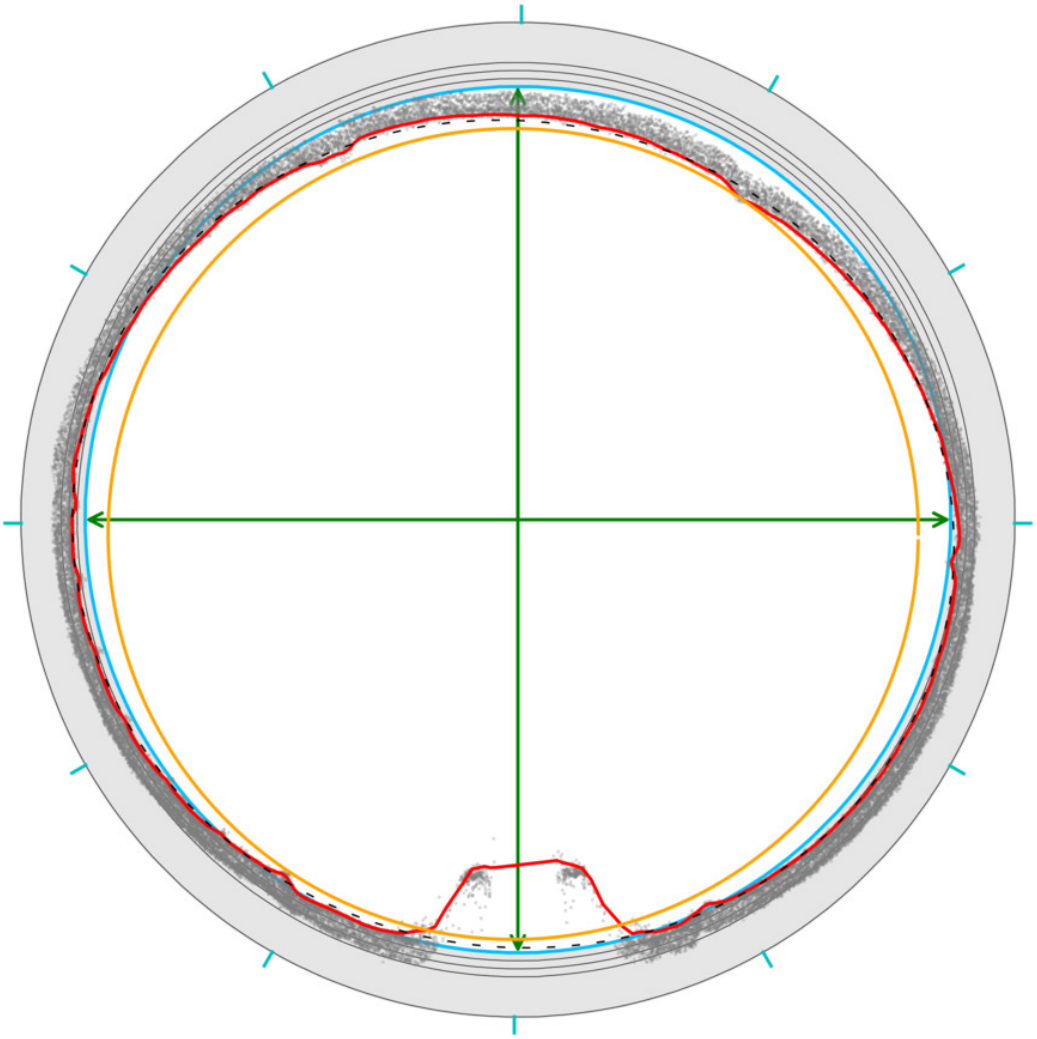
SFX-3D Cross Section Report
Inspection #1 : / , 50.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 50 ft
Width : 110.7" | 108.0"
Height : 104.4" | 108.0"

Area : 8724 sq in
Perimeter : 345.4 in
Ovality : 3.5%

Interior Diameter : 101.1"

Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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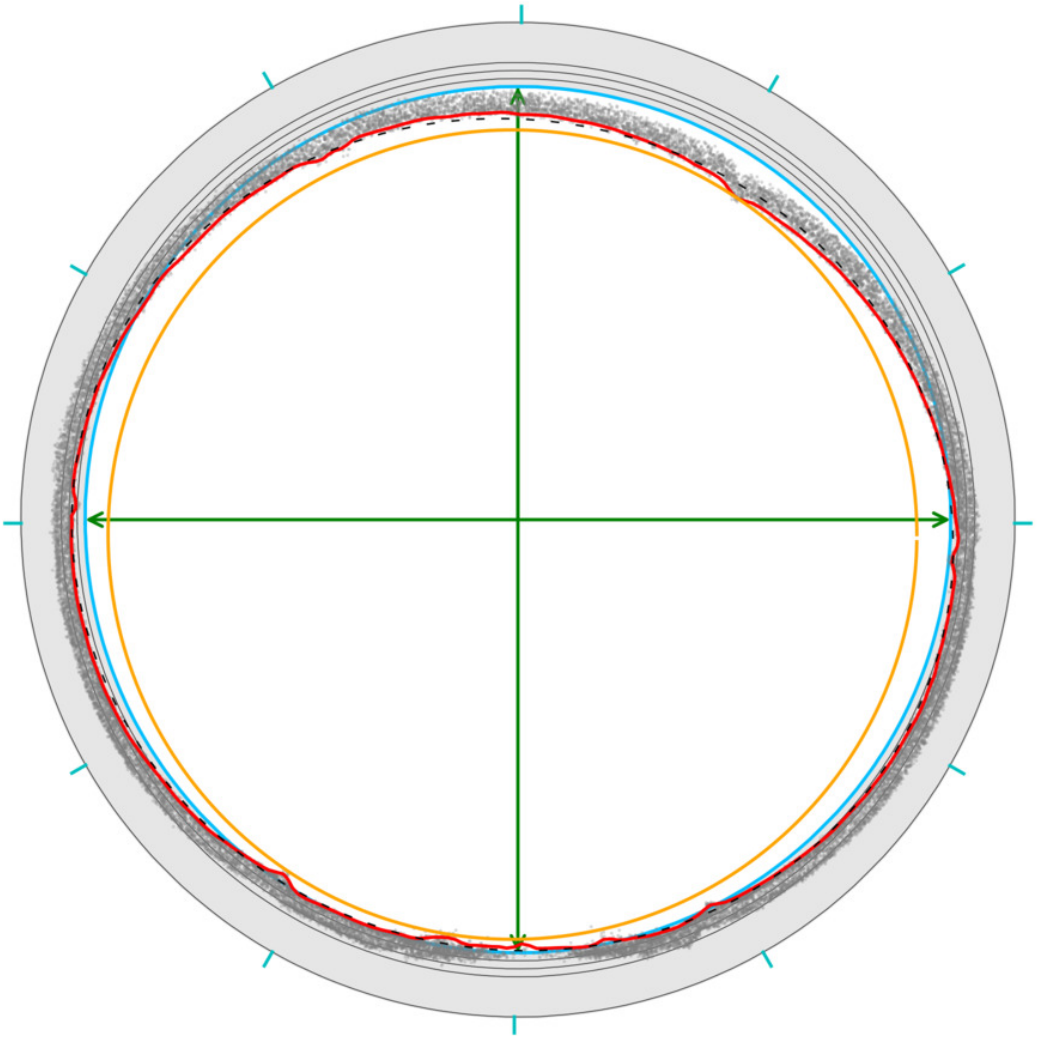
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 51.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  51 ft
Width     :  110.7" | 108.0"
Height    :  104.6" | 108.0"

Area      :  8943 sq in
Perimeter :  337.9 in
Ovality   :  3.2%

Interior Diameter : 100.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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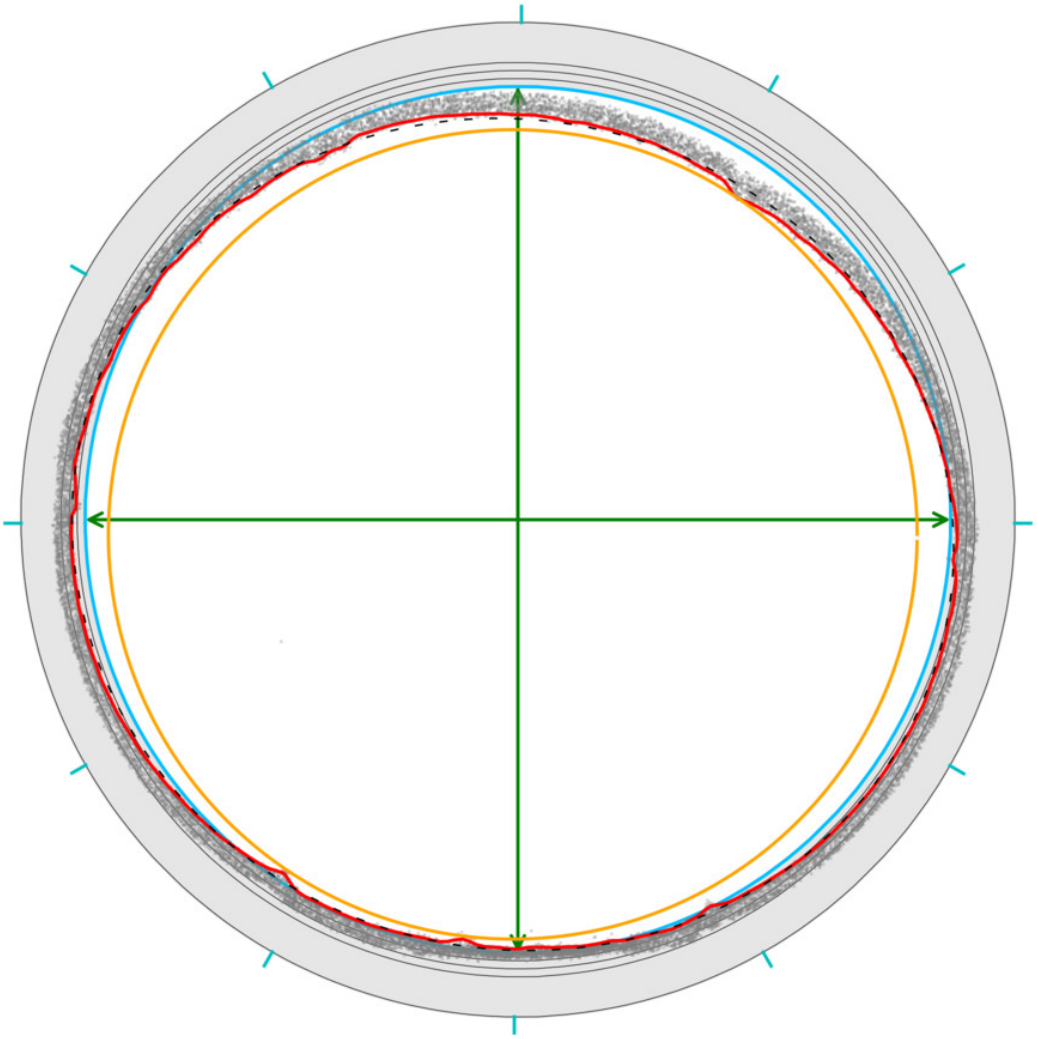
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 52.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  52 ft
Width     :  110.6" | 108.0"
Height    :  104.5" | 108.0"

Area      :  8947 sq in
Perimeter :  337.6 in
Ovality   :  3.4%

Interior Diameter : 100.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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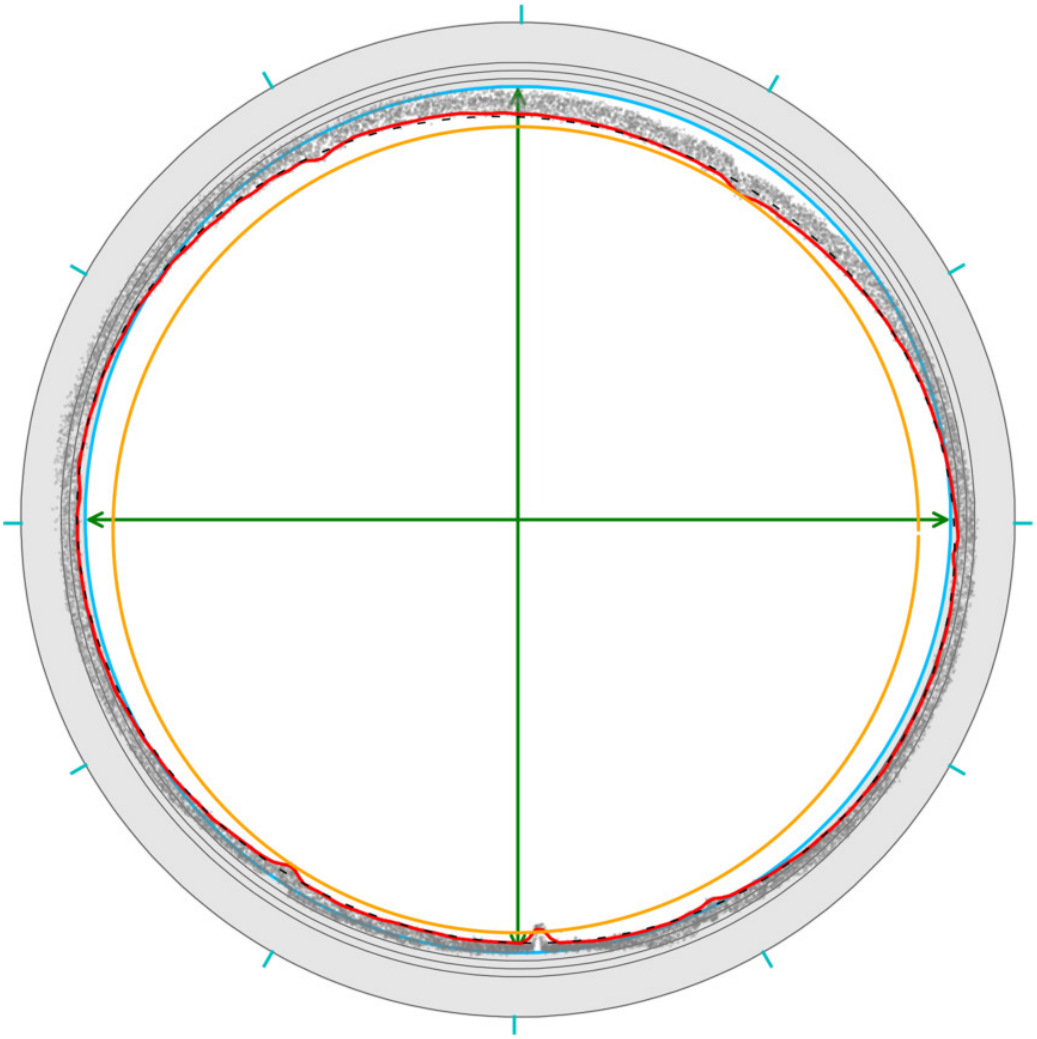
SFX-3D Cross Section Report
Inspection #1 : / , 53.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  53 ft
Width     :  110.0" | 108.0"
Height    :  104.6" | 108.0"

Area      :  8849 sq in
Perimeter :  336.7 in
Ovality   :  3.6%

Interior Diameter : 100.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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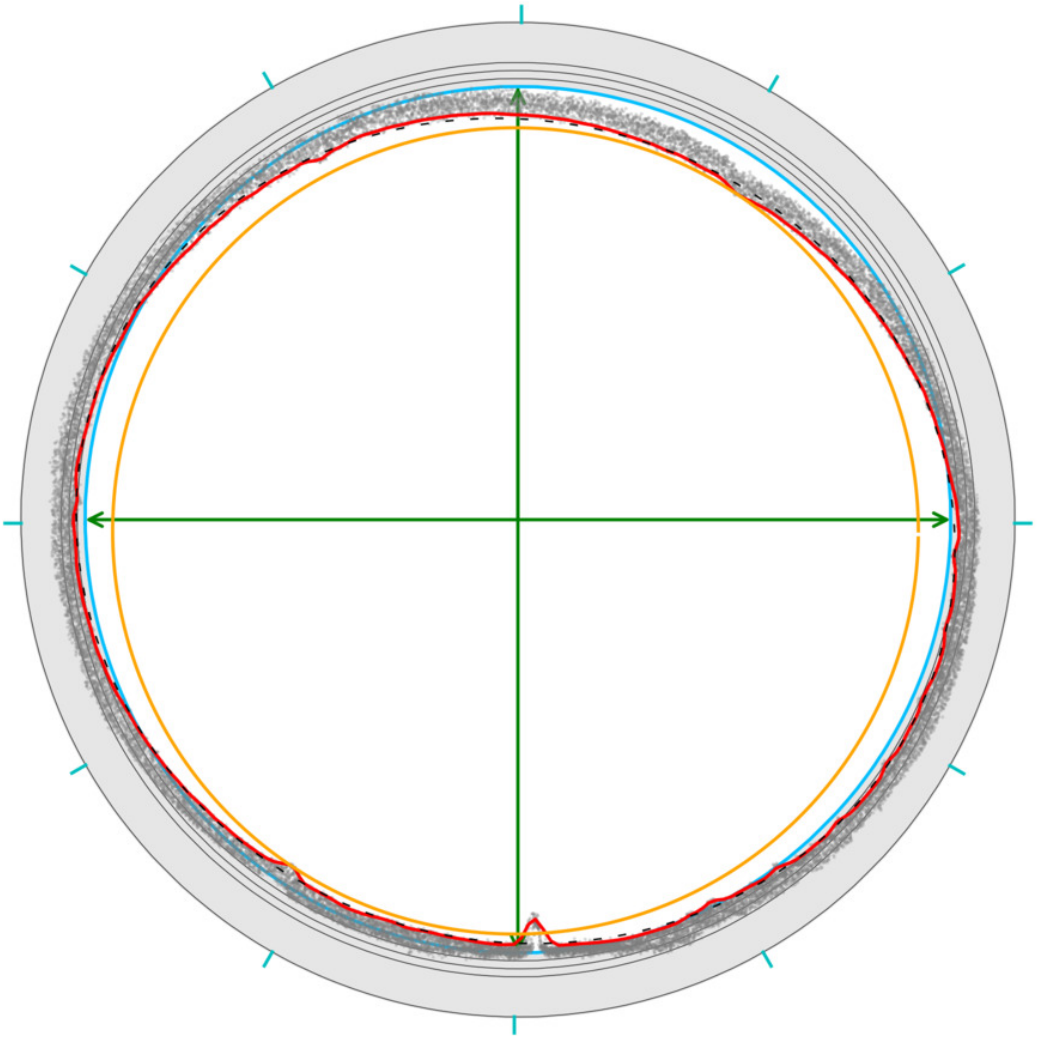
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 54.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  54 ft
Width     :  110.5" | 108.0"
Height    :  104.5" | 108.0"

Area      :  8843 sq in
Perimeter :  338.7 in
Ovality   :  3.8%

Interior Diameter : 100.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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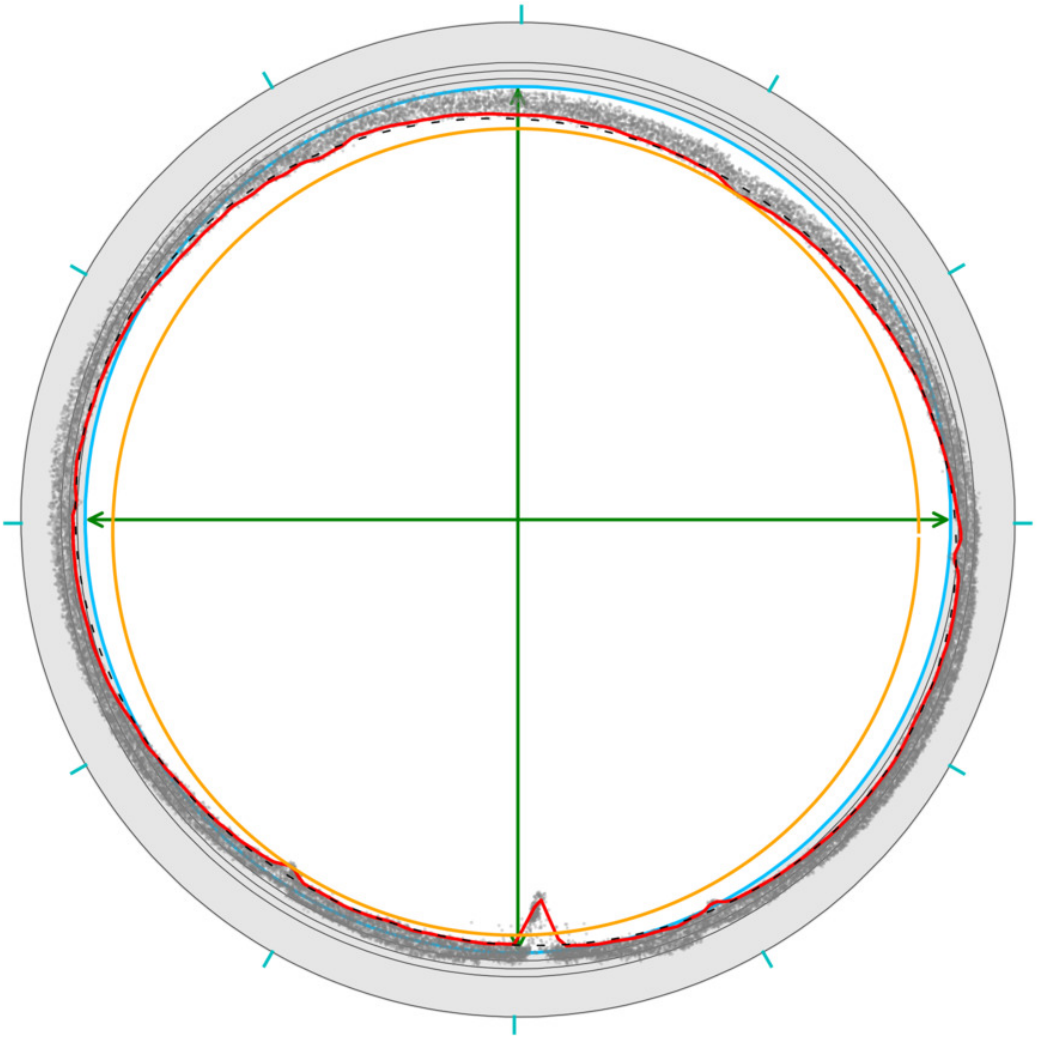
SFX-3D Cross Section Report
Inspection #1 : / , 55.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  55 ft
Width     :  110.9" | 108.0"
Height    :  104.5" | 108.0"

Area      :  8875 sq in
Perimeter :  343.0 in
Ovality   :  3.9%

Interior Diameter : 100.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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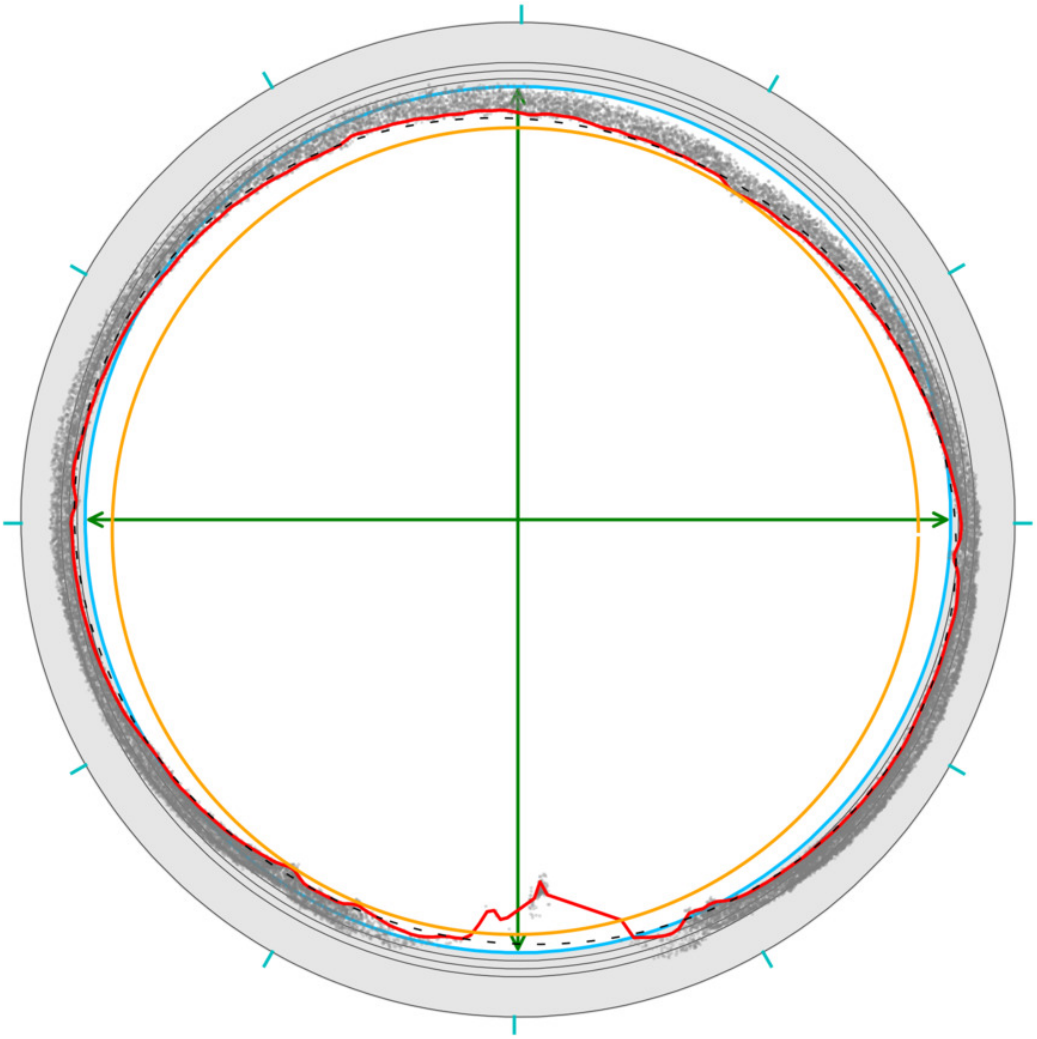
SFX-3D Cross Section Report
Inspection #1 : / , 56.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  56 ft
Width     :  111.1" | 108.0"
Height    :  104.8" | 108.0"

Area      :  8822 sq in
Perimeter :  344.4 in
Ovality   :  4.0%

Interior Diameter : 100.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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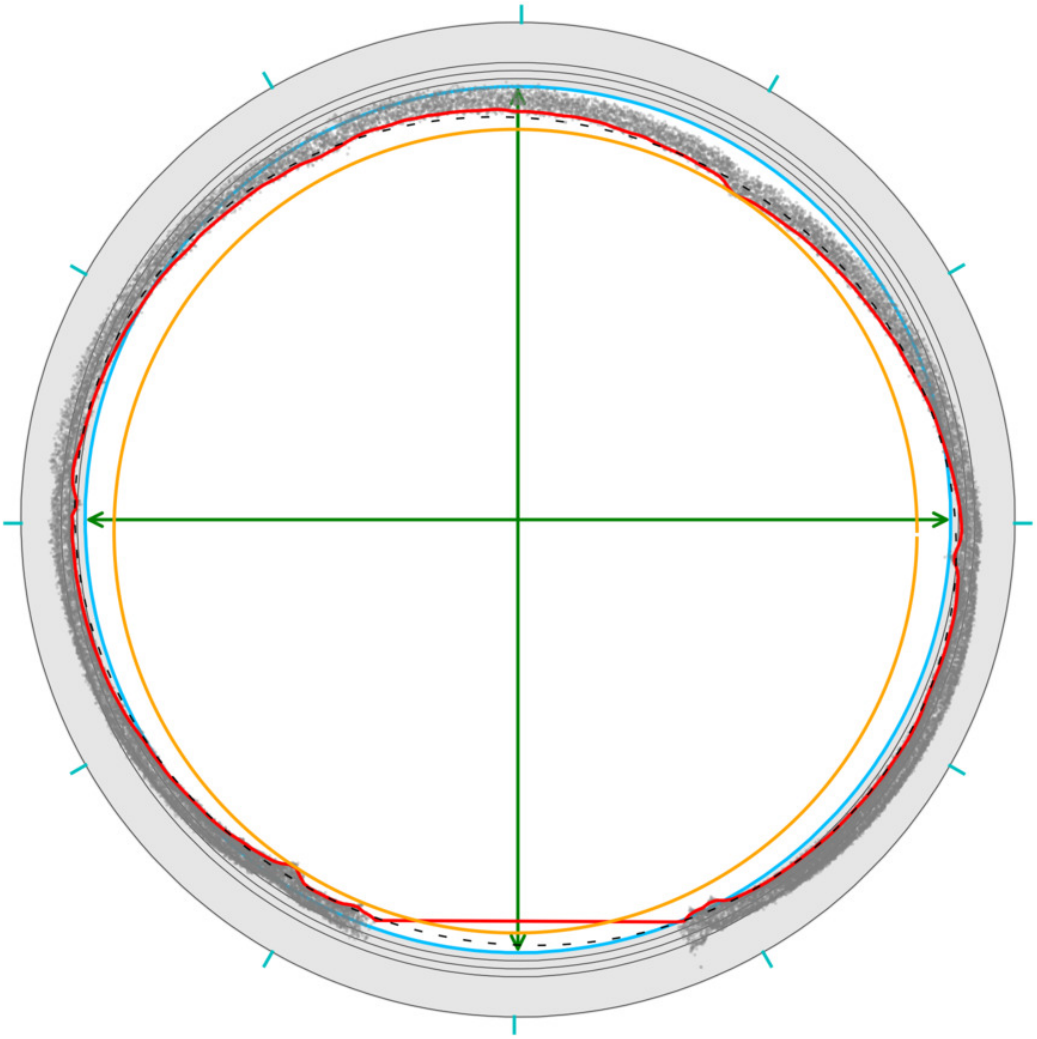
SFX-3D Cross Section Report
Inspection #1 : / , 57.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  57 ft
Width     :  111.0" | 108.0"
Height    :  104.9" | 108.0"

Area      :  8830 sq in
Perimeter :  336.5 in
Ovality   :  3.8%

Interior Diameter : 100.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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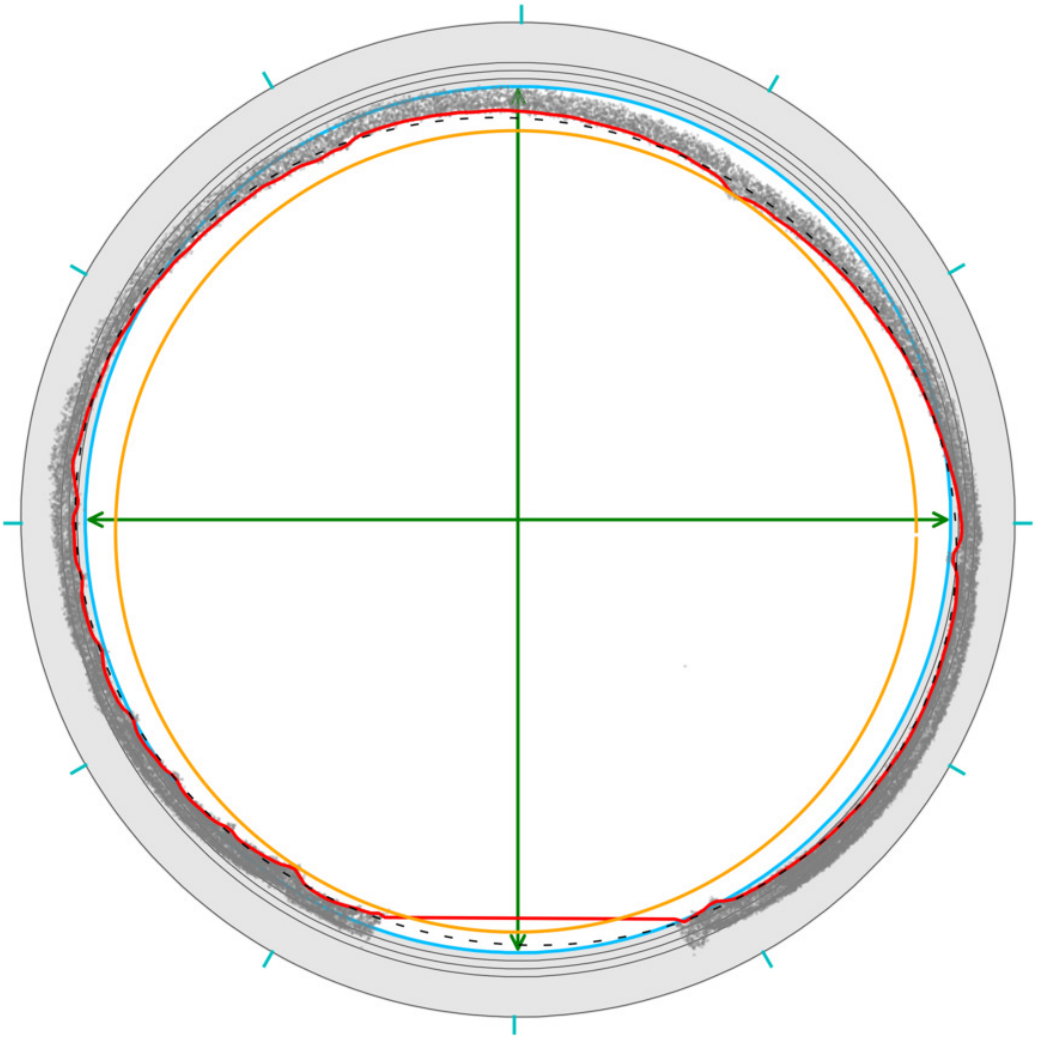
SFX-3D Cross Section Report
Inspection #1 : / , 58.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  58 ft
Width     :  110.9" | 108.0"
Height    :  104.9" | 108.0"

Area      :  8807 sq in
Perimeter :  336.6 in
Ovality   :  3.9%

Interior Diameter : 99.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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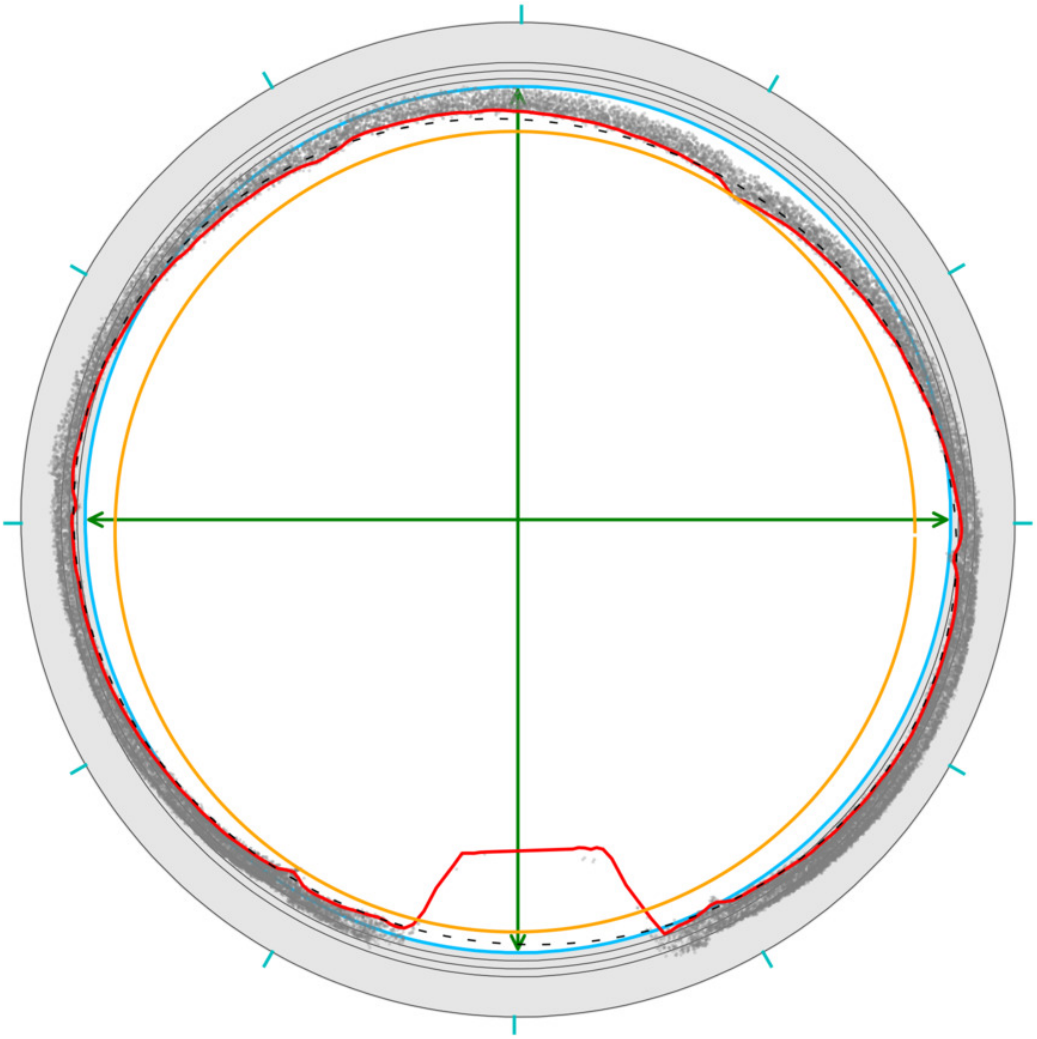
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 59.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  59 ft
Width     :  111.0" | 108.0"
Height    :  104.9" | 108.0"

Area      :  8636 sq in
Perimeter :  347.2 in
Ovality   :  4.1%

Interior Diameter : 99.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

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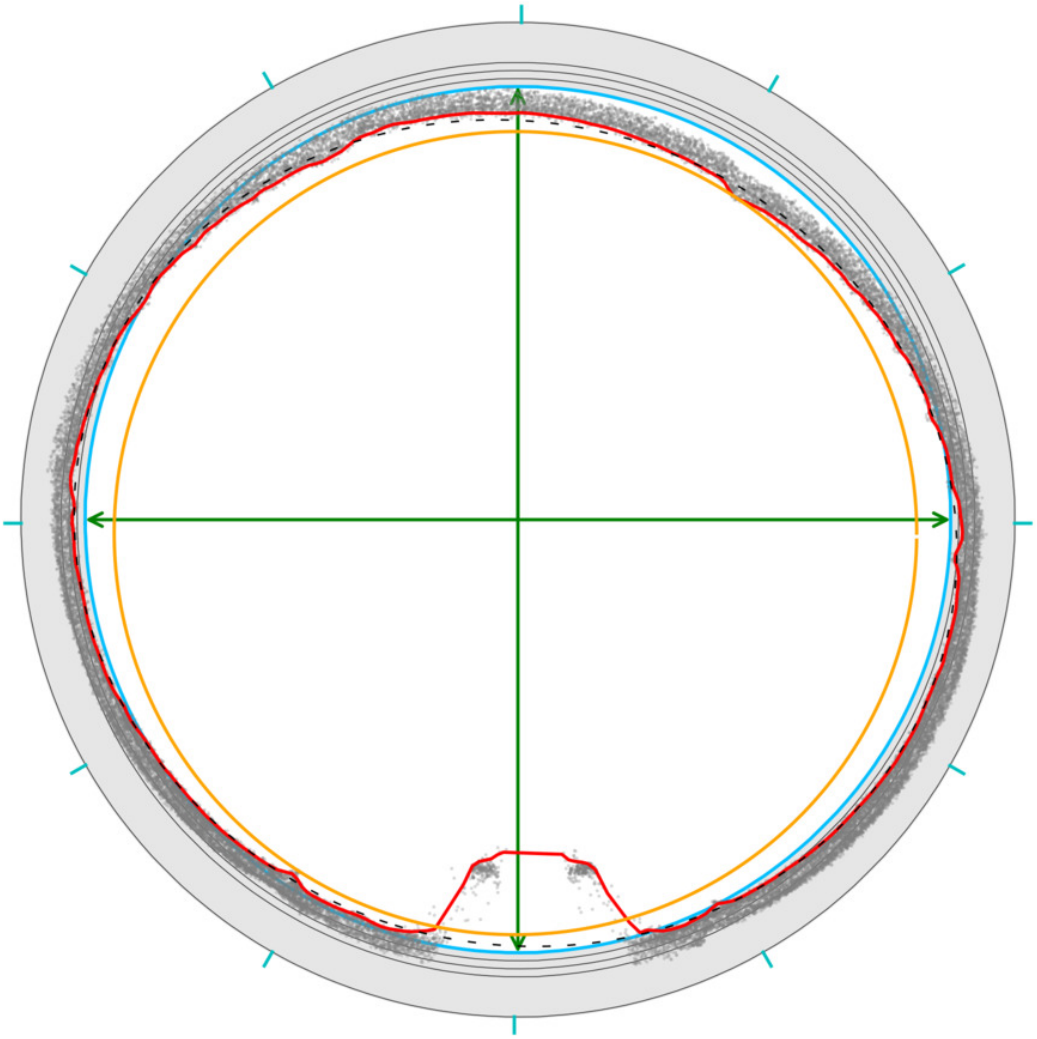
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 60.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  60 ft
Width     :  111.3" | 108.0"
Height    :  104.7" | 108.0"

Area      :  8699 sq in
Perimeter :  346.7 in
Ovality   :  4.0%

Interior Diameter : 100.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

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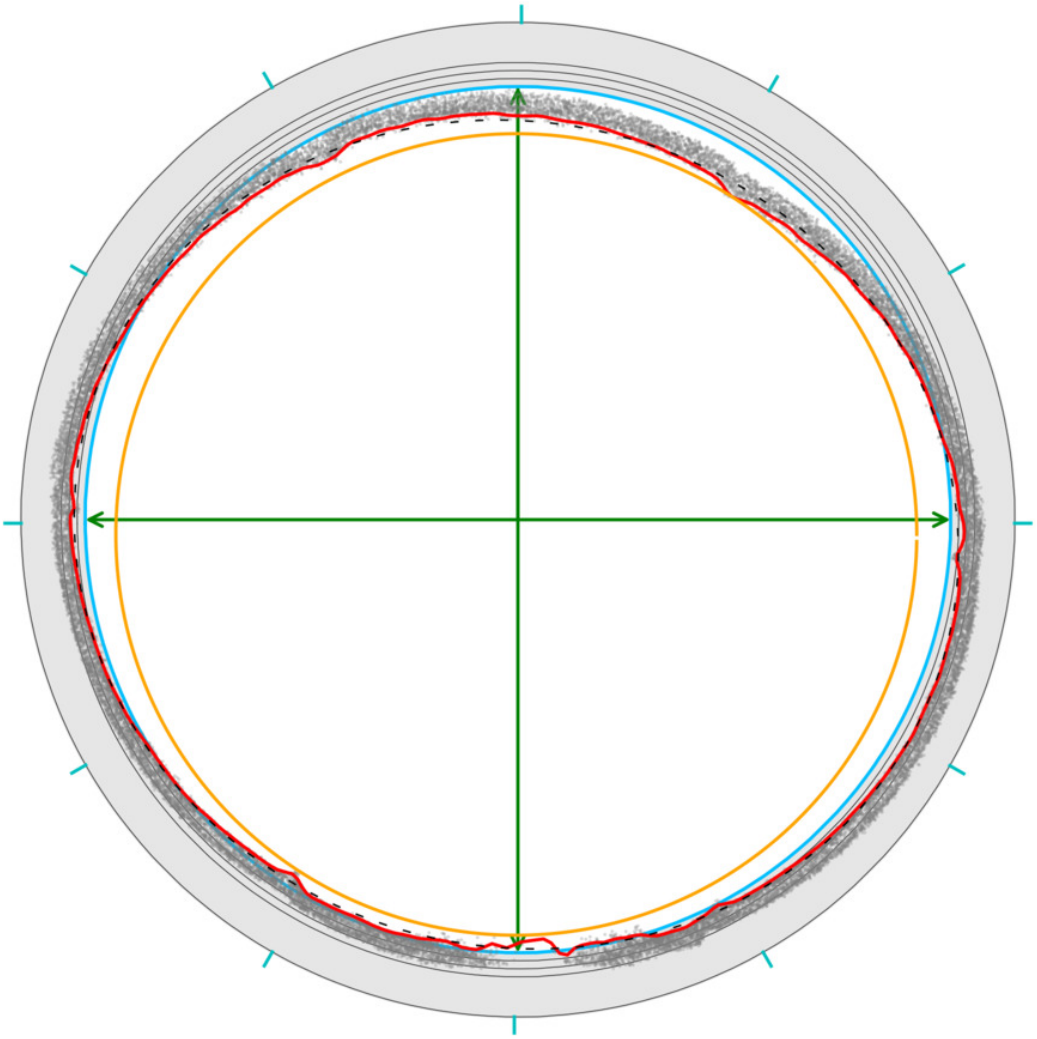
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 61.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



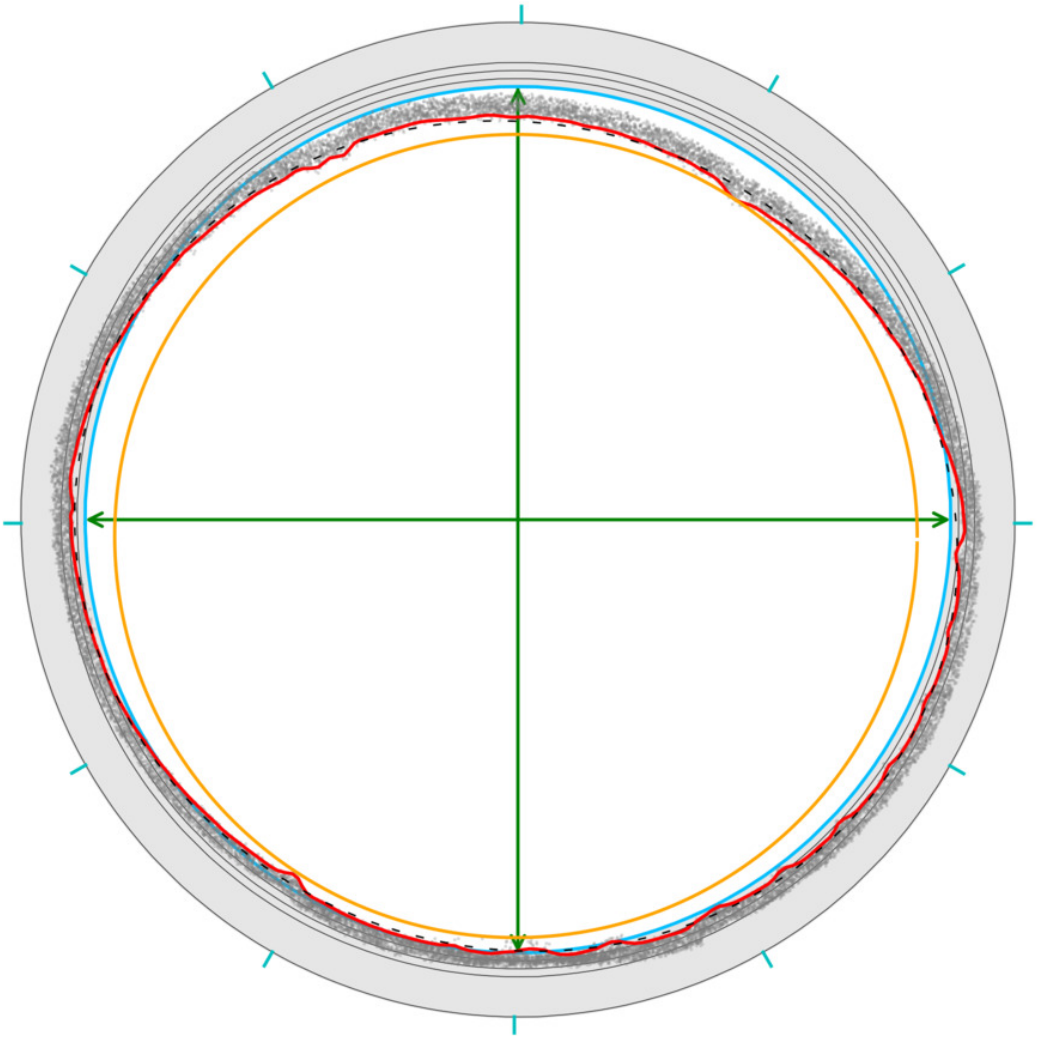
```
Footage   :  61 ft
Width     :  111.5" | 108.0"
Height    :  104.4" | 108.0"

Area      :  8932 sq in
Perimeter :  339.3 in
Ovality   :  3.8%

Interior Diameter : 100.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 62.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



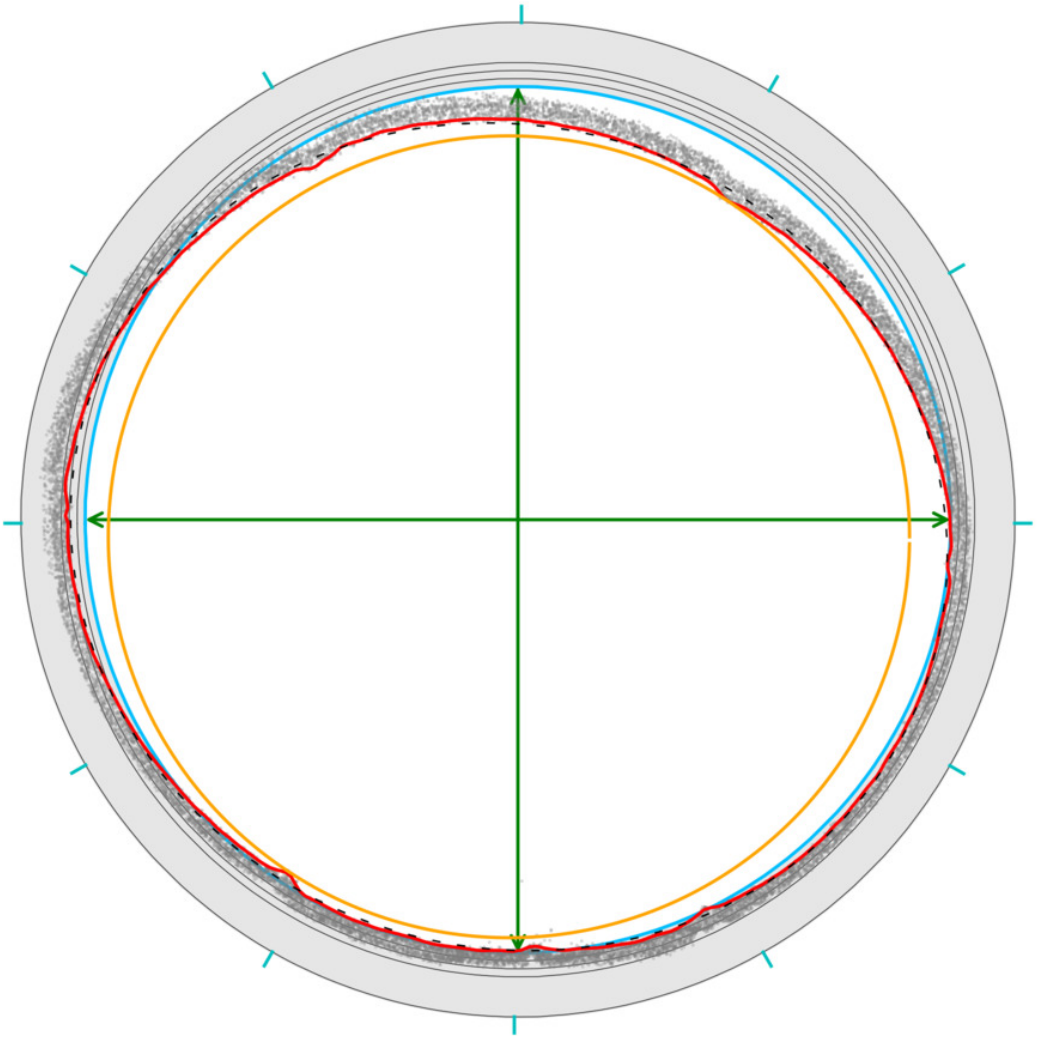
```
Footage   :  62 ft
Width     :  111.6" | 108.0"
Height    :  104.2" | 108.0"

Area      :  8935 sq in
Perimeter :  338.7 in
Ovality   :  3.7%

Interior Diameter : 100.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 63.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



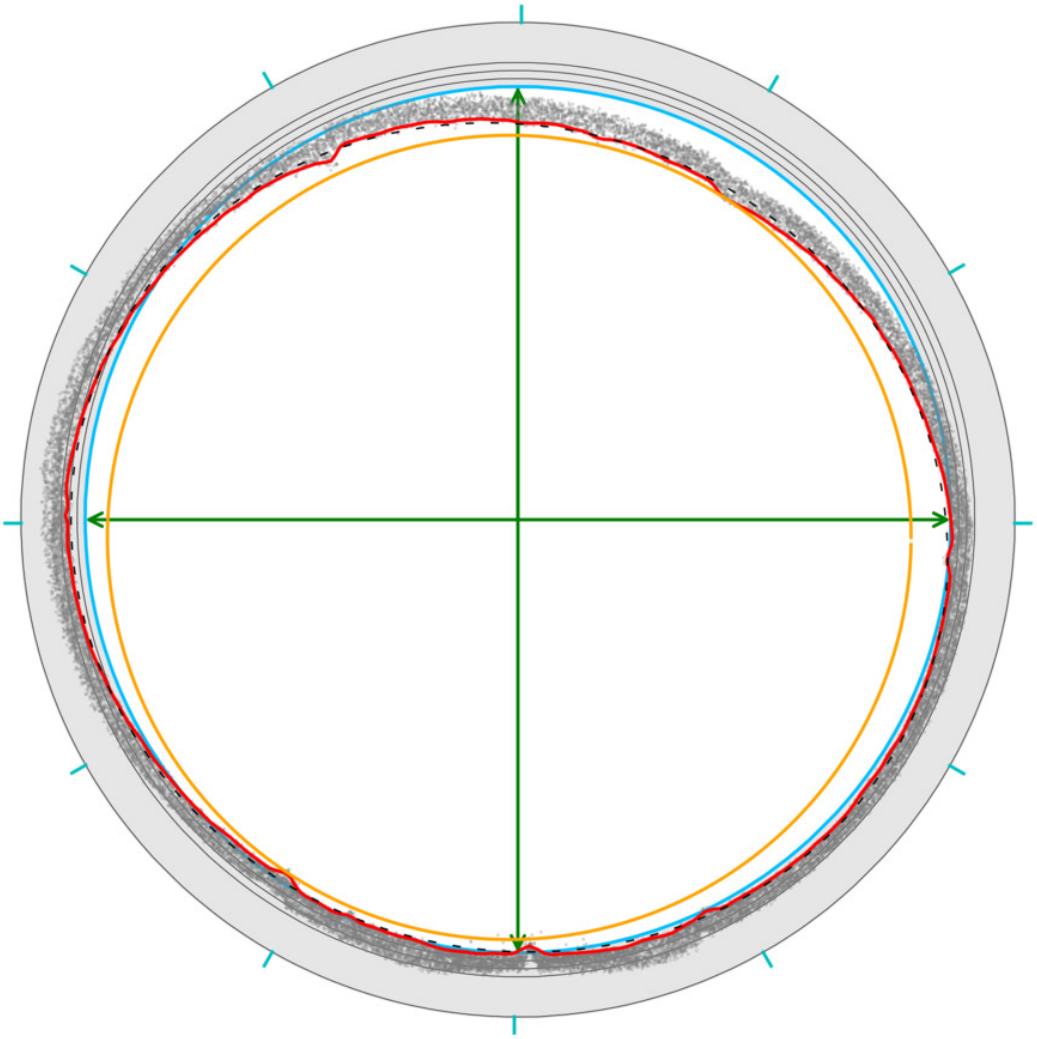
```
Footage   :  63 ft
Width     :  110.6" | 108.0"
Height    :  103.9" | 108.0"

Area      :  8841 sq in
Perimeter :  335.6 in
Ovality   :  3.7%

Interior Diameter : 100.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 64.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



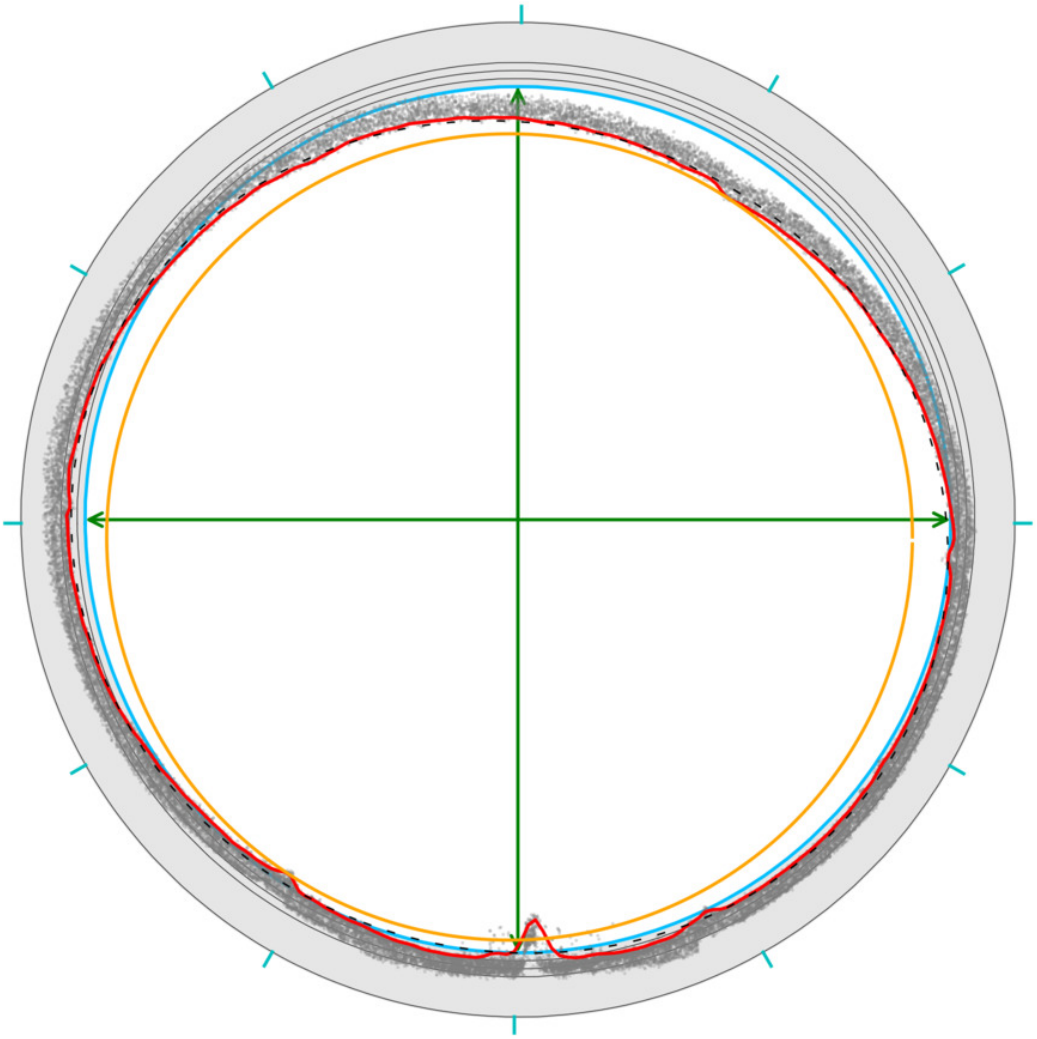
```
Footage   :  64 ft
Width     :  110.7" | 108.0"
Height    :  103.6" | 108.0"

Area      :  8859 sq in
Perimeter :  336.6 in
Ovality   :  3.6%

Interior Diameter : 100.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 65.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



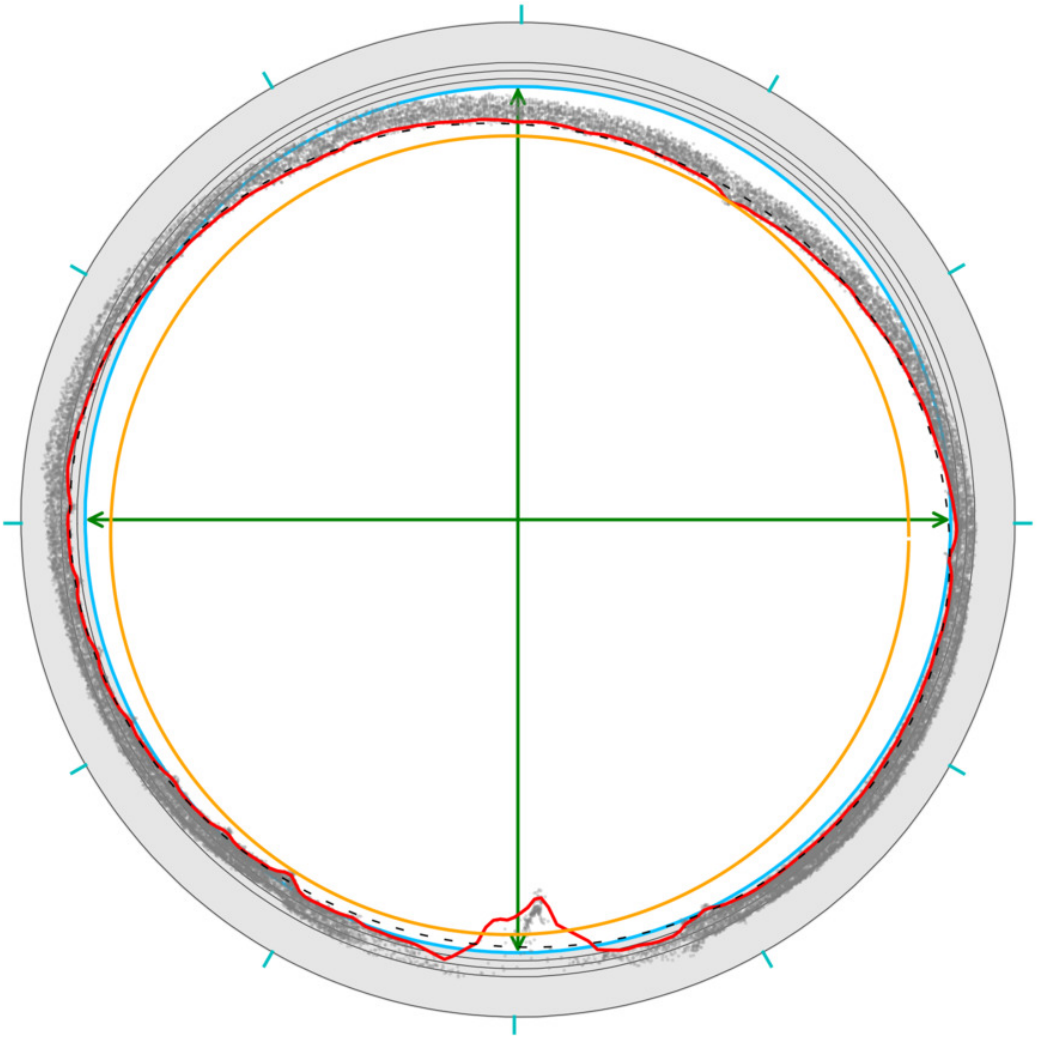
```
Footage   :  65 ft
Width     :  110.7" | 108.0"
Height    :  104.1" | 108.0"

Area      :  8896 sq in
Perimeter :  341.6 in
Ovality   :  3.5%

Interior Diameter : 100.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 66.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



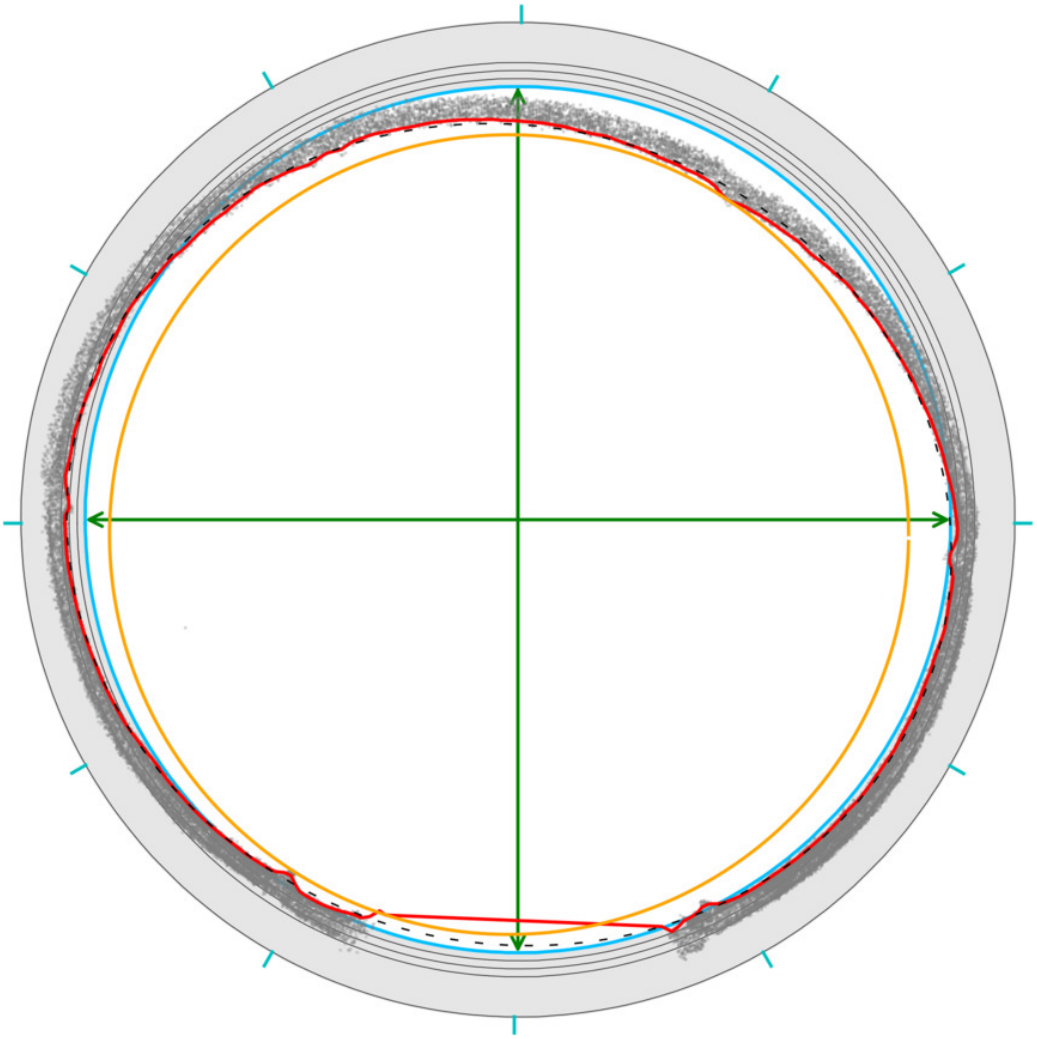
```
Footage   :  66 ft
Width     :  110.9" | 108.0"
Height    :  103.7" | 108.0"

Area      :  8830 sq in
Perimeter :  343.1 in
Ovality   :  4.0%

Interior Diameter : 99.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 67.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



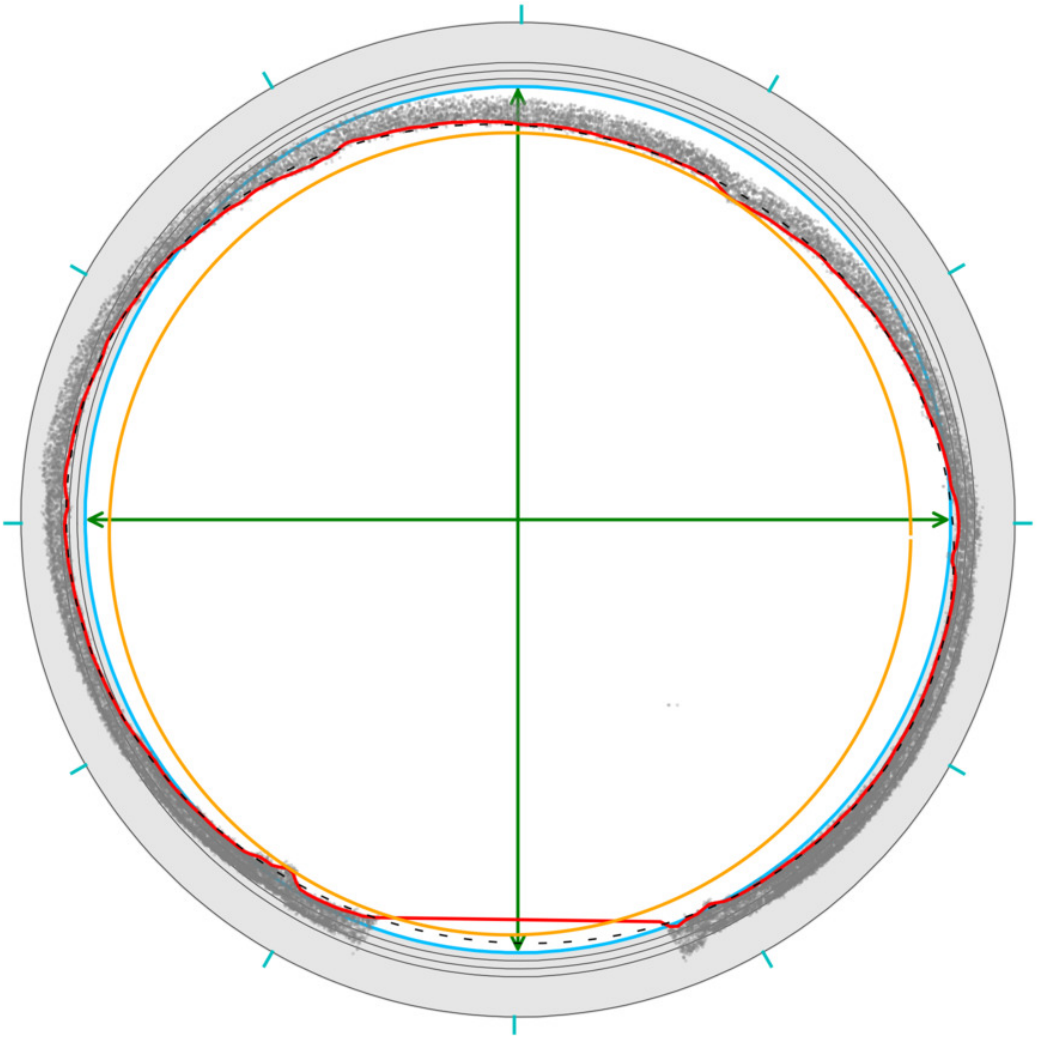
```
Footage   :  67 ft
Width     :  111.4" | 108.0"
Height    :  103.7" | 108.0"

Area      :  8790 sq in
Perimeter :  336.7 in
Ovality   :  4.3%

Interior Diameter : 99.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 68.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



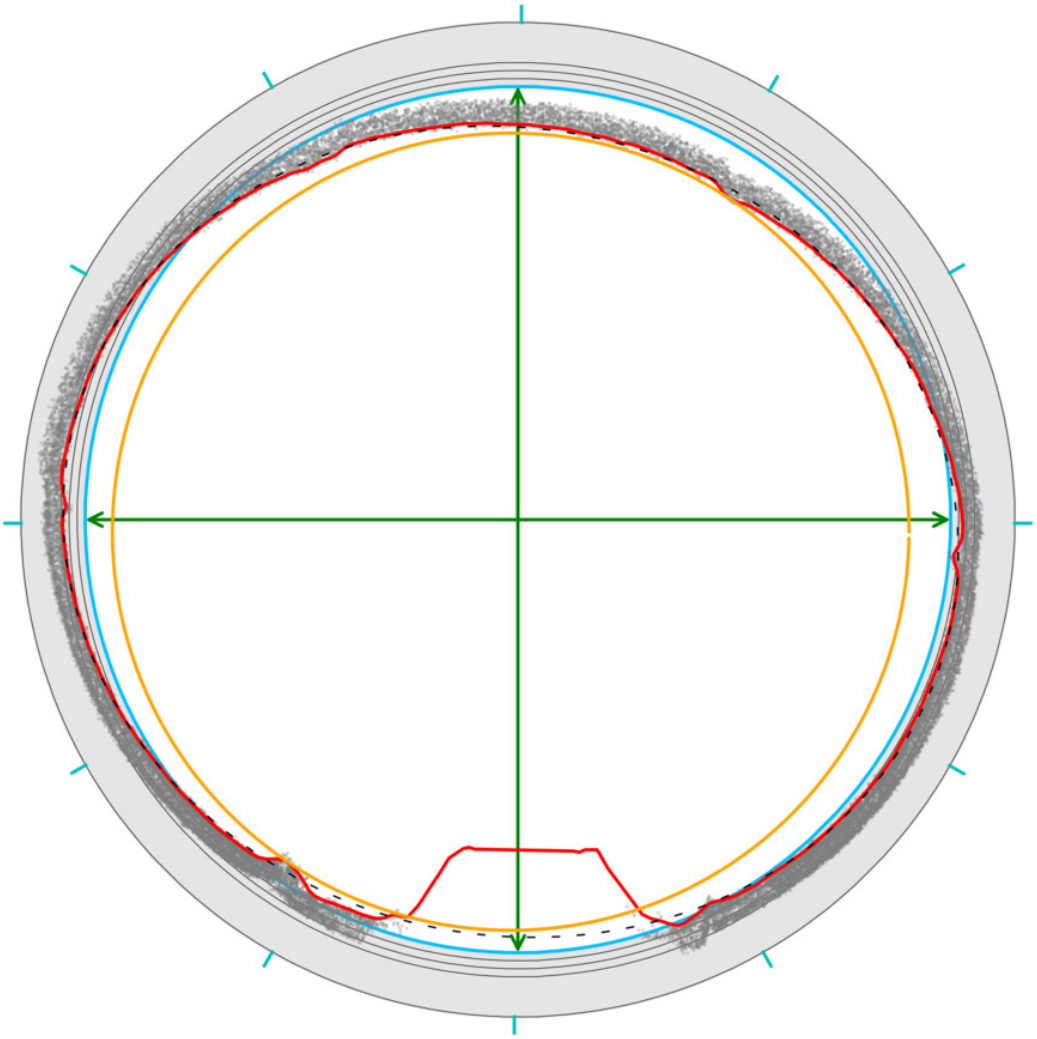
```
Footage   :  68 ft
Width     :  111.6" | 108.0"
Height    :  103.4" | 108.0"

Area      :  8796 sq in
Perimeter :  336.2 in
Ovality   :  4.6%

Interior Diameter : 100.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 69.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



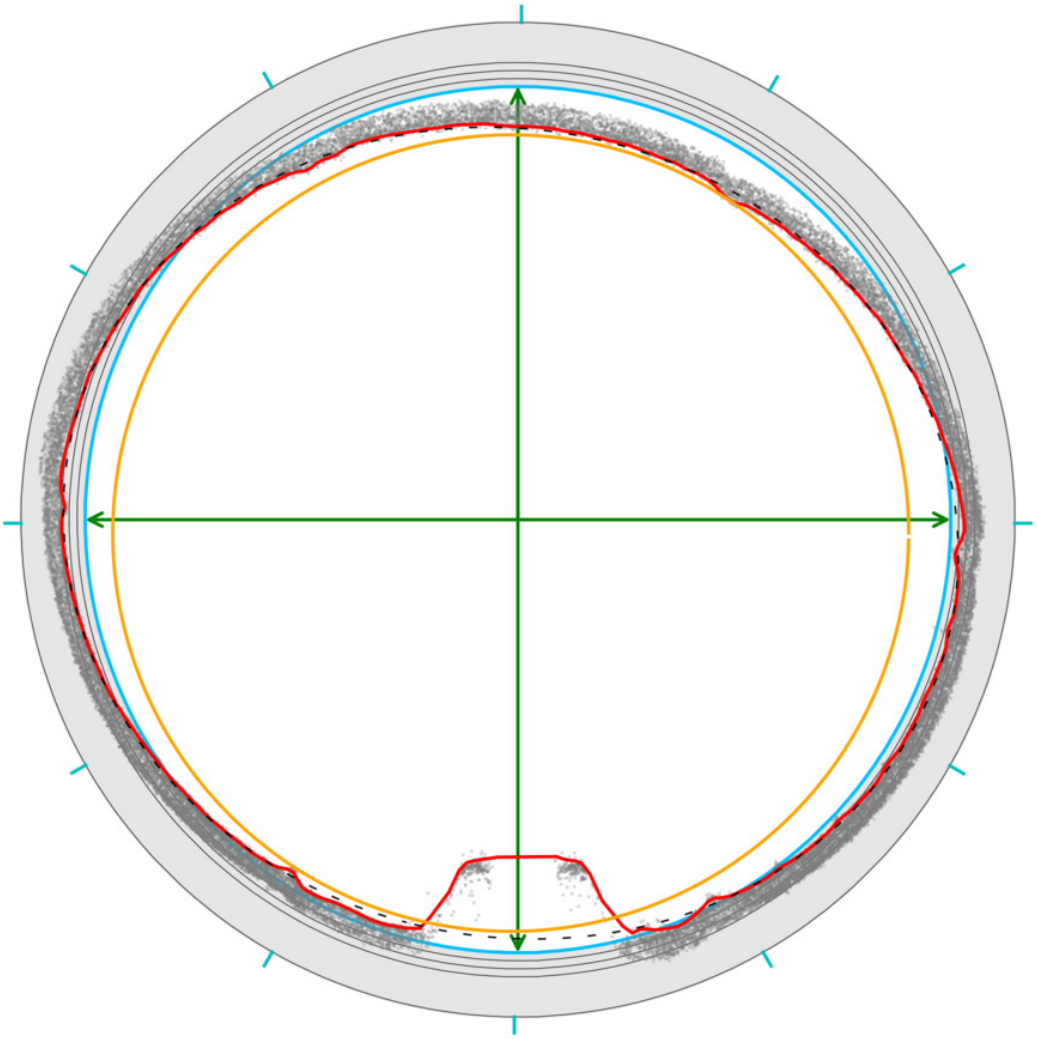
```
Footage   :  69 ft
Width     :  112.5" | 108.0"
Height    :  103.3" | 108.0"

Area      :  8619 sq in
Perimeter :  345.9 in
Ovality   :  5.5%

Interior Diameter : 99.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 70.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



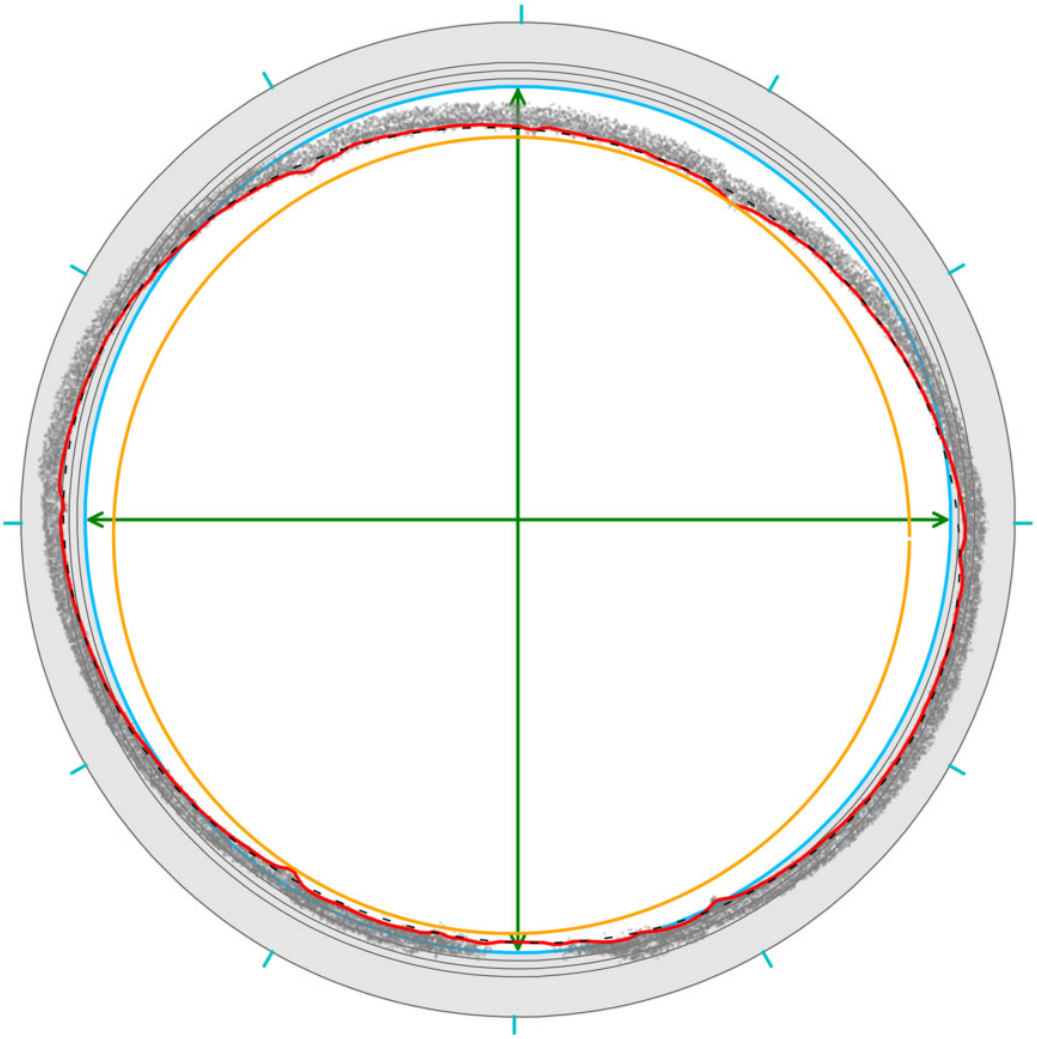
```
Footage   :  70 ft
Width     :  112.8" | 108.0"
Height    :  103.1" | 108.0"

Area      :  8680 sq in
Perimeter :  346.1 in
Ovality   :  5.5%

Interior Diameter : 99.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 71.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



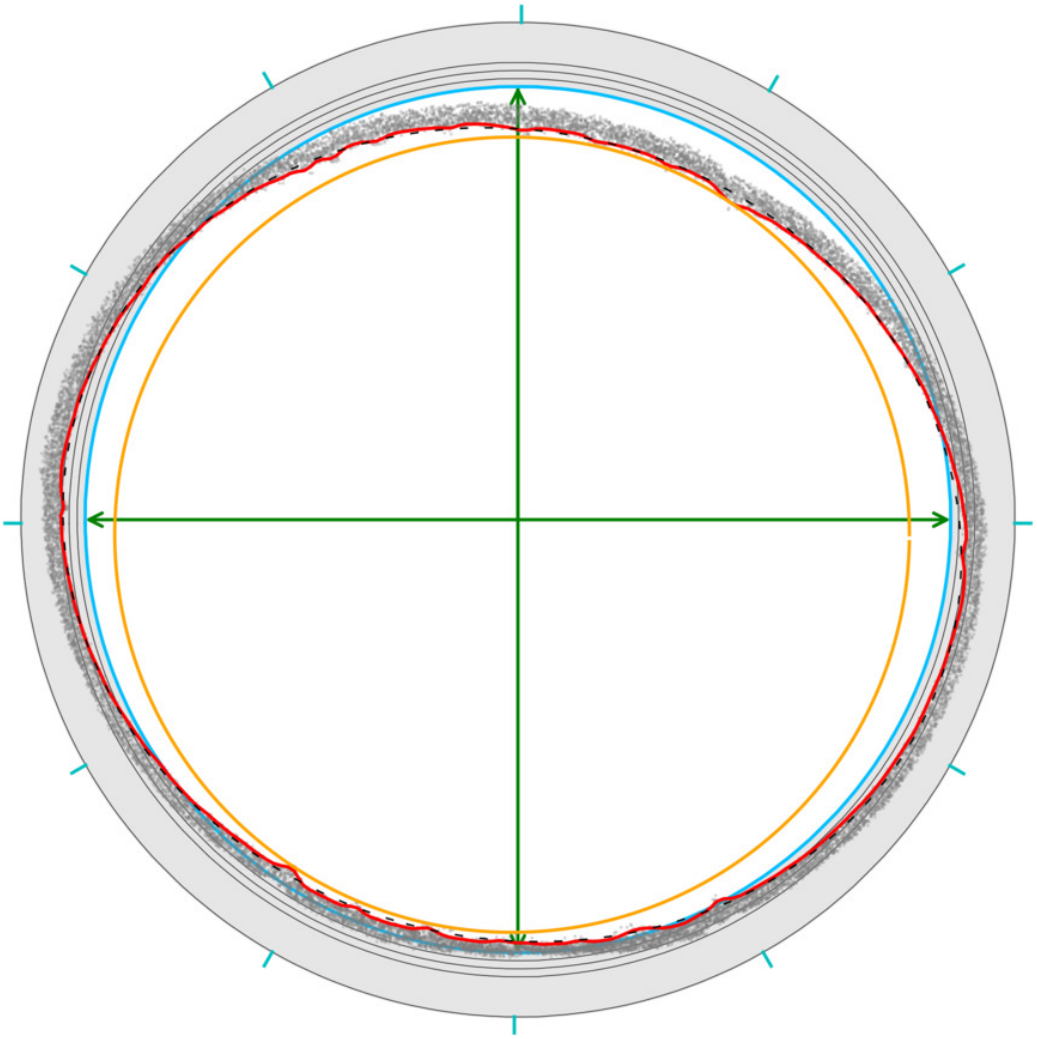
```
Footage   :  71 ft
Width     :  113.0" | 108.0"
Height    :  103.0" | 108.0"

Area      :  8911 sq in
Perimeter :  337.7 in
Ovality   :  5.5%

Interior Diameter : 99.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 72.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



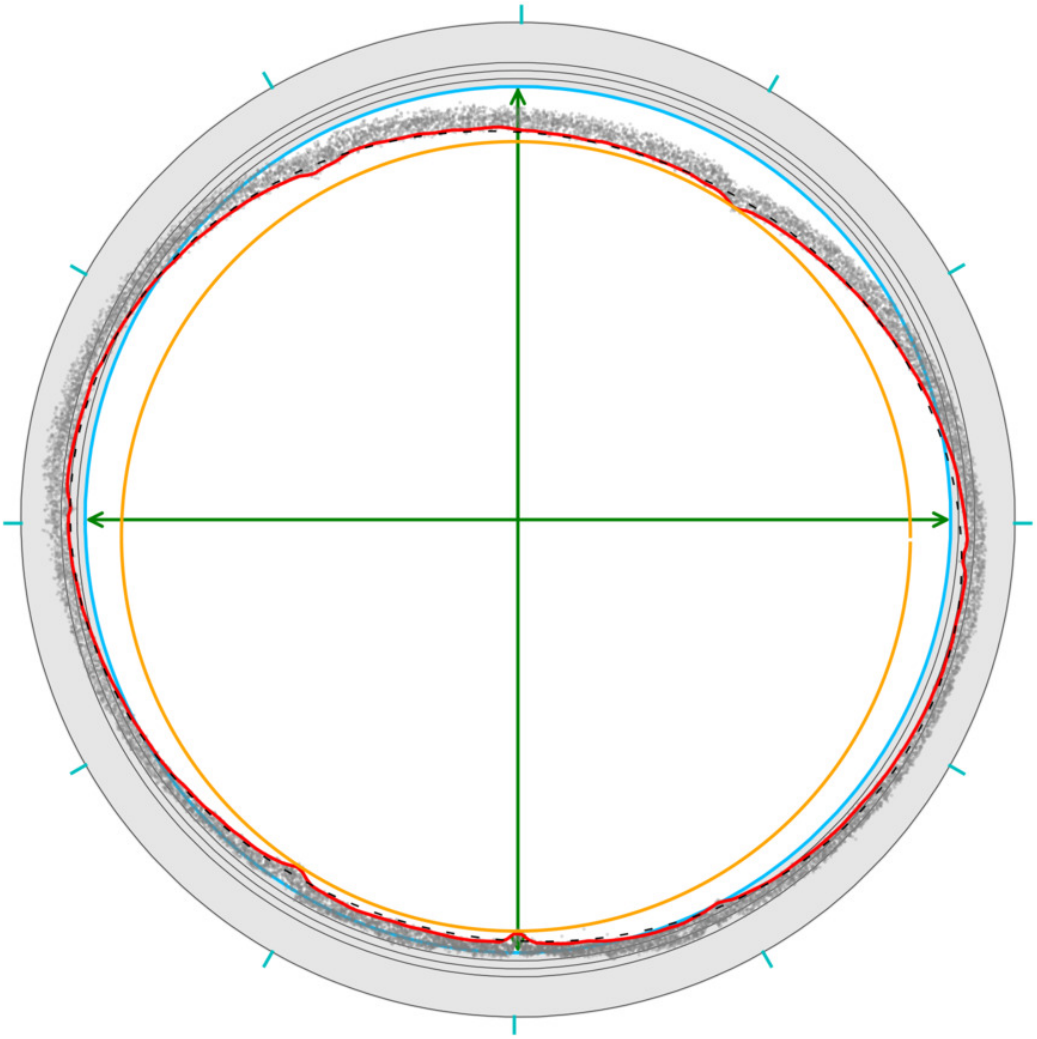
```
Footage    :  72 ft
Width      :  113.0" | 108.0"
Height     :  102.7" | 108.0"

Area       :  8909 sq in
Perimeter  :  338.0 in
Ovality    :  5.7%

Interior Diameter : 99.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 73.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



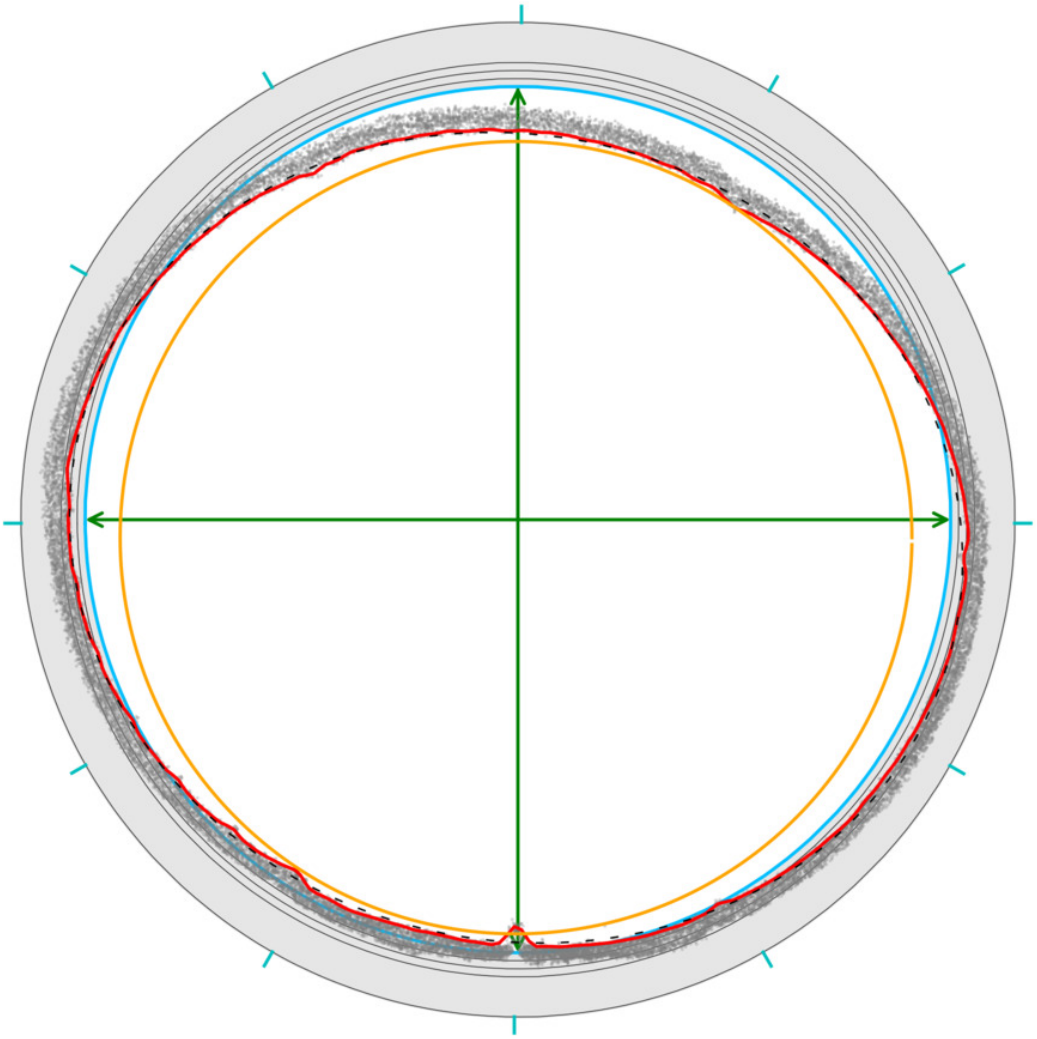
```
Footage   :  73 ft
Width     :  112.3" | 108.0"
Height    :  102.7" | 108.0"

Area      :  8805 sq in
Perimeter :  335.7 in
Ovality   :  5.5%

Interior Diameter : 98.5"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 74.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



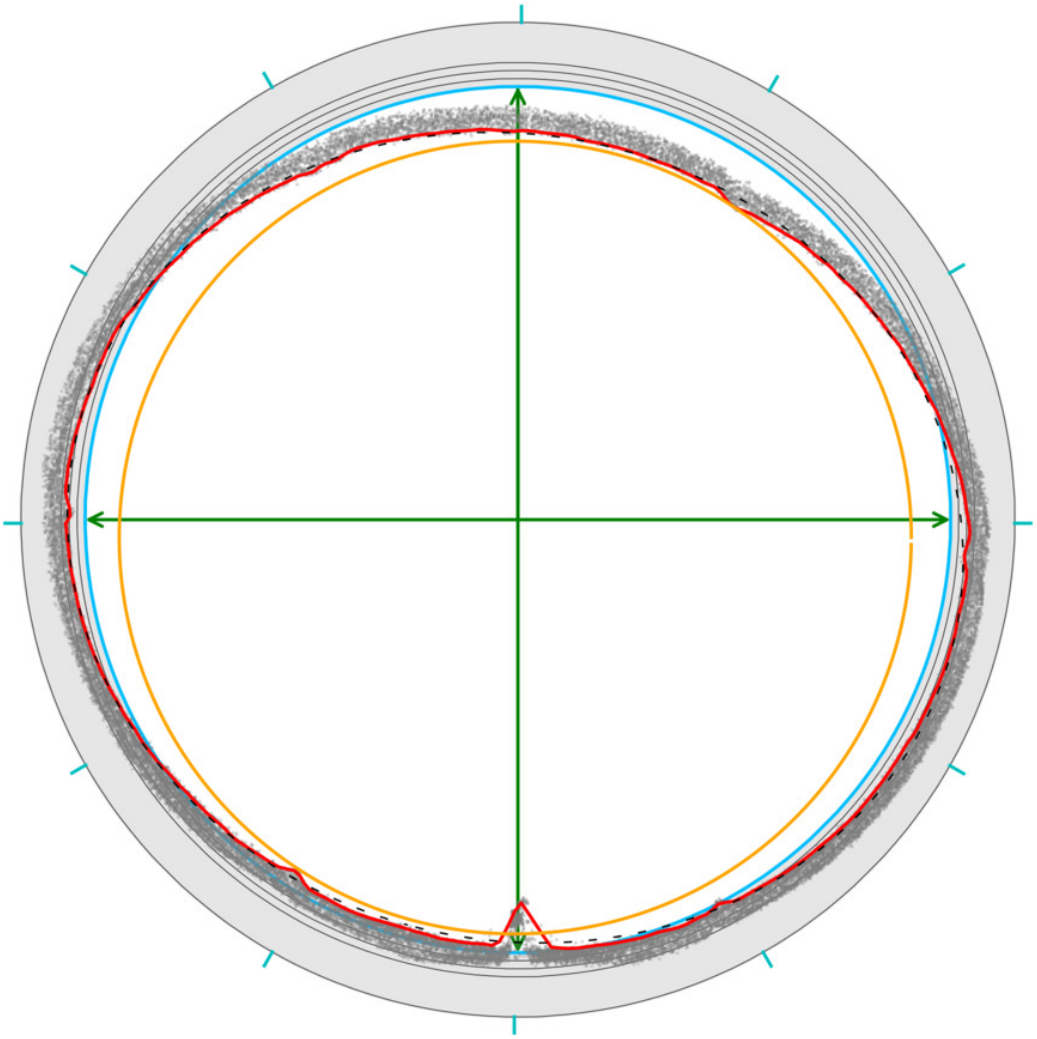
```
Footage   :  74 ft
Width     :  112.4" | 108.0"
Height    :  102.5" | 108.0"

Area      :  8825 sq in
Perimeter :  337.5 in
Ovality   :  5.5%

Interior Diameter : 98.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 75.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



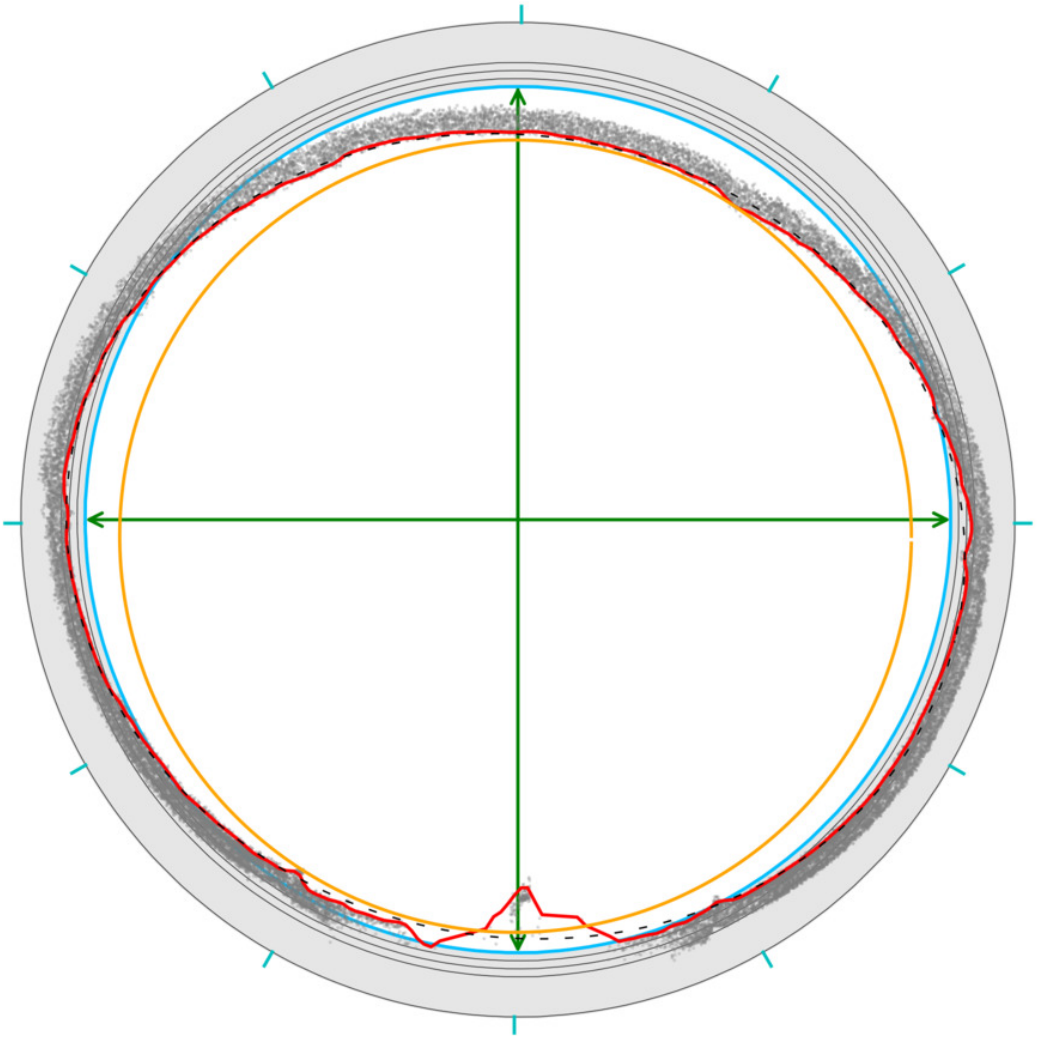
```
Footage   :  75 ft
Width     :  112.9" | 108.0"
Height    :  102.5" | 108.0"

Area      :  8851 sq in
Perimeter :  342.3 in
Ovality   :  5.6%

Interior Diameter : 98.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 76.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 76 ft
Width : 113.3" | 108.0"
Height : 102.3" | 108.0"

Area : 8801 sq in
Perimeter : 343.2 in
Ovality : 6.0%

Interior Diameter : 98.8"

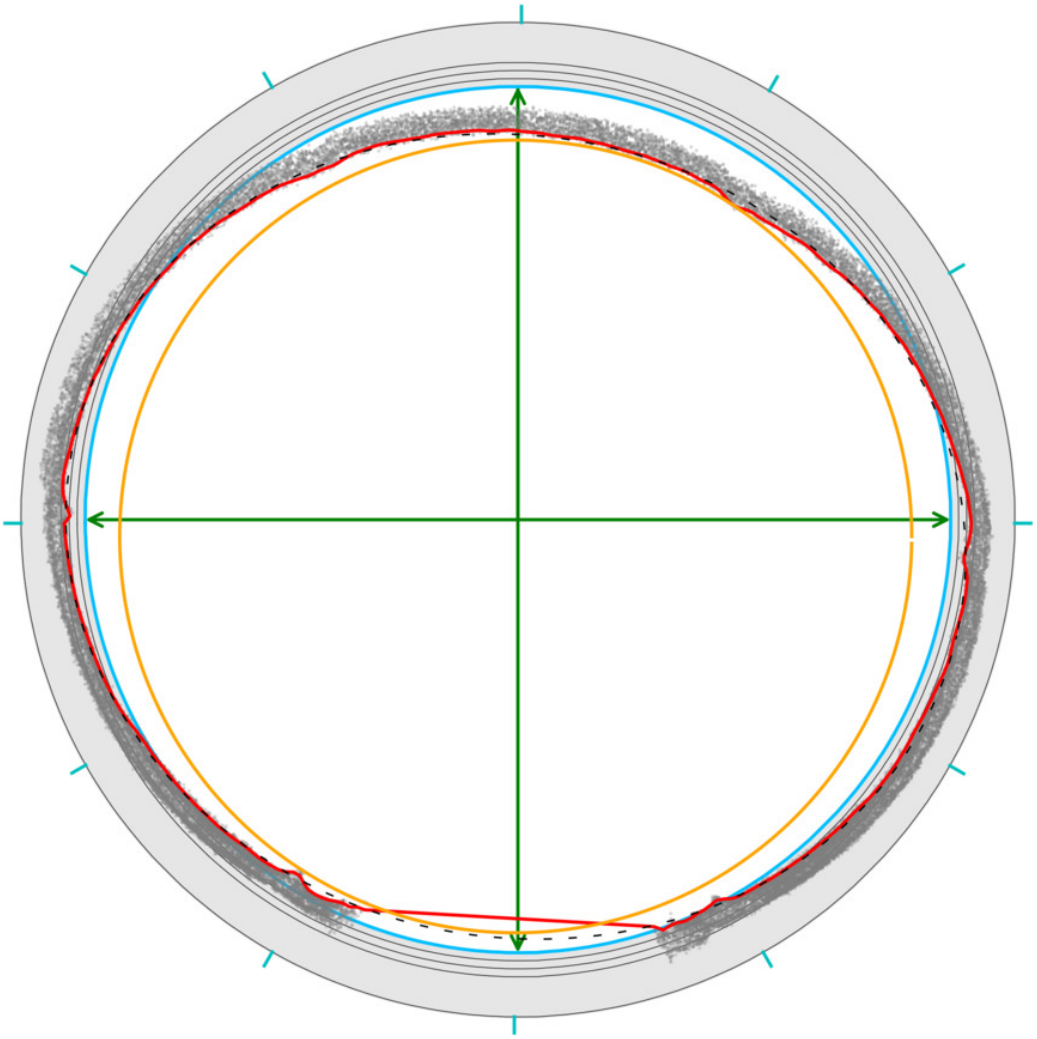
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 77.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



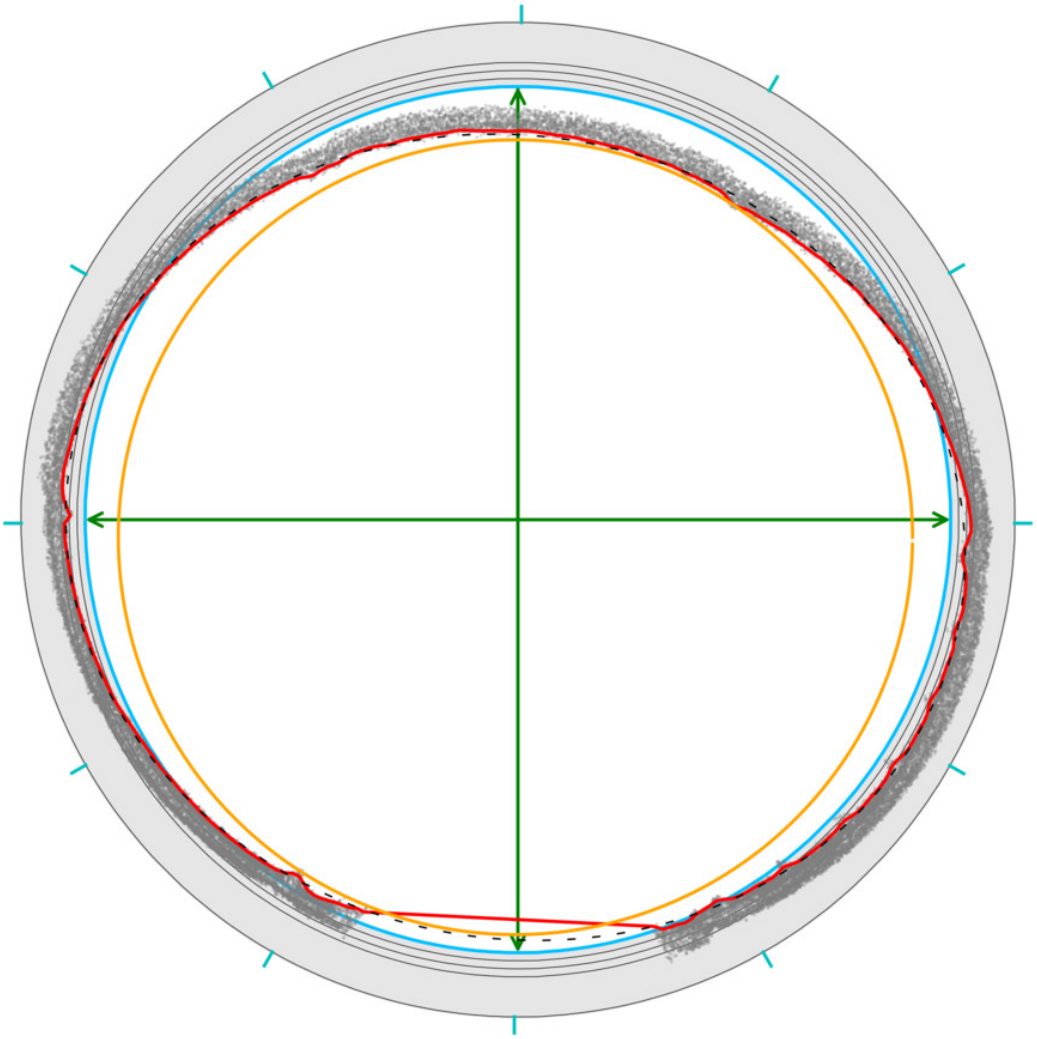
```
Footage   :  77 ft
Width     :  113.4" | 108.0"
Height    :  102.5" | 108.0"

Area      :  8779 sq in
Perimeter :  336.1 in
Ovality   :  6.0%

Interior Diameter : 98.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 78.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



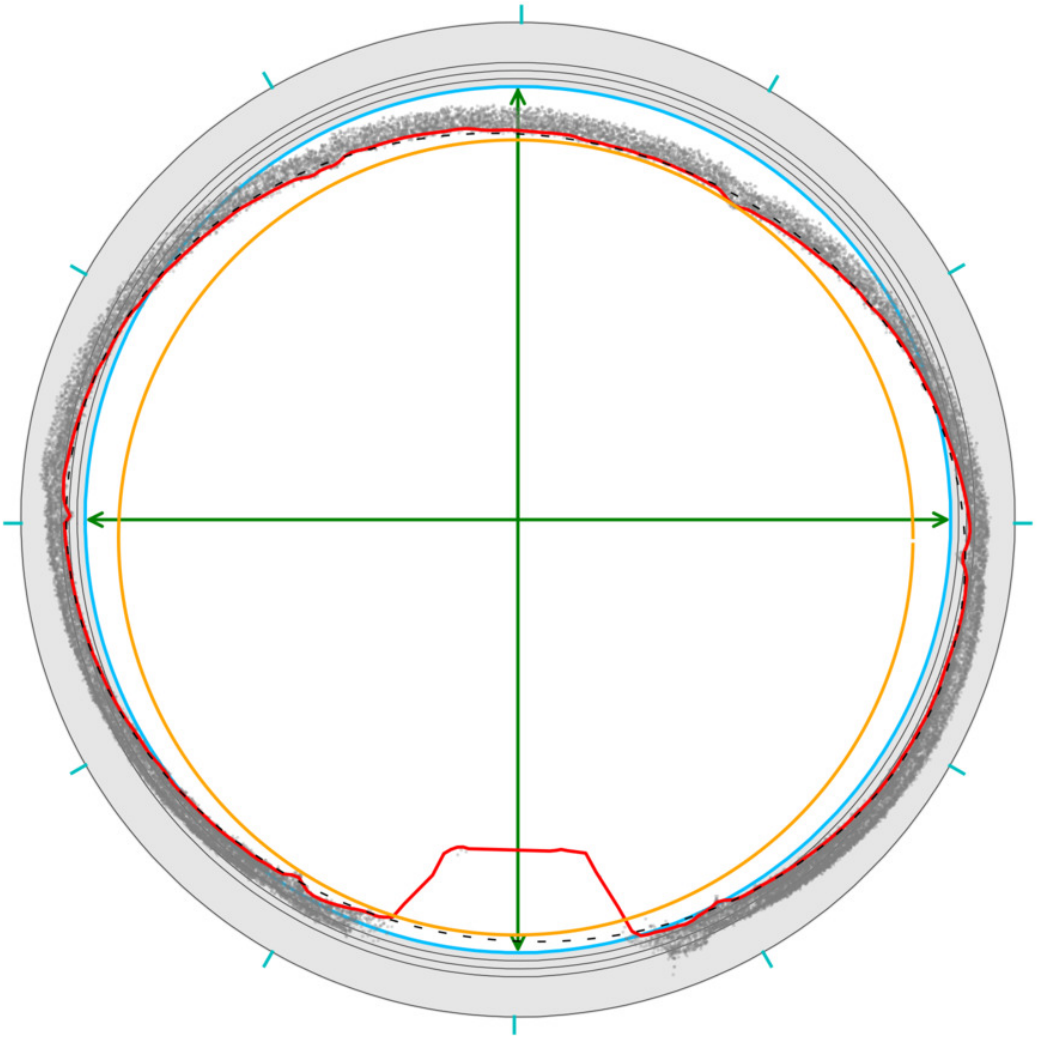
```
Footage   :  78 ft
Width     :  113.4" | 108.0"
Height    :  102.5" | 108.0"

Area      :  8787 sq in
Perimeter :  336.6 in
Ovality   :  5.9%

Interior Diameter : 99.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 79.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



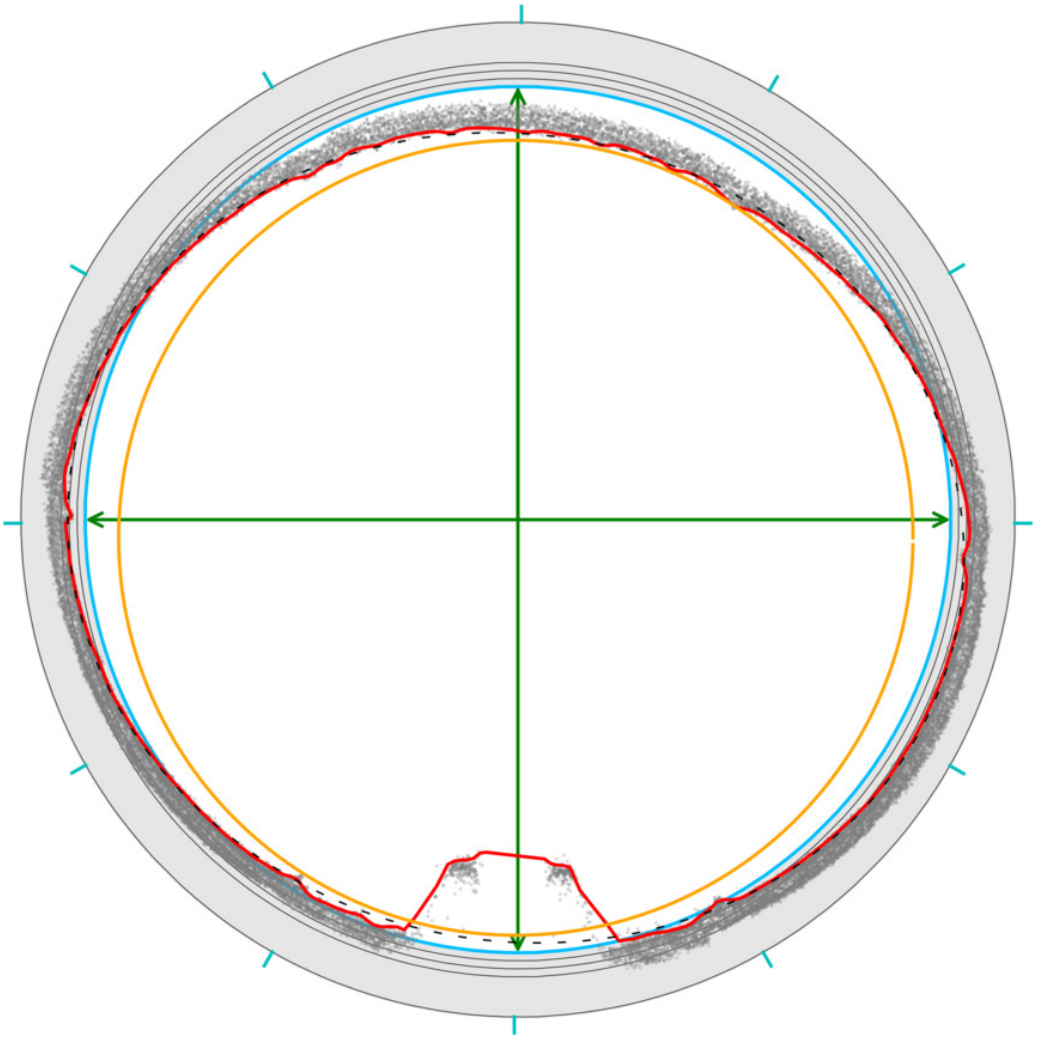
```
Footage   :  79 ft
Width     :  113.1" | 108.0"
Height    :  102.5" | 108.0"

Area      :  8613 sq in
Perimeter :  346.5 in
Ovality   :  5.8%

Interior Diameter : 99.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 80.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



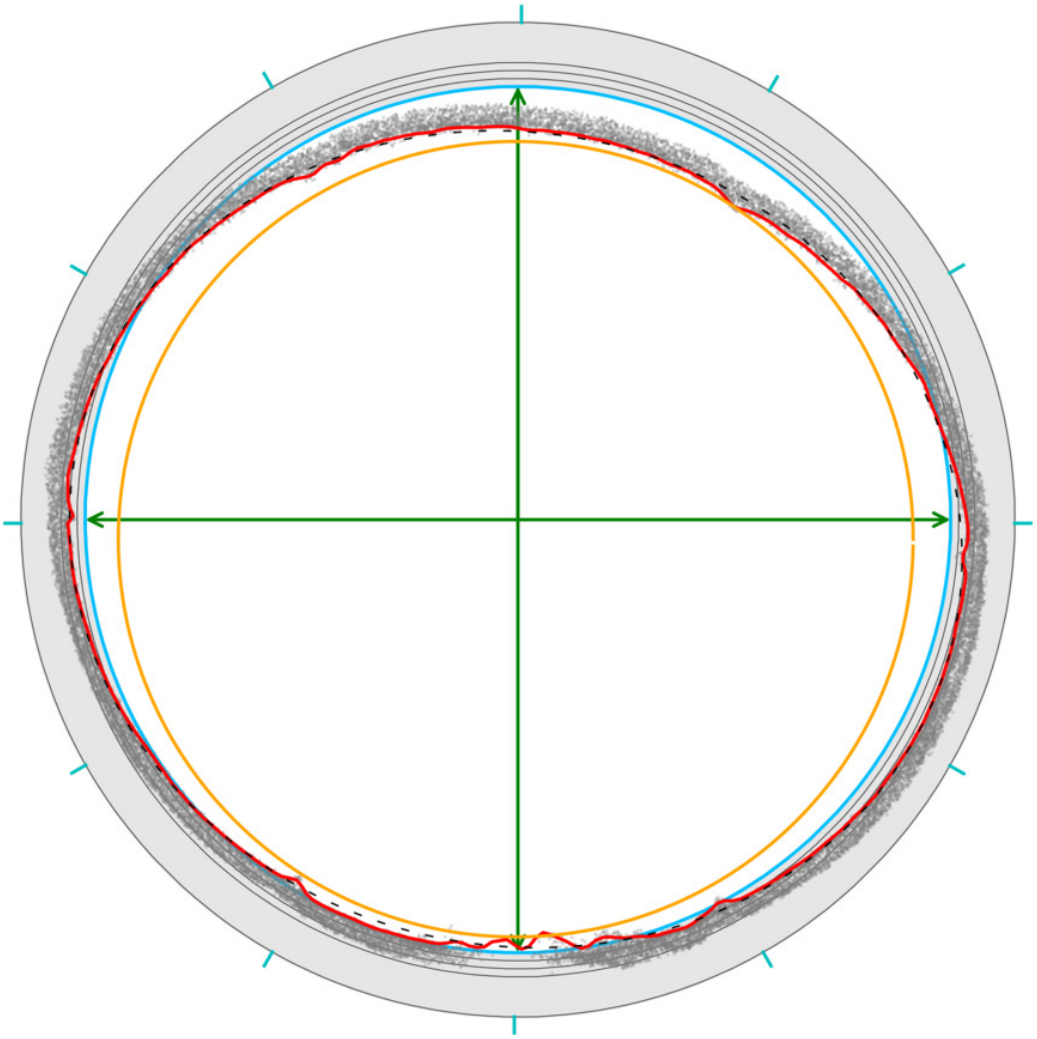
```
Footage    :  80 ft
Width      :  113.0" | 108.0"
Height     :  102.5" | 108.0"

Area       :  8672 sq in
Perimeter  :  347.5 in
Ovality    :  5.6%

Interior Diameter : 99.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 81.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



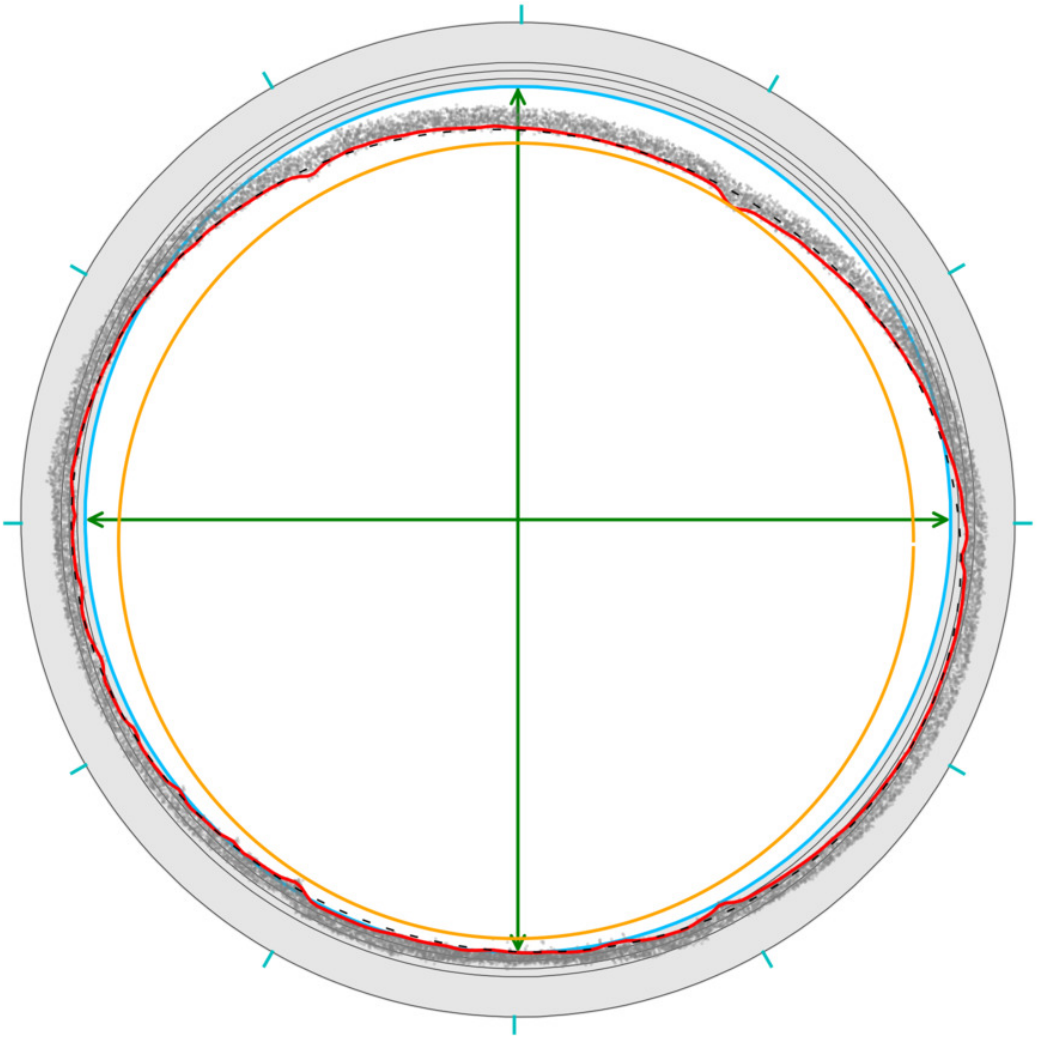
```
Footage   :  81 ft
Width     :  112.4" | 108.0"
Height    :  102.8" | 108.0"

Area      :  8890 sq in
Perimeter :  339.5 in
Ovality   :  5.0%

Interior Diameter : 99.2"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 82.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



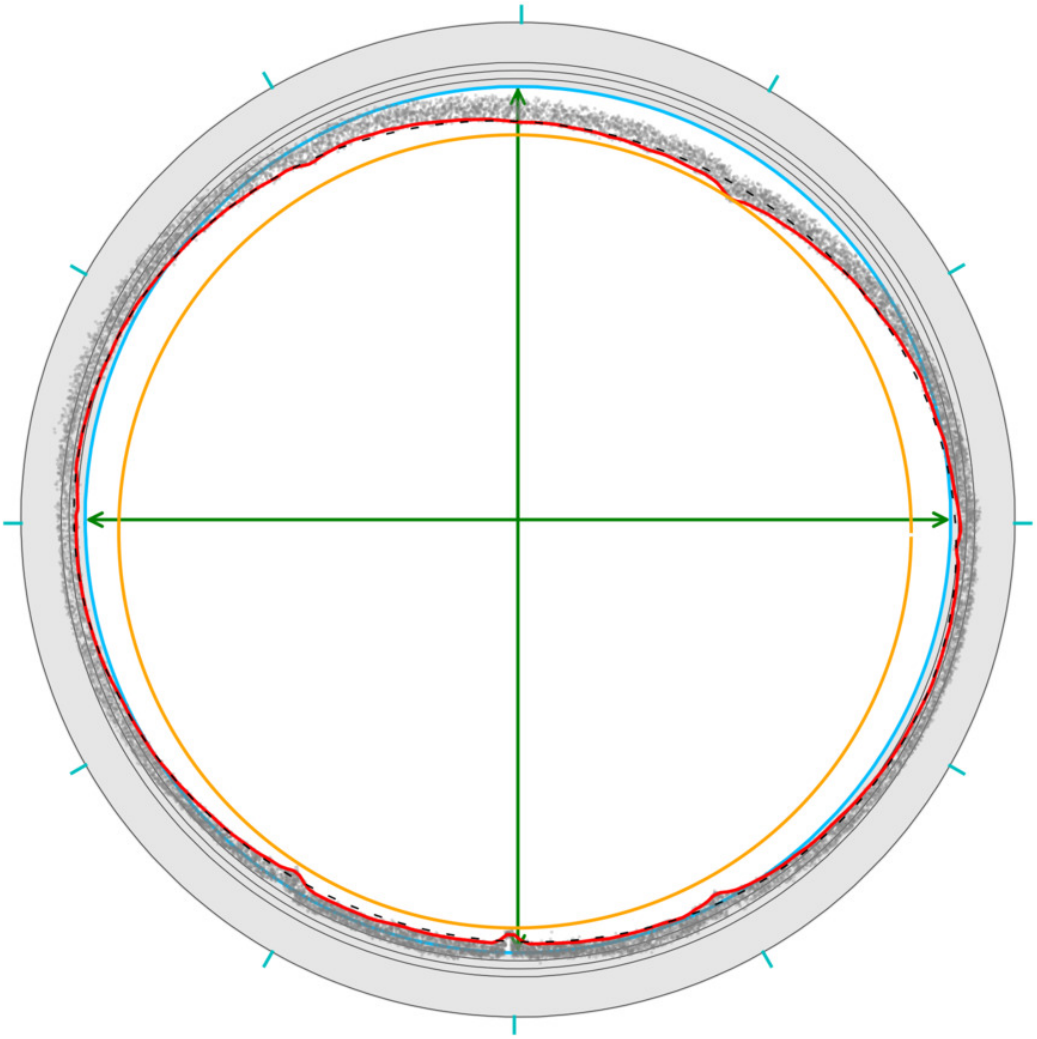
```
Footage   :  82 ft
Width     :  111.8" | 108.0"
Height    :  102.9" | 108.0"

Area      :  8923 sq in
Perimeter :  337.9 in
Ovality   :  4.5%

Interior Diameter : 99.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 83.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



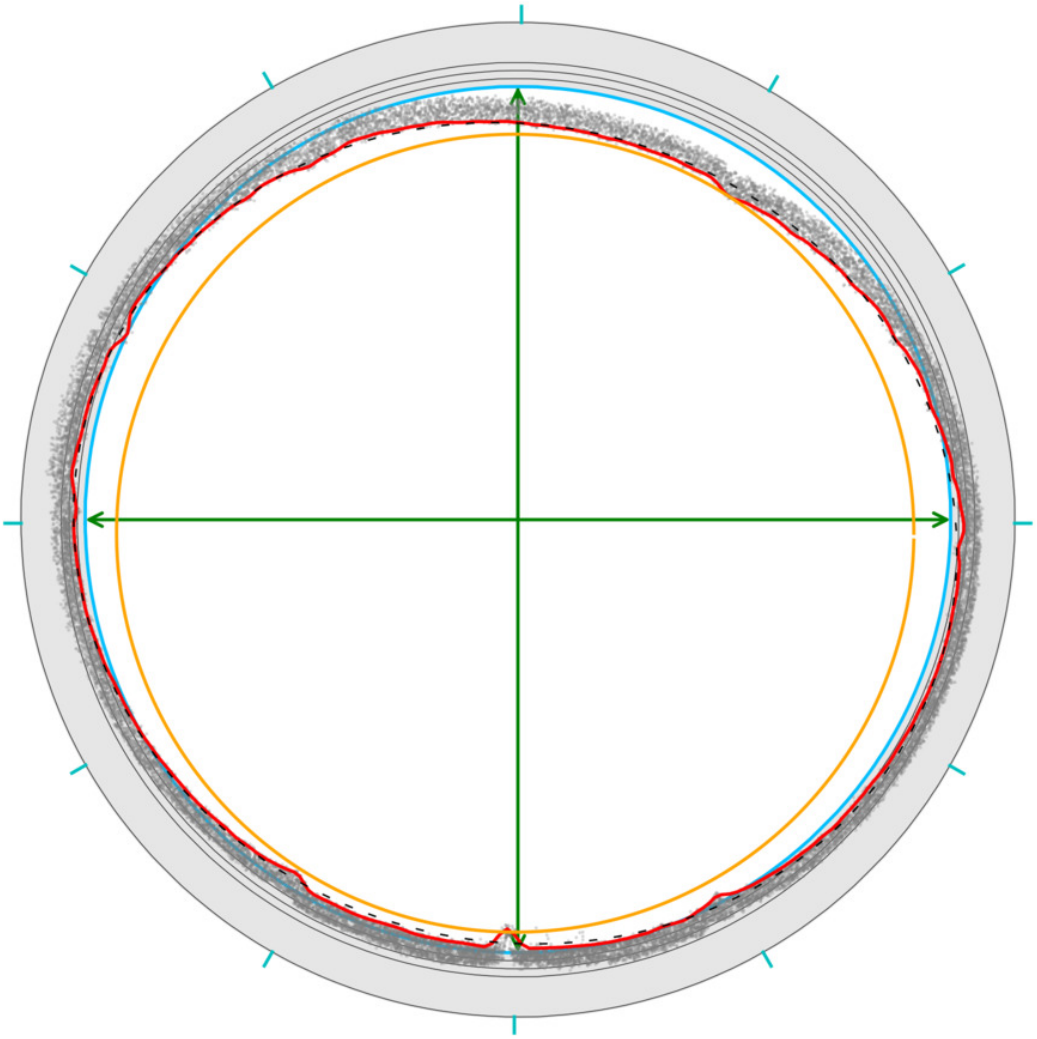
```
Footage   :  83 ft
Width     :  110.4" | 108.0"
Height    :  103.6" | 108.0"

Area      :  8829 sq in
Perimeter :  335.8 in
Ovality   :  4.1%

Interior Diameter : 98.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 84.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



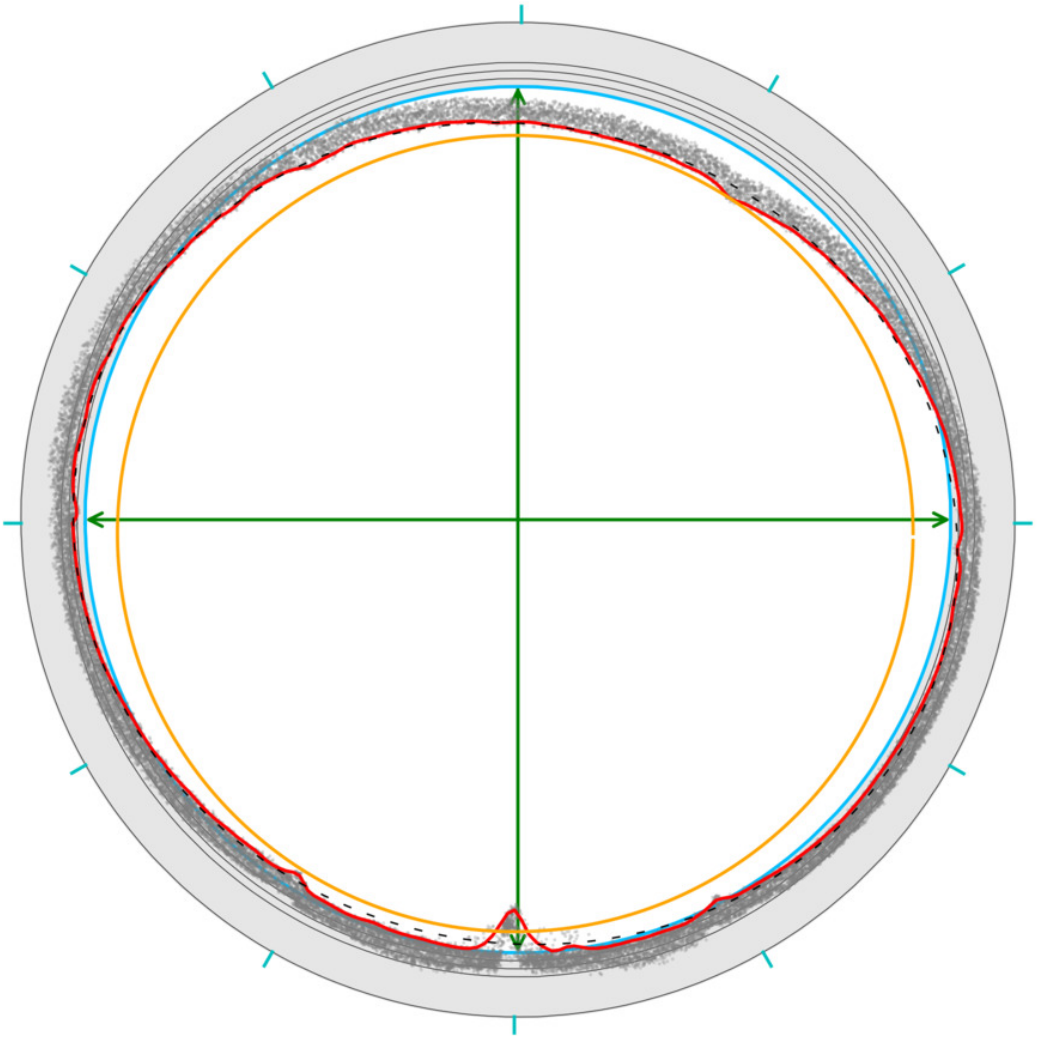
```
Footage   :  84 ft
Width     :  111.3" | 108.0"
Height    :  103.5" | 108.0"

Area      :  8845 sq in
Perimeter :  338.0 in
Ovality   :  4.3%

Interior Diameter : 99.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 85.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



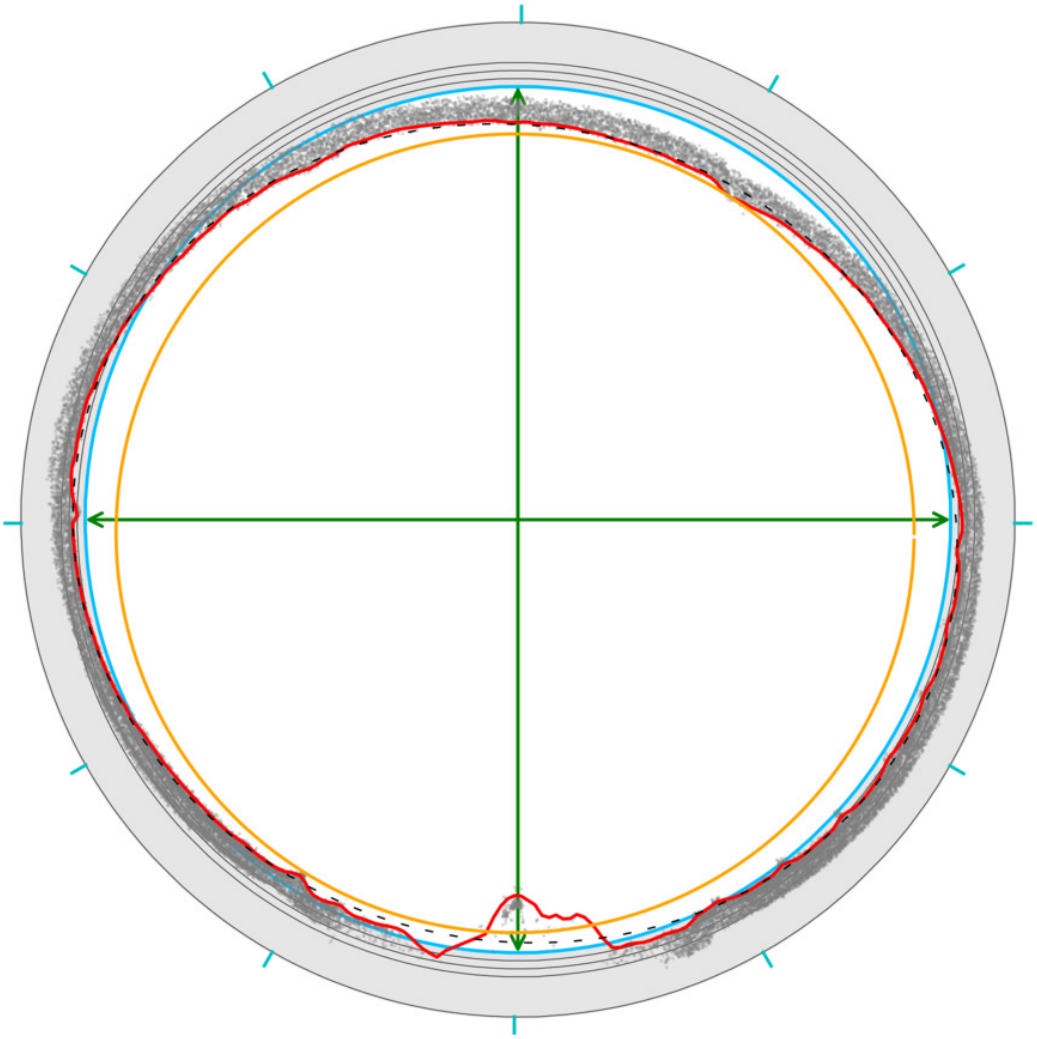
```
Footage   :  85 ft
Width     :  111.0" | 108.0"
Height    :  103.6" | 108.0"

Area      :  8858 sq in
Perimeter :  341.0 in
Ovality   :  4.3%

Interior Diameter : 99.3"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 86.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



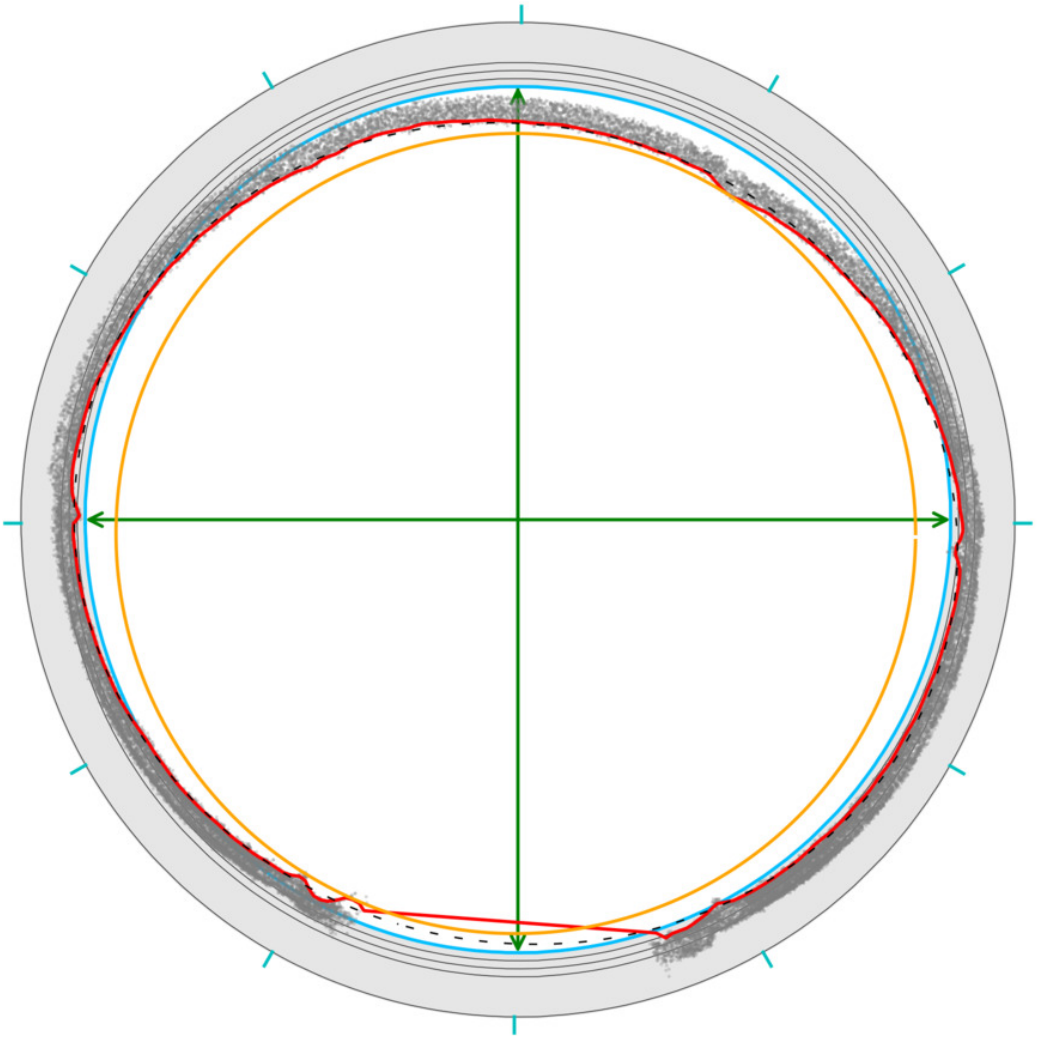
```
Footage   :  86 ft
Width     :  111.2" | 108.0"
Height    :  103.6" | 108.0"

Area      :  8809 sq in
Perimeter :  344.1 in
Ovality   :  4.4%

Interior Diameter : 99.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 87.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



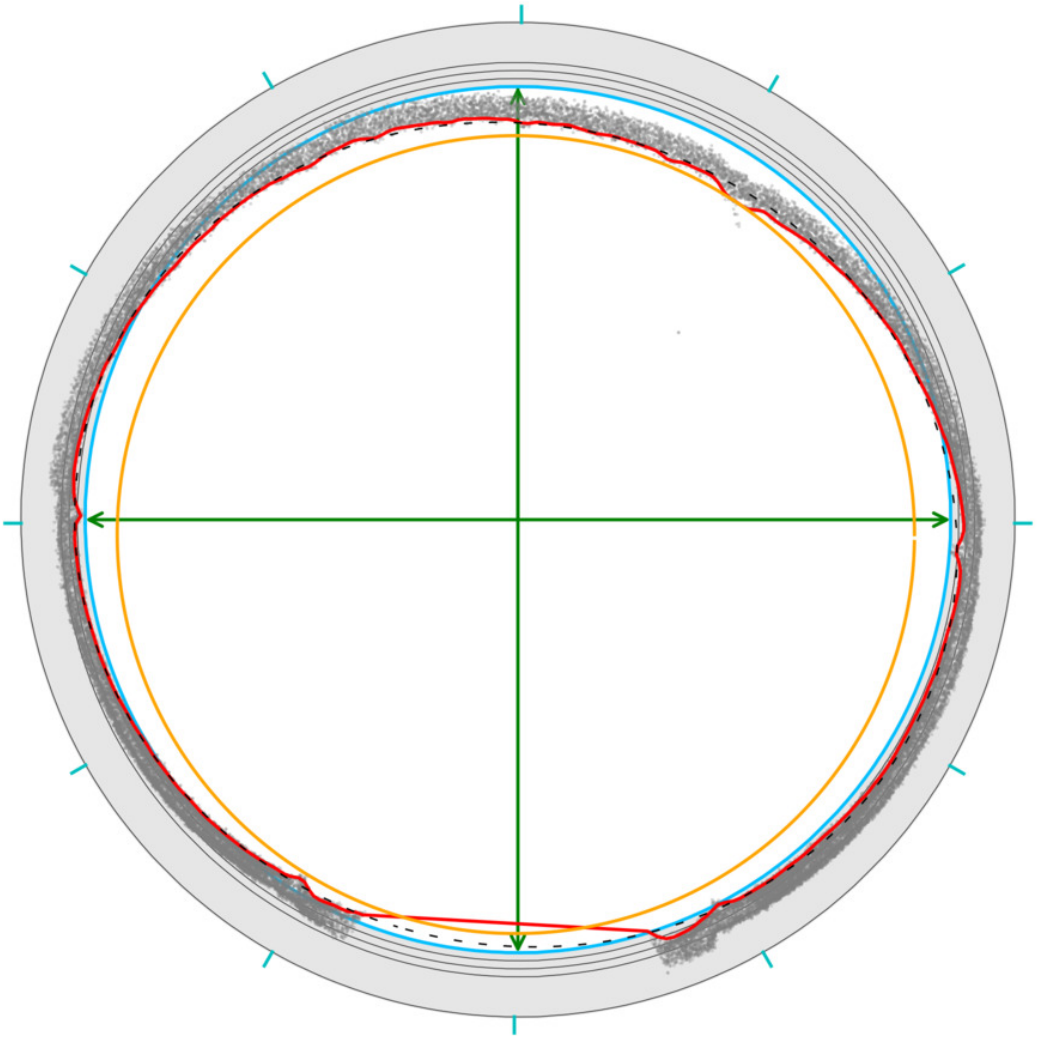
```
Footage   :  87 ft
Width     :  111.2" | 108.0"
Height    :  103.6" | 108.0"

Area      :  8785 sq in
Perimeter :  336.8 in
Ovality   :  4.3%

Interior Diameter : 99.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 88.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



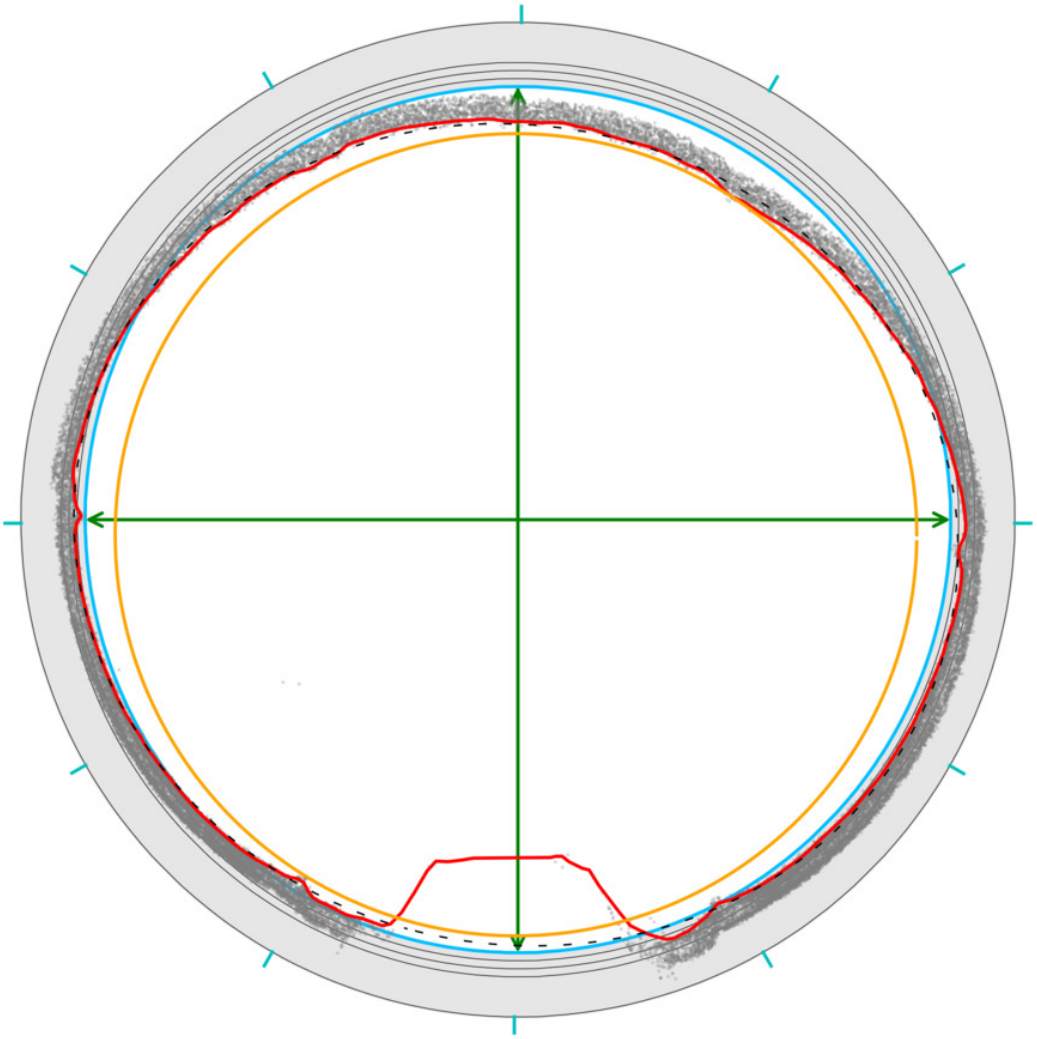
```
Footage   :  88 ft
Width     :  111.1" | 108.0"
Height    :  103.7" | 108.0"

Area      :  8802 sq in
Perimeter :  336.9 in
Ovality   :  4.0%

Interior Diameter : 99.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 89.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



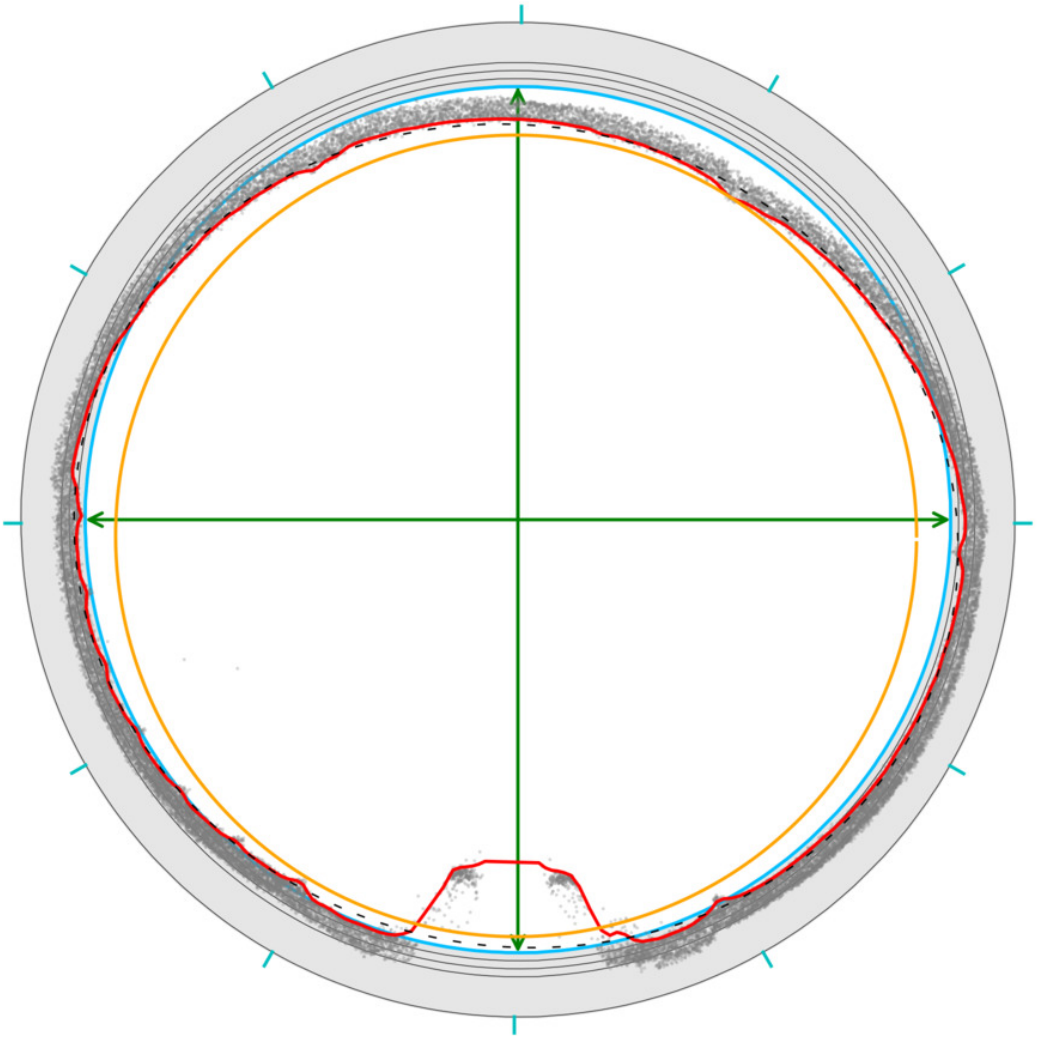
```
Footage   :  89 ft
Width     :  111.4" | 108.0"
Height    :  103.7" | 108.0"

Area      :  8630 sq in
Perimeter :  345.2 in
Ovality   :  4.1%

Interior Diameter : 100.0"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 90.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



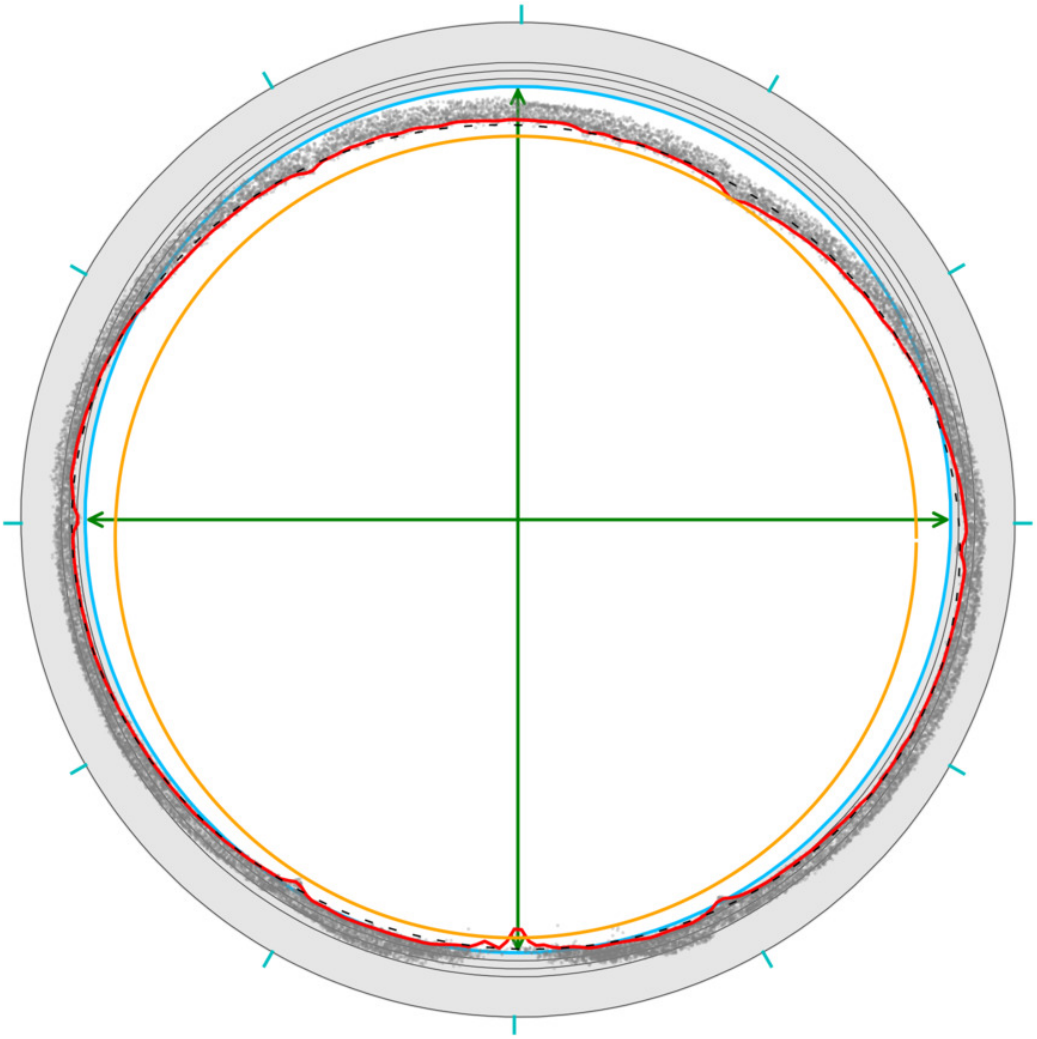
```
Footage   :  90 ft
Width     :  111.4" | 108.0"
Height    :  103.9" | 108.0"

Area      :  8703 sq in
Perimeter :  346.7 in
Ovality   :  4.0%

Interior Diameter : 100.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 91.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



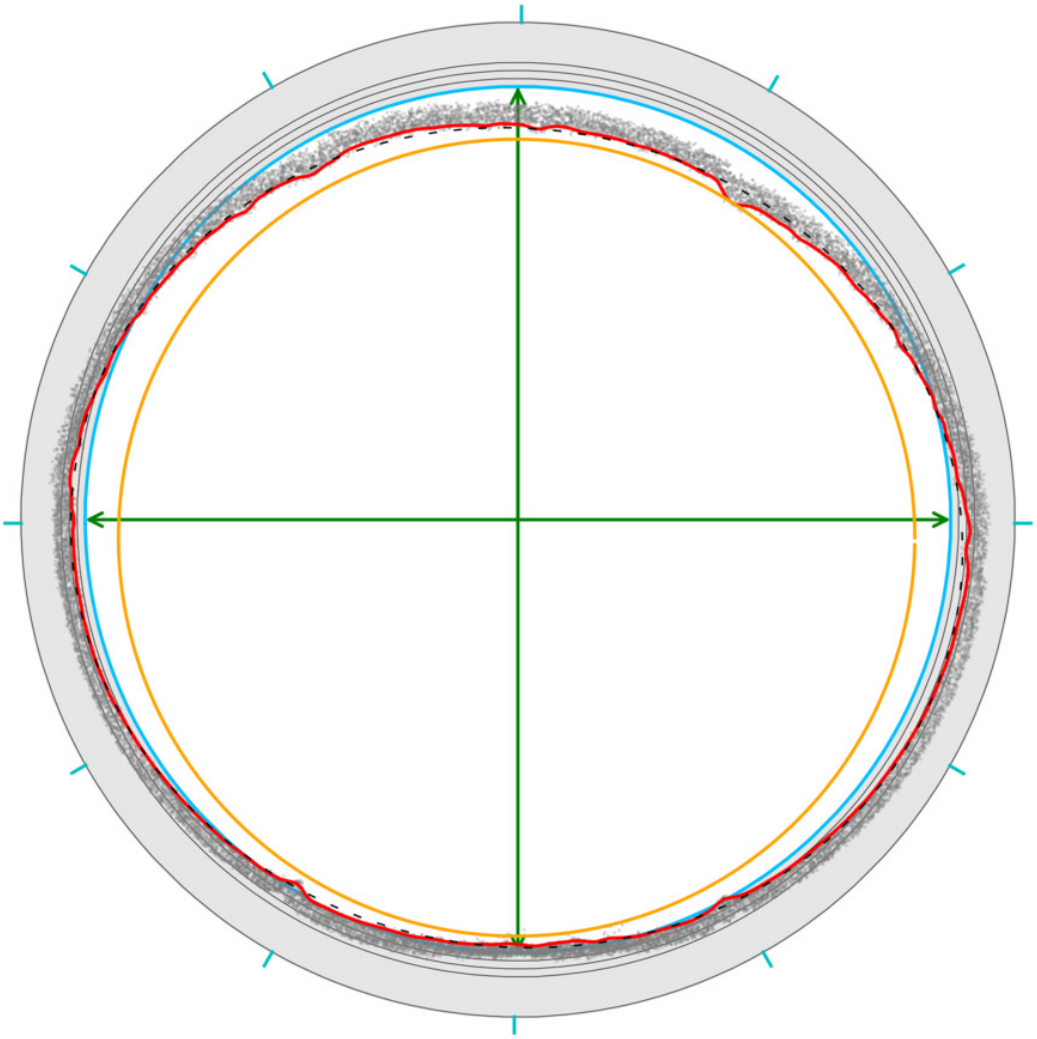
```
Footage   :  91 ft
Width     :  111.7" | 108.0"
Height    :  103.9" | 108.0"

Area      :  8929 sq in
Perimeter :  340.3 in
Ovality   :  4.0%

Interior Diameter : 100.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 92.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  92 ft
Width     :  112.3" | 108.0"
Height    :  103.2" | 108.0"

Area      :  8919 sq in
Perimeter :  338.0 in
Ovality   :  4.4%

Interior Diameter : 99.4"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
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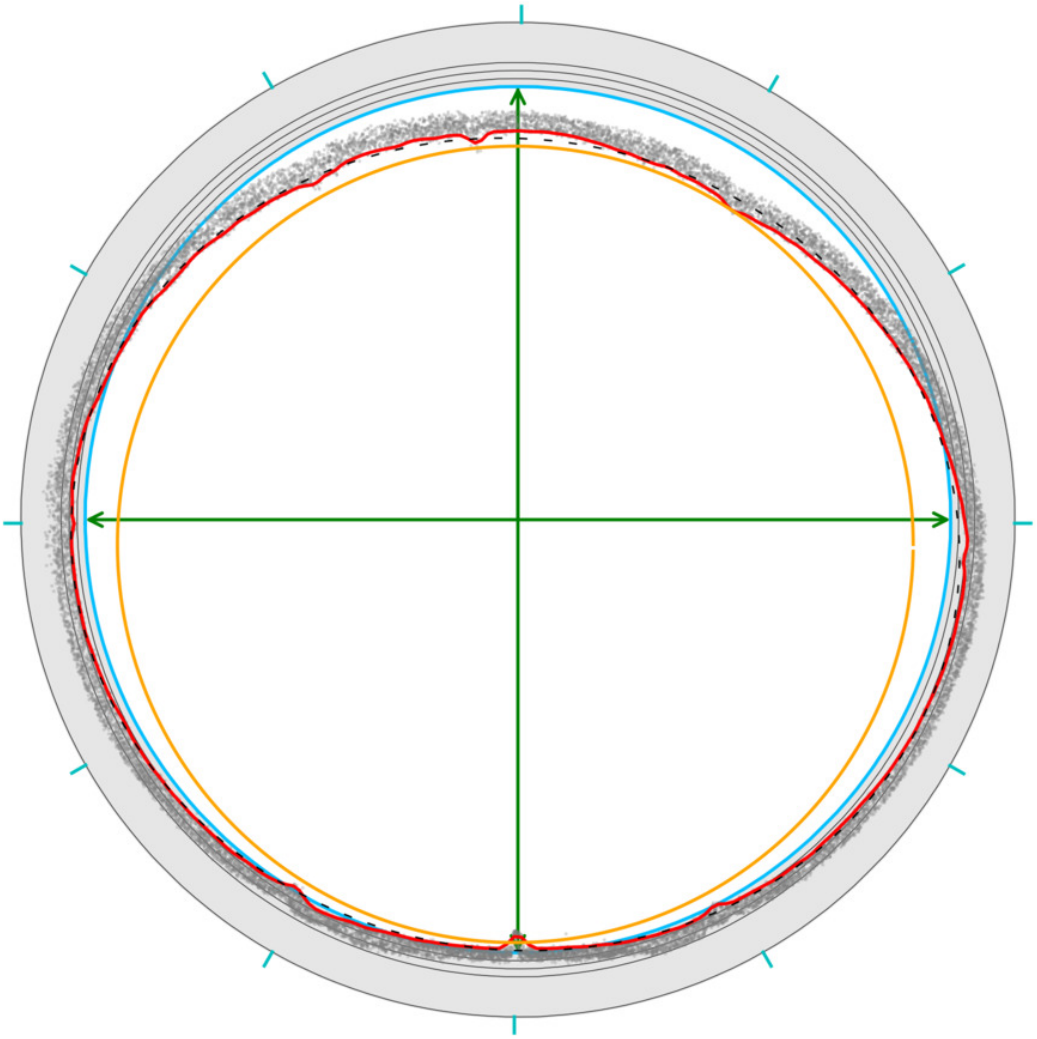
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 93.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



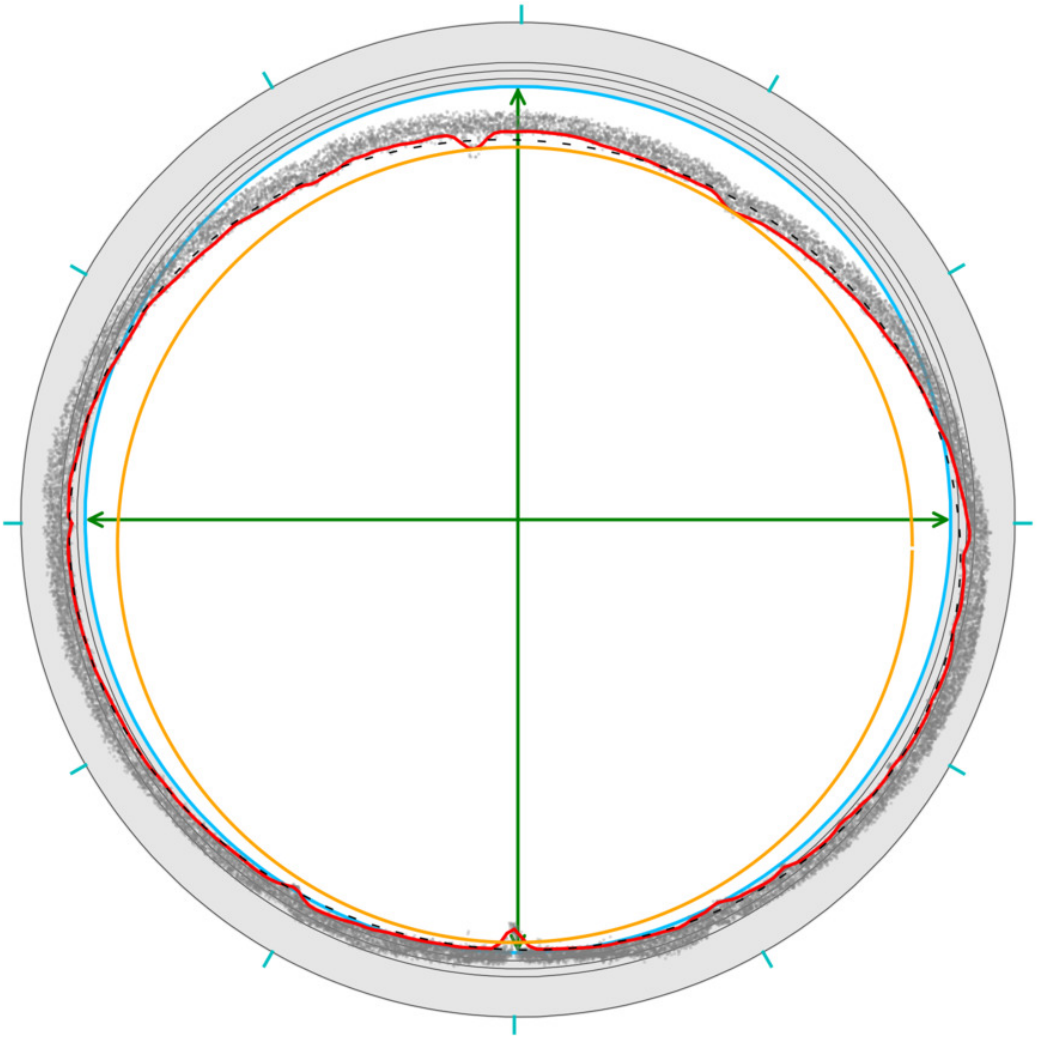
```
Footage   :  93 ft
Width     :  111.8" | 108.0"
Height    :  102.5" | 108.0"

Area      :  8810 sq in
Perimeter :  336.8 in
Ovality   :  4.7%

Interior Diameter : 99.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 94.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



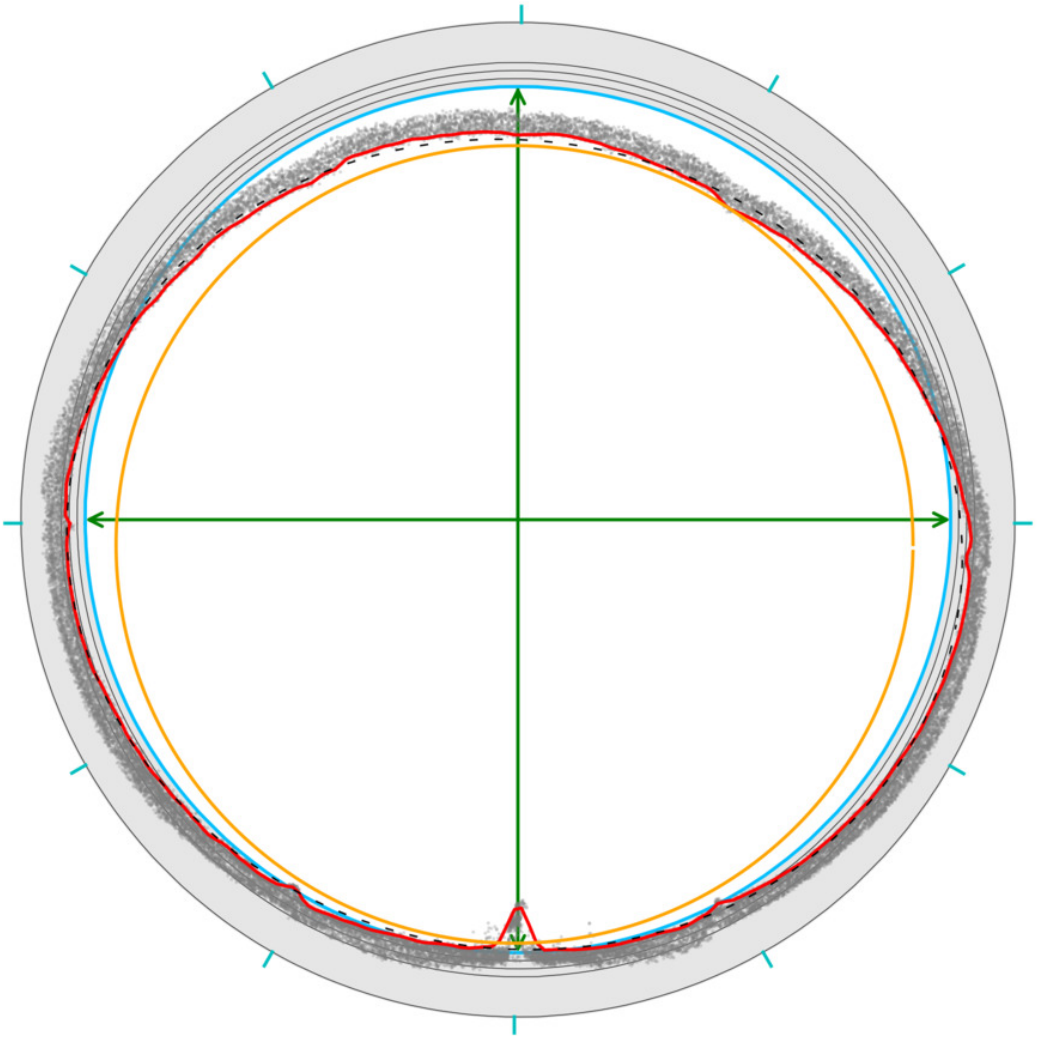
```
Footage   :  94 ft
Width     :  112.5" | 108.0"
Height    :  102.4" | 108.0"

Area      :  8812 sq in
Perimeter :  338.9 in
Ovality   :  4.9%

Interior Diameter : 99.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 95.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



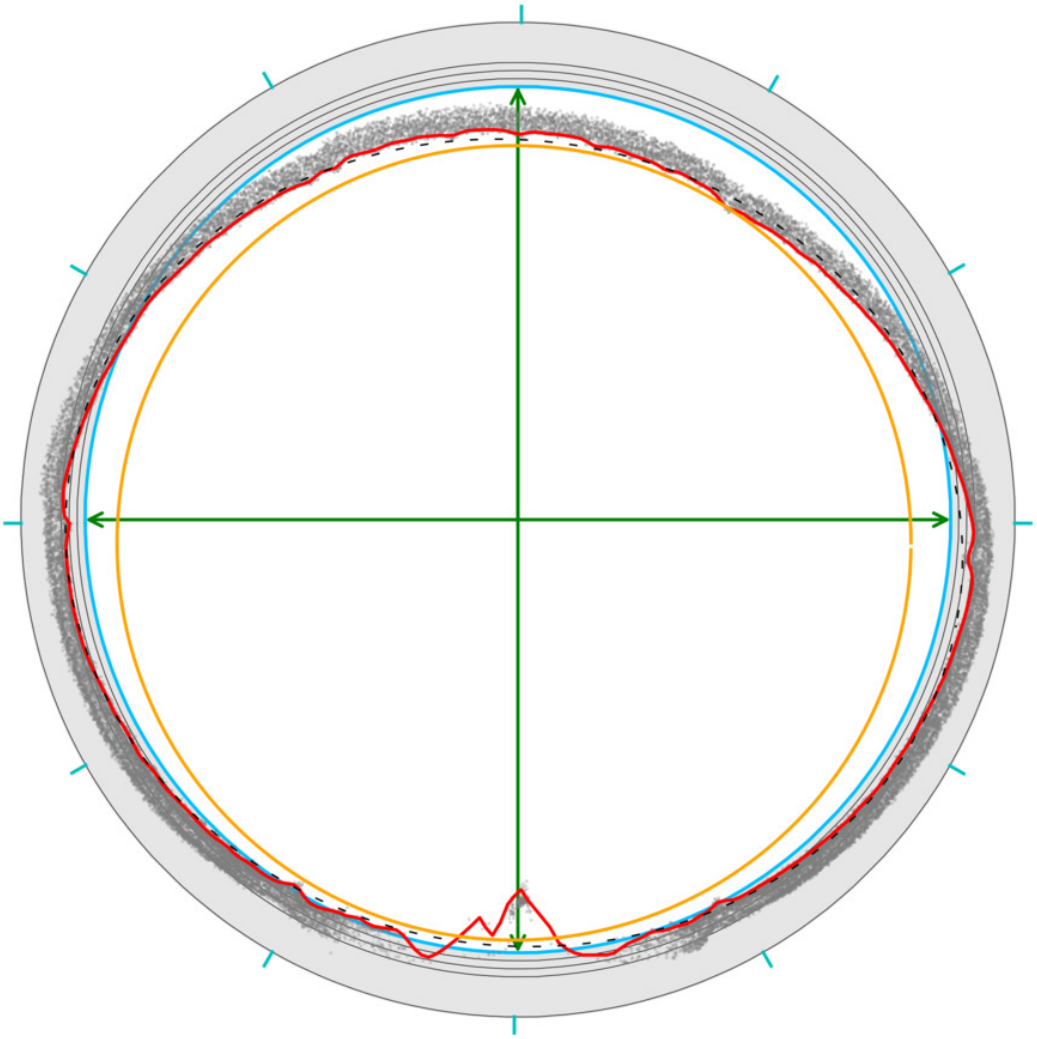
```
Footage   :  95 ft
Width     :  113.0" | 108.0"
Height    :  102.0" | 108.0"

Area      :  8858 sq in
Perimeter :  342.6 in
Ovality   :  5.2%

Interior Diameter : 99.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 96.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



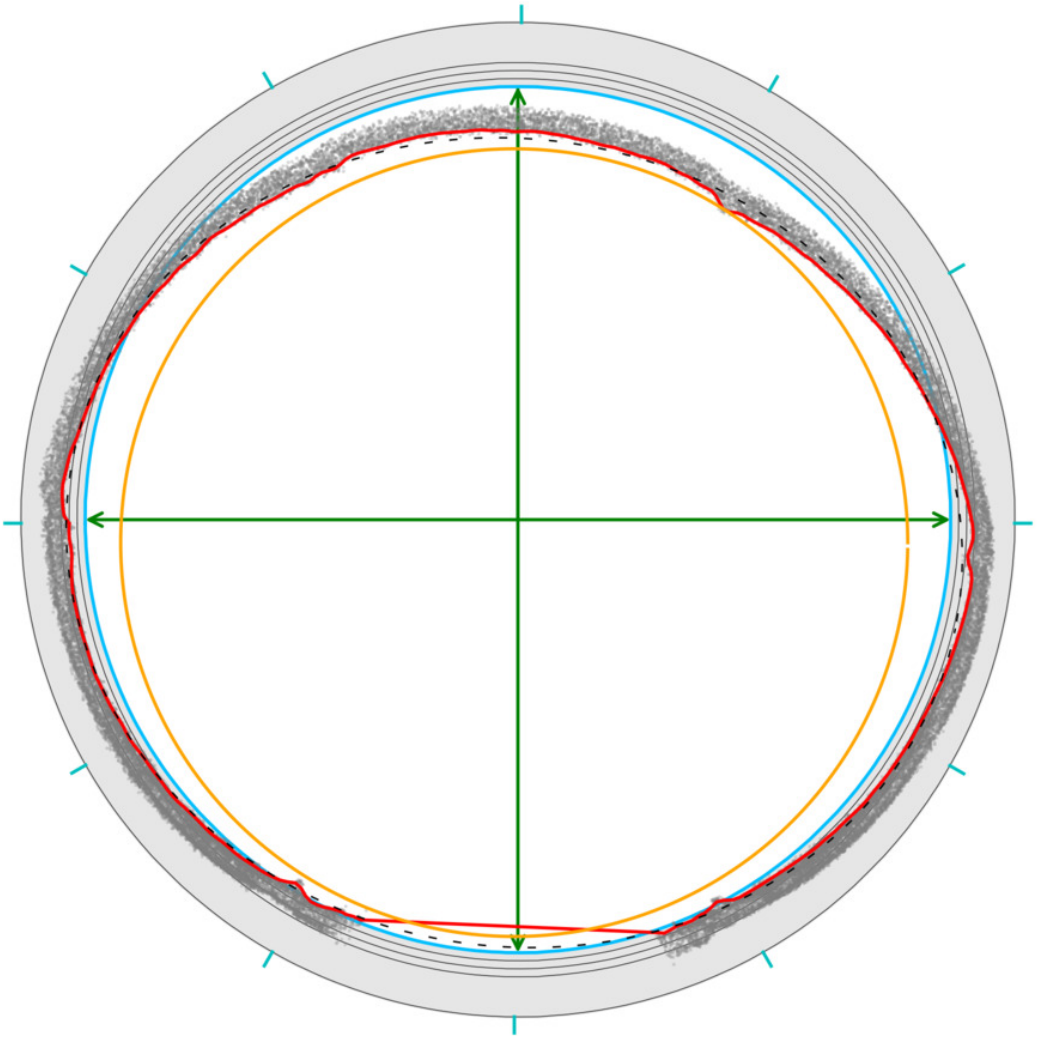
```
Footage   :  96 ft
Width     :  113.6" | 108.0"
Height    :  102.2" | 108.0"

Area      :  8830 sq in
Perimeter :  348.6 in
Ovality   :  5.5%

Interior Diameter : 99.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 97.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



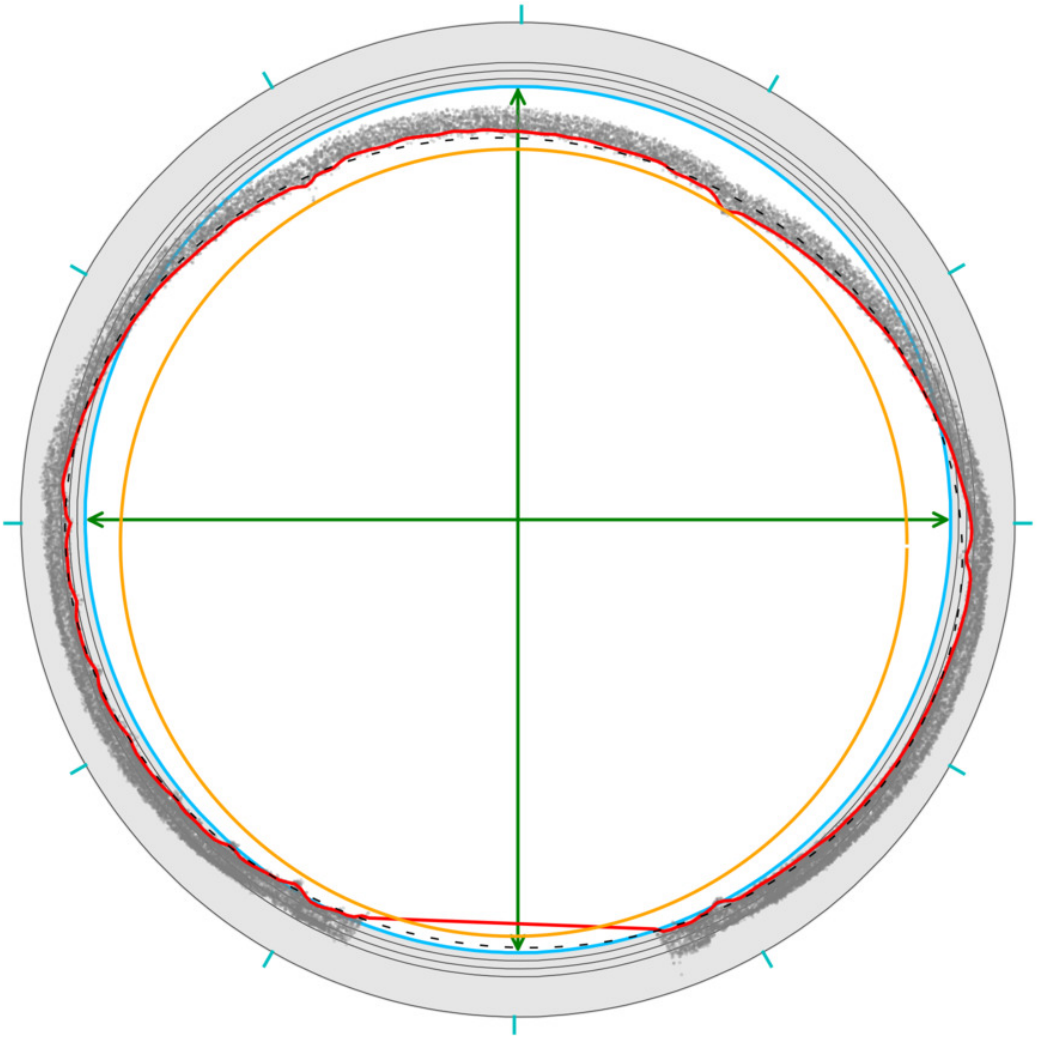
```
Footage   :  97 ft
Width     :  113.7" | 108.0"
Height    :  102.4" | 108.0"

Area      :  8794 sq in
Perimeter :  336.5 in
Ovality   :  5.3%

Interior Diameter : 98.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 98.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



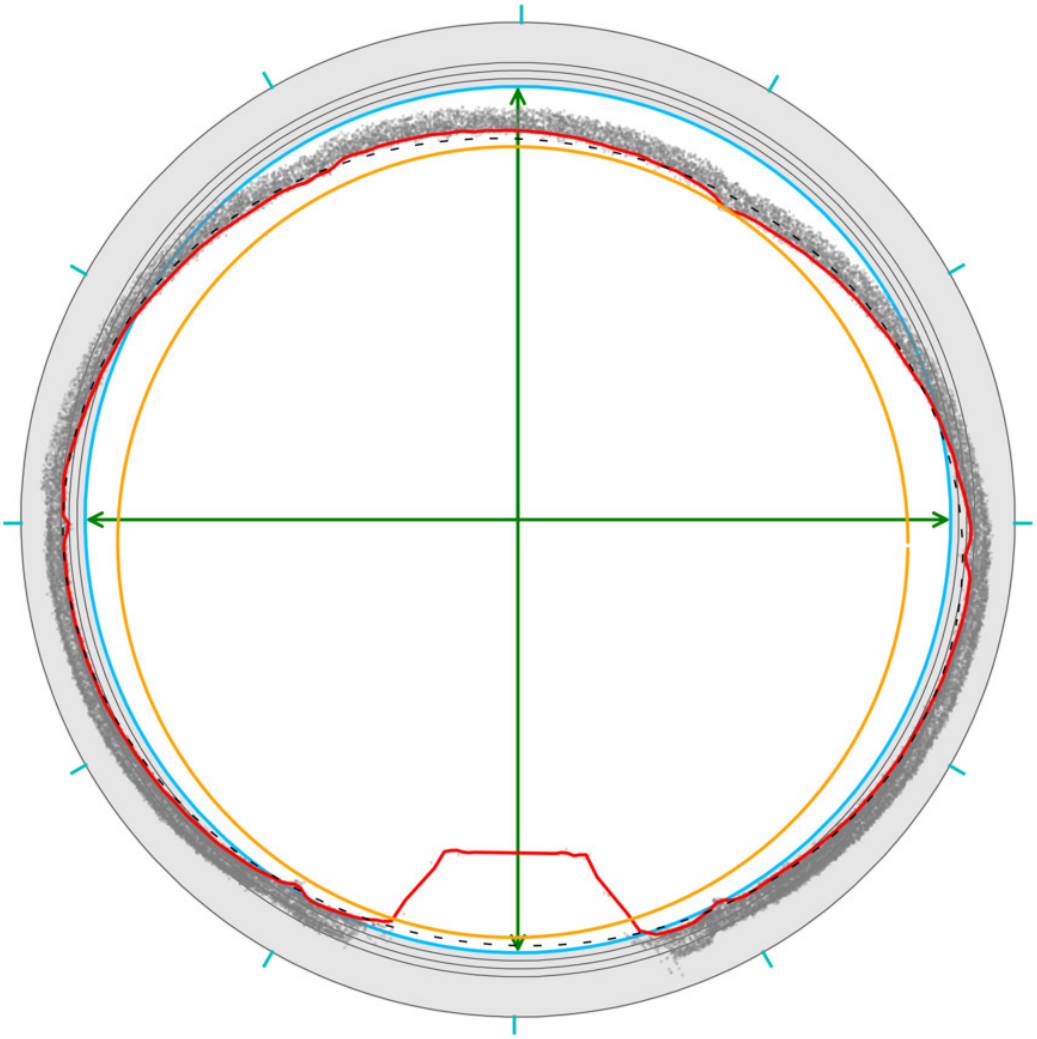
```
Footage   :  98 ft
Width     :  113.4" | 108.0"
Height    :  102.4" | 108.0"

Area      :  8791 sq in
Perimeter :  337.1 in
Ovality   :  5.4%

Interior Diameter : 98.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 99.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



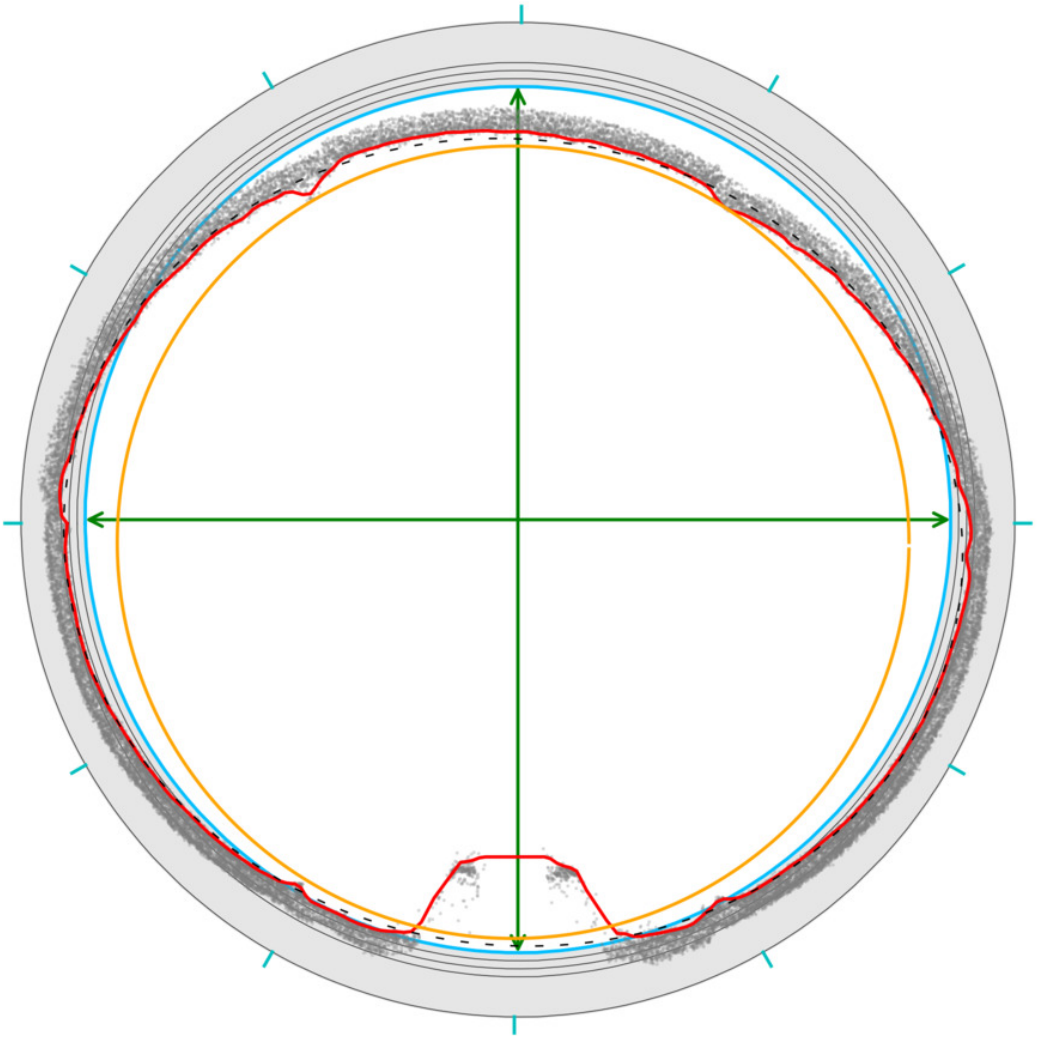
```
Footage   :  99 ft
Width     :  113.3" | 108.0"
Height    :  102.5" | 108.0"

Area      :  8605 sq in
Perimeter :  346.1 in
Ovality   :  5.6%

Interior Diameter : 98.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 100.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



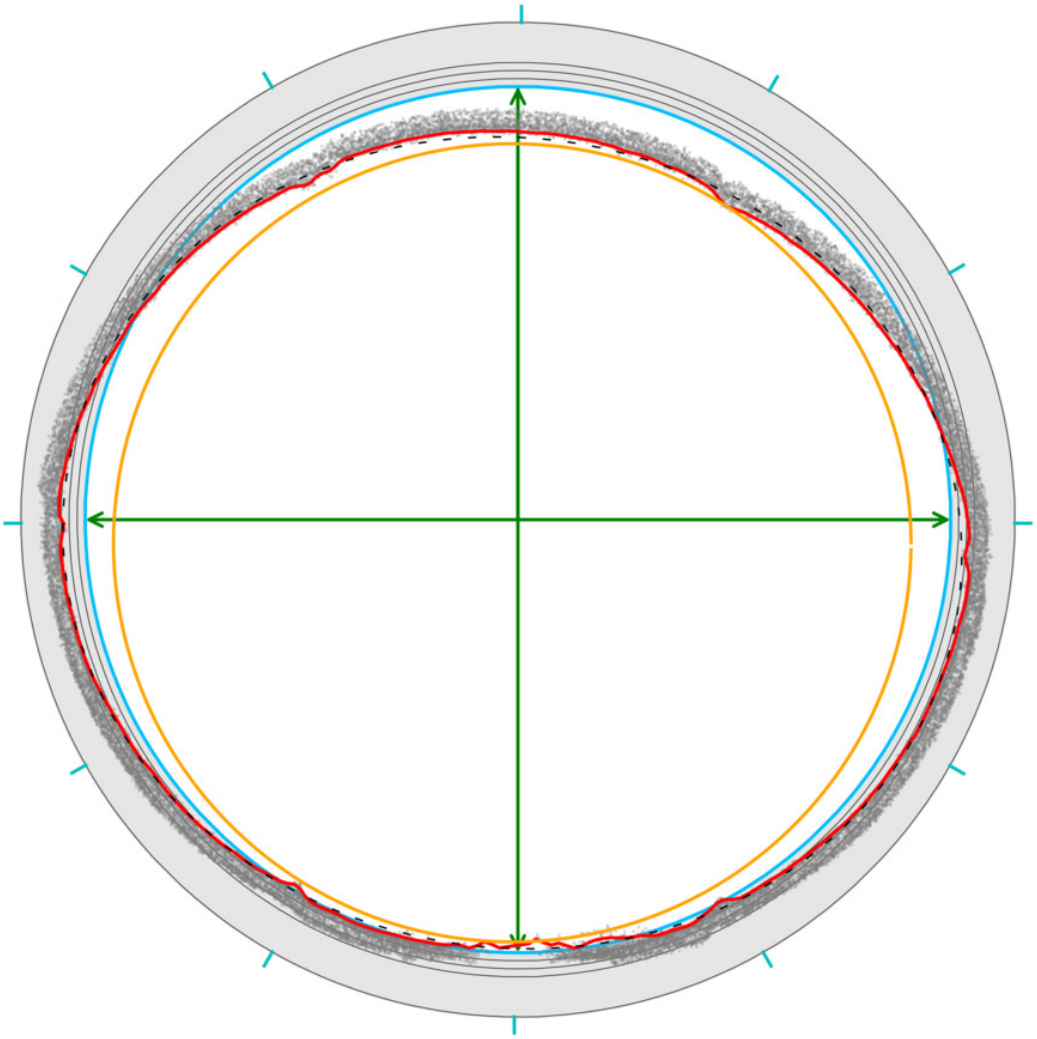
```
Footage   :  100 ft
Width     :  113.7" | 108.0"
Height    :  102.4" | 108.0"

Area      :  8668 sq in
Perimeter :  347.4 in
Ovality   :  5.6%

Interior Diameter : 98.8"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 101.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



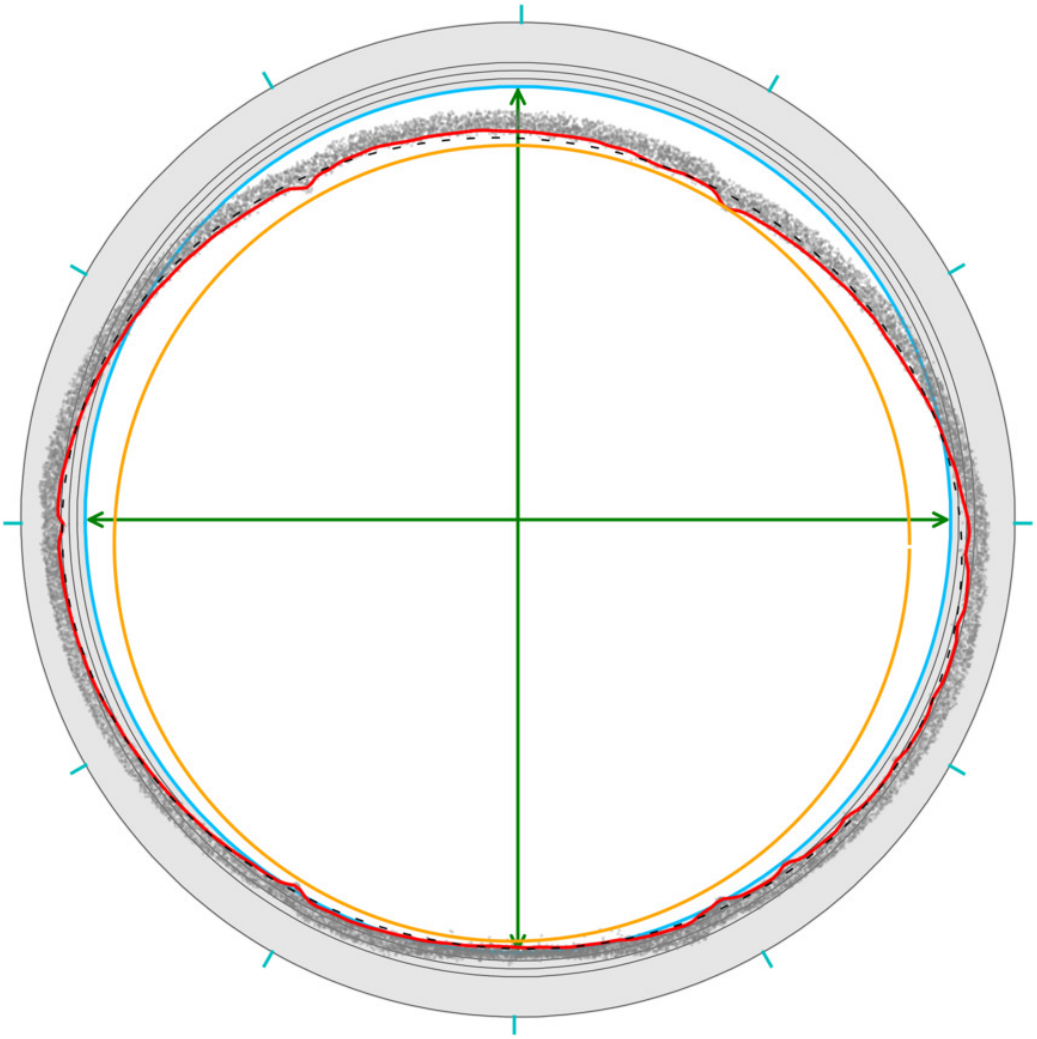
```
Footage   :  101 ft
Width     :  113.6" | 108.0"
Height    :  102.4" | 108.0"

Area      :  8903 sq in
Perimeter :  338.4 in
Ovality   :  5.3%

Interior Diameter : 99.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 102.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



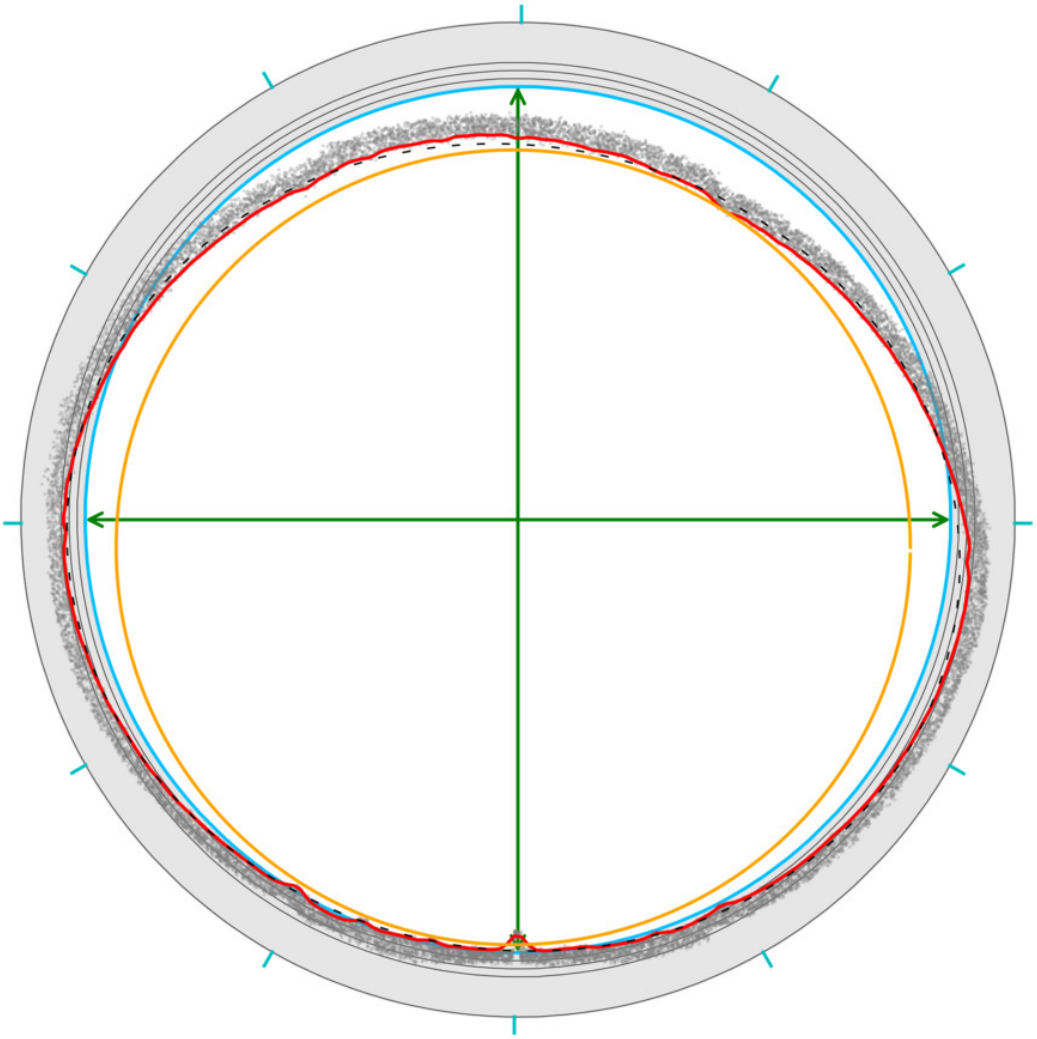
```
Footage   :  102 ft
Width     :  113.7" | 108.0"
Height    :  102.4" | 108.0"

Area      :  8904 sq in
Perimeter :  338.0 in
Ovality   :  5.4%

Interior Diameter : 99.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 103.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



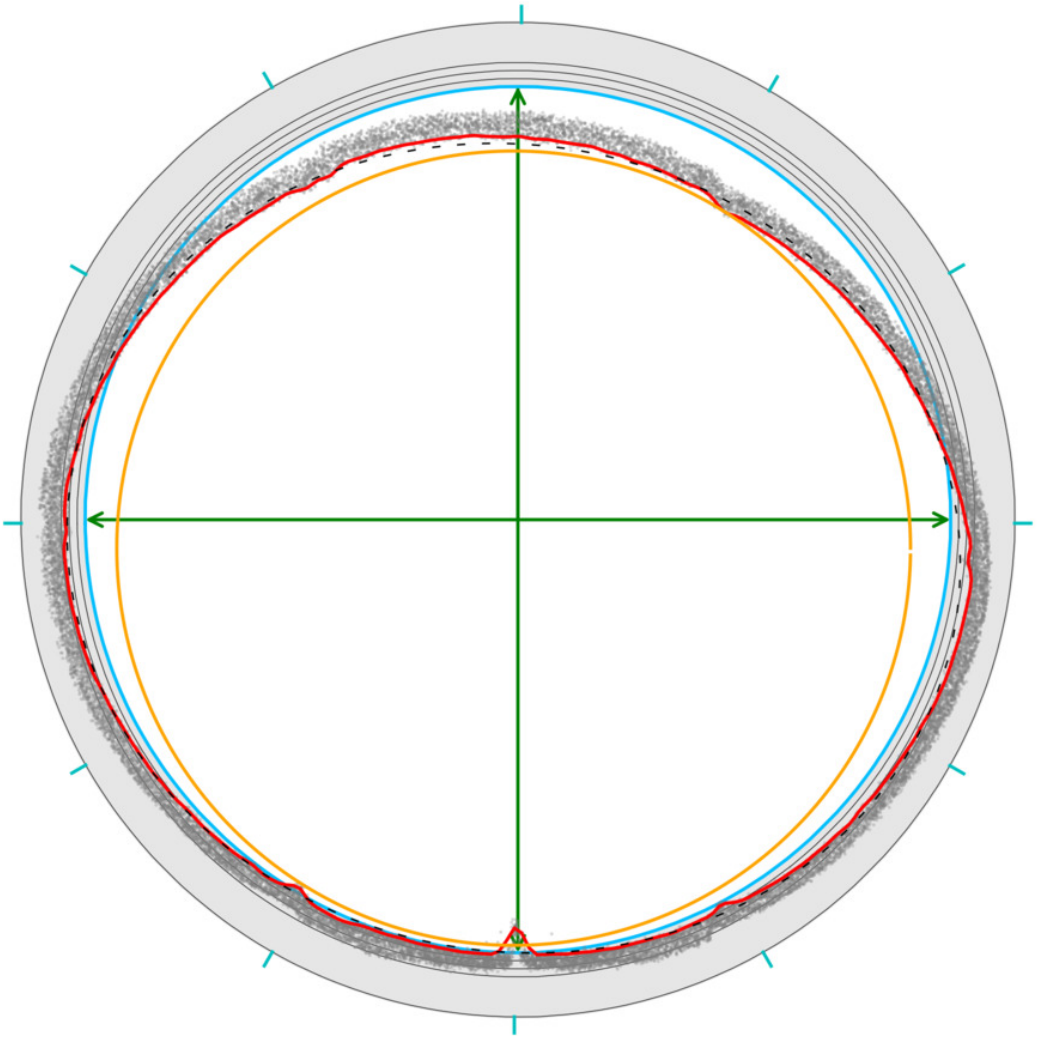
```
Footage   :  103 ft
Width     :  113.1" | 108.0"
Height    :  101.7" | 108.0"

Area      :  8797 sq in
Perimeter :  336.4 in
Ovality   :  5.4%

Interior Diameter : 99.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 104.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



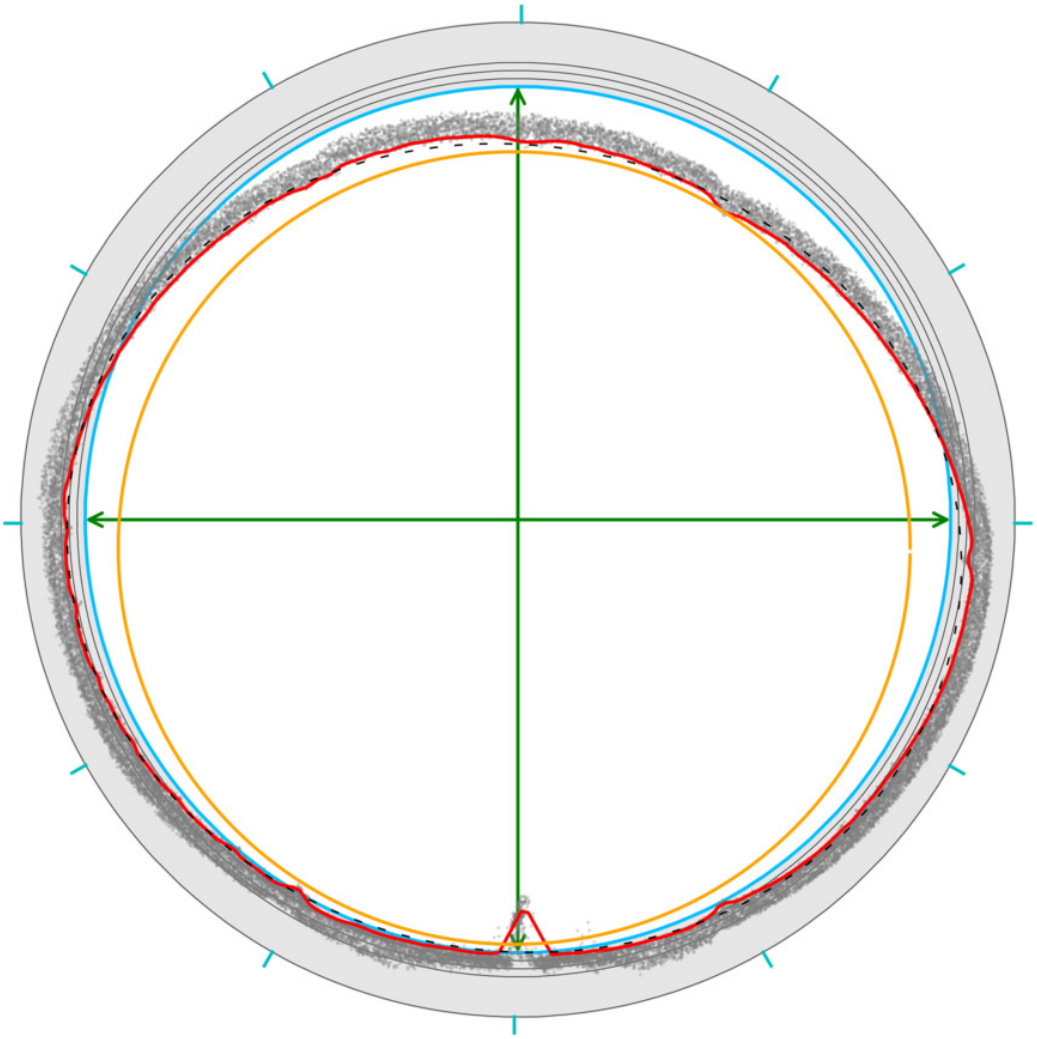
```
Footage   :  104 ft
Width     :  113.2" | 108.0"
Height    :  101.7" | 108.0"

Area      :  8824 sq in
Perimeter :  339.0 in
Ovality   :  5.3%

Interior Diameter : 99.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 105.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



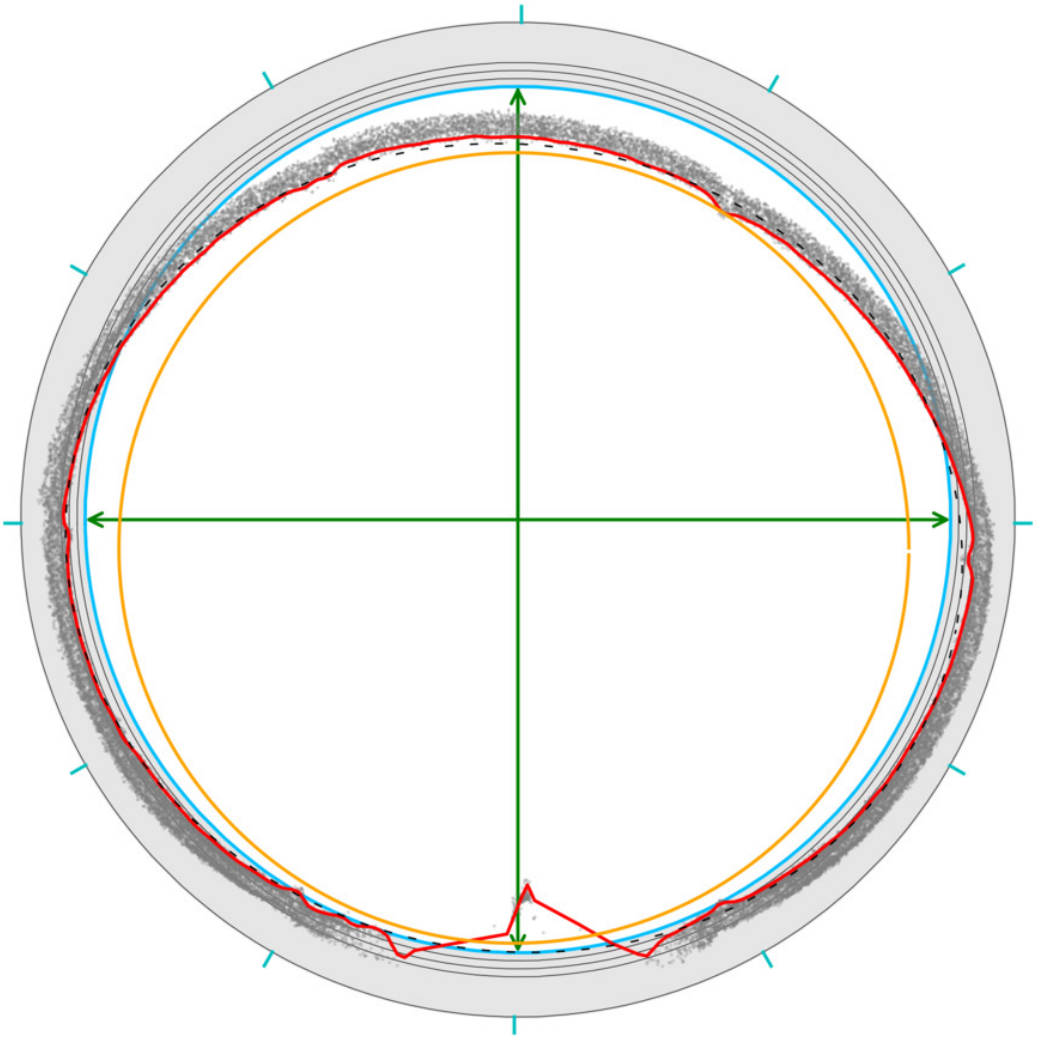
```
Footage   :  105 ft
Width     :  113.4" | 108.0"
Height    :  101.3" | 108.0"

Area      :  8821 sq in
Perimeter :  342.3 in
Ovality   :  5.4%

Interior Diameter : 98.8"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 106.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



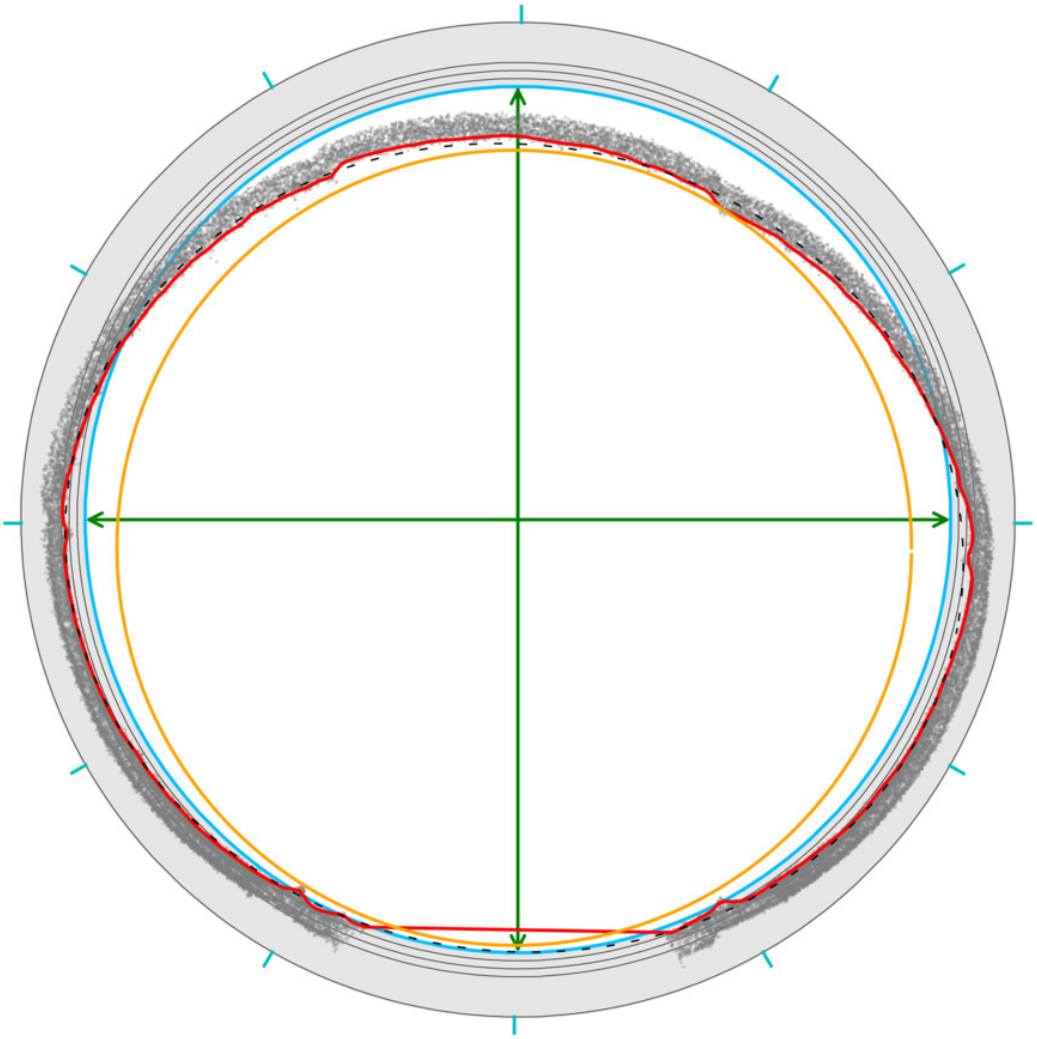
```
Footage   :  106 ft
Width     :  113.5" | 108.0"
Height    :  101.7" | 108.0"

Area      :  8809 sq in
Perimeter :  346.4 in
Ovality   :  5.4%

Interior Diameter : 98.6"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 107.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



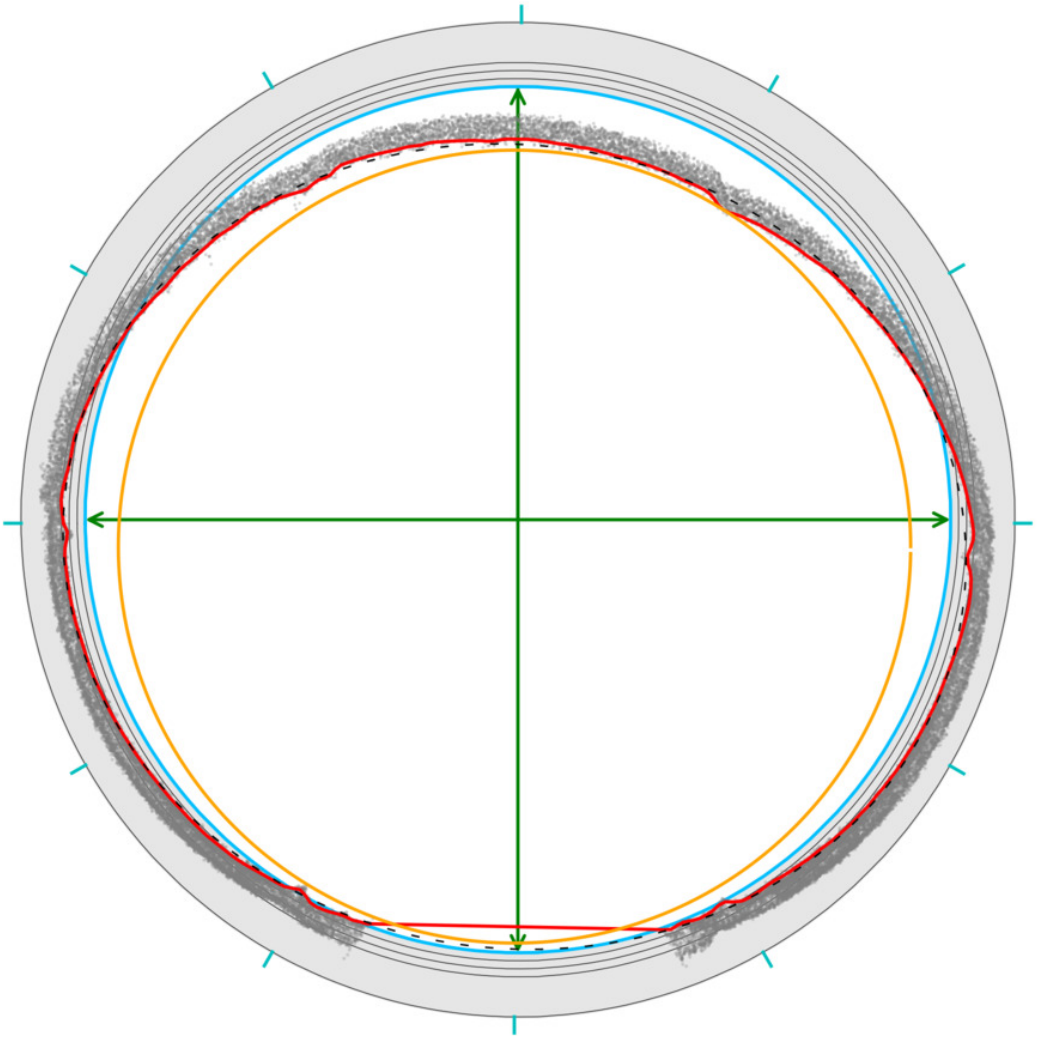
```
Footage   :  107 ft
Width     :  113.6" | 108.0"
Height    :  101.8" | 108.0"

Area      :  8796 sq in
Perimeter :  336.3 in
Ovality   :  5.5%

Interior Diameter : 99.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 108.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



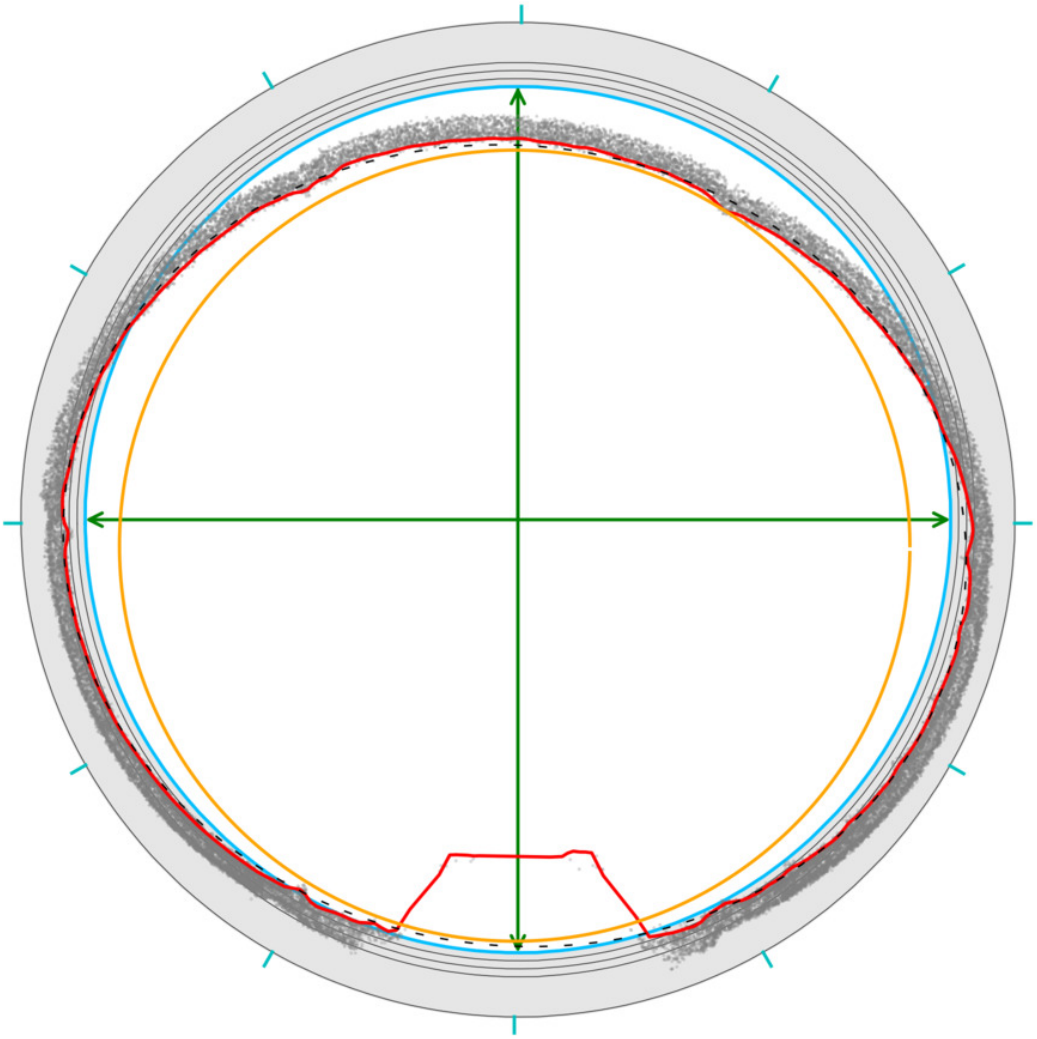
```
Footage   :  108 ft
Width     :  113.9" | 108.0"
Height    :  101.4" | 108.0"

Area      :  8808 sq in
Perimeter :  336.4 in
Ovality   :  5.9%

Interior Diameter : 98.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 109.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



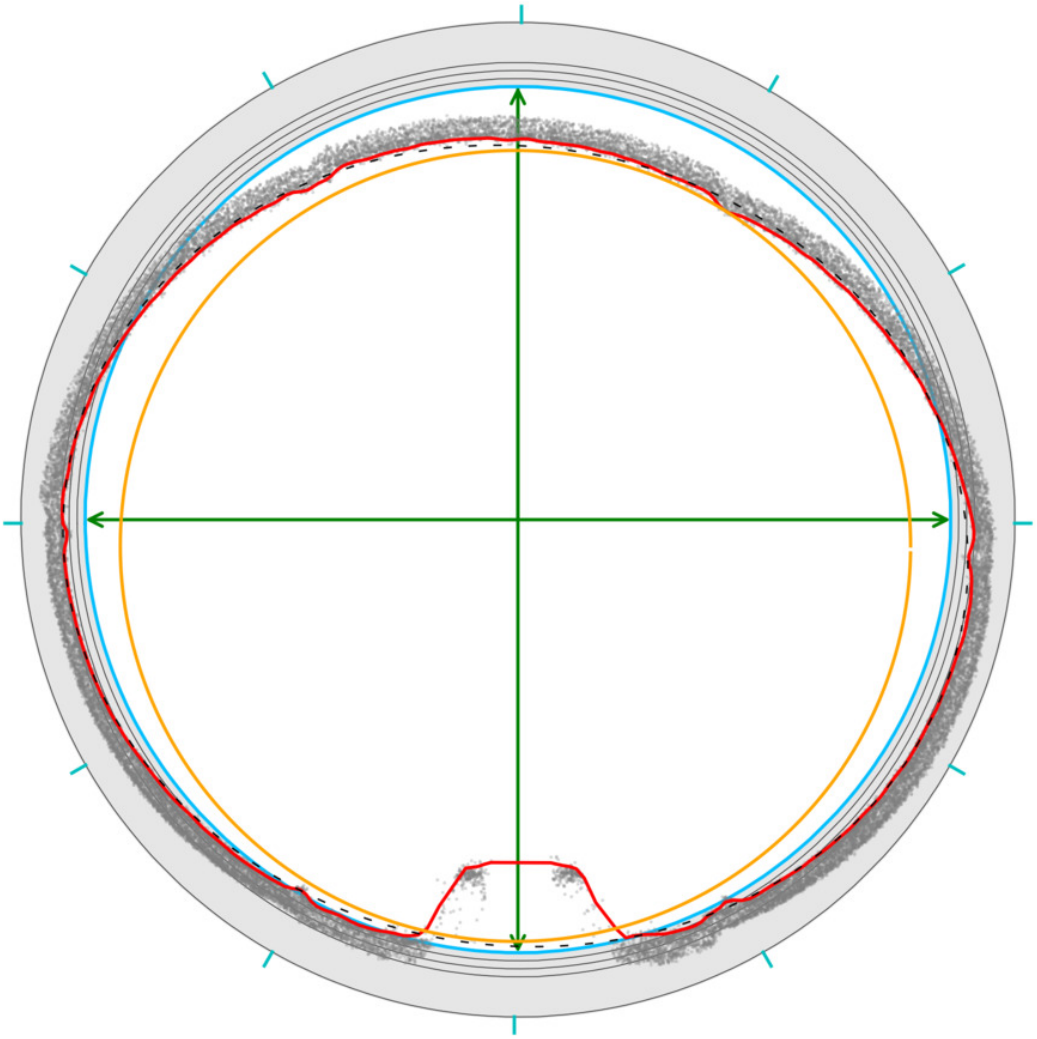
```
Footage   :  109 ft
Width     :  113.6" | 108.0"
Height    :  101.5" | 108.0"

Area      :  8588 sq in
Perimeter :  347.2 in
Ovality   :  6.2%

Interior Diameter : 98.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 110.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



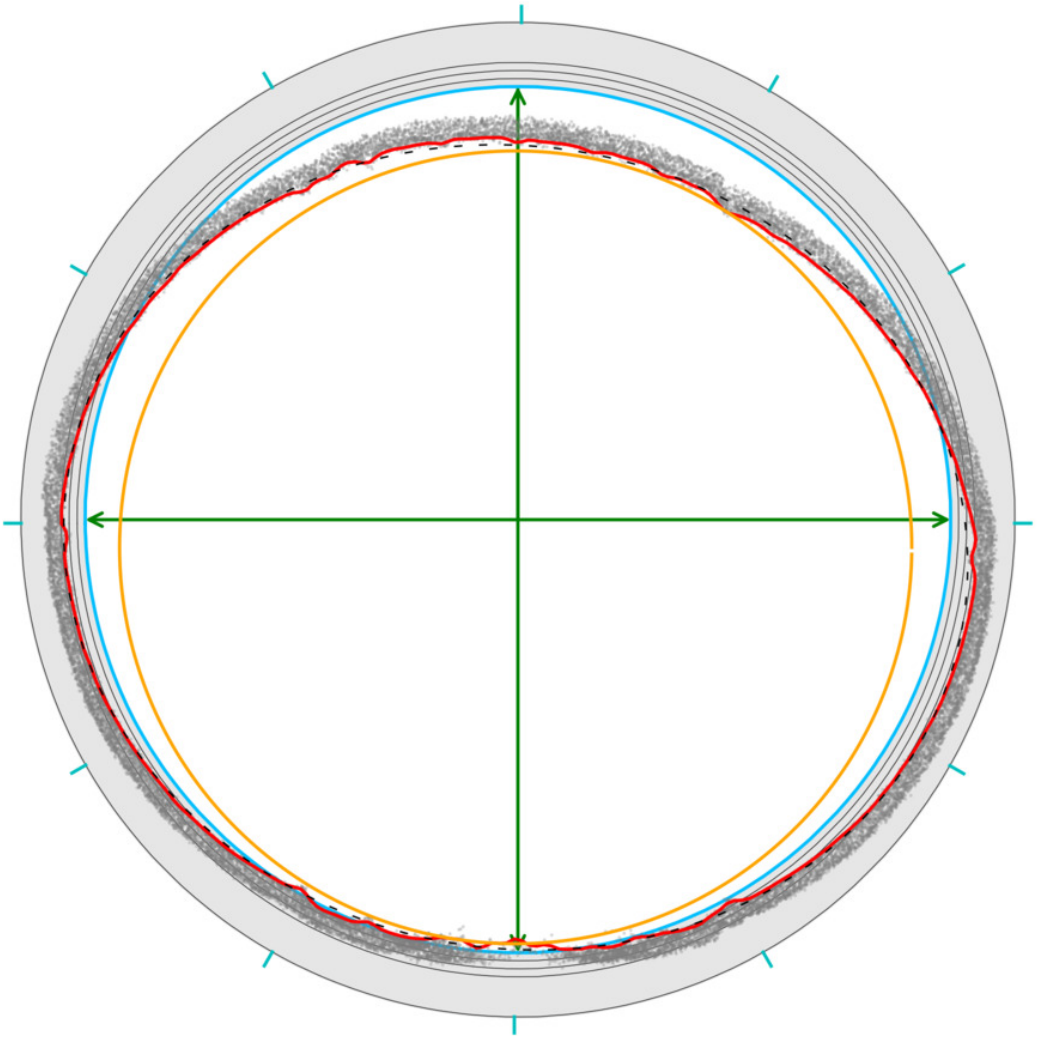
```
Footage    :  110 ft
Width      :  113.8" | 108.0"
Height     :  101.4" | 108.0"

Area       :  8681 sq in
Perimeter  :  346.0 in
Ovality    :  6.3%

Interior Diameter : 98.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 111.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



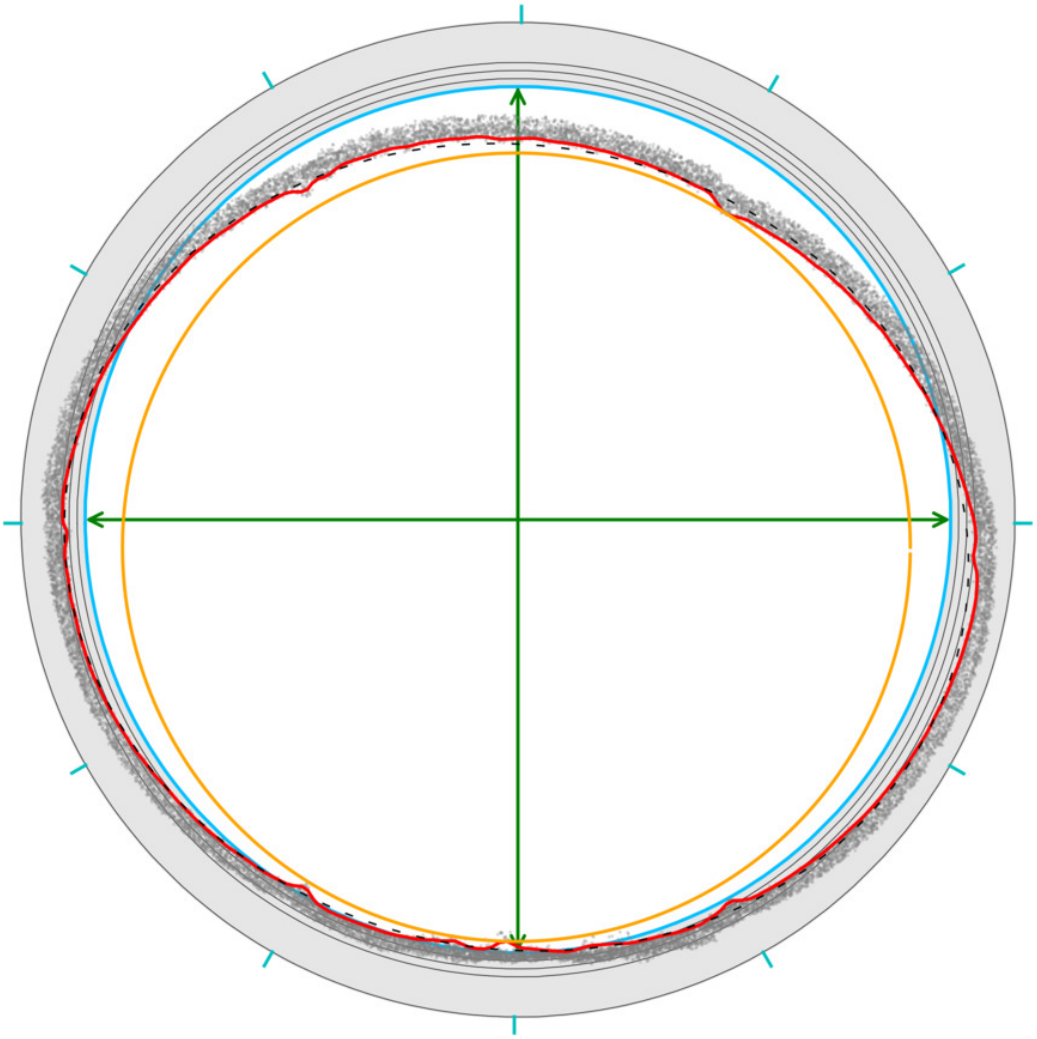
```
Footage   :  111 ft
Width     :  114.1" | 108.0"
Height    :  101.2" | 108.0"

Area      :  8880 sq in
Perimeter :  338.6 in
Ovality   :  6.1%

Interior Diameter : 98.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 112.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



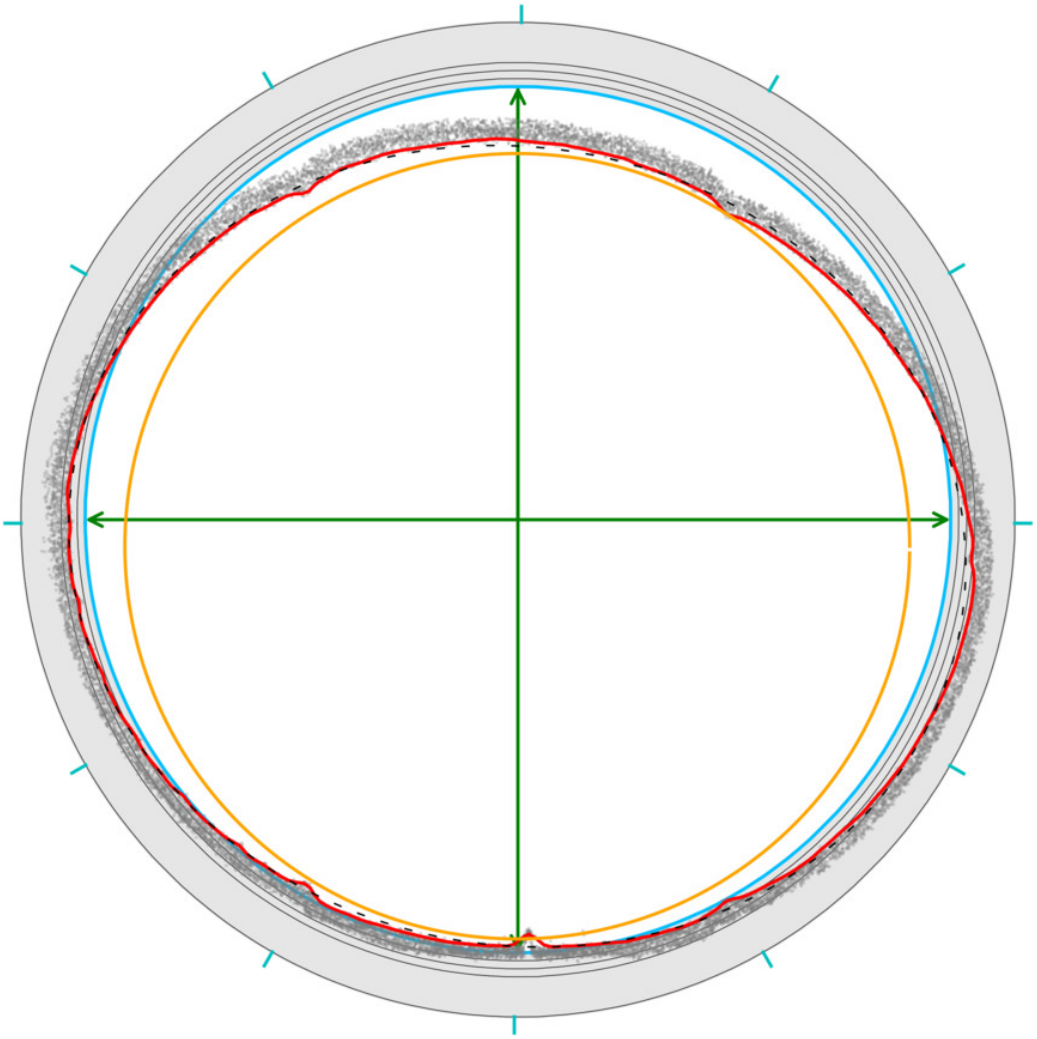
```
Footage   :  112 ft
Width     :  114.2" | 108.0"
Height    :  101.5" | 108.0"

Area      :  8905 sq in
Perimeter :  338.3 in
Ovality   :  6.1%

Interior Diameter : 98.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 113.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



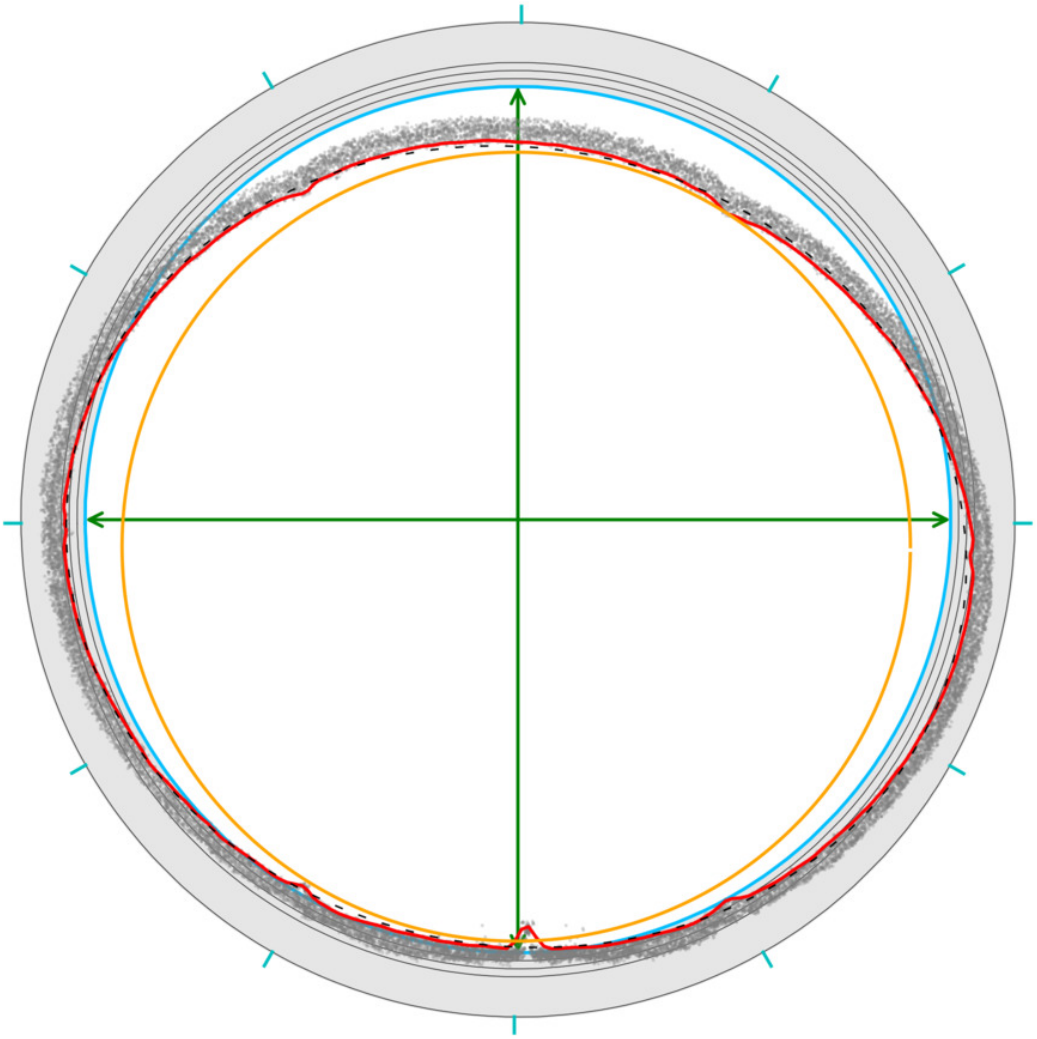
```
Footage   :  113 ft
Width     :  113.2" | 108.0"
Height    :  101.3" | 108.0"

Area      :  8767 sq in
Perimeter :  335.6 in
Ovality   :  6.1%

Interior Diameter : 97.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 114.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



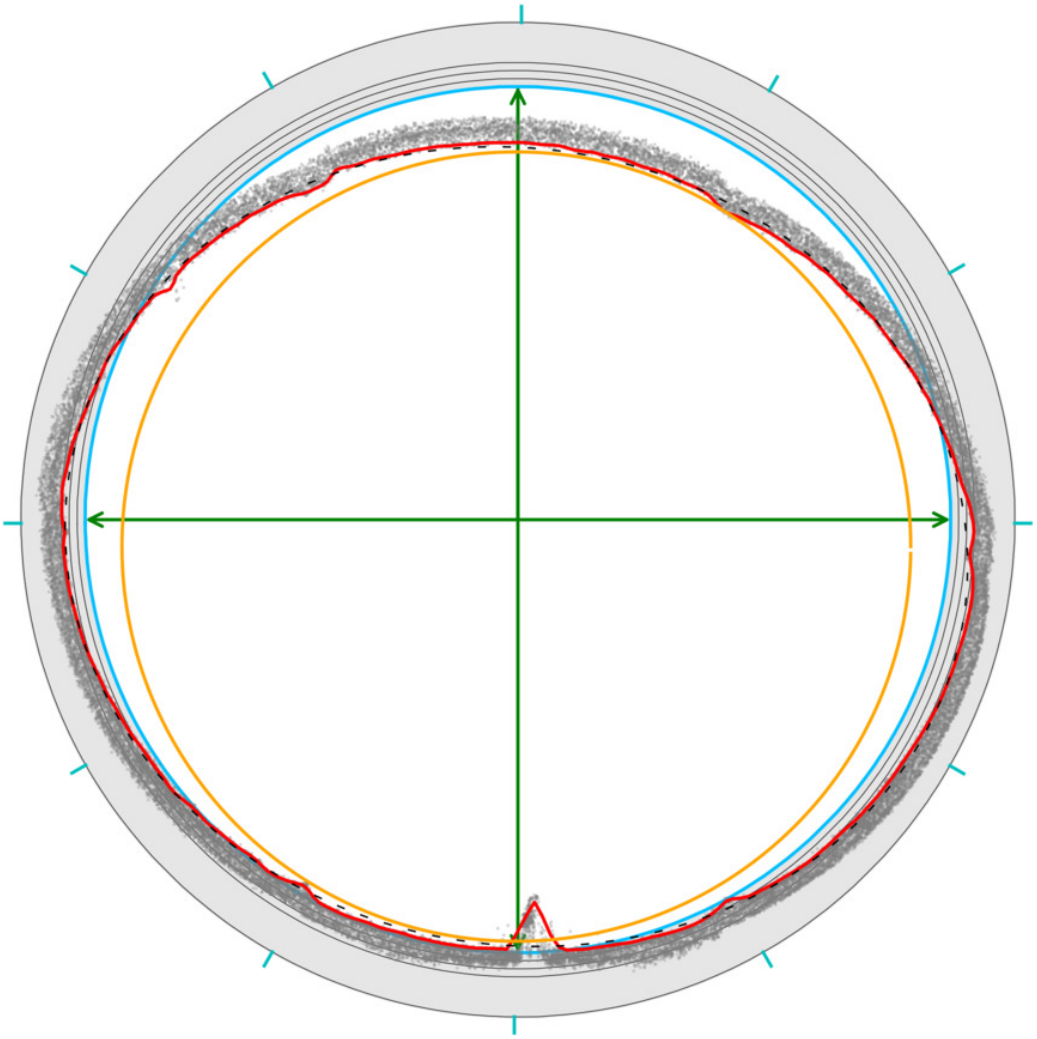
```
Footage   :  114 ft
Width     :  113.5" | 108.0"
Height    :  101.1" | 108.0"

Area      :  8801 sq in
Perimeter :  337.7 in
Ovality   :  6.2%

Interior Diameter : 98.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 115.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



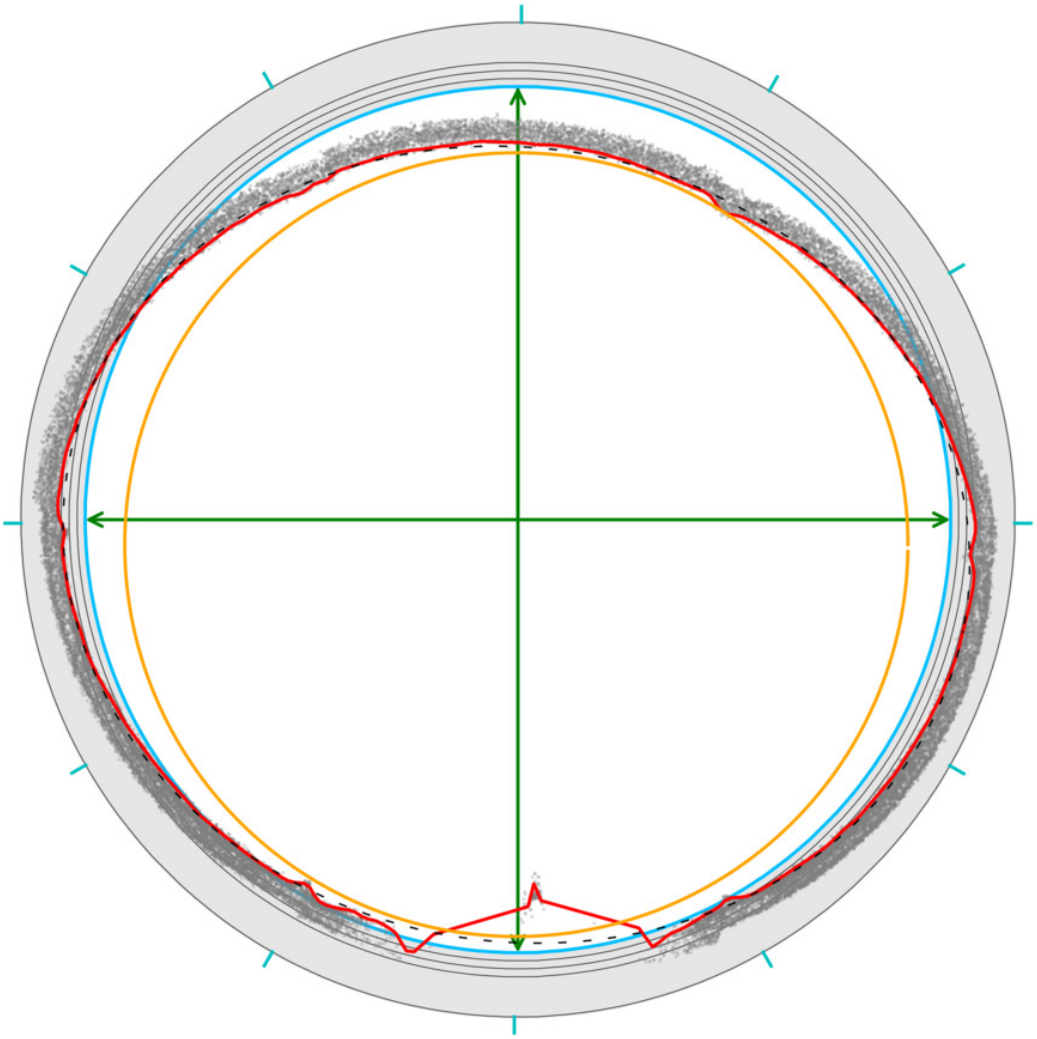
```
Footage   :  115 ft
Width     :  113.8" | 108.0"
Height    :  101.0" | 108.0"

Area      :  8800 sq in
Perimeter :  343.0 in
Ovality   :  6.4%

Interior Diameter : 98.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 116.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



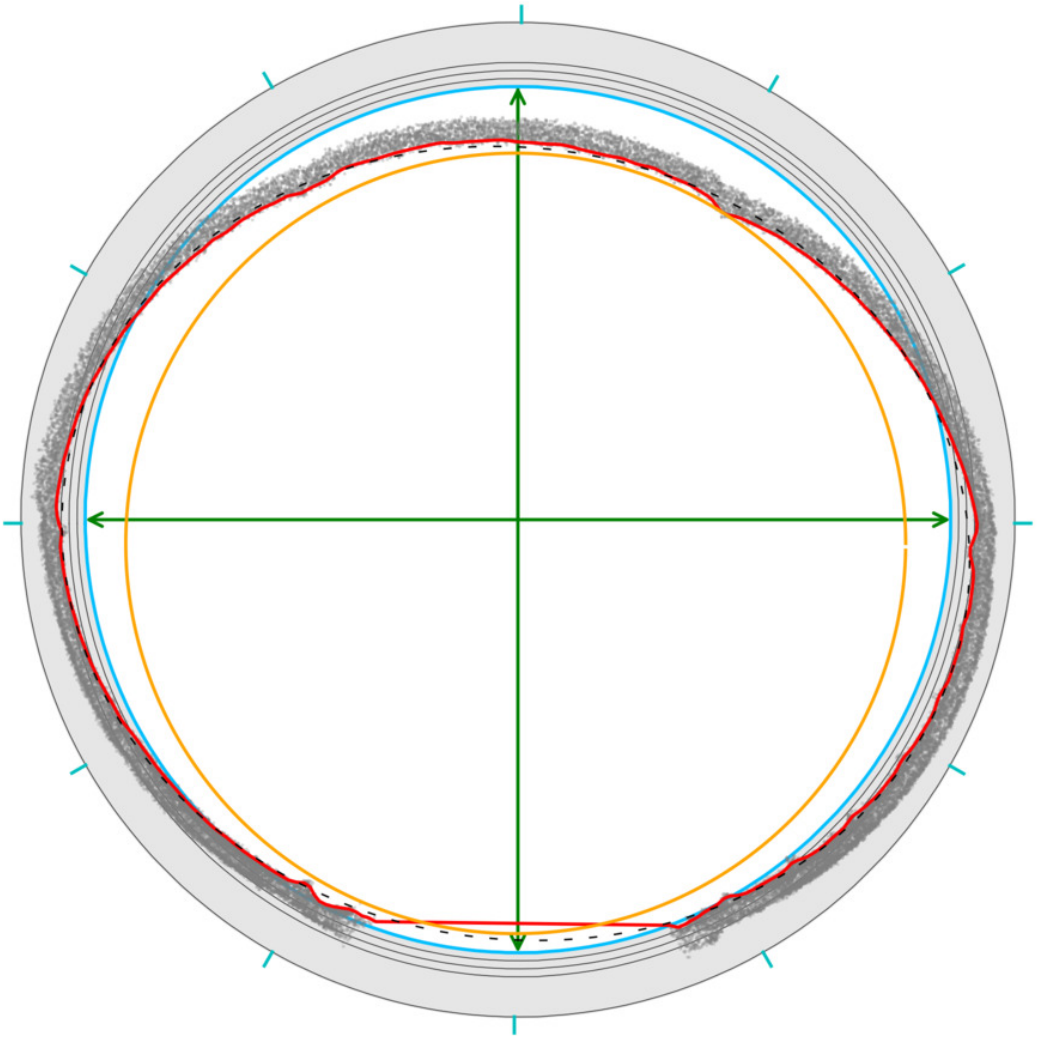
```
Footage   :  116 ft
Width     :  114.5" | 108.0"
Height    :  101.0" | 108.0"

Area      :  8751 sq in
Perimeter :  344.8 in
Ovality   :  6.8%

Interior Diameter : 97.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 117.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



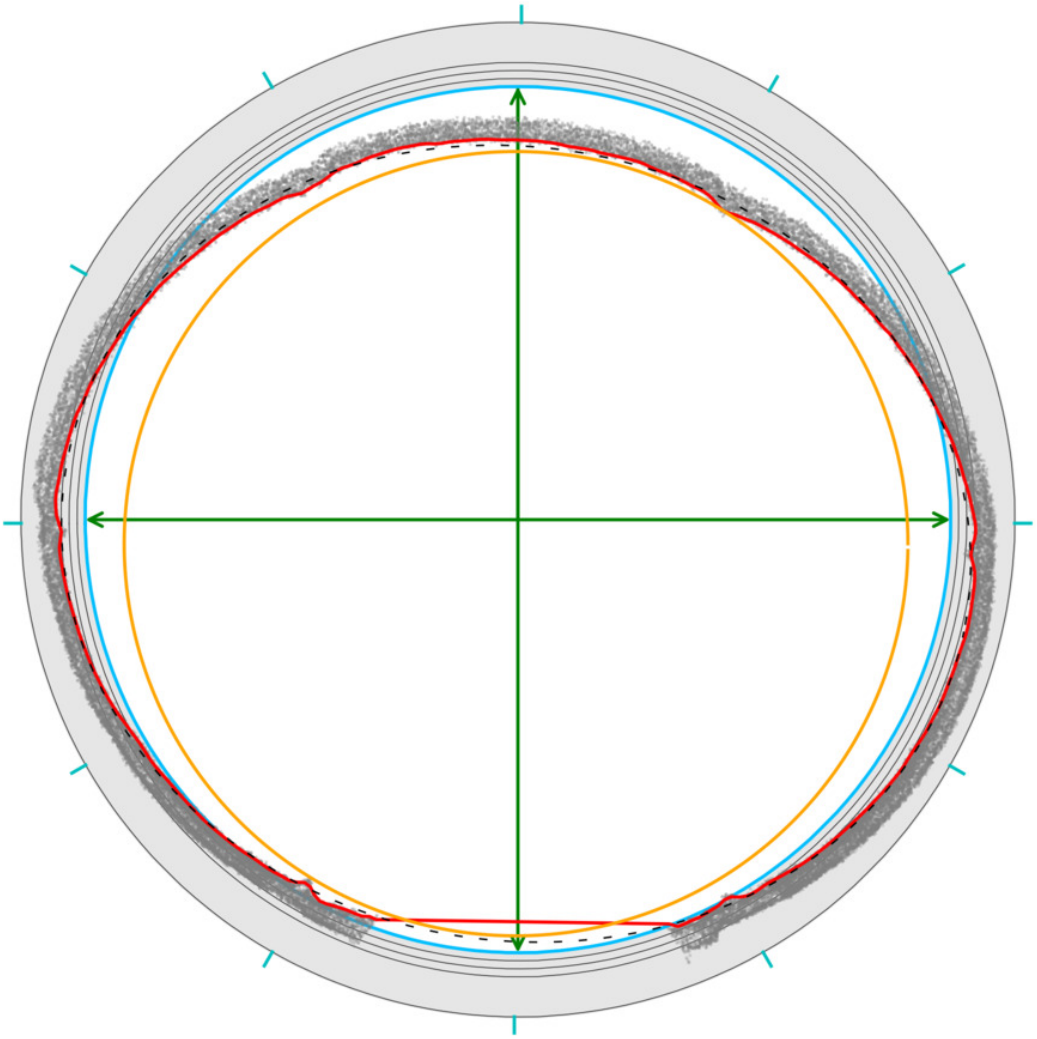
```
Footage   :  117 ft
Width     :  114.9" | 108.0"
Height    :  101.1" | 108.0"

Area      :  8748 sq in
Perimeter :  336.0 in
Ovality   :  7.0%

Interior Diameter : 97.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 118.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



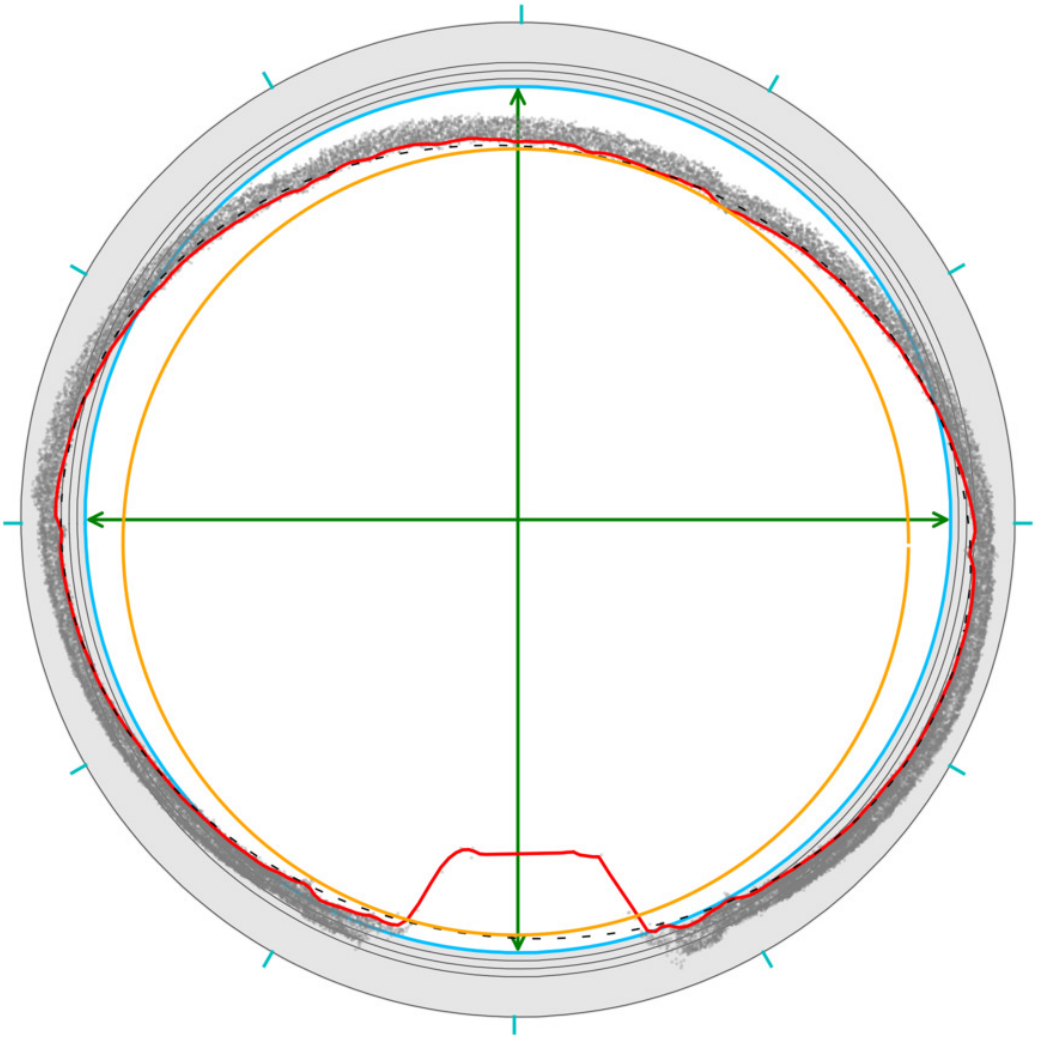
```
Footage   :  118 ft
Width     :  114.8" | 108.0"
Height    :  101.3" | 108.0"

Area      :  8779 sq in
Perimeter :  336.2 in
Ovality   :  6.9%

Interior Diameter : 97.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 119.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



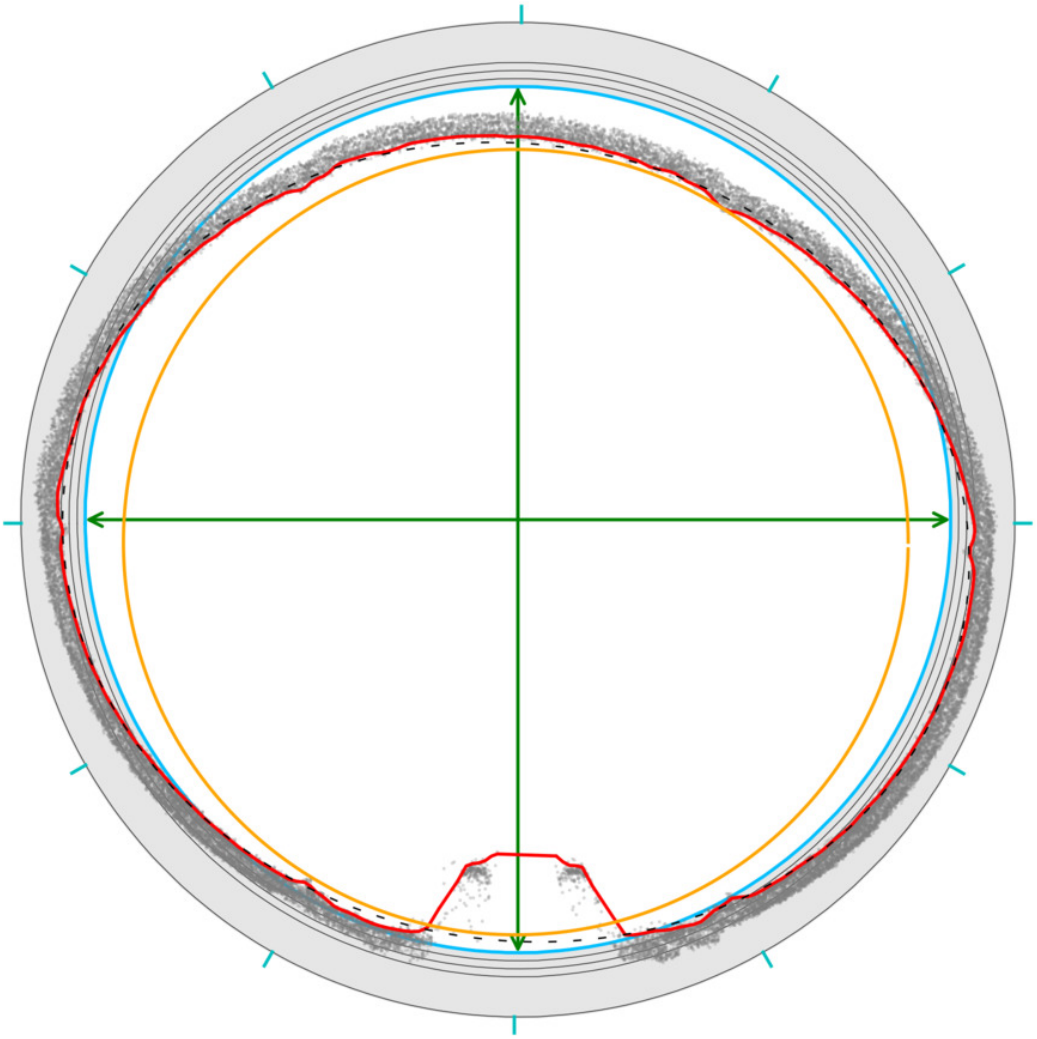
```
Footage   :  119 ft
Width     :  114.8" | 108.0"
Height    :  101.2" | 108.0"

Area      :  8580 sq in
Perimeter :  346.2 in
Ovality   :  7.2%

Interior Diameter : 98.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 120.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



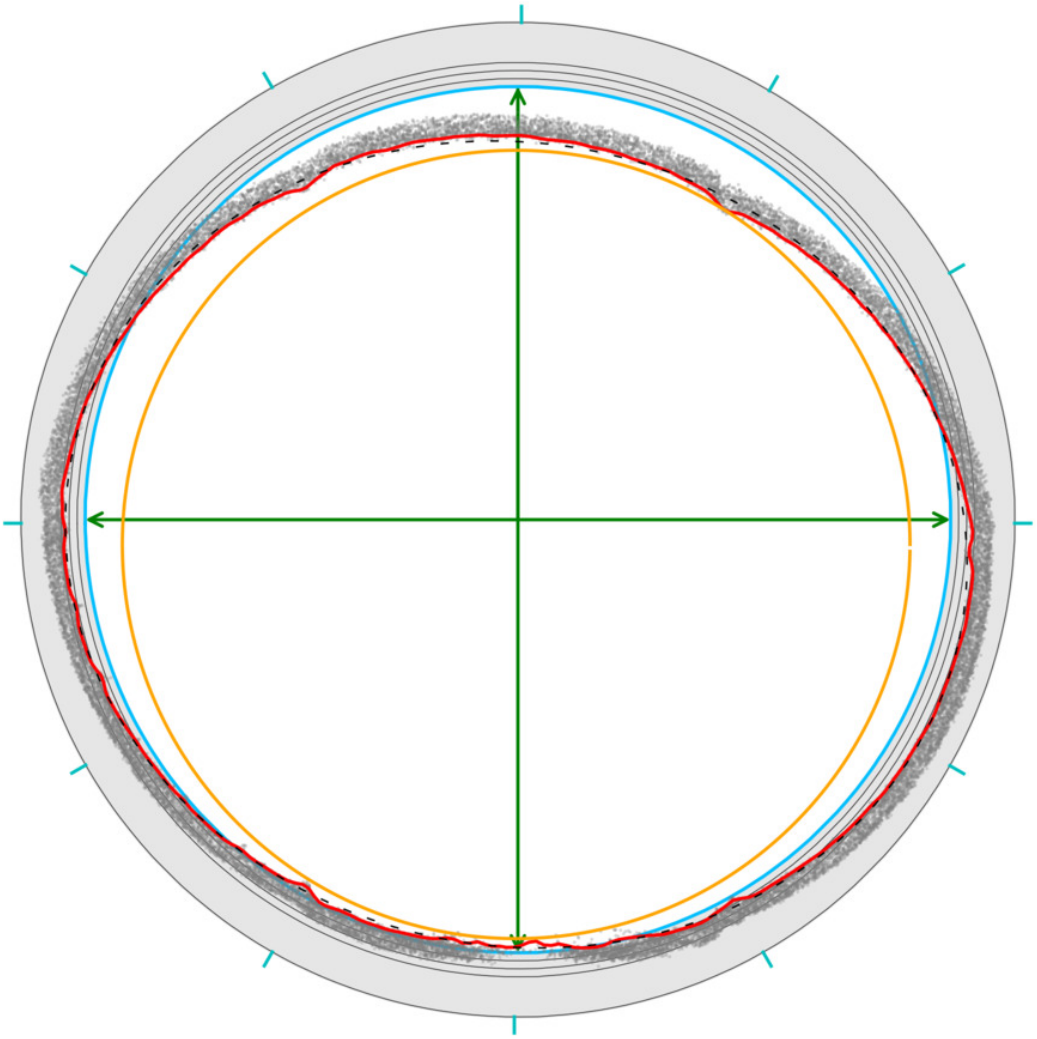
```
Footage   :  120 ft
Width     :  114.5" | 108.0"
Height    :  101.8" | 108.0"

Area      :  8667 sq in
Perimeter :  346.5 in
Ovality   :  6.7%

Interior Diameter : 97.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 121.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



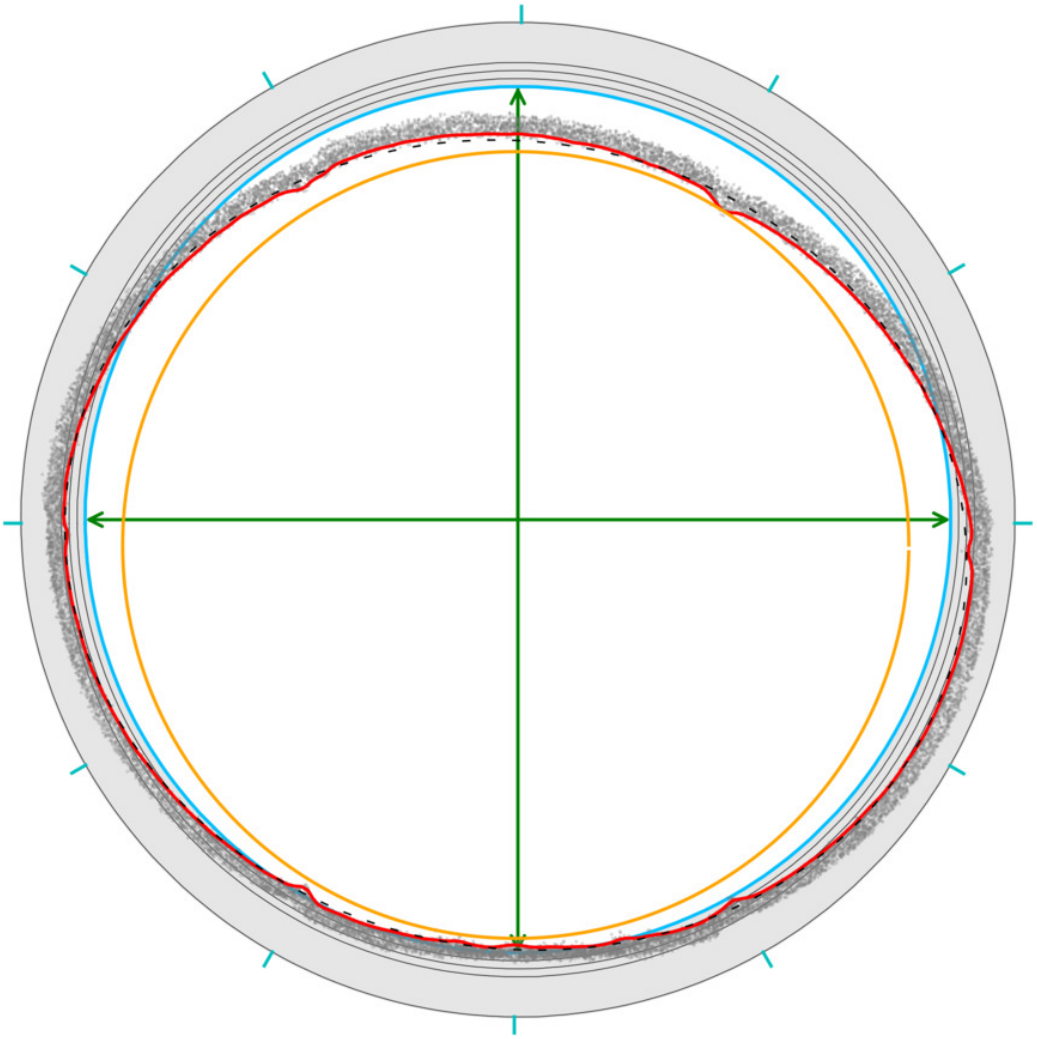
```
Footage   :  121 ft
Width     :  113.7" | 108.0"
Height    :  101.9" | 108.0"

Area      :  8873 sq in
Perimeter :  337.5 in
Ovality   :  6.0%

Interior Diameter : 98.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 122.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



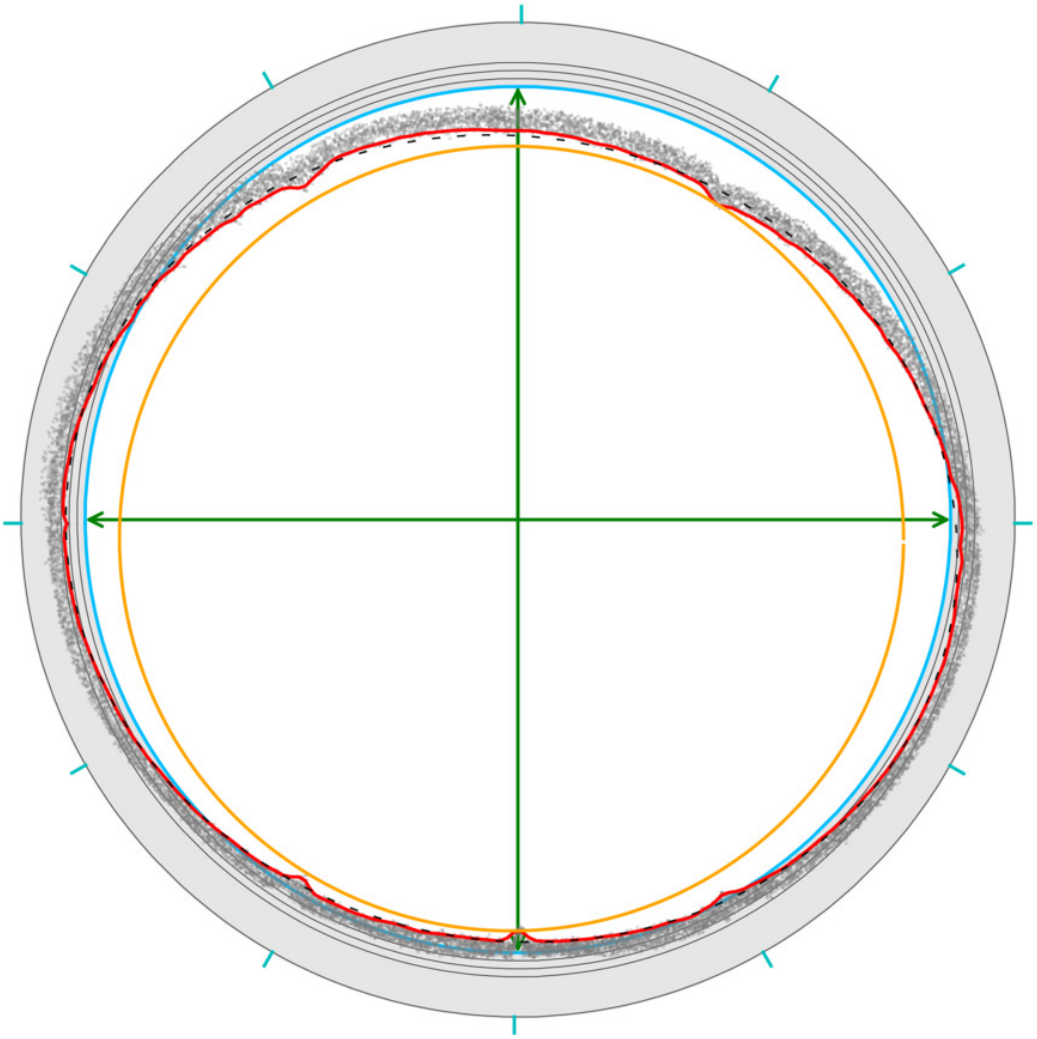
```
Footage   :  122 ft
Width     :  113.4" | 108.0"
Height    :  102.1" | 108.0"

Area      :  8905 sq in
Perimeter :  337.5 in
Ovality   :  5.8%

Interior Diameter : 98.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 123.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



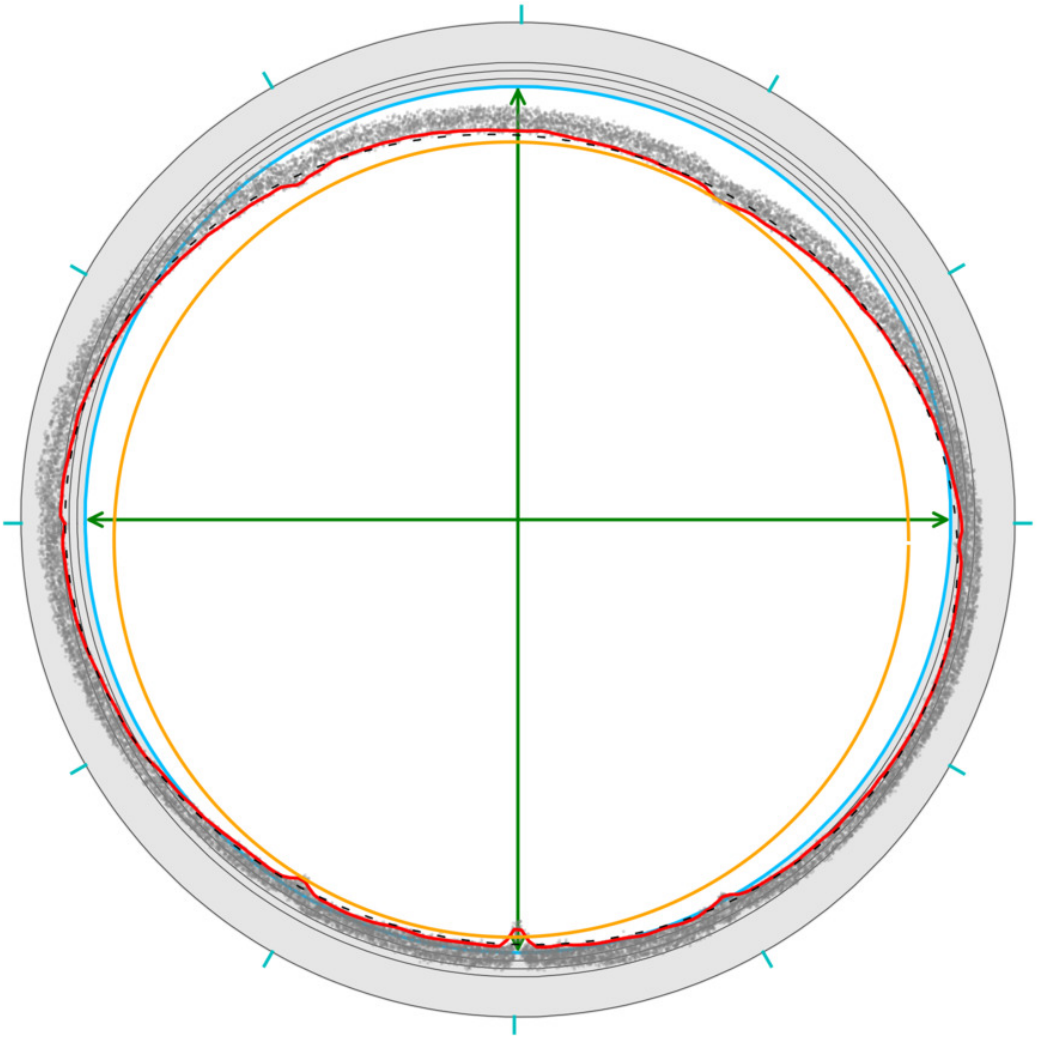
```
Footage   :  123 ft
Width     :  112.2" | 108.0"
Height    :  102.5" | 108.0"

Area      :  8772 sq in
Perimeter :  335.9 in
Ovality   :  5.4%

Interior Diameter : 97.8"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 124.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



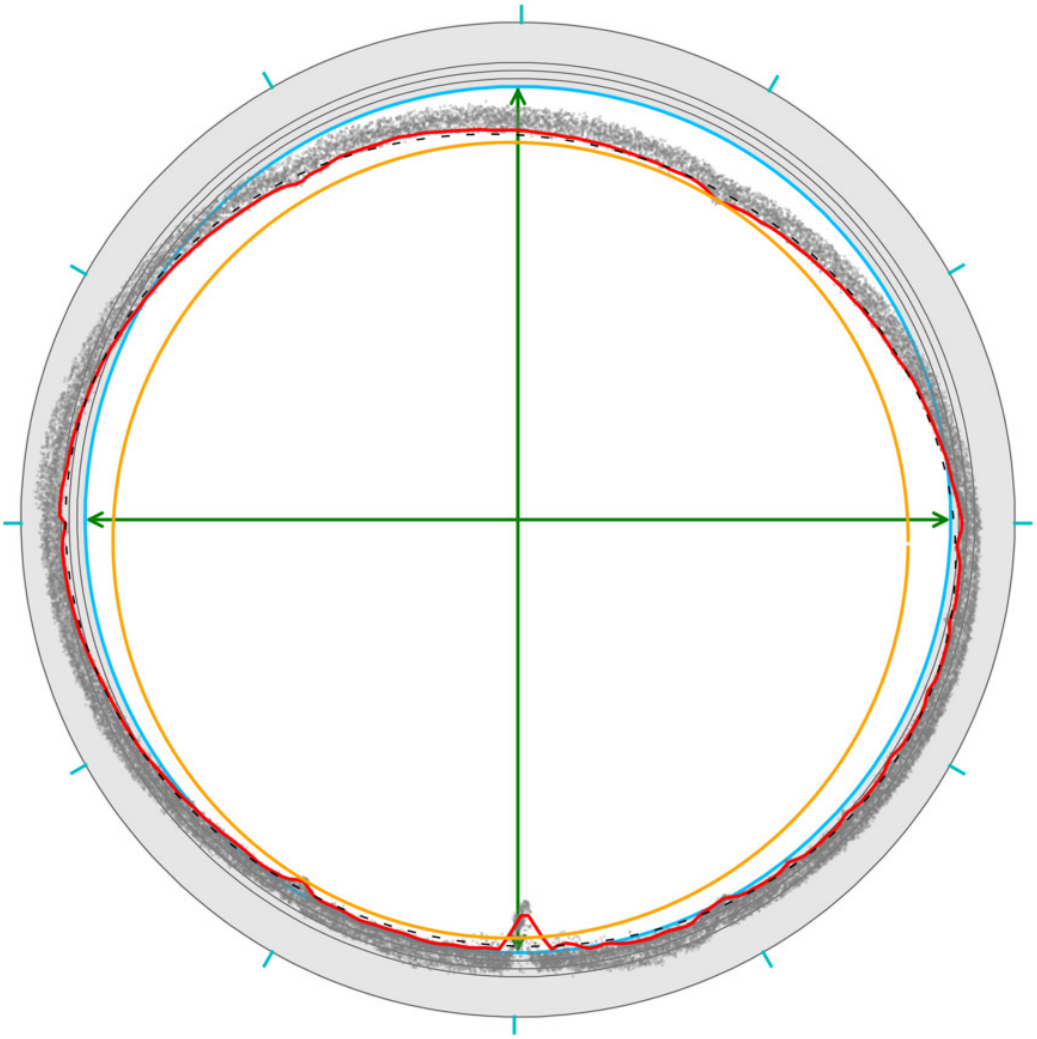
```
Footage    :  124 ft
Width      :  112.5" | 108.0"
Height     :  102.5" | 108.0"

Area       :  8819 sq in
Perimeter  :  337.5 in
Ovality    :  5.3%

Interior Diameter : 99.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 125.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



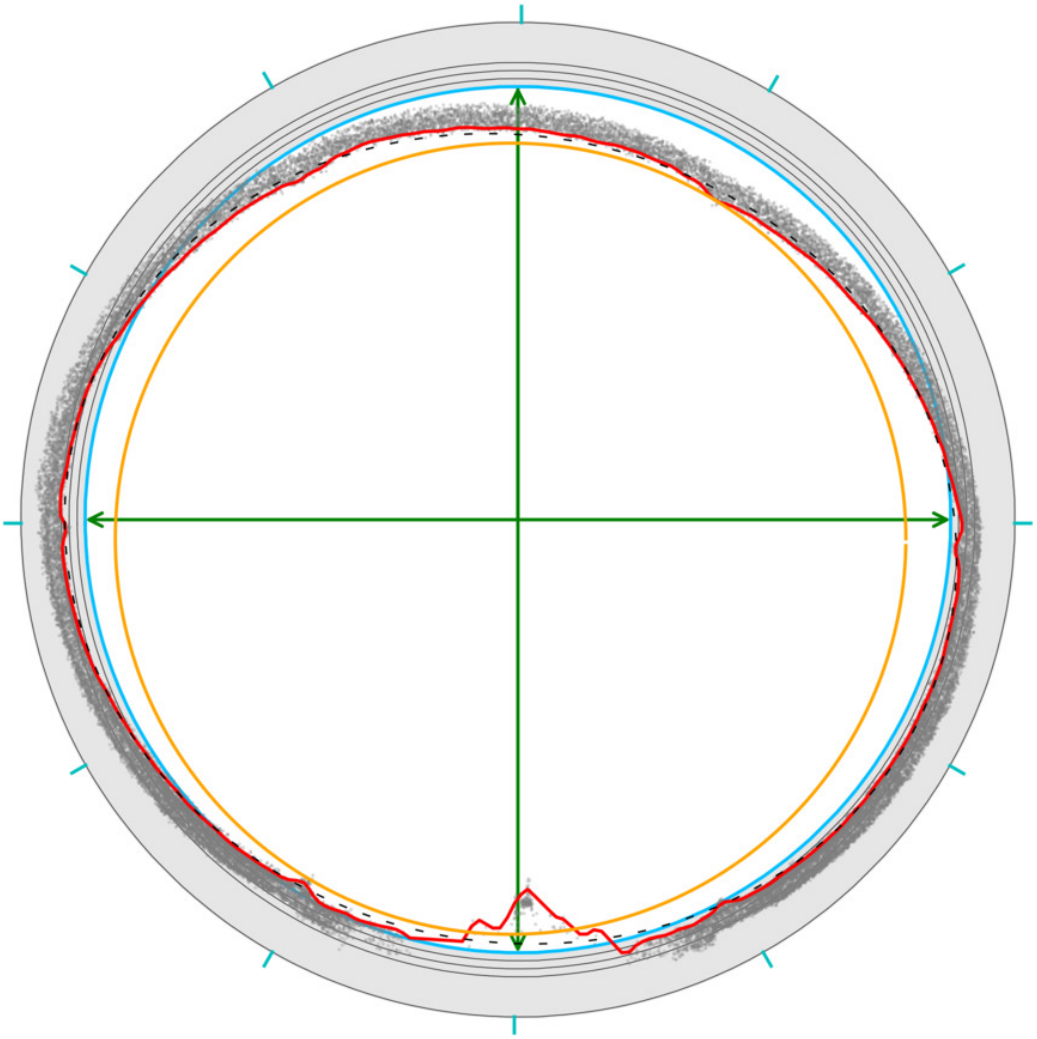
```
Footage   :  125 ft
Width     :  112.6" | 108.0"
Height    :  102.5" | 108.0"

Area      :  8814 sq in
Perimeter :  340.8 in
Ovality   :  5.1%

Interior Diameter : 99.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 126.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



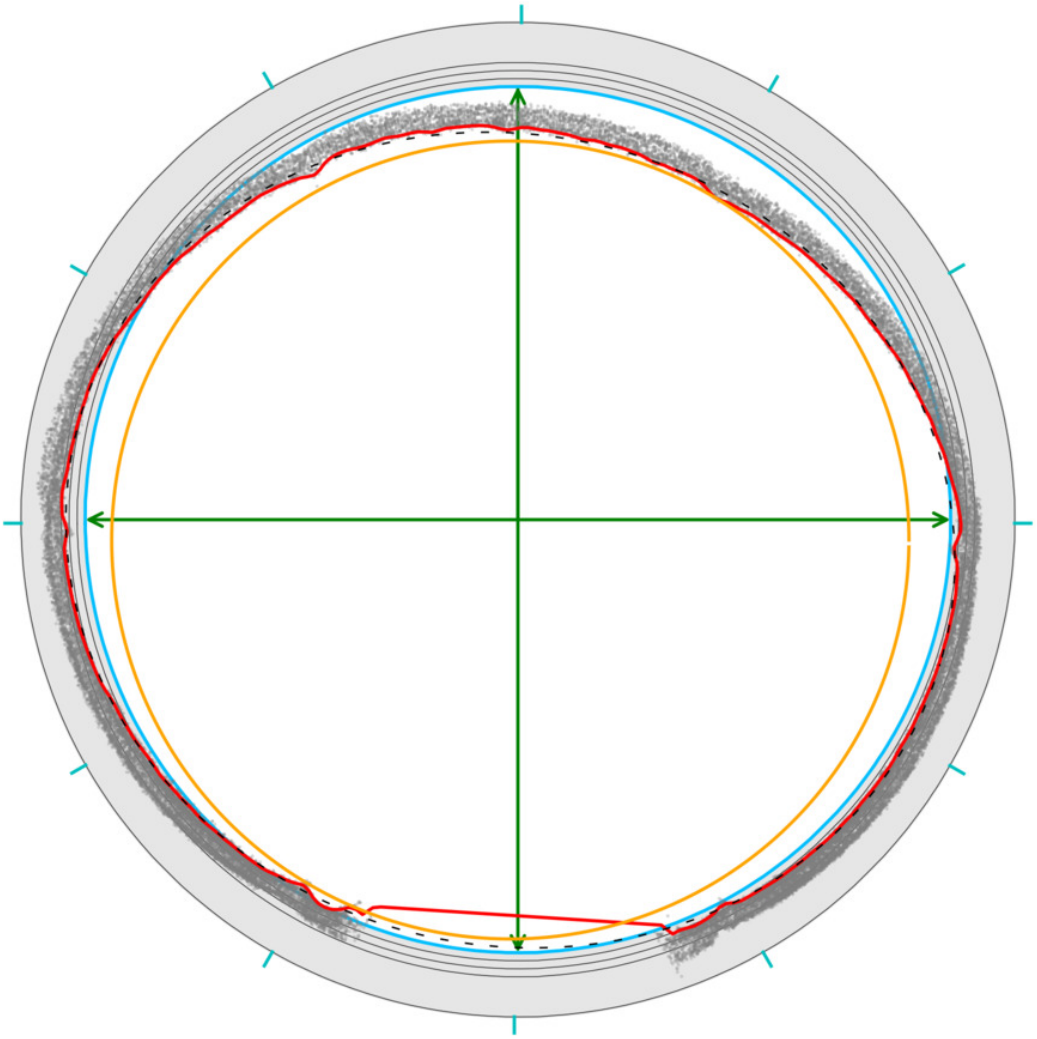
```
Footage   :  126 ft
Width     :  112.5" | 108.0"
Height    :  102.8" | 108.0"

Area      :  8796 sq in
Perimeter :  344.6 in
Ovality   :  5.4%

Interior Diameter : 98.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 127.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



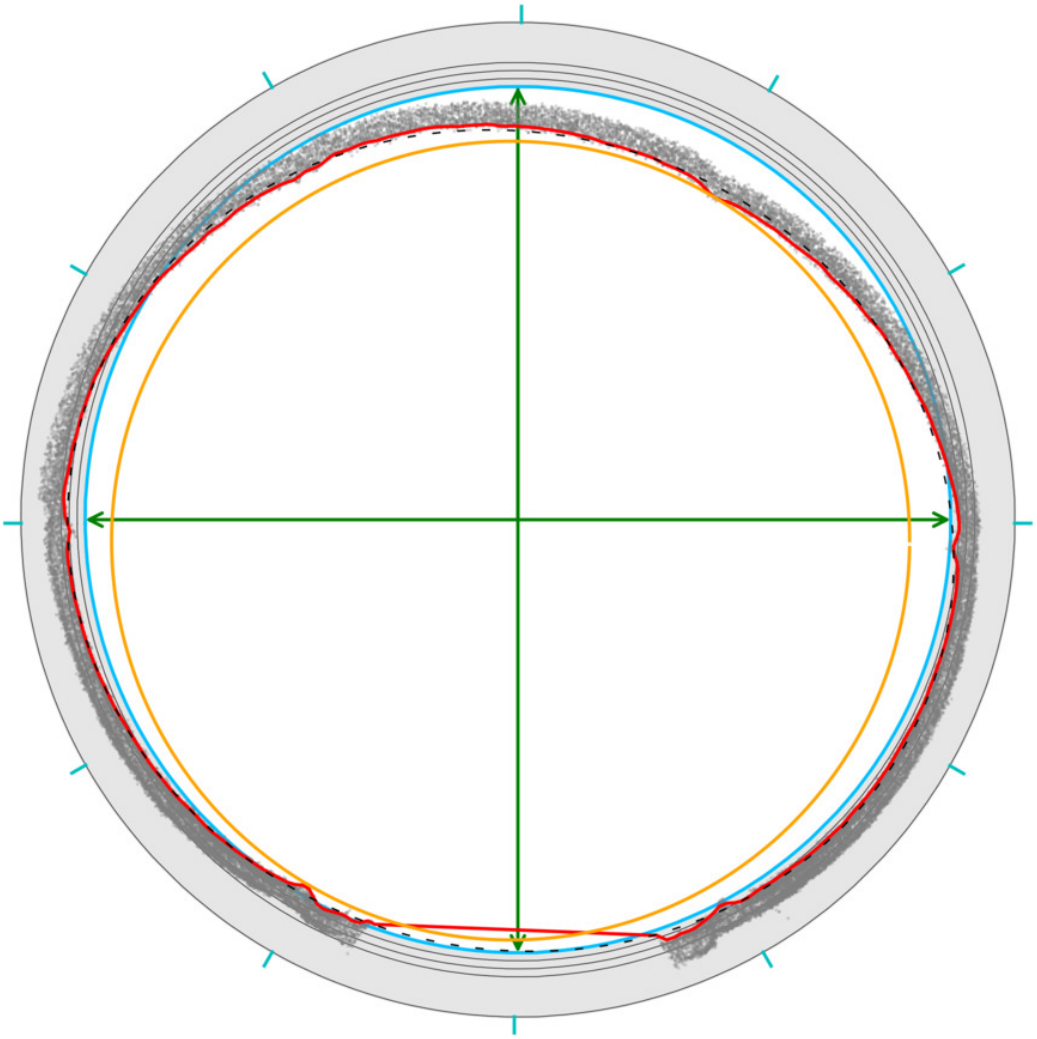
```
Footage    :  127 ft
Width      :  112.2" | 108.0"
Height     :  102.8" | 108.0"

Area       :  8735 sq in
Perimeter  :  336.7 in
Ovality    :  5.0%

Interior Diameter : 99.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 128.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



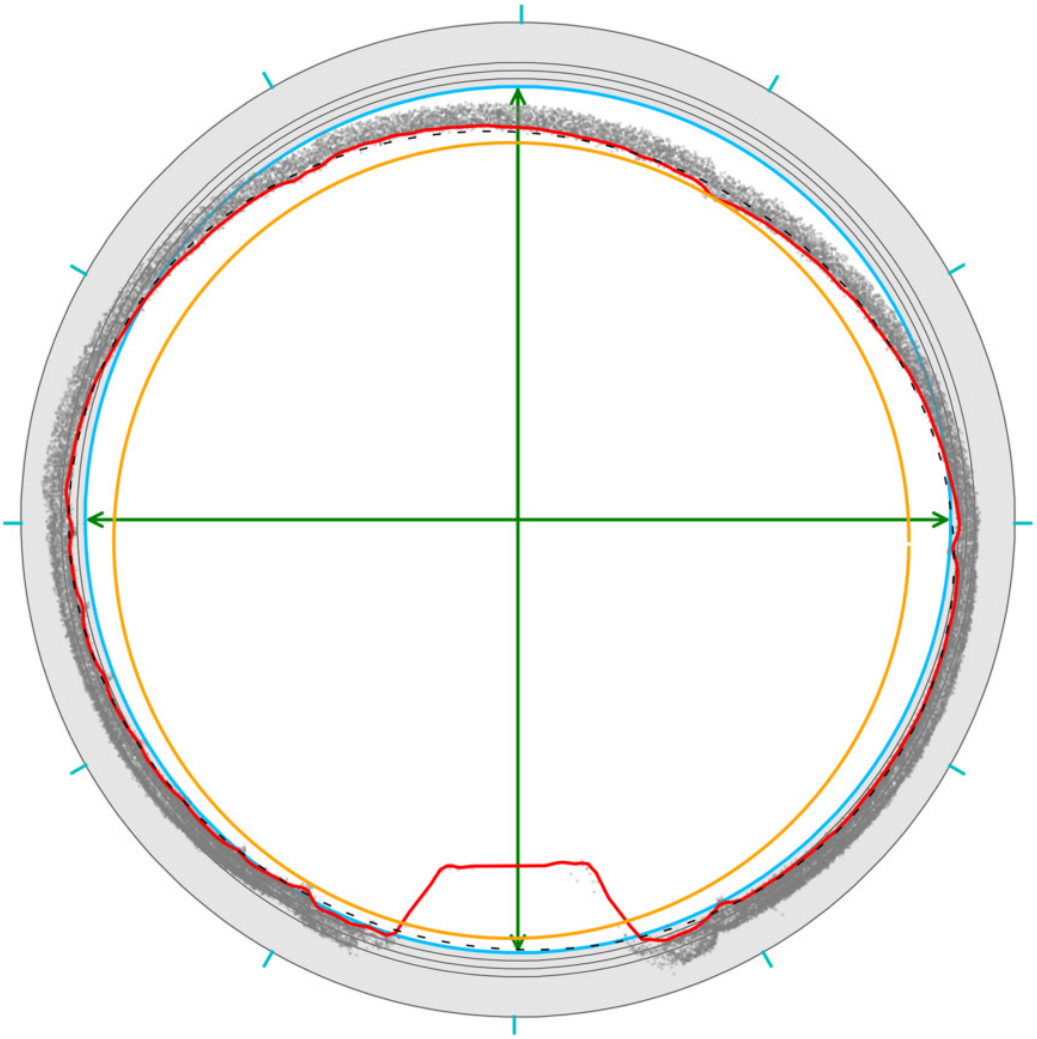
```
Footage   :  128 ft
Width     :  111.8" | 108.0"
Height    :  103.0" | 108.0"

Area      :  8814 sq in
Perimeter :  336.6 in
Ovality   :  4.5%

Interior Diameter : 99.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 129.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



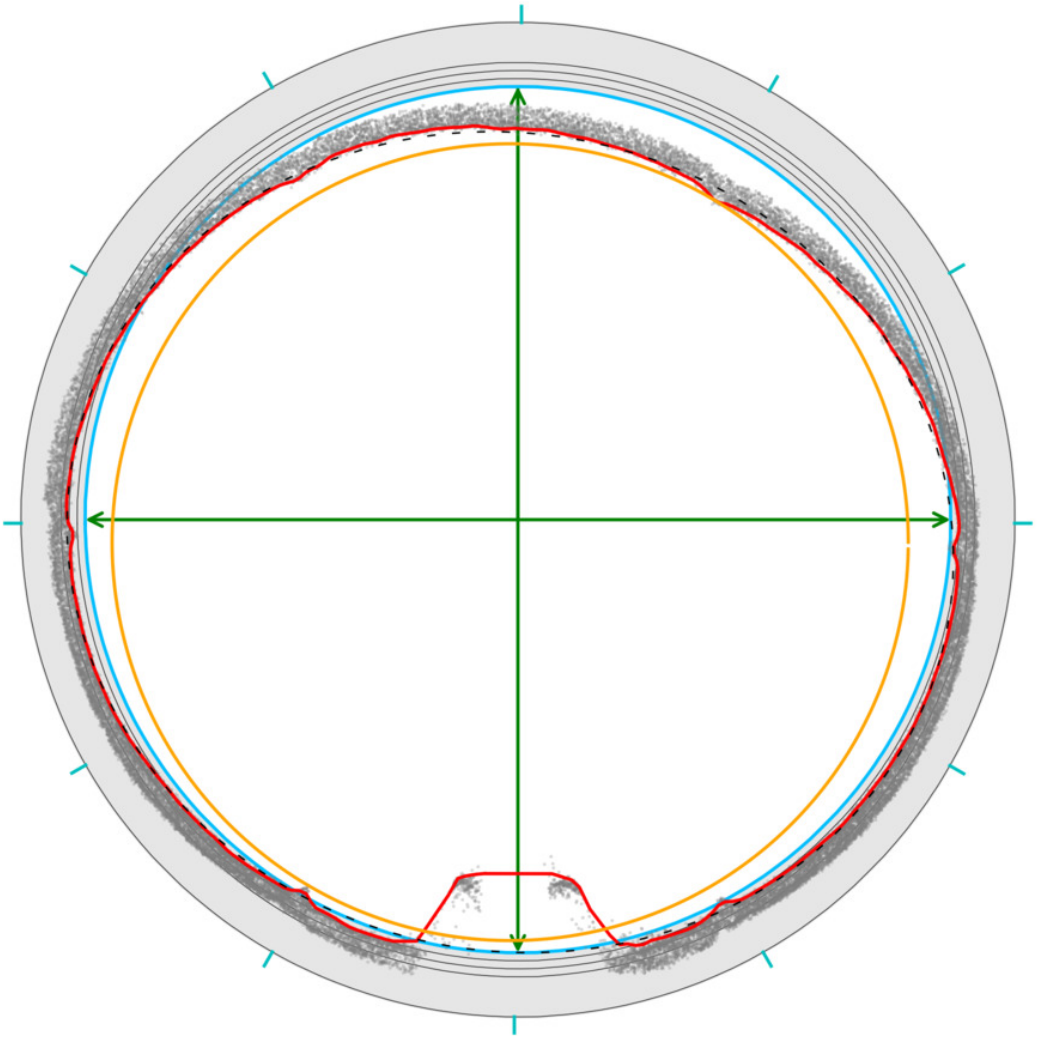
```
Footage   :  129 ft
Width     :  111.5" | 108.0"
Height    :  102.9" | 108.0"

Area      :  8610 sq in
Perimeter :  345.8 in
Ovality   :  4.5%

Interior Diameter : 99.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 130.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



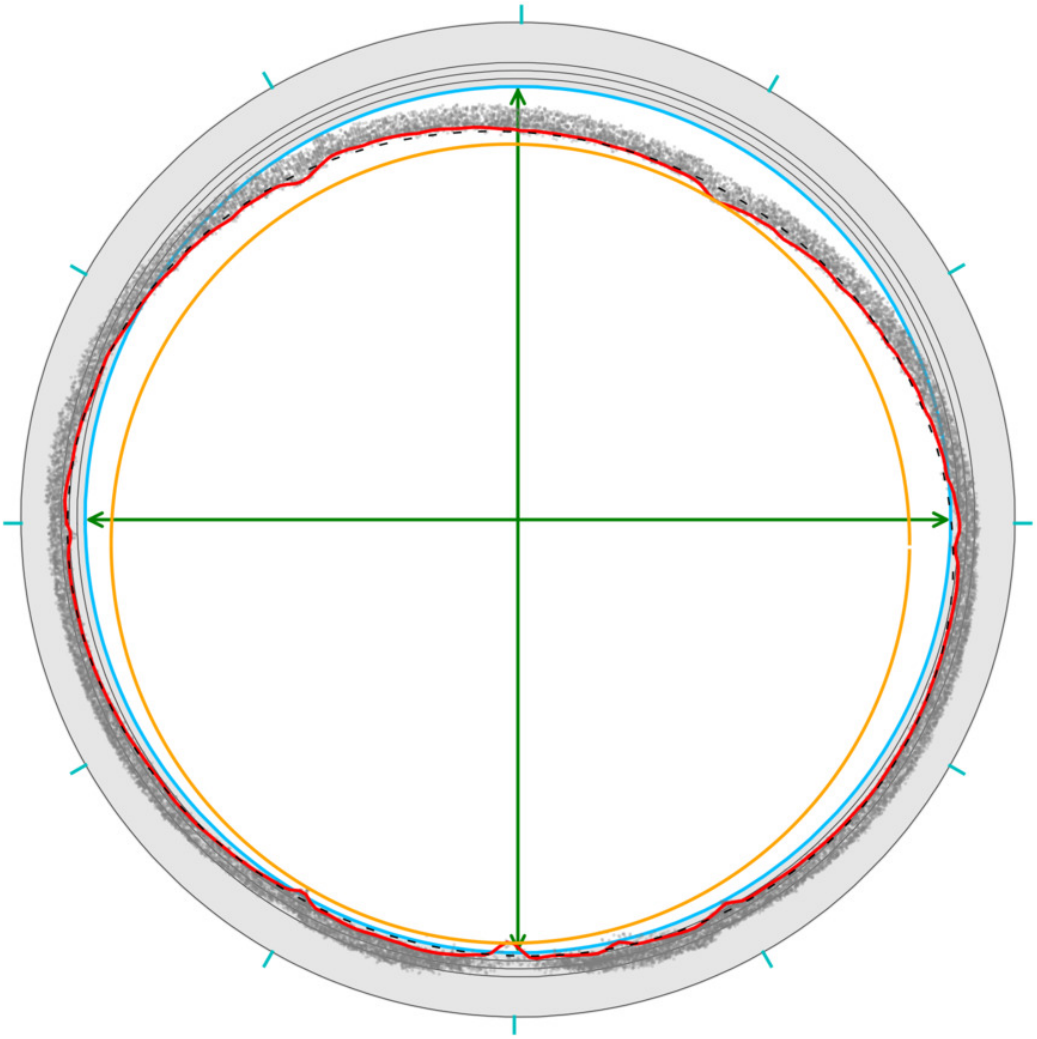
```
Footage   :  130 ft
Width     :  111.4" | 108.0"
Height    :  102.7" | 108.0"

Area      :  8713 sq in
Perimeter :  345.4 in
Ovality   :  4.4%

Interior Diameter : 99.4"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 131.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



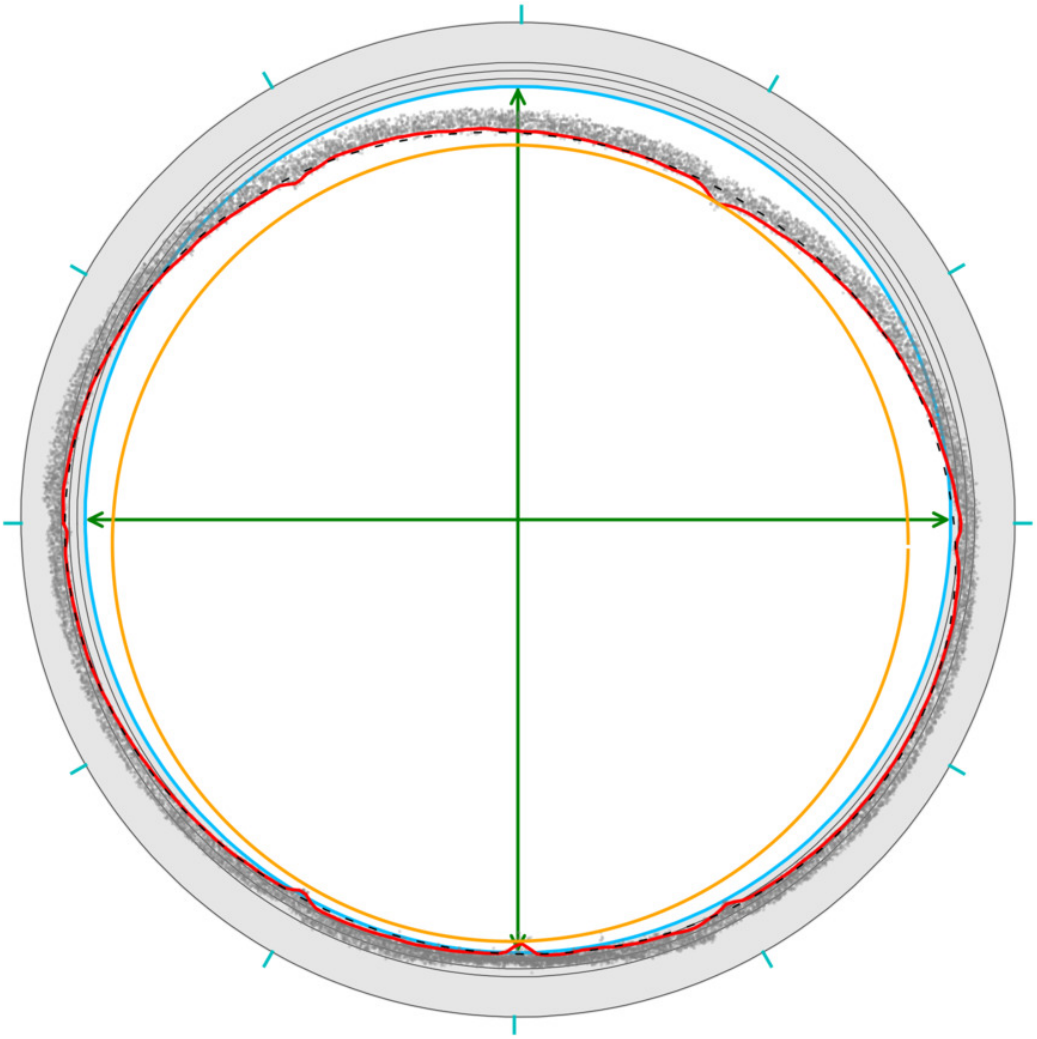
```
Footage   :  131 ft
Width     :  111.7" | 108.0"
Height    :  102.6" | 108.0"

Area      :  8908 sq in
Perimeter :  338.8 in
Ovality   :  4.1%

Interior Diameter : 99.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 132.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



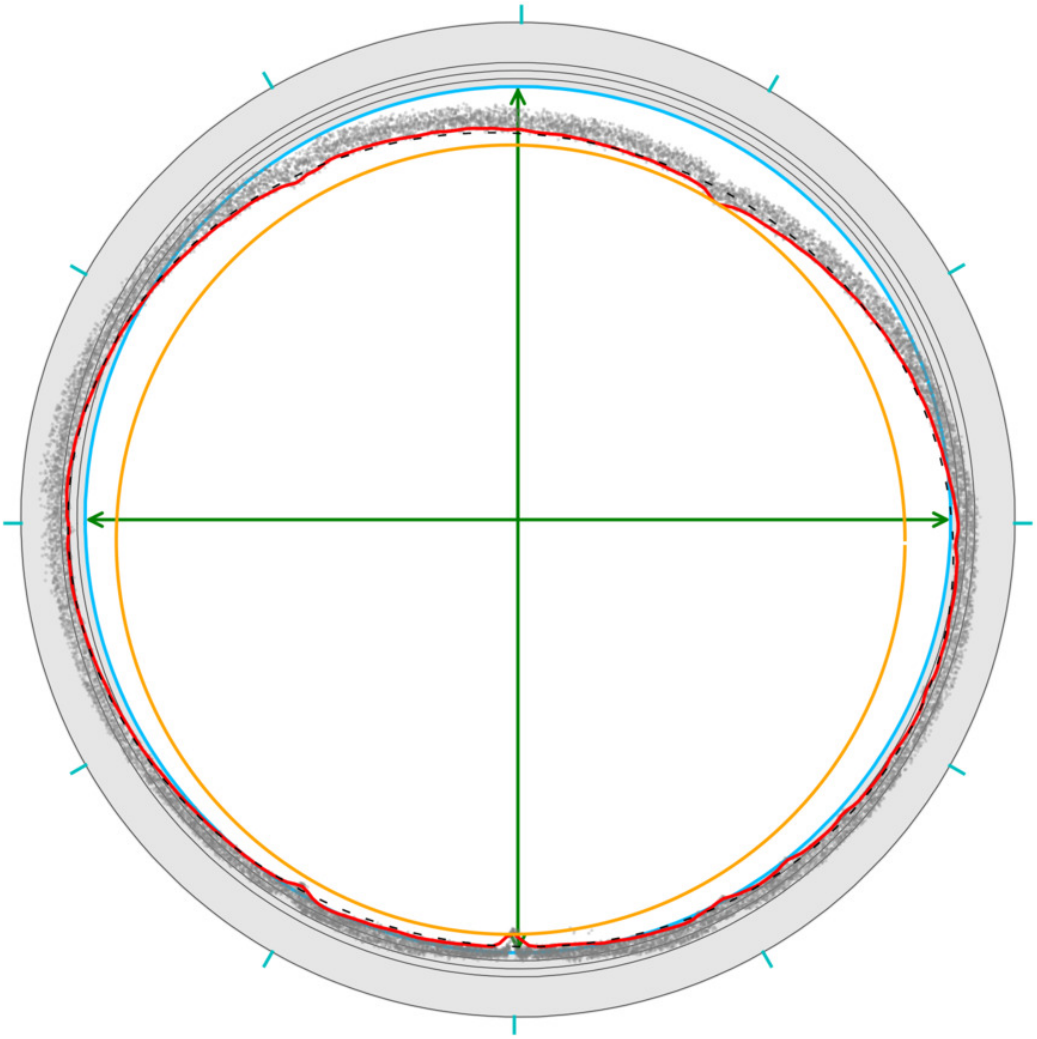
```
Footage   :  132 ft
Width     :  112.0" | 108.0"
Height    :  102.5" | 108.0"

Area      :  8927 sq in
Perimeter :  338.1 in
Ovality   :  4.5%

Interior Diameter : 99.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 133.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



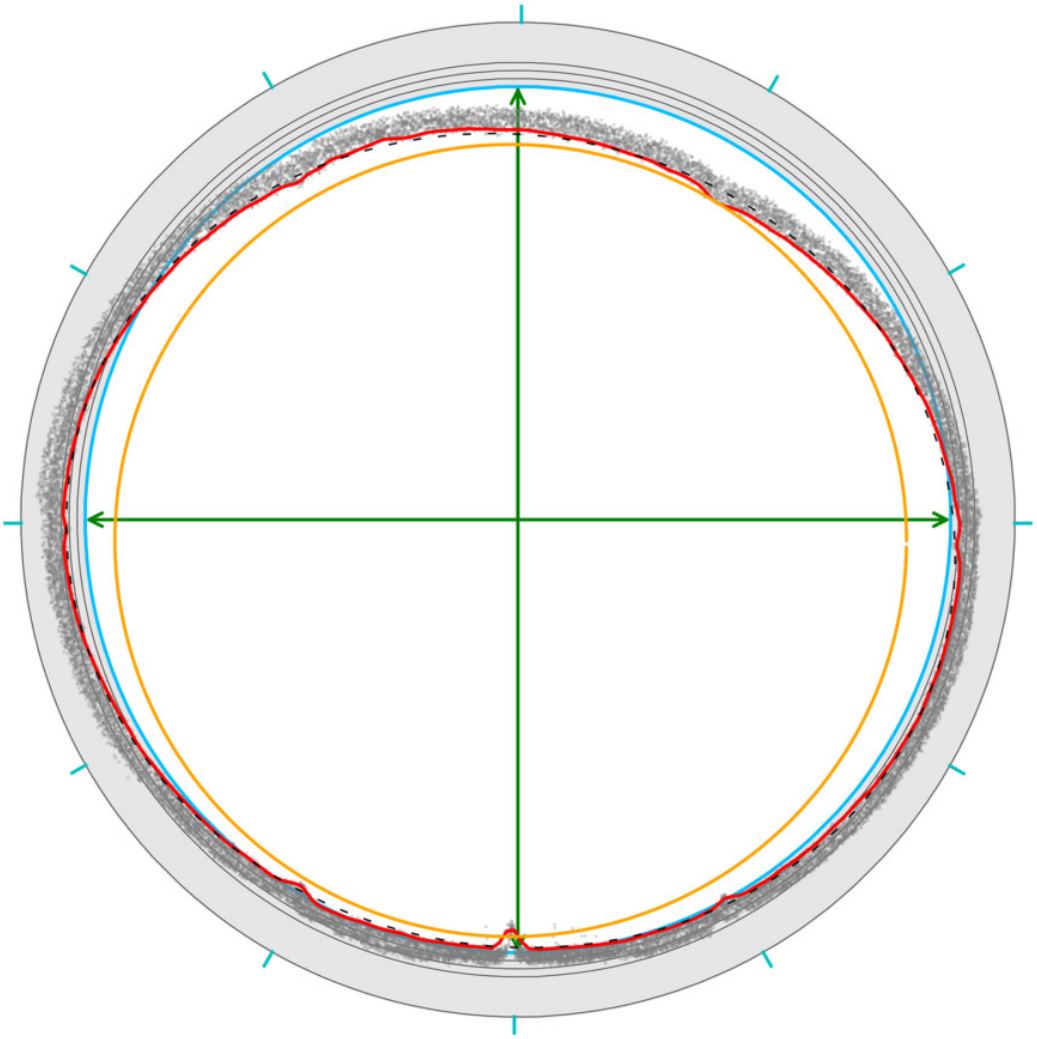
```
Footage   :  133 ft
Width     :  111.2" | 108.0"
Height    :  102.6" | 108.0"

Area      :  8791 sq in
Perimeter :  335.6 in
Ovality   :  4.6%

Interior Diameter : 98.4"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 134.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



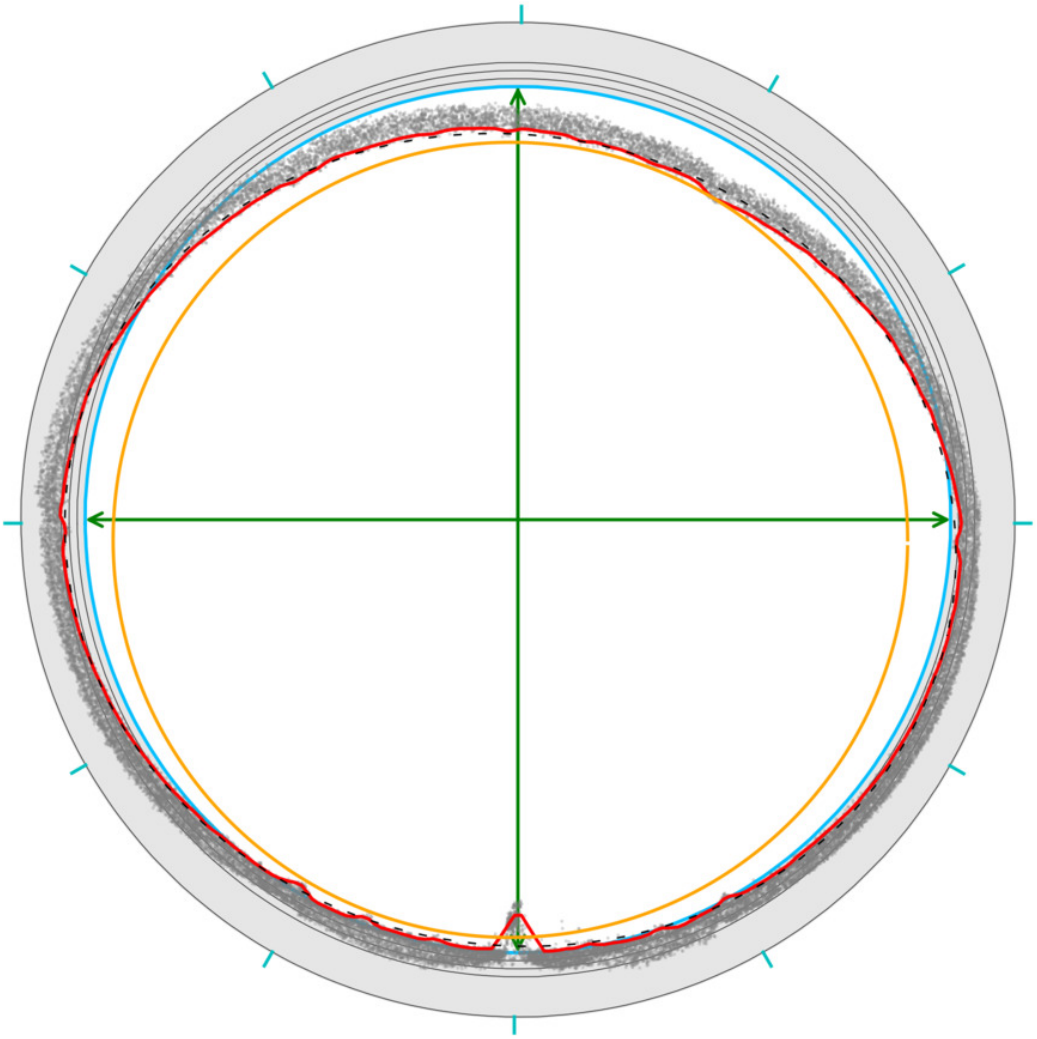
```
Footage   :  134 ft
Width     :  111.9" | 108.0"
Height    :  102.6" | 108.0"

Area      :  8822 sq in
Perimeter :  337.3 in
Ovality   :  4.8%

Interior Diameter : 98.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 135.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



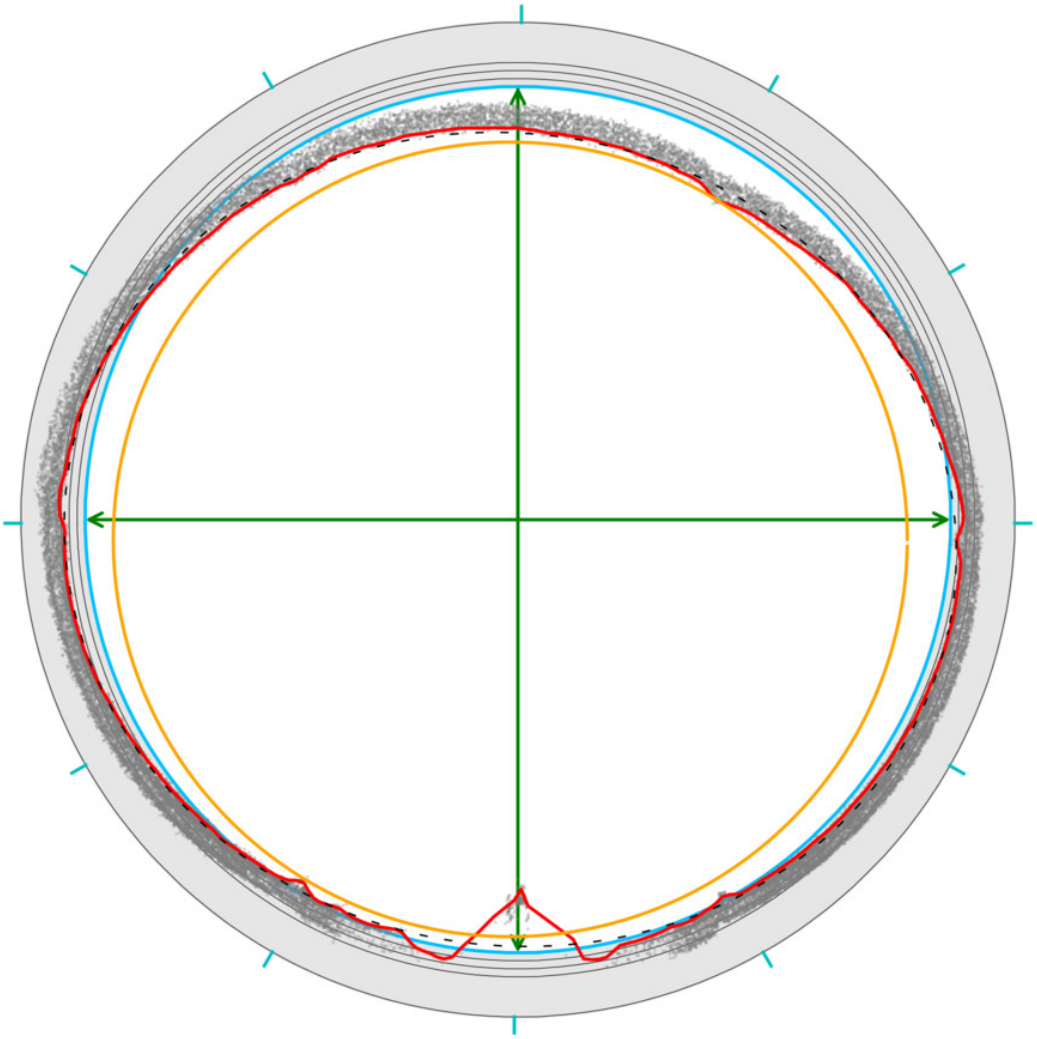
```
Footage   :  135 ft
Width     :  112.5" | 108.0"
Height    :  102.6" | 108.0"

Area      :  8829 sq in
Perimeter :  340.8 in
Ovality   :  4.9%

Interior Diameter : 99.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 136.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



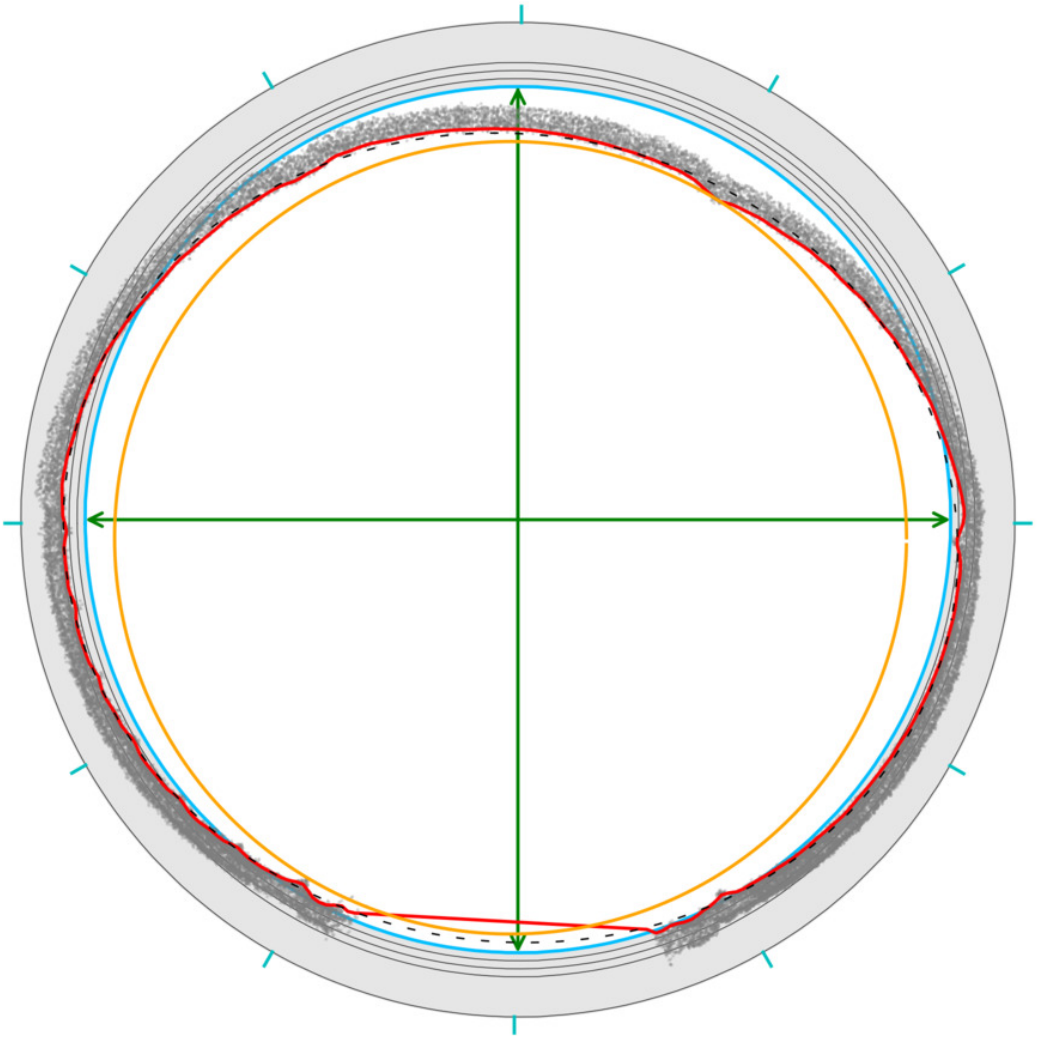
```
Footage   :  136 ft
Width     :  112.8" | 108.0"
Height    :  102.8" | 108.0"

Area      :  8830 sq in
Perimeter :  345.8 in
Ovality   :  4.9%

Interior Diameter : 99.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 137.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



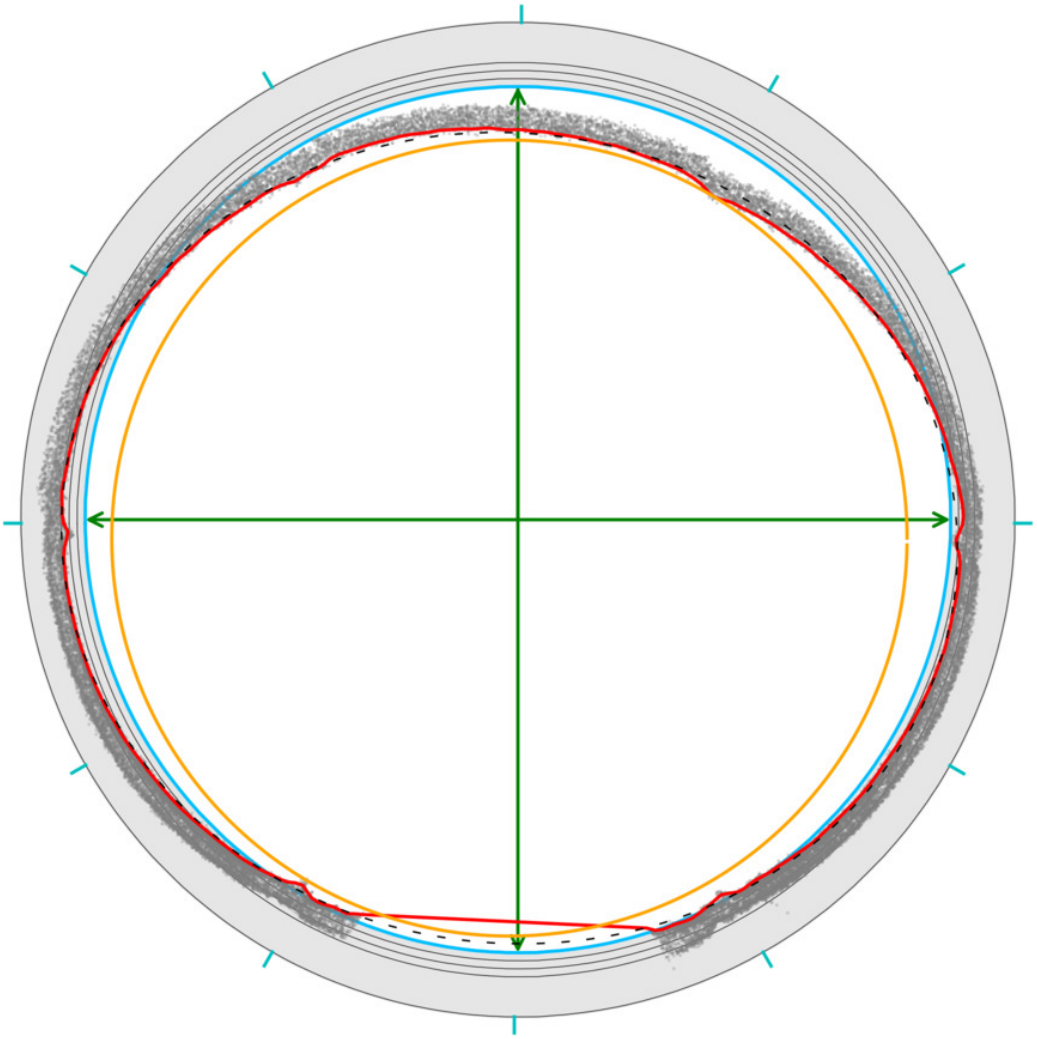
```
Footage   :  137 ft
Width     :  112.6" | 108.0"
Height    :  102.7" | 108.0"

Area      :  8773 sq in
Perimeter :  335.9 in
Ovality   :  5.2%

Interior Diameter : 98.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 138.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



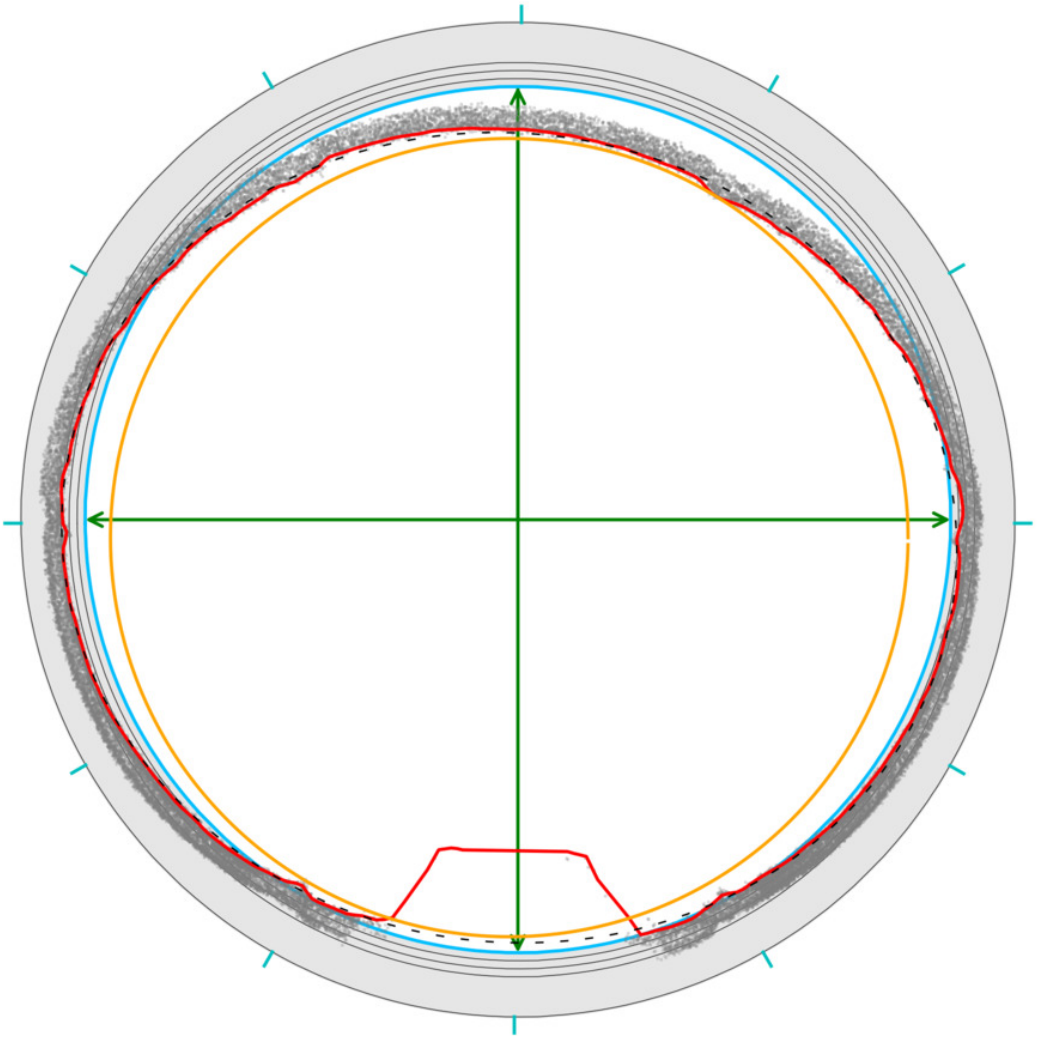
```
Footage   :  138 ft
Width     :  112.5" | 108.0"
Height    :  102.6" | 108.0"

Area      :  8804 sq in
Perimeter :  336.1 in
Ovality   :  5.1%

Interior Diameter : 99.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 139.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



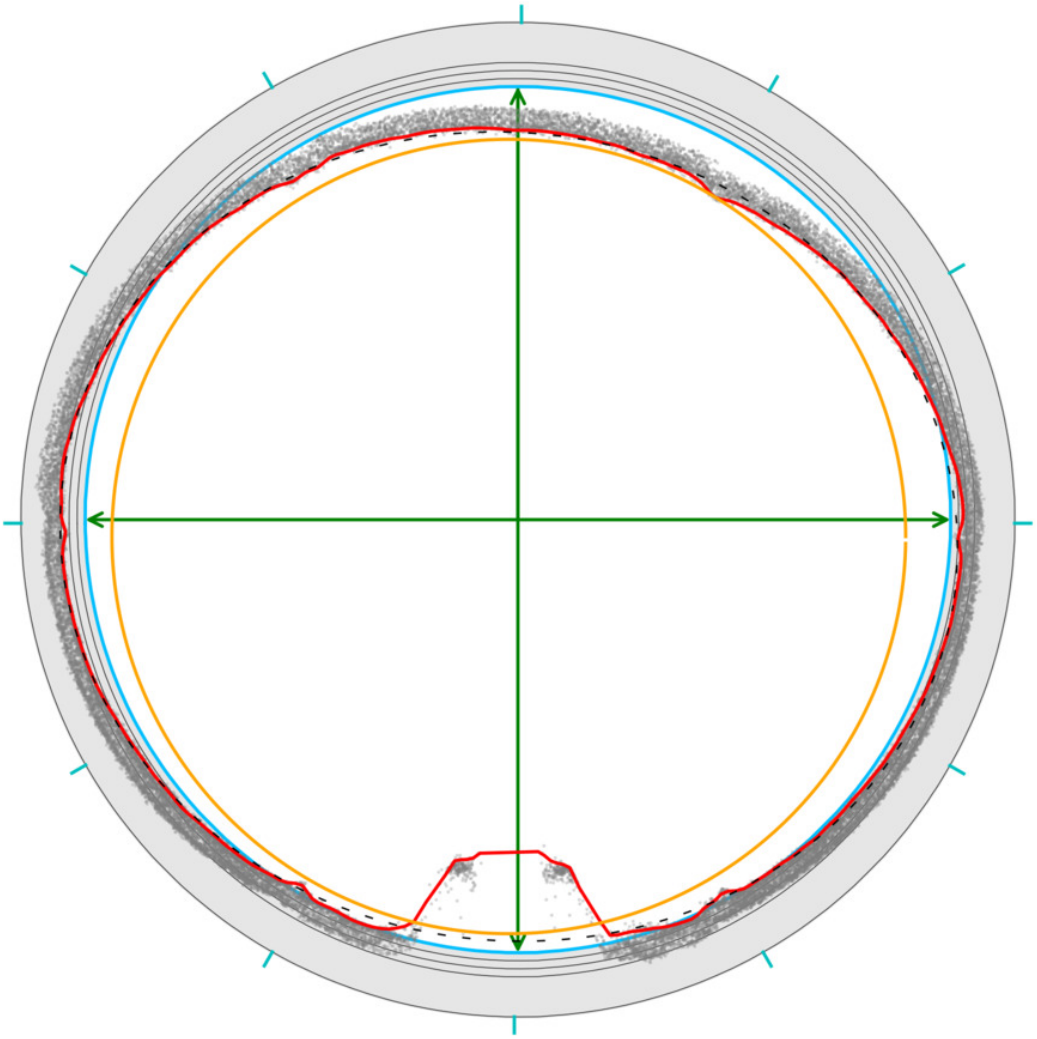
```
Footage   :  139 ft
Width     :  112.5" | 108.0"
Height    :  102.7" | 108.0"

Area      :  8591 sq in
Perimeter :  346.0 in
Ovality   :  5.2%

Interior Diameter : 99.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 140.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



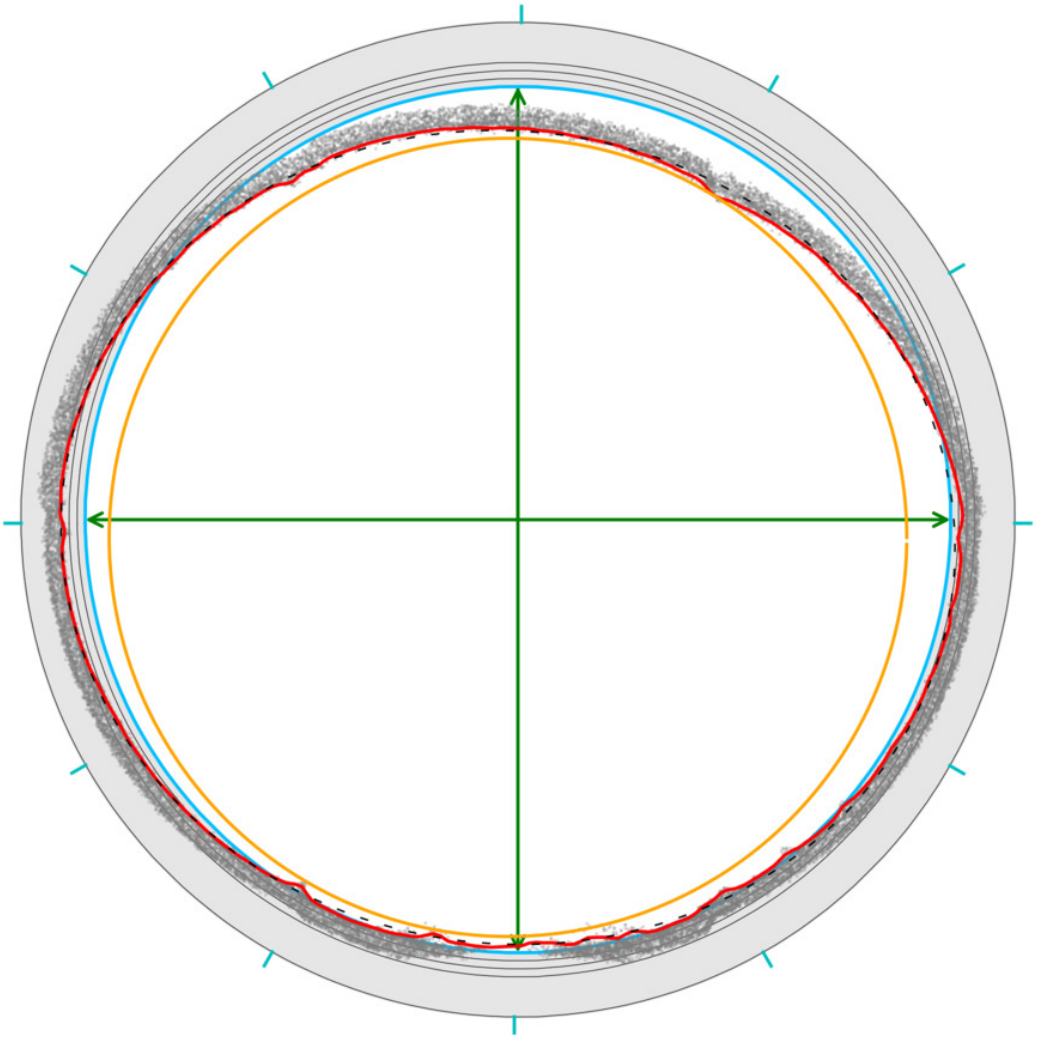
```
Footage   :  140 ft
Width     :  112.6" | 108.0"
Height    :  102.6" | 108.0"

Area      :  8681 sq in
Perimeter :  346.4 in
Ovality   :  5.3%

Interior Diameter : 99.1"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 141.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



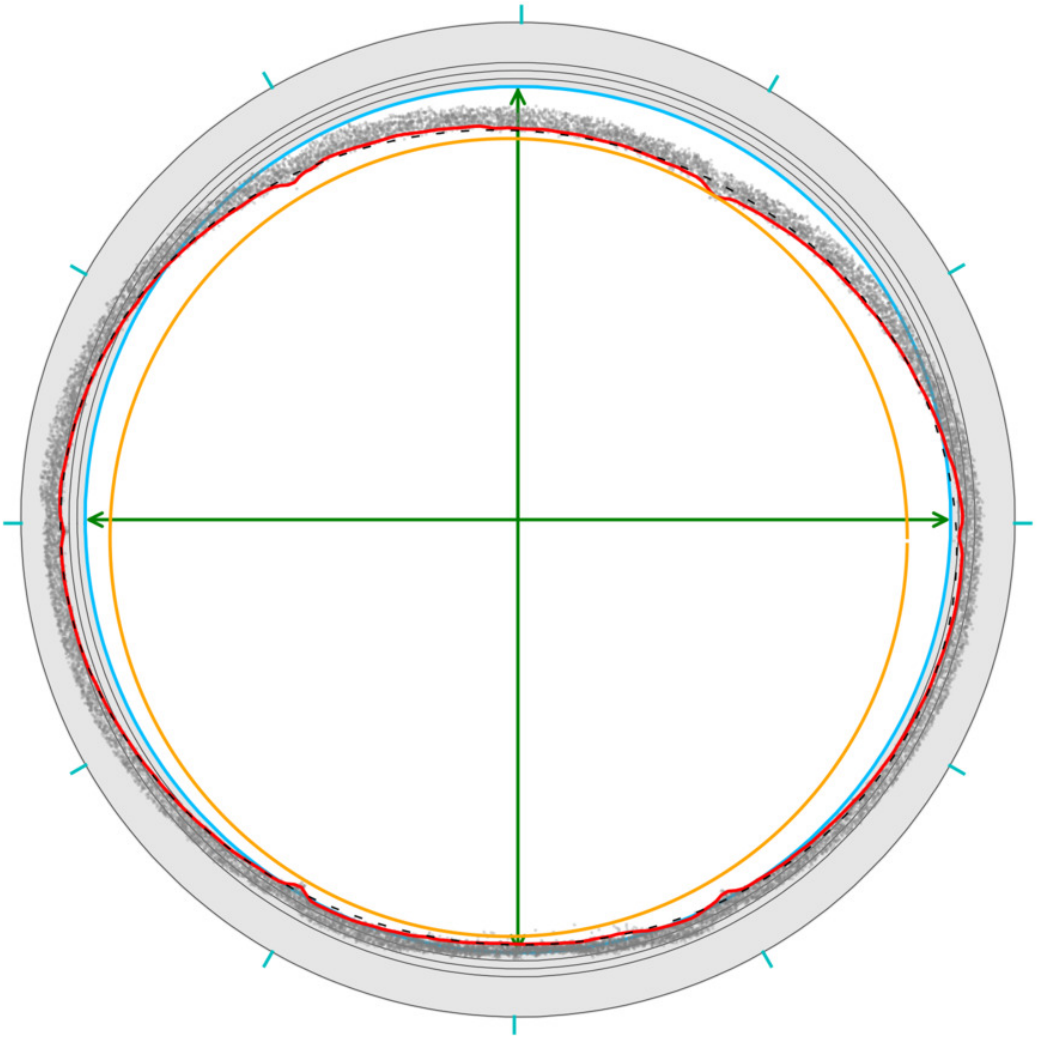
```
Footage   :  141 ft
Width     :  112.6" | 108.0"
Height    :  102.8" | 108.0"

Area      :  8879 sq in
Perimeter :  337.3 in
Ovality   :  4.8%

Interior Diameter : 99.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 142.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



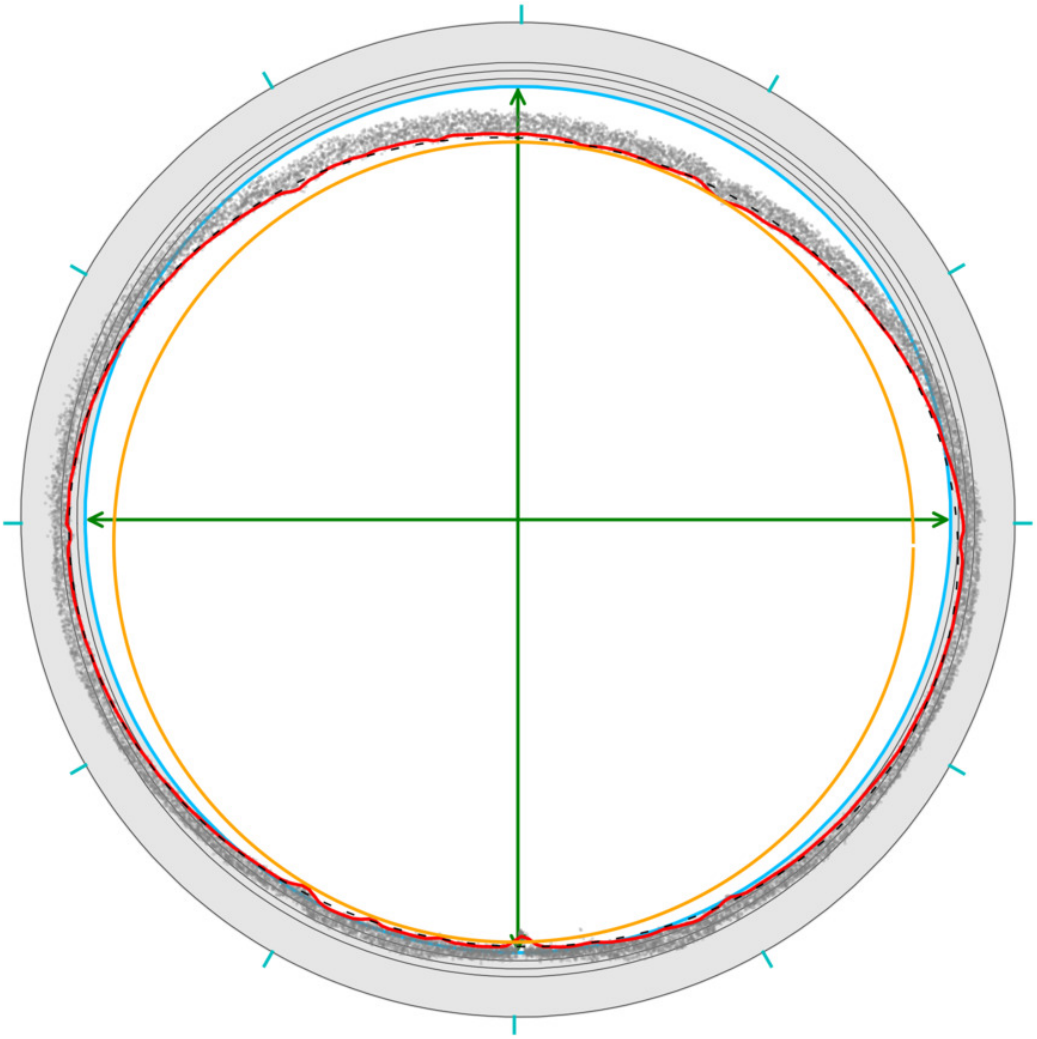
```
Footage    :  142 ft
Width      :  112.7" | 108.0"
Height     :  102.8" | 108.0"

Area       :  8912 sq in
Perimeter  :  337.2 in
Ovality    :  5.0%

Interior Diameter : 99.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 143.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



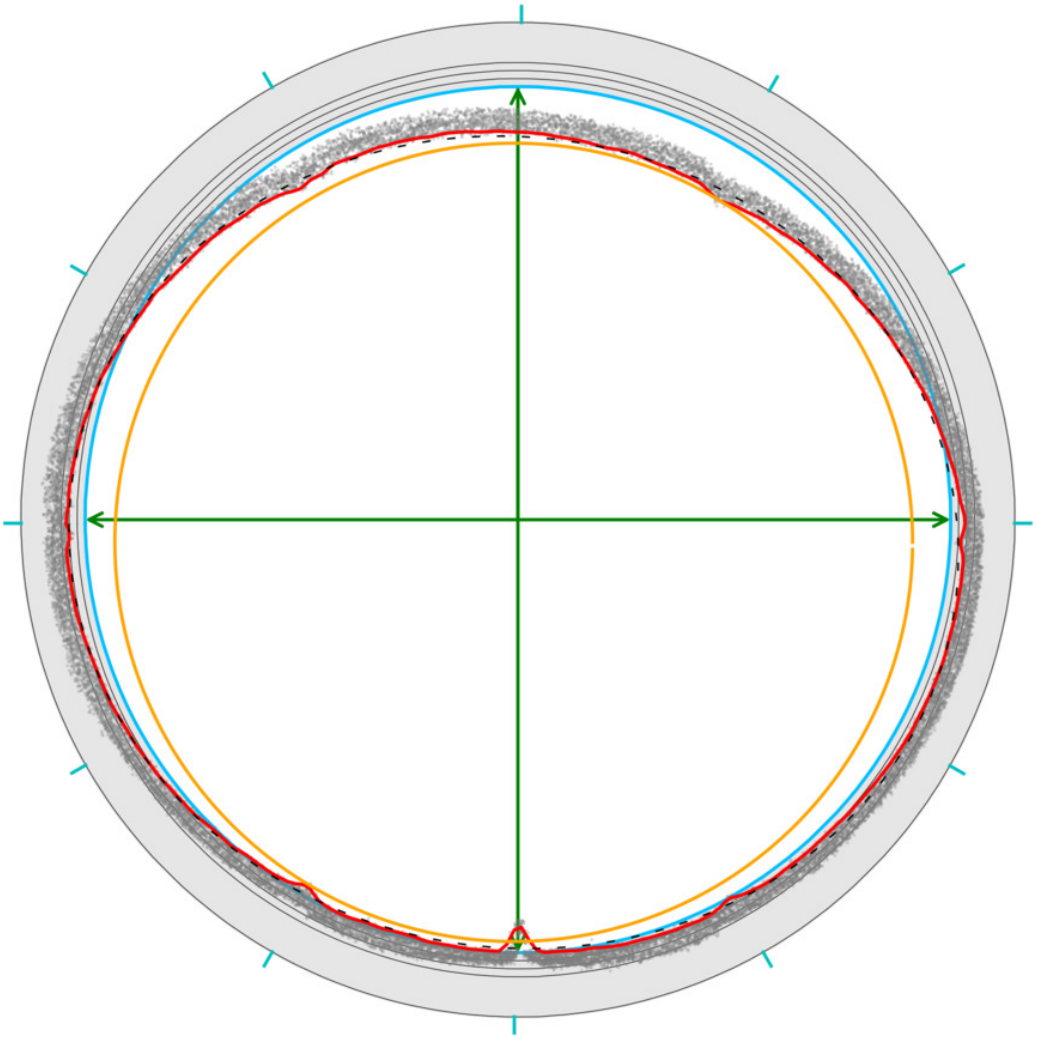
```
Footage   :  143 ft
Width     :  111.9" | 108.0"
Height    :  102.1" | 108.0"

Area      :  8781 sq in
Perimeter :  335.5 in
Ovality   :  4.9%

Interior Diameter : 99.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 144.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



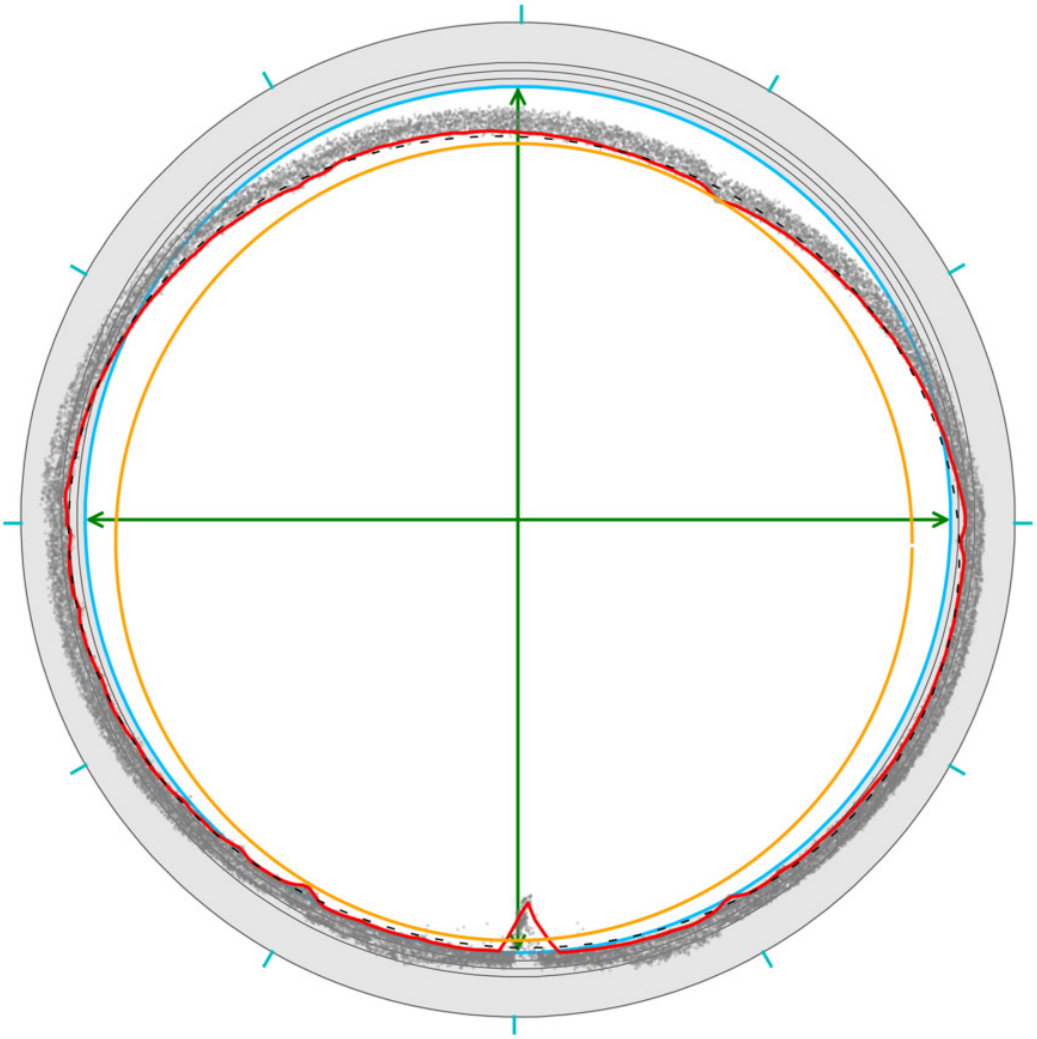
```
Footage   :  144 ft
Width     :  112.2" | 108.0"
Height    :  102.3" | 108.0"

Area      :  8817 sq in
Perimeter :  338.3 in
Ovality   :  4.8%

Interior Diameter : 99.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 145.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



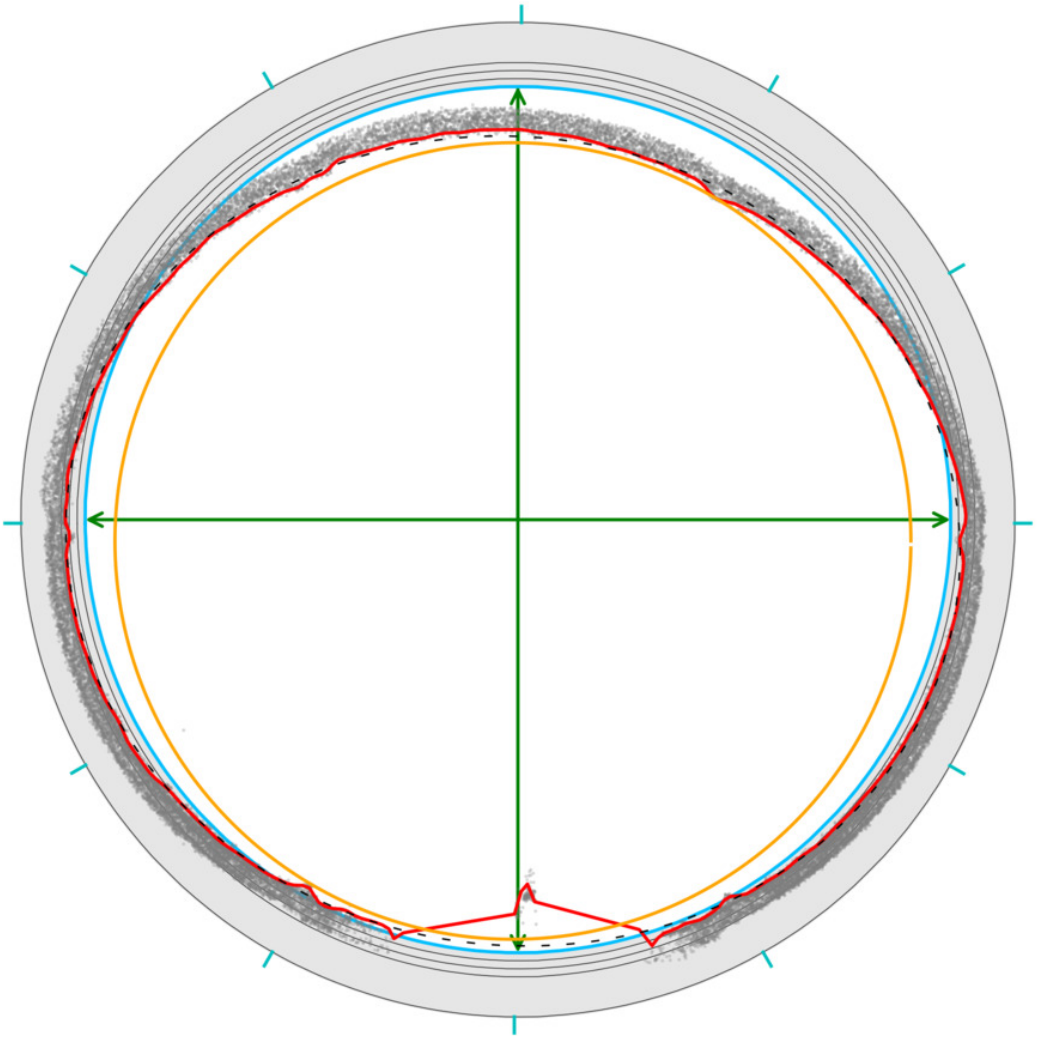
```
Footage   :  145 ft
Width     :  112.3" | 108.0"
Height    :  102.3" | 108.0"

Area      :  8819 sq in
Perimeter :  342.7 in
Ovality   :  4.9%

Interior Diameter : 99.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 146.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



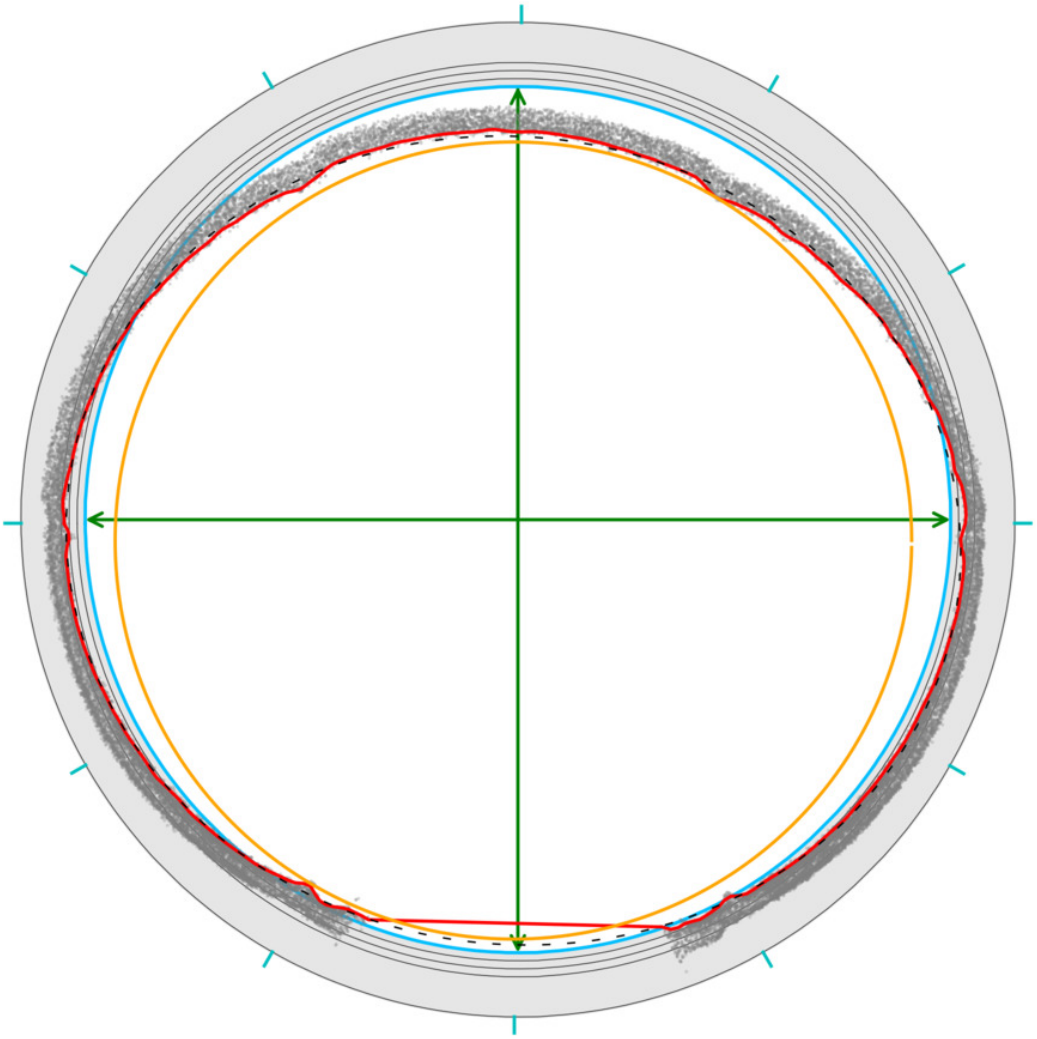
```
Footage   :  146 ft
Width     :  112.4" | 108.0"
Height    :  102.6" | 108.0"

Area      :  8764 sq in
Perimeter :  343.5 in
Ovality   :  5.1%

Interior Diameter : 99.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 147.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



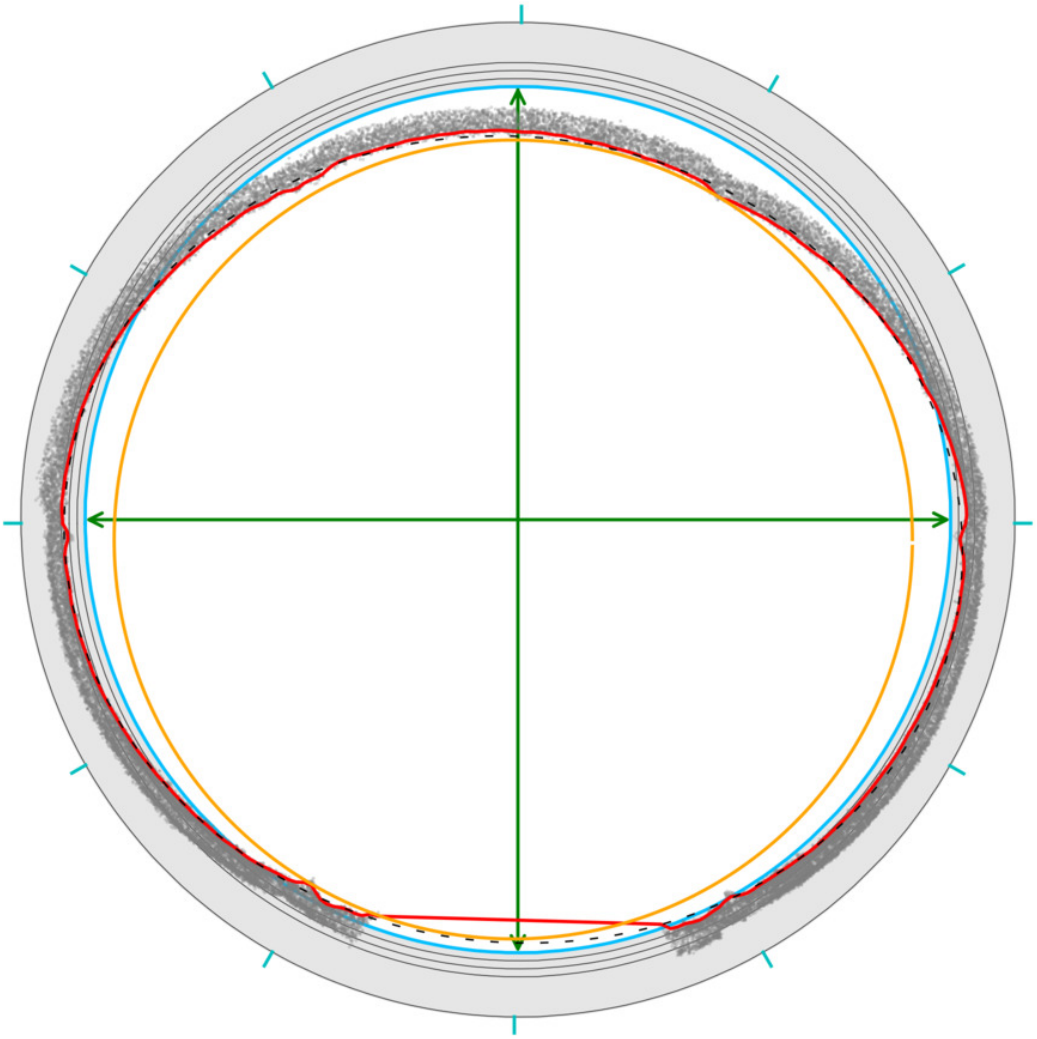
```
Footage   :  147 ft
Width     :  112.7" | 108.0"
Height    :  102.4" | 108.0"

Area      :  8767 sq in
Perimeter :  335.9 in
Ovality   :  5.2%

Interior Diameter : 99.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 148.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



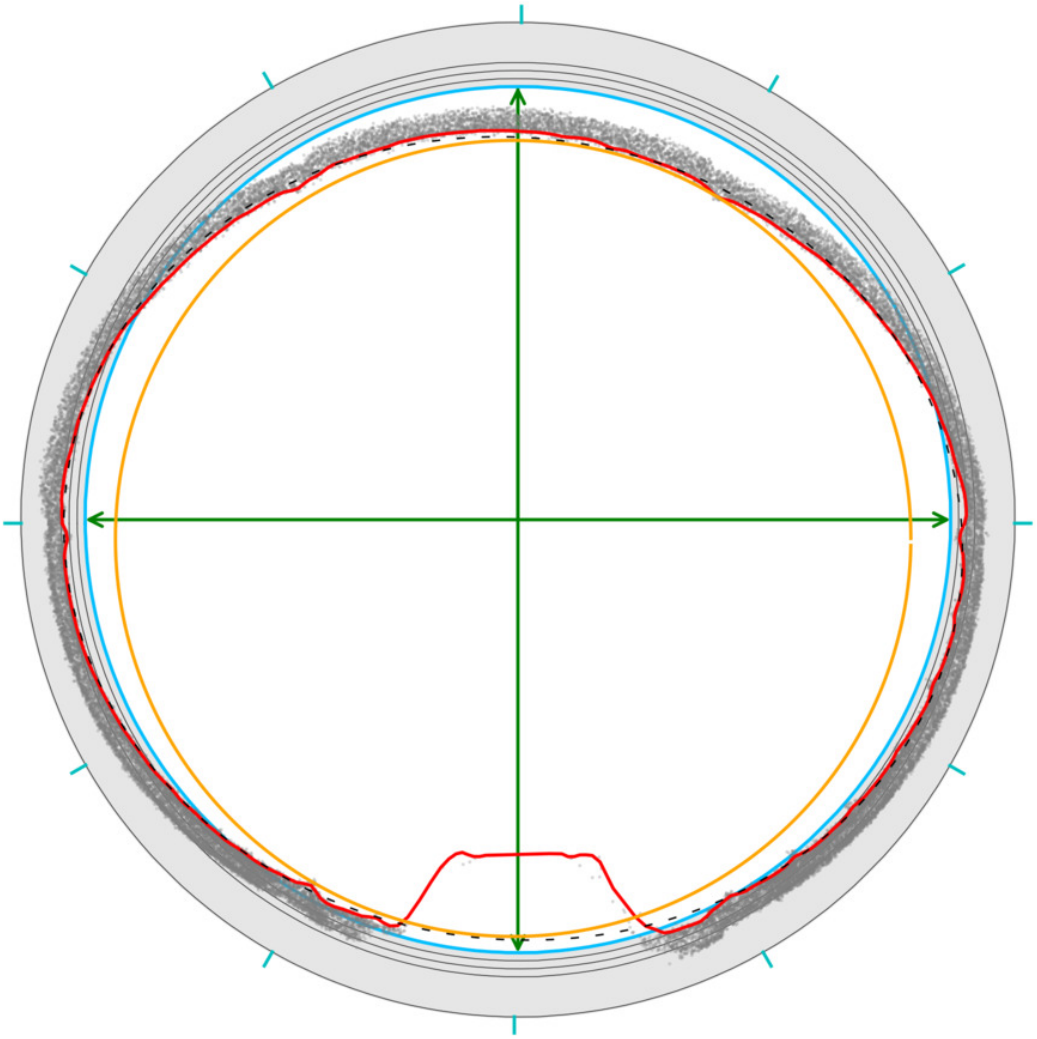
```
Footage   :  148 ft
Width     :  112.9" | 108.0"
Height    :  102.4" | 108.0"

Area      :  8778 sq in
Perimeter :  336.1 in
Ovality   :  5.5%

Interior Diameter : 99.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 149.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



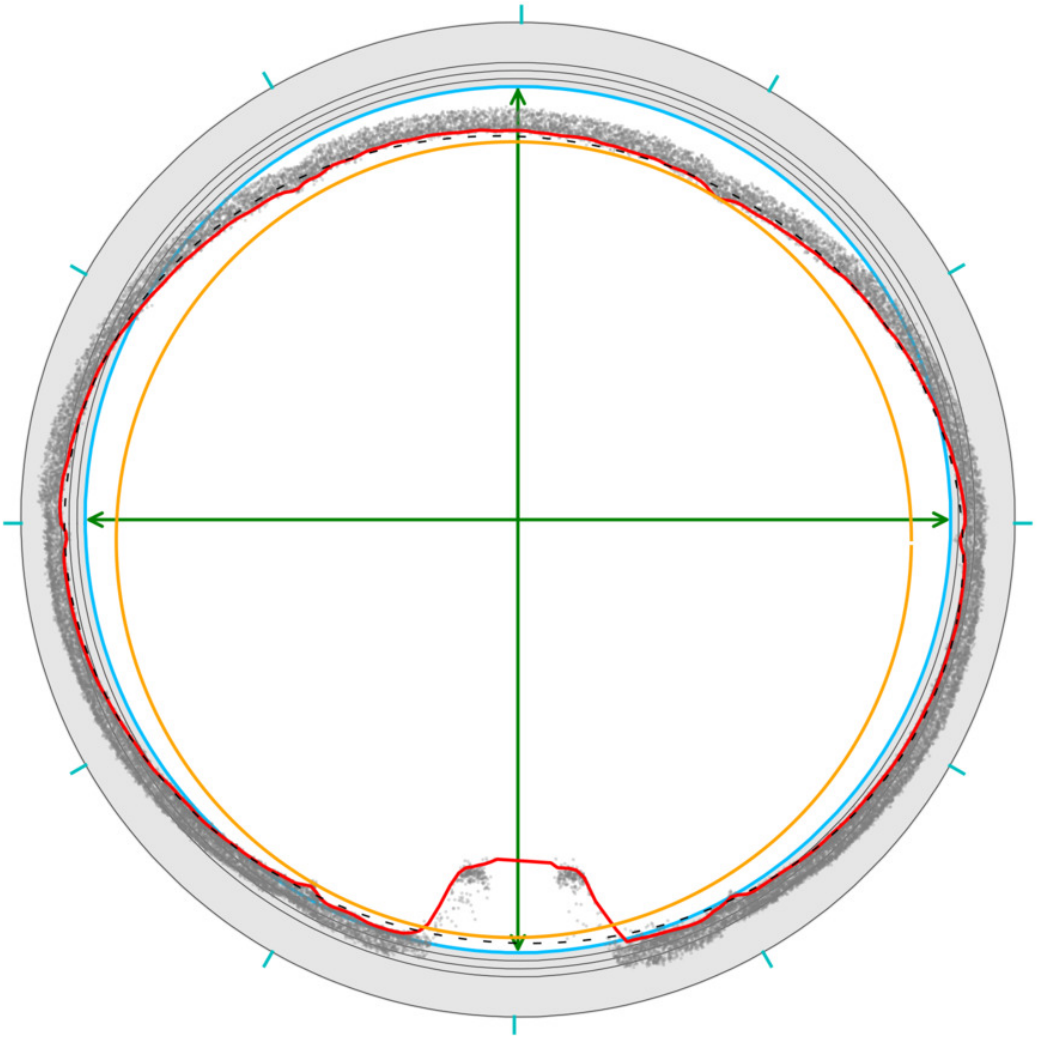
```
Footage   :  149 ft
Width     :  112.9" | 108.0"
Height    :  102.4" | 108.0"

Area      :  8584 sq in
Perimeter :  345.4 in
Ovality   :  5.8%

Interior Diameter : 99.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 150.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



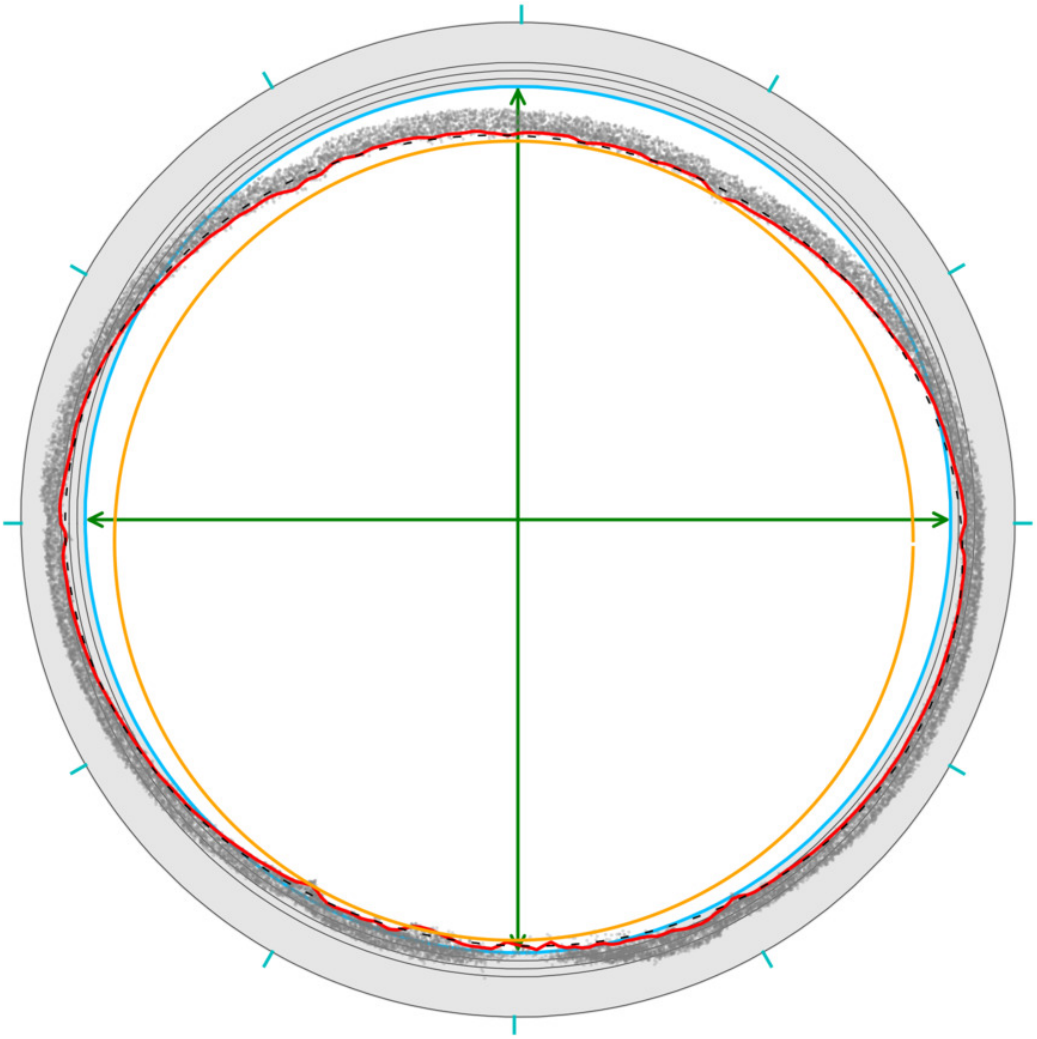
```
Footage   :  150 ft
Width     :  113.0" | 108.0"
Height    :  102.5" | 108.0"

Area      :  8686 sq in
Perimeter :  346.0 in
Ovality   :  5.6%

Interior Diameter : 99.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 151.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



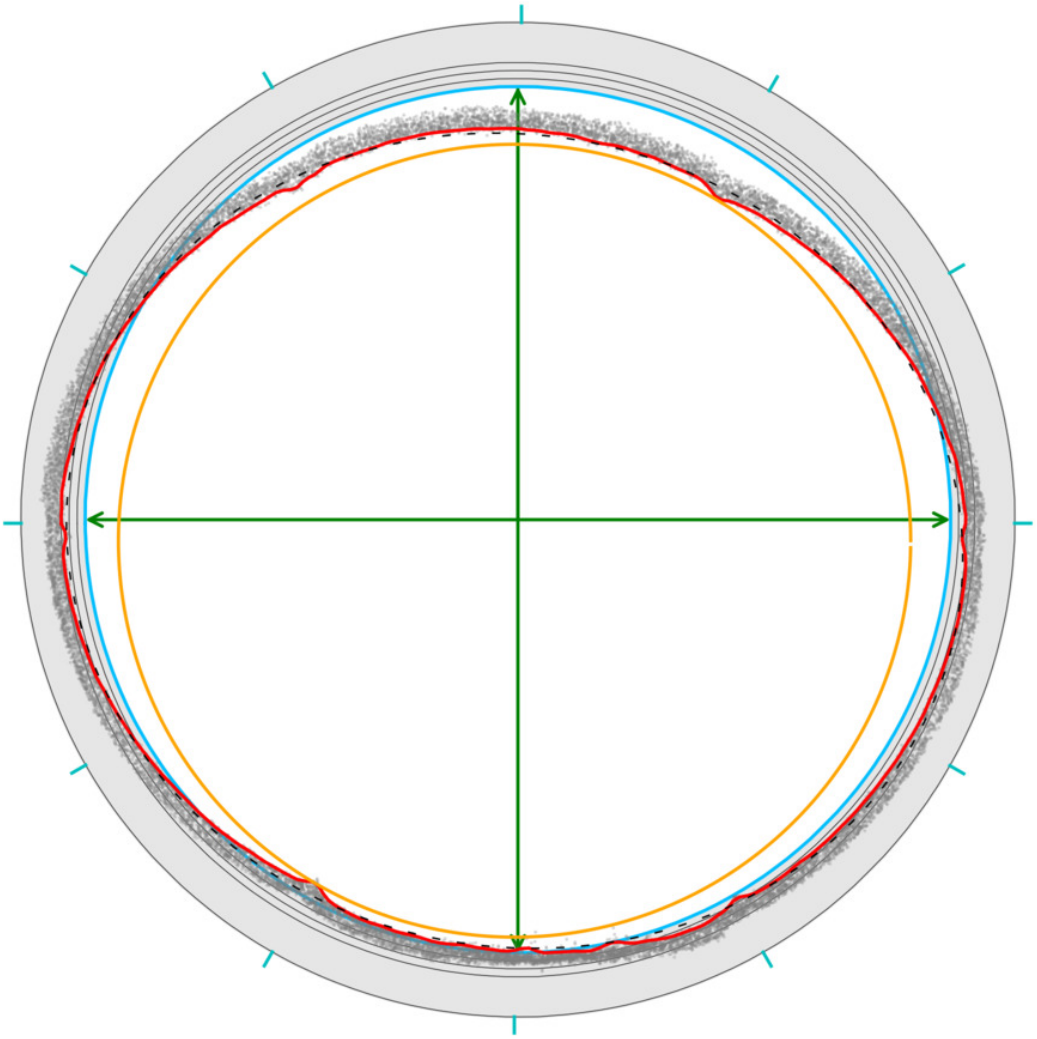
```
Footage    :  151 ft
Width      :  113.0" | 108.0"
Height     :  102.1" | 108.0"

Area       :  8880 sq in
Perimeter  :  338.4 in
Ovality    :  5.4%

Interior Diameter : 99.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 152.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



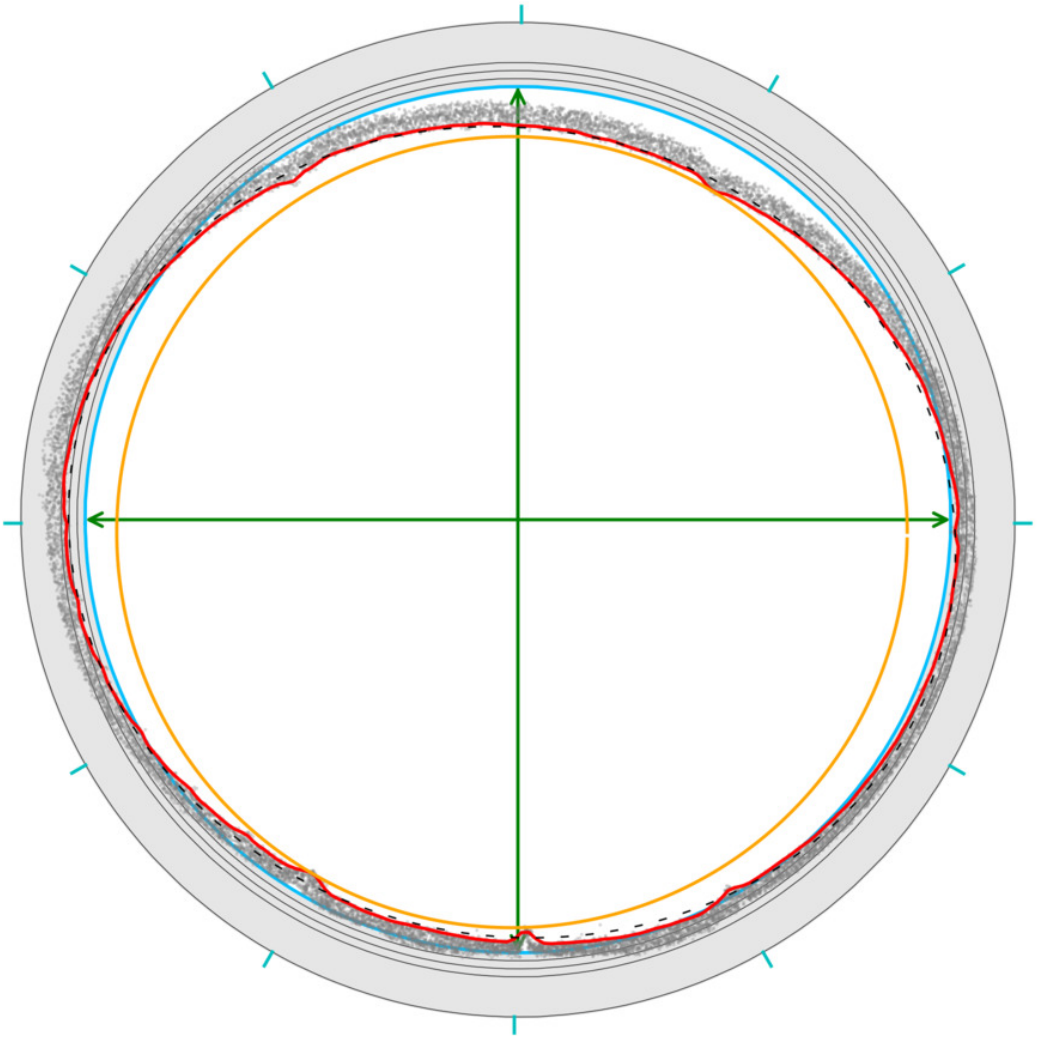
```
Footage    :  152 ft
Width      :  112.9" | 108.0"
Height     :  102.7" | 108.0"

Area       :  8912 sq in
Perimeter  :  337.7 in
Ovality    :  5.2%

Interior Diameter : 98.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 153.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



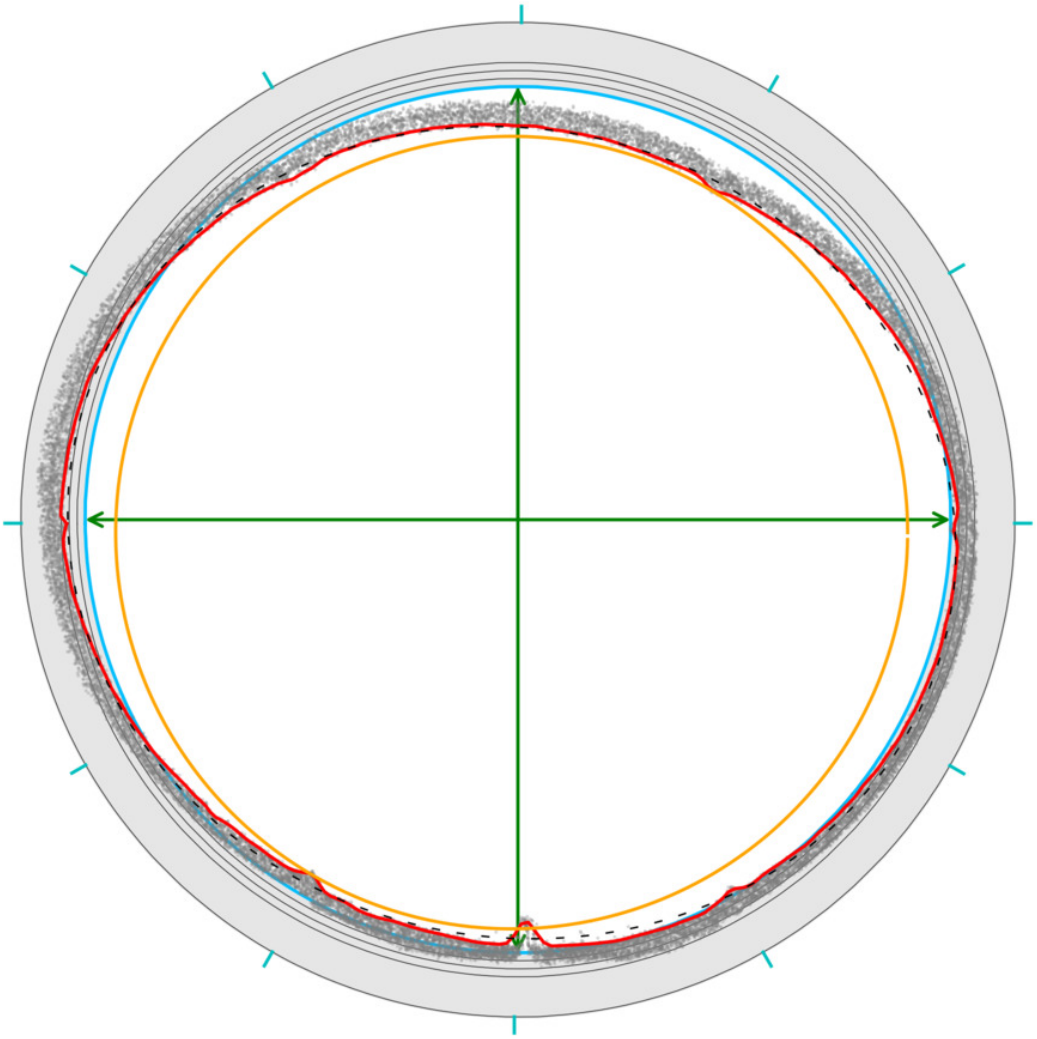
```
Footage   :  153 ft
Width     :  111.6" | 108.0"
Height    :  103.2" | 108.0"

Area      :  8776 sq in
Perimeter :  335.5 in
Ovality   :  5.0%

Interior Diameter : 98.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 154.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



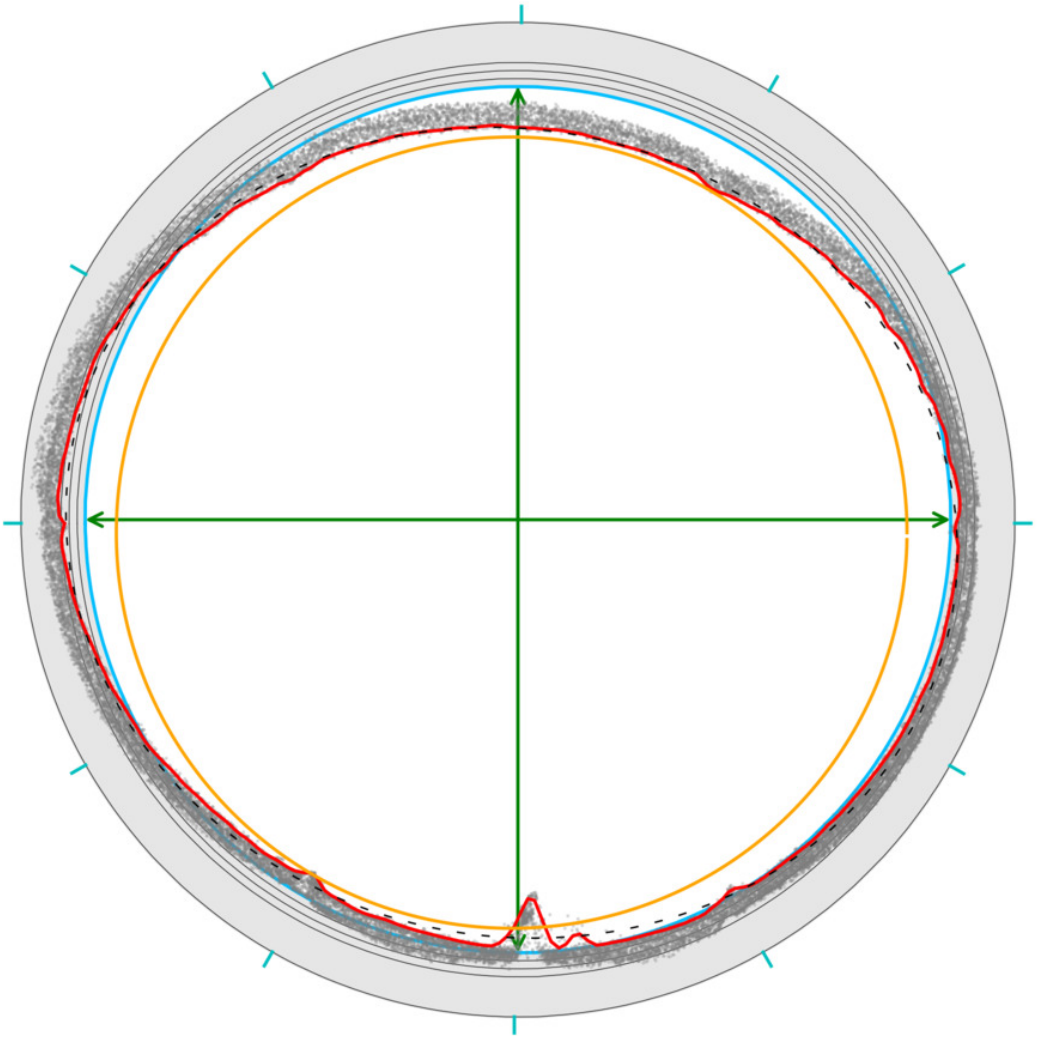
```
Footage   :  154 ft
Width     :  112.0" | 108.0"
Height    :  103.1" | 108.0"

Area      :  8798 sq in
Perimeter :  337.9 in
Ovality   :  5.0%

Interior Diameter : 98.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 155.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



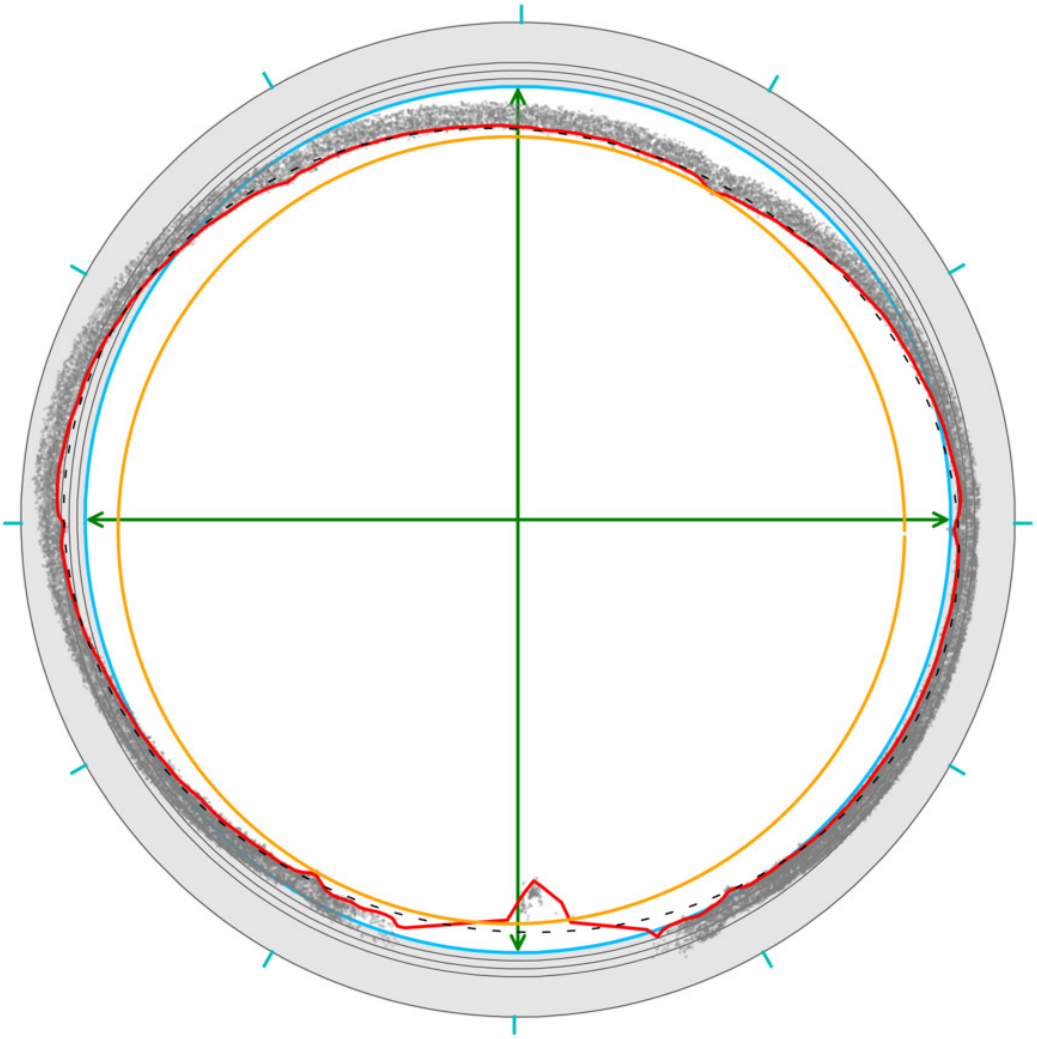
```
Footage   :  155 ft
Width     :  112.6" | 108.0"
Height    :  102.9" | 108.0"

Area      :  8809 sq in
Perimeter :  344.2 in
Ovality   :  5.3%

Interior Diameter : 98.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 156.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



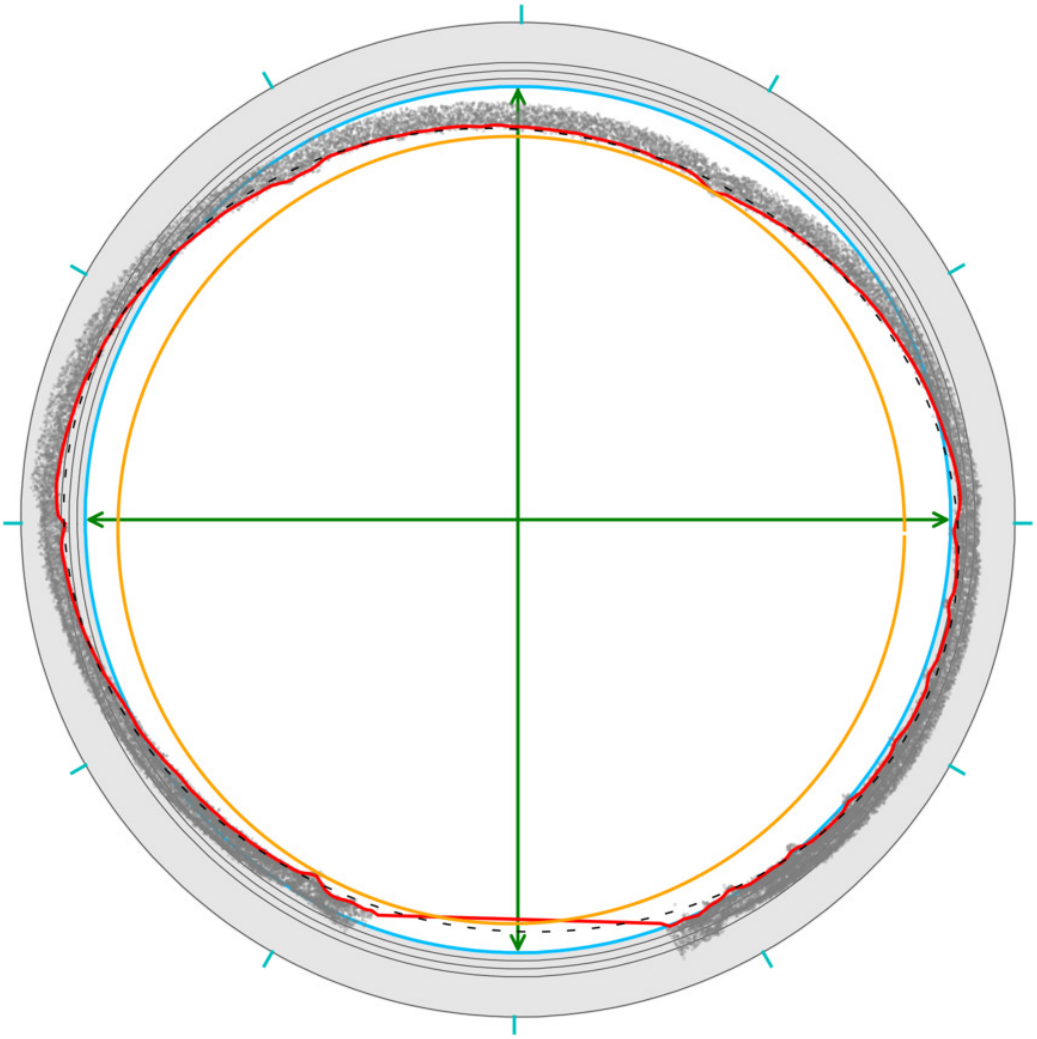
```
Footage   :  156 ft
Width     :  112.8" | 108.0"
Height    :  103.0" | 108.0"

Area      :  8749 sq in
Perimeter :  341.8 in
Ovality   :  5.9%

Interior Diameter : 98.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 157.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



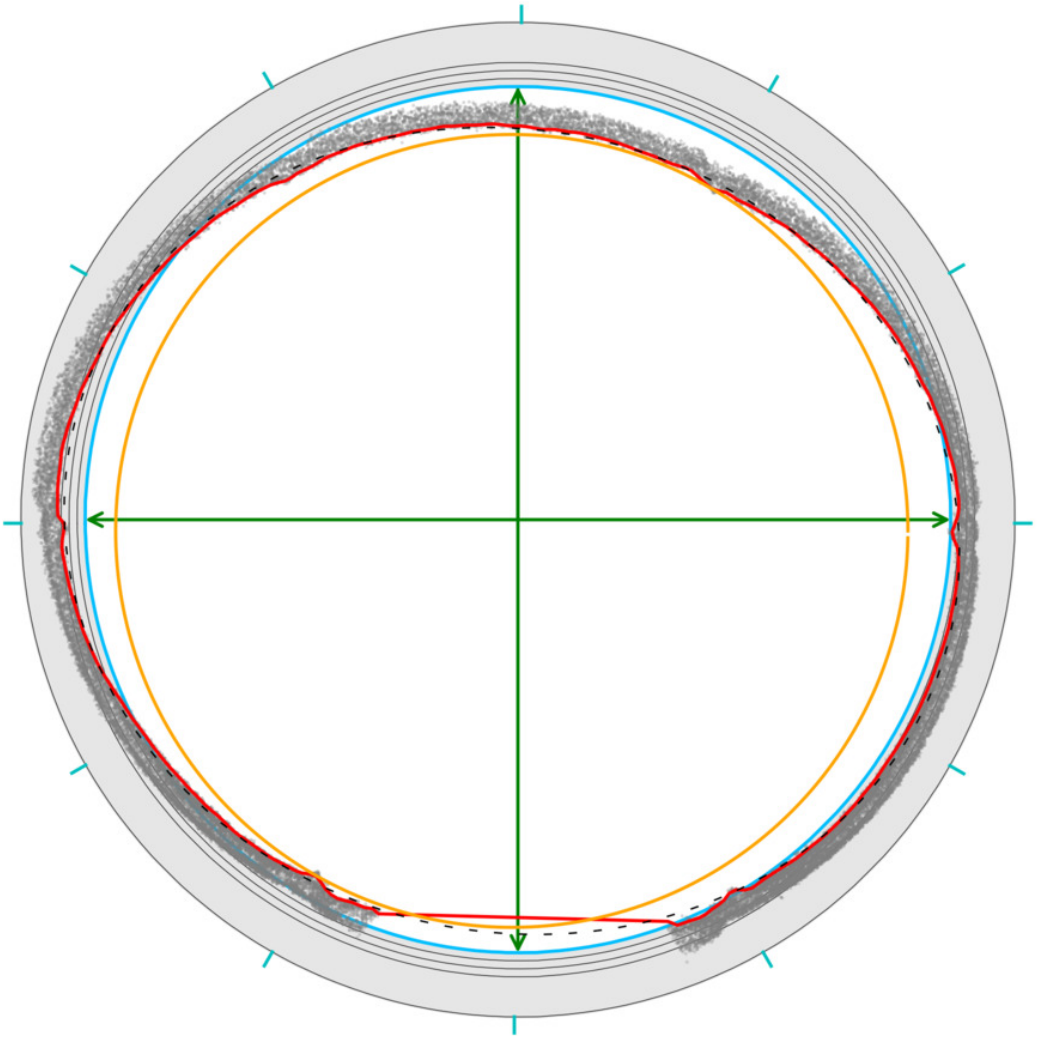
```
Footage   :  157 ft
Width     :  112.8" | 108.0"
Height    :  103.0" | 108.0"

Area      :  8746 sq in
Perimeter :  335.9 in
Ovality   :  5.9%

Interior Diameter : 98.2"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 158.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



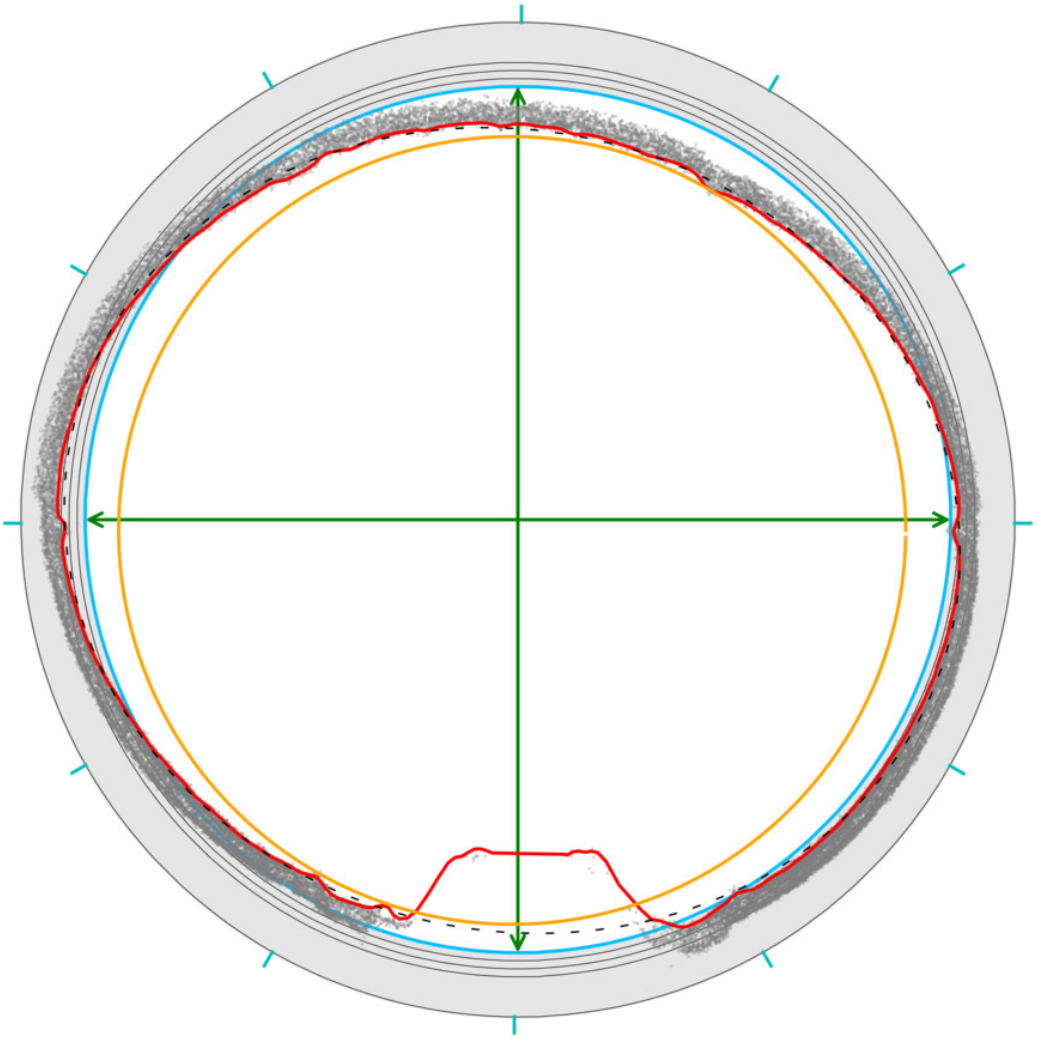
```
Footage   :  158 ft
Width     :  112.5" | 108.0"
Height    :  103.1" | 108.0"

Area      :  8766 sq in
Perimeter :  335.9 in
Ovality   :  5.8%

Interior Diameter : 98.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 159.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



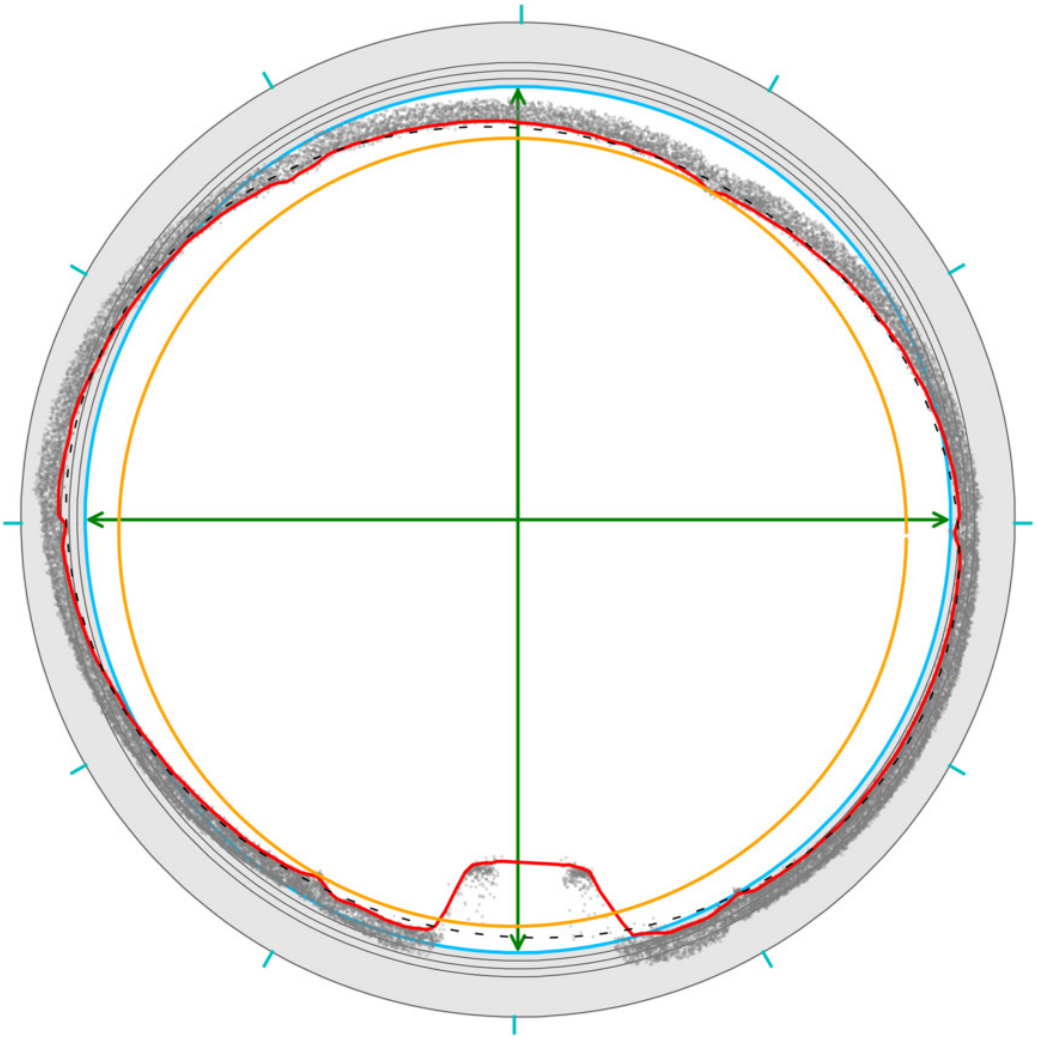
```
Footage   :  159 ft
Width     :  112.5" | 108.0"
Height    :  103.3" | 108.0"

Area      :  8584 sq in
Perimeter :  345.2 in
Ovality   :  6.0%

Interior Diameter : 98.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 160.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



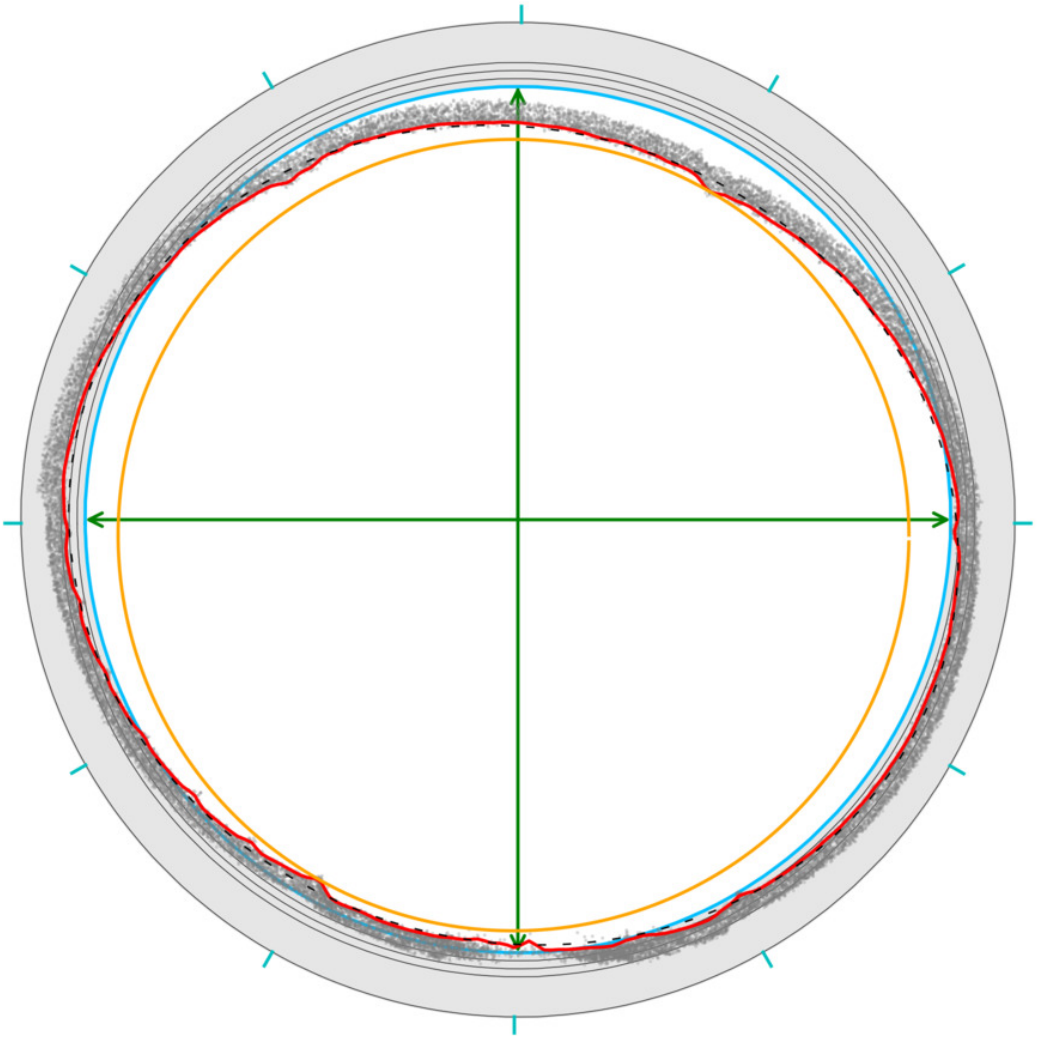
```
Footage    :  160 ft
Width      :  112.5" | 108.0"
Height     :  103.6" | 108.0"

Area       :  8673 sq in
Perimeter  :  345.2 in
Ovality    :  5.7%

Interior Diameter : 98.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 161.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



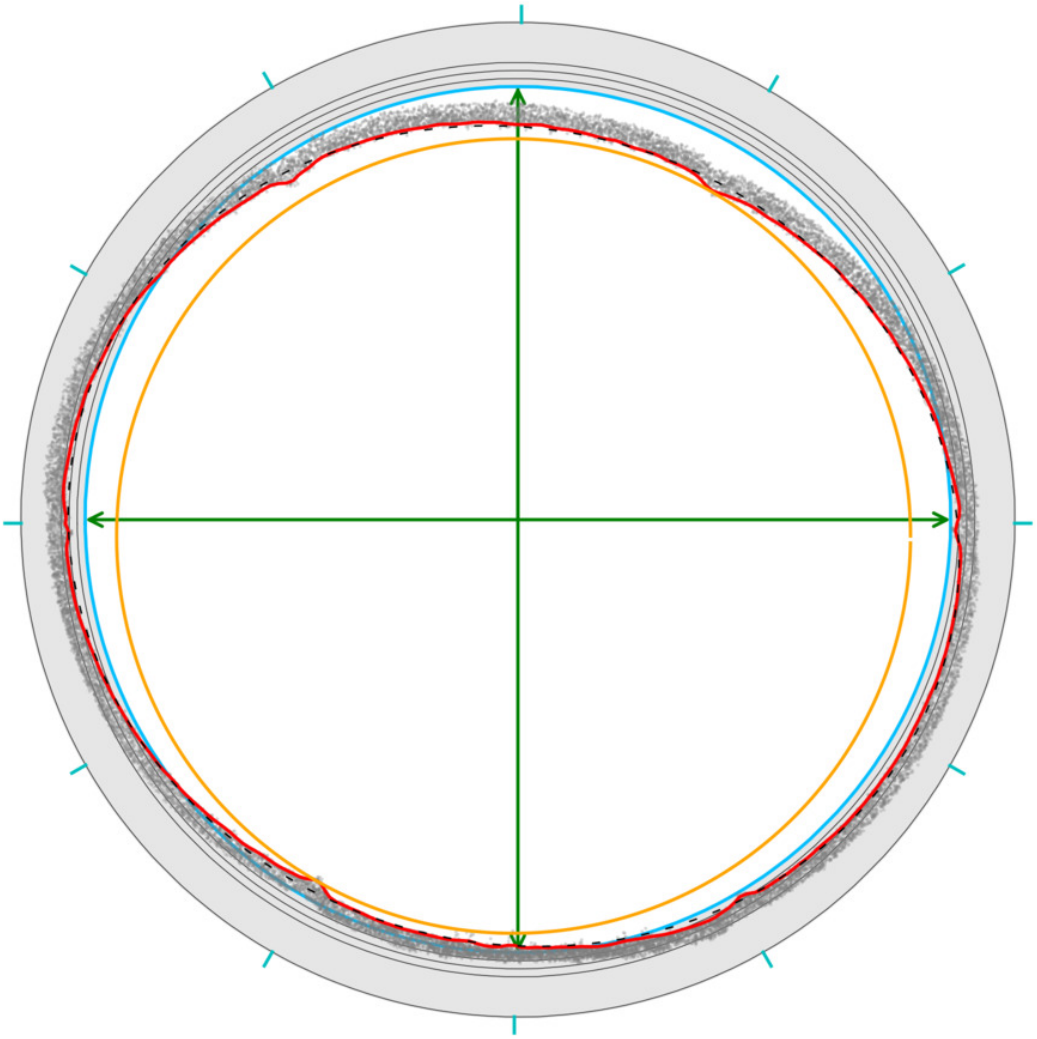
```
Footage   :  161 ft
Width     :  111.8" | 108.0"
Height    :  103.5" | 108.0"

Area      :  8882 sq in
Perimeter :  337.8 in
Ovality   :  5.0%

Interior Diameter : 98.7"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 162.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 162 ft
Width : 112.0" | 108.0"
Height : 103.3" | 108.0"

Area : 8911 sq in
Perimeter : 337.2 in
Ovality : 4.9%

Interior Diameter : 99.1"

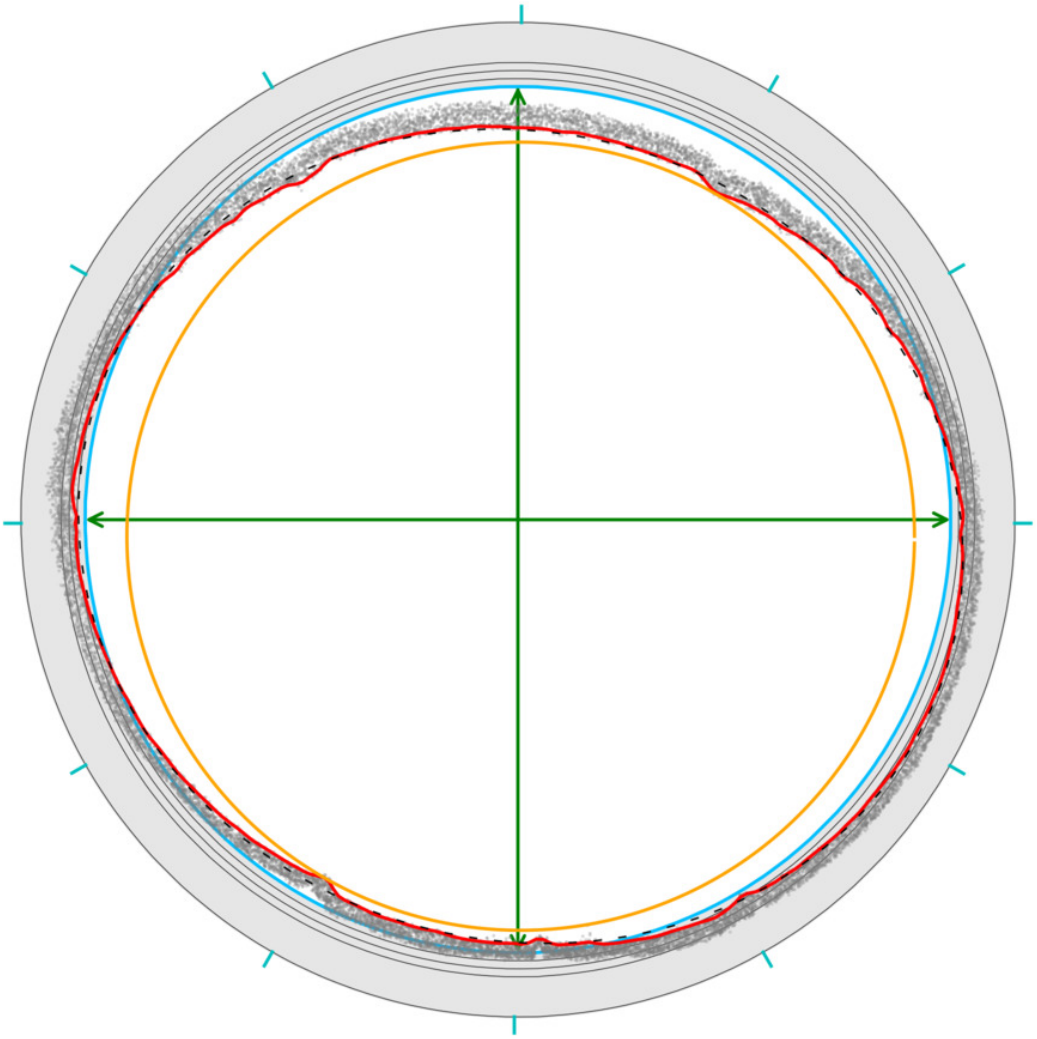
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 163.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



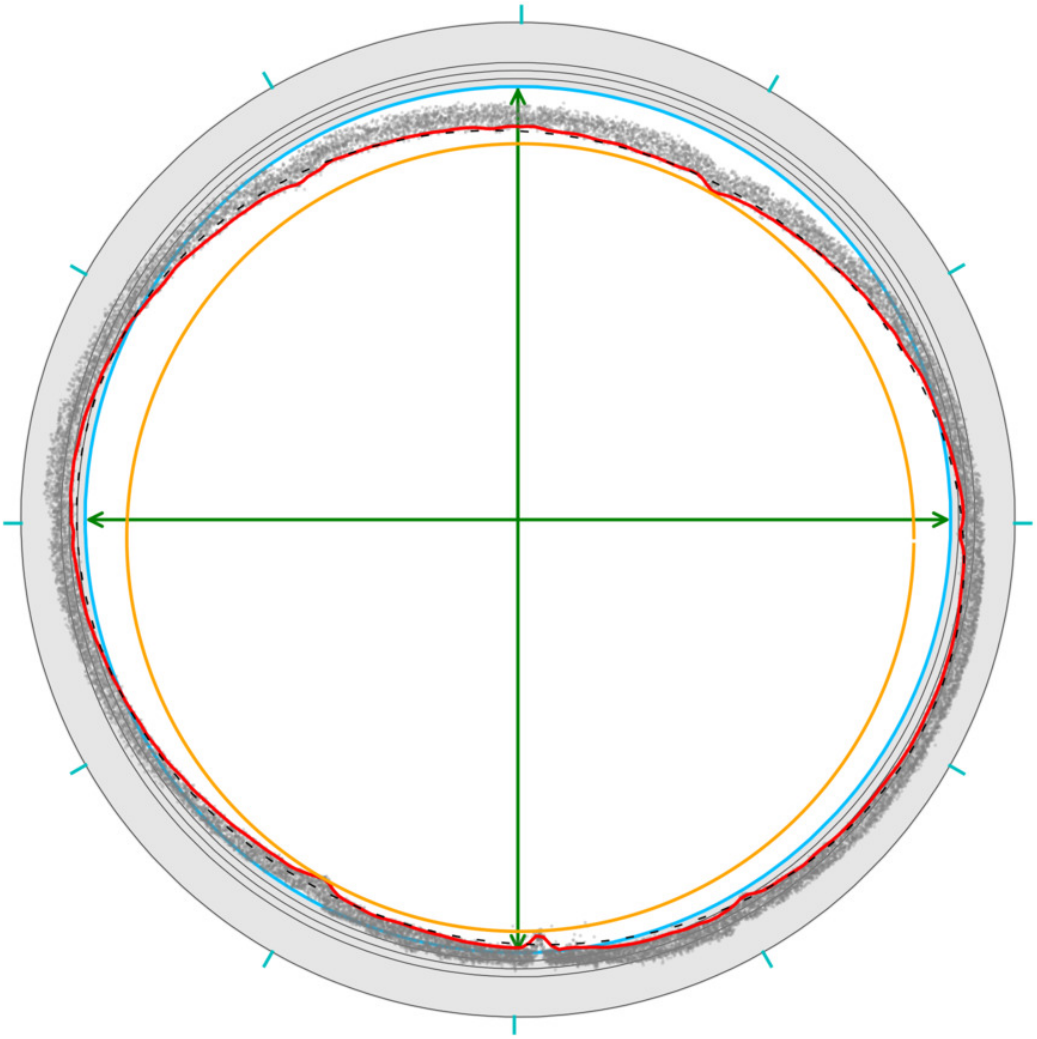
```
Footage   :  163 ft
Width     :  111.2" | 108.0"
Height    :  102.9" | 108.0"

Area      :  8778 sq in
Perimeter :  335.2 in
Ovality   :  5.0%

Interior Diameter : 98.3"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 164.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



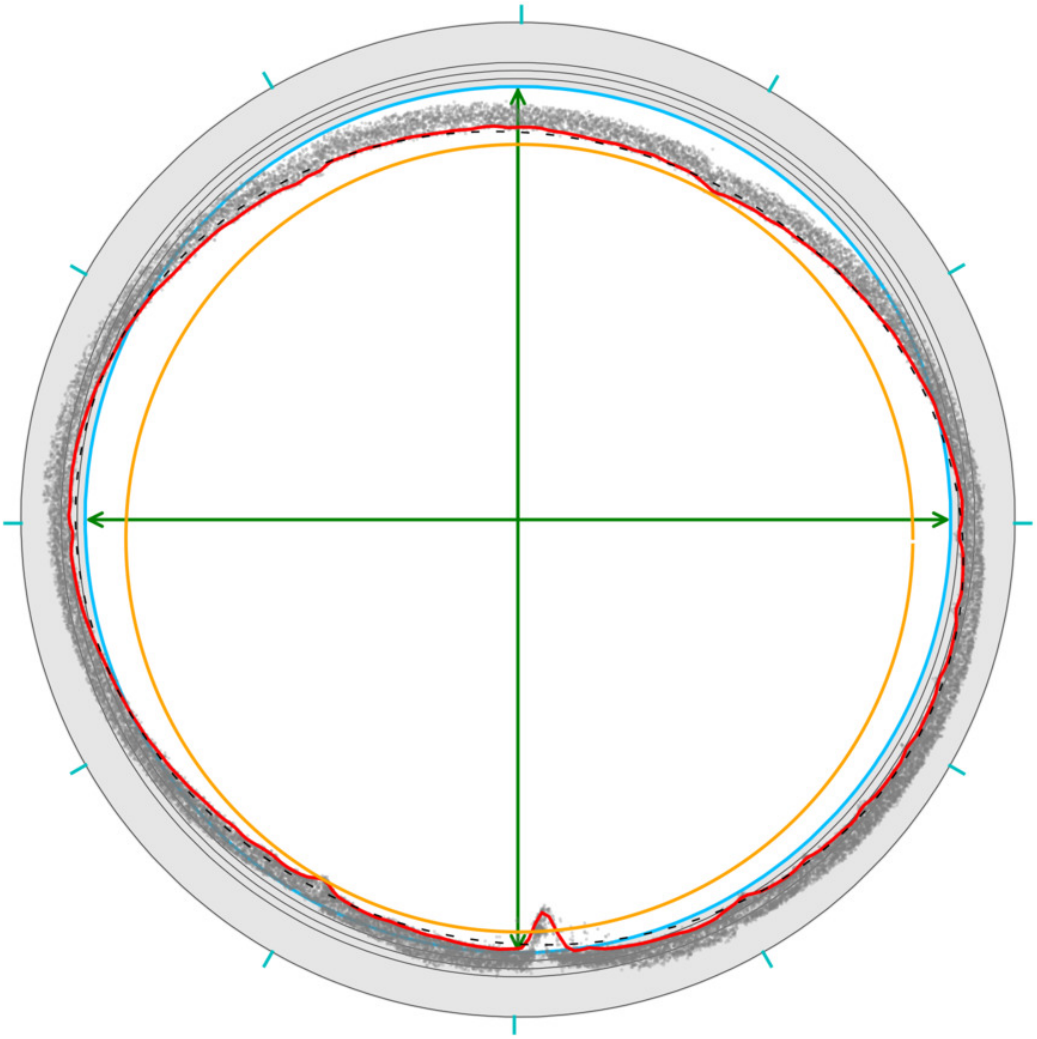
```
Footage   :  164 ft
Width     :  111.5" | 108.0"
Height    :  103.0" | 108.0"

Area      :  8808 sq in
Perimeter :  336.2 in
Ovality   :  5.1%

Interior Diameter : 98.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 165.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



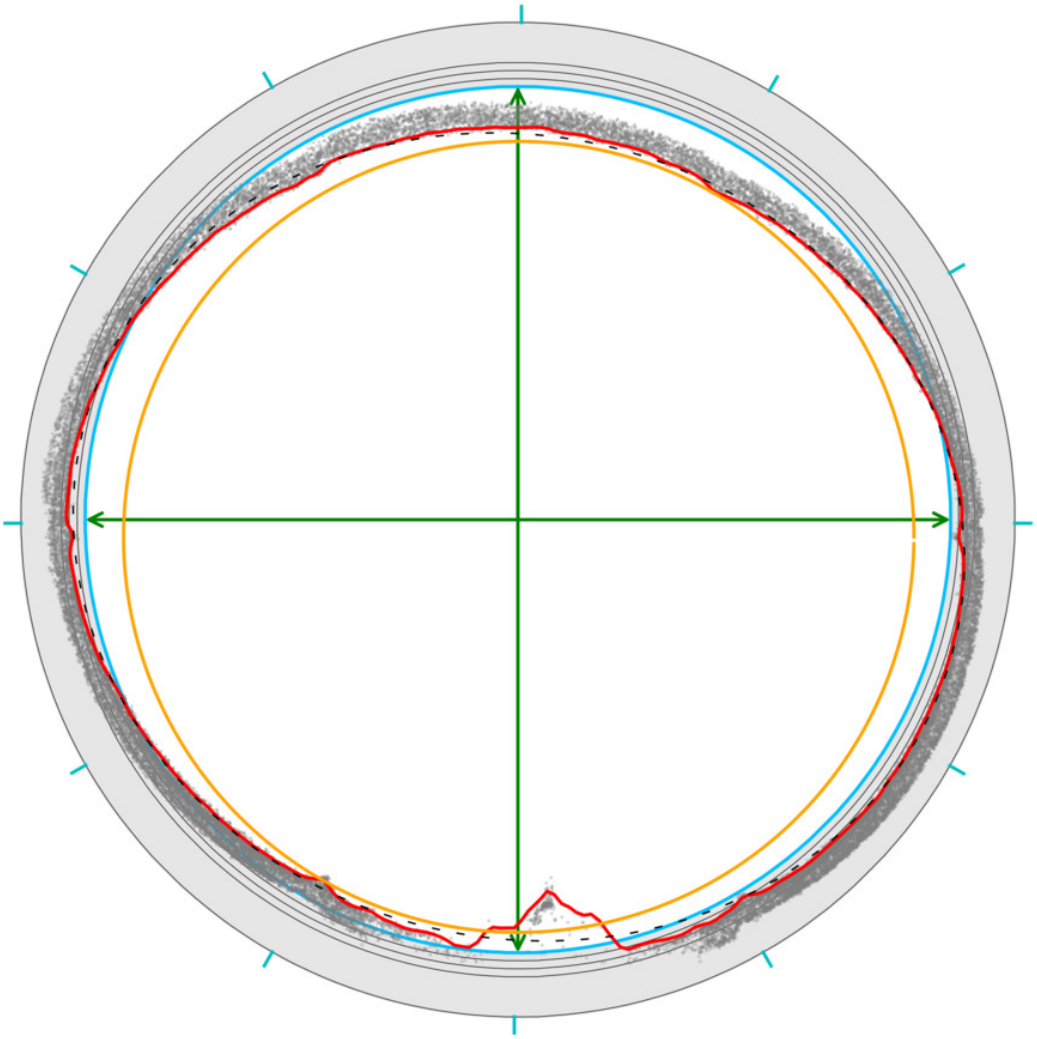
```
Footage   :  165 ft
Width     :  111.6" | 108.0"
Height    :  102.9" | 108.0"

Area      :  8806 sq in
Perimeter :  340.6 in
Ovality   :  5.2%

Interior Diameter : 98.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 166.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



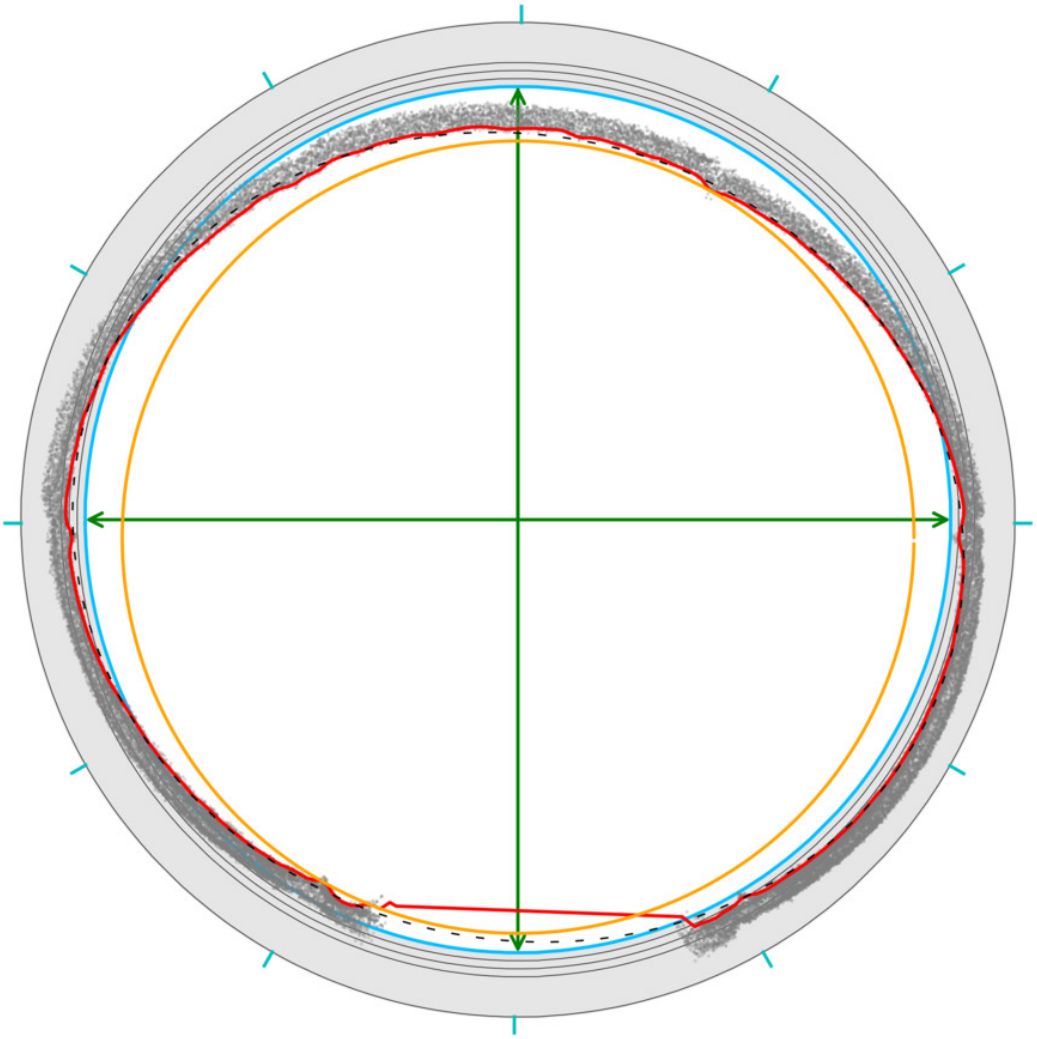
```
Footage   :  166 ft
Width     :  112.0" | 108.0"
Height    :  102.9" | 108.0"

Area      :  8770 sq in
Perimeter :  342.0 in
Ovality   :  5.6%

Interior Diameter : 98.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 167.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



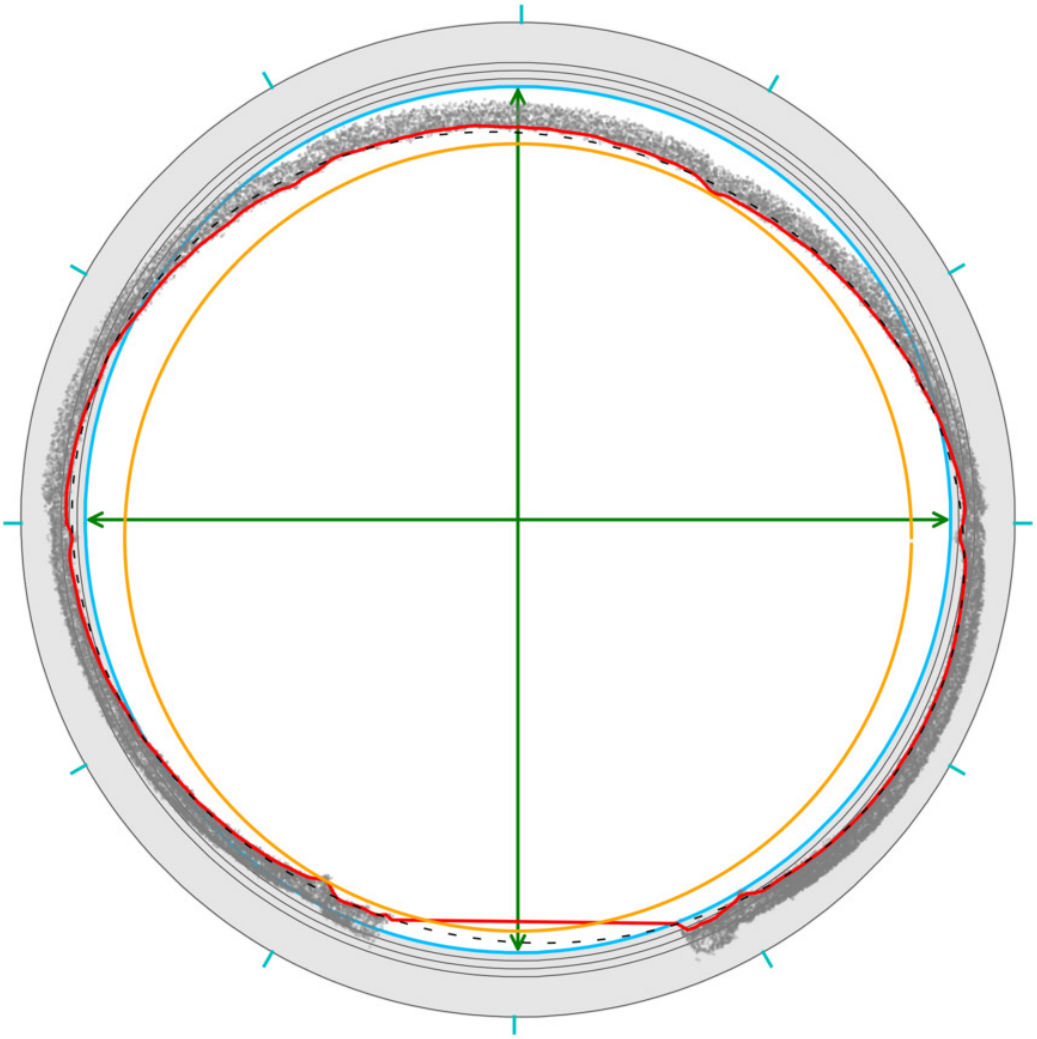
```
Footage   :  167 ft
Width     :  112.1" | 108.0"
Height    :  102.8" | 108.0"

Area      :  8695 sq in
Perimeter :  335.7 in
Ovality   :  5.5%

Interior Diameter : 98.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 168.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



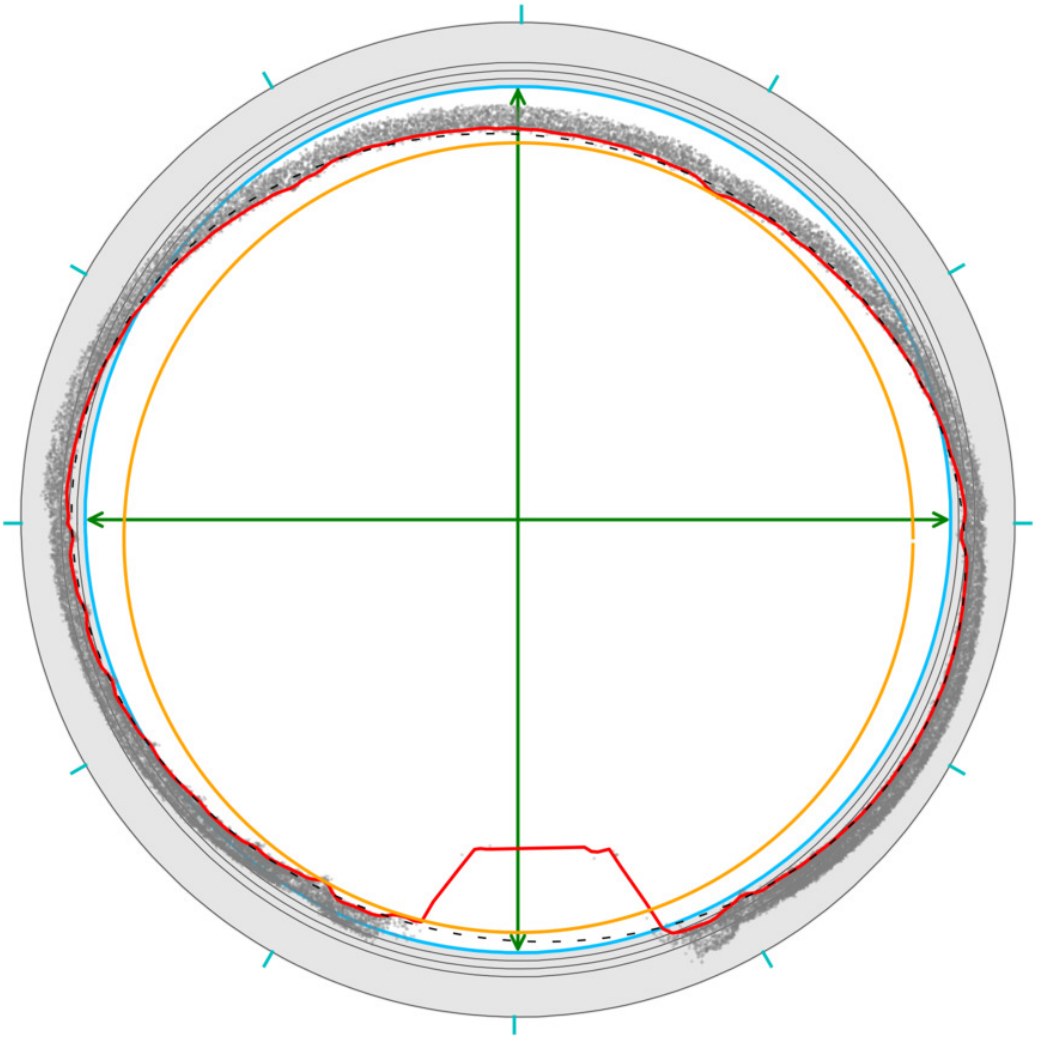
```
Footage   :  168 ft
Width     :  112.2" | 108.0"
Height    :  102.9" | 108.0"

Area      :  8762 sq in
Perimeter :  336.0 in
Ovality   :  5.5%

Interior Diameter : 98.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 169.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



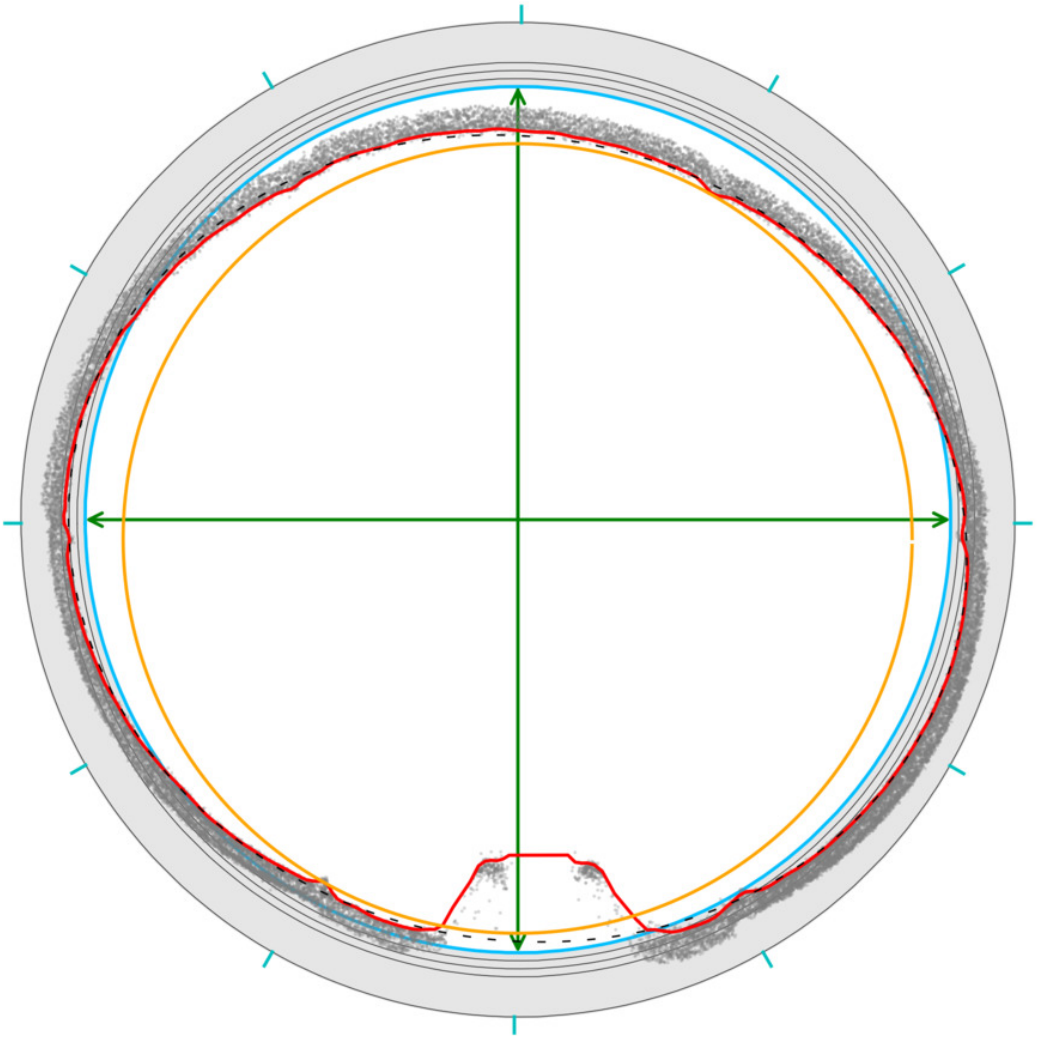
```
Footage   :  169 ft
Width     :  112.3" | 108.0"
Height    :  102.8" | 108.0"

Area      :  8545 sq in
Perimeter :  346.0 in
Ovality   :  5.8%

Interior Diameter : 98.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 170.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



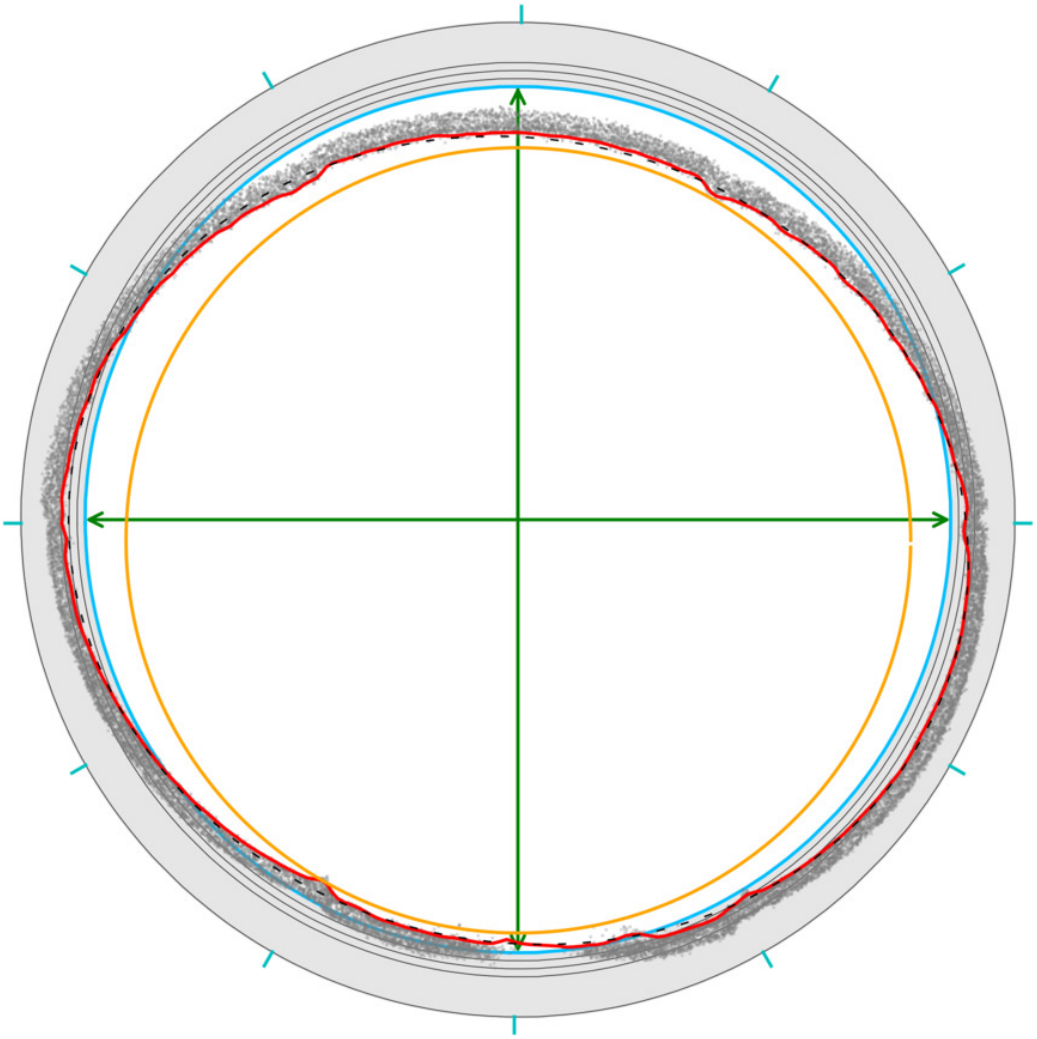
```
Footage   :  170 ft
Width     :  112.8" | 108.0"
Height    :  102.5" | 108.0"

Area      :  8650 sq in
Perimeter :  345.4 in
Ovality   :  5.9%

Interior Diameter : 98.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 171.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



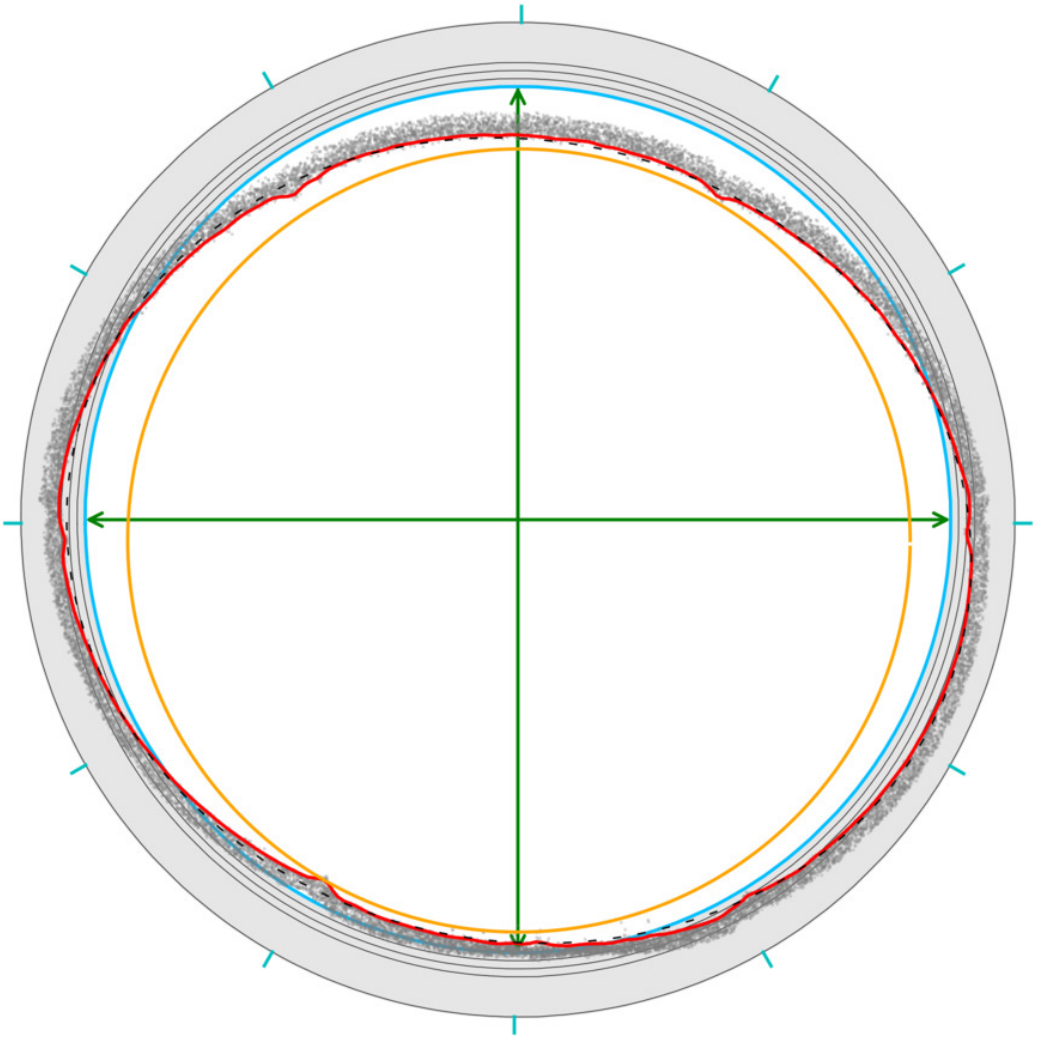
```
Footage   :  171 ft
Width     :  113.2" | 108.0"
Height    :  102.3" | 108.0"

Area      :  8865 sq in
Perimeter :  337.4 in
Ovality   :  5.9%

Interior Diameter : 97.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 172.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



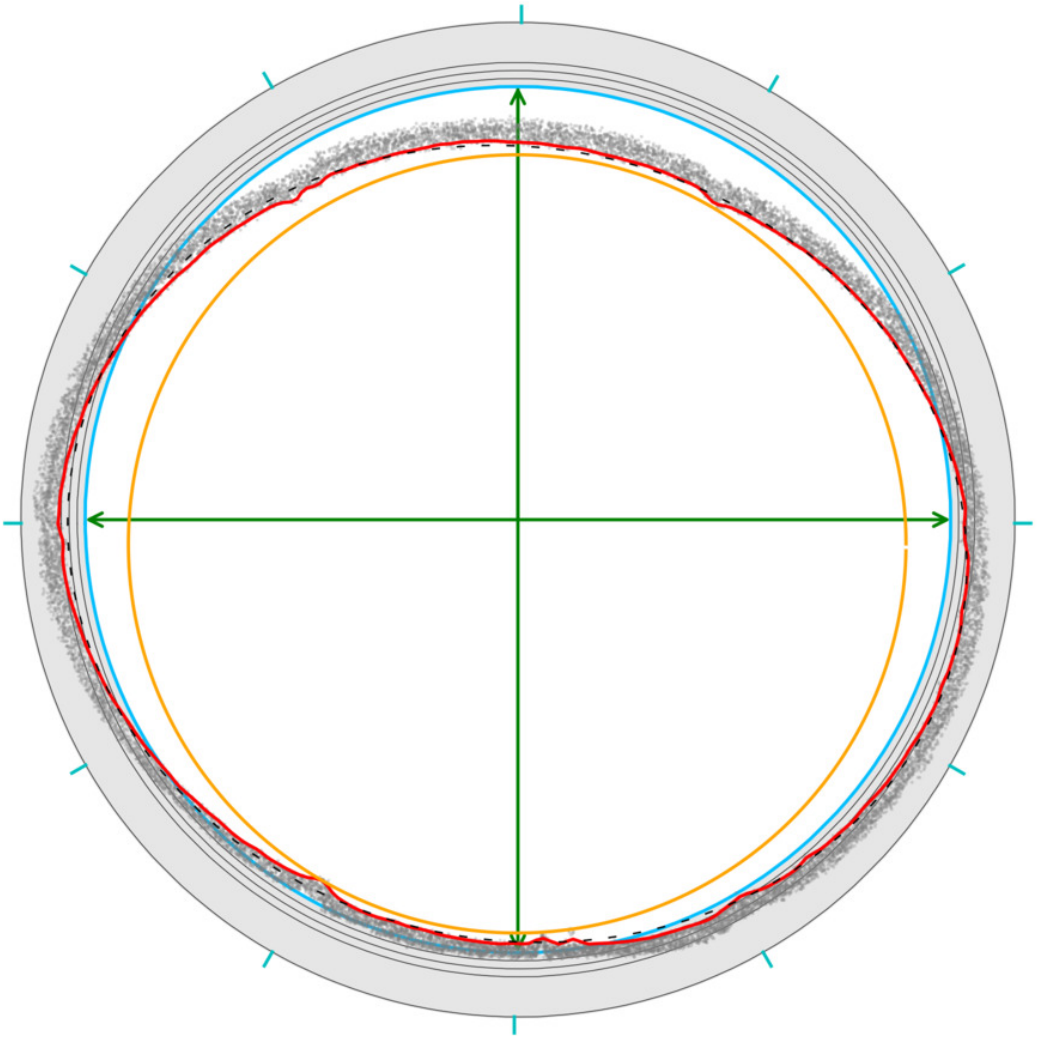
```
Footage   :  172 ft
Width     :  113.9" | 108.0"
Height    :  102.0" | 108.0"

Area      :  8884 sq in
Perimeter :  337.2 in
Ovality   :  6.3%

Interior Diameter : 97.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 173.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



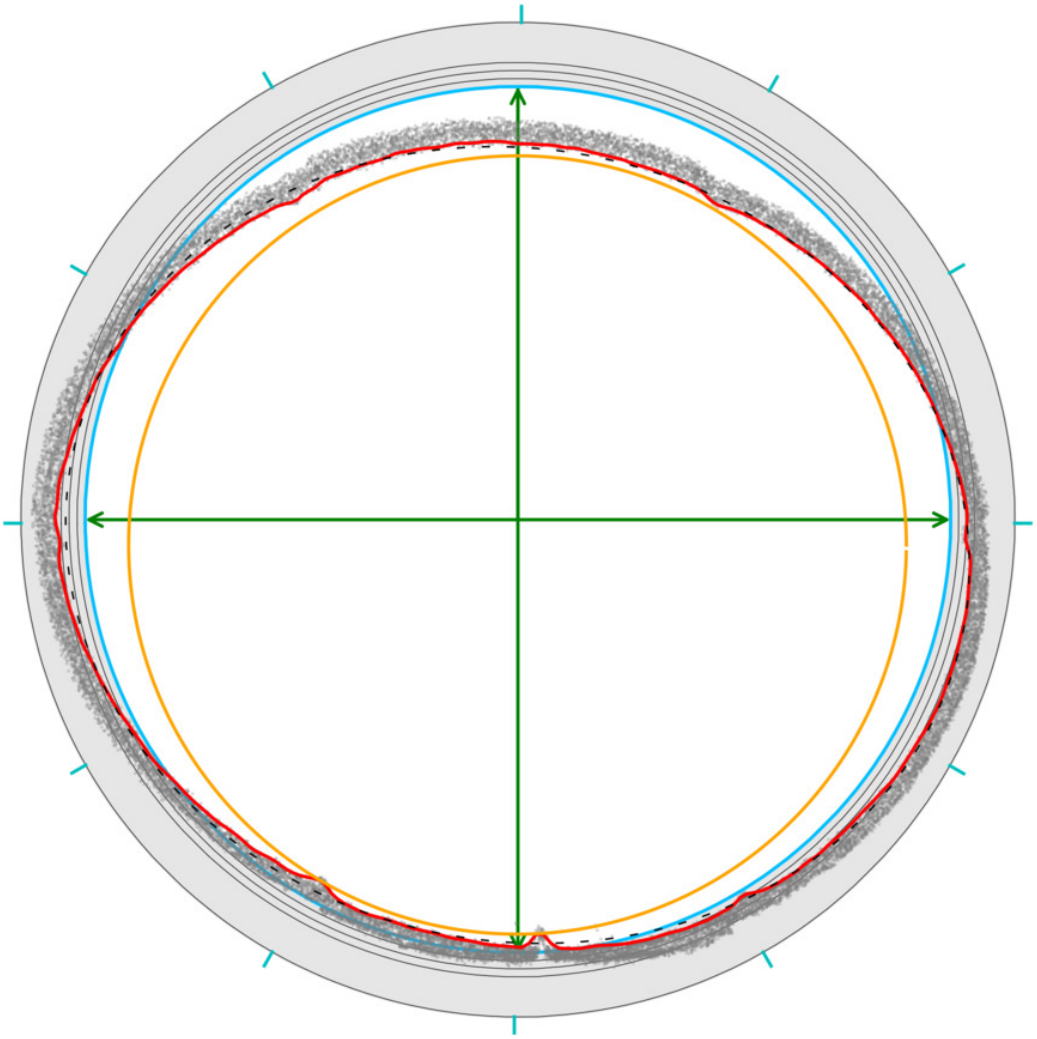
```
Footage   :  173 ft
Width     :  113.6" | 108.0"
Height    :  101.1" | 108.0"

Area      :  8741 sq in
Perimeter :  334.8 in
Ovality   :  6.5%

Interior Diameter : 97.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 174.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



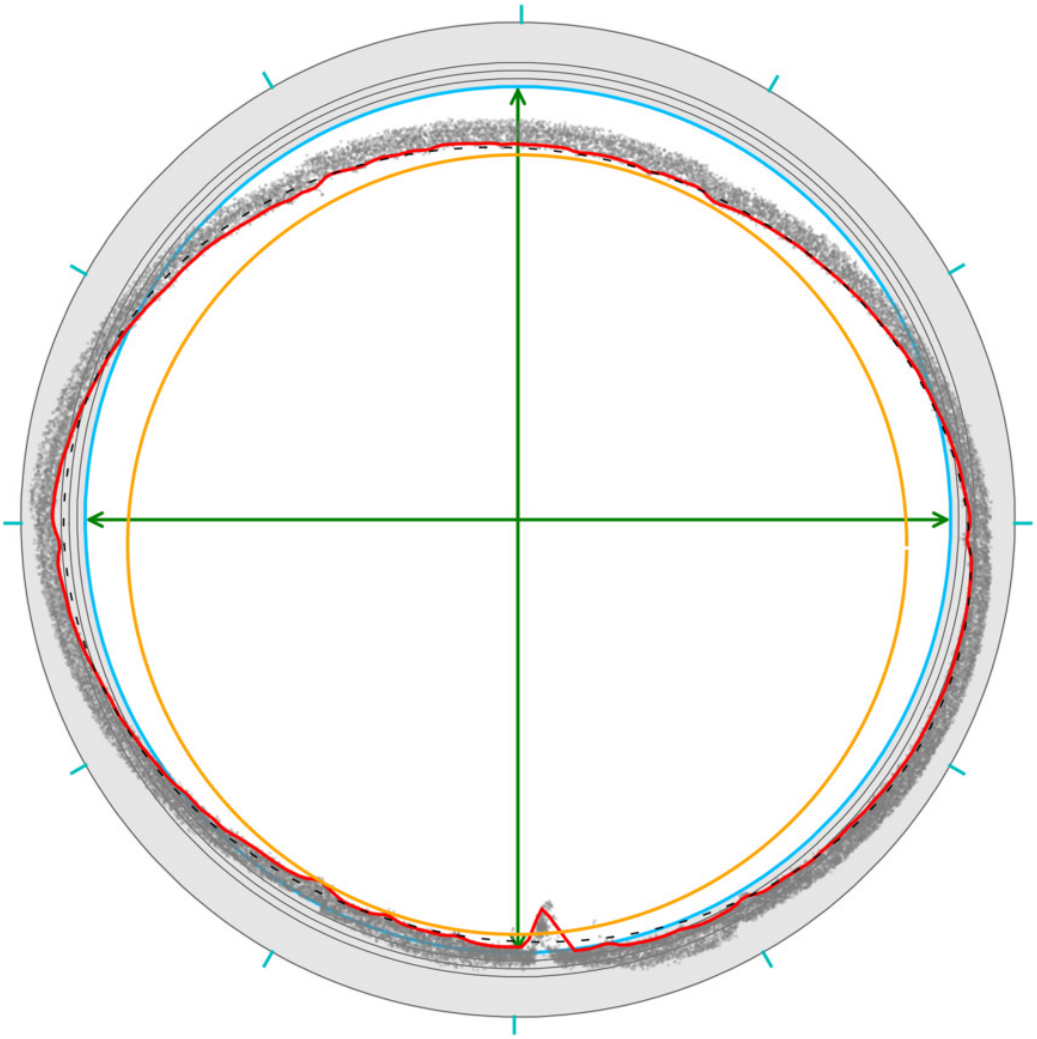
```
Footage   :  174 ft
Width     :  114.3" | 108.0"
Height    :  100.9" | 108.0"

Area      :  8780 sq in
Perimeter :  336.5 in
Ovality   :  6.7%

Interior Diameter : 97.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 175.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



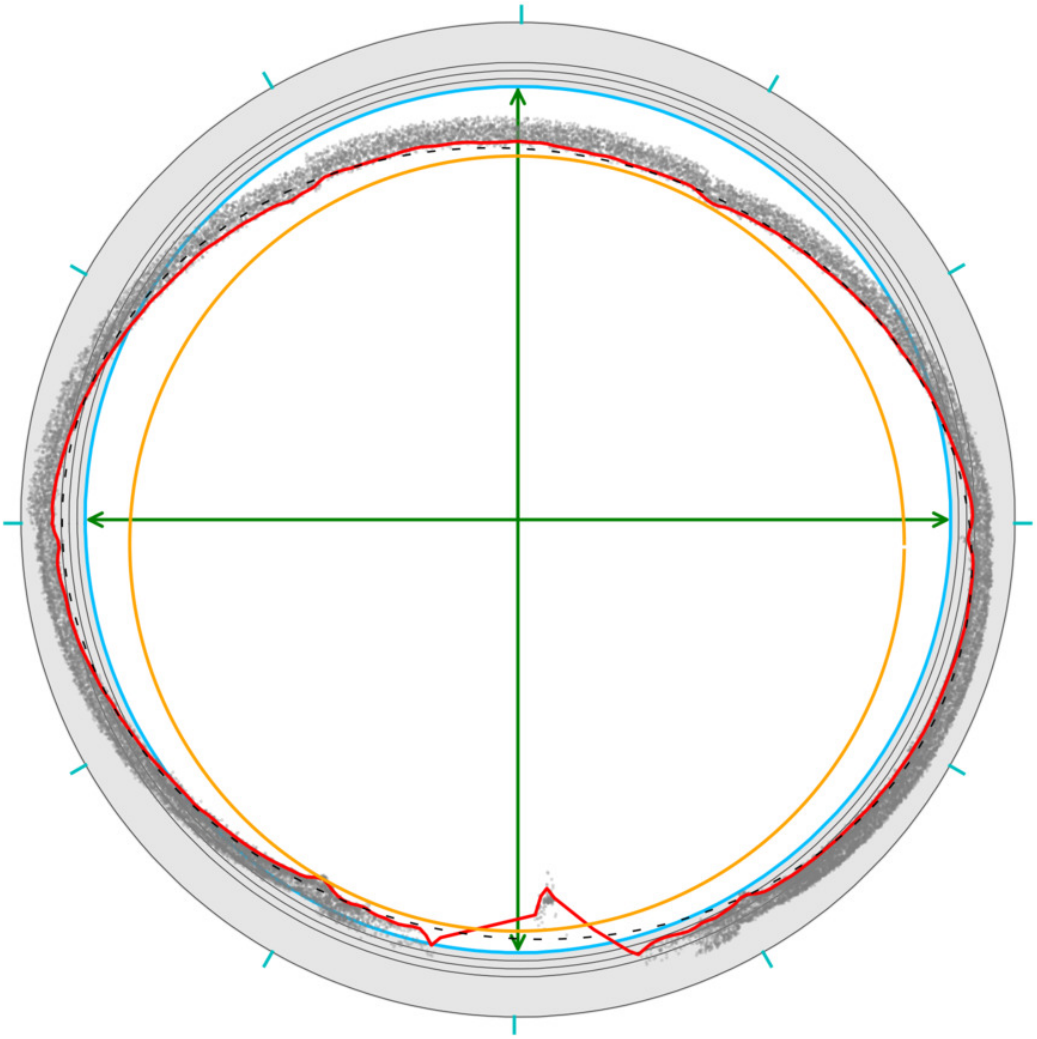
```
Footage    :  175 ft
Width      :  114.7" | 108.0"
Height     :  100.8" | 108.0"

Area       :  8790 sq in
Perimeter  :  341.5 in
Ovality    :  7.0%

Interior Diameter : 97.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 176.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



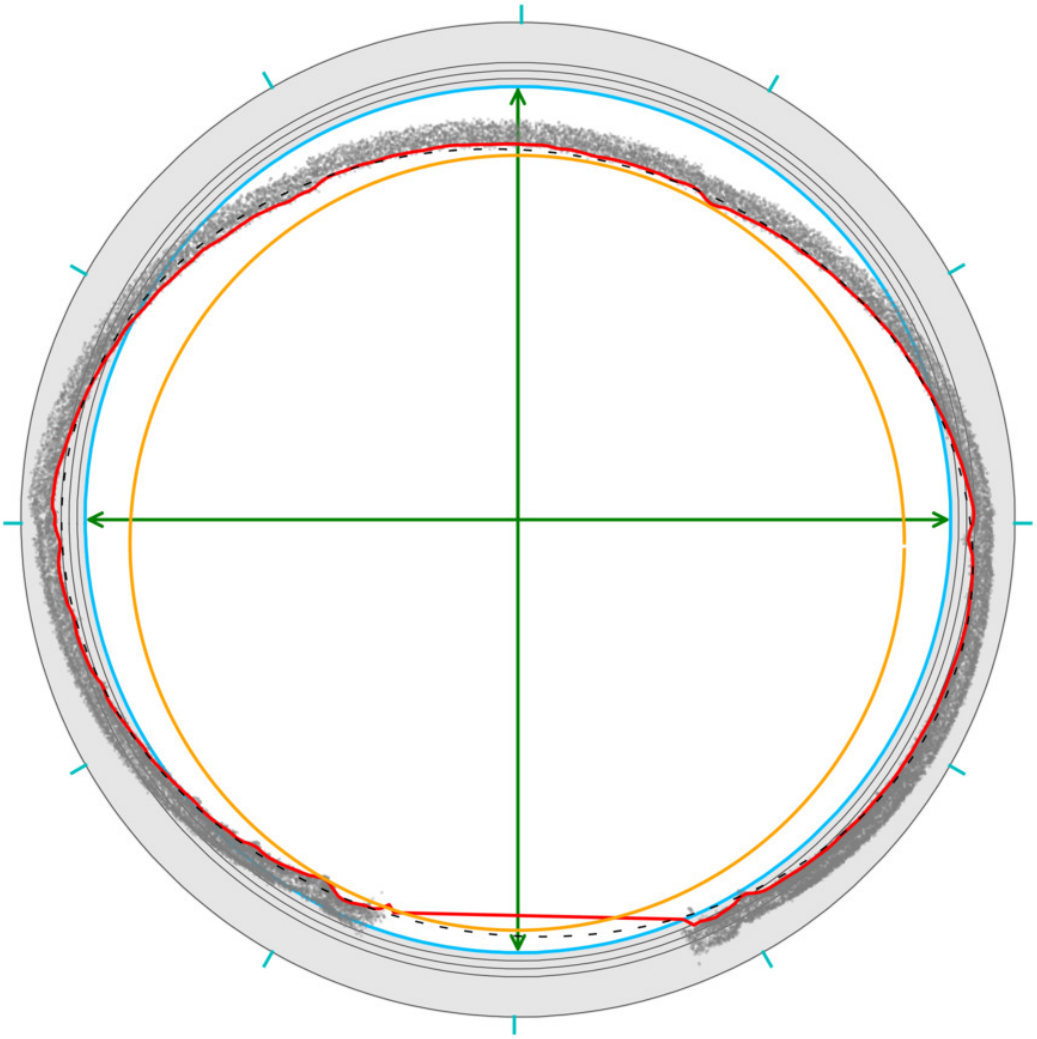
```
Footage    :  176 ft
Width      :  114.9" | 108.0"
Height     :  101.1" | 108.0"

Area       :  8759 sq in
Perimeter  :  343.4 in
Ovality    :  7.3%

Interior Diameter : 96.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 177.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



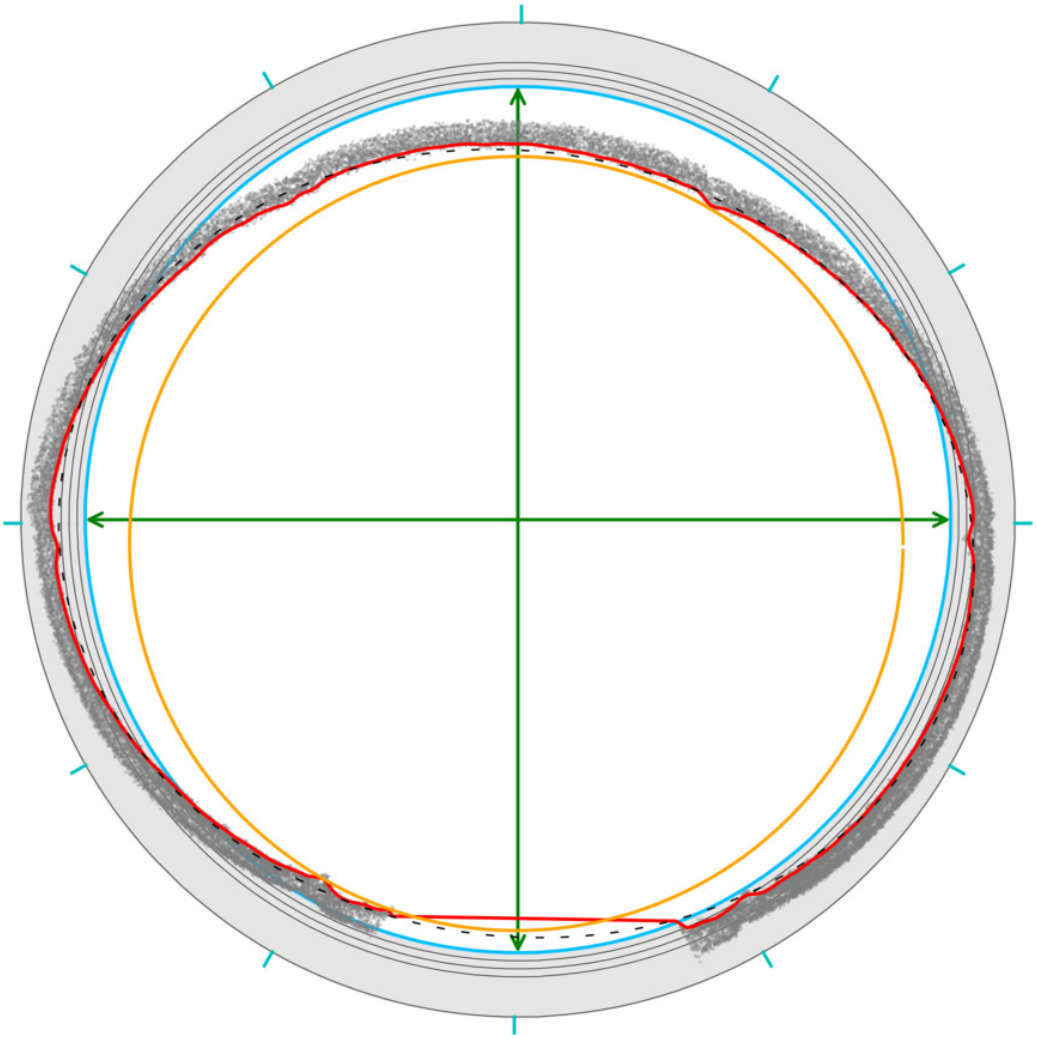
```
Footage   :  177 ft
Width     :  115.0" | 108.0"
Height    :  100.8" | 108.0"

Area      :  8693 sq in
Perimeter :  336.1 in
Ovality   :  7.6%

Interior Diameter : 96.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 178.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



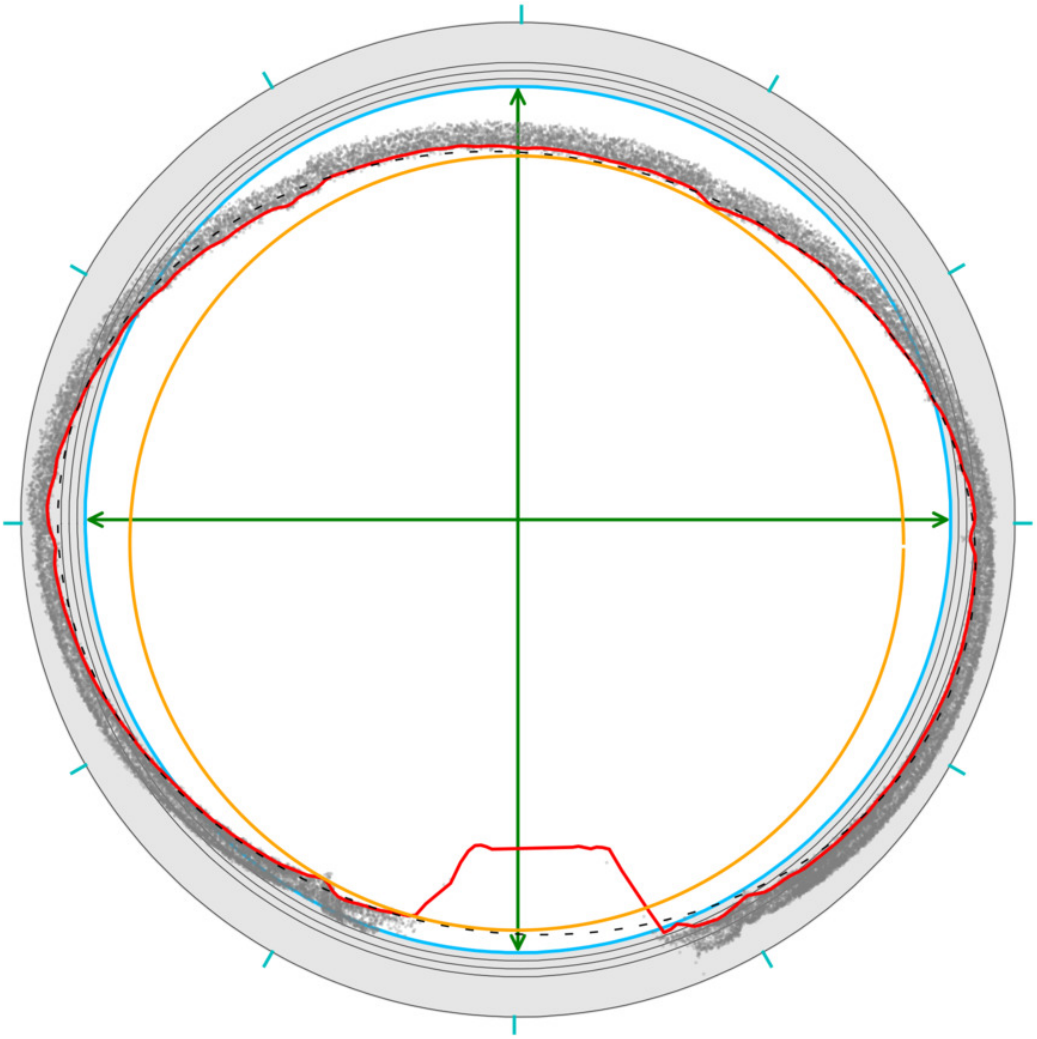
```
Footage   :  178 ft
Width     :  115.2" | 108.0"
Height    :  100.8" | 108.0"

Area      :  8741 sq in
Perimeter :  336.5 in
Ovality   :  7.8%

Interior Diameter : 96.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 179.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



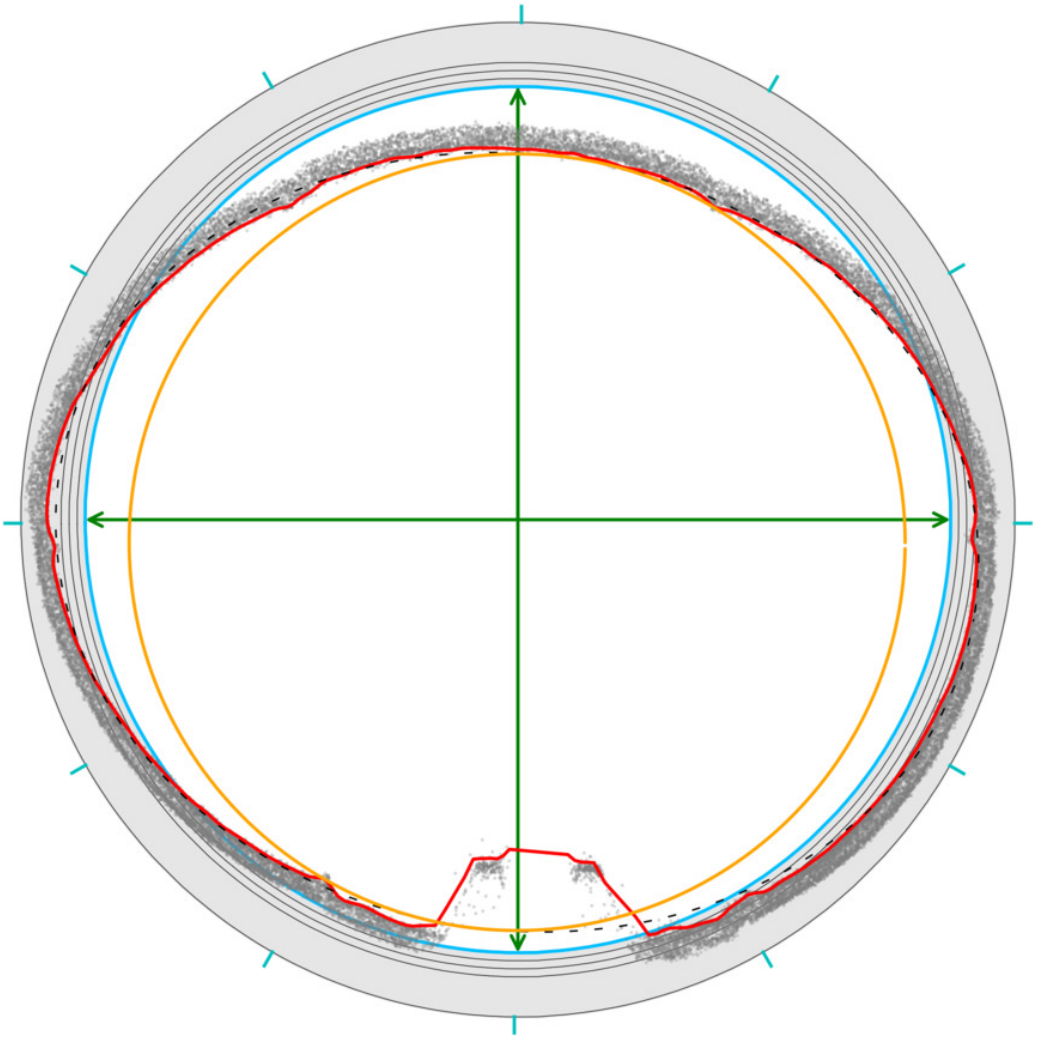
```
Footage   :  179 ft
Width     :  115.9" | 108.0"
Height    :  100.4" | 108.0"

Area      :  8535 sq in
Perimeter :  346.4 in
Ovality   :  8.2%

Interior Diameter : 96.6"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 180.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



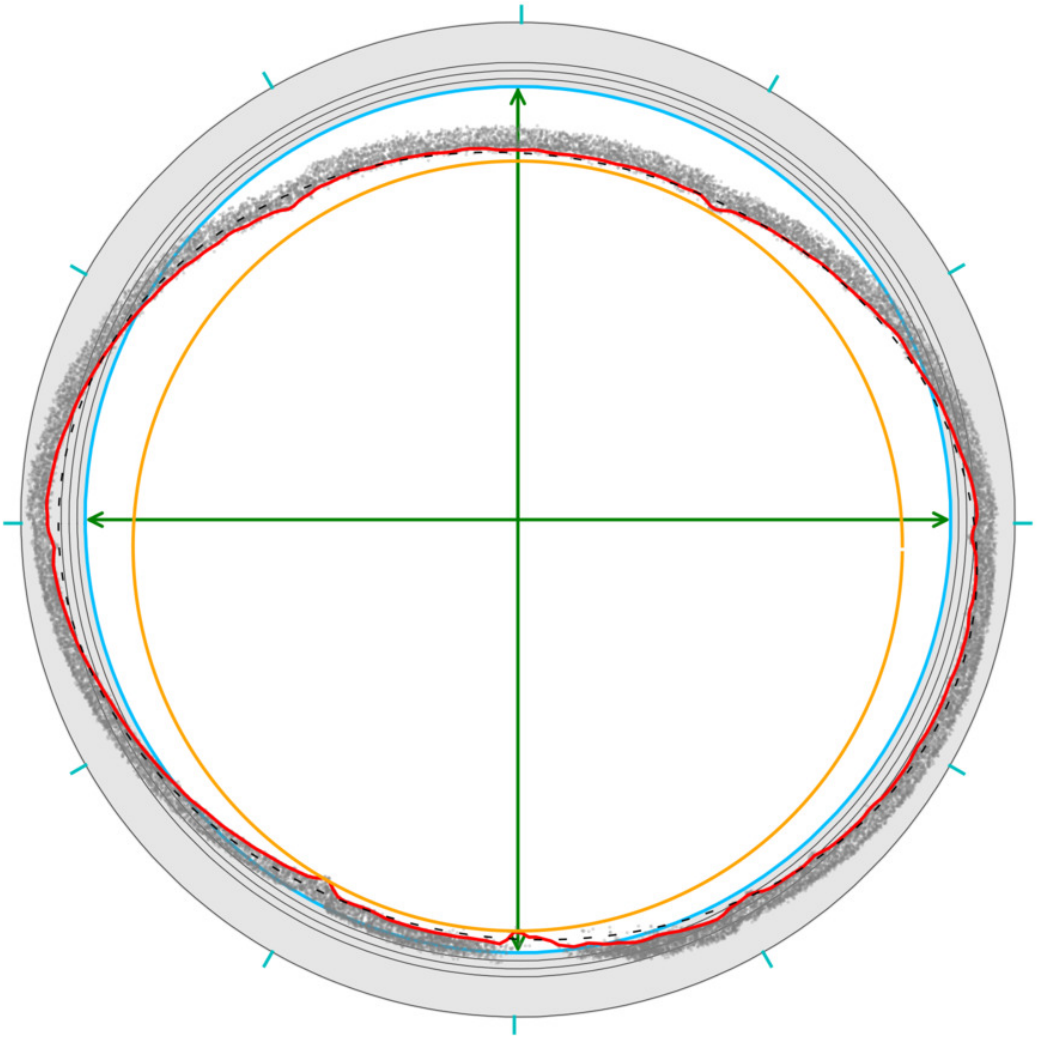
```
Footage    :  180 ft
Width      :  116.0" | 108.0"
Height     :  100.2" | 108.0"

Area       :  8622 sq in
Perimeter  :  347.1 in
Ovality    :  8.7%

Interior Diameter : 96.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 181.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



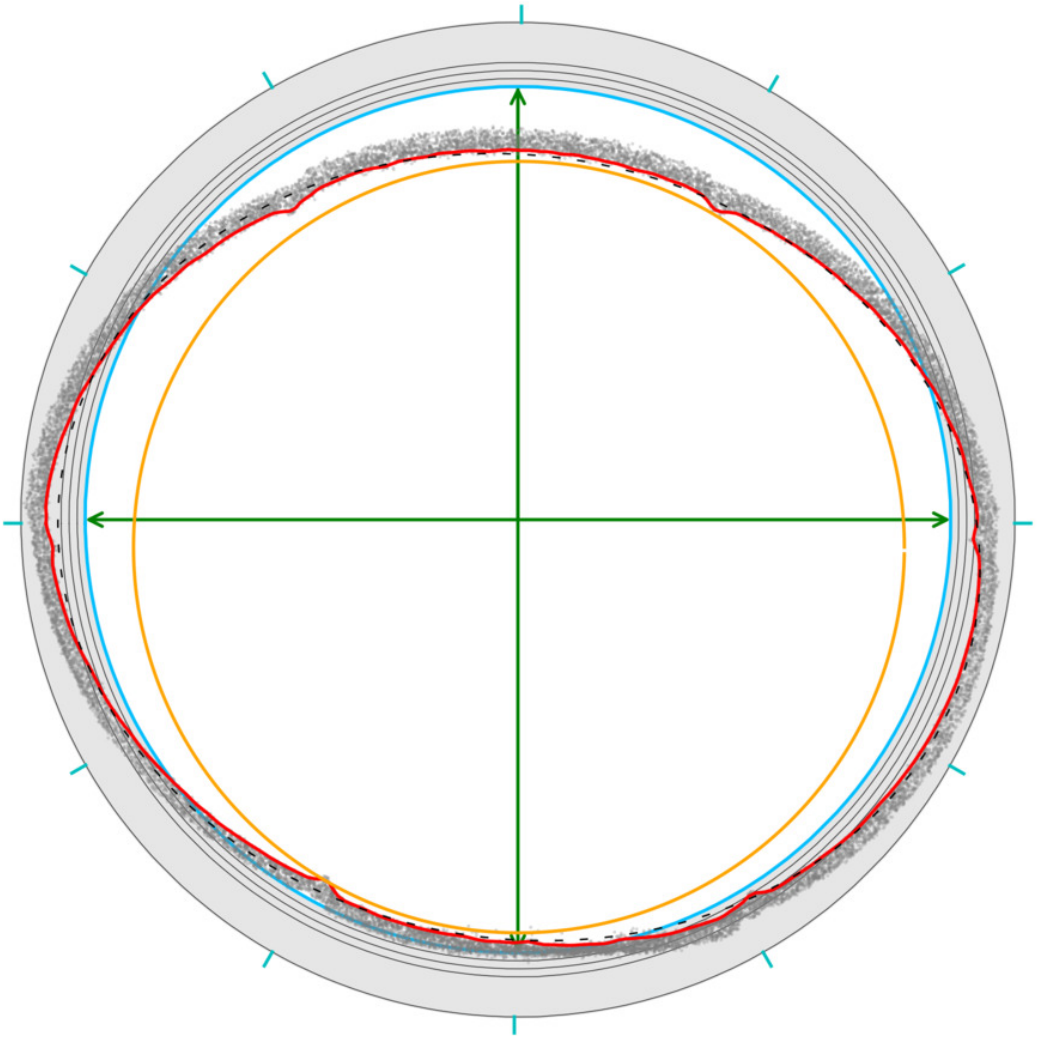
```
Footage   :  181 ft
Width     :  116.1" | 108.0"
Height    :  100.1" | 108.0"

Area      :  8820 sq in
Perimeter :  338.2 in
Ovality   :  8.0%

Interior Diameter : 96.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 182.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



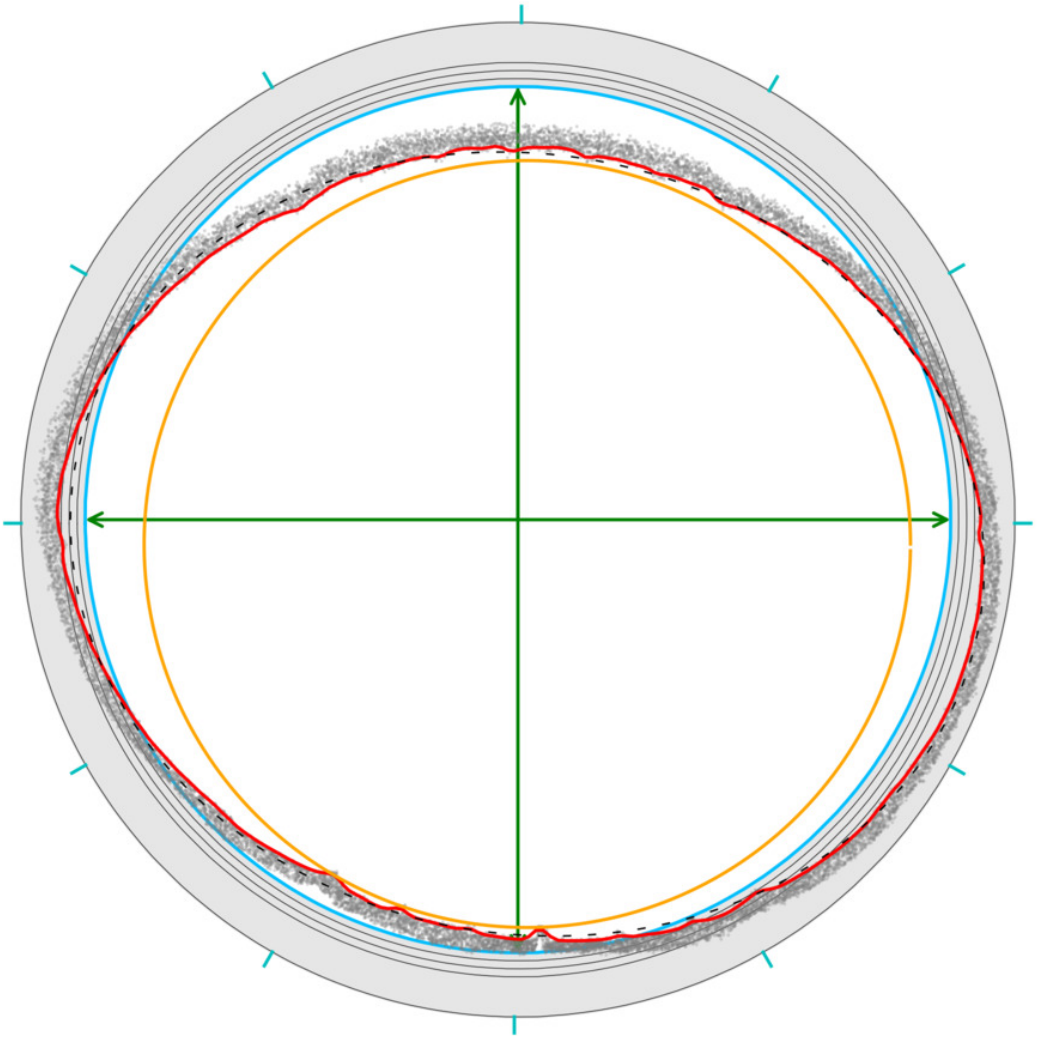
```
Footage   :  182 ft
Width     :  116.5" | 108.0"
Height    :  100.1" | 108.0"

Area      :  8850 sq in
Perimeter :  337.7 in
Ovality   :  8.2%

Interior Diameter : 96.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 183.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



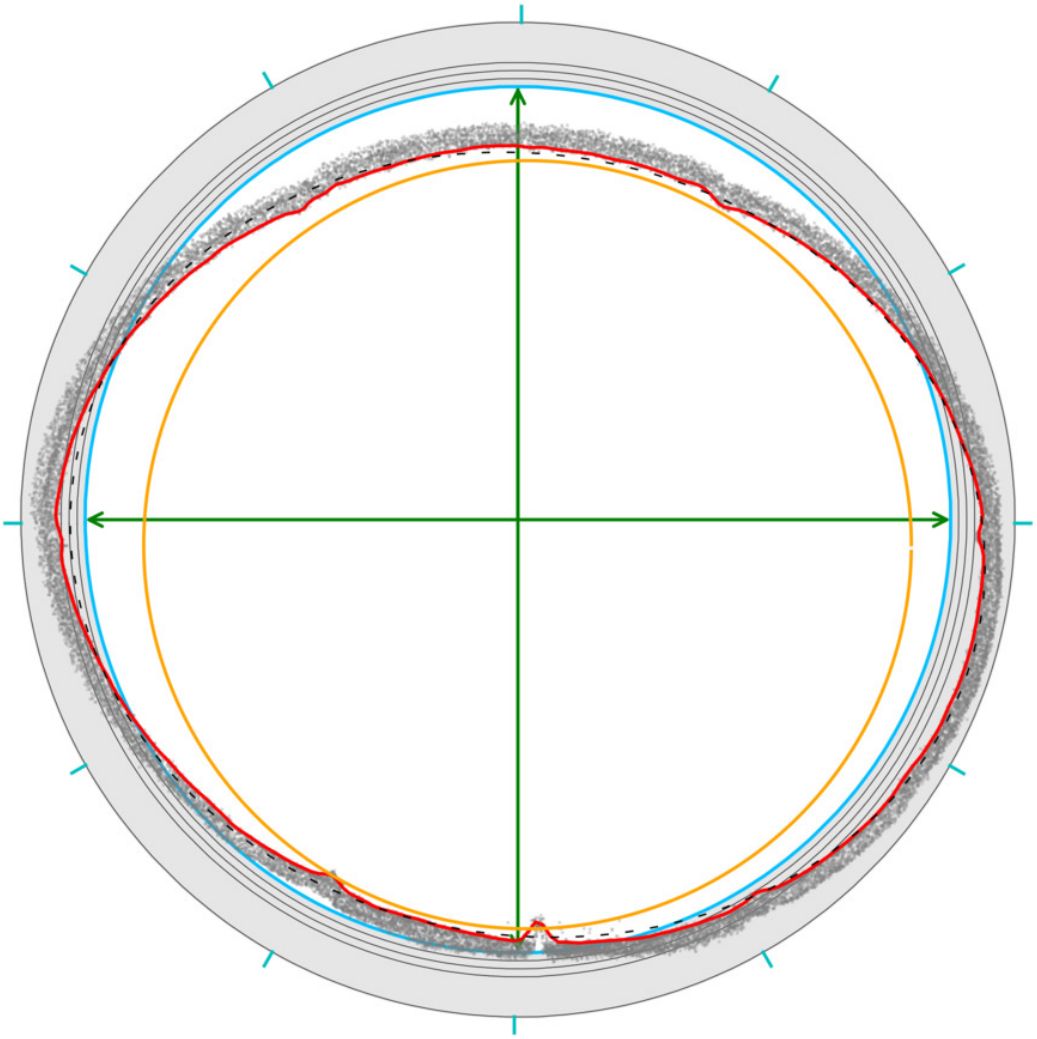
```
Footage   :  183 ft
Width     :  115.5" | 108.0"
Height    :  100.2" | 108.0"

Area      :  8735 sq in
Perimeter :  336.3 in
Ovality   :  8.0%

Interior Diameter : 95.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 184.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



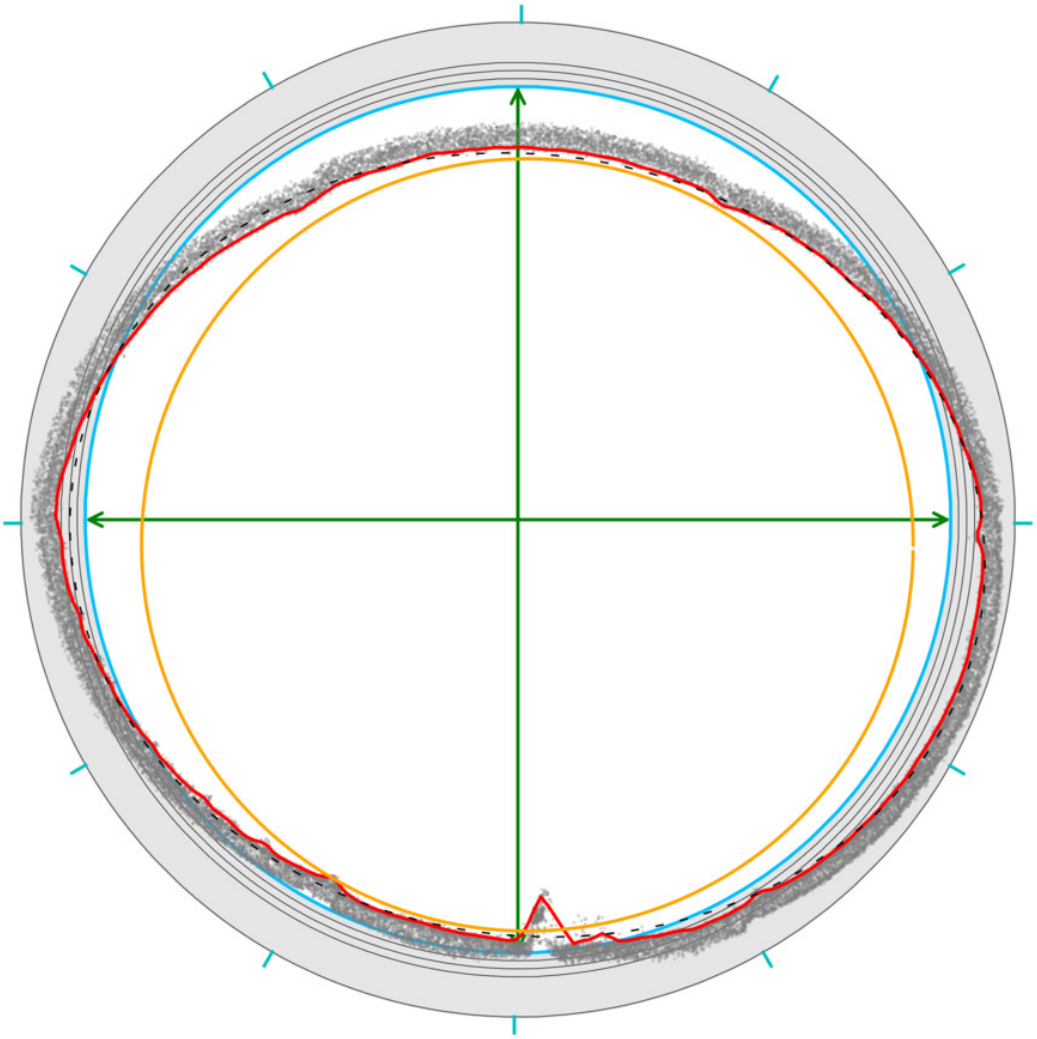
```
Footage    :  184 ft
Width      :  115.8" | 108.0"
Height     :  100.6" | 108.0"

Area       :  8755 sq in
Perimeter  :  337.6 in
Ovality    :  8.0%

Interior Diameter : 95.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 185.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



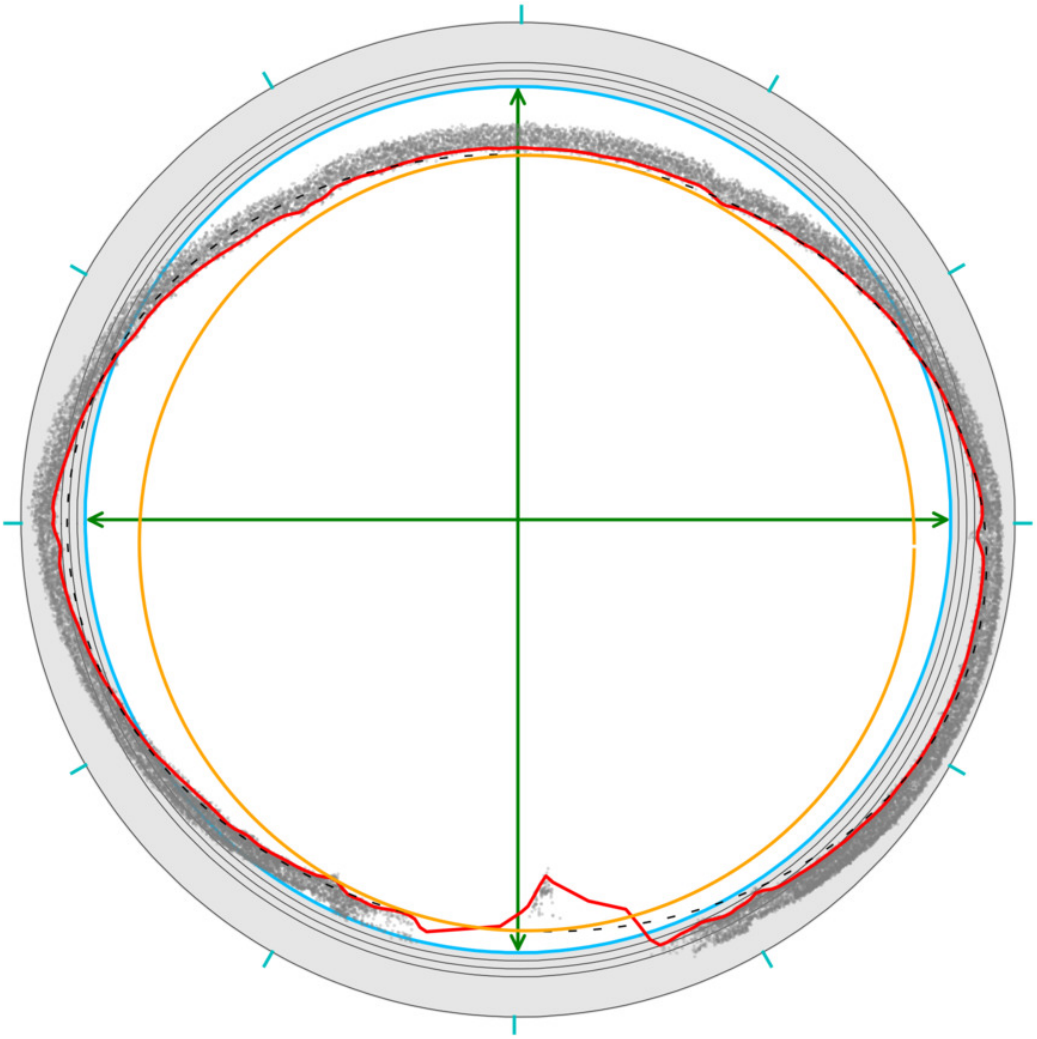
```
Footage   :  185 ft
Width     :  115.8" | 108.0"
Height    :  100.4" | 108.0"

Area      :  8747 sq in
Perimeter :  342.3 in
Ovality   :  8.0%

Interior Diameter : 96.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 186.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



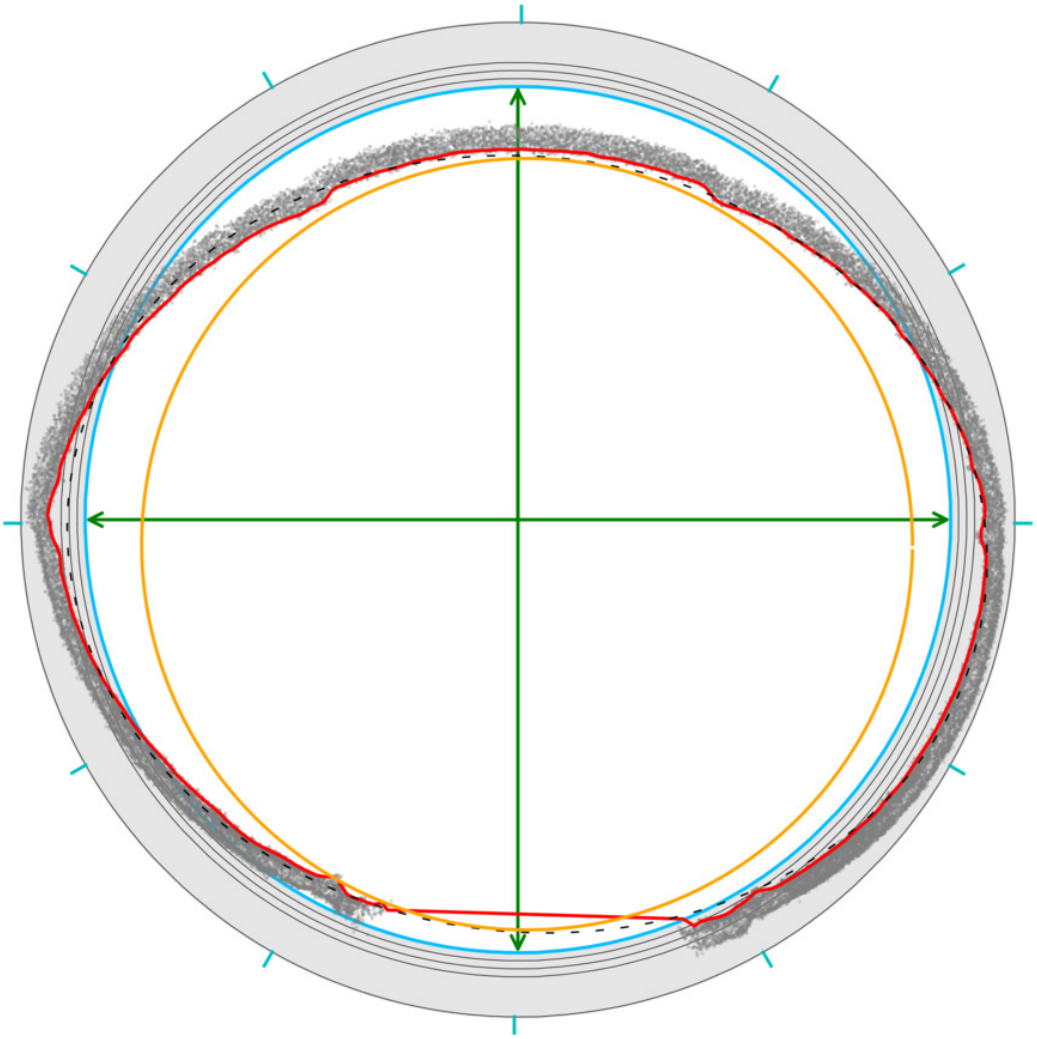
```
Footage    :  186 ft
Width      :  116.1" | 108.0"
Height     :  100.4" | 108.0"

Area       :  8692 sq in
Perimeter  :  342.8 in
Ovality    :  8.5%

Interior Diameter : 96.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 187.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



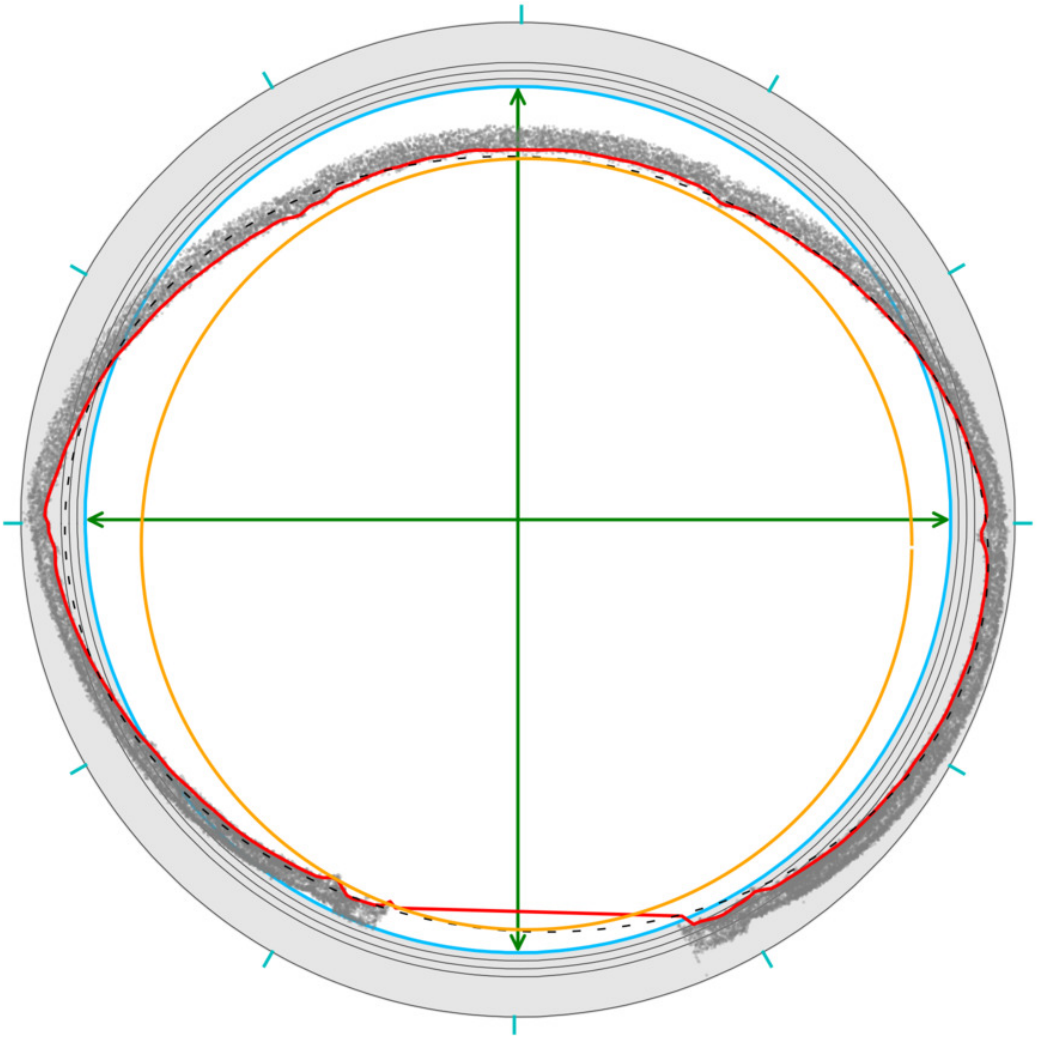
```
Footage   :  187 ft
Width     :  117.1" | 108.0"
Height    :  100.2" | 108.0"

Area      :  8672 sq in
Perimeter :  336.4 in
Ovality   :  8.5%

Interior Diameter : 96.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 188.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



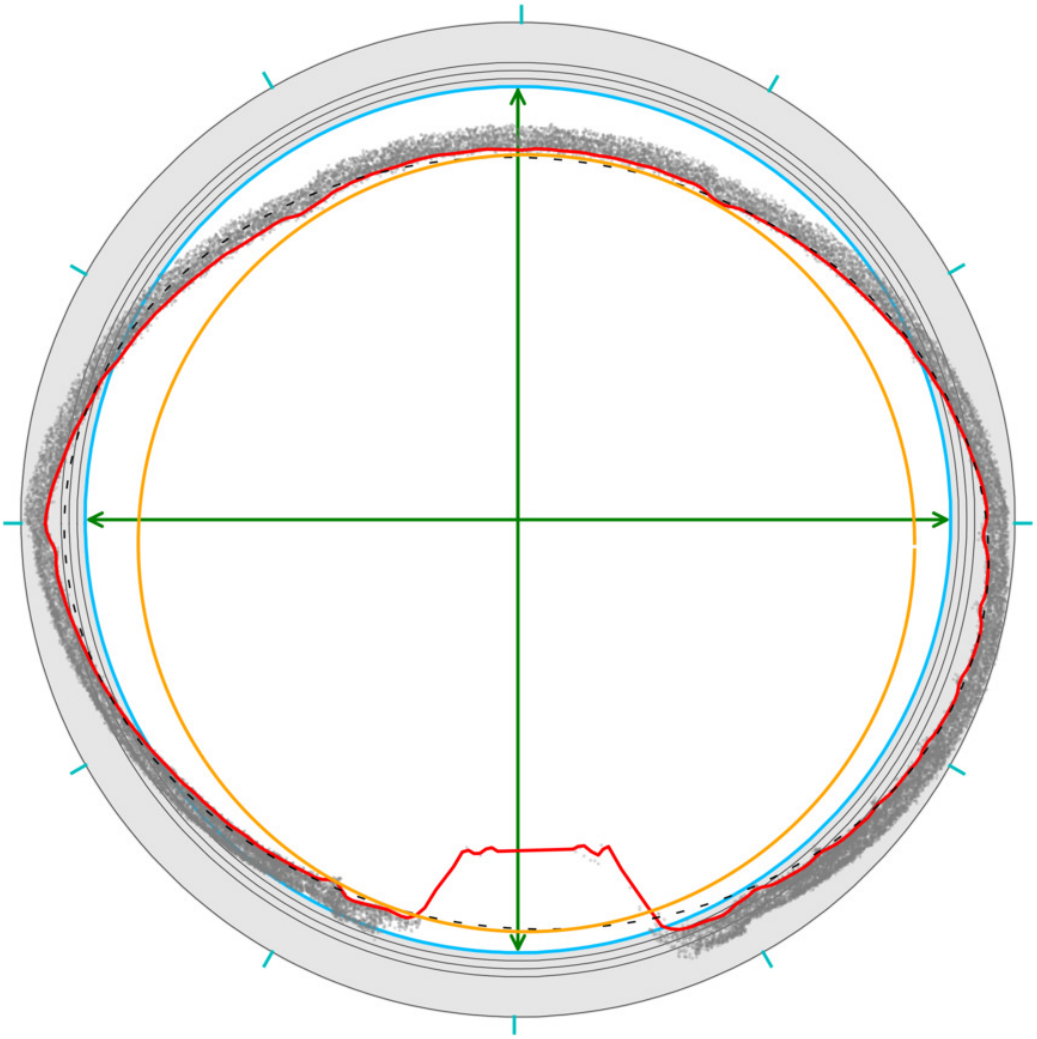
```
Footage   :  188 ft
Width     :  117.6" | 108.0"
Height    :  100.1" | 108.0"

Area      :  8682 sq in
Perimeter :  336.6 in
Ovality   :  8.7%

Interior Diameter : 96.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 189.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



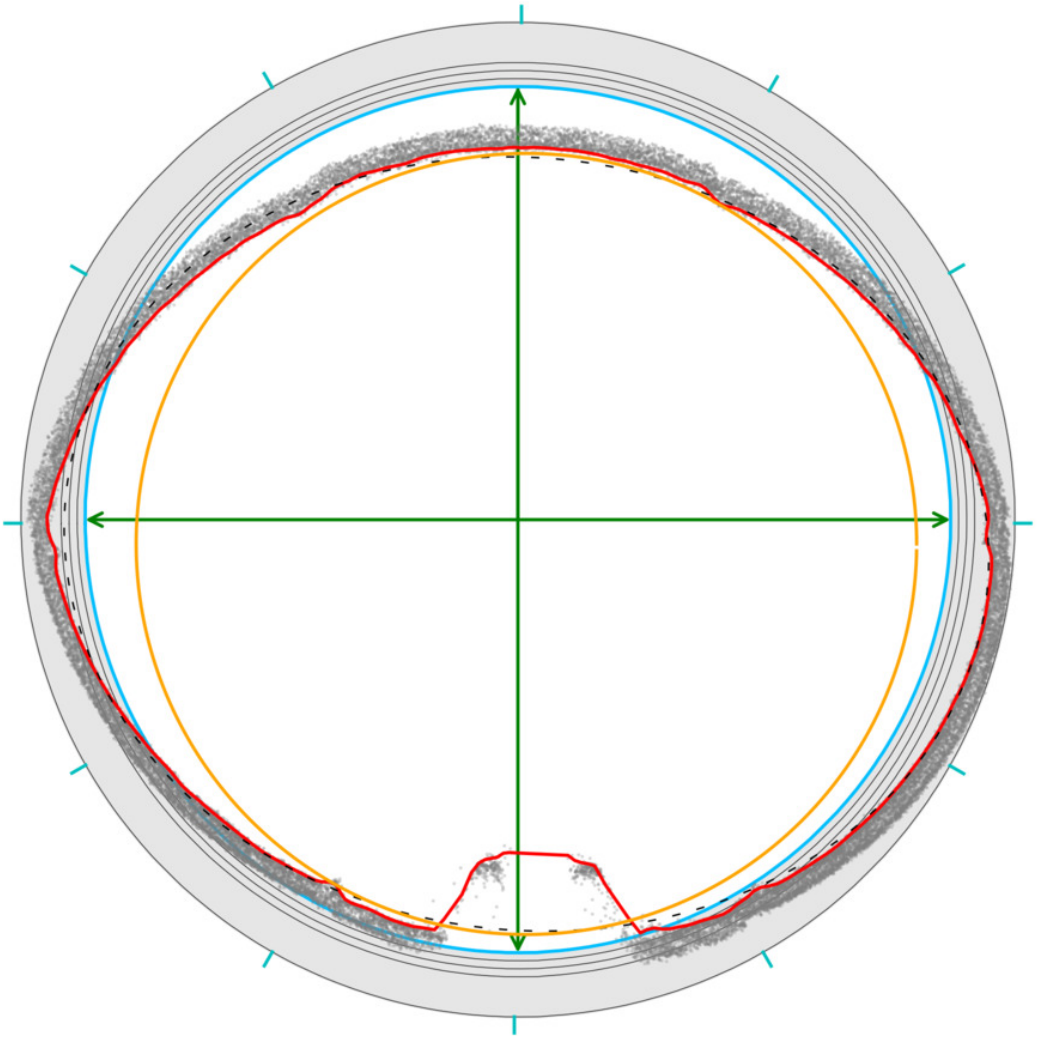
```
Footage   :  189 ft
Width     :  117.7" | 108.0"
Height    :  100.1" | 108.0"

Area      :  8505 sq in
Perimeter :  347.1 in
Ovality   :  9.0%

Interior Diameter : 96.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 190.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



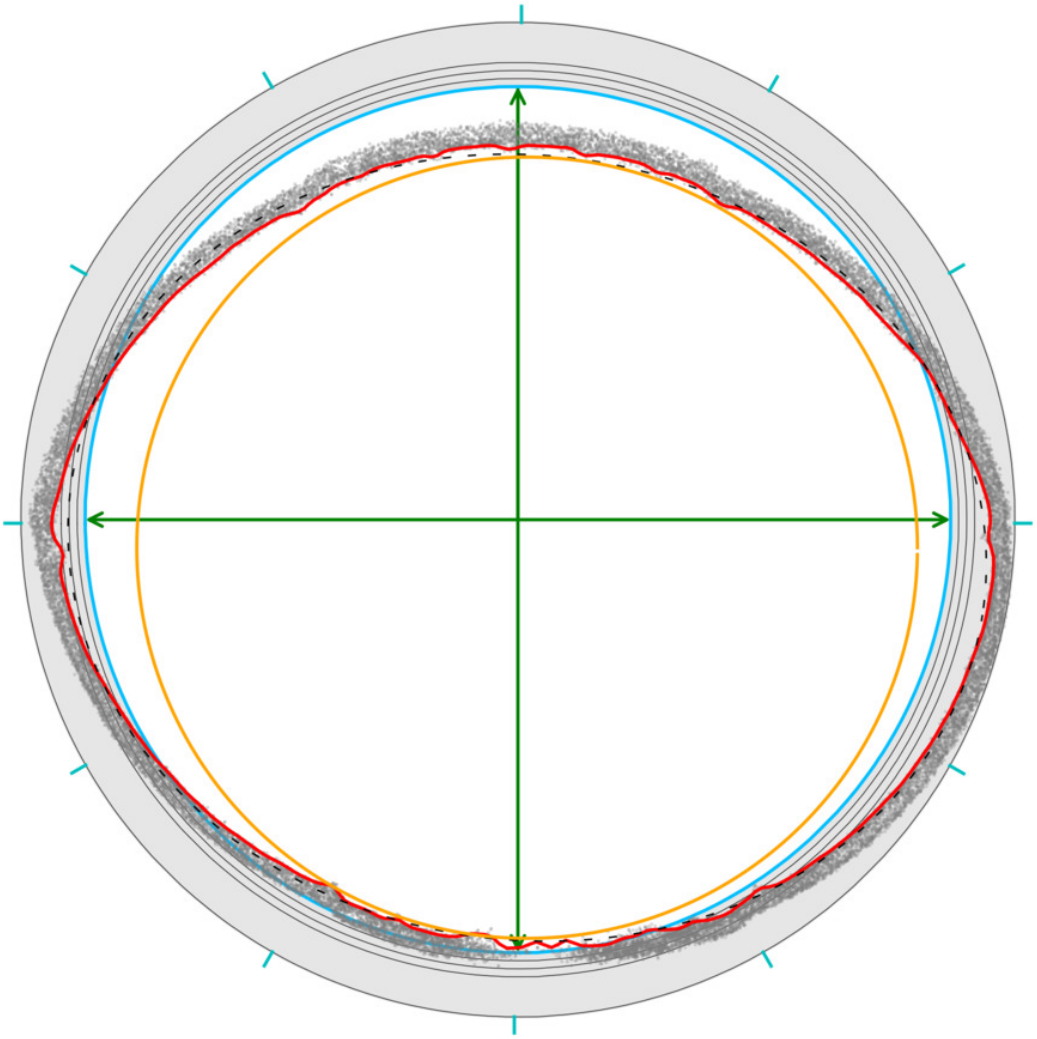
```
Footage   :  190 ft
Width     :  117.9" | 108.0"
Height    :  100.4" | 108.0"

Area      :  8605 sq in
Perimeter :  346.3 in
Ovality   :  8.9%

Interior Diameter : 97.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 191.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



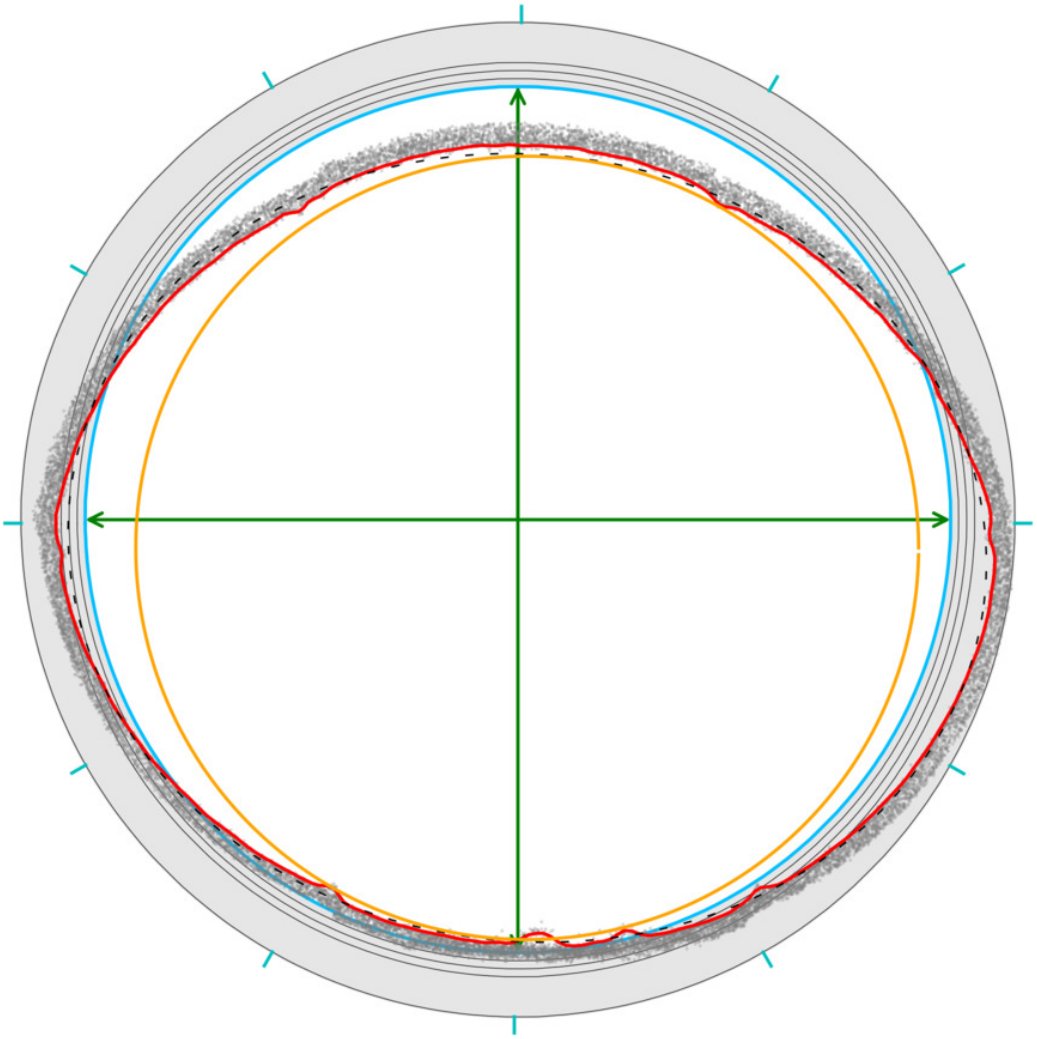
```
Footage   :  191 ft
Width     :  117.5" | 108.0"
Height    :  100.4" | 108.0"

Area      :  8819 sq in
Perimeter :  338.7 in
Ovality   :  7.8%

Interior Diameter : 97.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 192.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



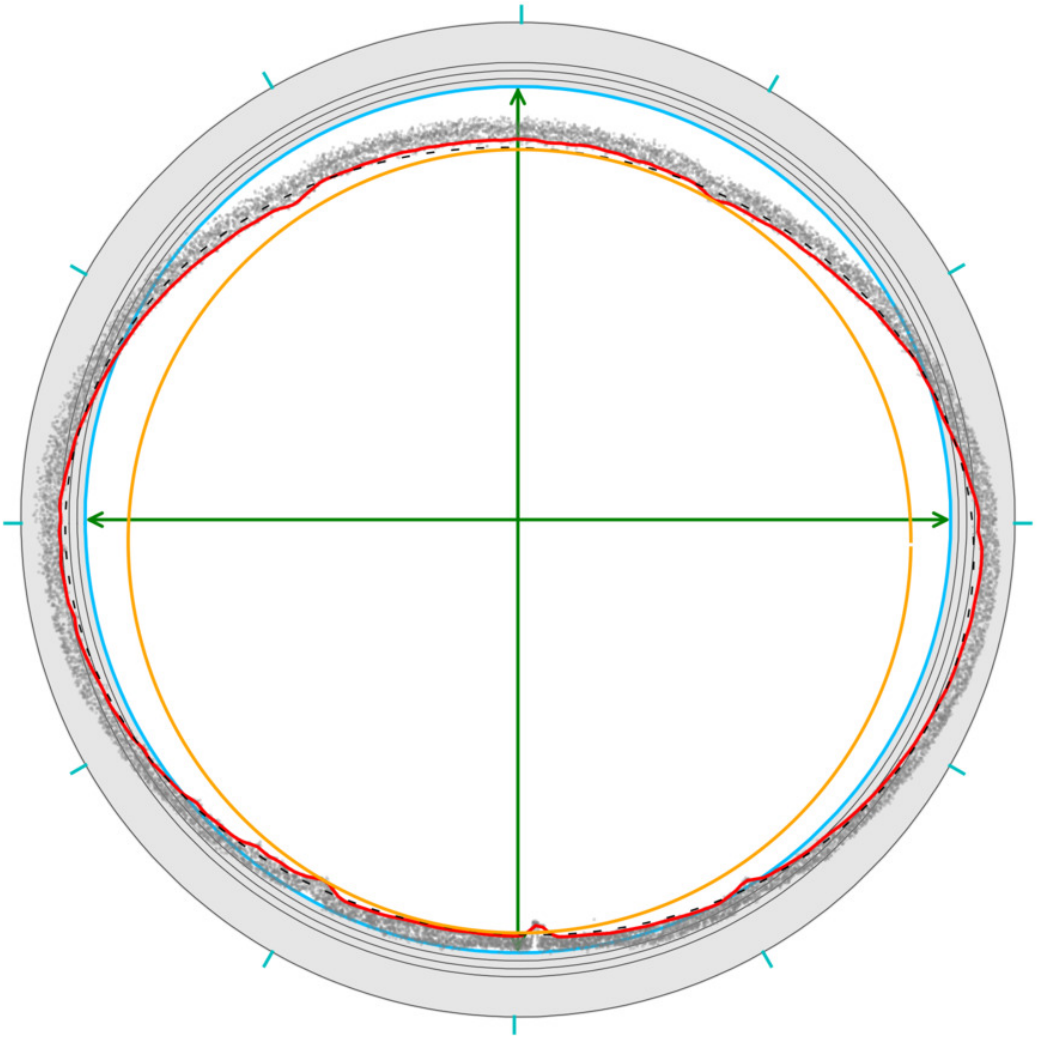
```
Footage   :  192 ft
Width     :  117.2" | 108.0"
Height    :  100.7" | 108.0"

Area      :  8837 sq in
Perimeter :  338.3 in
Ovality   :  7.7%

Interior Diameter : 97.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 193.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



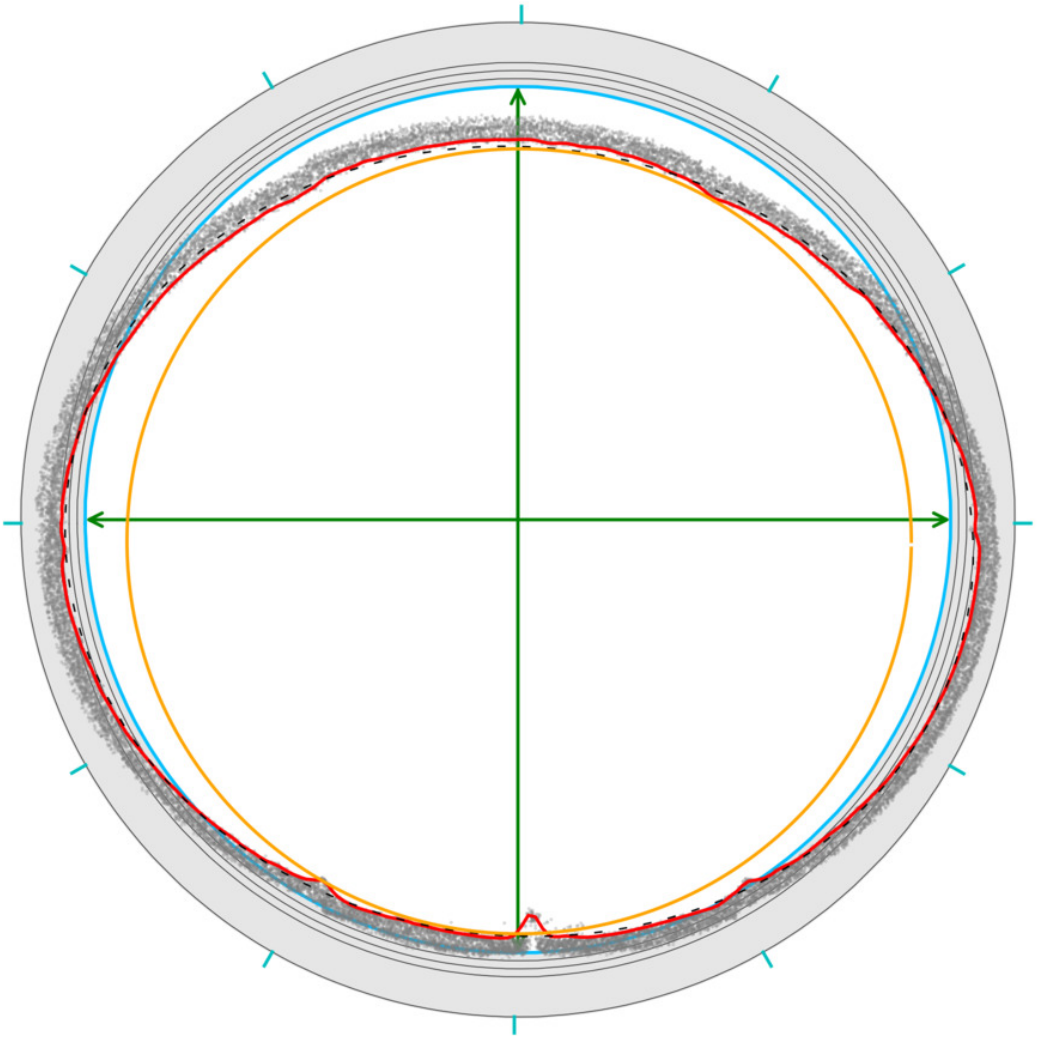
```
Footage   :  193 ft
Width     :  115.1" | 108.0"
Height    :  101.4" | 108.0"

Area      :  8731 sq in
Perimeter :  335.5 in
Ovality   :  7.2%

Interior Diameter : 97.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 194.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



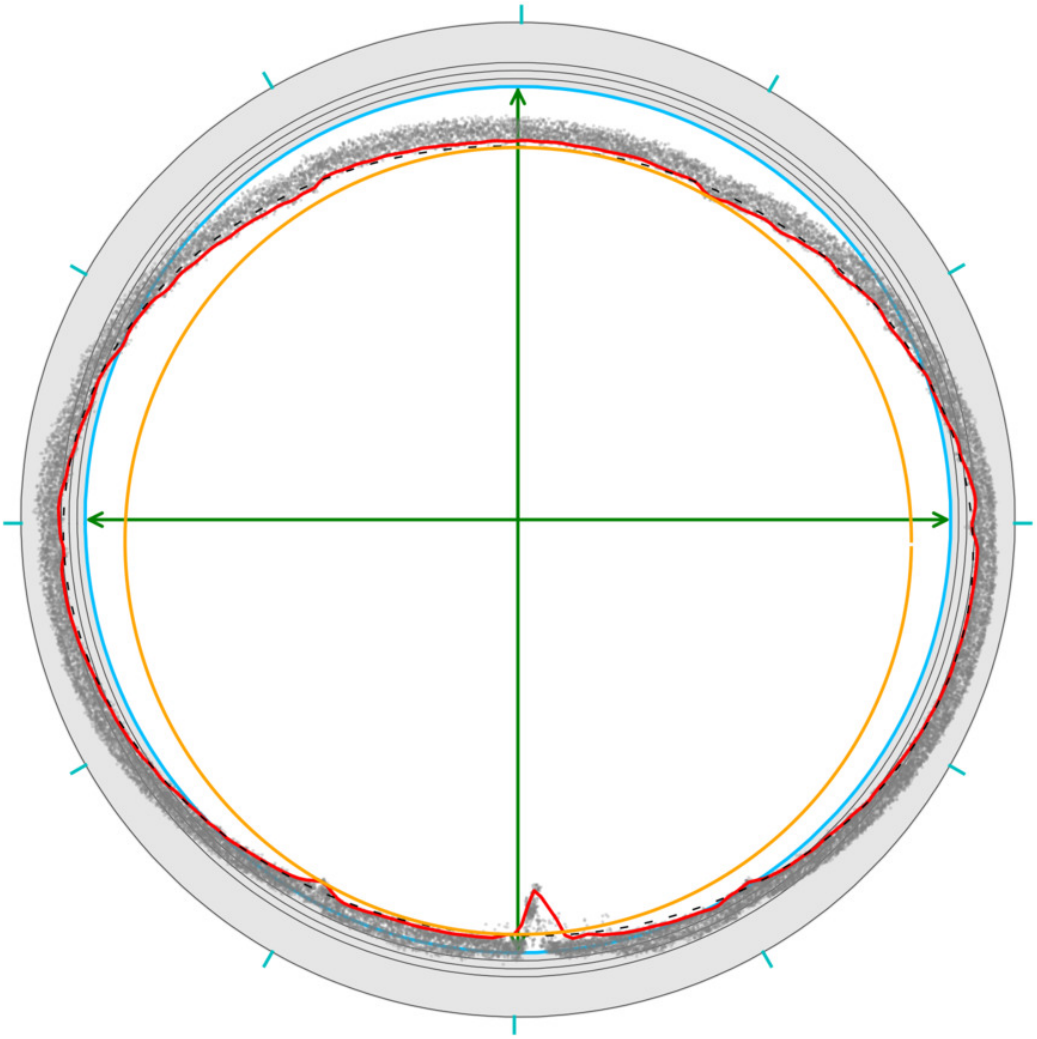
```
Footage   :  194 ft
Width     :  114.6" | 108.0"
Height    :  101.4" | 108.0"

Area      :  8759 sq in
Perimeter :  337.5 in
Ovality   :  7.0%

Interior Diameter : 97.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 195.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



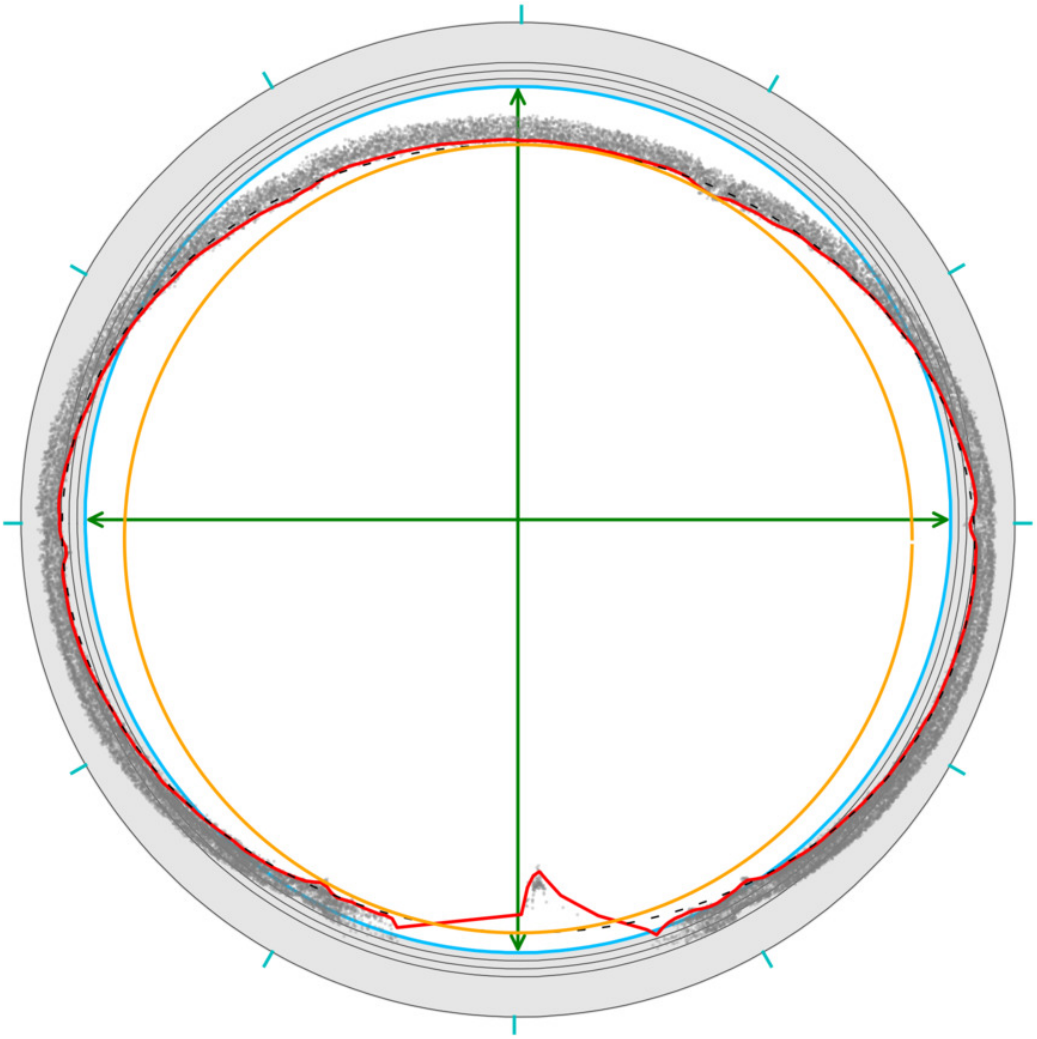
```
Footage   :  195 ft
Width     :  114.7" | 108.0"
Height    :  101.2" | 108.0"

Area      :  8770 sq in
Perimeter :  342.6 in
Ovality   :  7.1%

Interior Diameter : 98.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 196.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 196 ft
Width : 114.5" | 108.0"
Height : 101.3" | 108.0"

Area : 8736 sq in
Perimeter : 343.1 in
Ovality : 7.3%

Interior Diameter : 98.3"

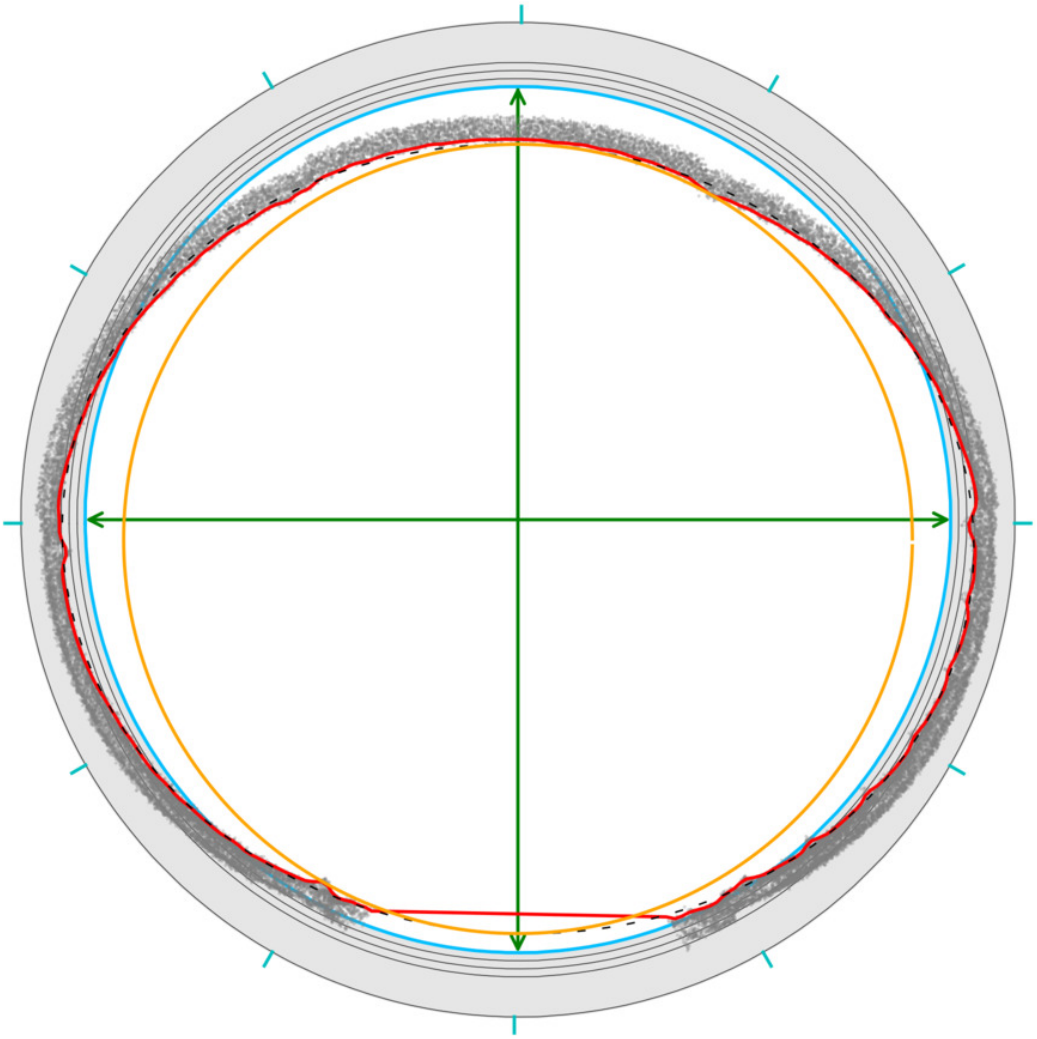
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 197.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



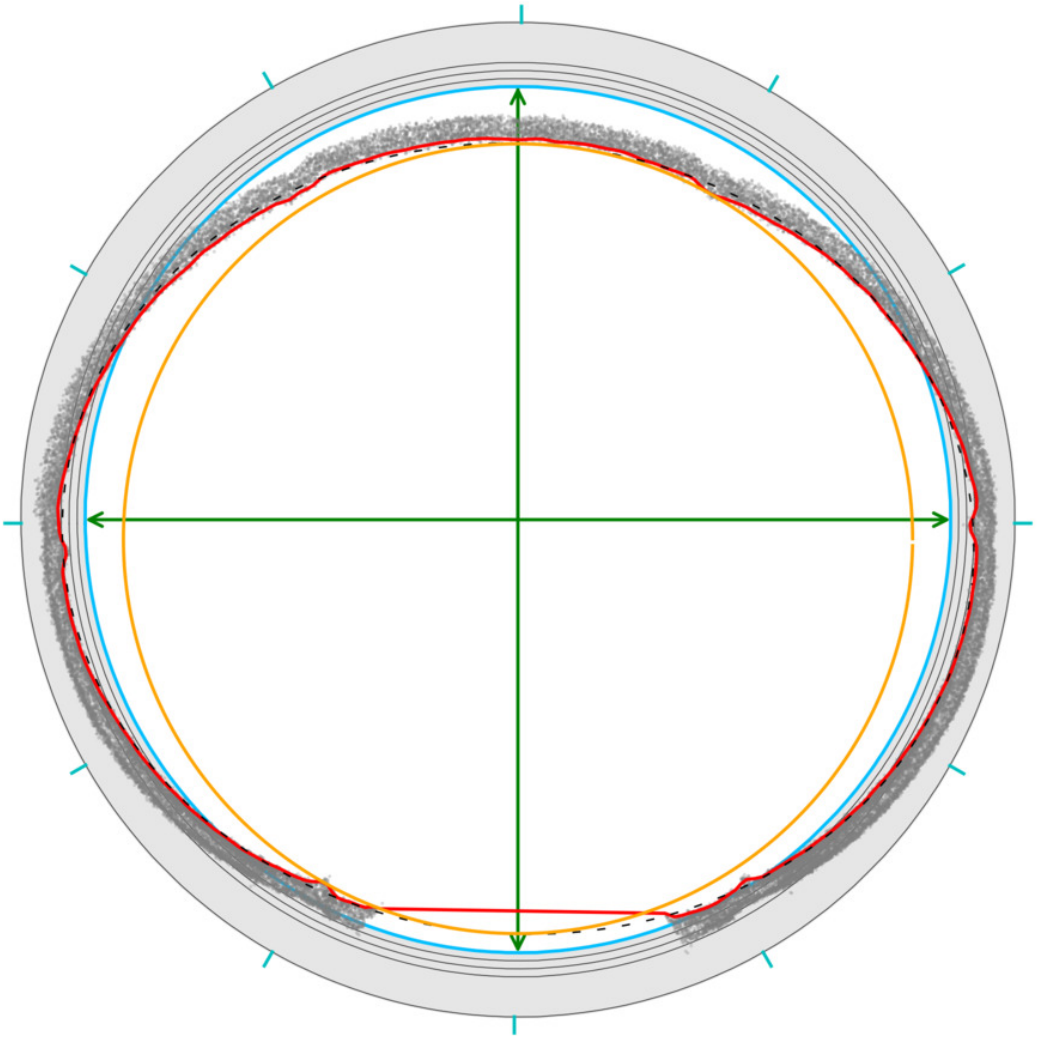
```
Footage   :  197 ft
Width     :  114.6" | 108.0"
Height    :  101.4" | 108.0"

Area      :  8733 sq in
Perimeter :  335.9 in
Ovality   :  7.2%

Interior Diameter : 98.4"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 198.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



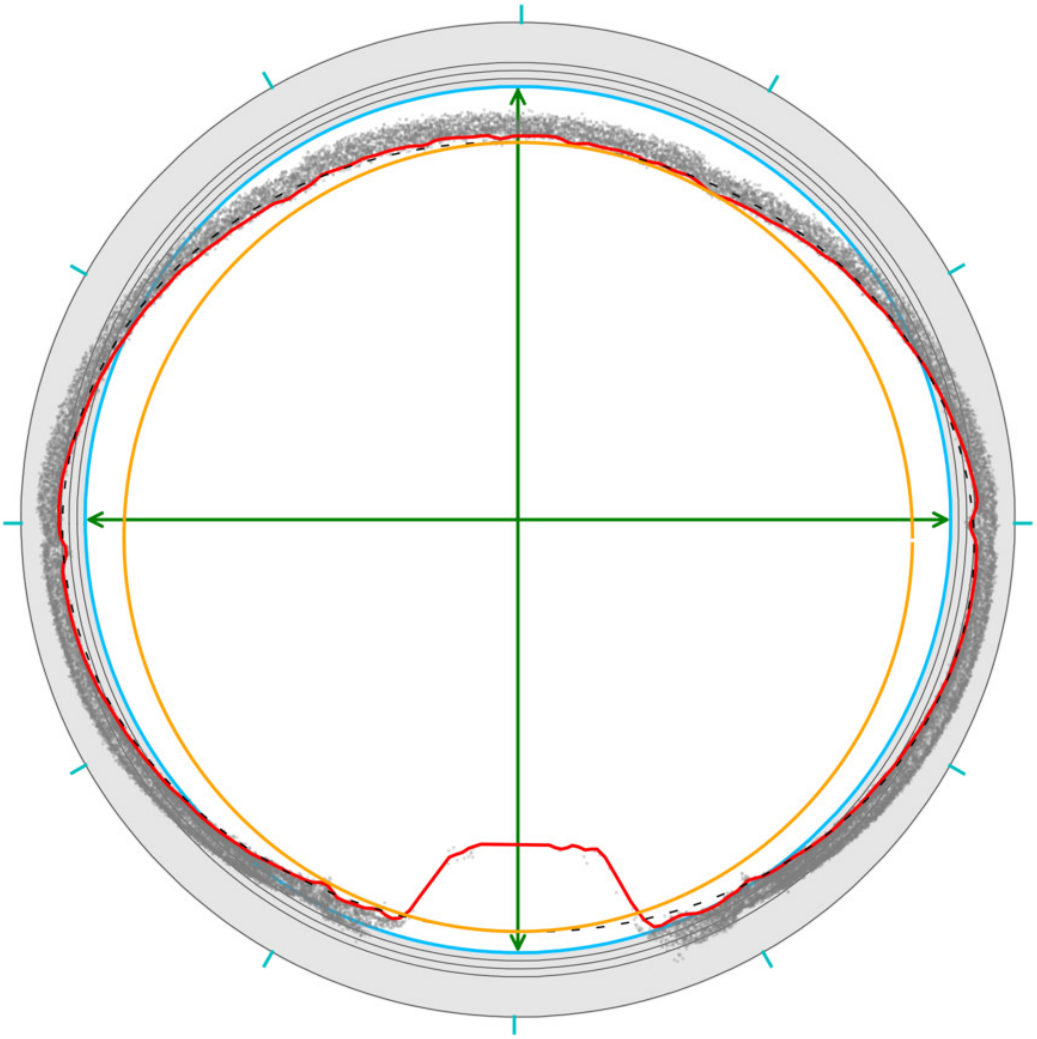
```
Footage   :  198 ft
Width     :  114.7" | 108.0"
Height    :  101.4" | 108.0"

Area      :  8729 sq in
Perimeter :  335.6 in
Ovality   :  7.1%

Interior Diameter : 98.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 199.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



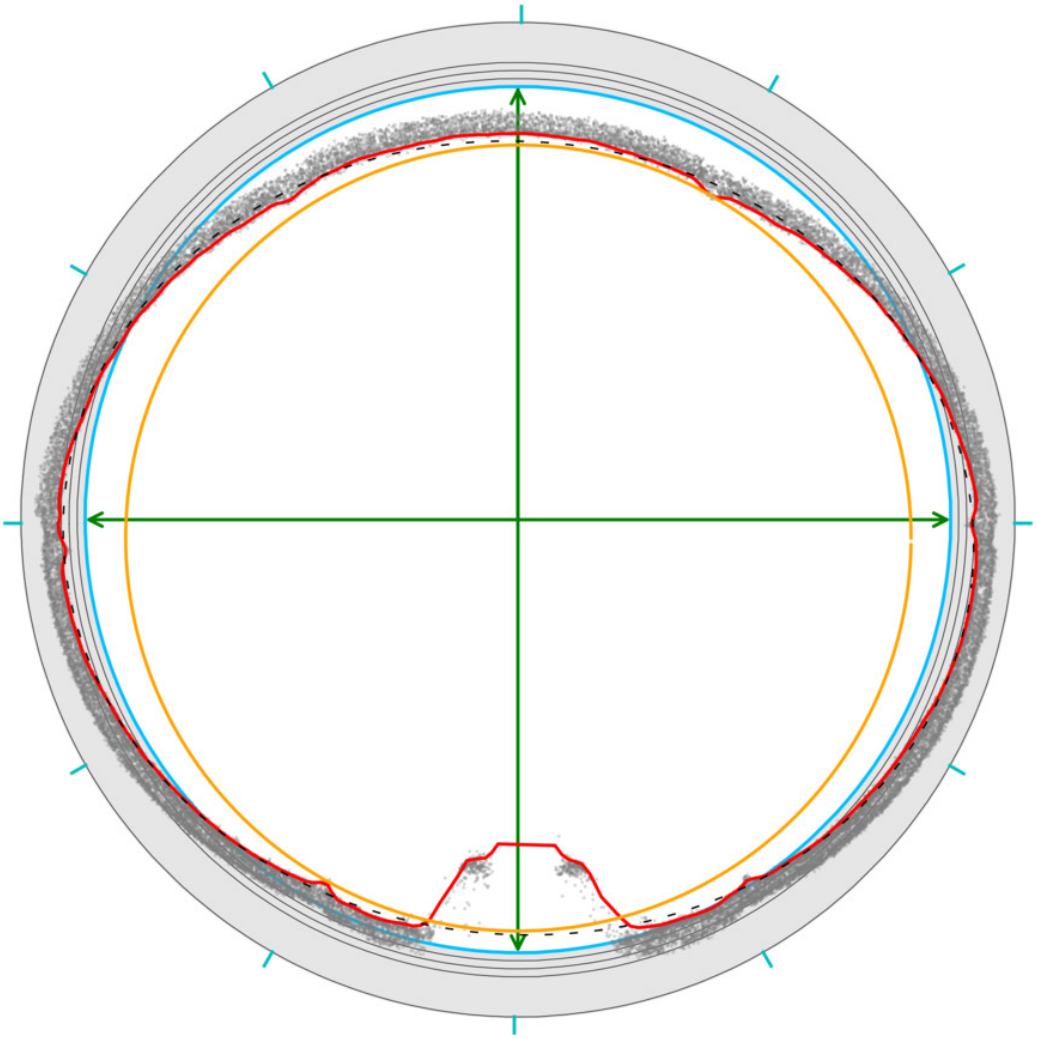
```
Footage   :  199 ft
Width     :  114.6" | 108.0"
Height    :  101.8" | 108.0"

Area      :  8561 sq in
Perimeter :  345.8 in
Ovality   :  7.2%

Interior Diameter : 98.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 200.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



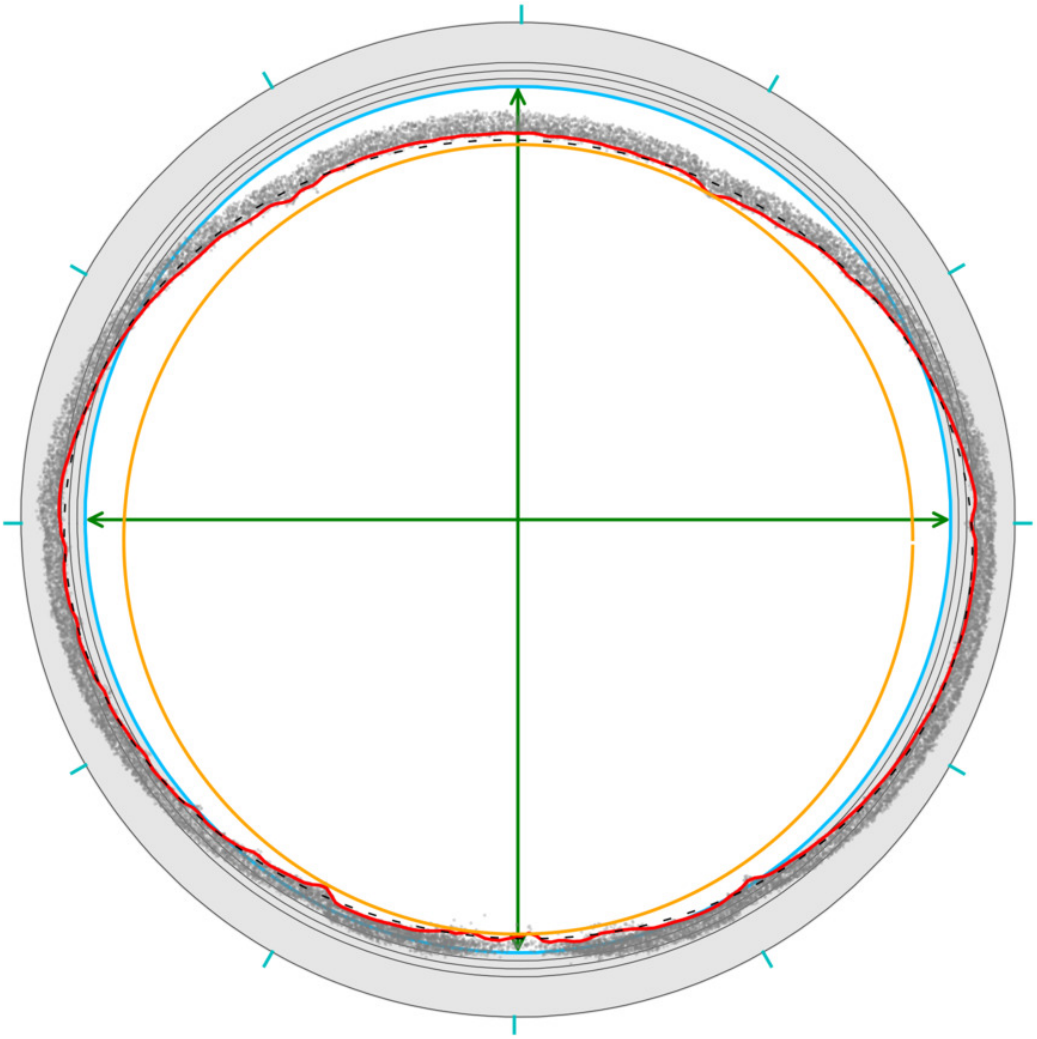
```
Footage   :  200 ft
Width     :  114.6" | 108.0"
Height    :  102.1" | 108.0"

Area      :  8640 sq in
Perimeter :  346.6 in
Ovality   :  6.8%

Interior Diameter : 98.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 201.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



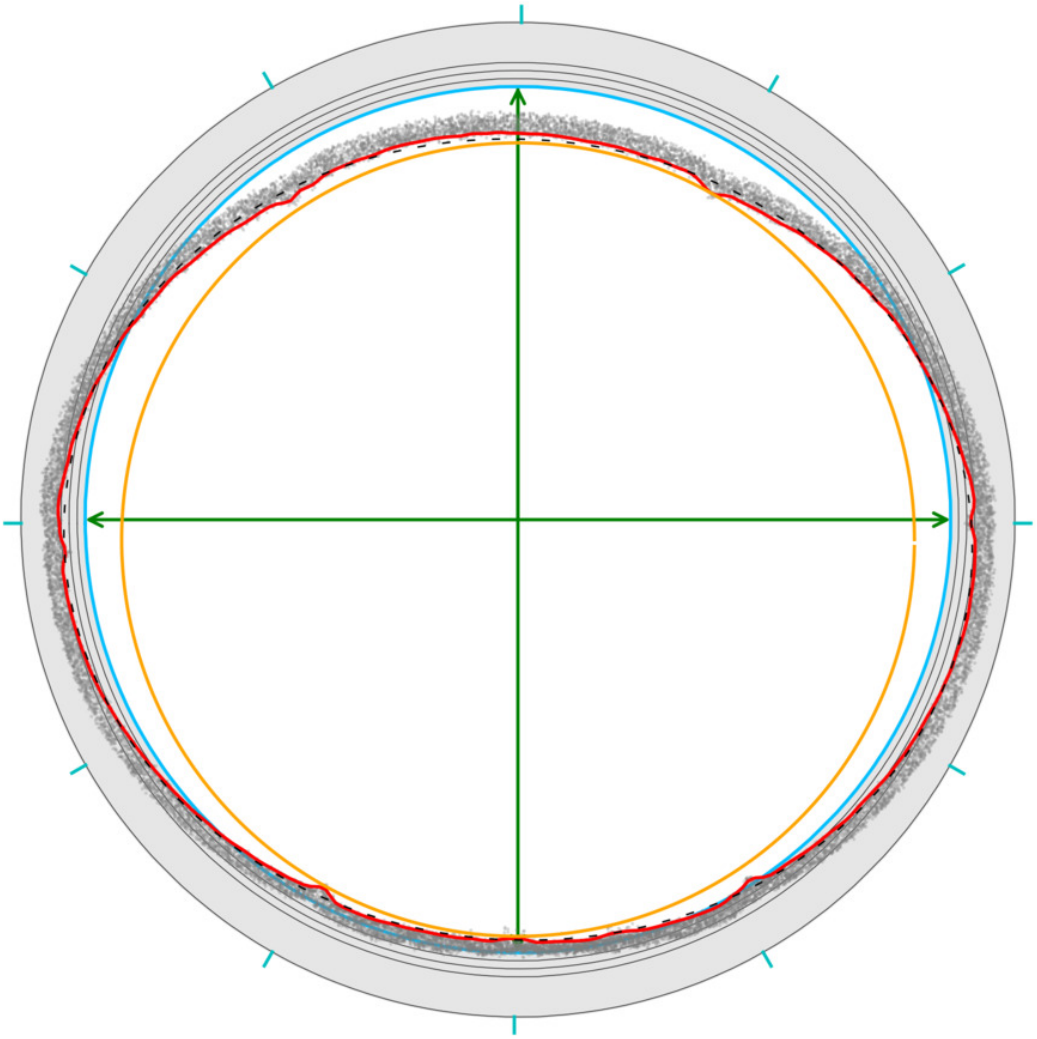
```
Footage   :  201 ft
Width     :  114.4" | 108.0"
Height    :  102.2" | 108.0"

Area      :  8855 sq in
Perimeter :  338.1 in
Ovality   :  6.4%

Interior Diameter : 98.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 202.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



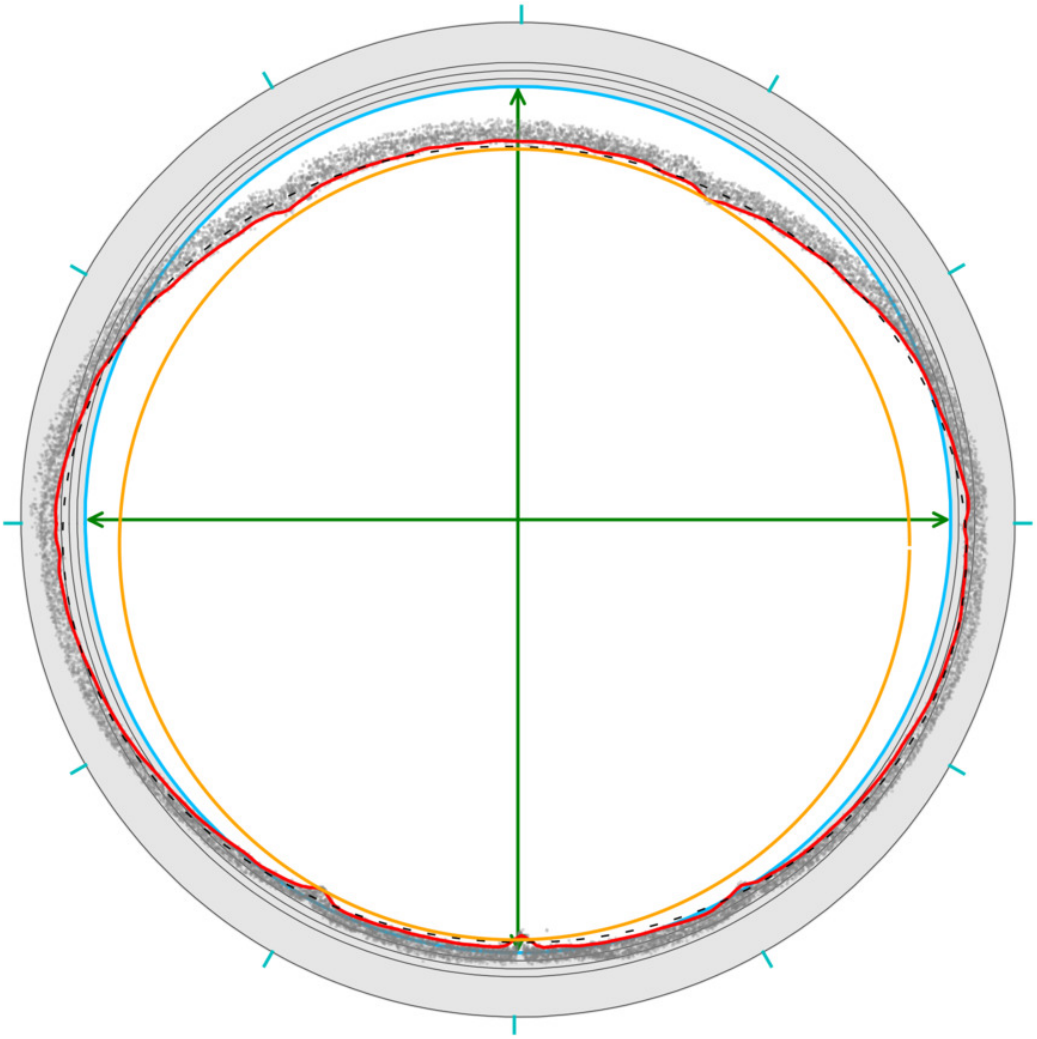
```
Footage   :  202 ft
Width     :  114.4" | 108.0"
Height    :  102.2" | 108.0"

Area      :  8885 sq in
Perimeter :  337.5 in
Ovality   :  6.3%

Interior Diameter : 98.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 203.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



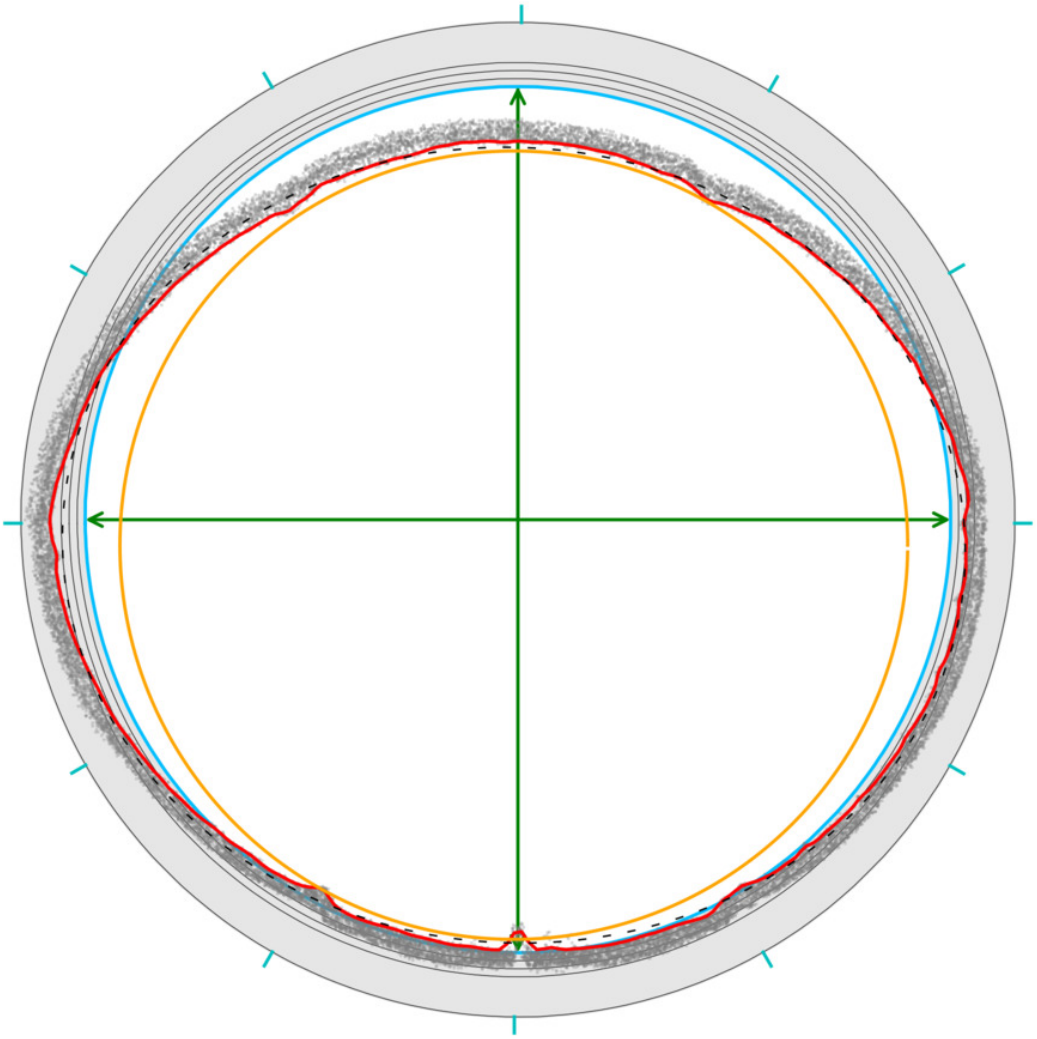
```
Footage   :  203 ft
Width     :  113.9" | 108.0"
Height    :  101.2" | 108.0"

Area      :  8783 sq in
Perimeter :  336.3 in
Ovality   :  6.3%

Interior Diameter : 98.6"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 204.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



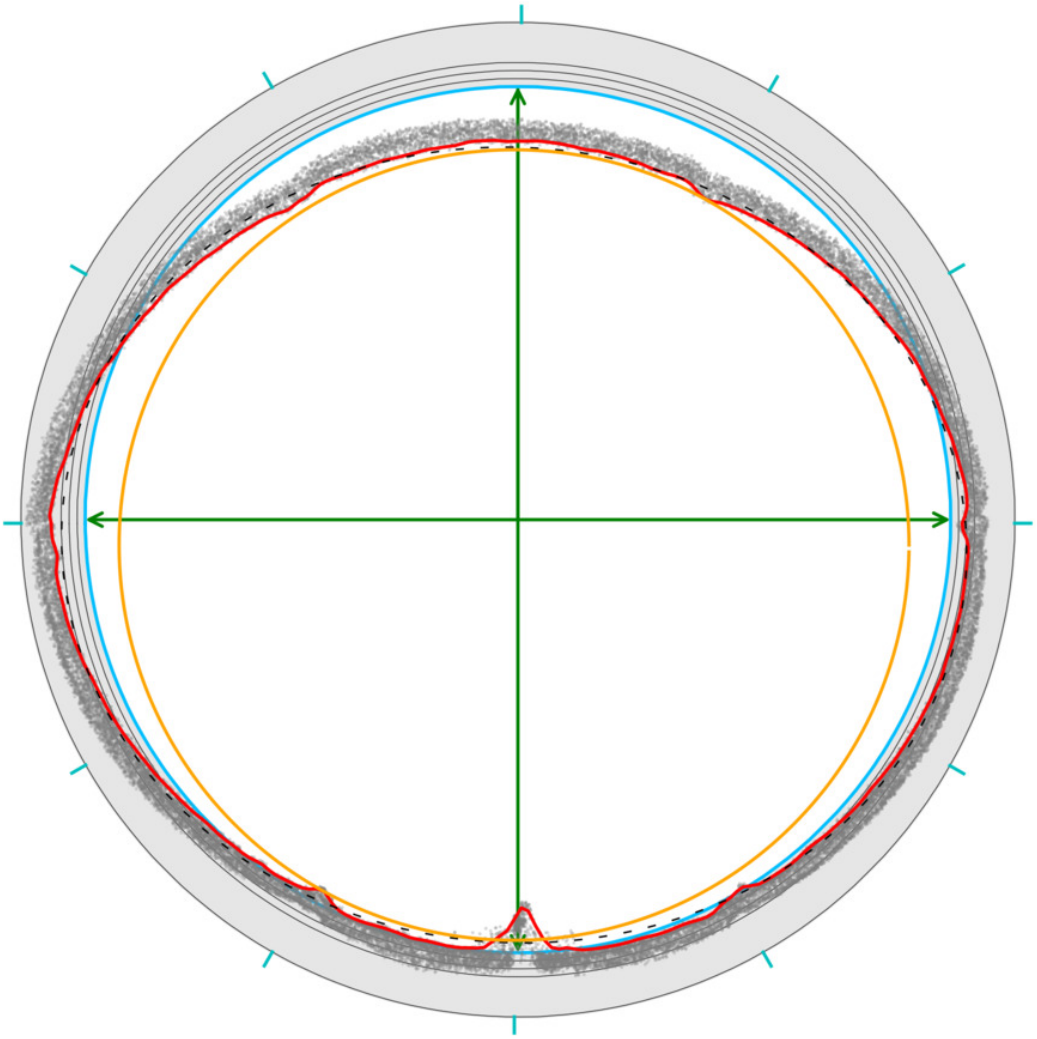
```
Footage   :  204 ft
Width     :  114.6" | 108.0"
Height    :  101.1" | 108.0"

Area      :  8773 sq in
Perimeter :  337.7 in
Ovality   :  6.3%

Interior Diameter : 98.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 205.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 205 ft
Width : 114.6" | 108.0"
Height : 101.2" | 108.0"

Area : 8795 sq in
Perimeter : 341.3 in
Ovality : 6.4%

Interior Diameter : 98.6"

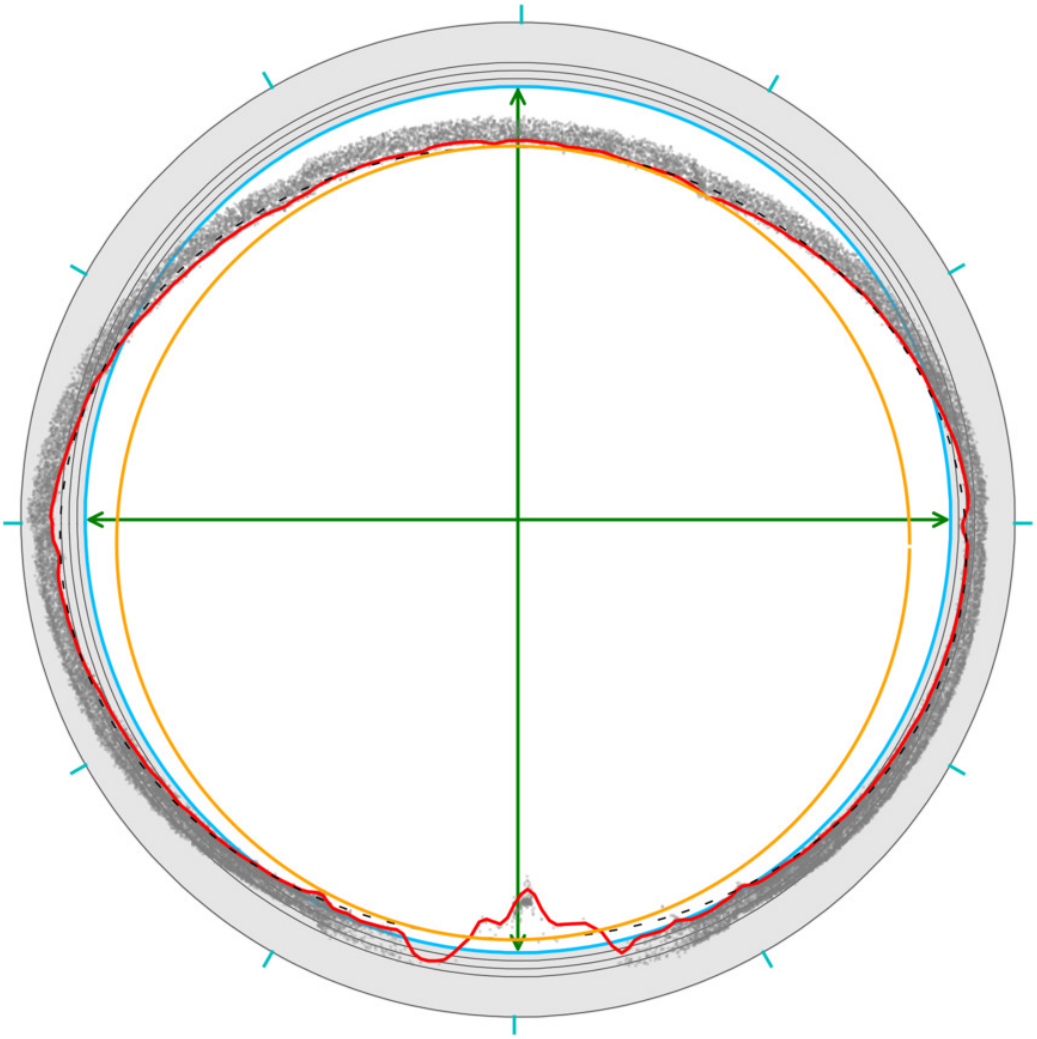
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 206.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



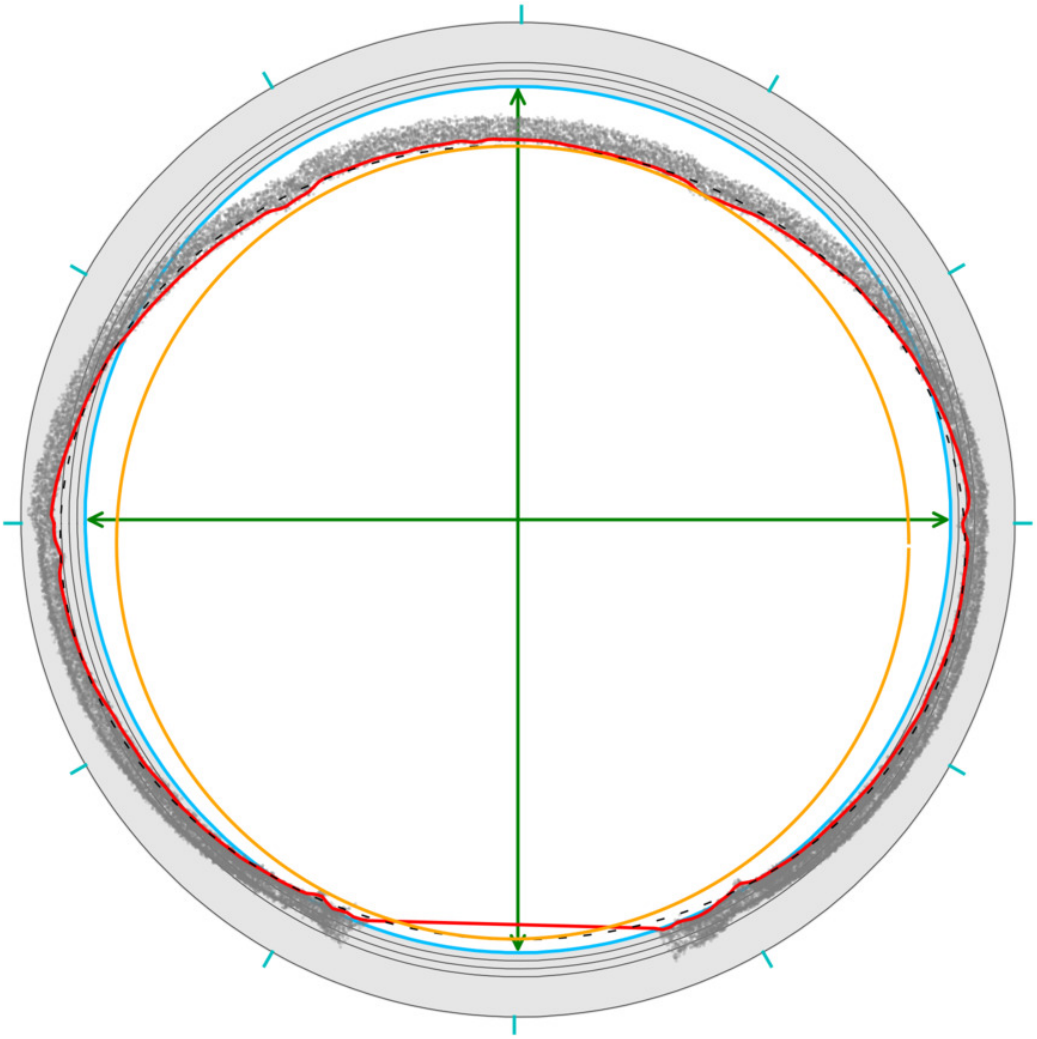
```
Footage   :  206 ft
Width     :  114.5" | 108.0"
Height    :  101.3" | 108.0"

Area      :  8765 sq in
Perimeter :  346.4 in
Ovality   :  6.7%

Interior Diameter : 99.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 207.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



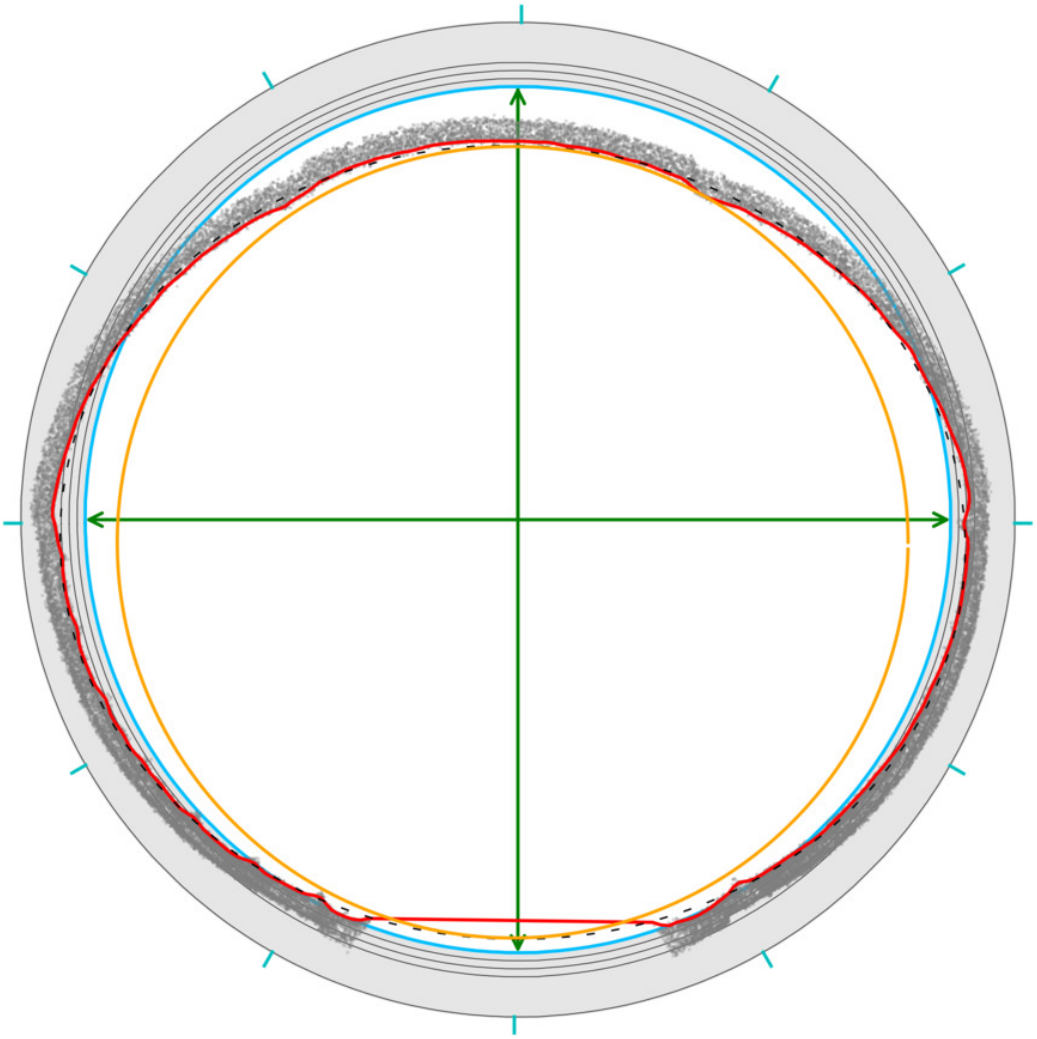
```
Footage   :  207 ft
Width     :  114.5" | 108.0"
Height    :  101.4" | 108.0"

Area      :  8741 sq in
Perimeter :  335.3 in
Ovality   :  6.5%

Interior Diameter : 98.9"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 208.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



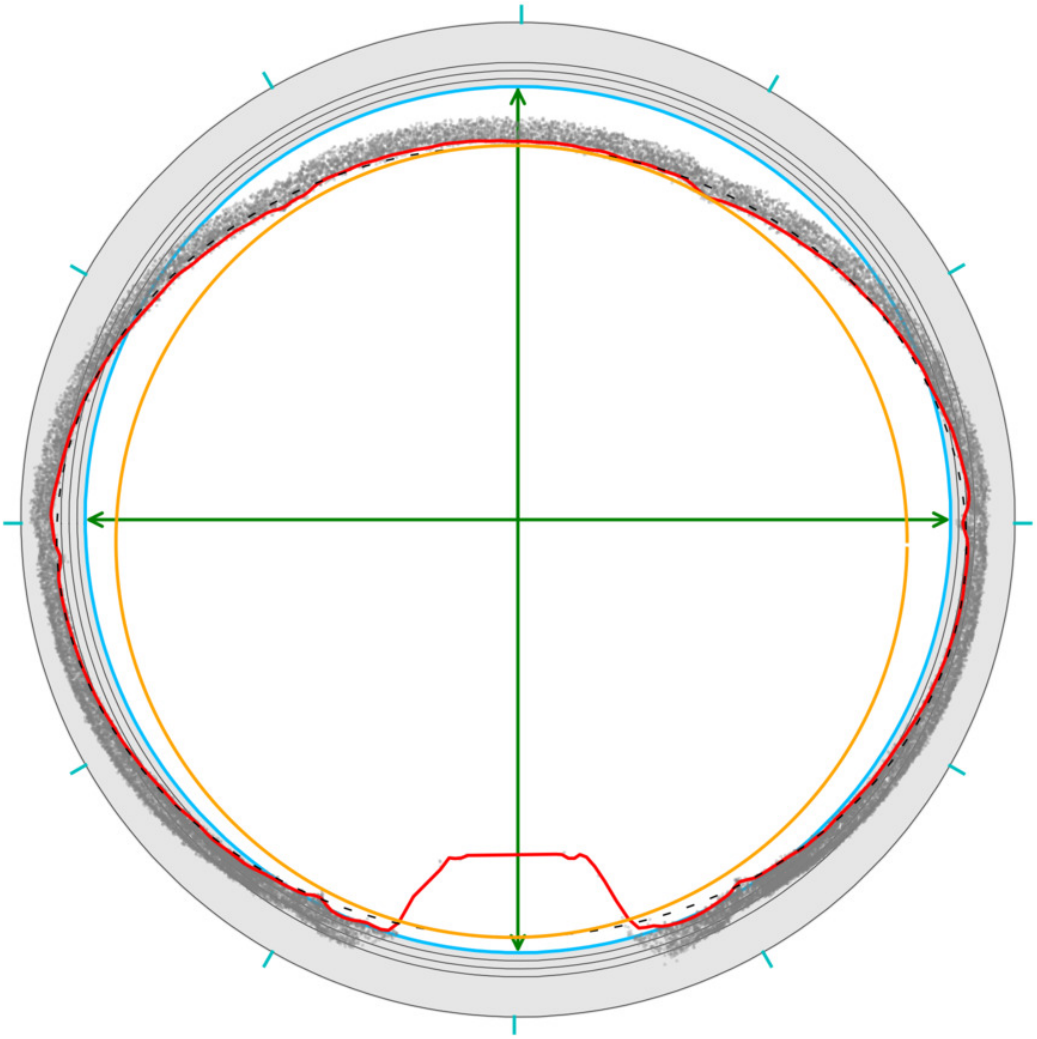
```
Footage   :  208 ft
Width     :  114.4" | 108.0"
Height    :  101.2" | 108.0"

Area      :  8721 sq in
Perimeter :  335.3 in
Ovality   :  6.5%

Interior Diameter : 98.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 209.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



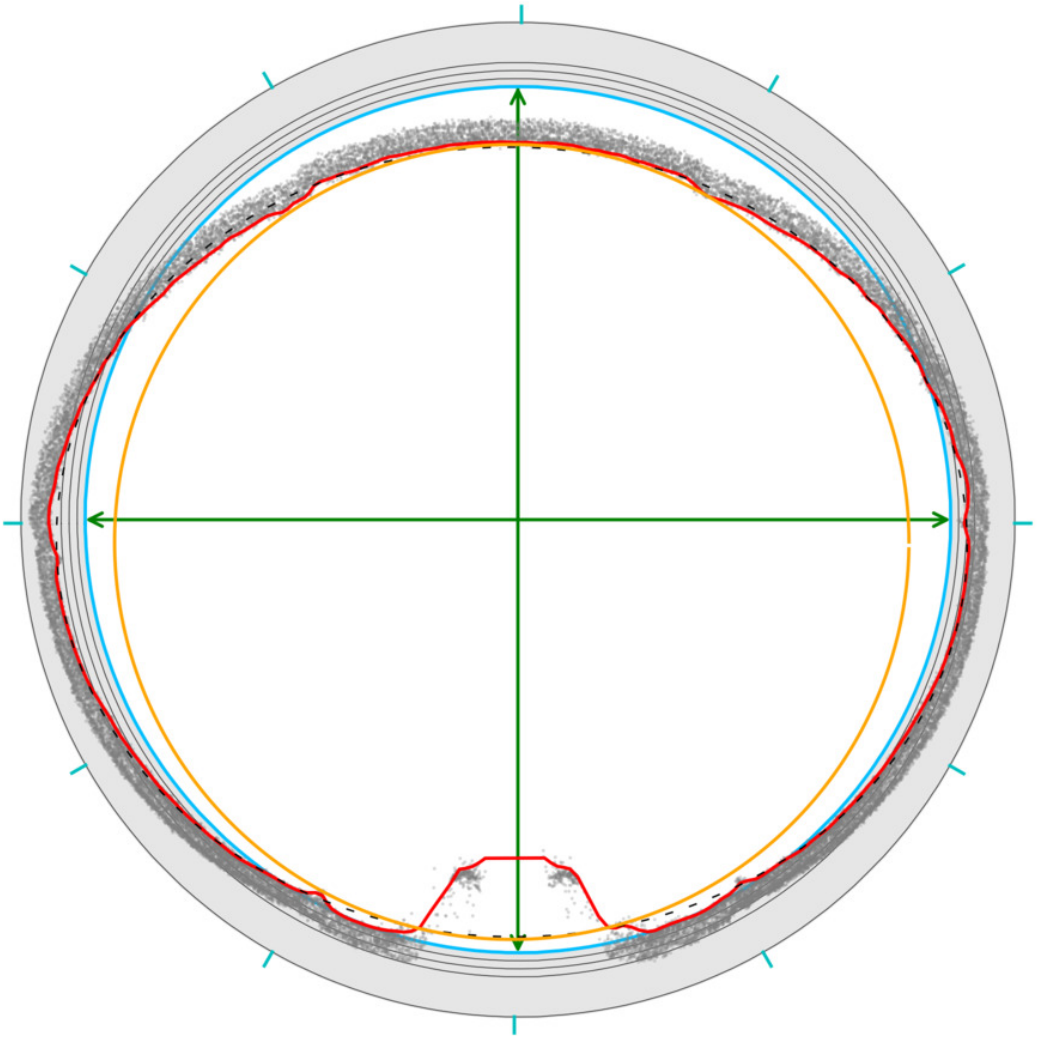
```
Footage   :  209 ft
Width     :  114.6" | 108.0"
Height    :  101.2" | 108.0"

Area      :  8572 sq in
Perimeter :  345.3 in
Ovality   :  6.9%

Interior Diameter : 98.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 210.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



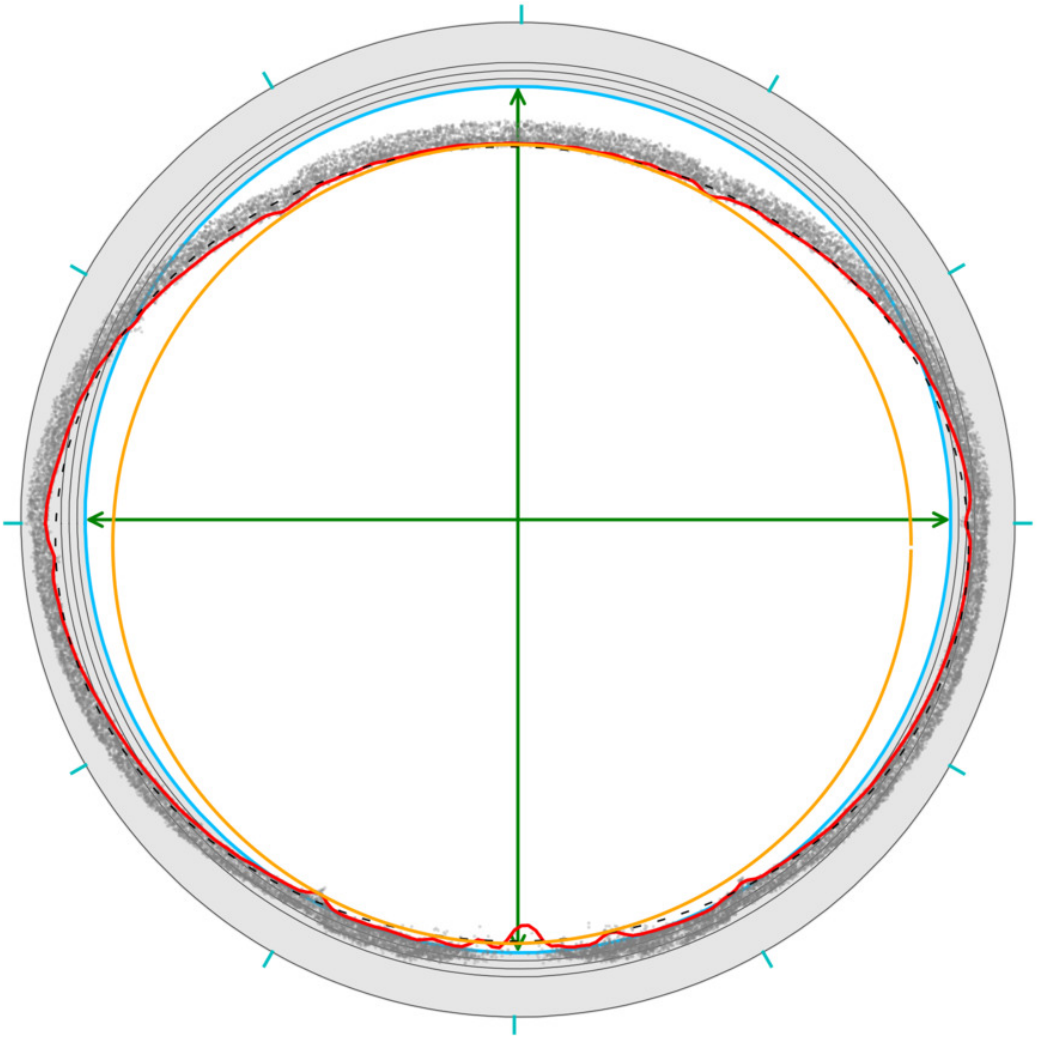
```
Footage    :  210 ft
Width      :  114.8" | 108.0"
Height     :  101.1" | 108.0"

Area       :  8635 sq in
Perimeter  :  345.3 in
Ovality    :  7.0%

Interior Diameter : 99.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 211.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



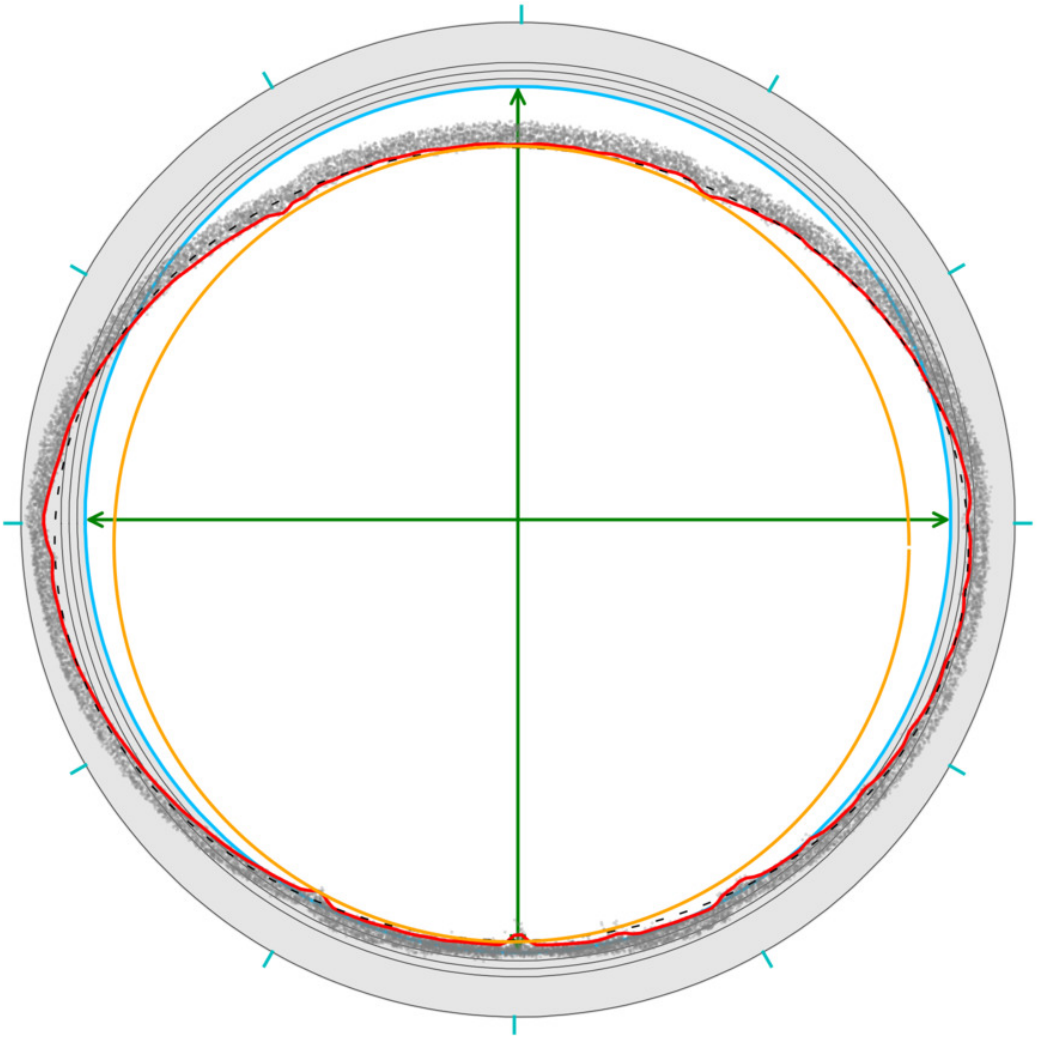
```
Footage   :  211 ft
Width     :  115.4" | 108.0"
Height    :  100.9" | 108.0"

Area      :  8859 sq in
Perimeter :  340.5 in
Ovality   :  6.9%

Interior Diameter : 99.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 212.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



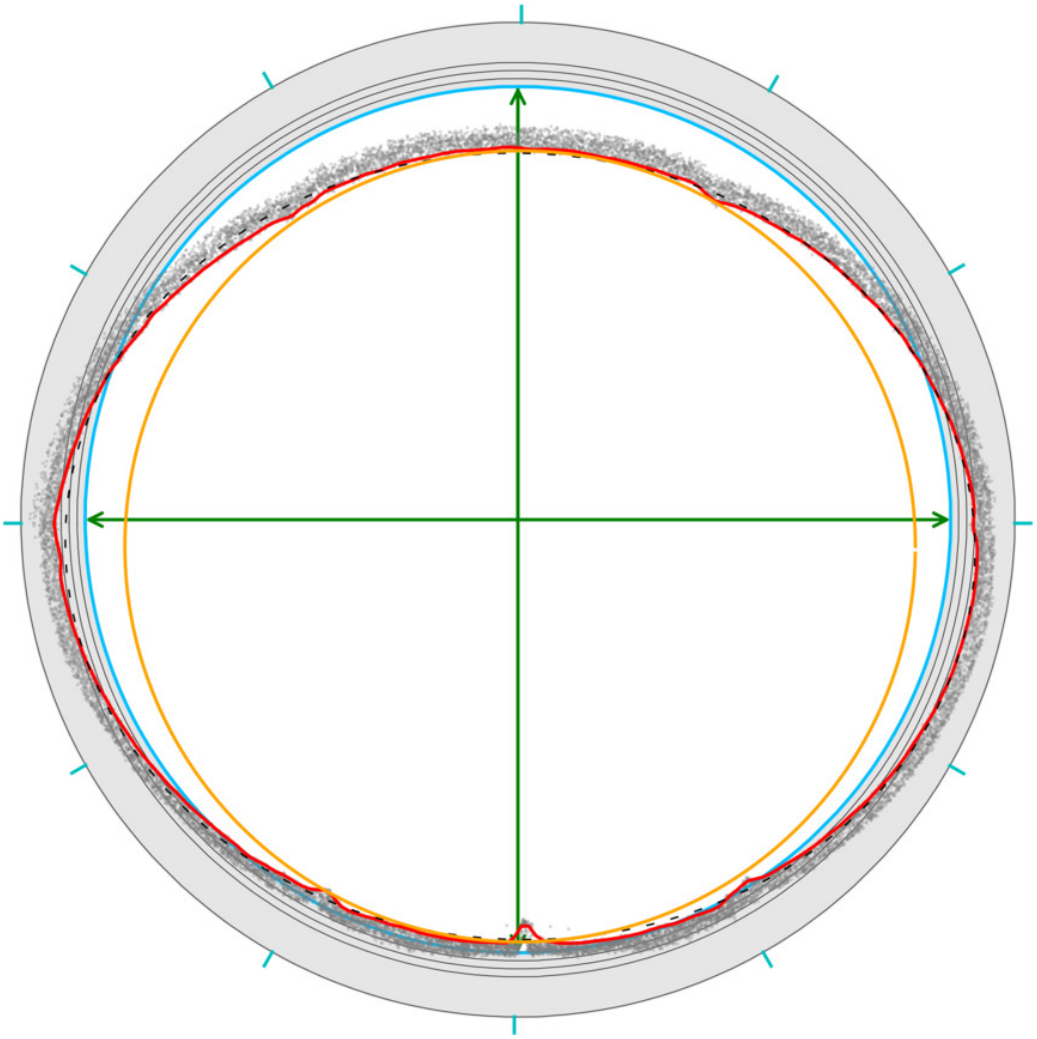
```
Footage   :  212 ft
Width     :  115.7" | 108.0"
Height    :  100.8" | 108.0"

Area      :  8846 sq in
Perimeter :  338.0 in
Ovality   :  7.0%

Interior Diameter : 99.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 213.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



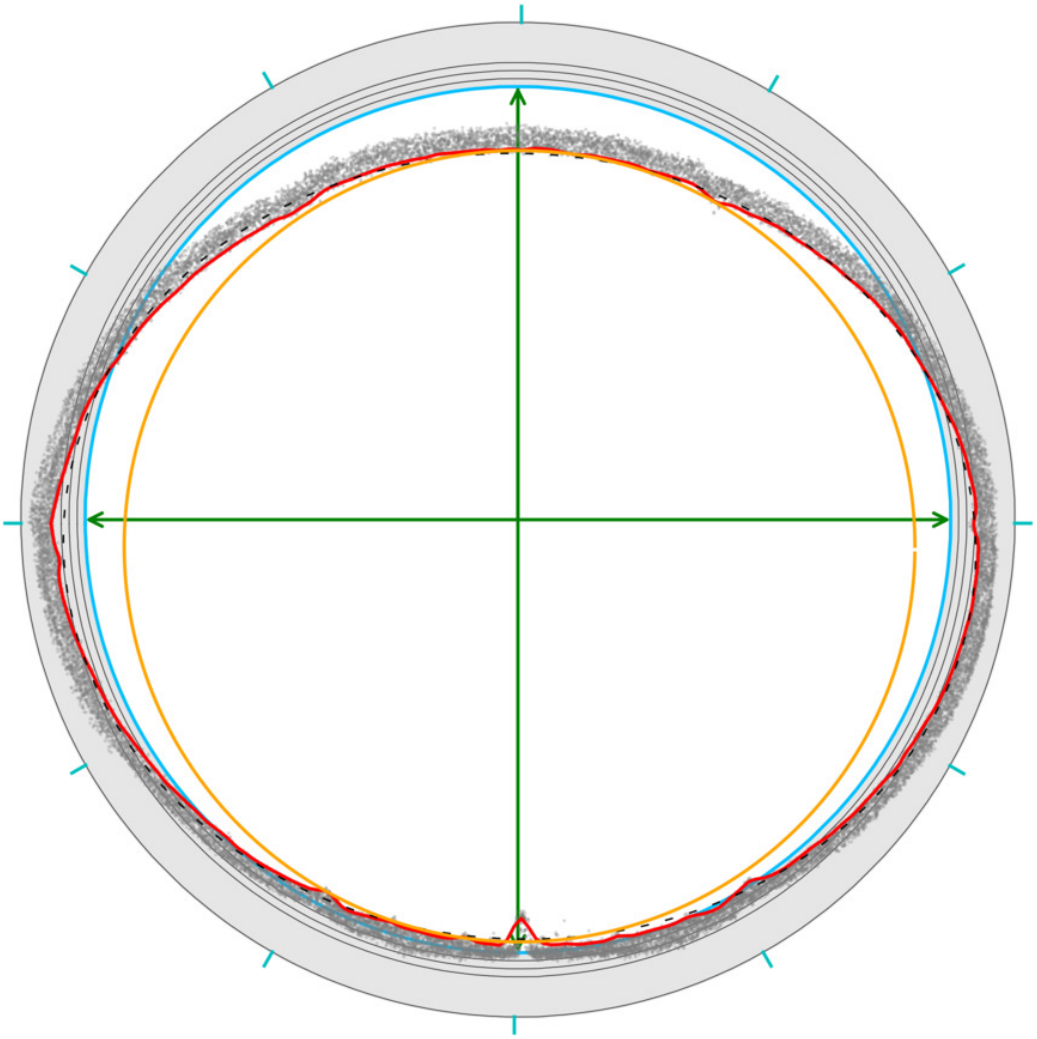
```
Footage   :  213 ft
Width     :  115.2" | 108.0"
Height    :  100.4" | 108.0"

Area      :  8736 sq in
Perimeter :  336.3 in
Ovality   :  7.2%

Interior Diameter : 98.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 214.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



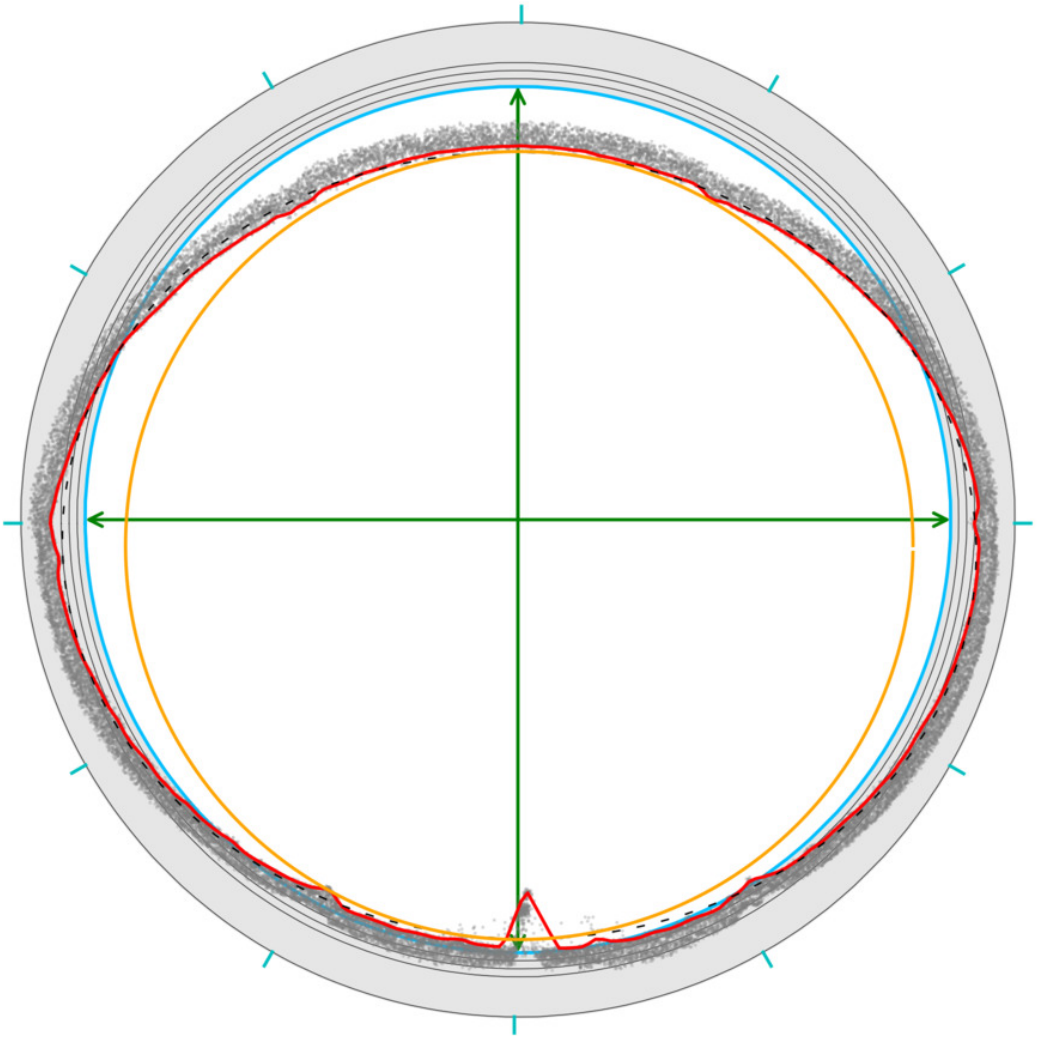
```
Footage    :  214 ft
Width      :  115.7" | 108.0"
Height     :  100.2" | 108.0"

Area       :  8754 sq in
Perimeter  :  338.5 in
Ovality    :  7.4%

Interior Diameter : 98.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 215.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



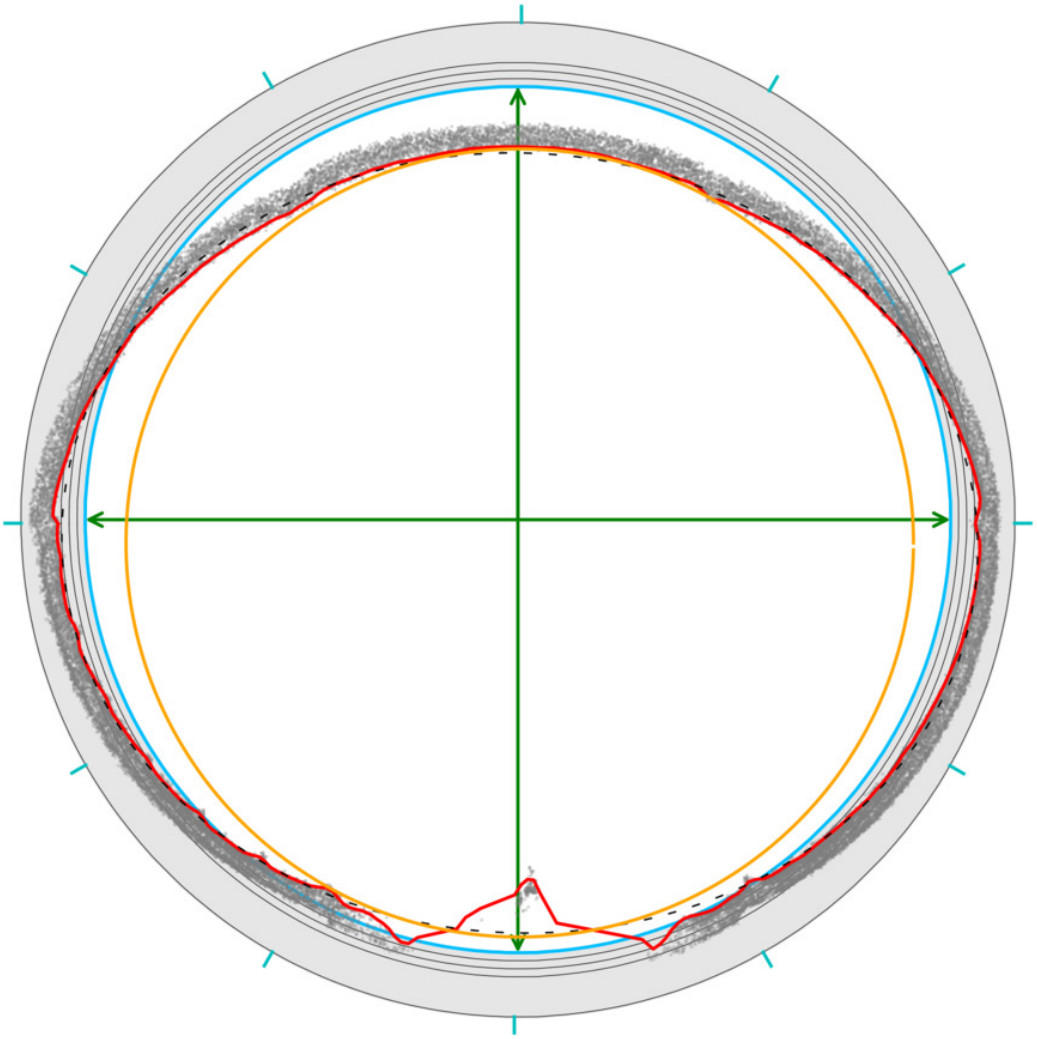
```
Footage   :  215 ft
Width     :  115.9" | 108.0"
Height    :  100.6" | 108.0"

Area      :  8777 sq in
Perimeter :  344.5 in
Ovality   :  7.4%

Interior Diameter : 98.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 216.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 216 ft
Width : 115.7" | 108.0"
Height : 100.5" | 108.0"

Area : 8718 sq in
Perimeter : 344.5 in
Ovality : 7.9%

Interior Diameter : 98.3"

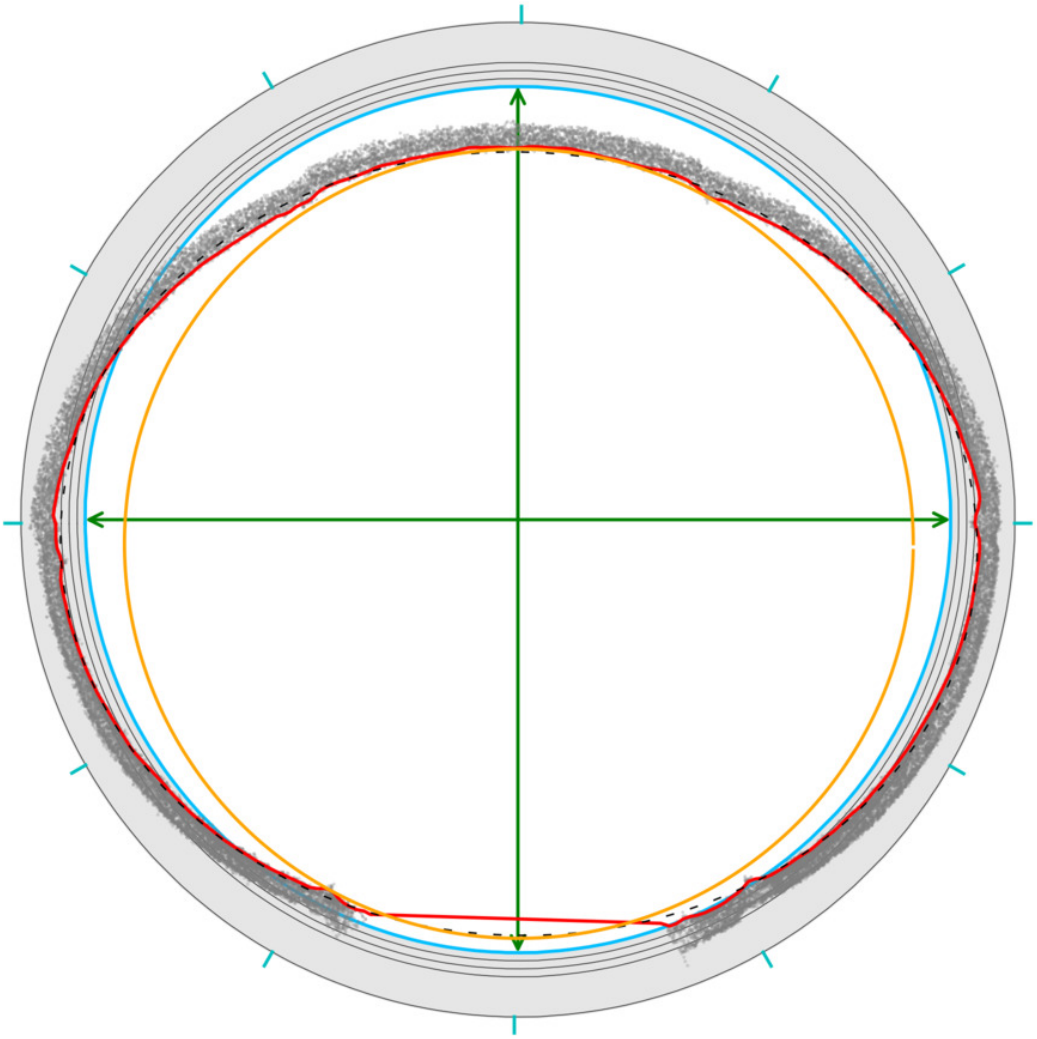
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 217.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



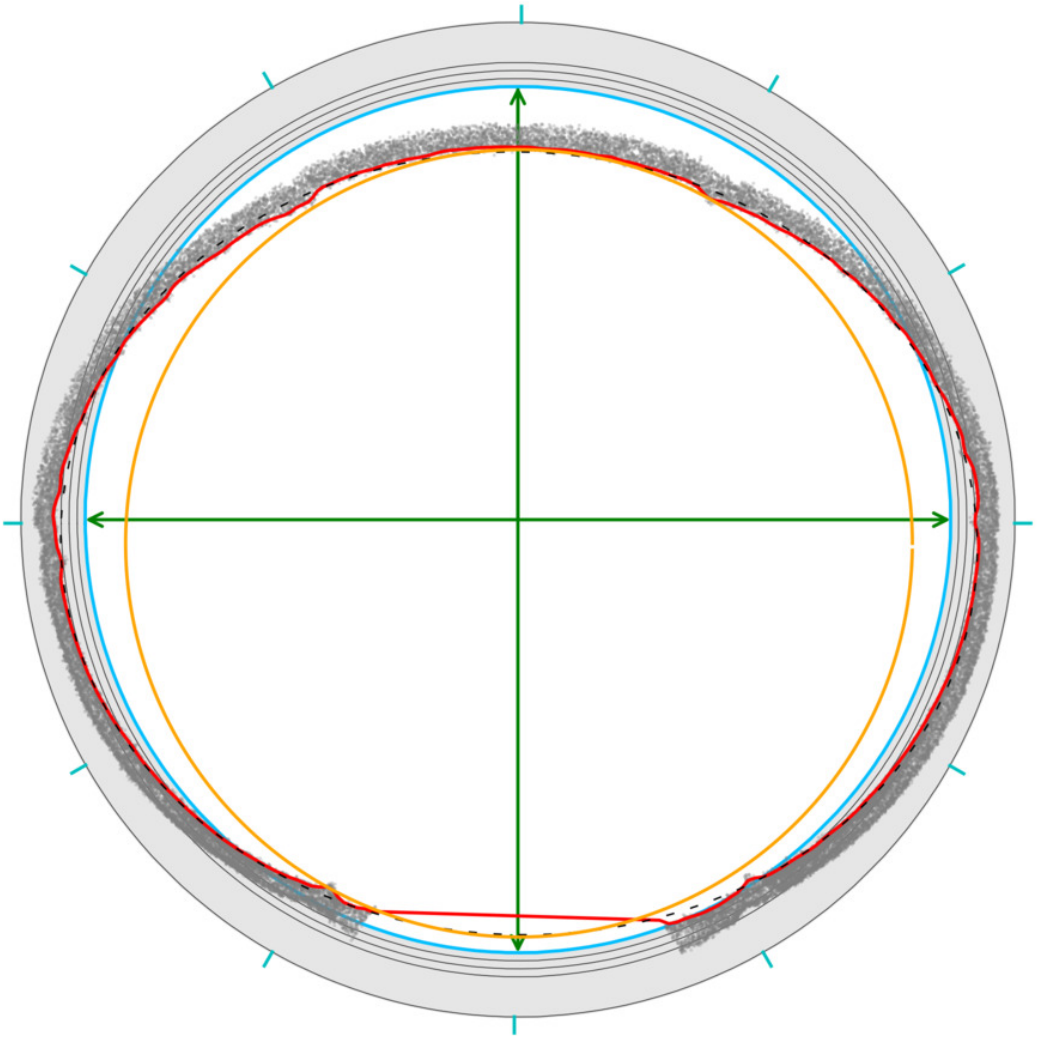
```
Footage   :  217 ft
Width     :  115.6" | 108.0"
Height    :  100.4" | 108.0"

Area      :  8727 sq in
Perimeter :  335.5 in
Ovality   :  7.7%

Interior Diameter : 98.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 218.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



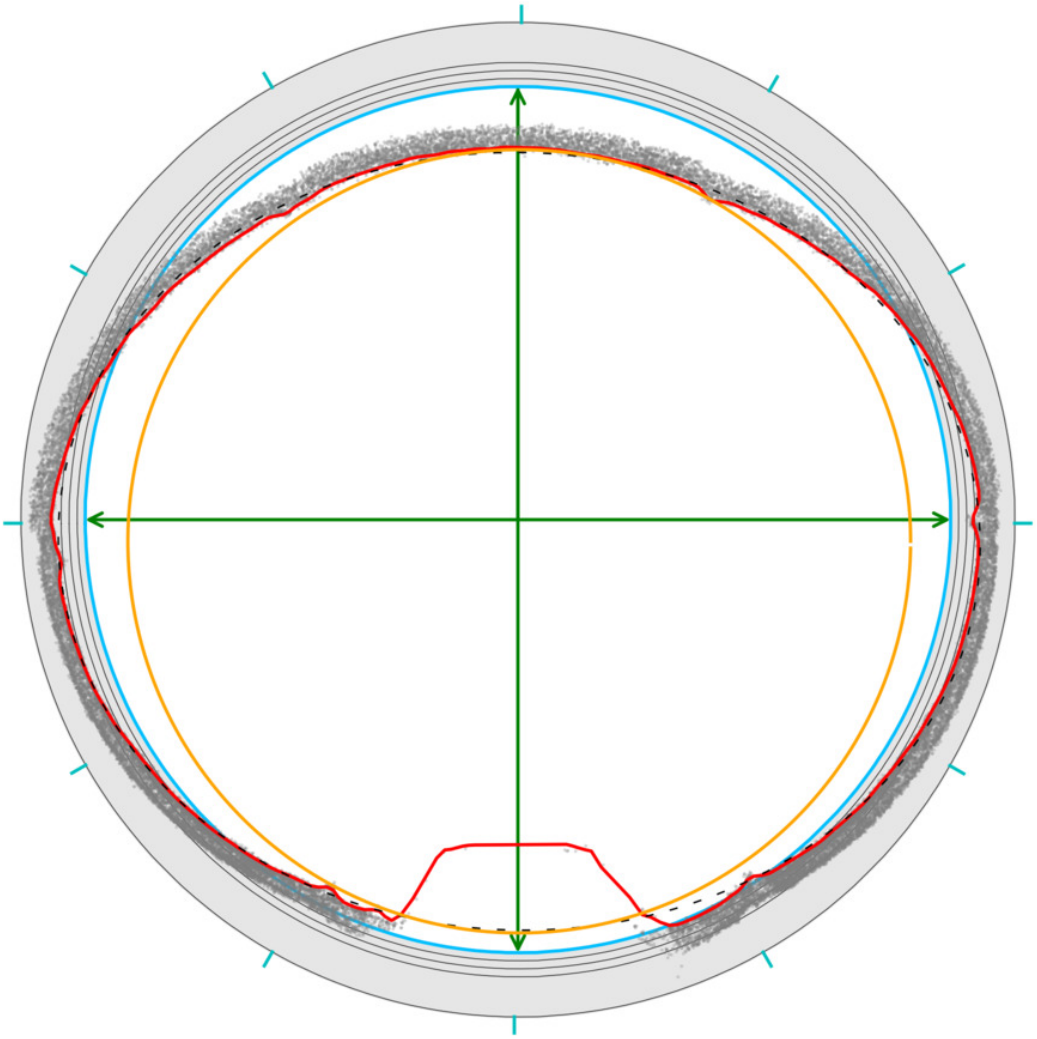
```
Footage   :  218 ft
Width     :  115.5" | 108.0"
Height    :  100.5" | 108.0"

Area      :  8709 sq in
Perimeter :  335.5 in
Ovality   :  7.8%

Interior Diameter : 98.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 219.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 219 ft
Width : 115.8" | 108.0"
Height : 100.4" | 108.0"

Area : 8527 sq in
Perimeter : 345.2 in
Ovality : 8.3%

Interior Diameter : 97.7"

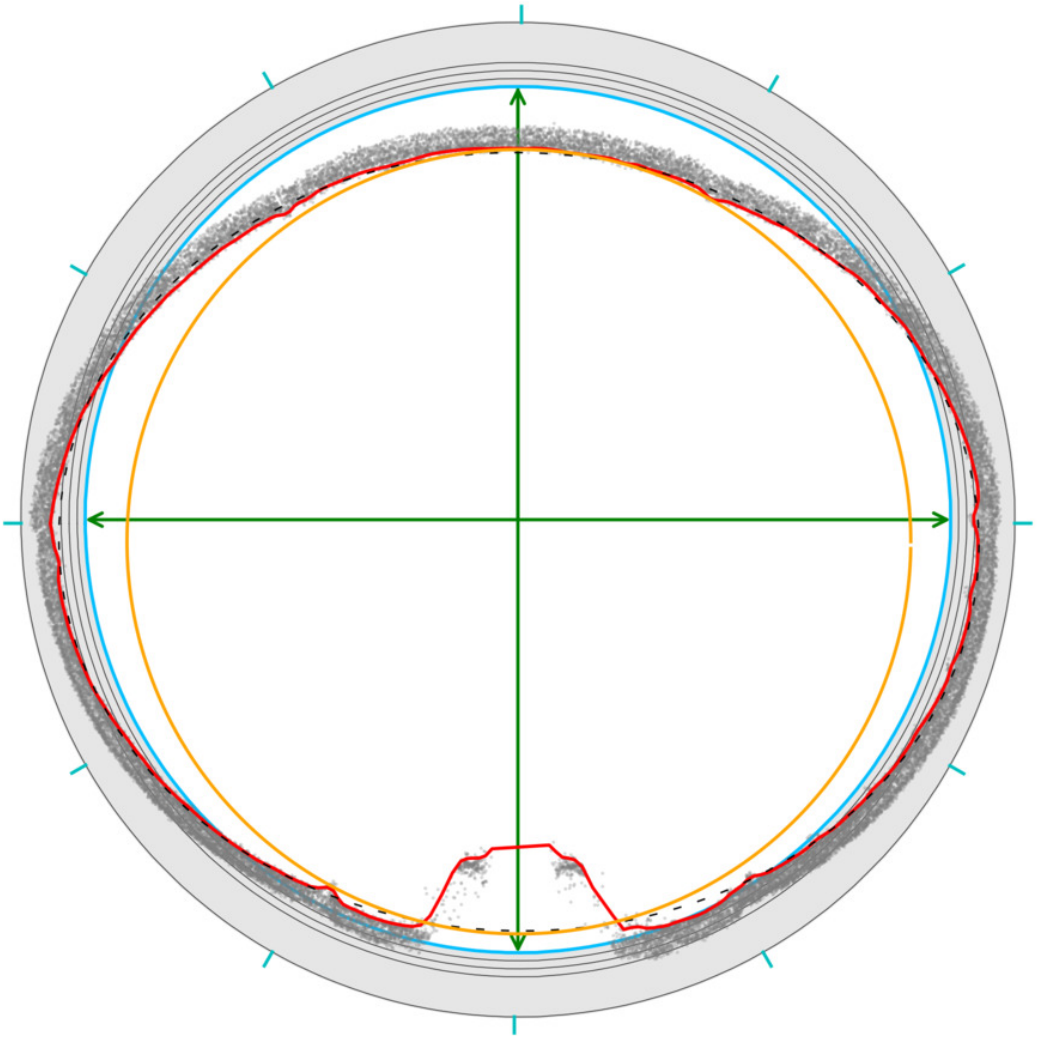
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 220.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 220 ft
Width : 115.8" | 108.0"
Height : 100.3" | 108.0"

Area : 8588 sq in
Perimeter : 346.3 in
Ovality : 8.2%

Interior Diameter : 97.8"

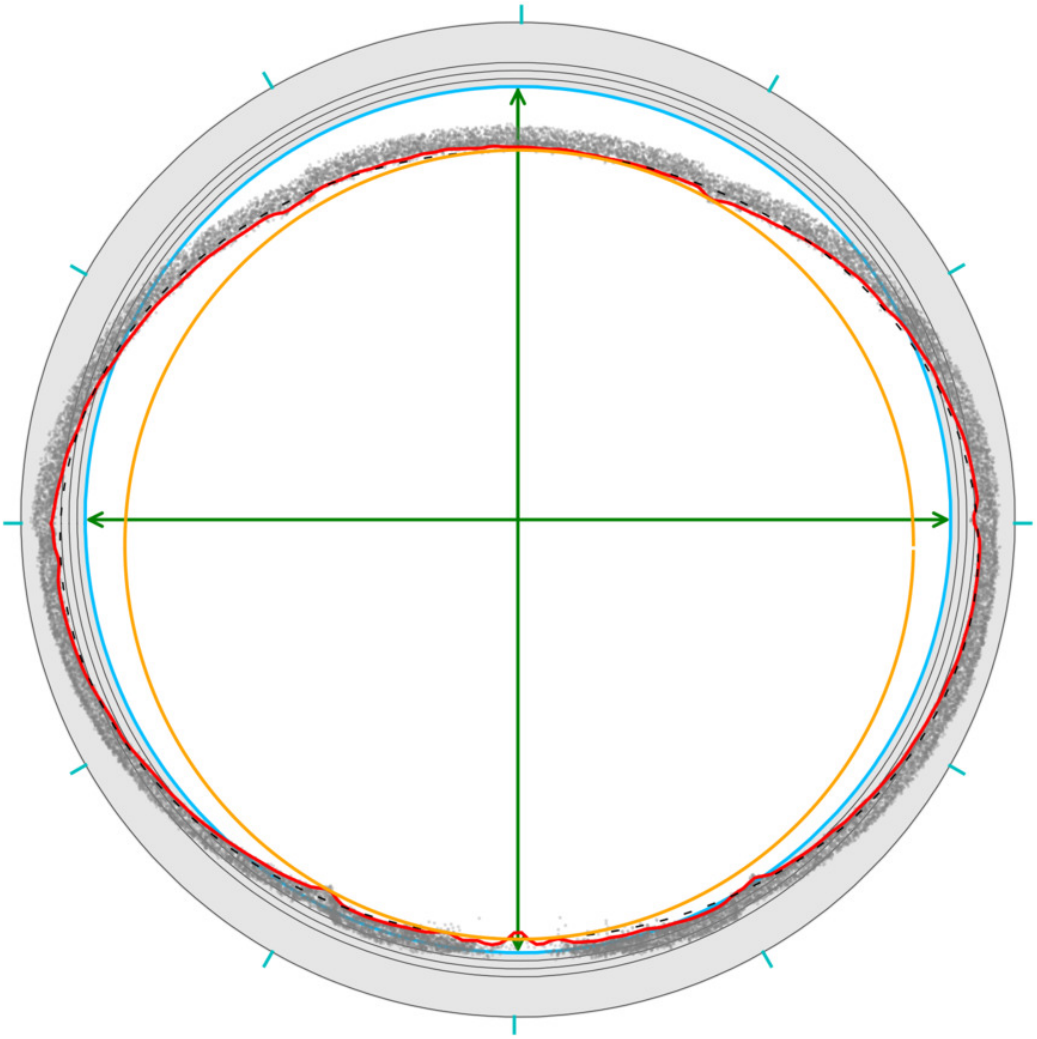
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 221.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



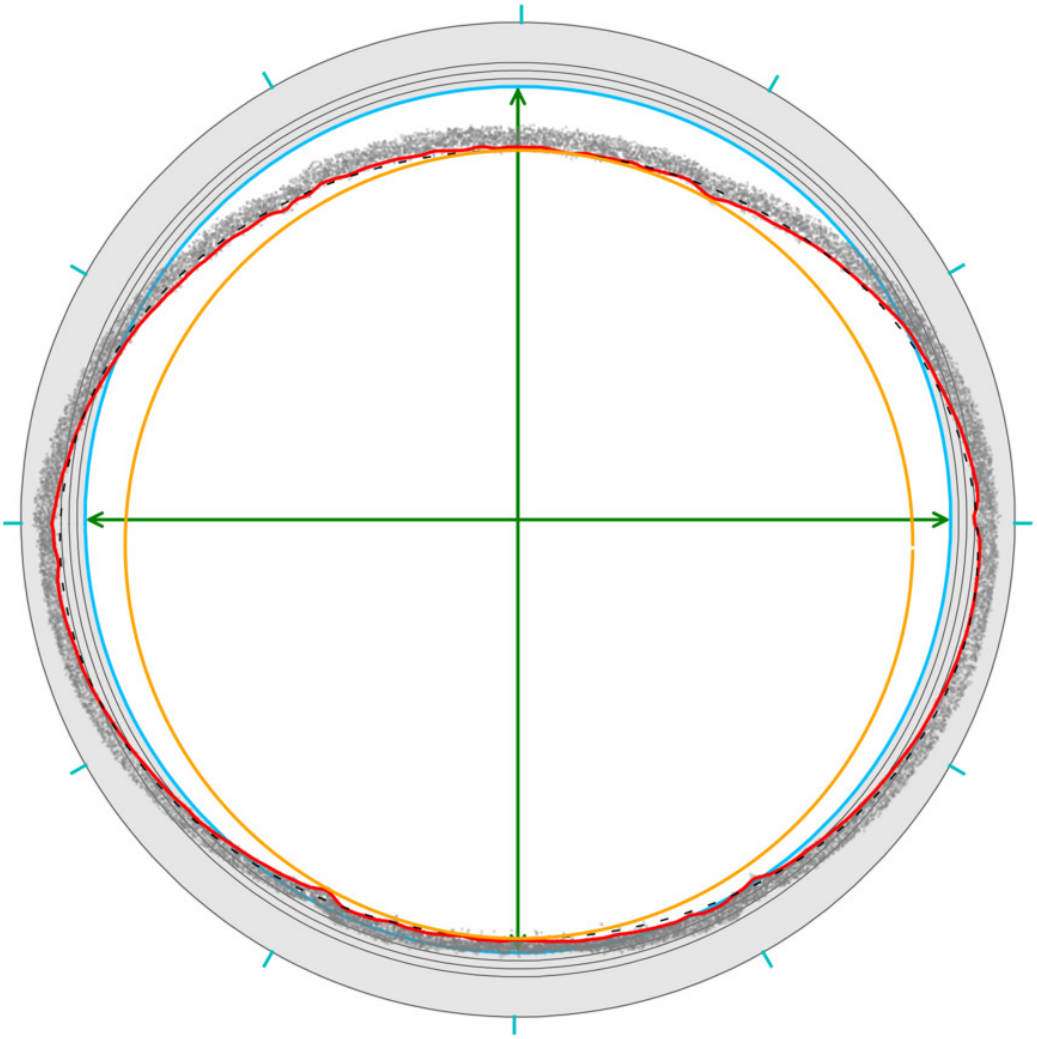
```
Footage   :  221 ft
Width     :  115.9" | 108.0"
Height    :  100.5" | 108.0"

Area      :  8838 sq in
Perimeter :  338.1 in
Ovality   :  7.5%

Interior Diameter : 98.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 222.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



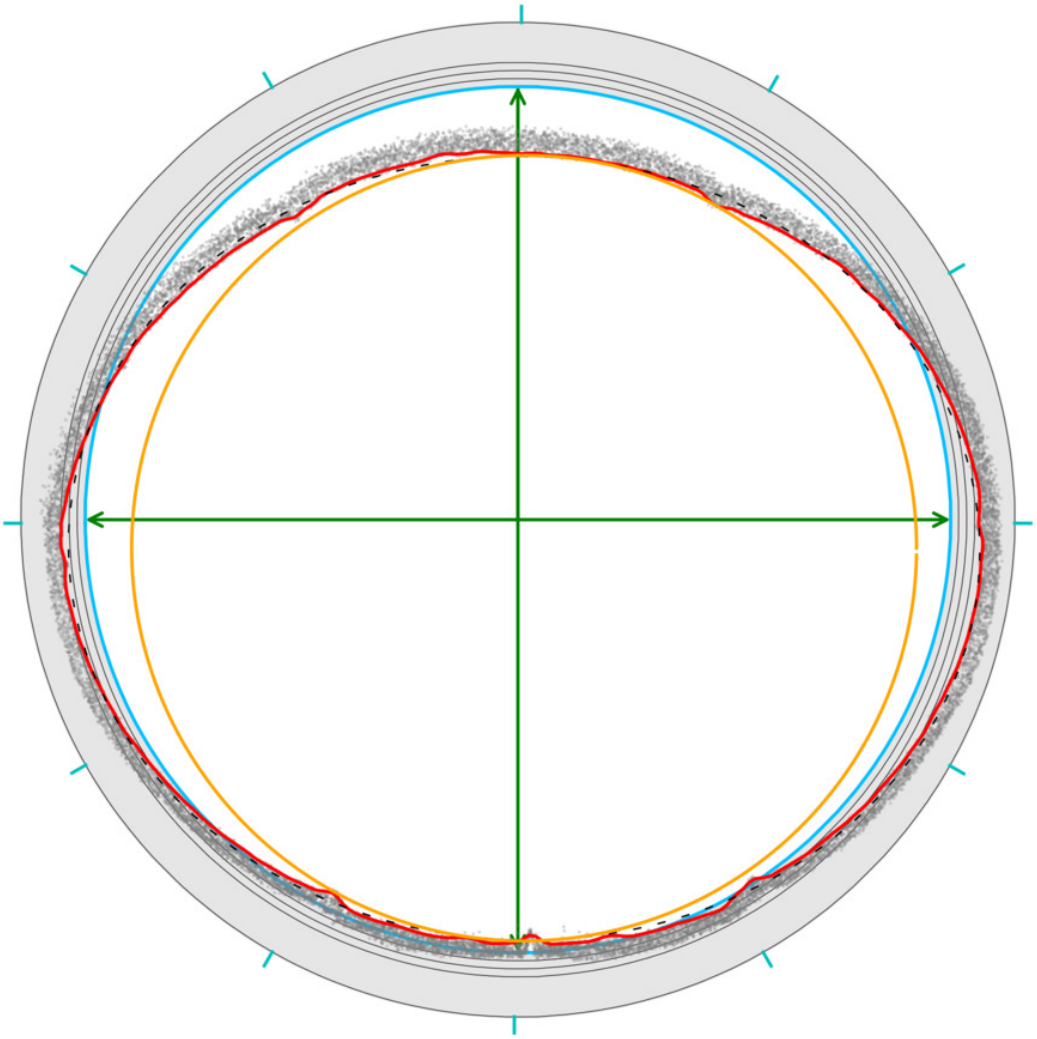
```
Footage   :  222 ft
Width     :  115.8" | 108.0"
Height    :  100.5" | 108.0"

Area      :  8842 sq in
Perimeter :  337.0 in
Ovality   :  7.5%

Interior Diameter : 98.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 223.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



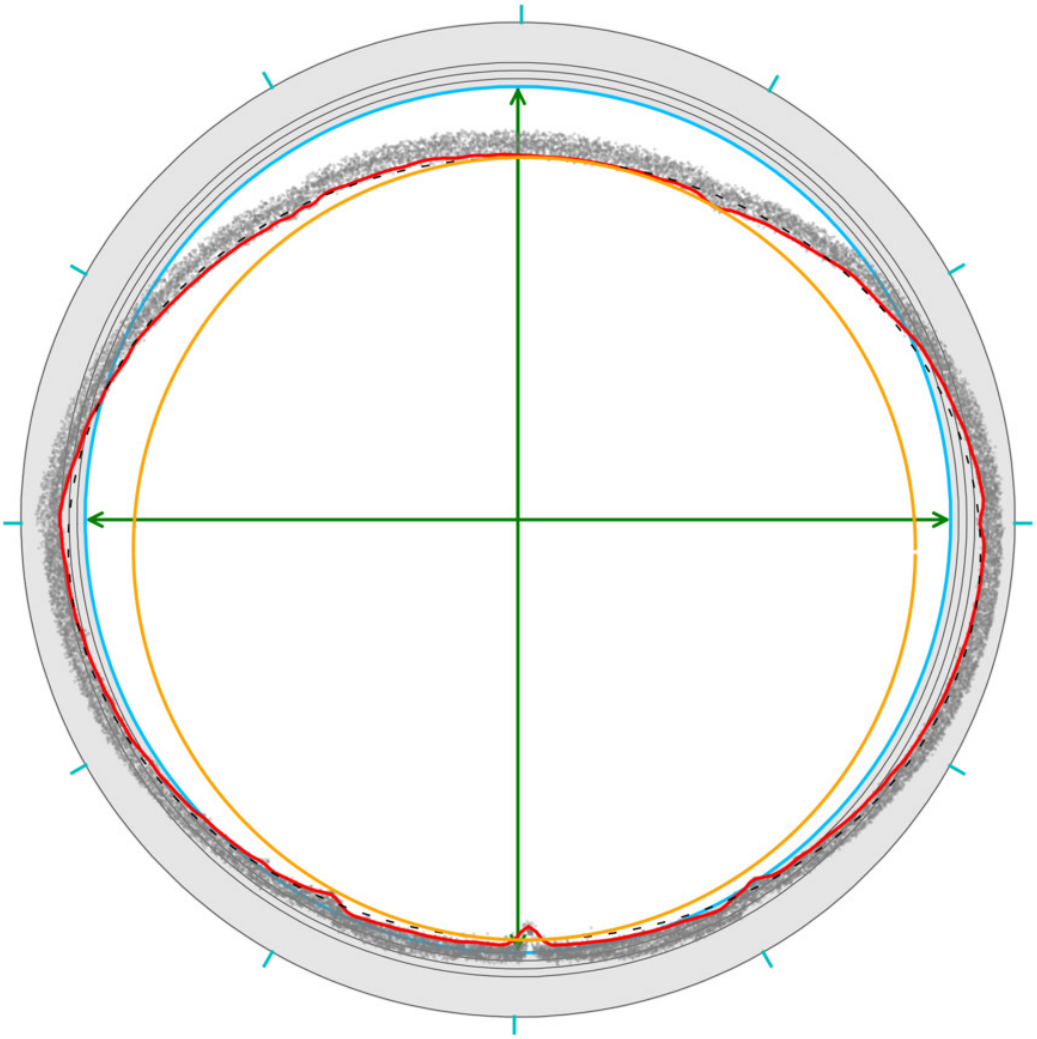
```
Footage    :  223 ft
Width      :  115.1" | 108.0"
Height     :  99.7" | 108.0"

Area       :  8721 sq in
Perimeter  :  335.1 in
Ovality    :  7.4%

Interior Diameter : 98.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 224.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 224 ft
Width : 115.4" | 108.0"
Height : 99.5" | 108.0"

Area : 8717 sq in
Perimeter : 336.4 in
Ovality : 7.5%

Interior Diameter : 97.6"

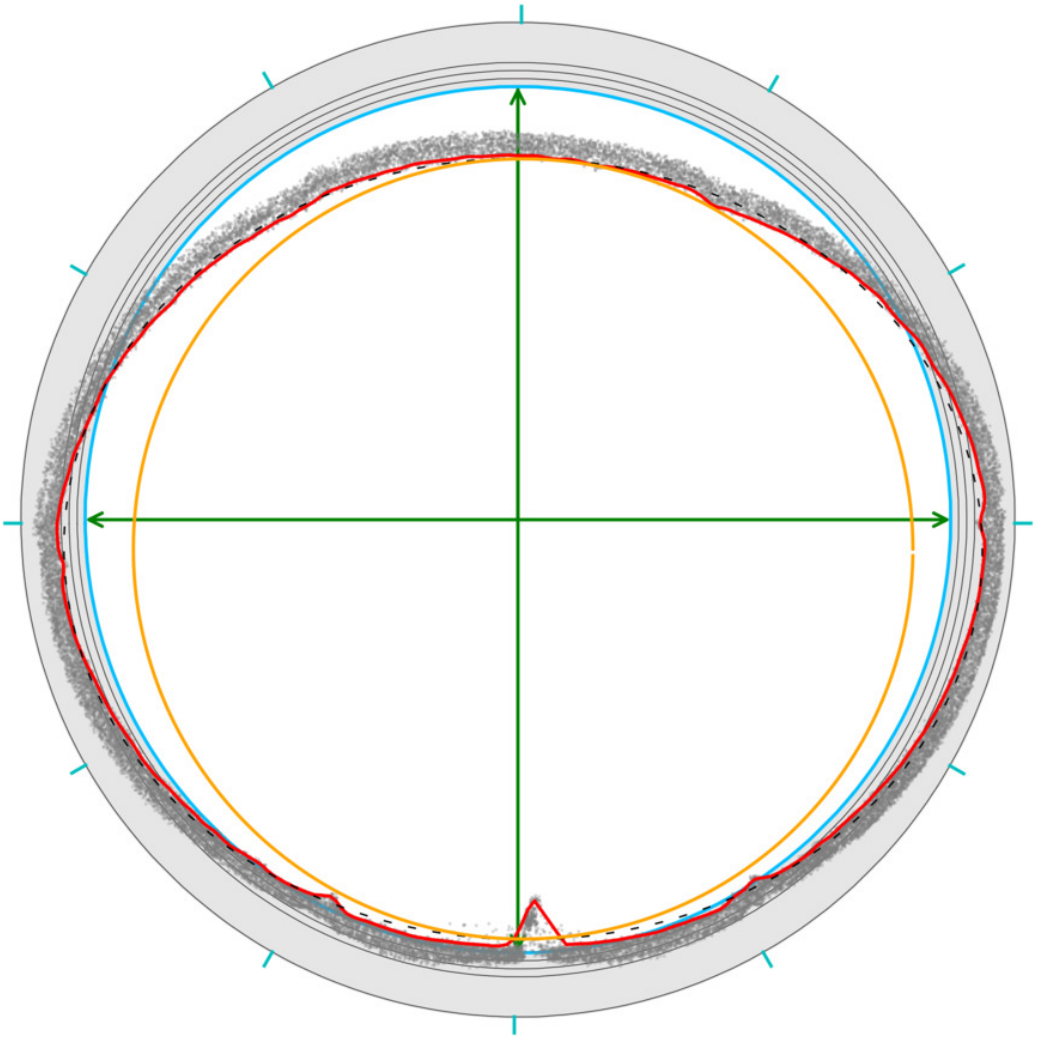
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 225.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



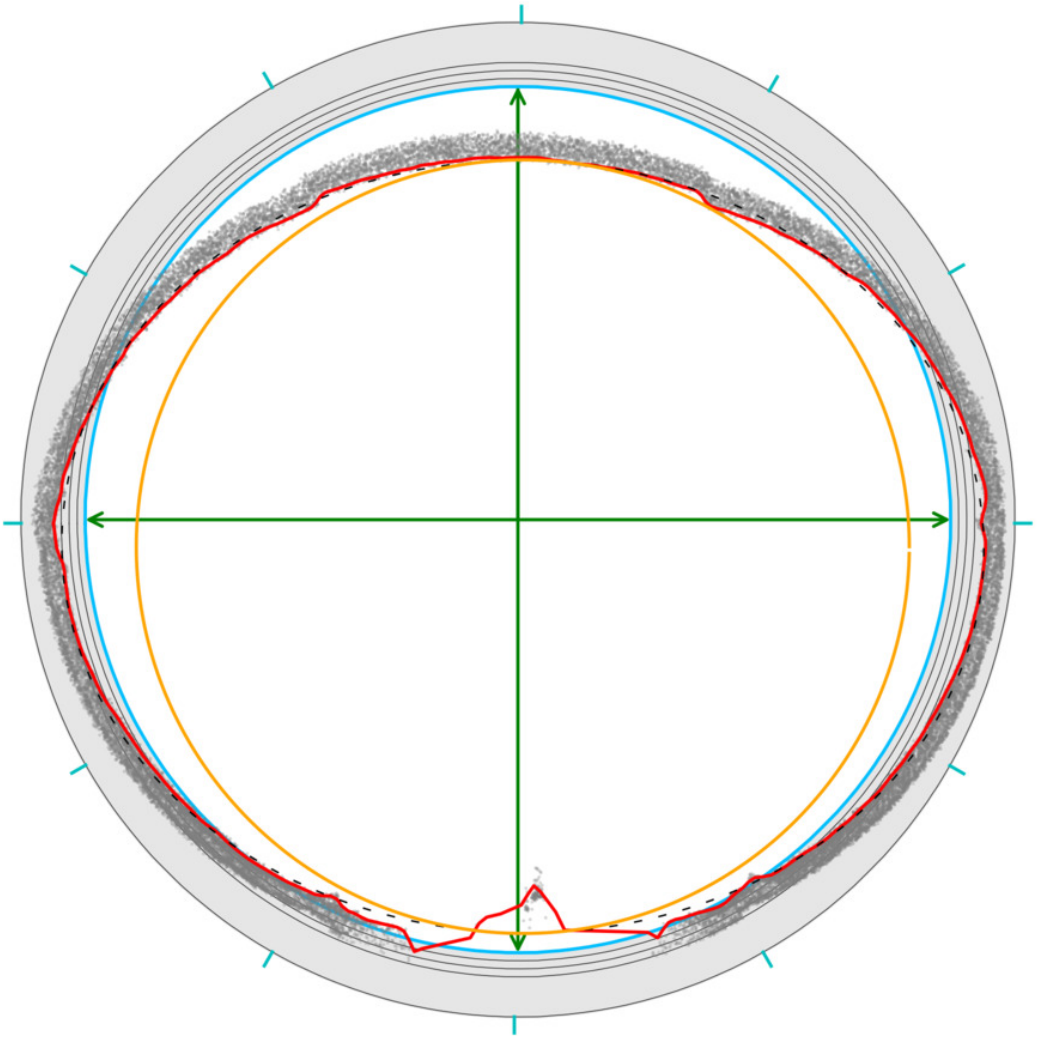
```
Footage    :  225 ft
Width      :  115.8" | 108.0"
Height     :  99.4" | 108.0"

Area       :  8763 sq in
Perimeter  :  341.7 in
Ovality    :  7.9%

Interior Diameter : 97.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 226.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



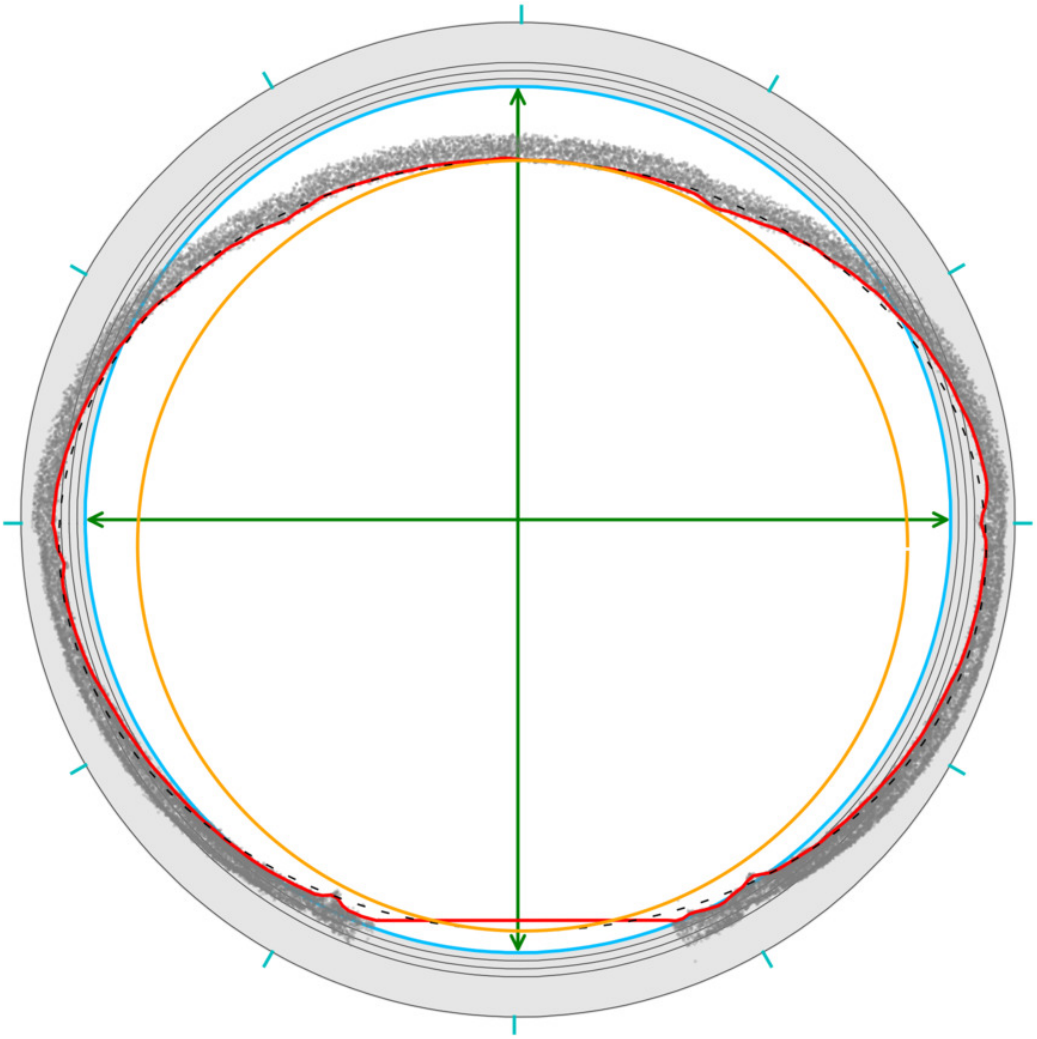
```
Footage   :  226 ft
Width     :  116.4" | 108.0"
Height    :  99.2" | 108.0"

Area      :  8705 sq in
Perimeter :  344.1 in
Ovality   :  8.6%

Interior Diameter : 96.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 227.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



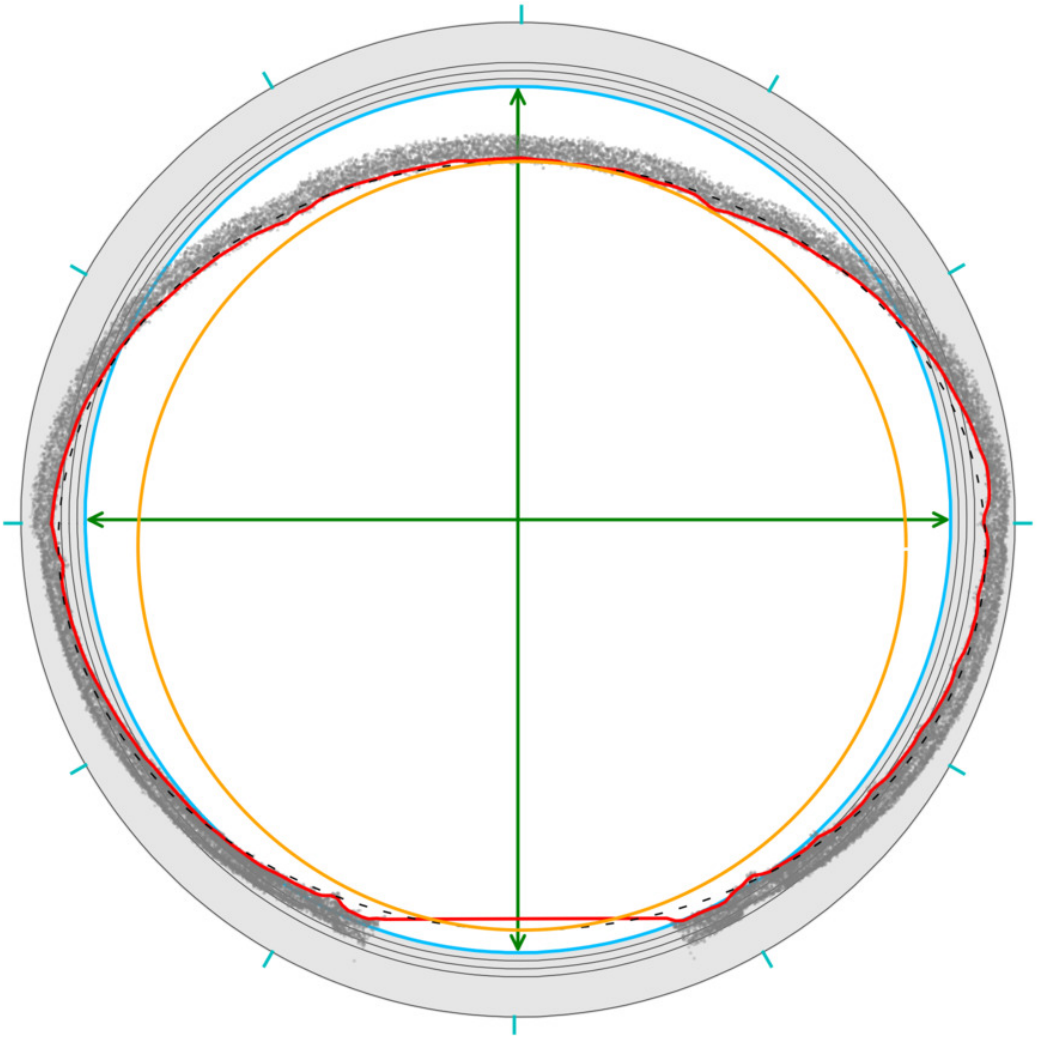
```
Footage   :  227 ft
Width     :  116.6" | 108.0"
Height    :  98.9" | 108.0"

Area      :  8702 sq in
Perimeter :  335.5 in
Ovality   :  9.1%

Interior Diameter : 96.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 228.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



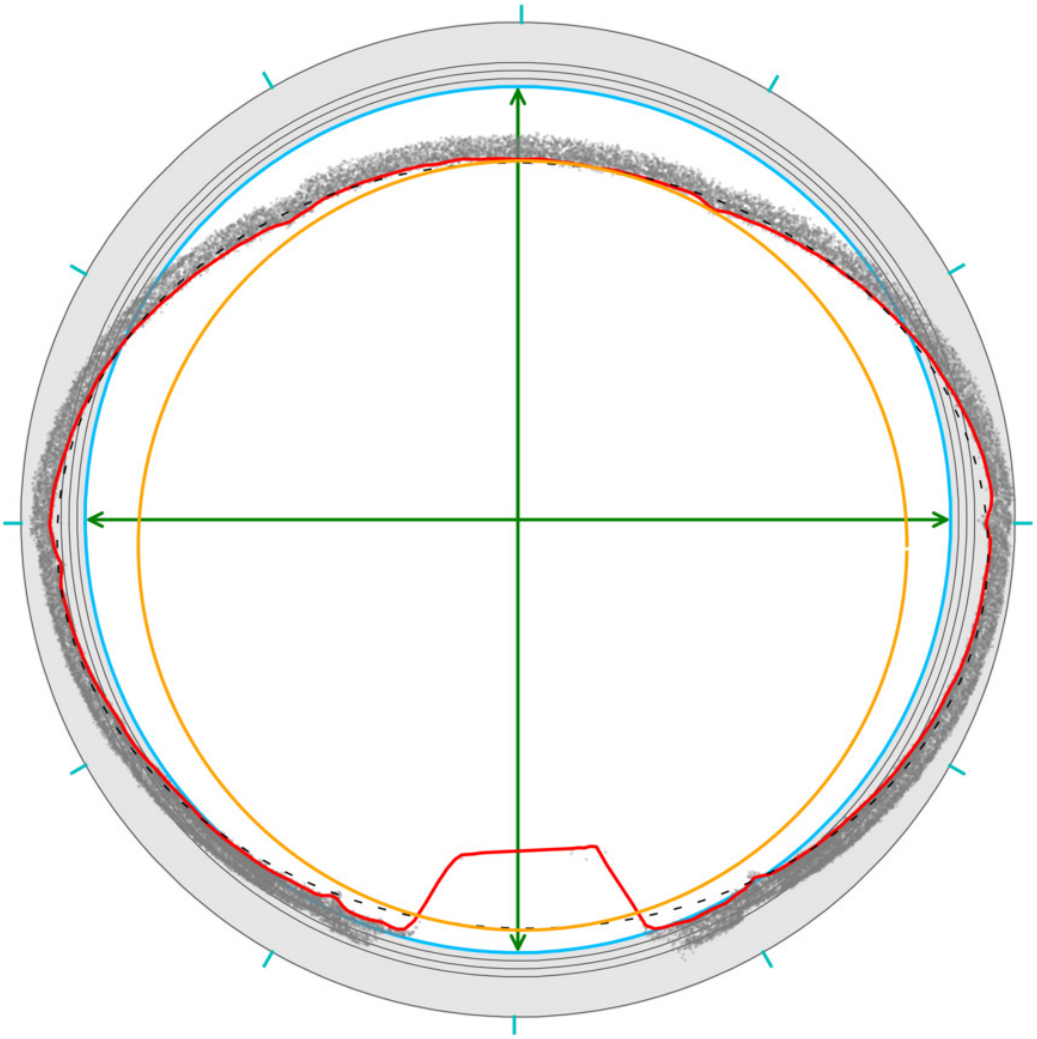
```
Footage   :  228 ft
Width     :  117.0" | 108.0"
Height    :  99.1" | 108.0"

Area      :  8679 sq in
Perimeter :  335.5 in
Ovality   :  9.2%

Interior Diameter : 95.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 229.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 229 ft
Width : 117.6" | 108.0"
Height : 98.9" | 108.0"

Area : 8518 sq in
Perimeter : 346.4 in
Ovality : 9.5%

Interior Diameter : 95.9"

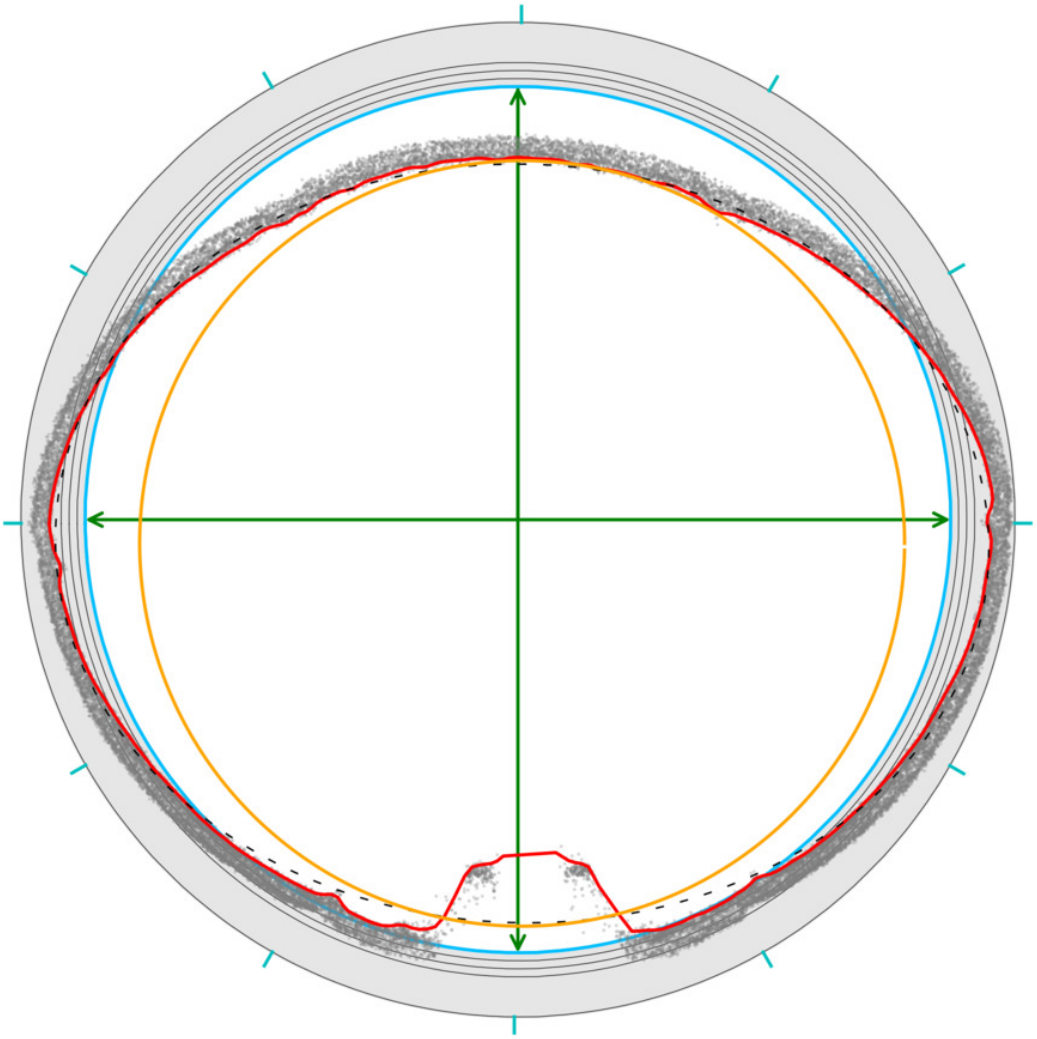
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 230.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



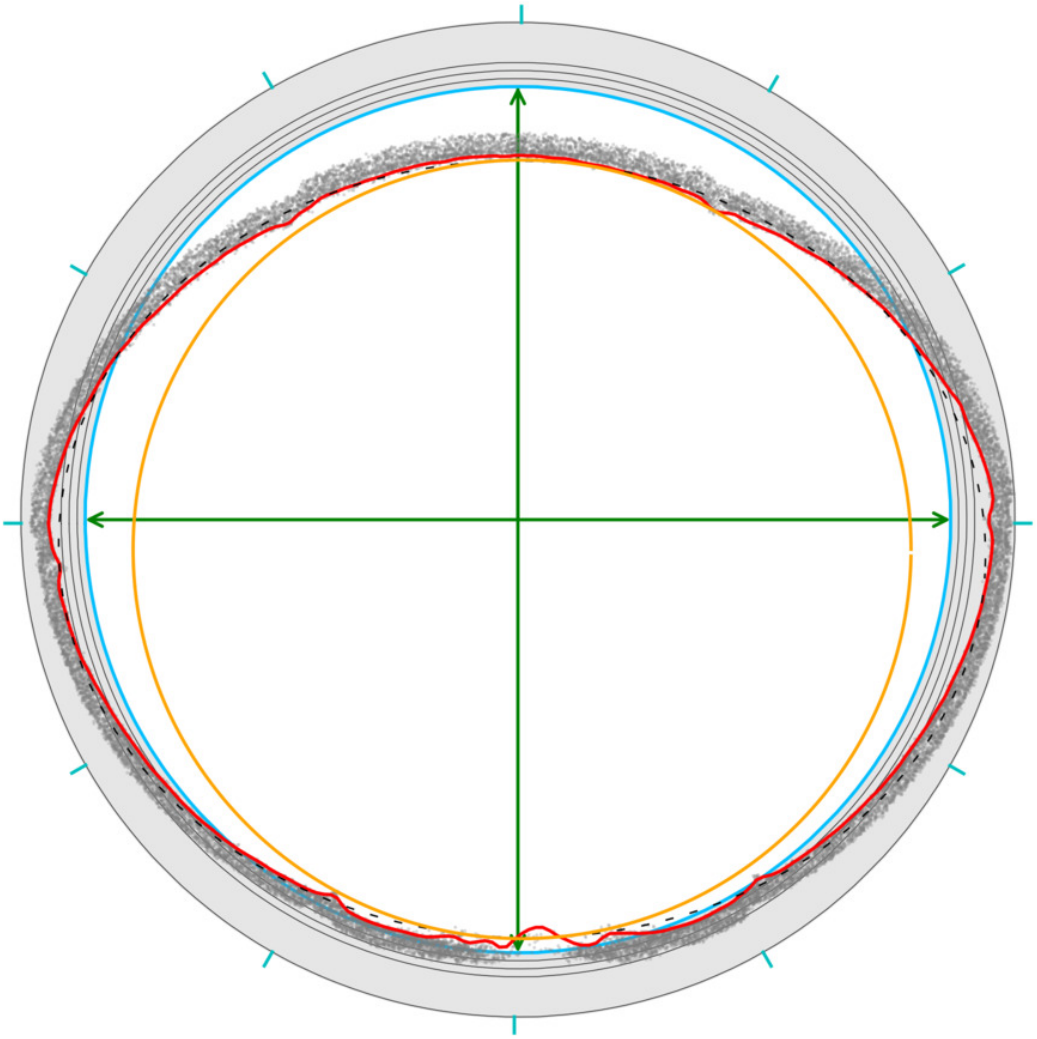
```
Footage   :  230 ft
Width     :  117.7" | 108.0"
Height    :  99.1" | 108.0"

Area      :  8578 sq in
Perimeter :  345.7 in
Ovality   :  10.1%

Interior Diameter : 95.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 231.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



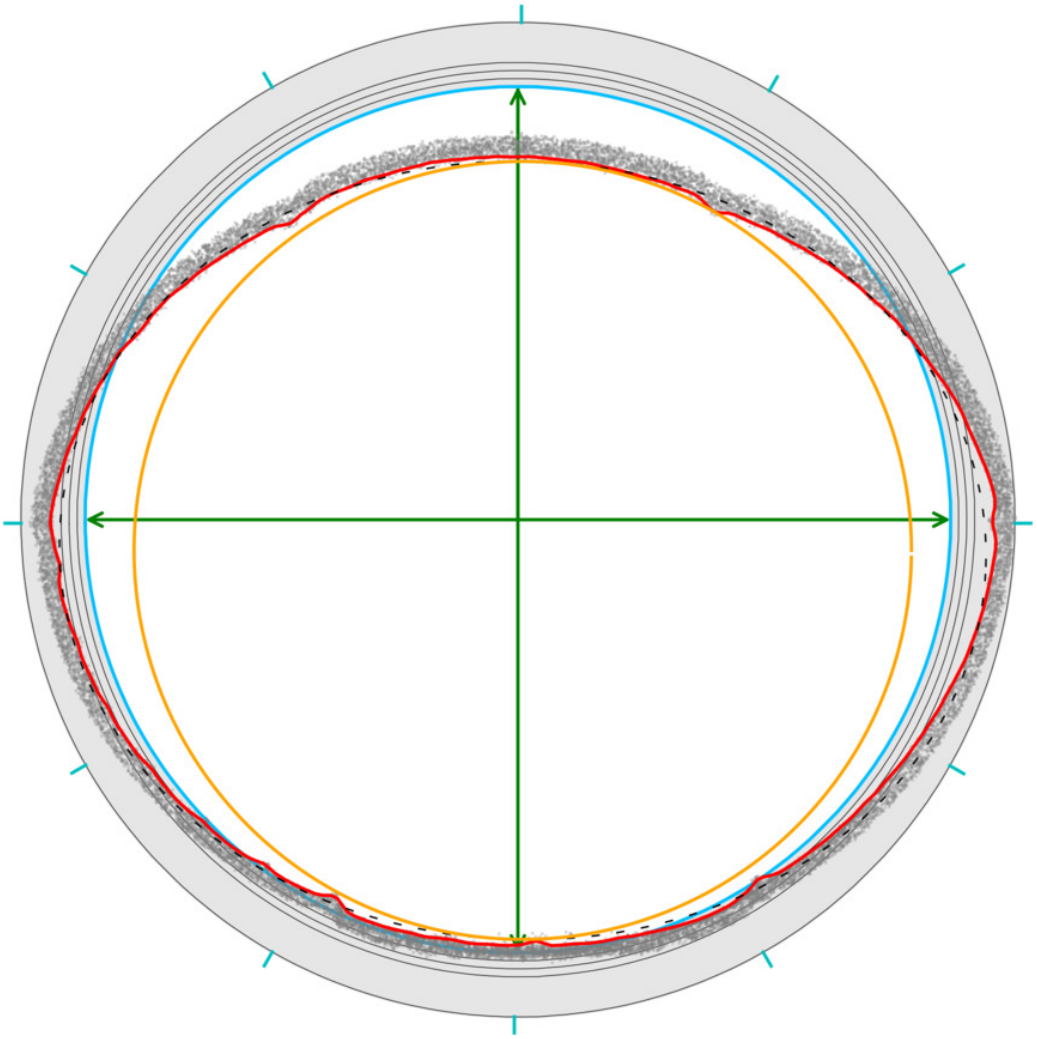
```
Footage   :  231 ft
Width     :  117.9" | 108.0"
Height    :  99.4" | 108.0"

Area      :  8792 sq in
Perimeter :  338.8 in
Ovality   :  8.6%

Interior Diameter : 97.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 232.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



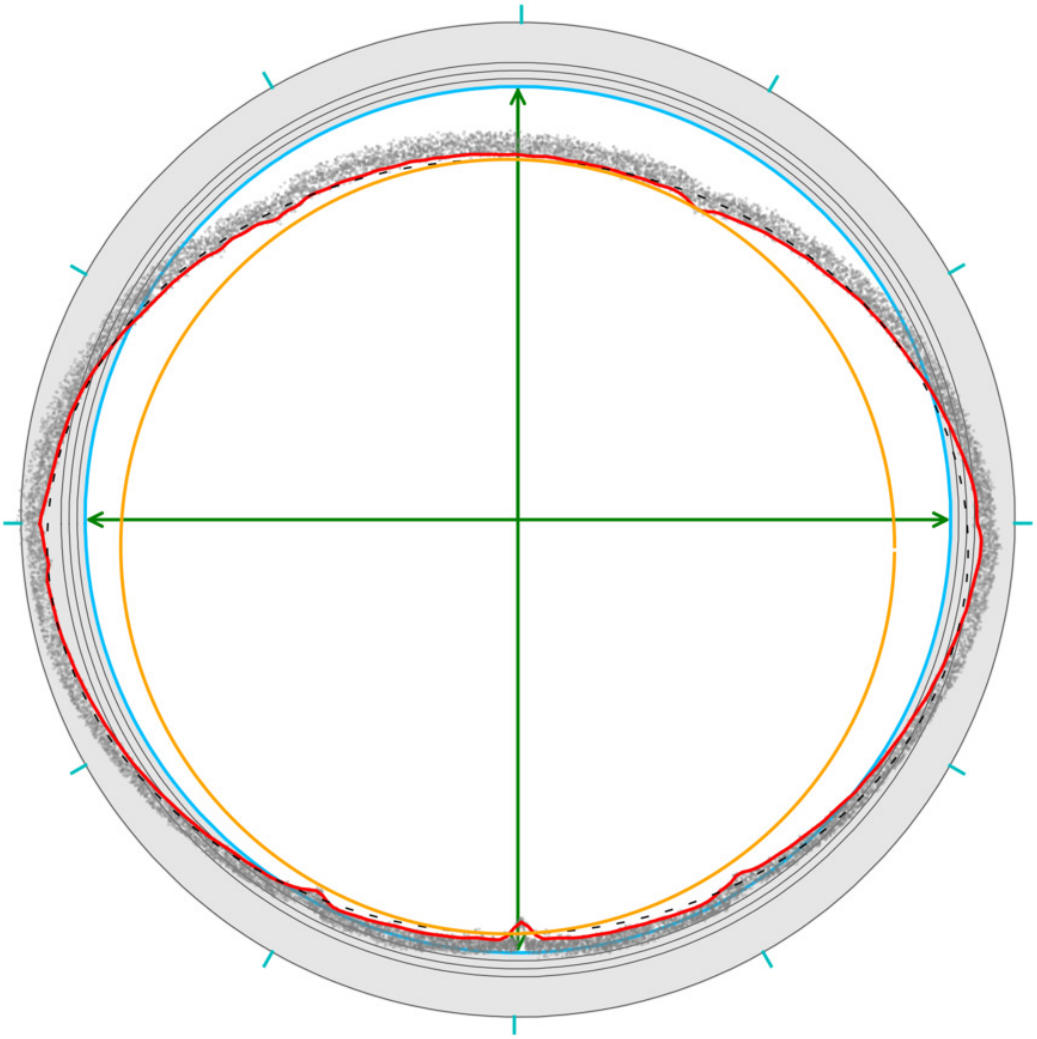
```
Footage   :  232 ft
Width     :  118.0" | 108.0"
Height    :  99.2" | 108.0"

Area      :  8810 sq in
Perimeter :  337.3 in
Ovality   :  8.5%

Interior Diameter : 97.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 233.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



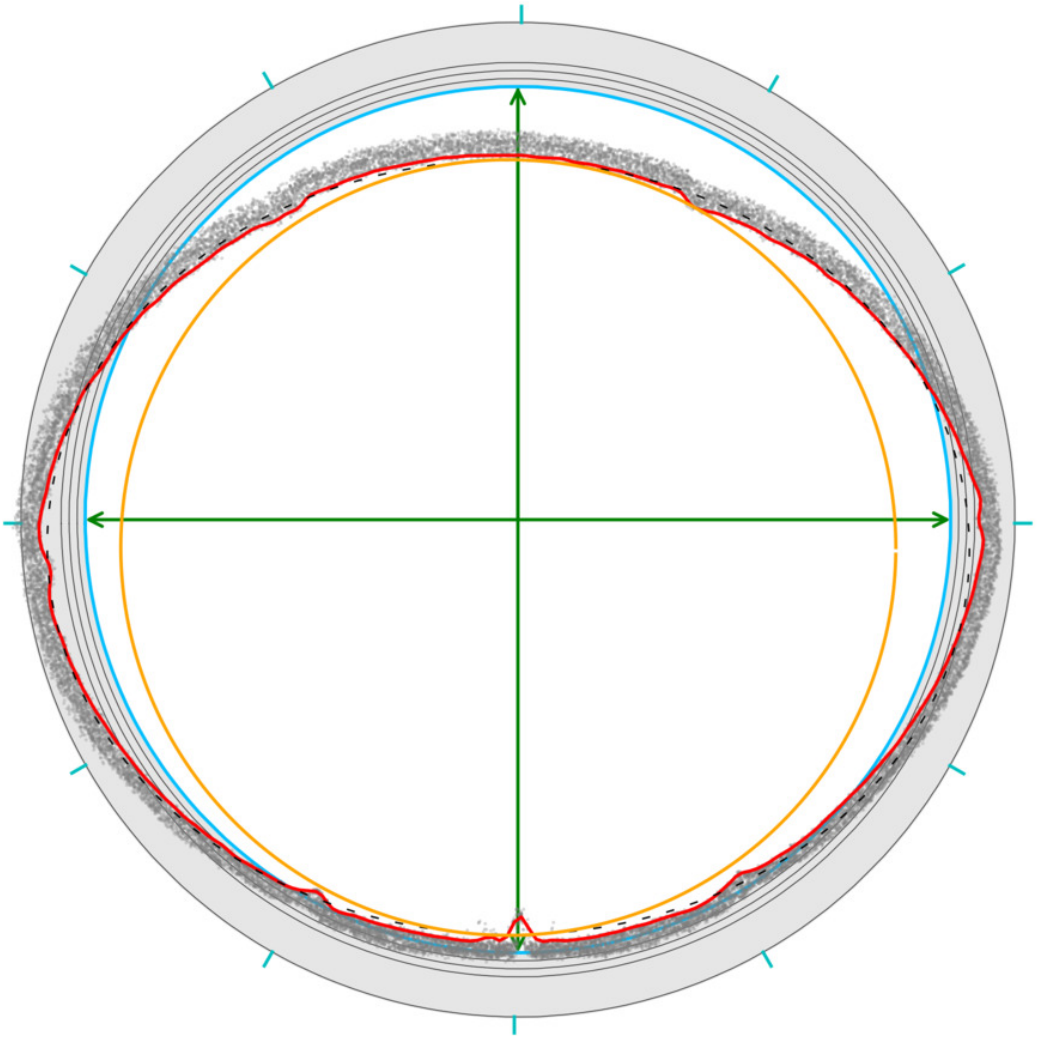
```
Footage   :  233 ft
Width     :  117.5" | 108.0"
Height    :  99.5" | 108.0"

Area      :  8711 sq in
Perimeter :  336.6 in
Ovality   :  8.5%

Interior Diameter : 96.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 234.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



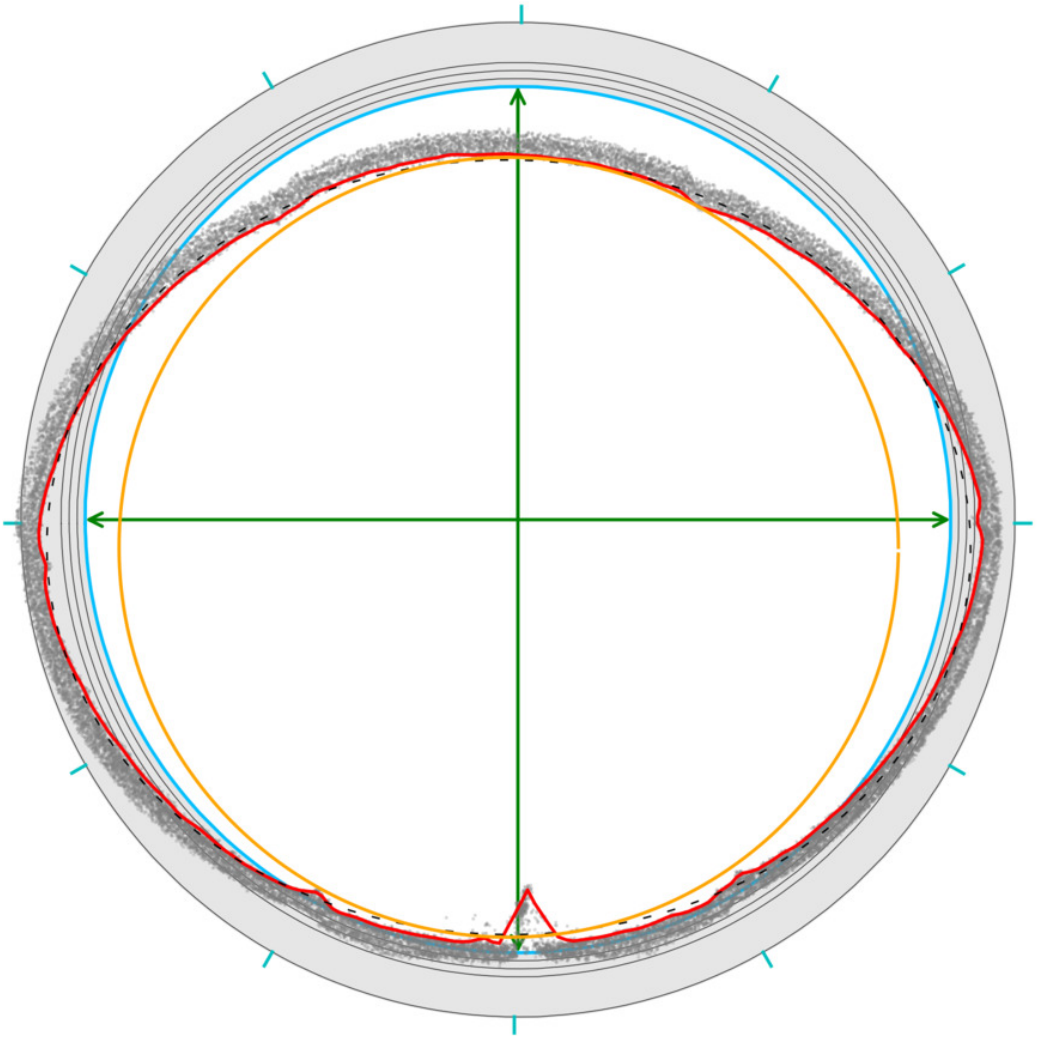
```
Footage   :  234 ft
Width     :  117.8" | 108.0"
Height    :  99.4" | 108.0"

Area      :  8721 sq in
Perimeter :  338.8 in
Ovality   :  8.5%

Interior Diameter : 96.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 235.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



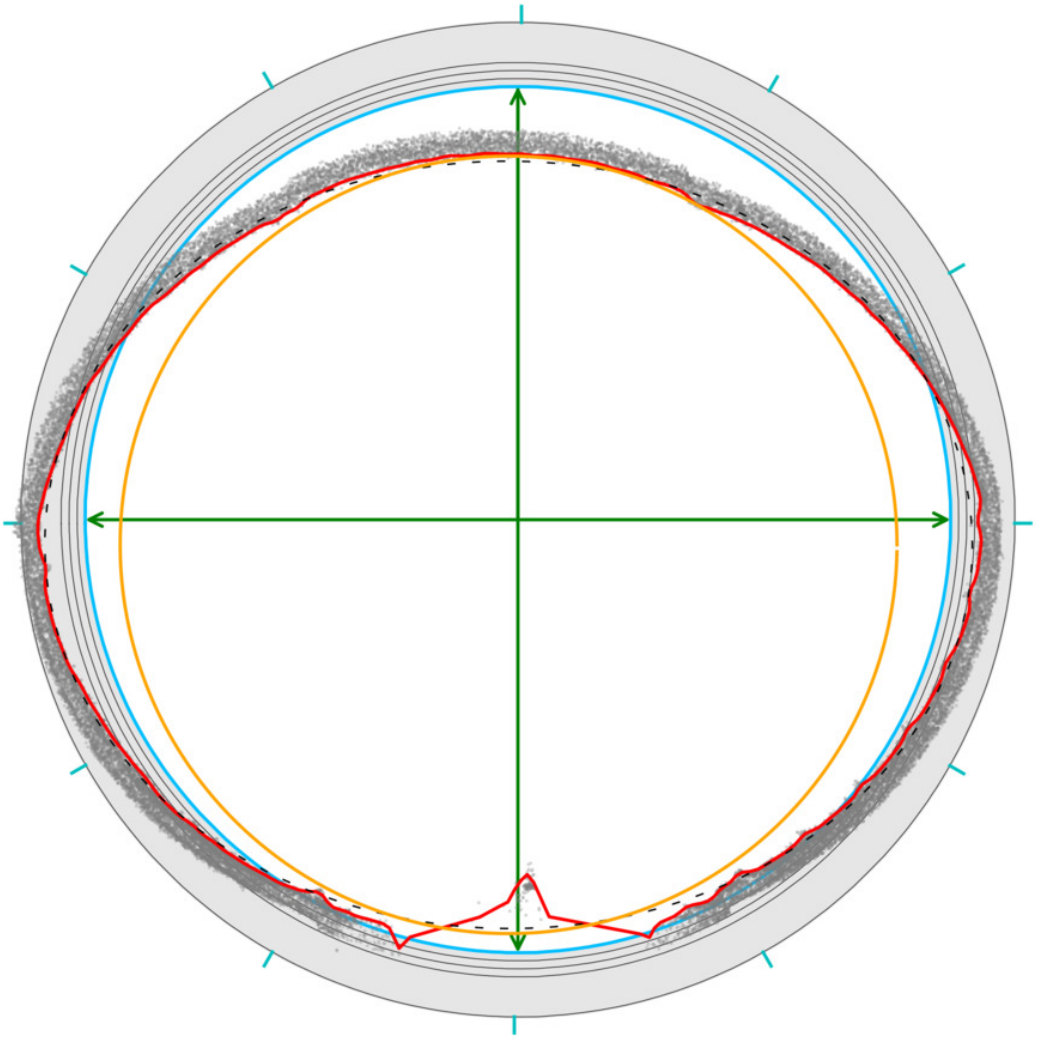
```
Footage   :  235 ft
Width     :  117.8" | 108.0"
Height    :  99.5" | 108.0"

Area      :  8734 sq in
Perimeter :  343.2 in
Ovality   :  8.6%

Interior Diameter : 97.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 236.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



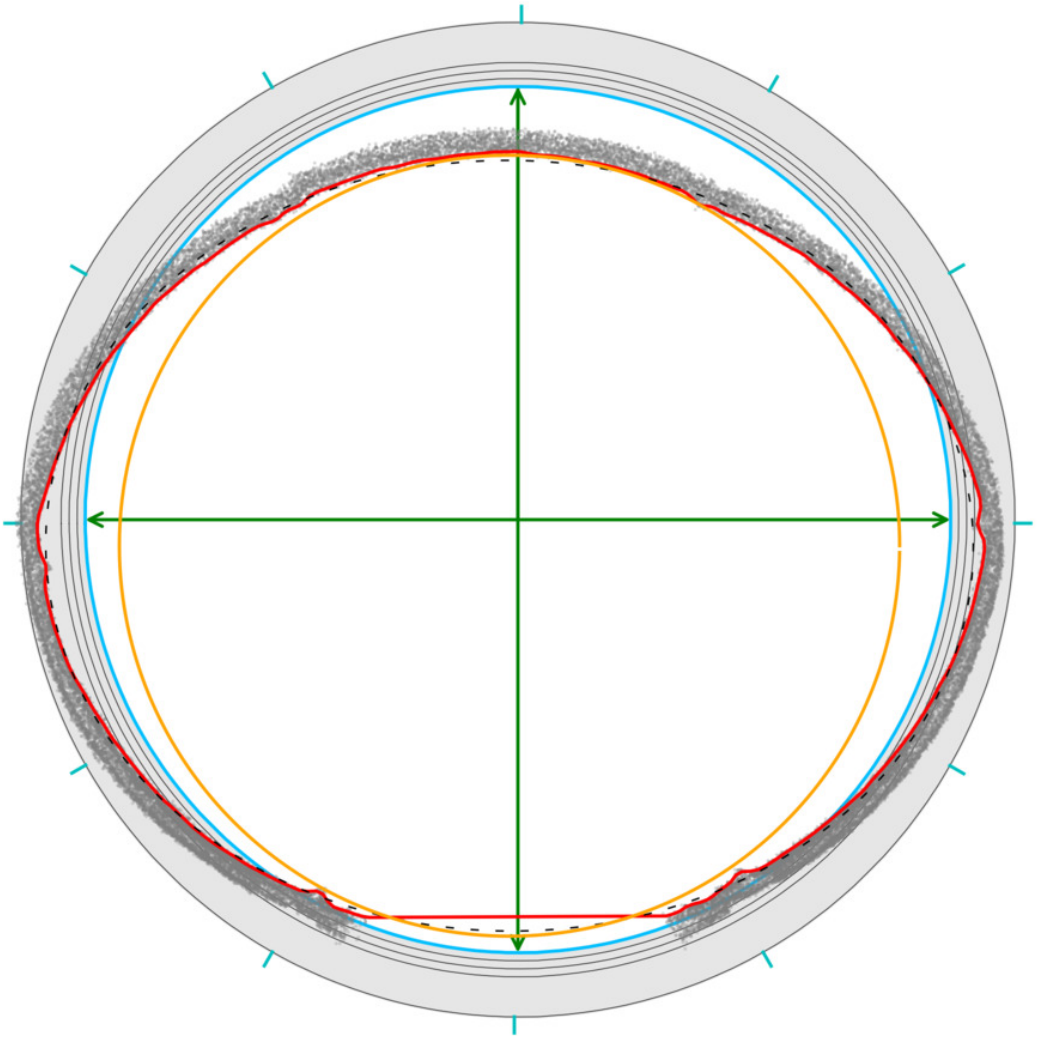
```
Footage   :  236 ft
Width     :  117.7" | 108.0"
Height    :  99.6" | 108.0"

Area      :  8693 sq in
Perimeter :  345.2 in
Ovality   :  9.2%

Interior Diameter : 97.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 237.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



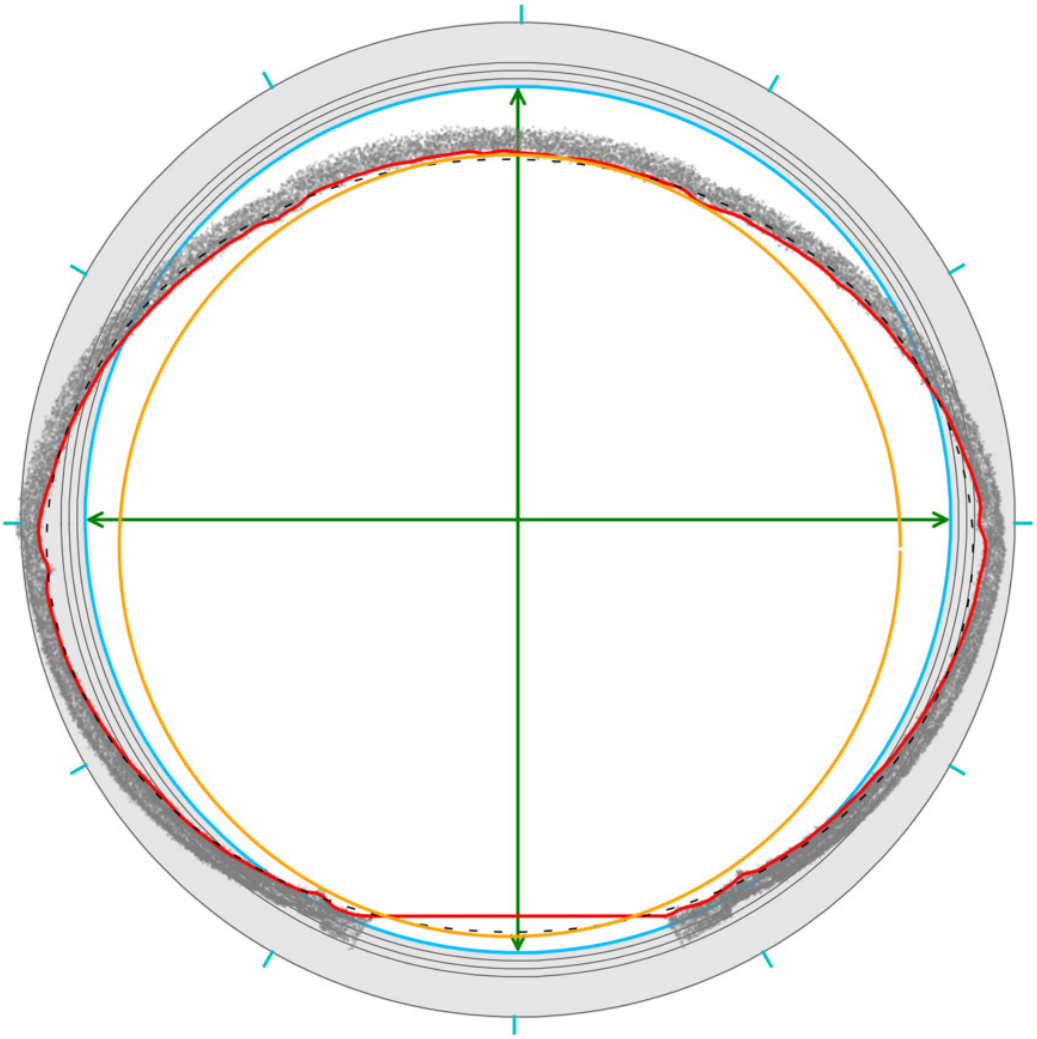
```
Footage   :  237 ft
Width     :  118.2" | 108.0"
Height    :  99.8" | 108.0"

Area      :  8694 sq in
Perimeter :  335.6 in
Ovality   :  9.0%

Interior Diameter : 97.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 238.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  238 ft
Width     :  118.2" | 108.0"
Height    :  99.8" | 108.0"

Area      :  8698 sq in
Perimeter :  335.4 in
Ovality   :  8.8%

Interior Diameter : 97.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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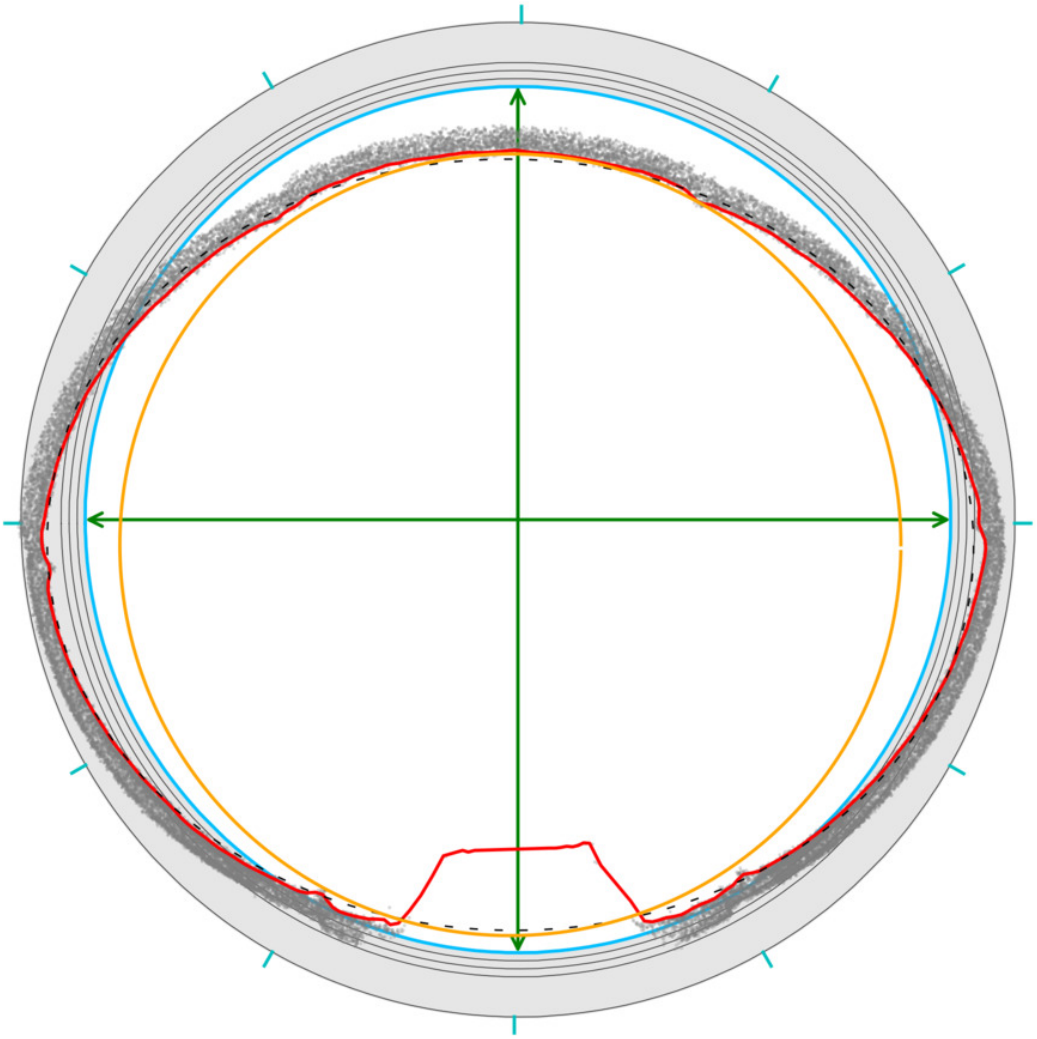
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 239.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



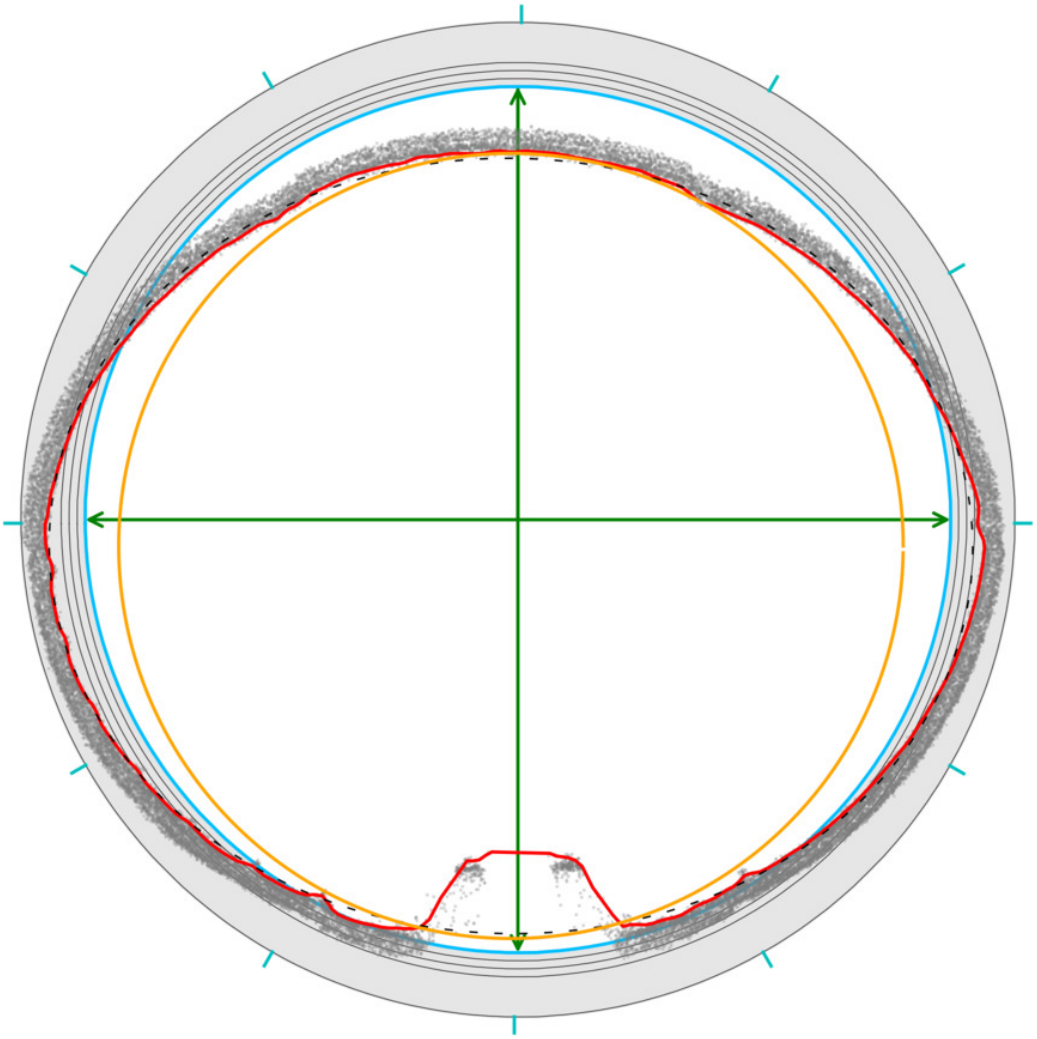
```
Footage   :  239 ft
Width     :  117.8" | 108.0"
Height    :  100.0" | 108.0"

Area      :  8517 sq in
Perimeter :  345.9 in
Ovality   :  8.9%

Interior Diameter : 97.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 240.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



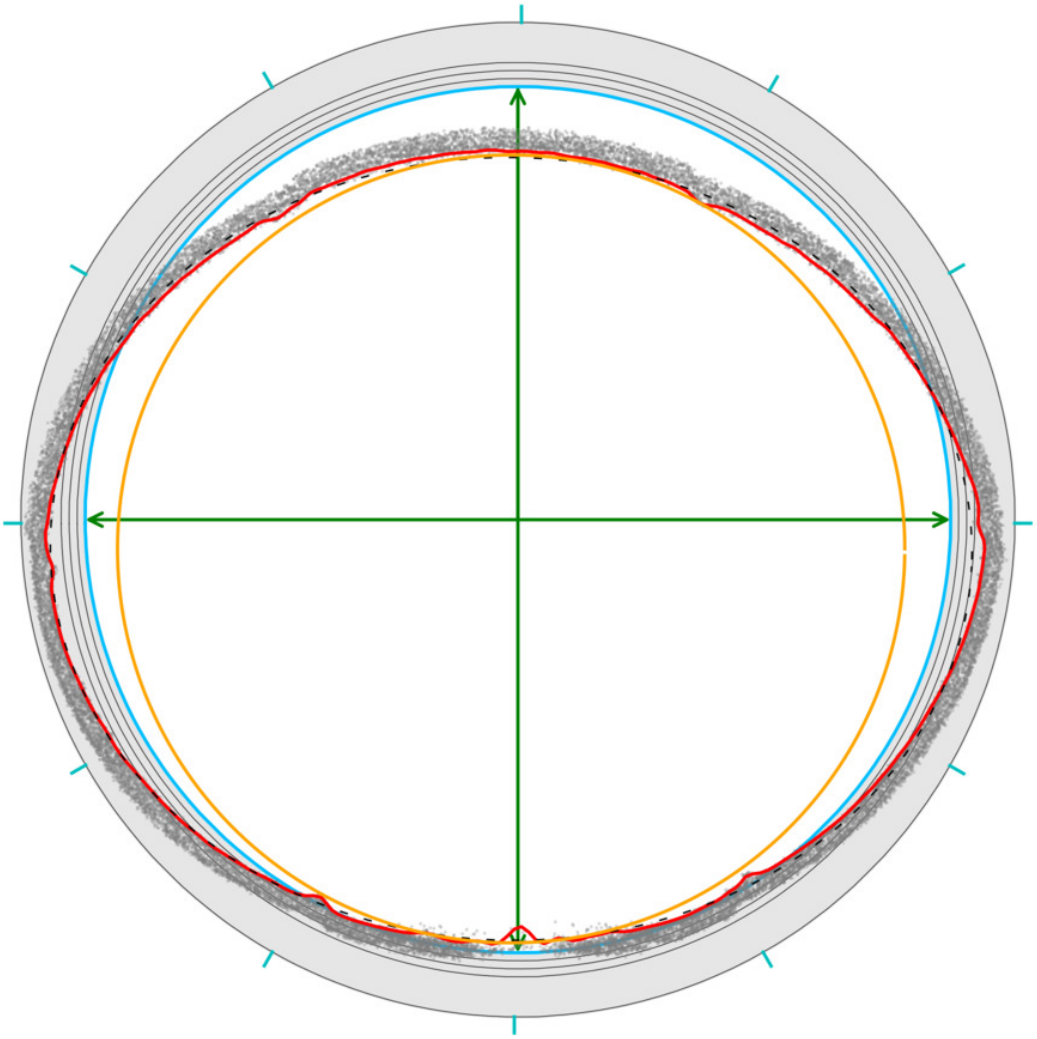
```
Footage    :  240 ft
Width      :  117.2" | 108.0"
Height     :  99.9" | 108.0"

Area       :  8588 sq in
Perimeter  :  345.3 in
Ovality    :  8.5%

Interior Diameter : 97.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 241.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



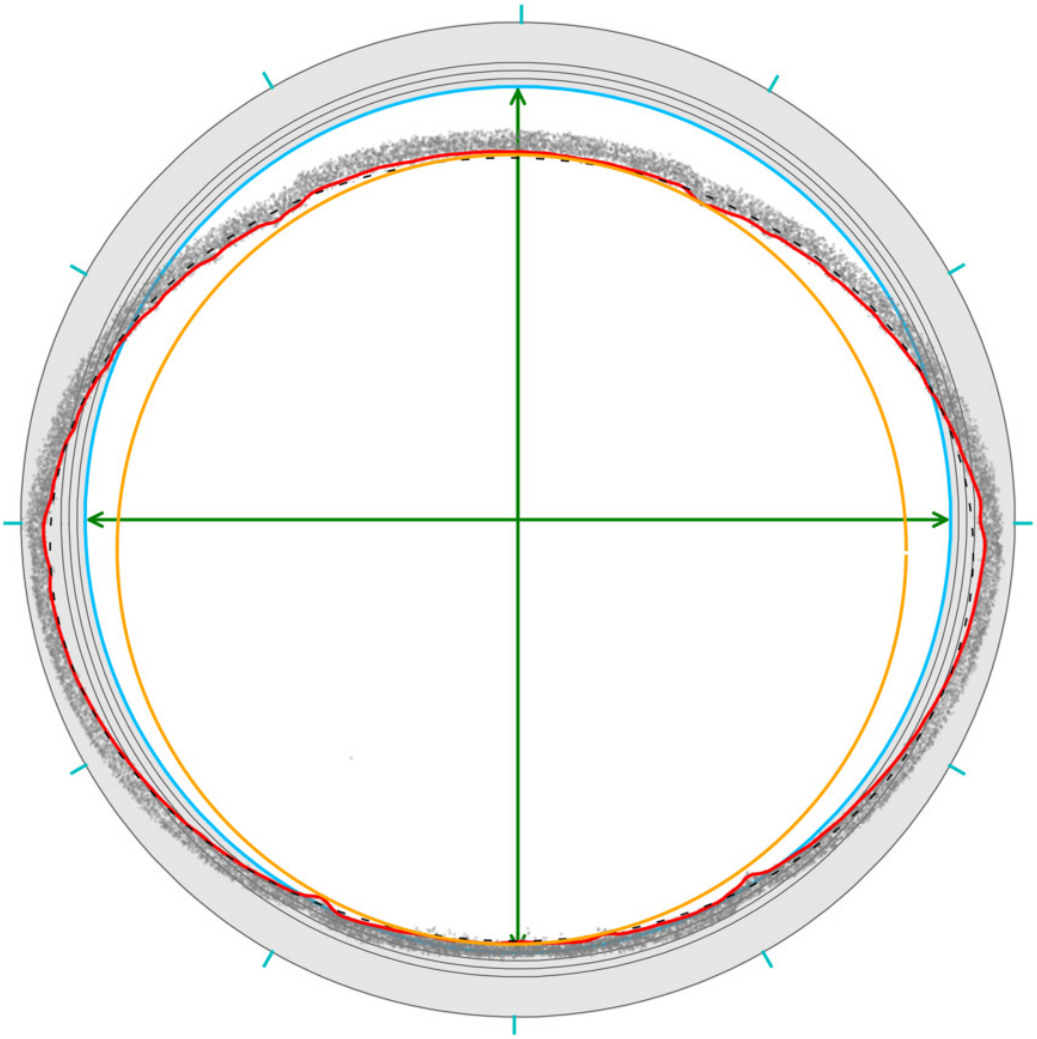
```
Footage   :  241 ft
Width     :  117.2" | 108.0"
Height    :  99.9" | 108.0"

Area      :  8810 sq in
Perimeter :  338.4 in
Ovality   :  8.0%

Interior Diameter : 98.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 242.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 242 ft
Width : 117.5" | 108.0"
Height : 99.9" | 108.0"

Area : 8829 sq in
Perimeter : 337.1 in
Ovality : 8.1%

Interior Diameter : 98.5"

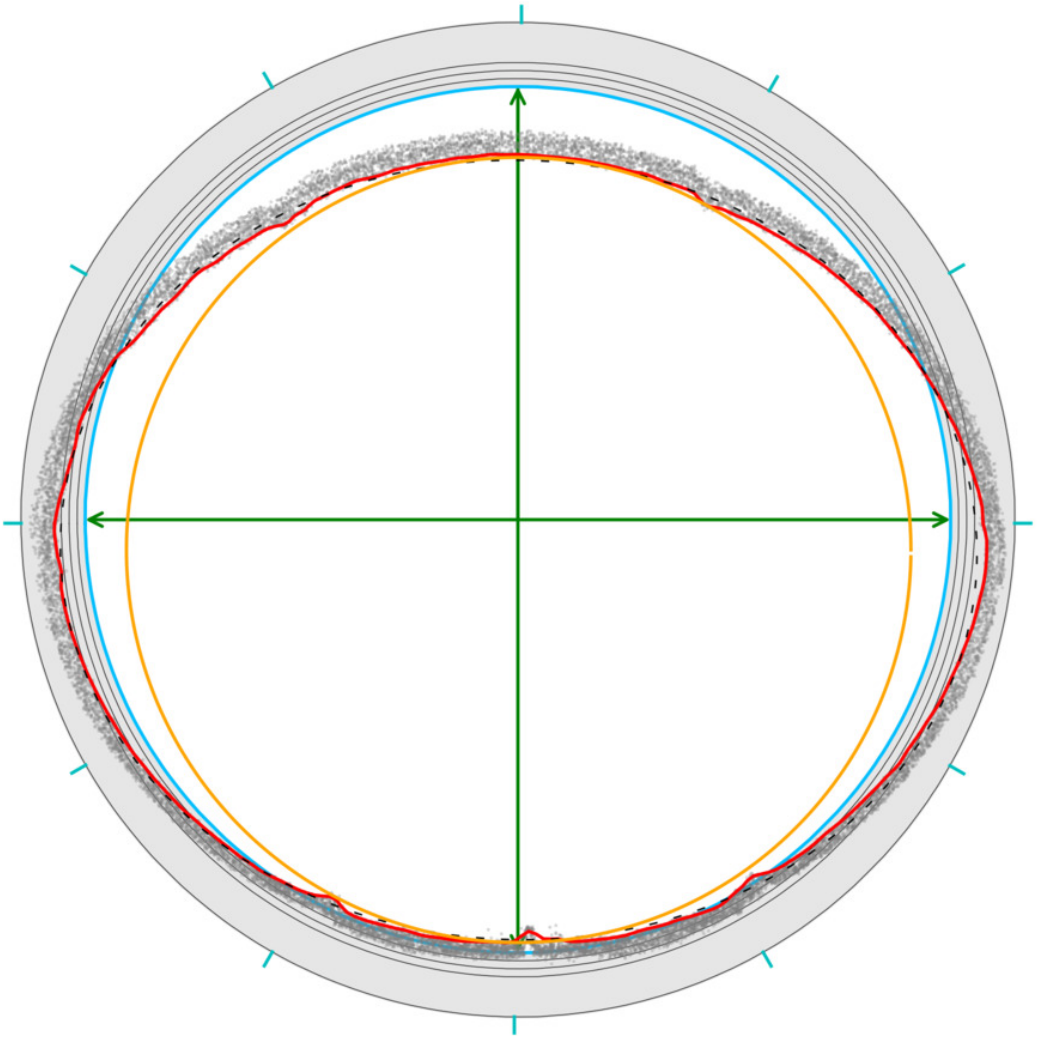
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 243.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



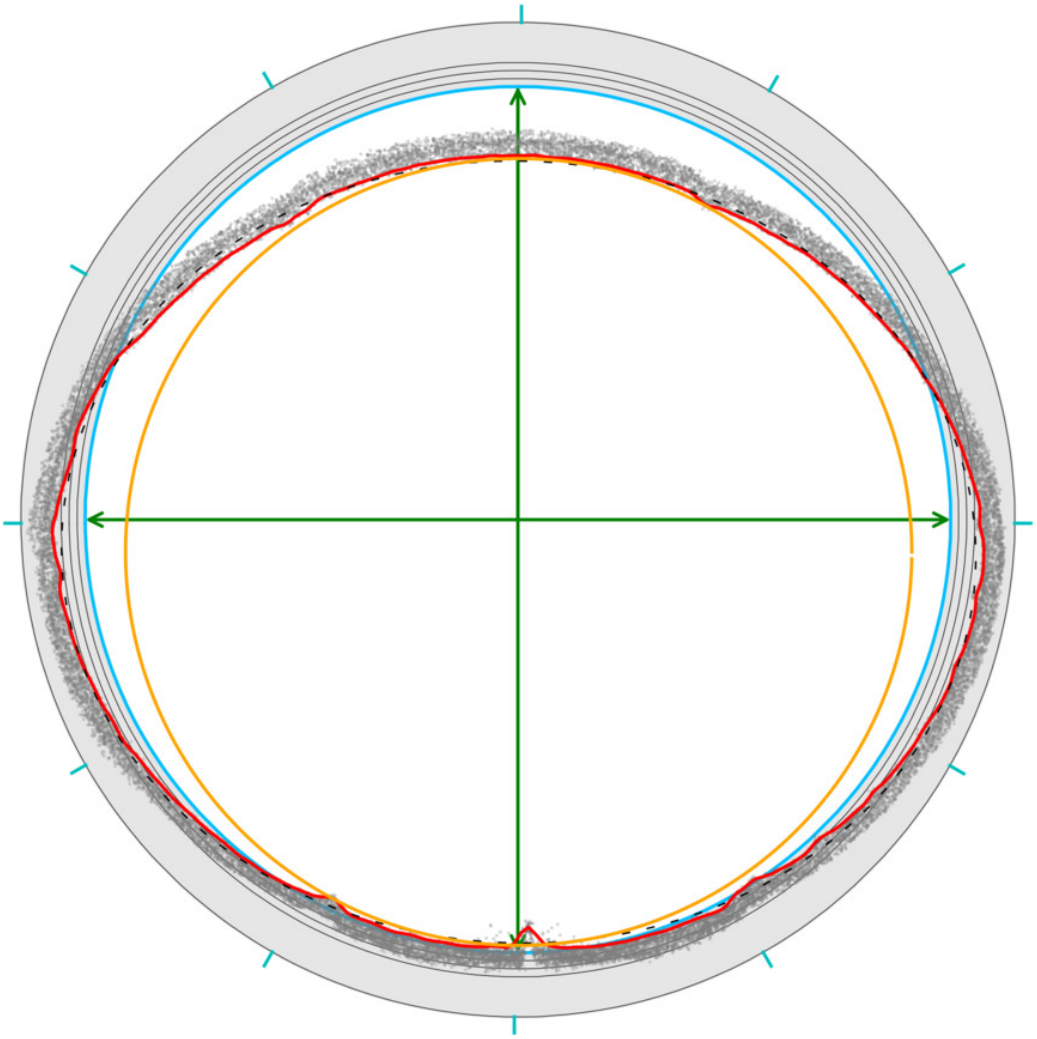
```
Footage    :  243 ft
Width      :  116.4" | 108.0"
Height     :  99.5" | 108.0"

Area       :  8724 sq in
Perimeter  :  335.6 in
Ovality    :  7.9%

Interior Diameter : 97.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 244.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



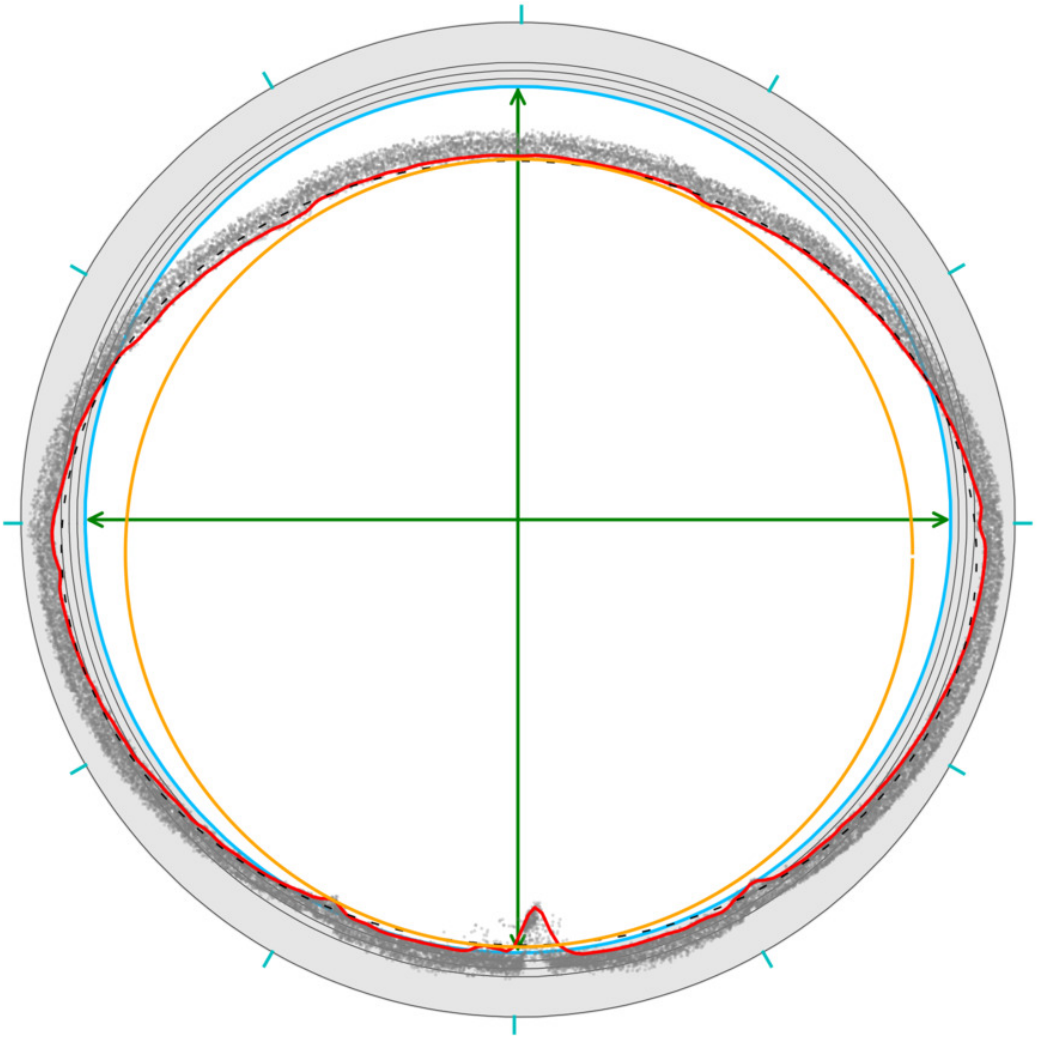
```
Footage   :  244 ft
Width     :  116.3" | 108.0"
Height    :  99.4" | 108.0"

Area      :  8731 sq in
Perimeter :  337.1 in
Ovality   :  7.7%

Interior Diameter : 98.1"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 245.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



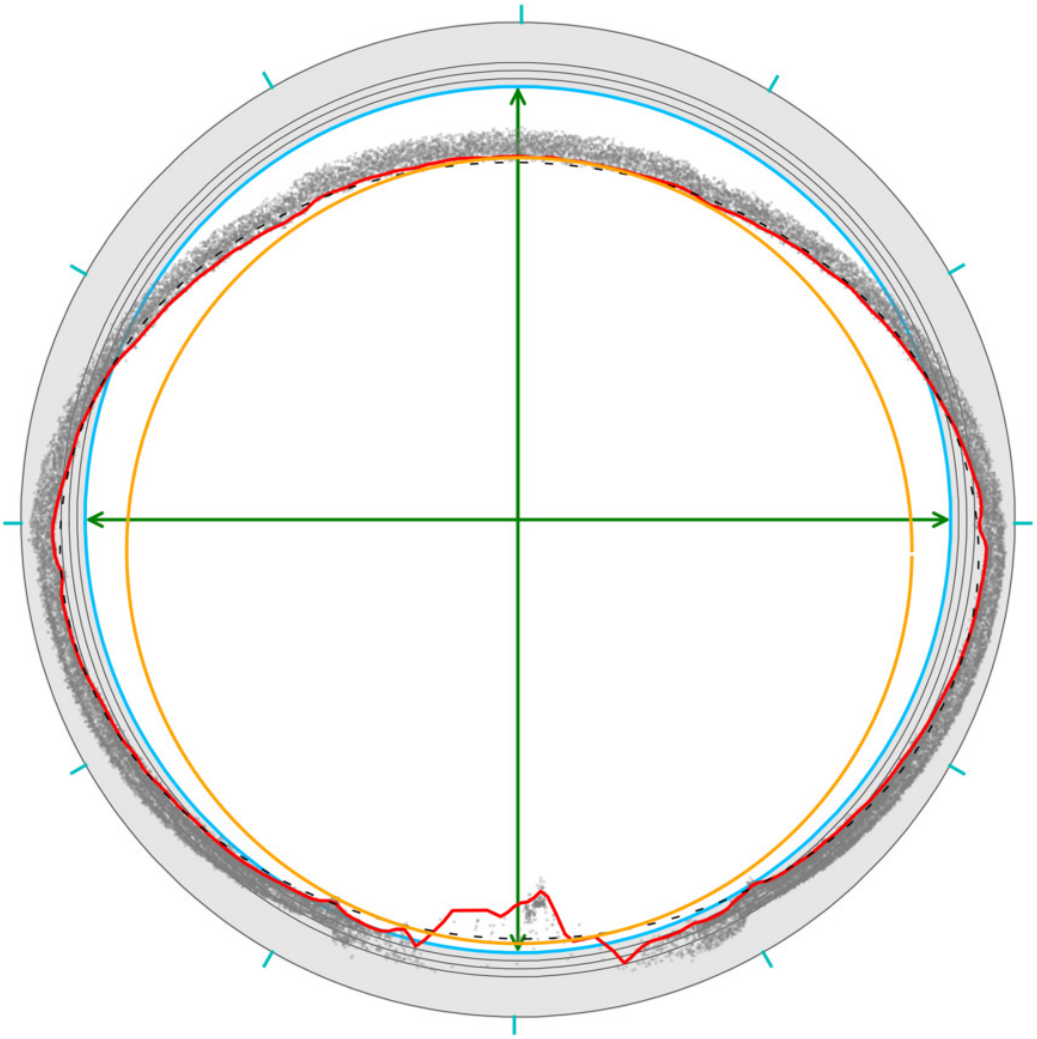
```
Footage    :  245 ft
Width      :  116.5" | 108.0"
Height     :  99.4" | 108.0"

Area       :  8764 sq in
Perimeter  :  342.2 in
Ovality    :  7.6%

Interior Diameter : 98.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 246.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



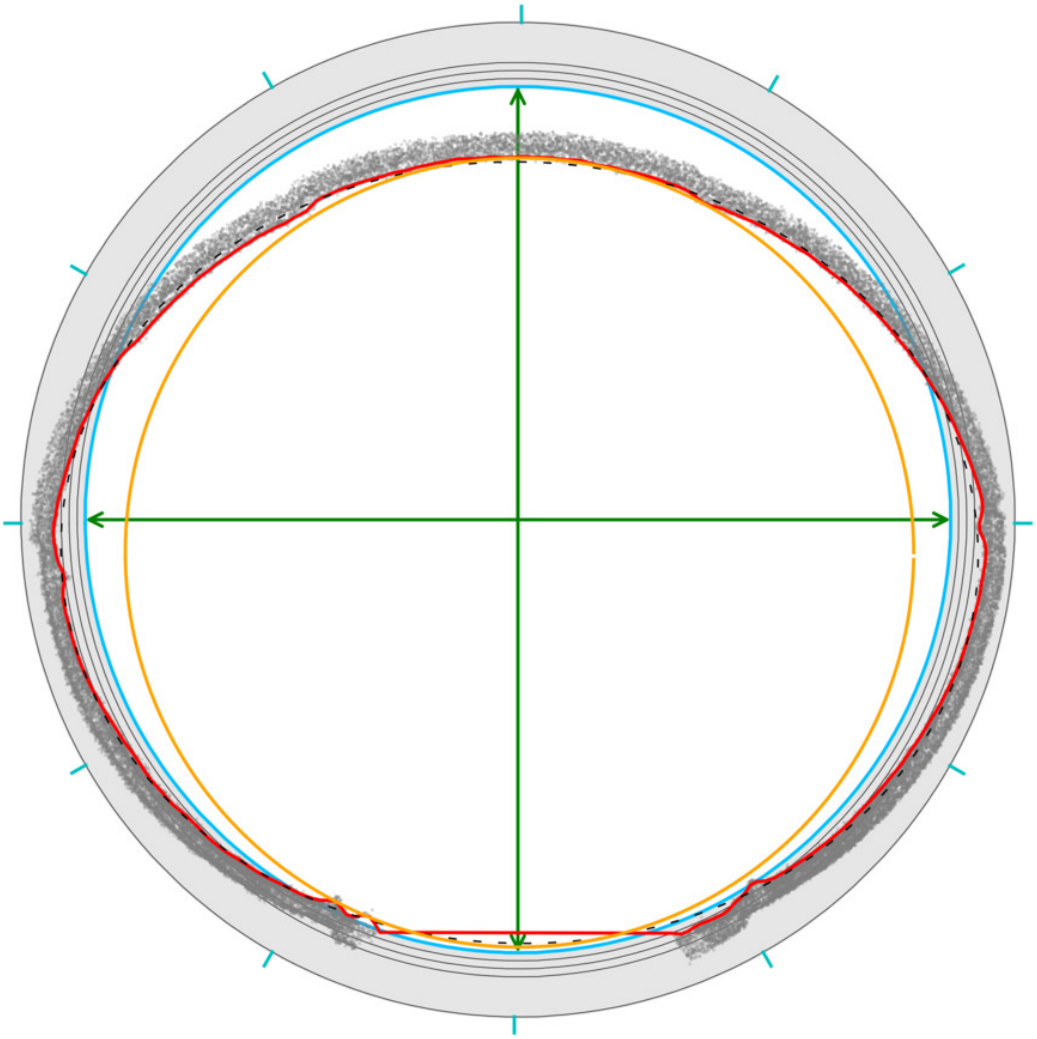
```
Footage   :  246 ft
Width     :  116.6" | 108.0"
Height    :  99.3" | 108.0"

Area      :  8703 sq in
Perimeter :  345.5 in
Ovality   :  8.2%

Interior Diameter : 98.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 247.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



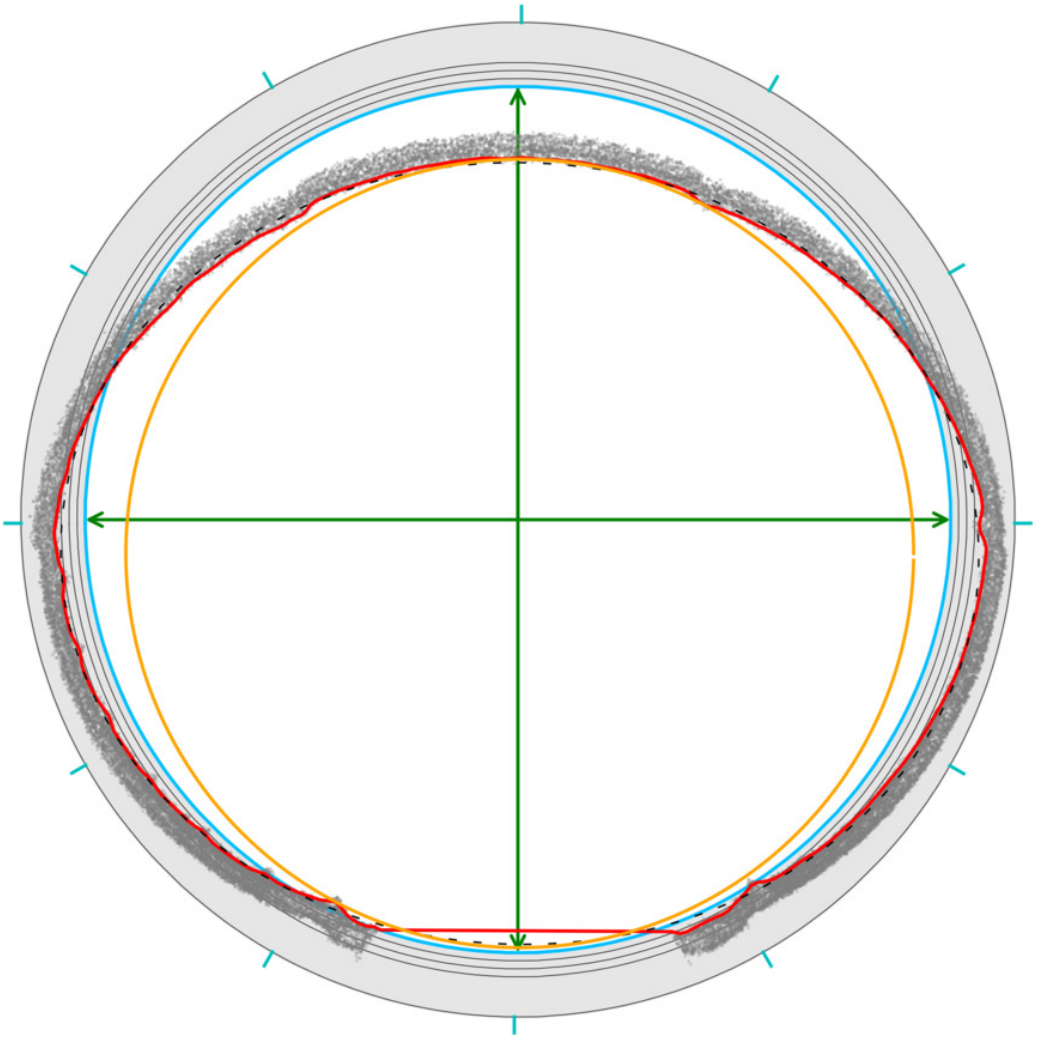
```
Footage   :  247 ft
Width     :  116.4" | 108.0"
Height    :  99.2" | 108.0"

Area      :  8734 sq in
Perimeter :  336.5 in
Ovality   :  7.9%

Interior Diameter : 98.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 248.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



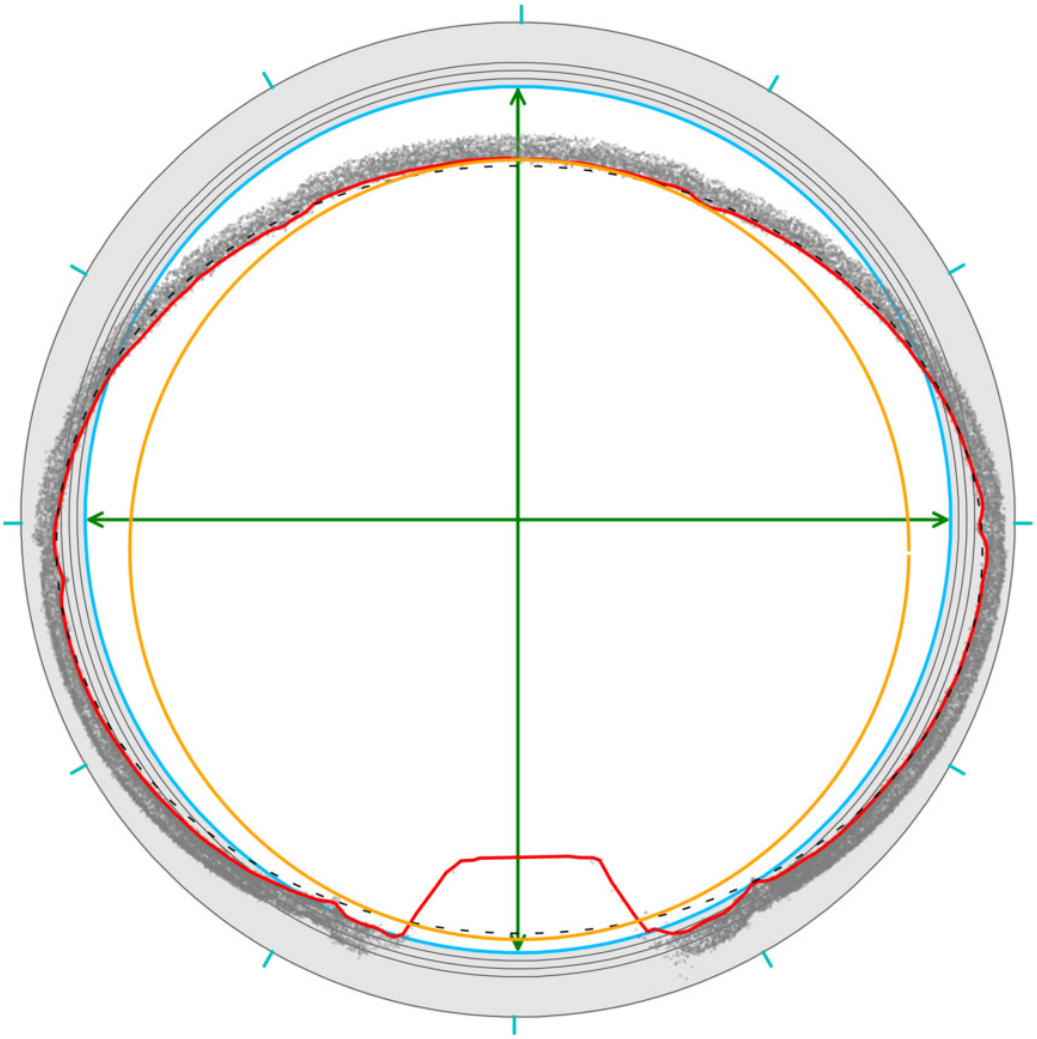
```
Footage   :  248 ft
Width     :  116.3" | 108.0"
Height    :  99.1" | 108.0"

Area      :  8730 sq in
Perimeter :  336.1 in
Ovality   :  7.9%

Interior Diameter : 98.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 249.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



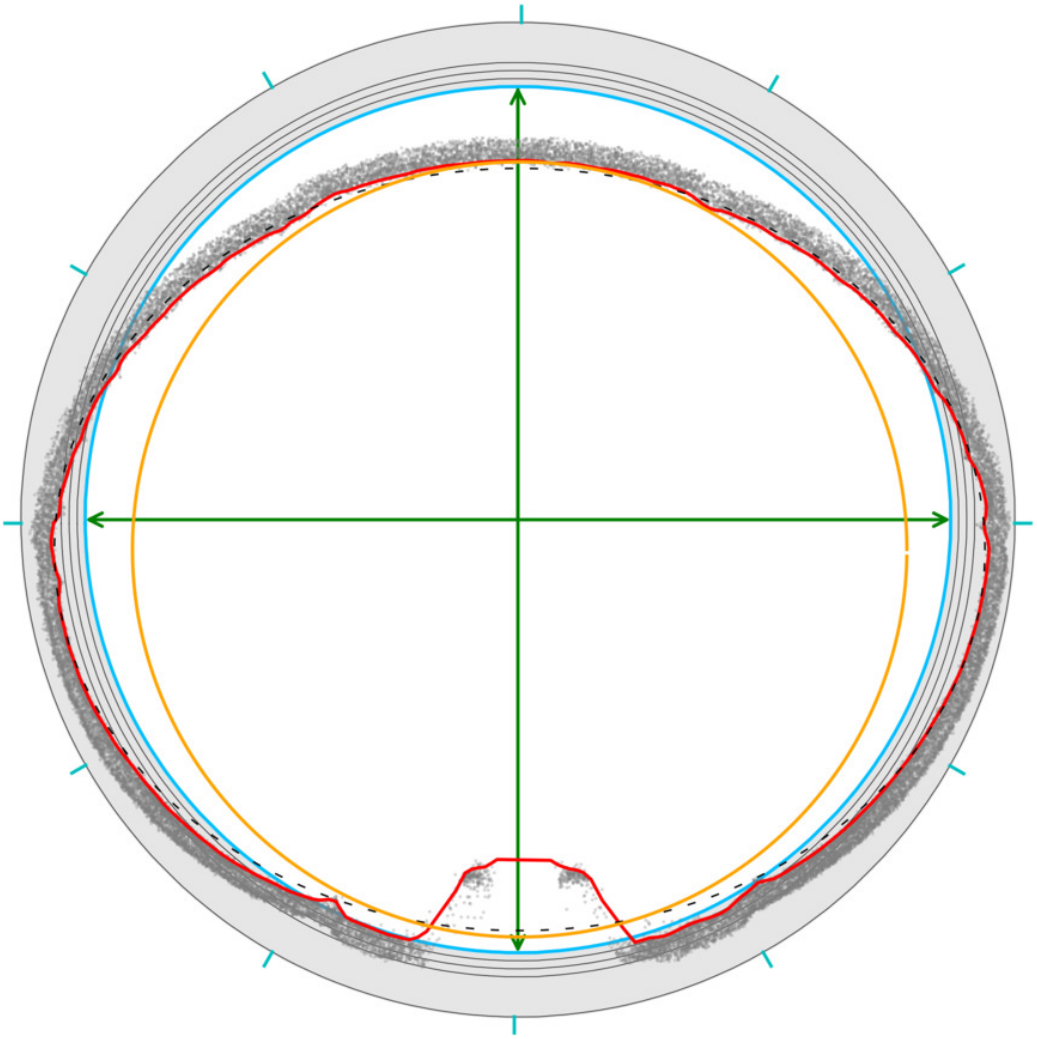
```
Footage   :  249 ft
Width     :  116.4" | 108.0"
Height    :  99.0" | 108.0"

Area      :  8543 sq in
Perimeter :  346.0 in
Ovality   :  9.1%

Interior Diameter : 97.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 250.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



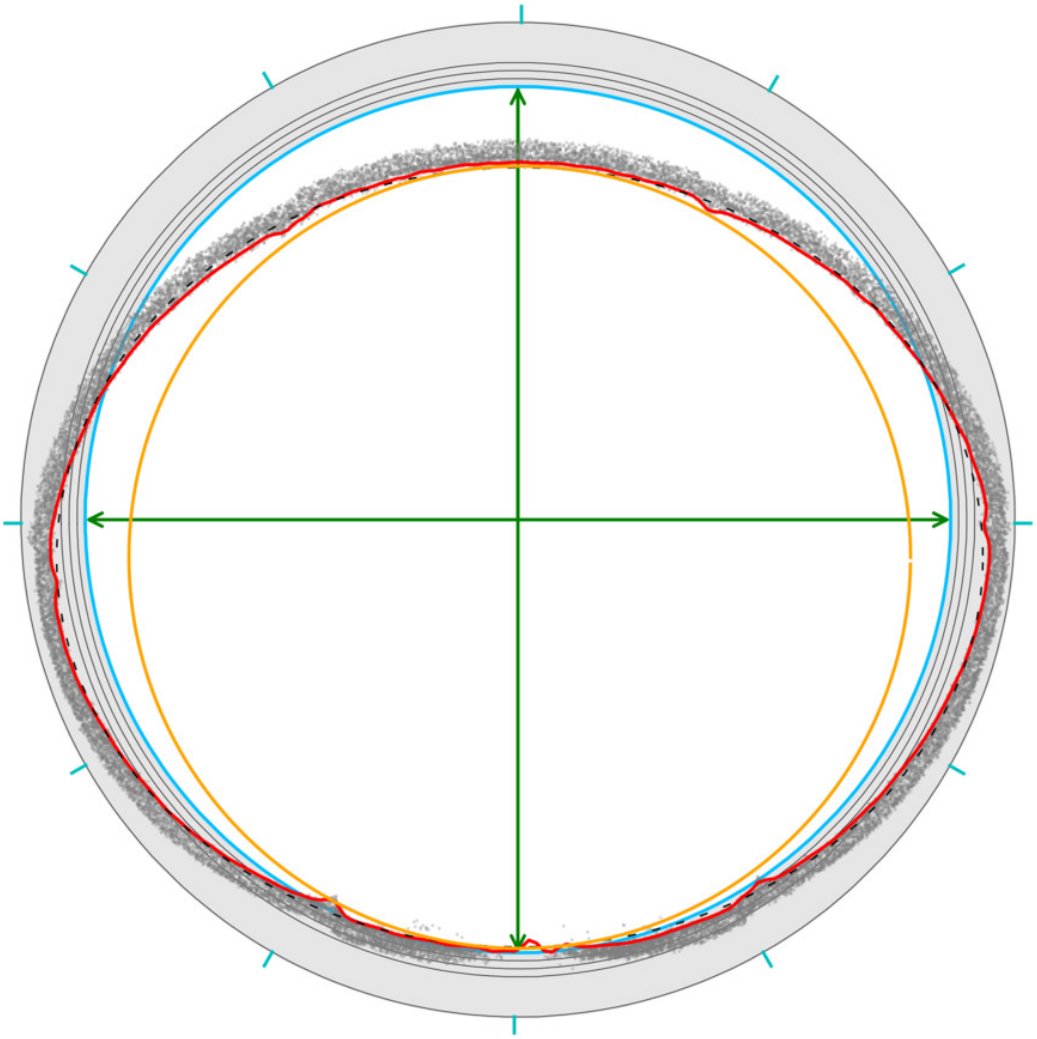
```
Footage   :  250 ft
Width     :  117.0" | 108.0"
Height    :  98.8" | 108.0"

Area      :  8609 sq in
Perimeter :  346.3 in
Ovality   :  9.7%

Interior Diameter : 96.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 251.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



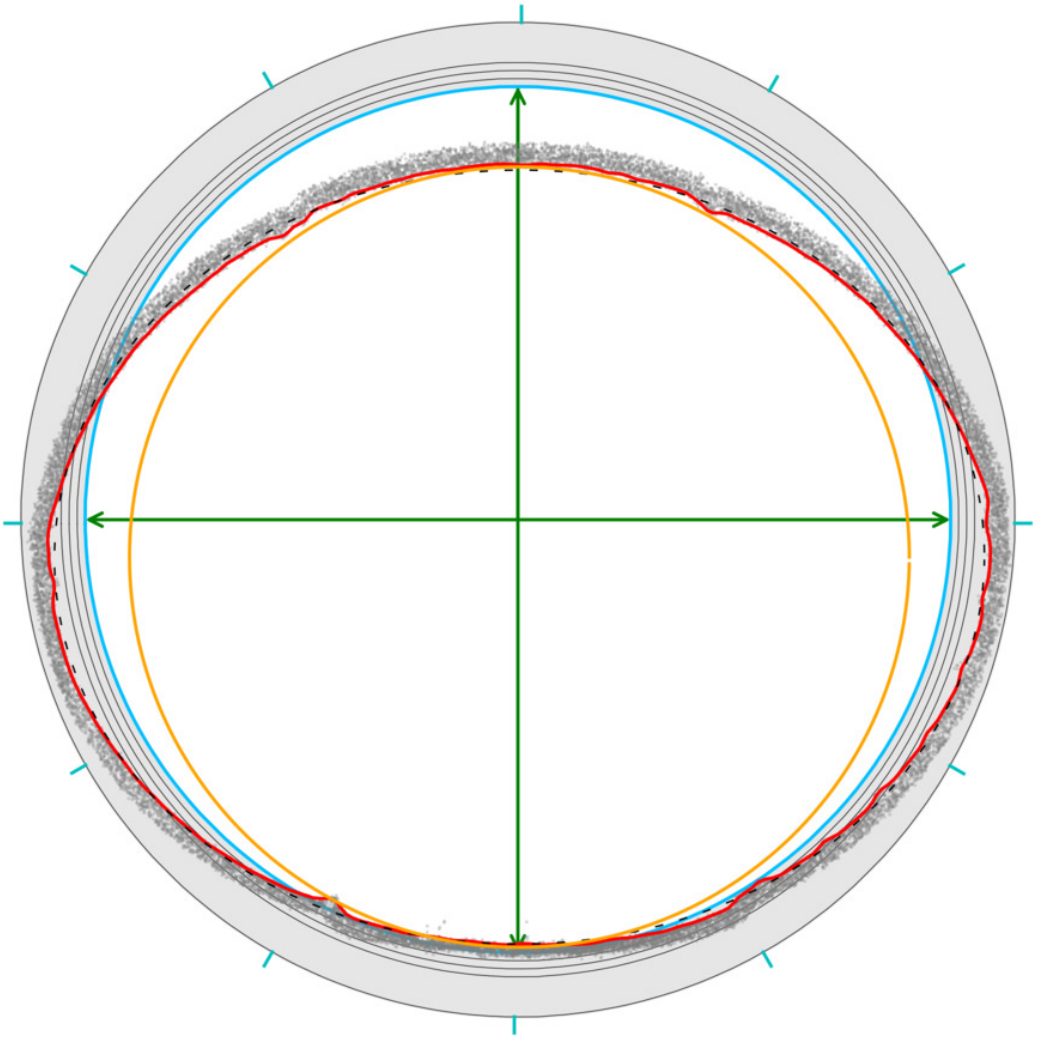
```
Footage   :  251 ft
Width     :  117.2" | 108.0"
Height    :  98.6" | 108.0"

Area      :  8814 sq in
Perimeter :  338.3 in
Ovality   :  8.4%

Interior Diameter : 97.5"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 252.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



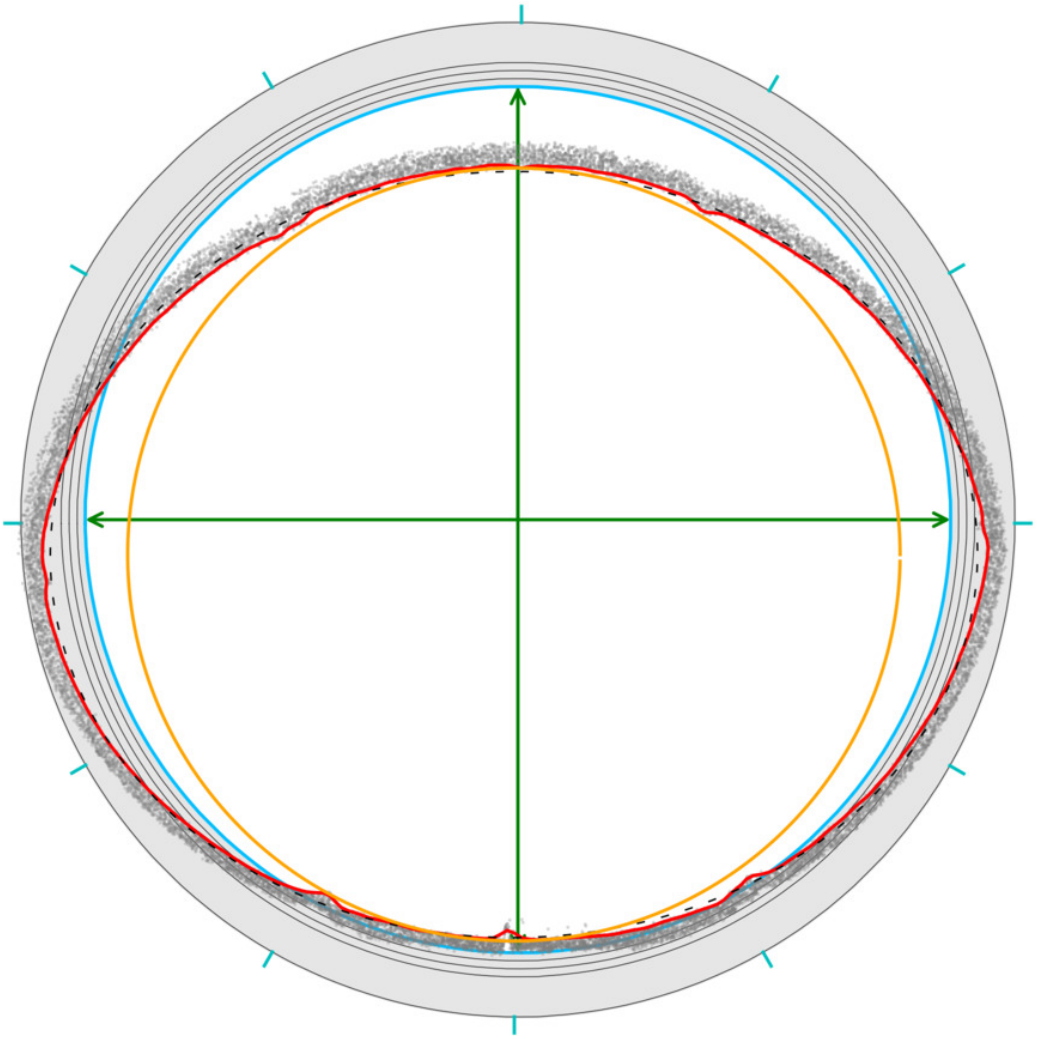
```
Footage    :  252 ft
Width      :  117.6" | 108.0"
Height     :  98.3" | 108.0"

Area       :  8789 sq in
Perimeter  :  337.0 in
Ovality    :  8.9%

Interior Diameter : 97.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 253.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



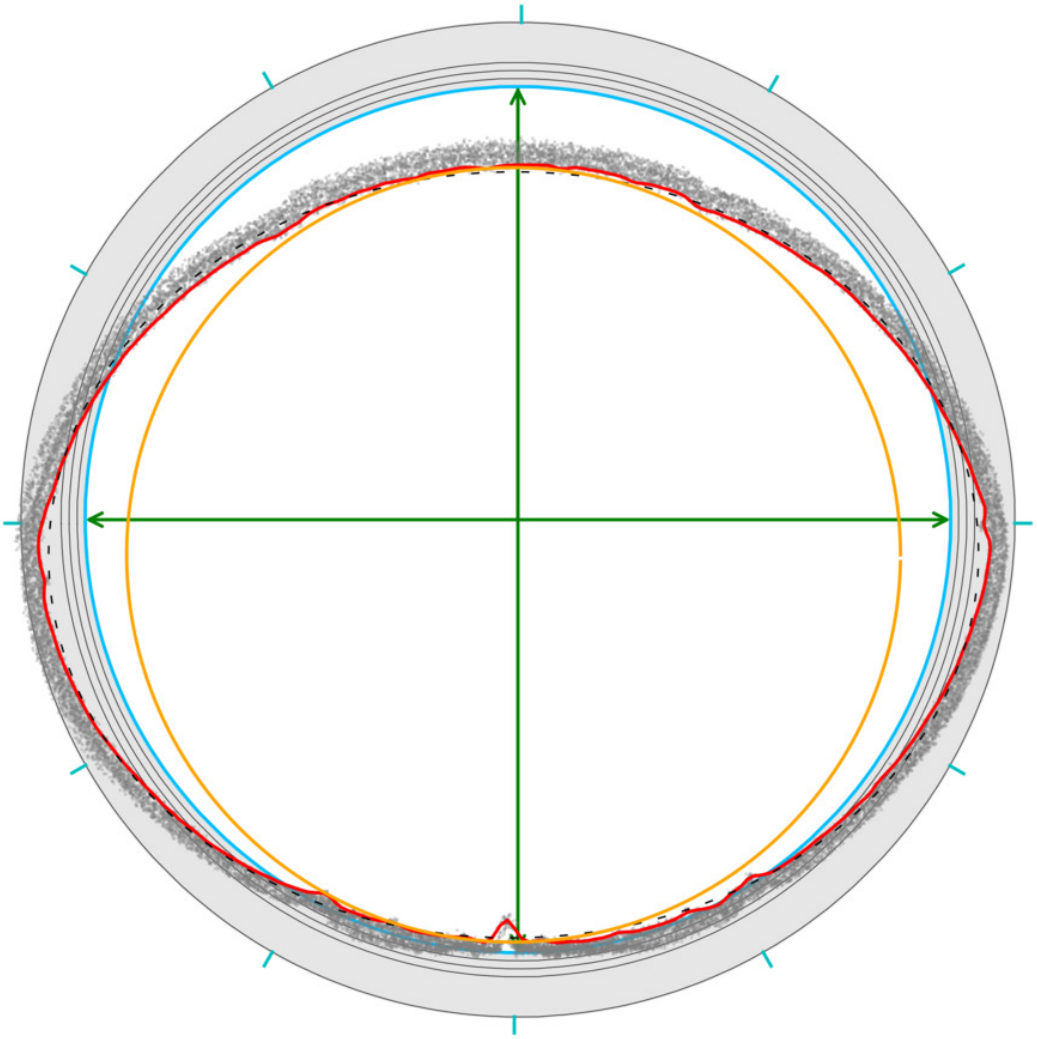
```
Footage    :  253 ft
Width      :  118.0" | 108.0"
Height     :  98.0" | 108.0"

Area       :  8674 sq in
Perimeter  :  334.9 in
Ovality    :  9.3%

Interior Diameter : 96.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 254.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



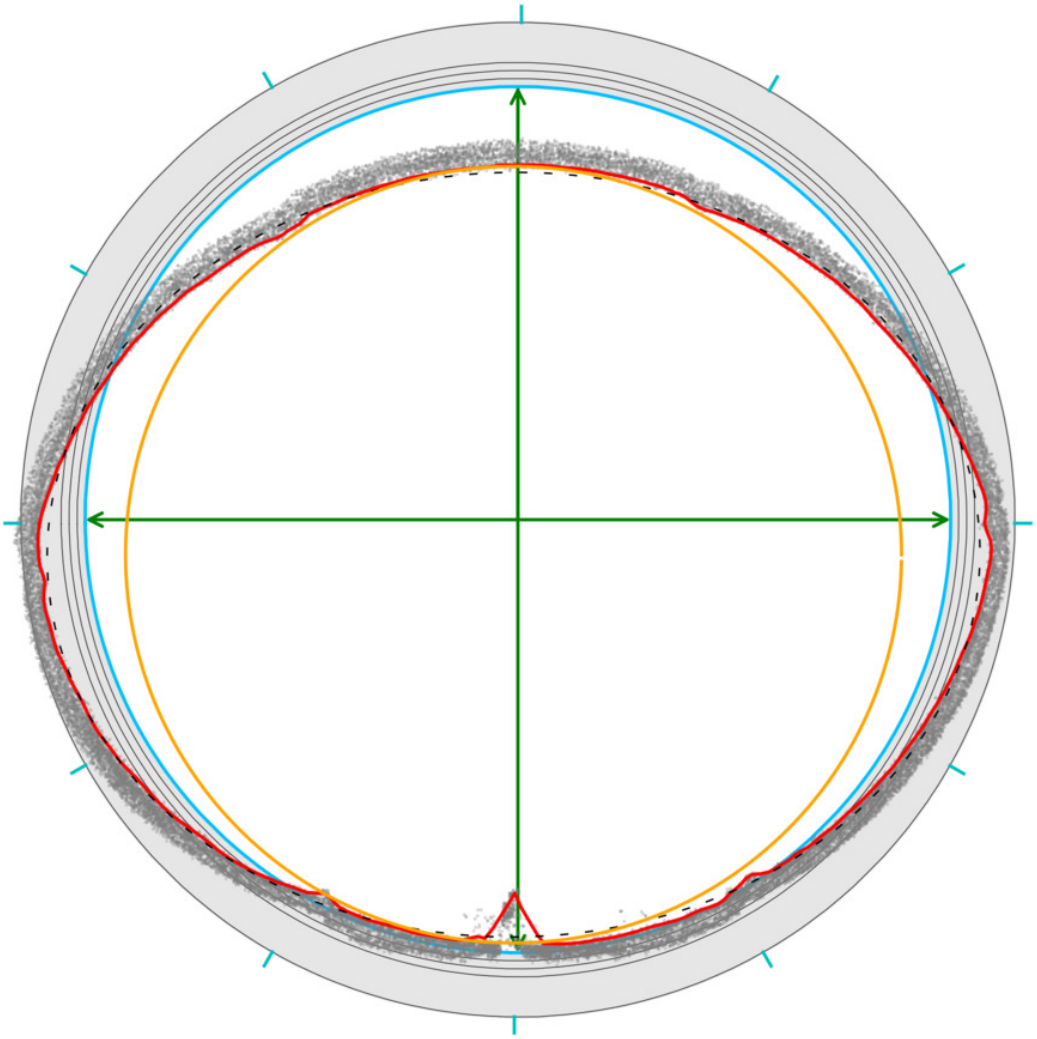
```
Footage    :  254 ft
Width      :  118.8" | 108.0"
Height     :  98.2" | 108.0"

Area       :  8697 sq in
Perimeter  :  337.8 in
Ovality    :  9.4%

Interior Diameter : 96.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 255.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 255 ft
Width : 119.0" | 108.0"
Height : 98.2" | 108.0"

Area : 8704 sq in
Perimeter : 342.4 in
Ovality : 9.7%

Interior Diameter : 96.8"

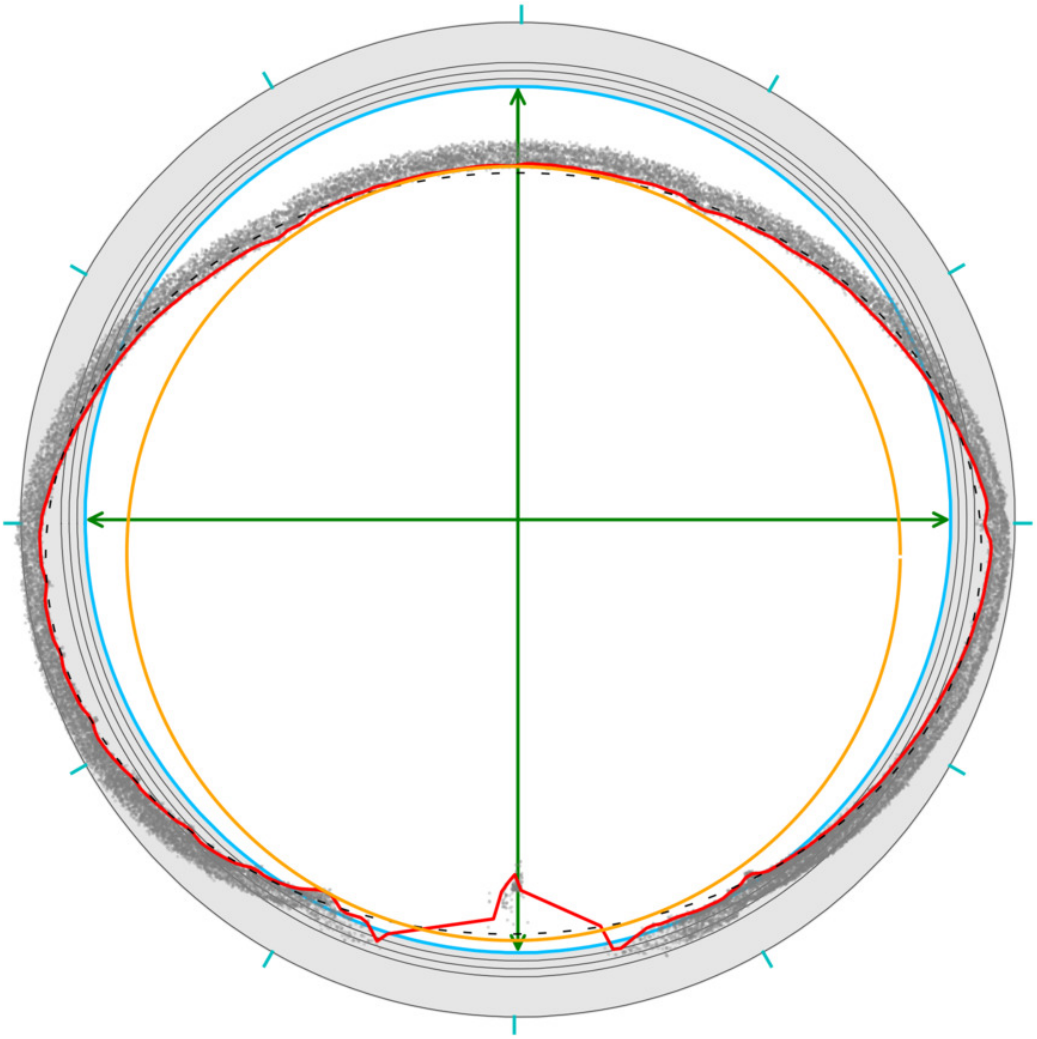
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 256.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



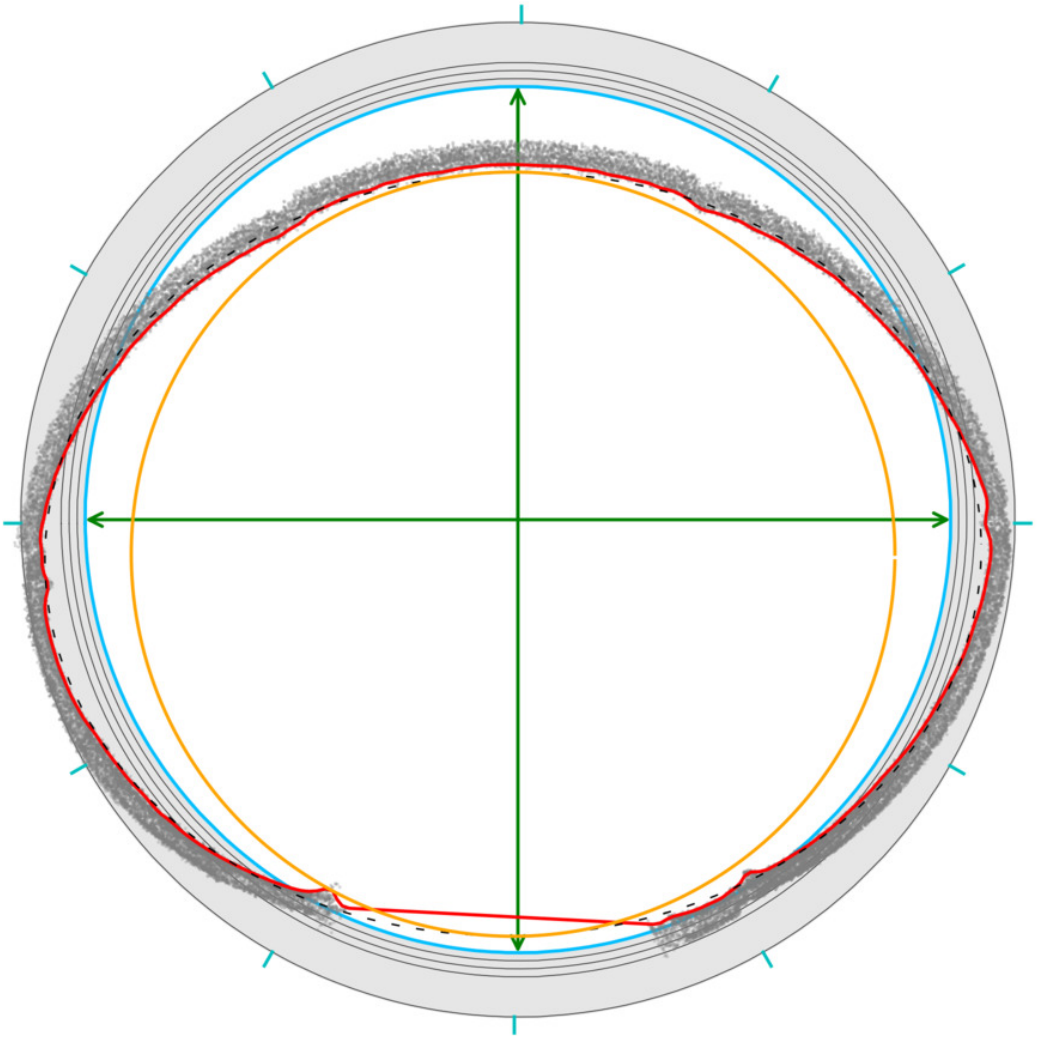
```
Footage   :  256 ft
Width     :  118.7" | 108.0"
Height    :  98.2" | 108.0"

Area      :  8666 sq in
Perimeter :  346.4 in
Ovality   :  10.0%

Interior Diameter : 96.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 257.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



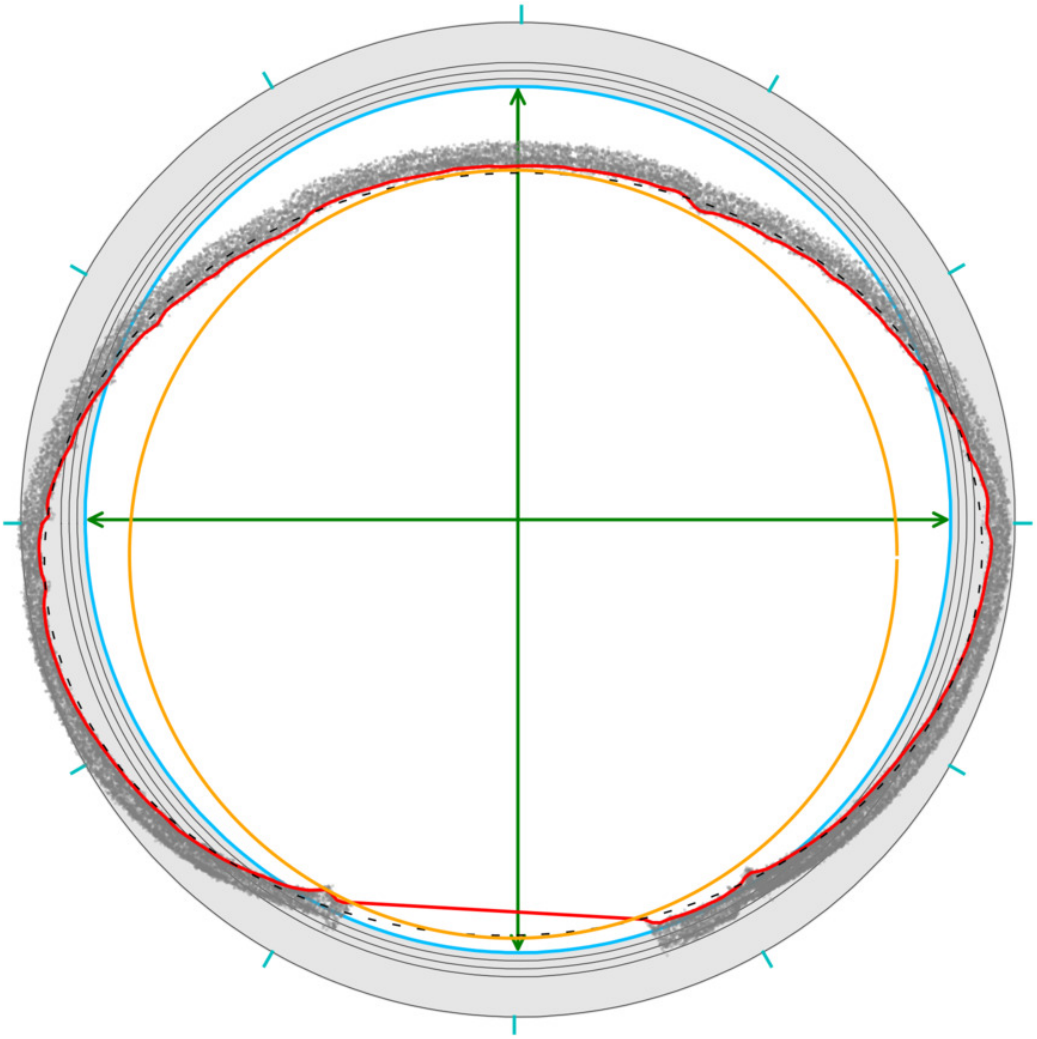
```
Footage   :  257 ft
Width     :  118.6" | 108.0"
Height    :  98.3" | 108.0"

Area      :  8662 sq in
Perimeter :  335.9 in
Ovality   :  9.9%

Interior Diameter : 95.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 258.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 258 ft
Width : 118.9" | 108.0"
Height : 98.1" | 108.0"

Area : 8646 sq in
Perimeter : 336.1 in
Ovality : 10.1%

Interior Diameter : 95.8"

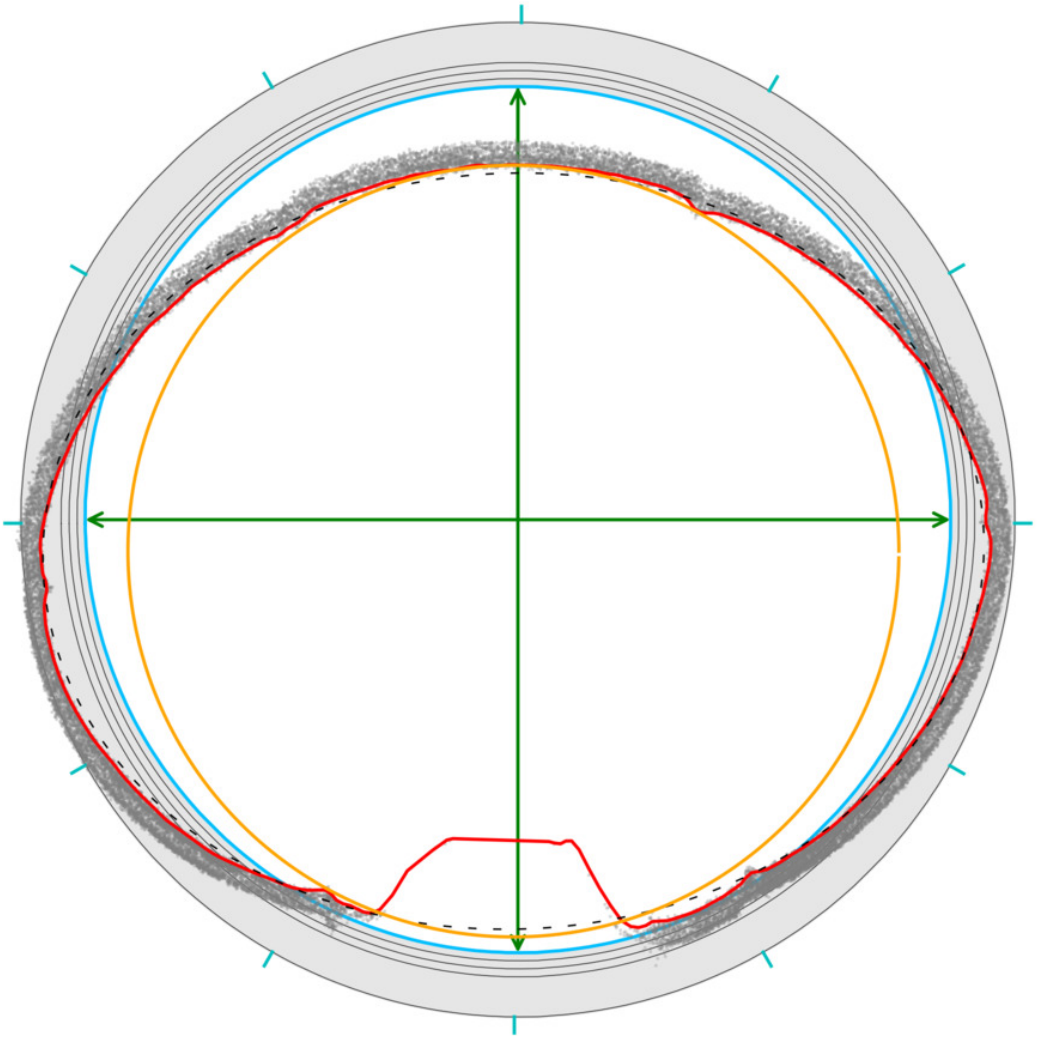
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 259.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



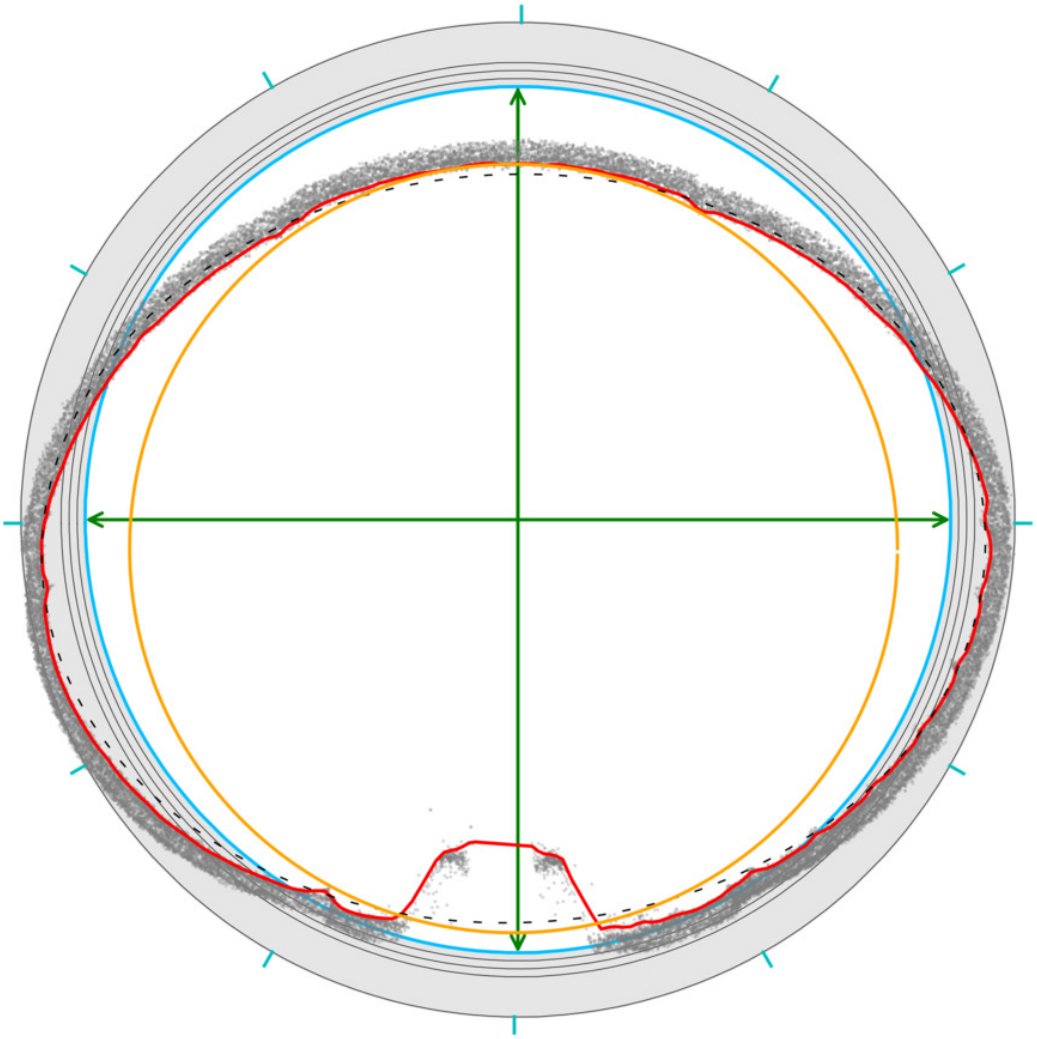
```
Footage   :  259 ft
Width     :  118.6" | 108.0"
Height    :  98.2" | 108.0"

Area      :  8470 sq in
Perimeter :  346.1 in
Ovality   :  10.6%

Interior Diameter : 96.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 260.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



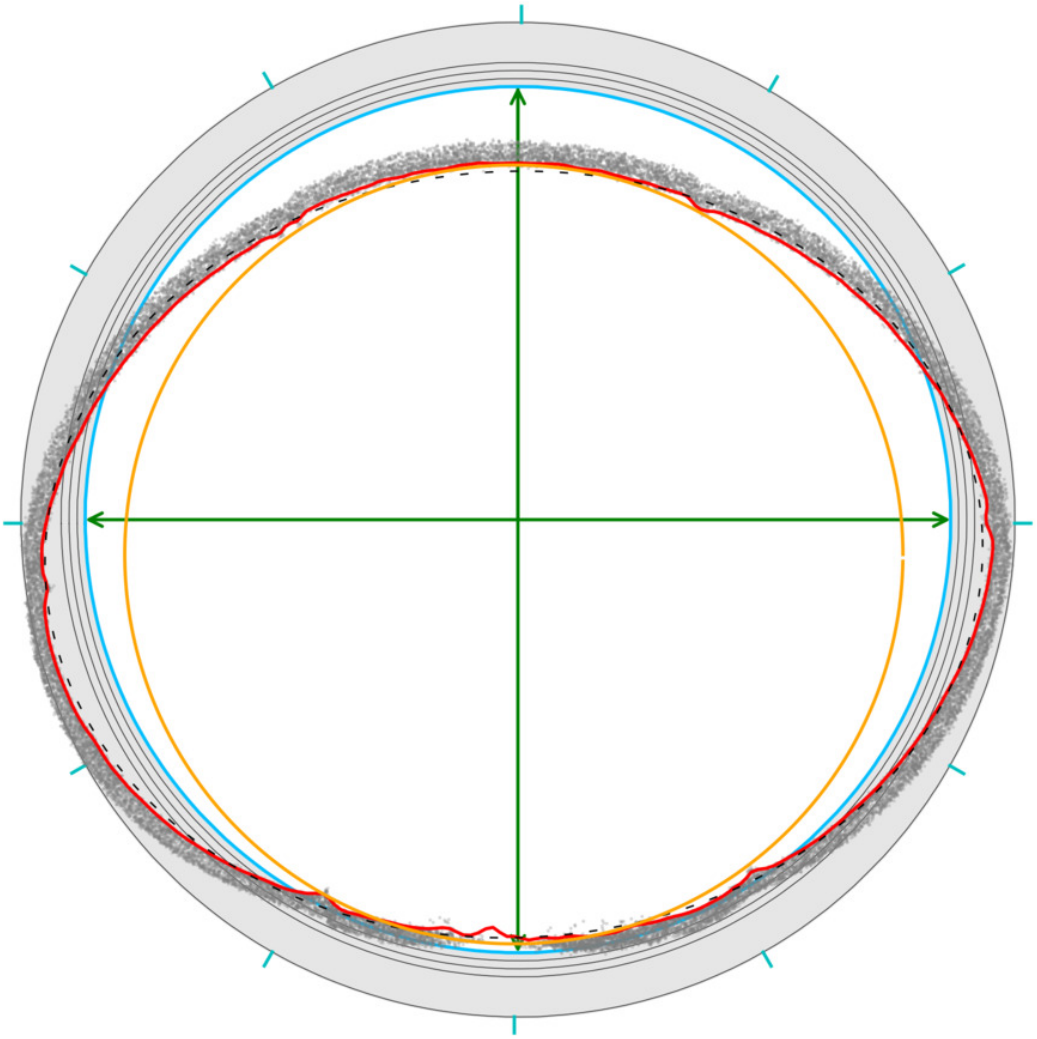
```
Footage    :  260 ft
Width      :  118.5" | 108.0"
Height     :  98.4" | 108.0"

Area       :  8537 sq in
Perimeter  :  346.8 in
Ovality    :  11.2%

Interior Diameter : 95.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 261.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



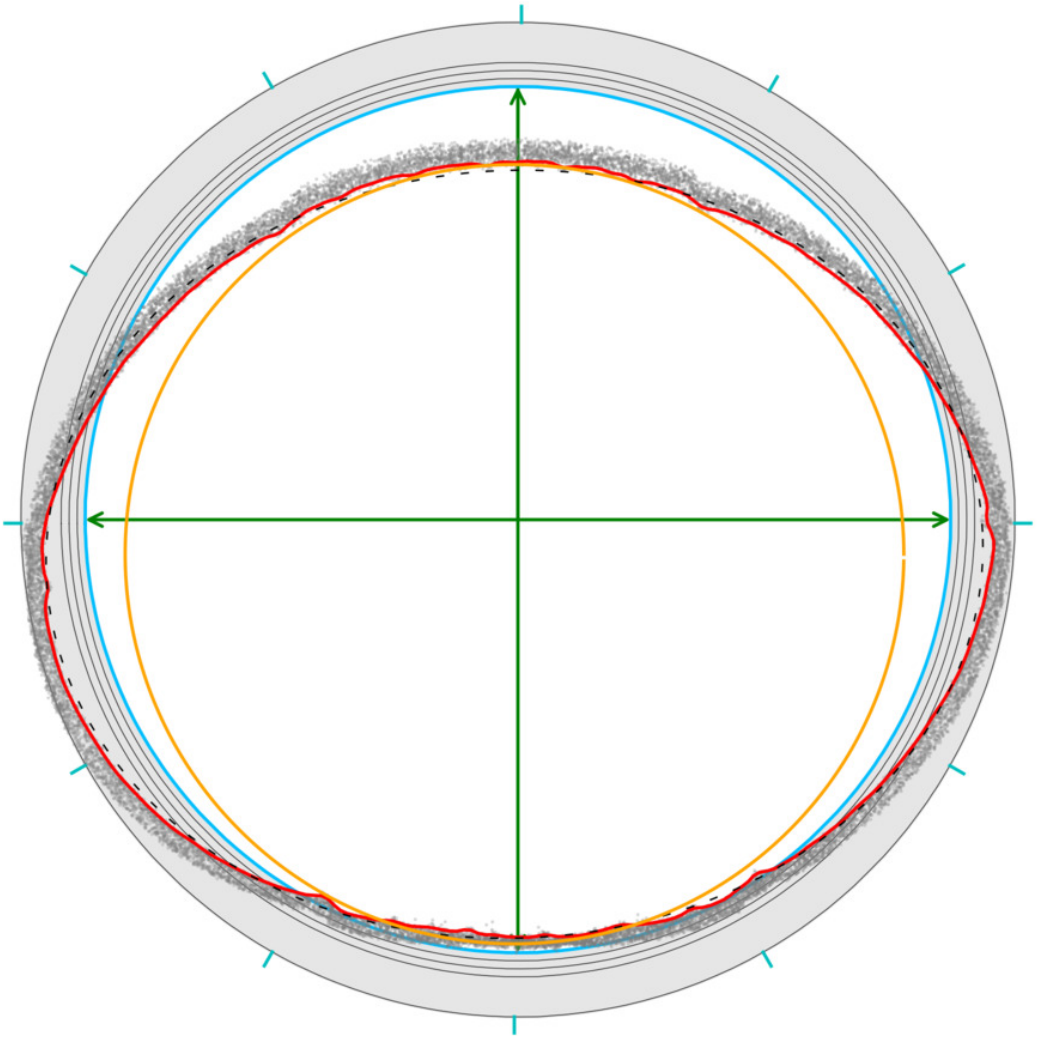
```
Footage    :  261 ft
Width      :  118.7" | 108.0"
Height     :  98.5" | 108.0"

Area       :  8774 sq in
Perimeter  :  337.7 in
Ovality    :  9.8%

Interior Diameter : 97.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 262.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



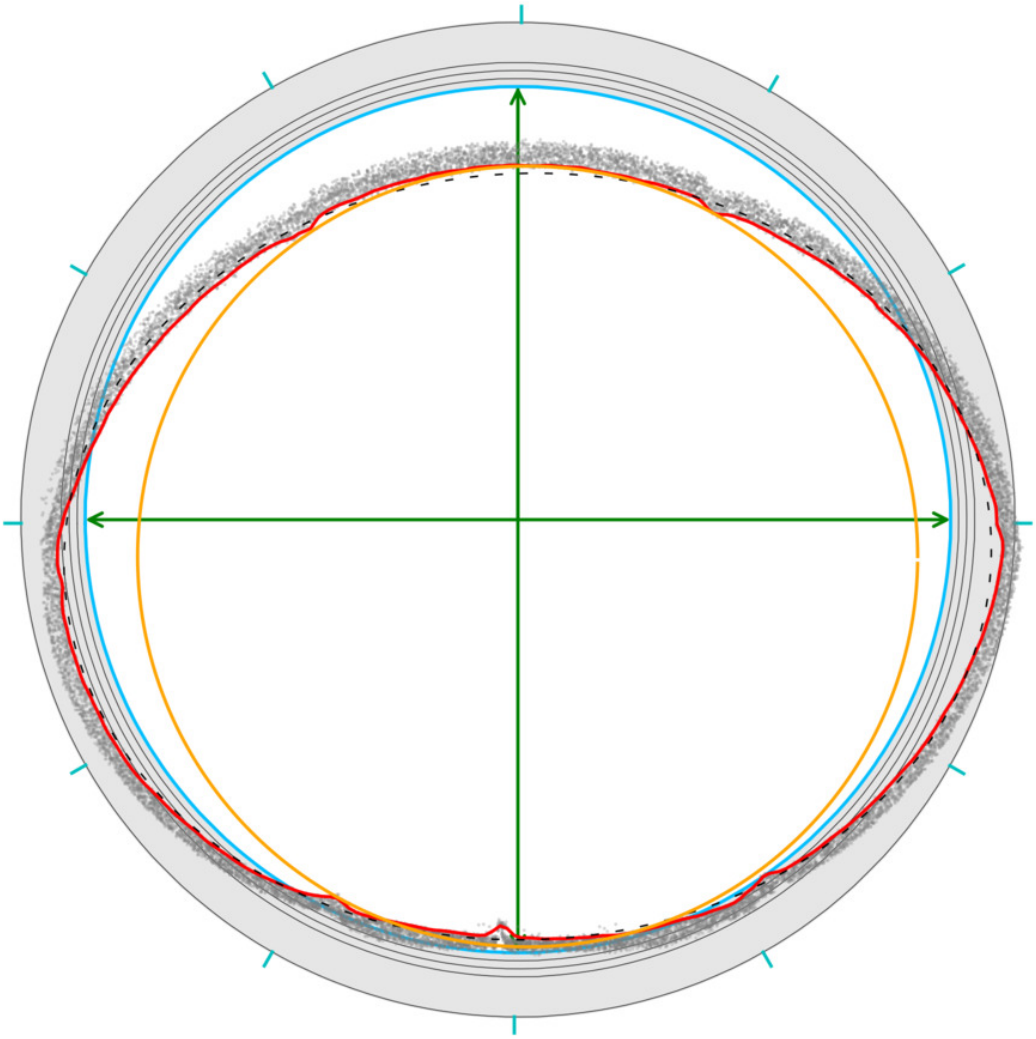
```
Footage    :  262 ft
Width      :  118.8" | 108.0"
Height     :  98.6" | 108.0"

Area       :  8783 sq in
Perimeter  :  337.2 in
Ovality    :  9.7%

Interior Diameter : 97.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 263.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



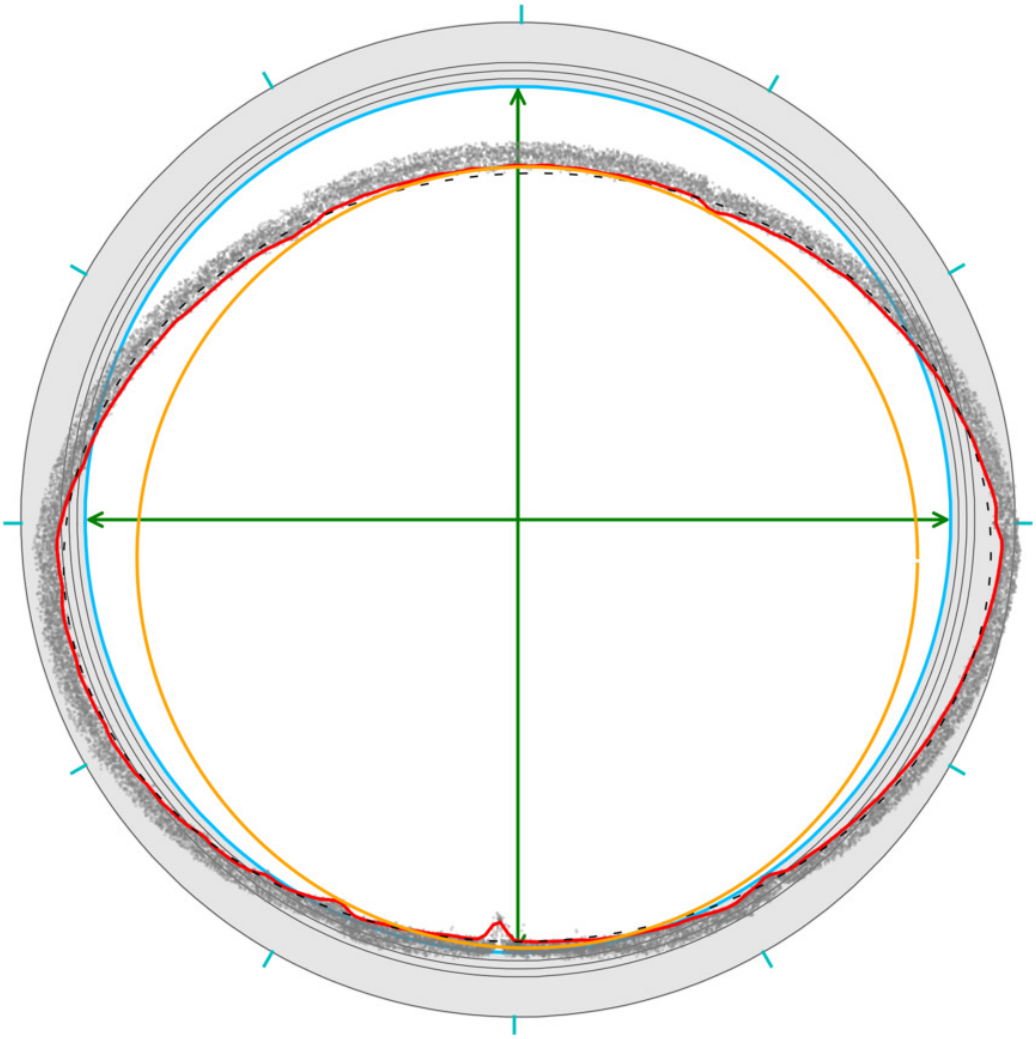
```
Footage    :  263 ft
Width      :  118.0" | 108.0"
Height     :  98.2" | 108.0"

Area       :  8678 sq in
Perimeter  :  335.5 in
Ovality    :  9.3%

Interior Diameter : 97.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 264.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



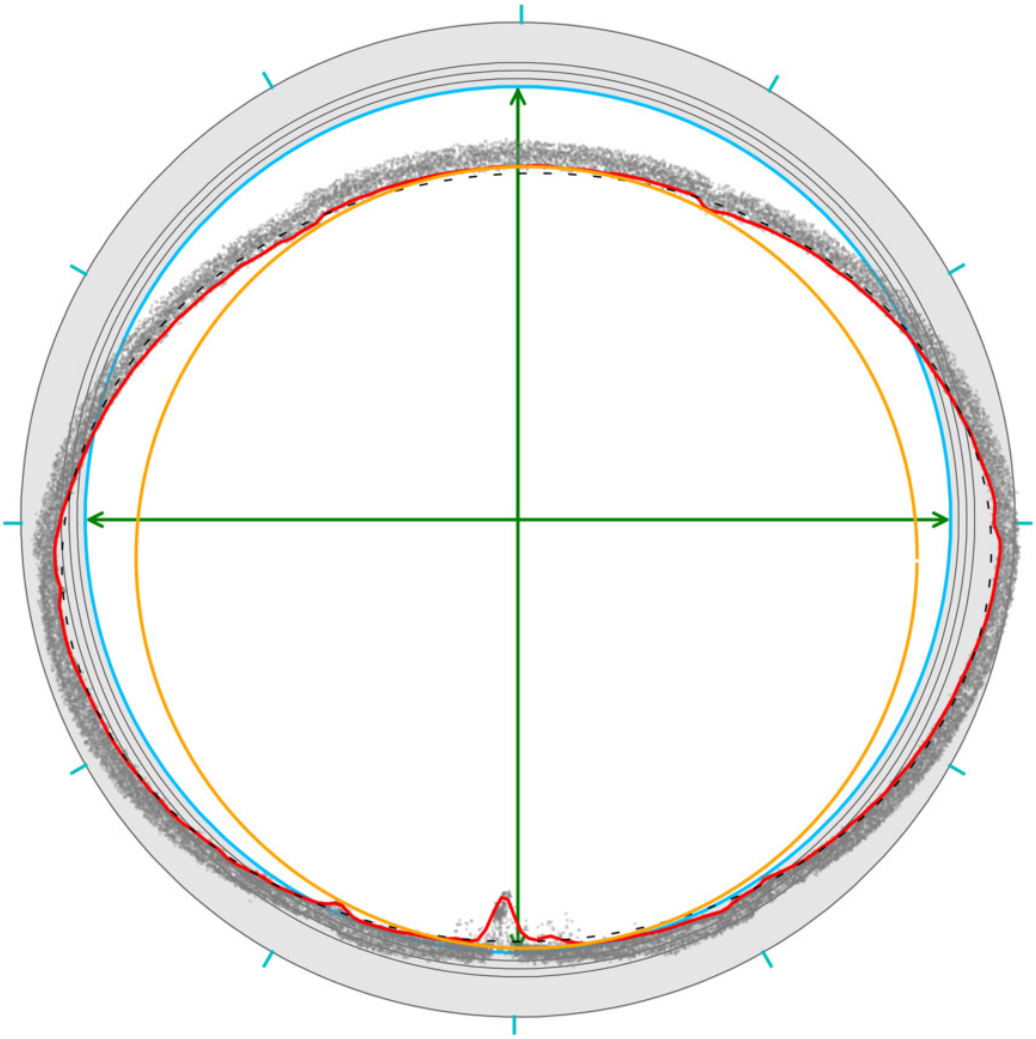
```
Footage   :  264 ft
Width     :  117.9" | 108.0"
Height    :  98.1" | 108.0"

Area      :  8700 sq in
Perimeter :  336.9 in
Ovality   :  9.2%

Interior Diameter : 97.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 265.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



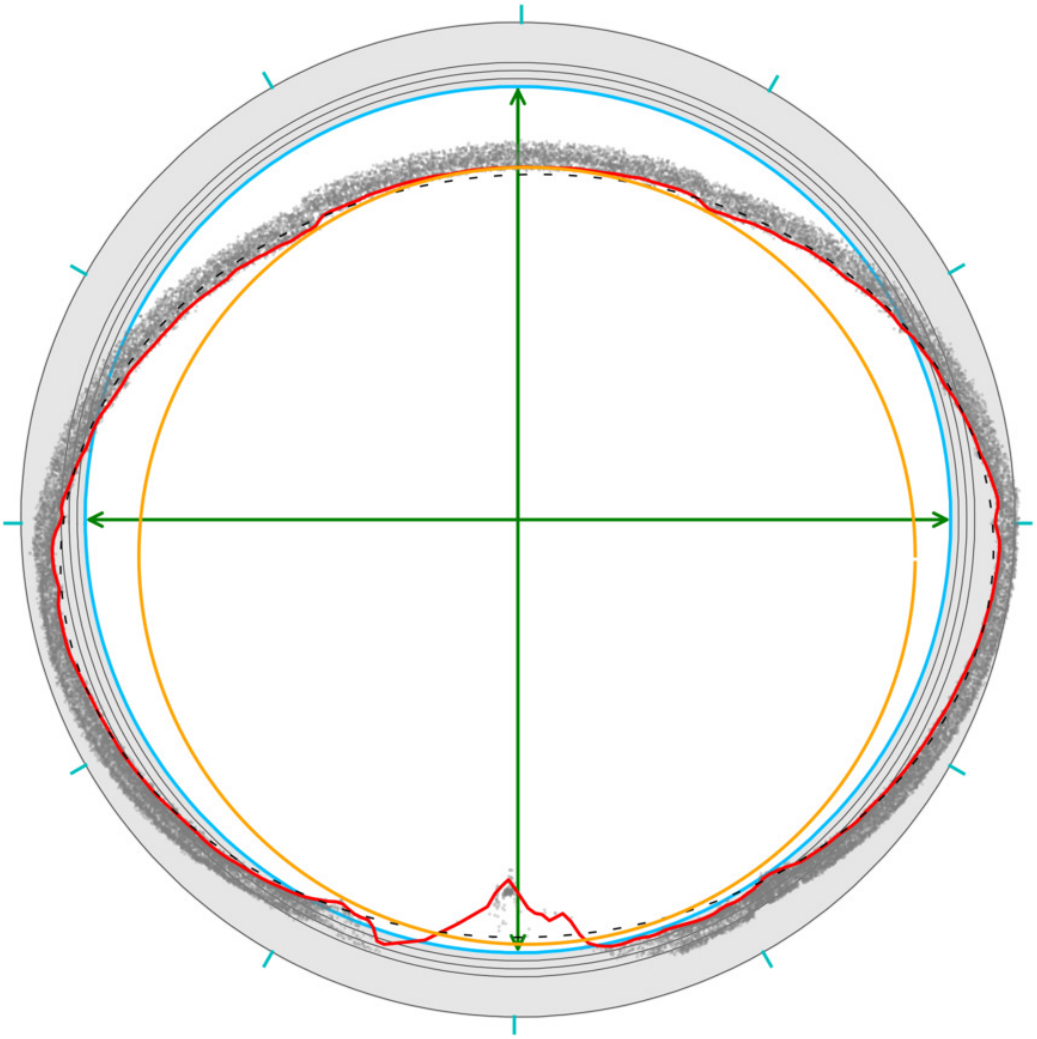
```
Footage    :  265 ft
Width      :  118.0" | 108.0"
Height     :  98.0" | 108.0"

Area       :  8720 sq in
Perimeter  :  342.1 in
Ovality    :  9.3%

Interior Diameter : 97.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 266.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 266 ft
Width : 118.2" | 108.0"
Height : 97.9" | 108.0"

Area : 8689 sq in
Perimeter : 344.8 in
Ovality : 9.8%

Interior Diameter : 96.9"

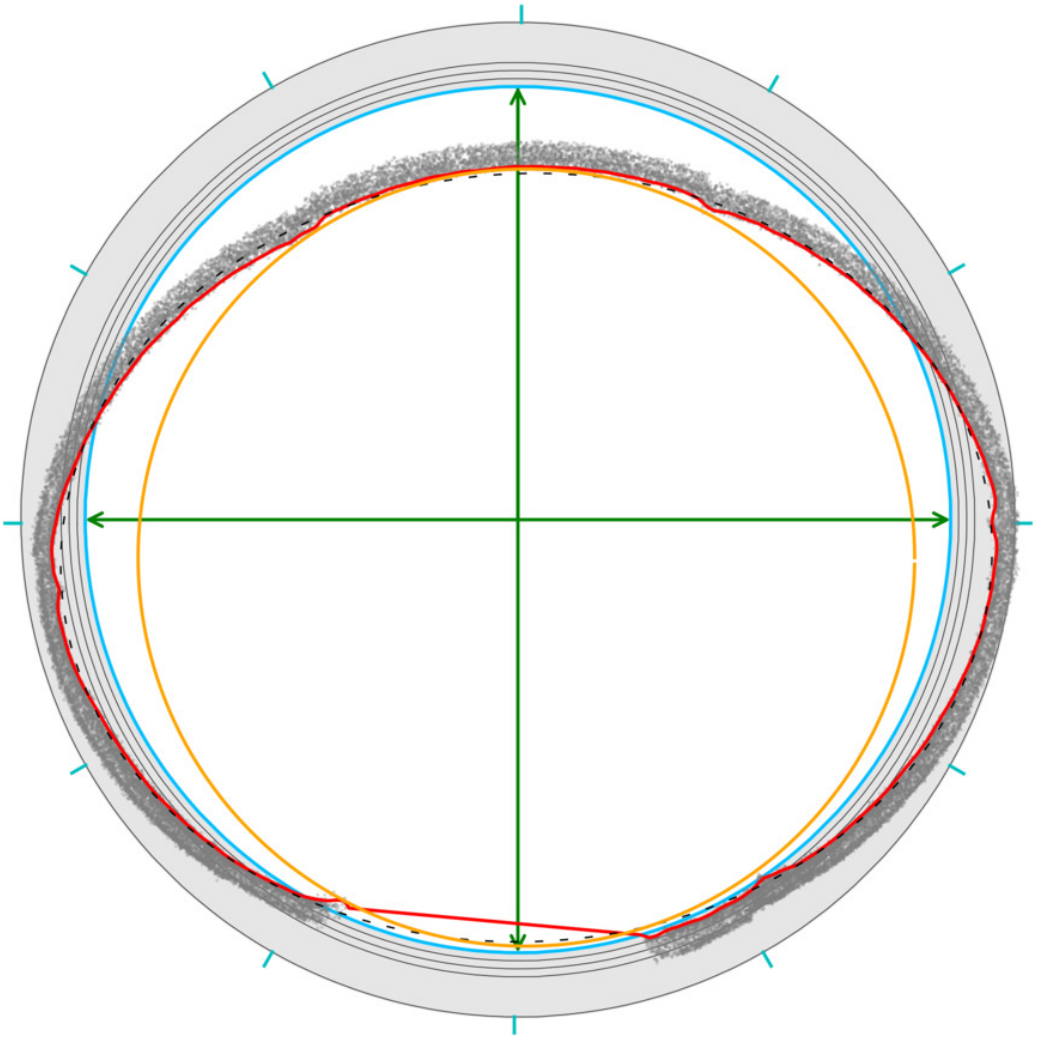
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 267.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



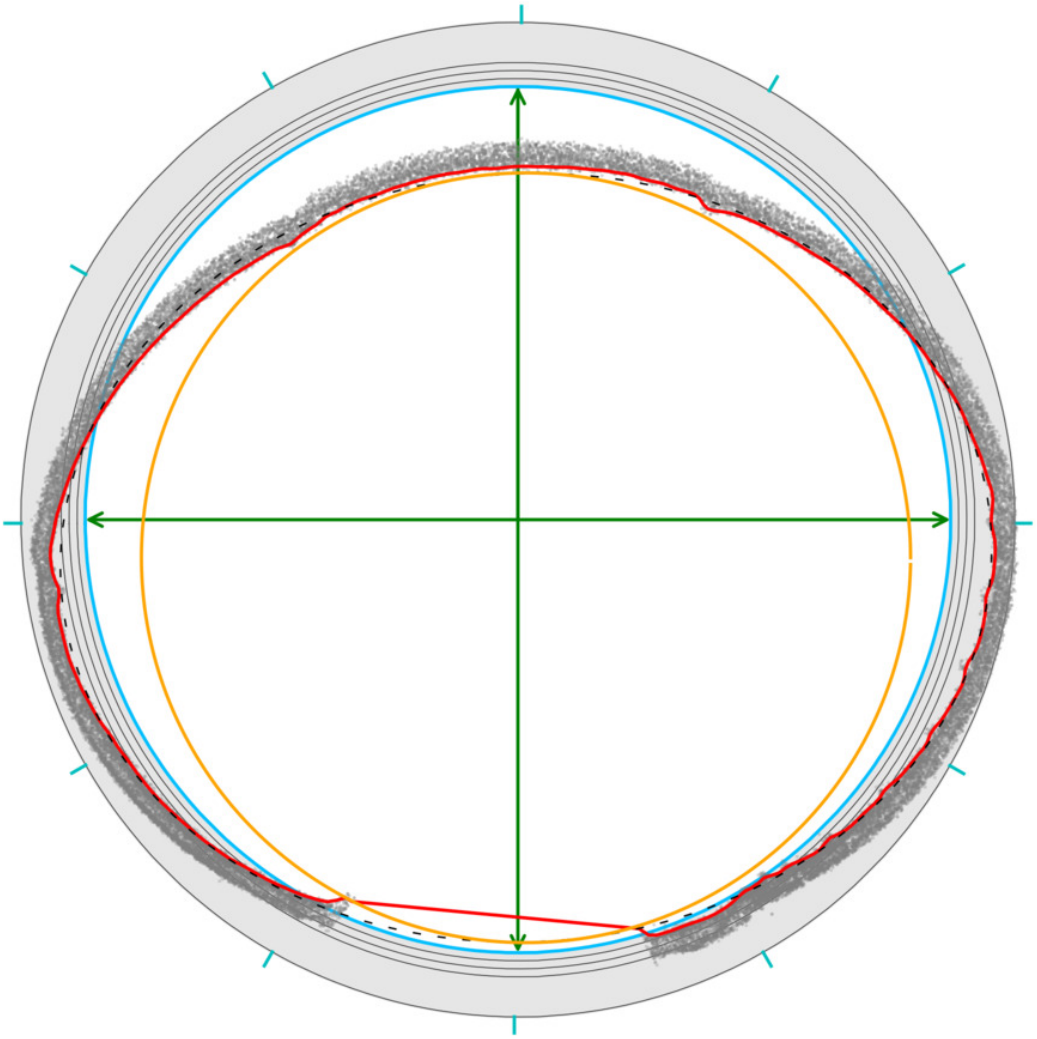
```
Footage   :  267 ft
Width     :  118.0" | 108.0"
Height    :  98.0" | 108.0"

Area      :  8676 sq in
Perimeter :  335.4 in
Ovality   :  9.4%

Interior Diameter : 96.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 268.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



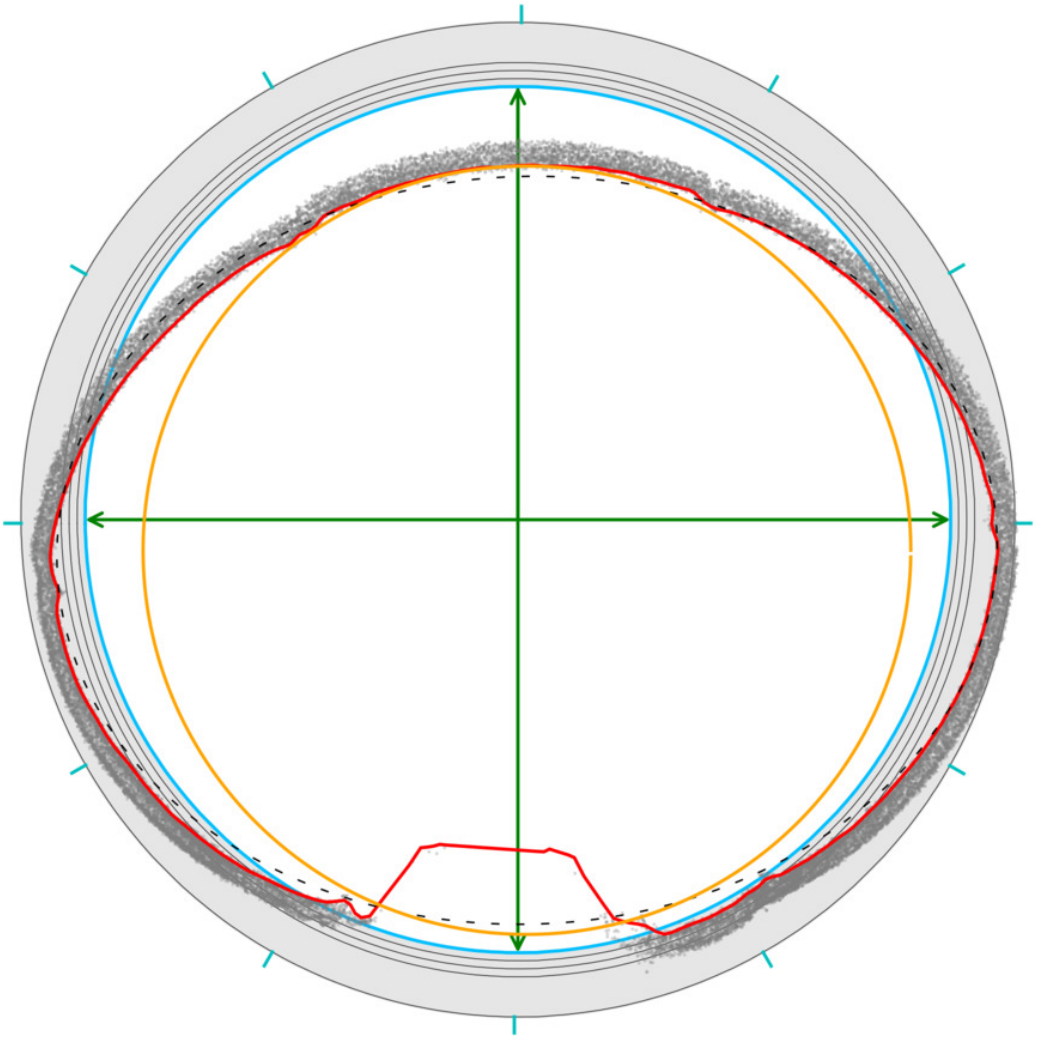
```
Footage   :  268 ft
Width     :  117.9" | 108.0"
Height    :  98.0" | 108.0"

Area      :  8646 sq in
Perimeter :  335.7 in
Ovality   :  9.4%

Interior Diameter : 96.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 269.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



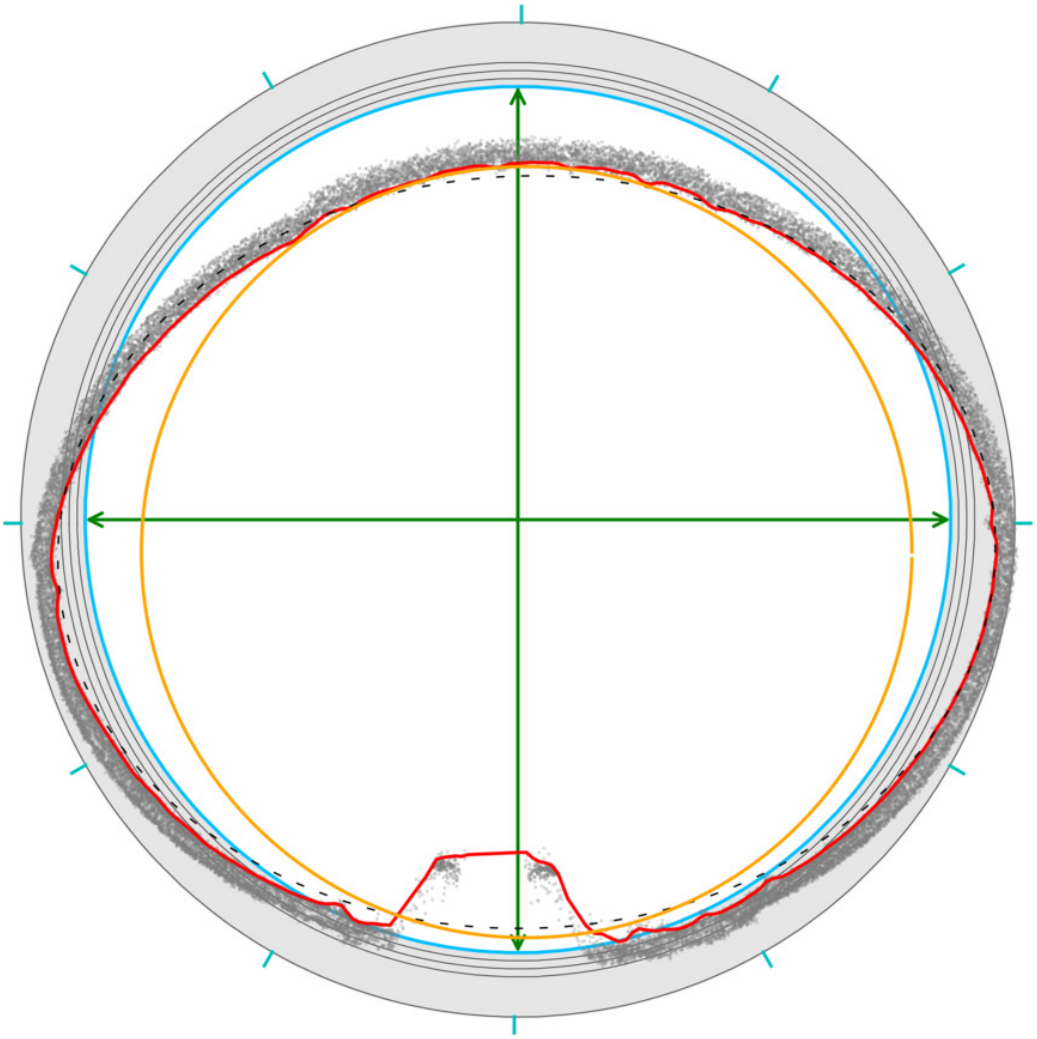
```
Footage   :  269 ft
Width     :  118.3" | 108.0"
Height    :  98.1" | 108.0"

Area      :  8480 sq in
Perimeter :  345.4 in
Ovality   :  11.1%

Interior Diameter : 95.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 270.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



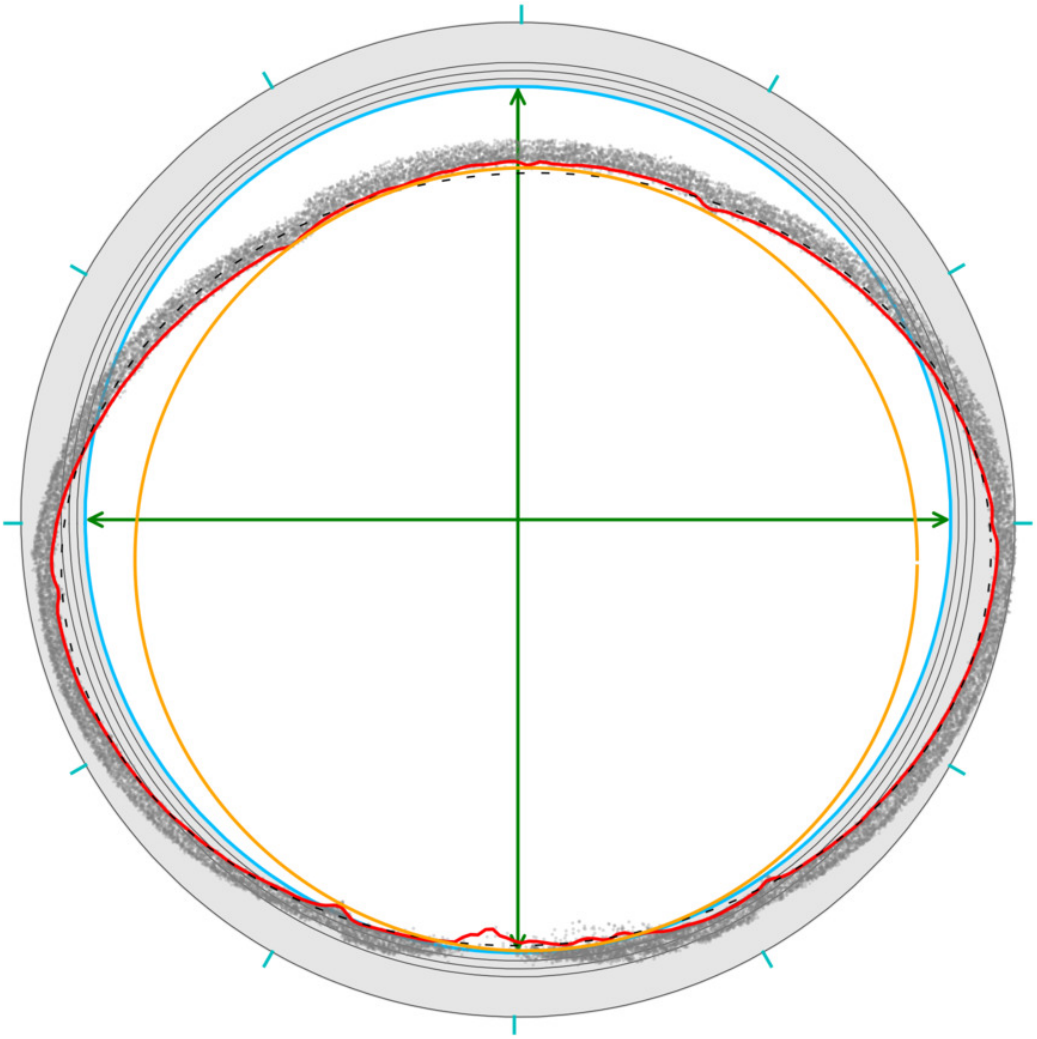
```
Footage   :  270 ft
Width     :  118.0" | 108.0"
Height    :  98.4" | 108.0"

Area      :  8560 sq in
Perimeter :  347.0 in
Ovality   :  10.7%

Interior Diameter : 96.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 271.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



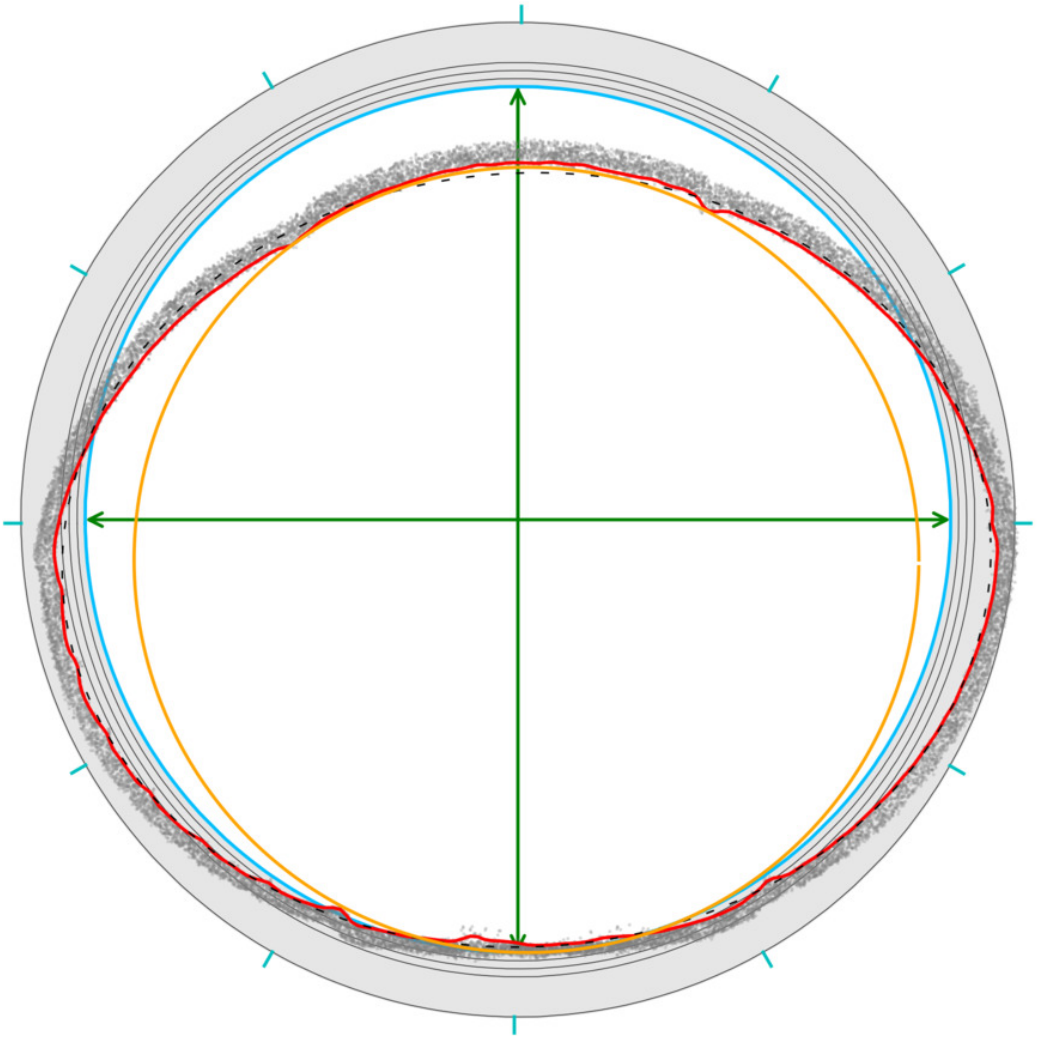
```
Footage   :  271 ft
Width     :  118.0" | 108.0"
Height    :  98.5" | 108.0"

Area      :  8767 sq in
Perimeter :  337.8 in
Ovality   :  9.1%

Interior Diameter : 97.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 272.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



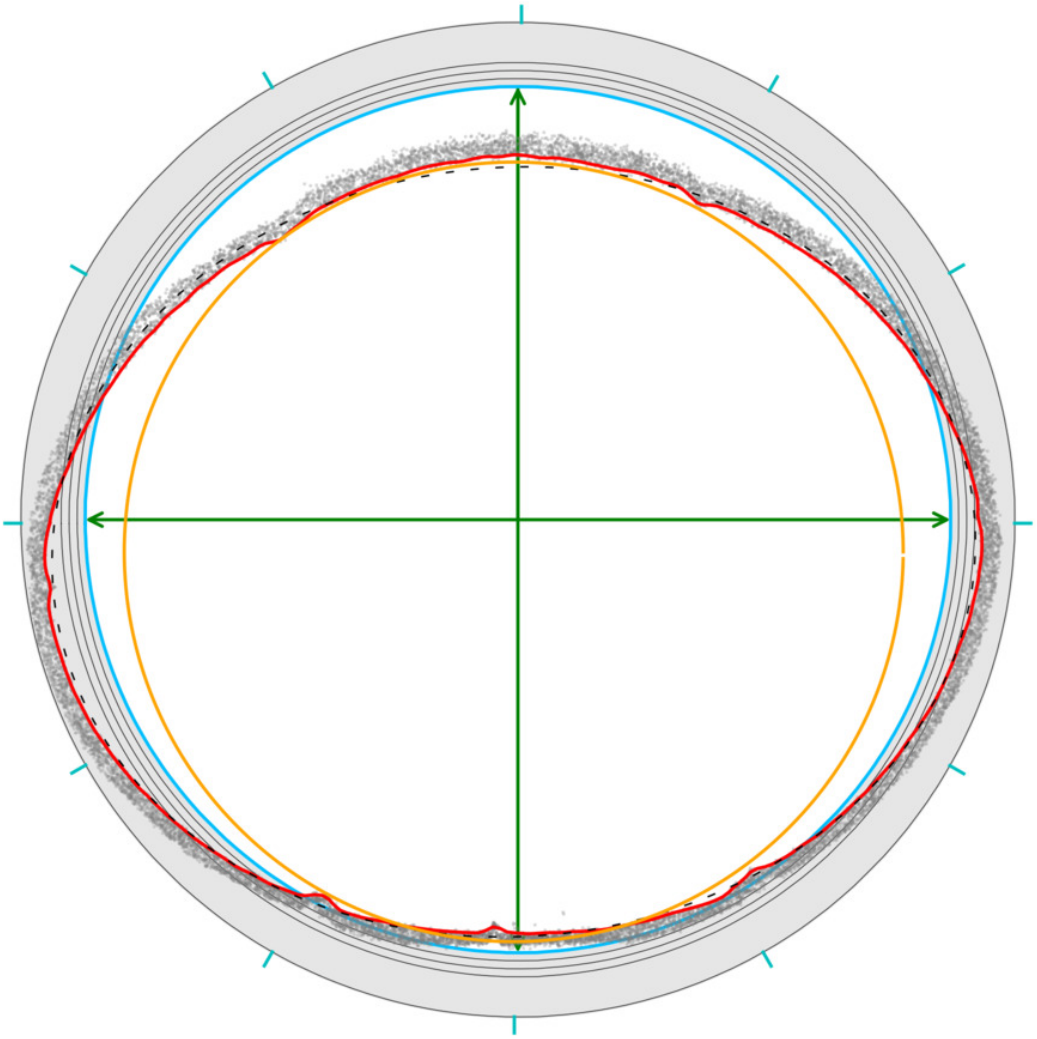
```
Footage   :  272 ft
Width     :  117.7" | 108.0"
Height    :  98.5" | 108.0"

Area      :  8778 sq in
Perimeter :  337.2 in
Ovality   :  8.9%

Interior Diameter : 97.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 273.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



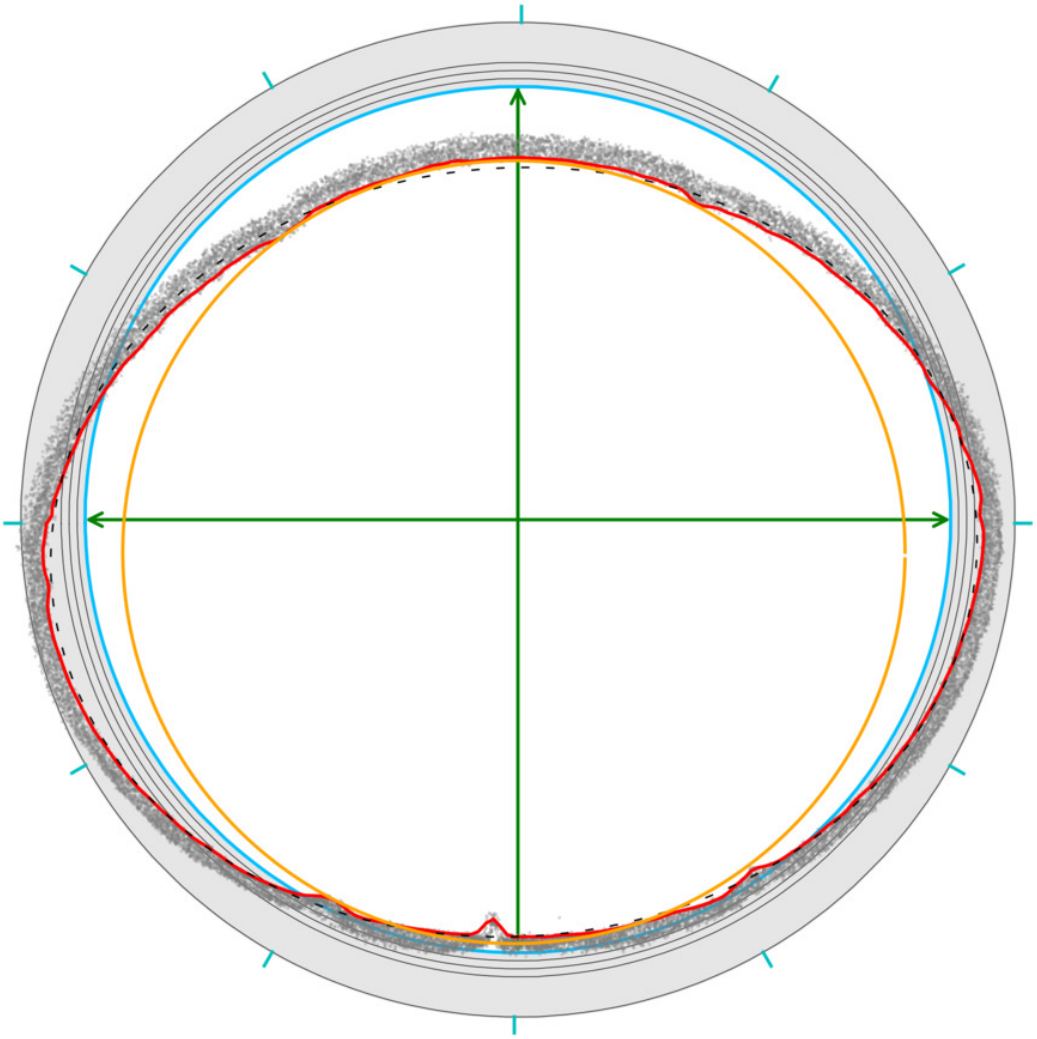
```
Footage   :  273 ft
Width     :  117.0" | 108.0"
Height    :  99.4" | 108.0"

Area      :  8679 sq in
Perimeter :  334.7 in
Ovality   :  8.9%

Interior Diameter : 97.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 274.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 274 ft
Width : 117.4" | 108.0"
Height : 99.2" | 108.0"

Area : 8699 sq in
Perimeter : 336.7 in
Ovality : 9.1%

Interior Diameter : 97.6"

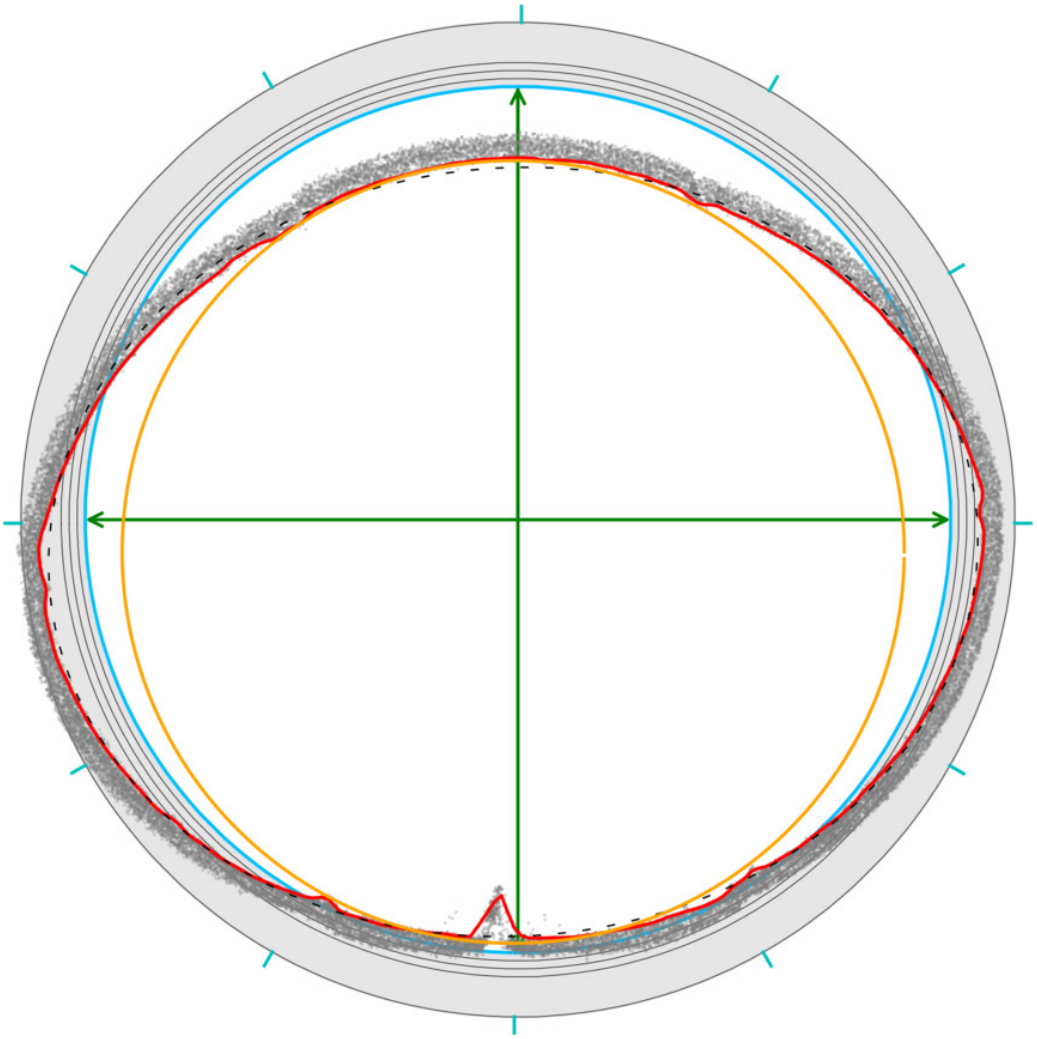
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 275.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



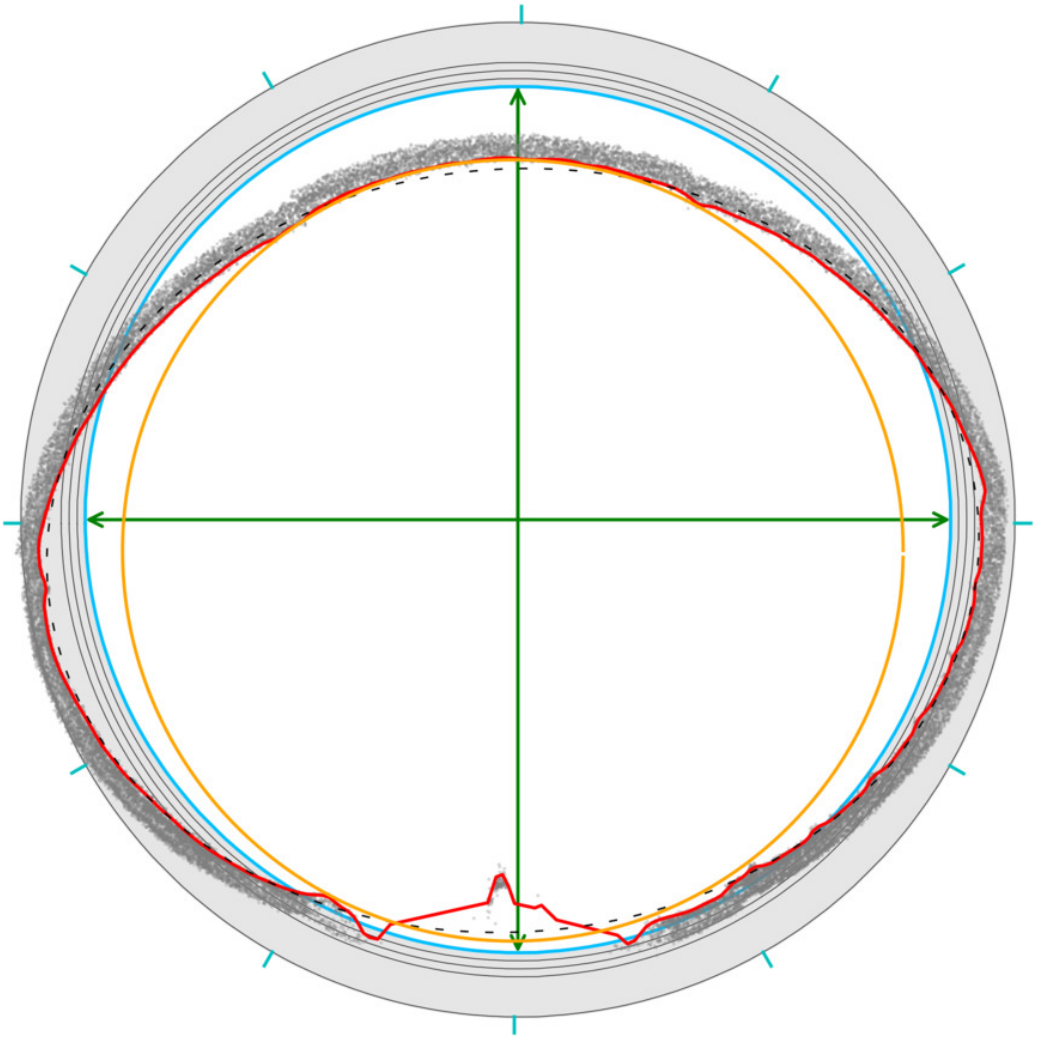
```
Footage   :  275 ft
Width     :  117.9" | 108.0"
Height    :  99.1" | 108.0"

Area      :  8722 sq in
Perimeter :  341.5 in
Ovality   :  9.3%

Interior Diameter : 97.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 276.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



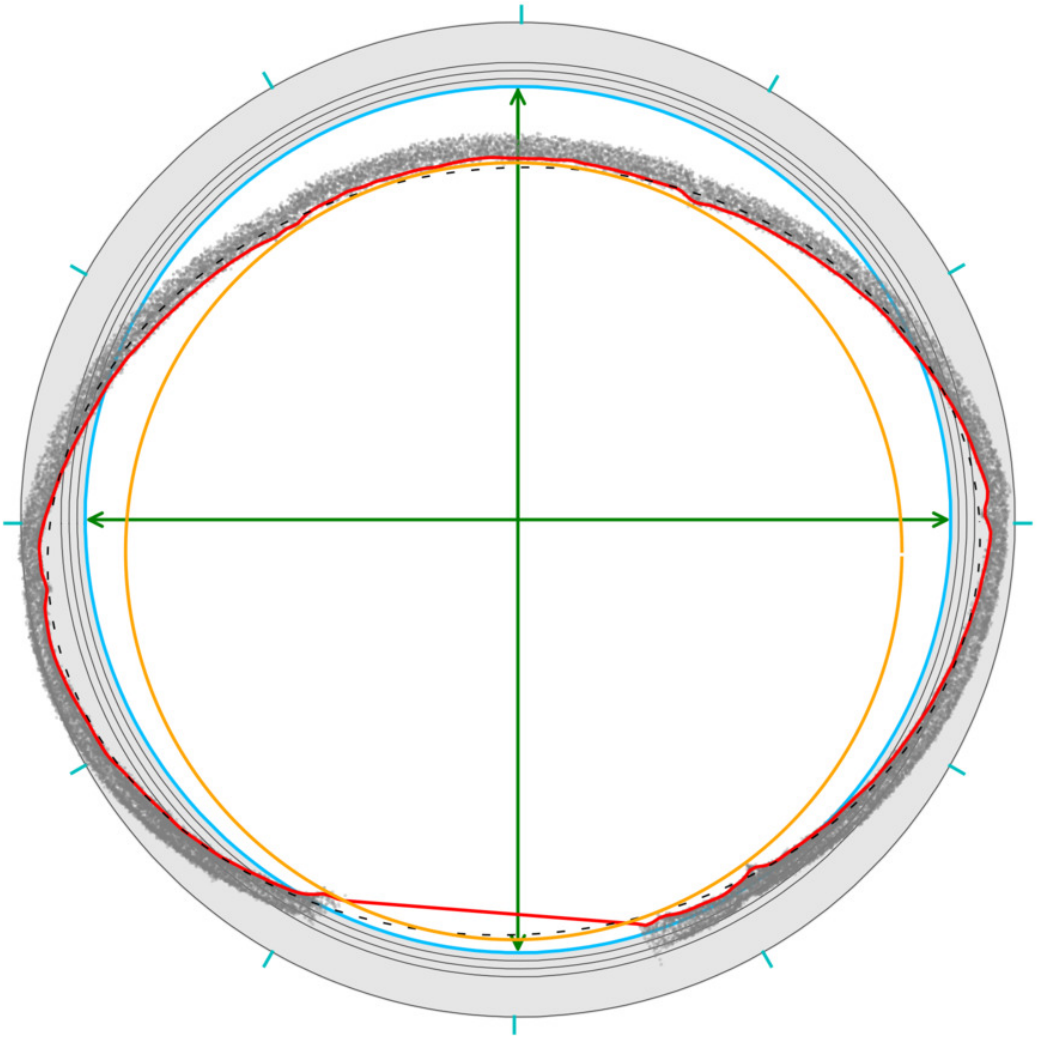
```
Footage   :  276 ft
Width     :  118.1" | 108.0"
Height    :  99.0" | 108.0"

Area      :  8664 sq in
Perimeter :  345.5 in
Ovality   :  9.8%

Interior Diameter : 97.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 277.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



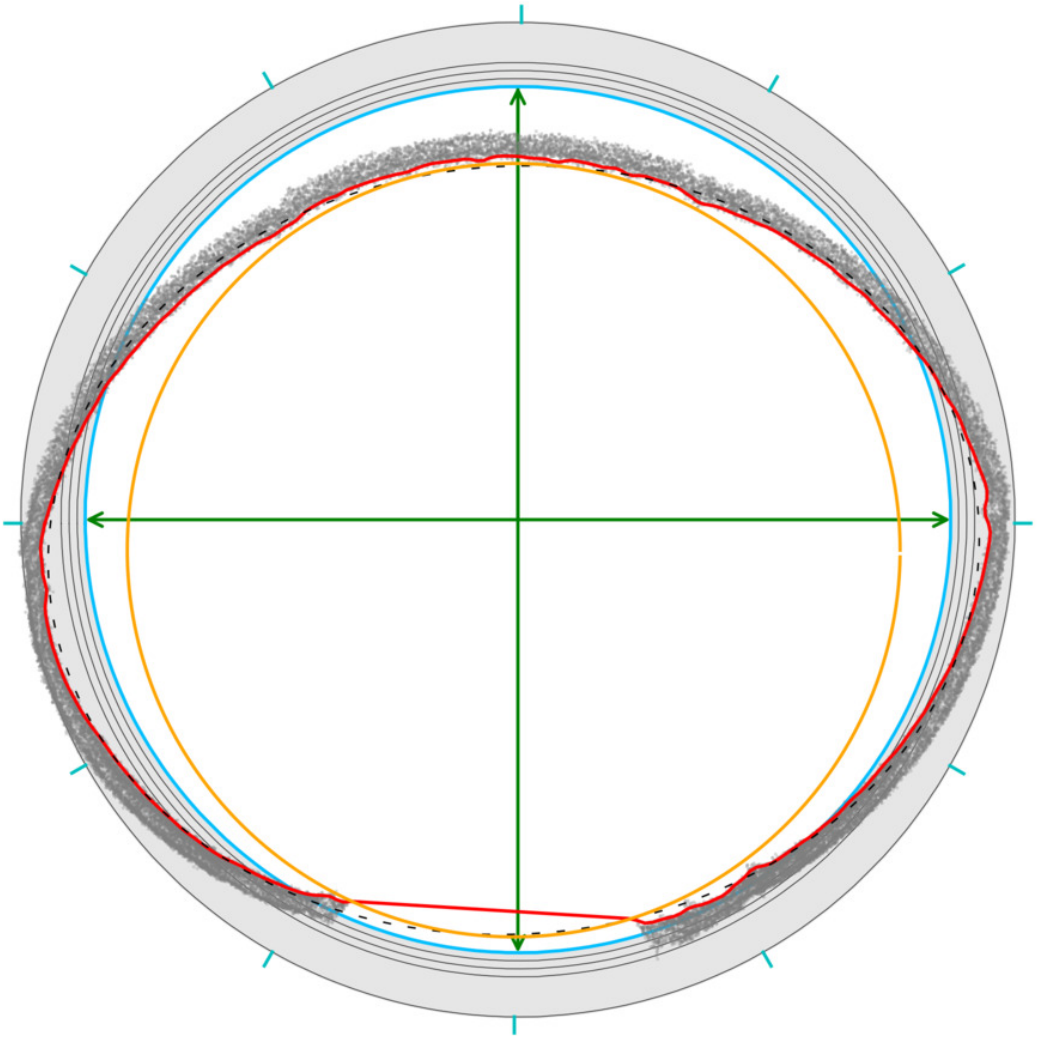
```
Footage   :  277 ft
Width     :  118.7" | 108.0"
Height    :  99.1" | 108.0"

Area      :  8662 sq in
Perimeter :  335.4 in
Ovality   :  9.6%

Interior Diameter : 96.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 278.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



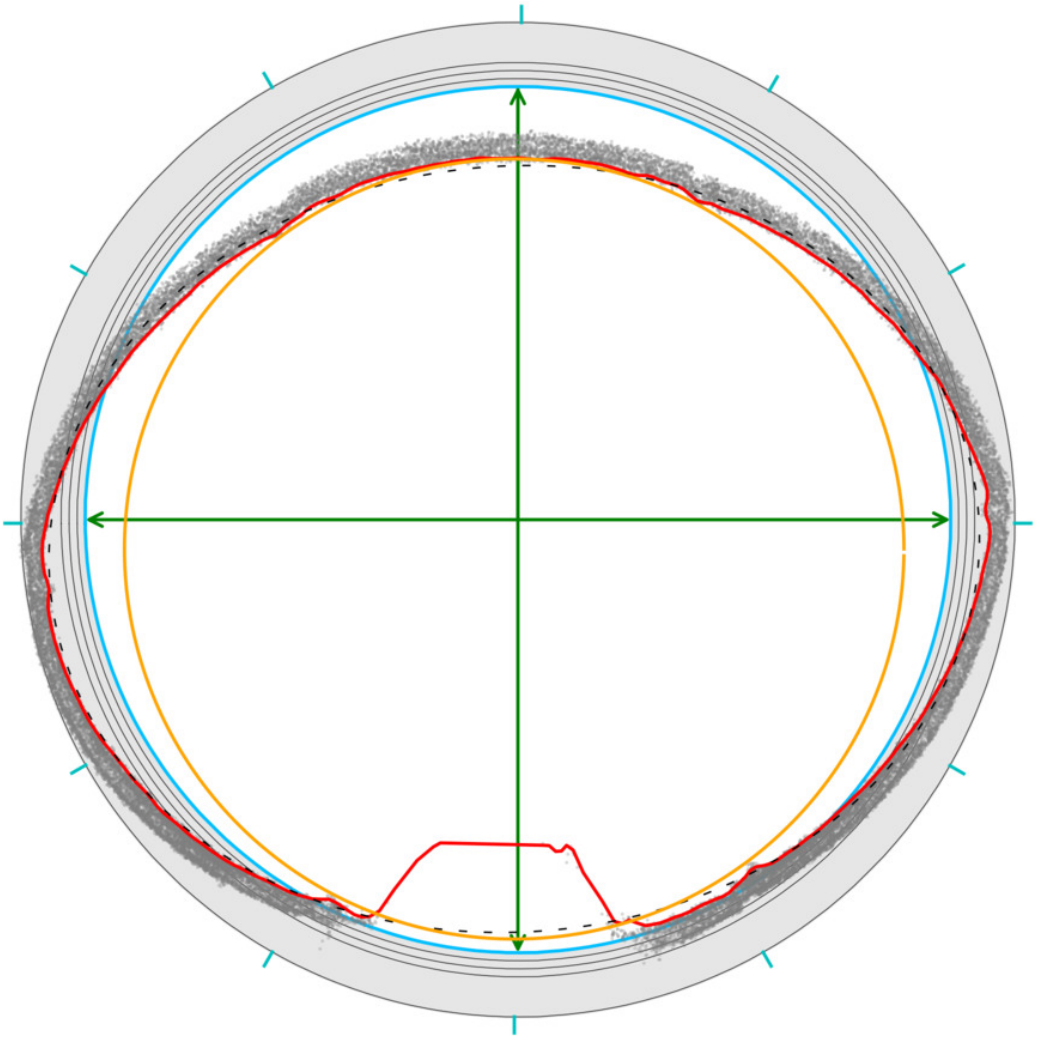
```
Footage   :  278 ft
Width     :  118.5" | 108.0"
Height    :  99.3" | 108.0"

Area      :  8655 sq in
Perimeter :  335.4 in
Ovality   :  9.4%

Interior Diameter : 96.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 279.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



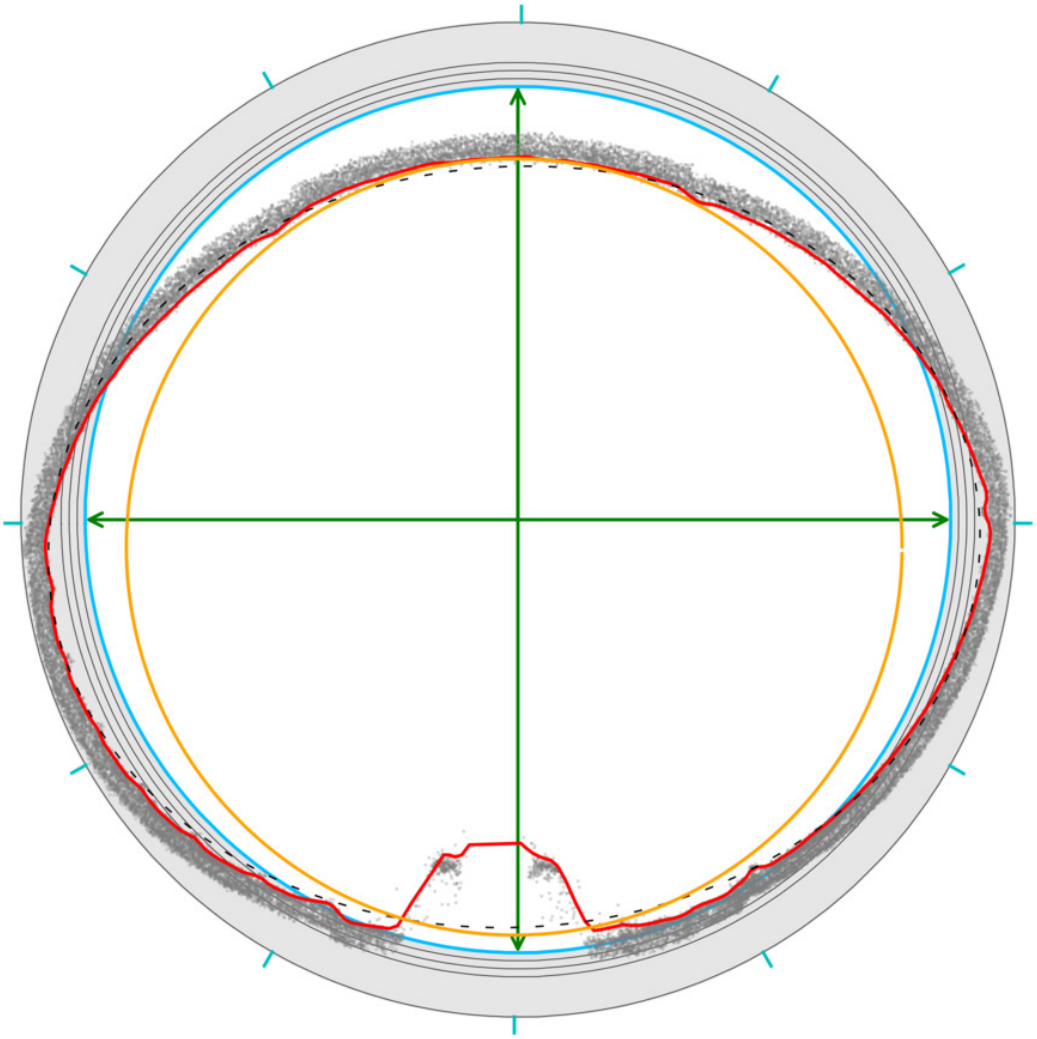
```
Footage   :  279 ft
Width     :  118.3" | 108.0"
Height    :  99.1" | 108.0"

Area      :  8479 sq in
Perimeter :  345.9 in
Ovality   :  9.5%

Interior Diameter : 97.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 280.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 280 ft
Width : 117.9" | 108.0"
Height : 99.2" | 108.0"

Area : 8556 sq in
Perimeter : 347.4 in
Ovality : 9.9%

Interior Diameter : 96.8"

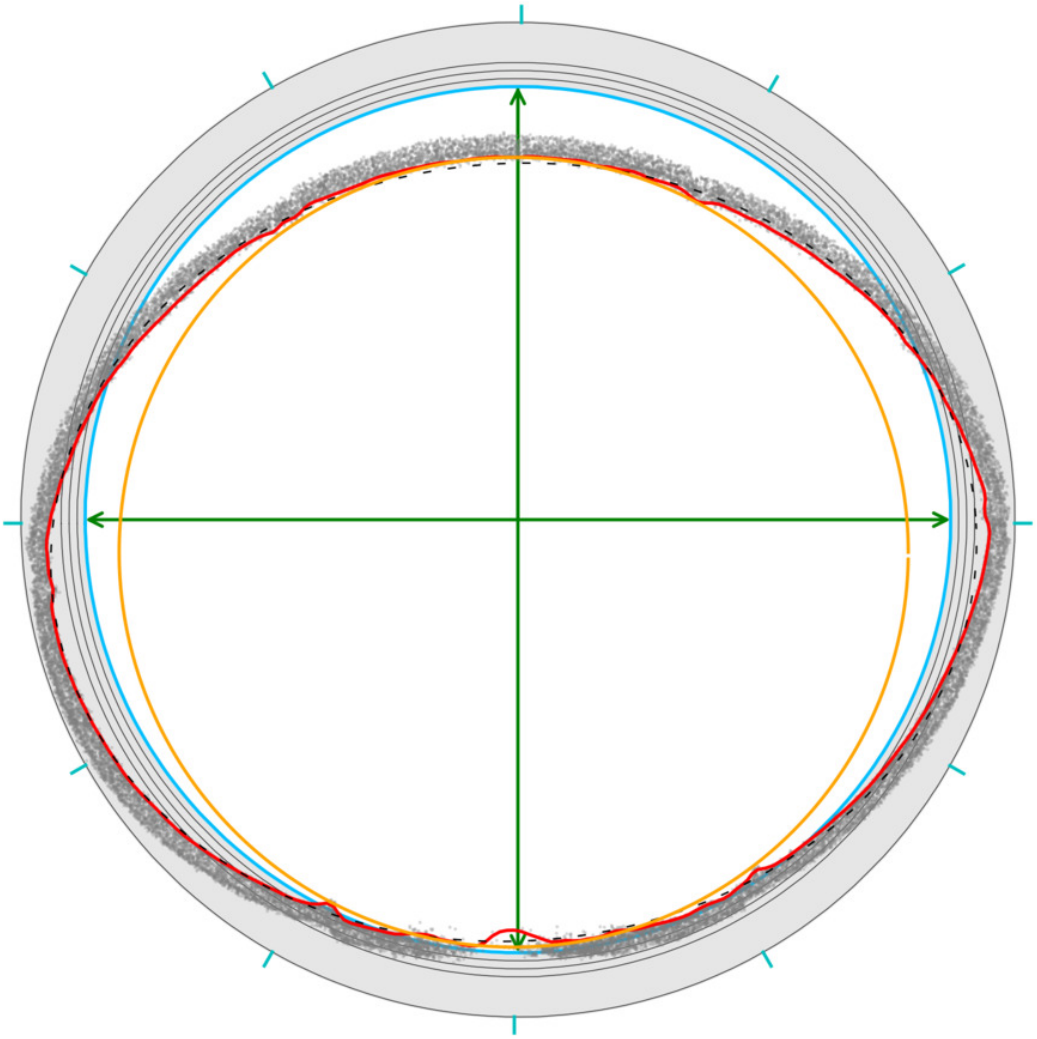
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 281.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



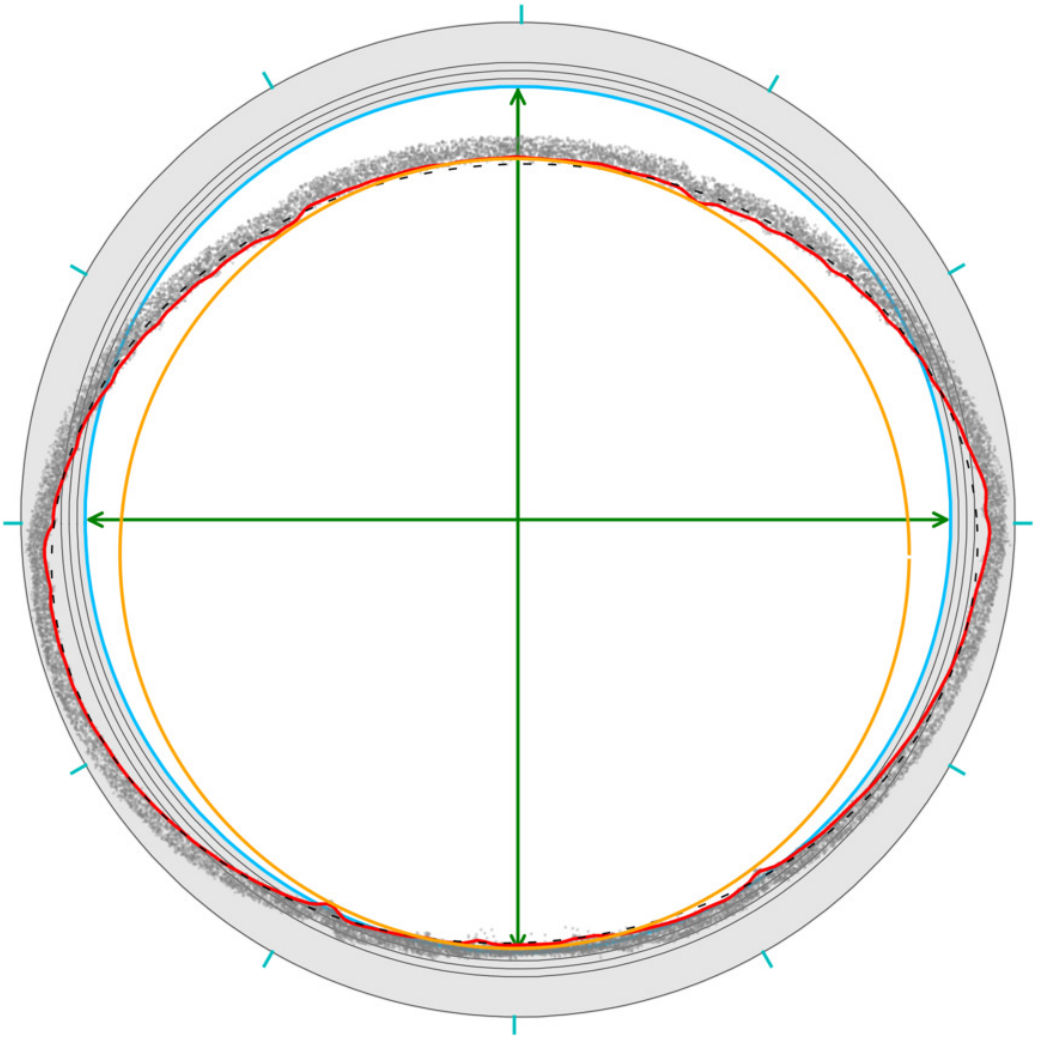
```
Footage   :  281 ft
Width     :  117.7" | 108.0"
Height    :  99.2" | 108.0"

Area      :  8796 sq in
Perimeter :  337.7 in
Ovality   :  8.6%

Interior Diameter : 98.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 282.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



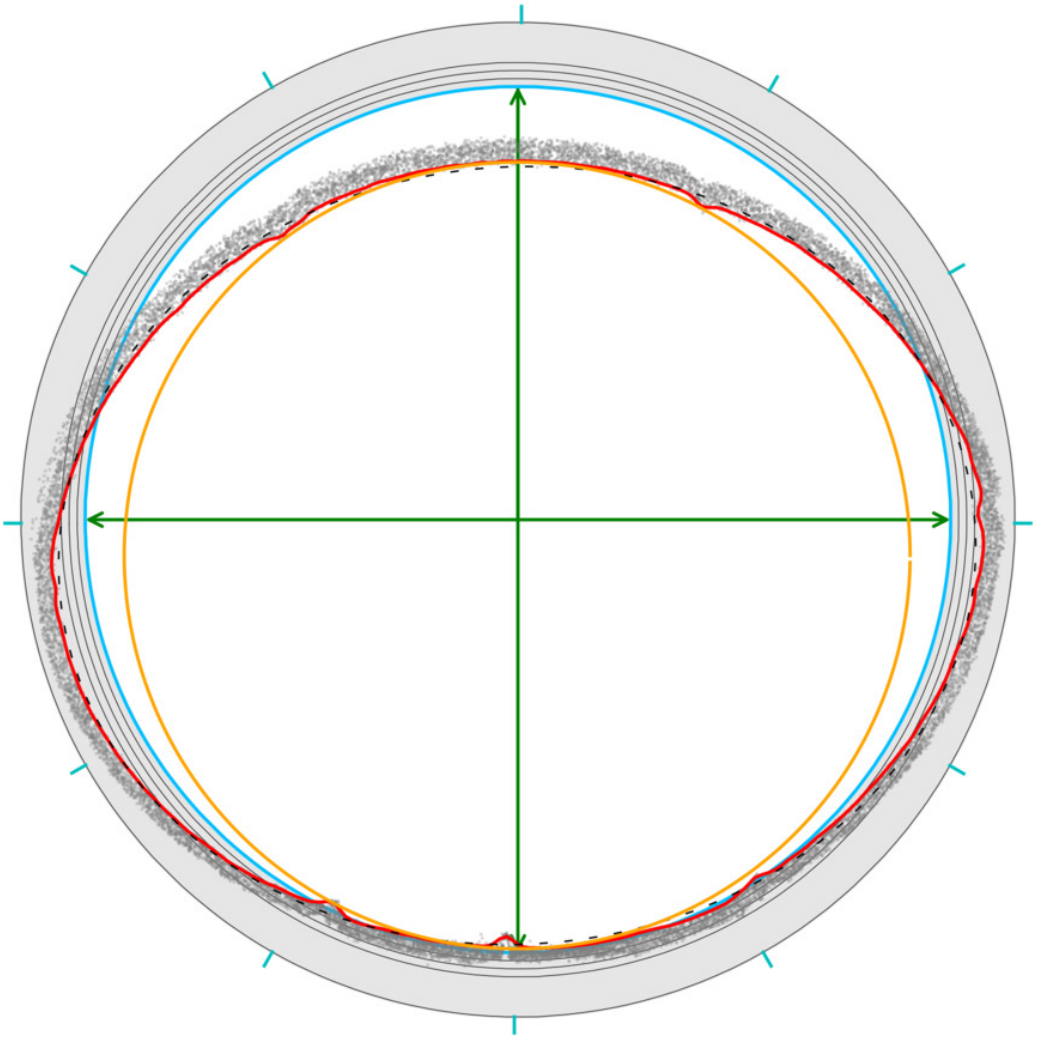
```
Footage   :  282 ft
Width     :  118.0" | 108.0"
Height    :  99.2" | 108.0"

Area      :  8807 sq in
Perimeter :  337.3 in
Ovality   :  8.5%

Interior Diameter : 98.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 283.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



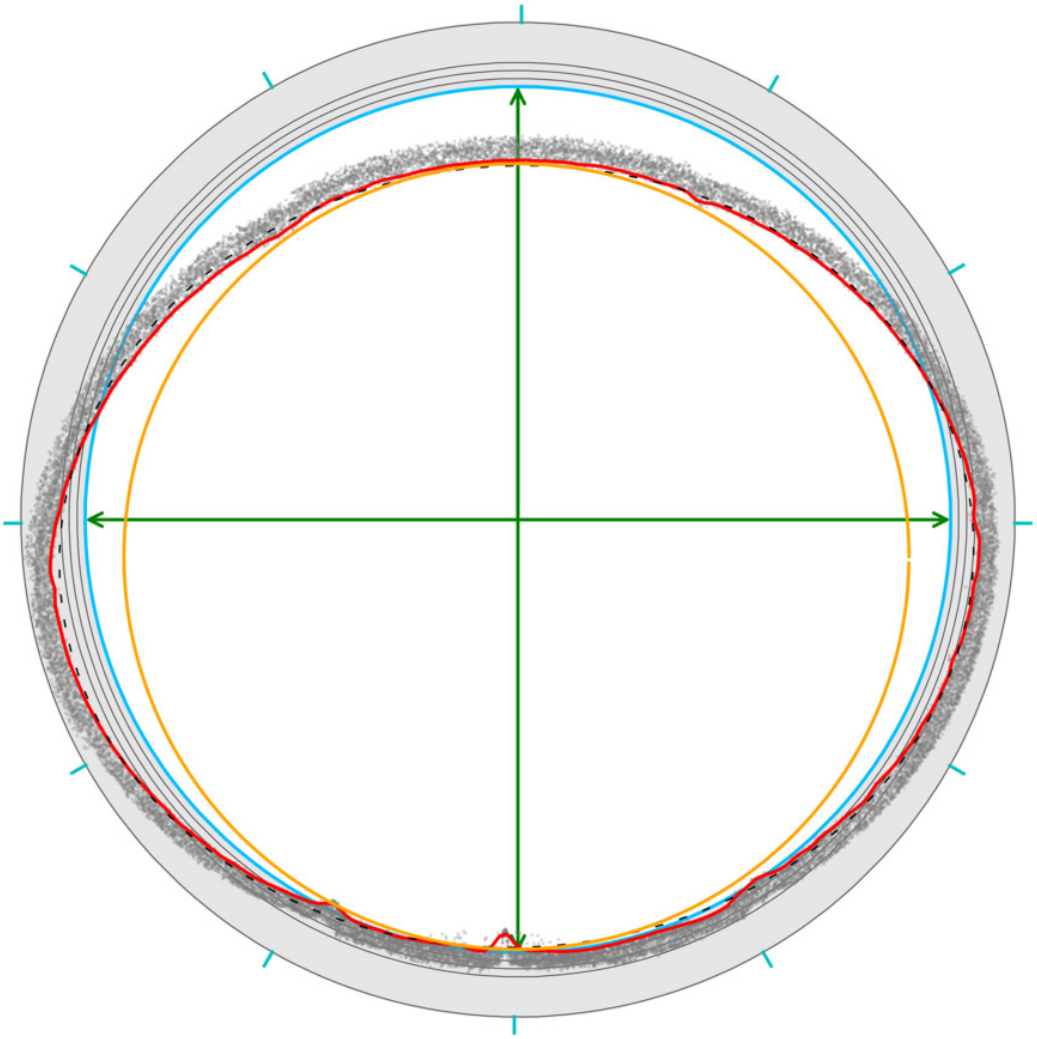
```
Footage   :  283 ft
Width     :  116.3" | 108.0"
Height    :  98.7" | 108.0"

Area      :  8710 sq in
Perimeter :  335.4 in
Ovality   :  8.1%

Interior Diameter : 98.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 284.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



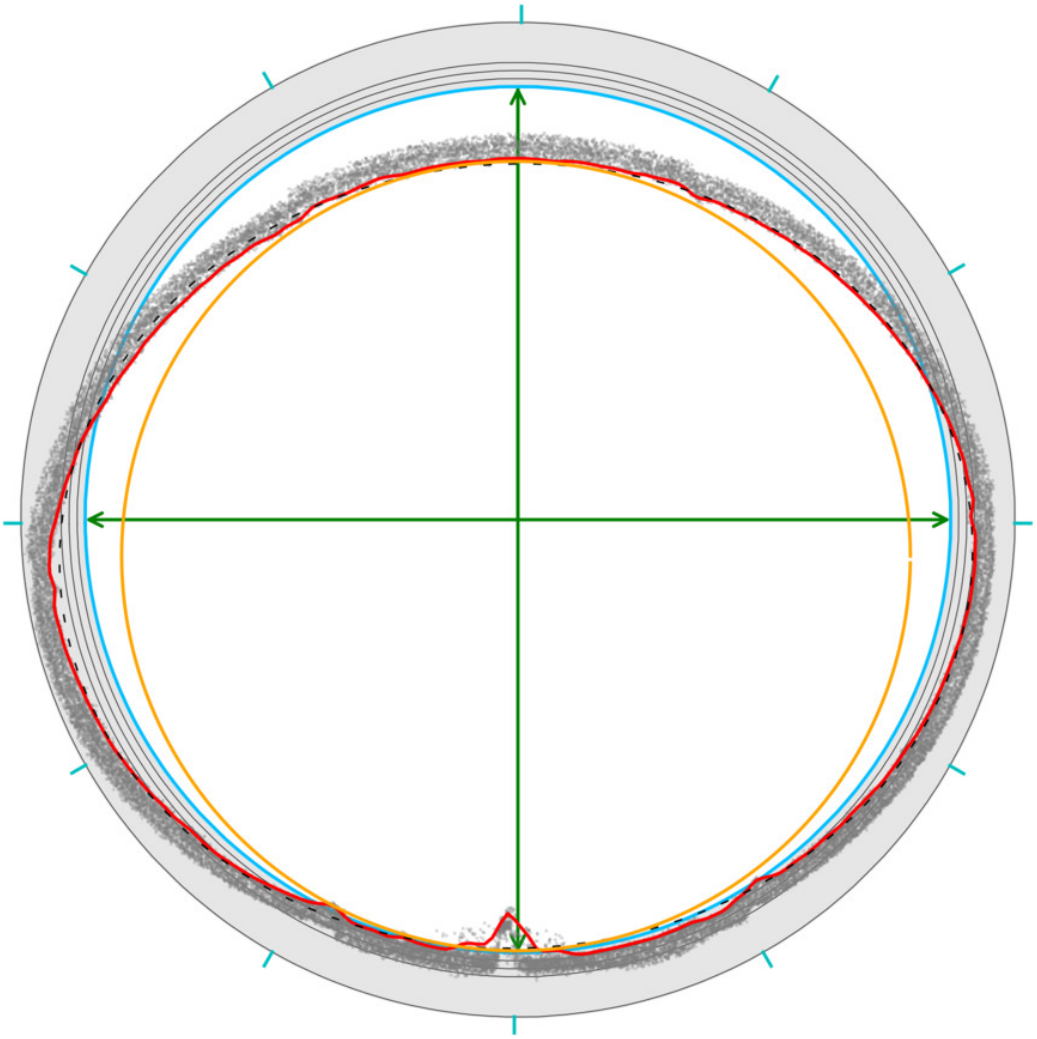
```
Footage   :  284 ft
Width     :  115.9" | 108.0"
Height    :  98.8" | 108.0"

Area      :  8727 sq in
Perimeter :  336.3 in
Ovality   :  7.7%

Interior Diameter : 98.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 285.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



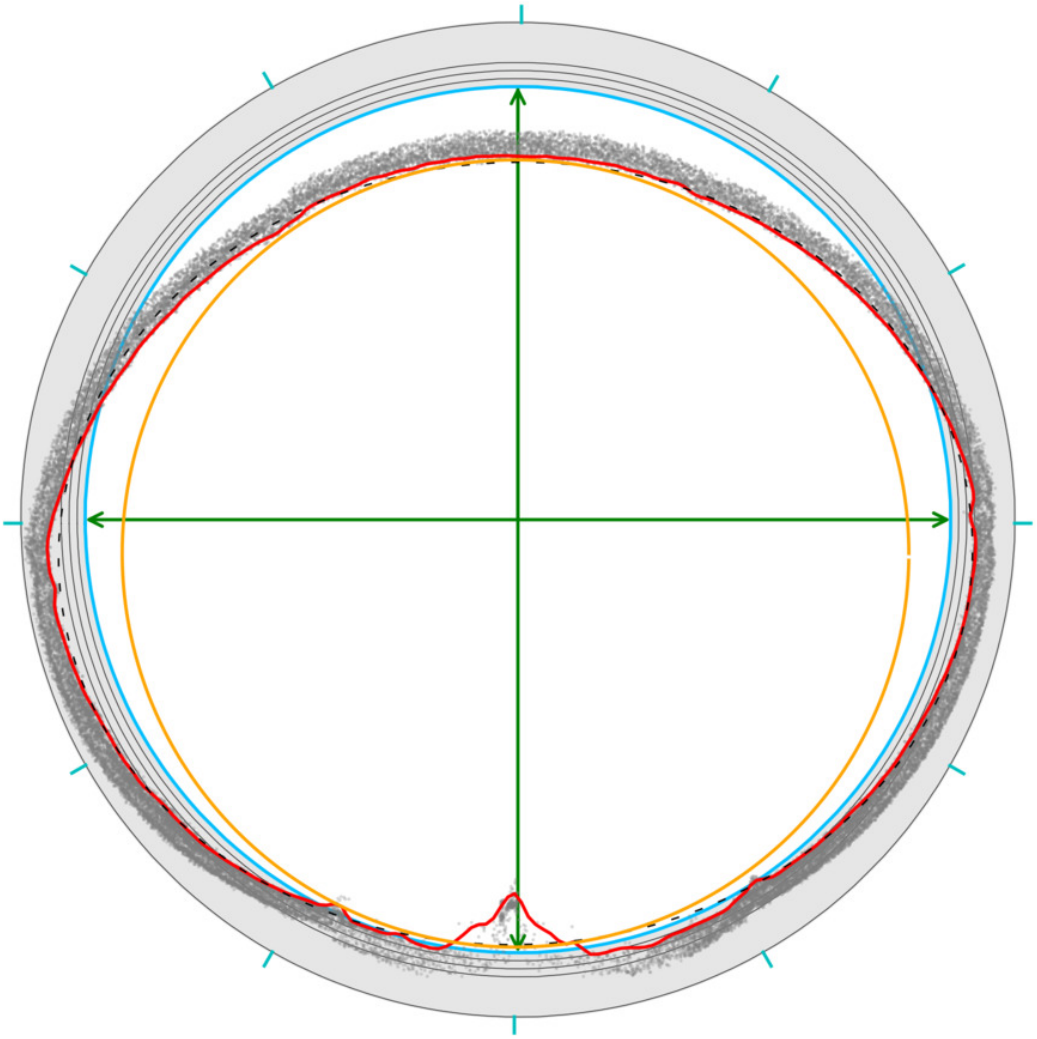
```
Footage   :  285 ft
Width     :  115.6" | 108.0"
Height    :  99.0" | 108.0"

Area      :  8744 sq in
Perimeter :  339.5 in
Ovality   :  7.5%

Interior Diameter : 98.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 286.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



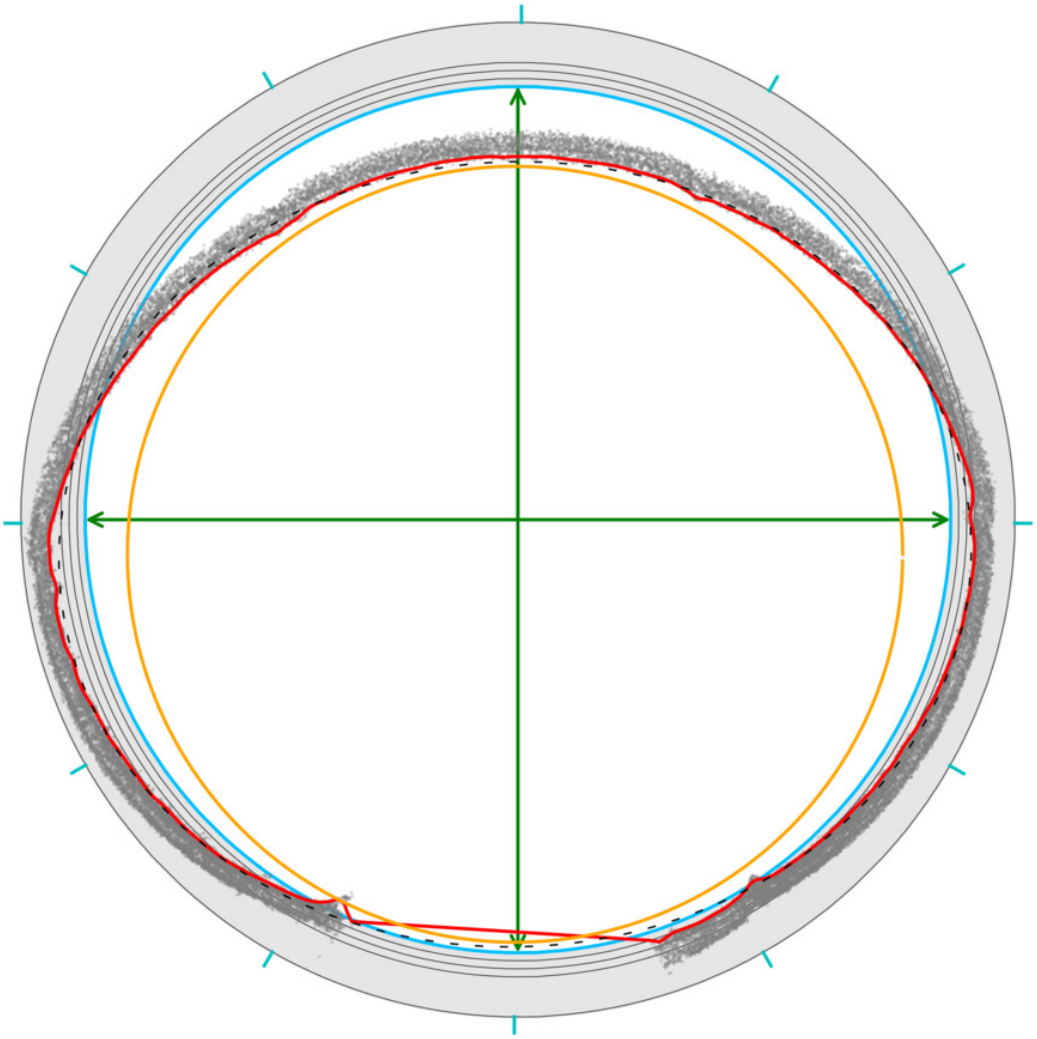
```
Footage    :  286 ft
Width      :  115.8" | 108.0"
Height     :  99.3" | 108.0"

Area       :  8735 sq in
Perimeter  :  342.3 in
Ovality    :  7.6%

Interior Diameter : 98.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 287.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  287 ft
Width     :  115.6" | 108.0"
Height    :  99.3" | 108.0"

Area      :  8705 sq in
Perimeter :  335.8 in
Ovality   :  7.4%

Interior Diameter : 96.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

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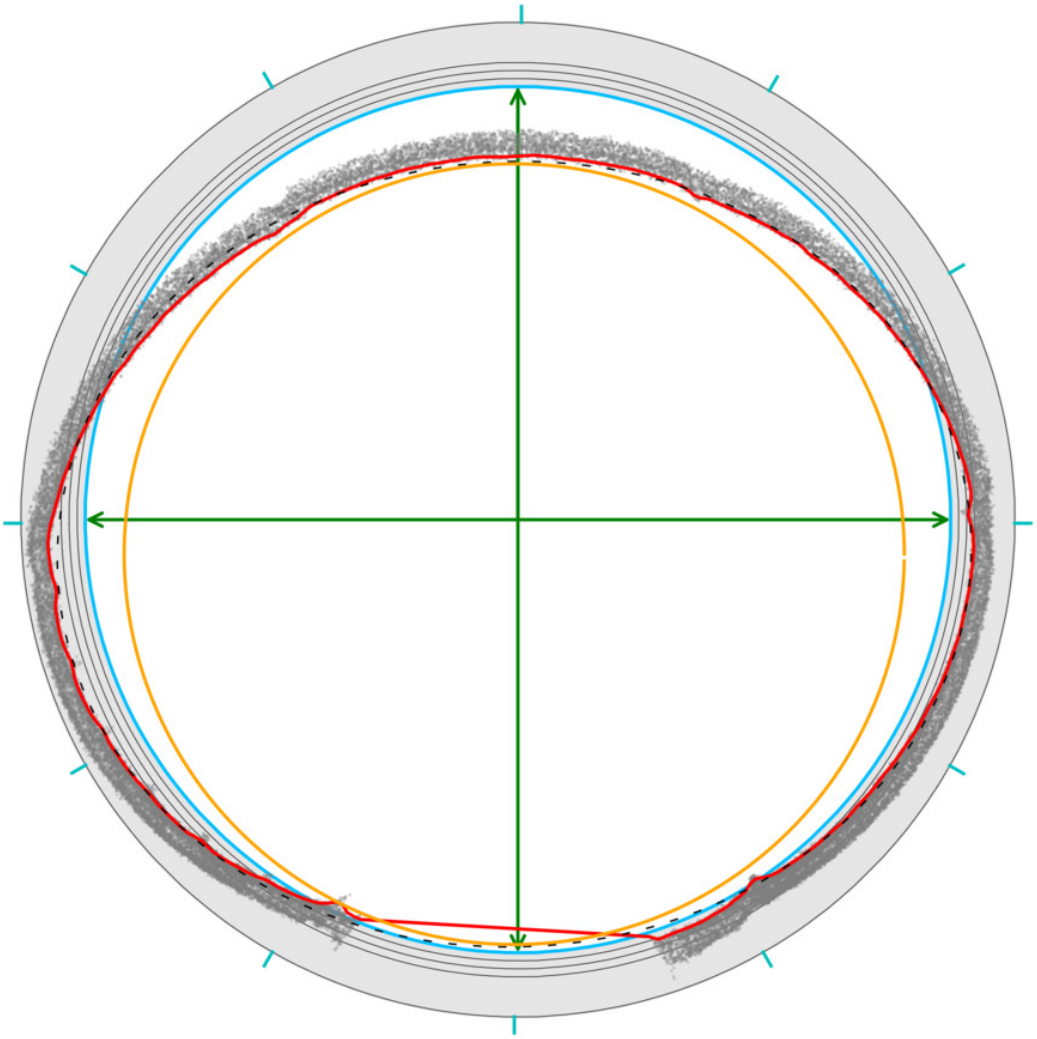
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 288.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



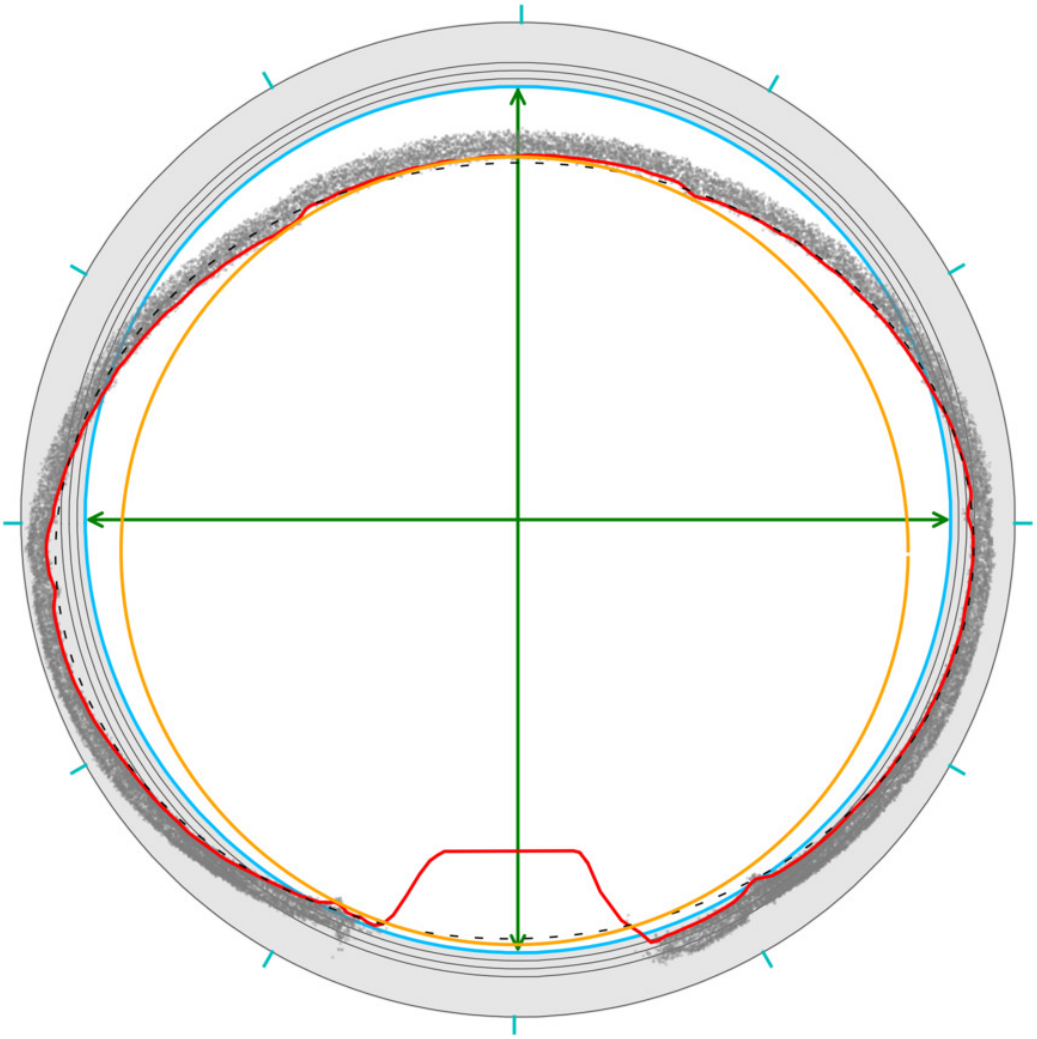
```
Footage    :  288 ft
Width      :  115.5" | 108.0"
Height     :  99.3" | 108.0"

Area       :  8709 sq in
Perimeter  :  335.3 in
Ovality    :  7.5%

Interior Diameter : 97.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 289.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



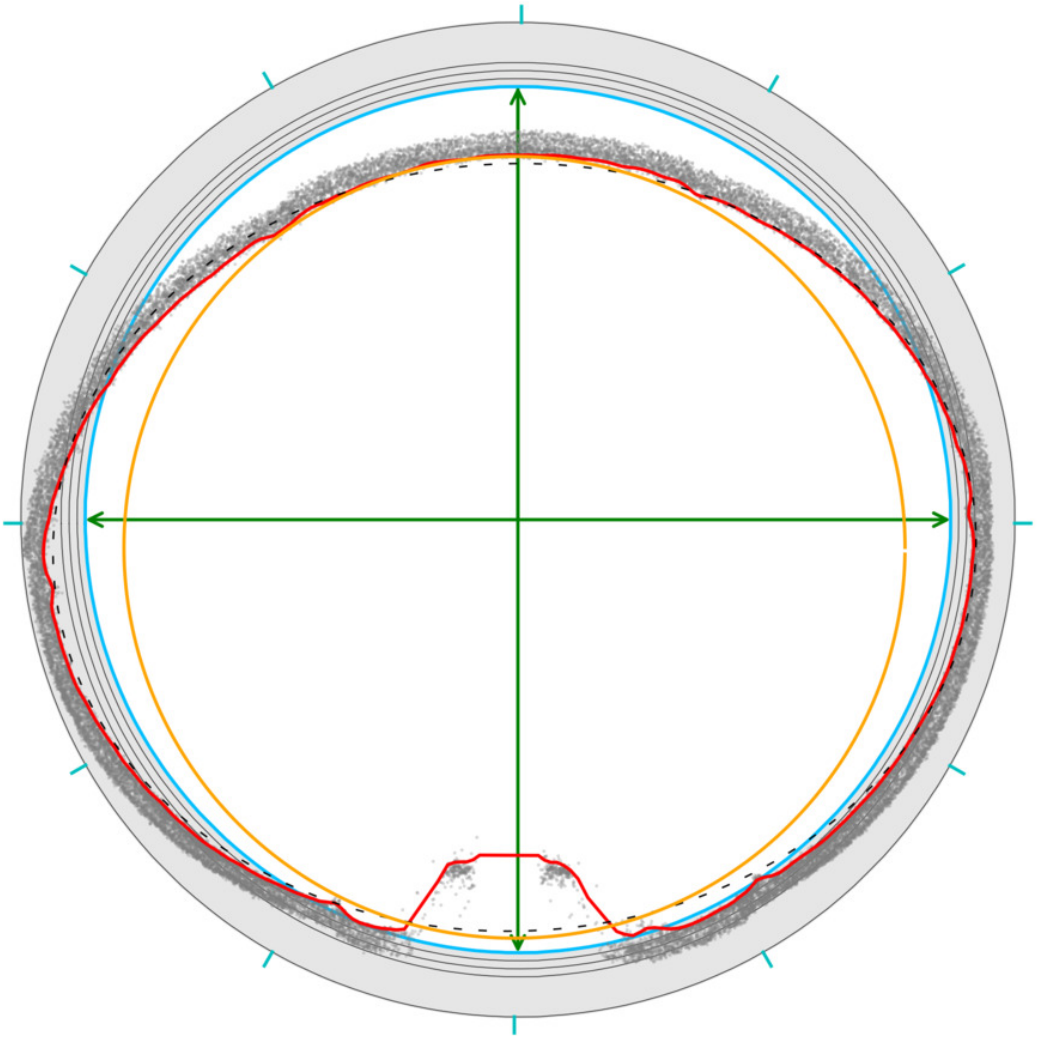
```
Footage    :  289 ft
Width      :  115.7" | 108.0"
Height     :  99.4" | 108.0"

Area       :  8491 sq in
Perimeter  :  345.8 in
Ovality    :  8.3%

Interior Diameter : 98.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 290.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



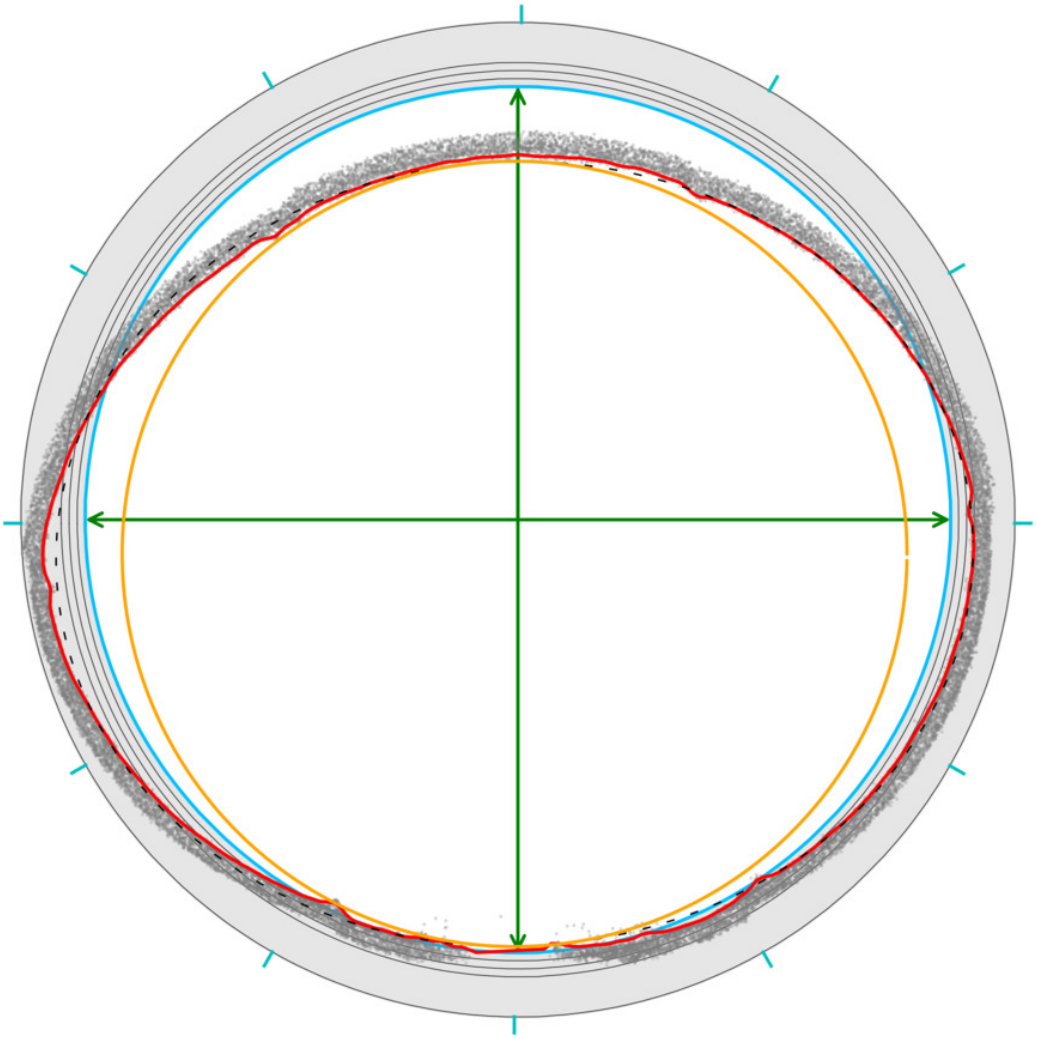
```
Footage   :  290 ft
Width     :  116.1" | 108.0"
Height    :  99.5" | 108.0"

Area      :  8564 sq in
Perimeter :  344.6 in
Ovality   :  9.0%

Interior Diameter : 97.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 291.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



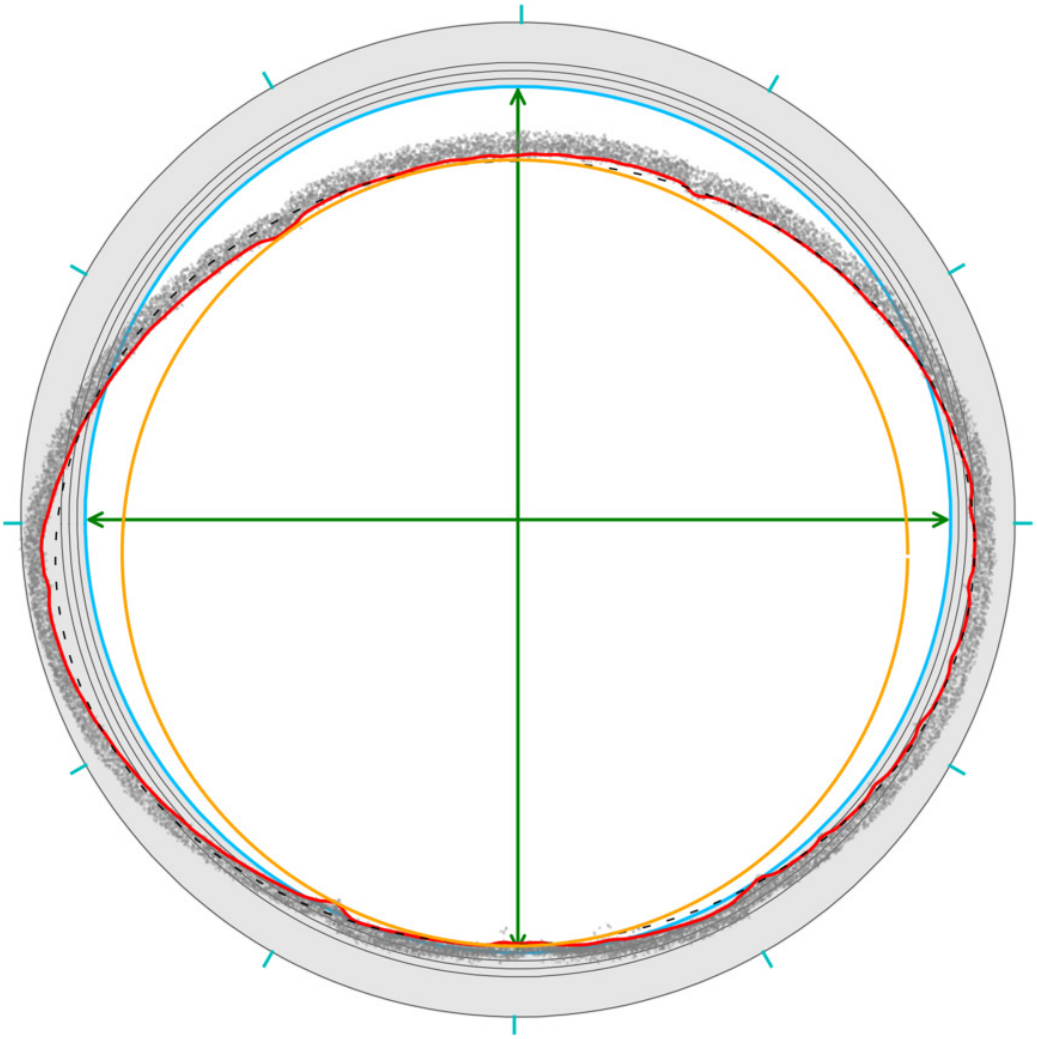
```
Footage    :  291 ft
Width      :  116.1" | 108.0"
Height     :  99.5" | 108.0"

Area       :  8793 sq in
Perimeter  :  336.4 in
Ovality    :  7.7%

Interior Diameter : 97.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 292.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



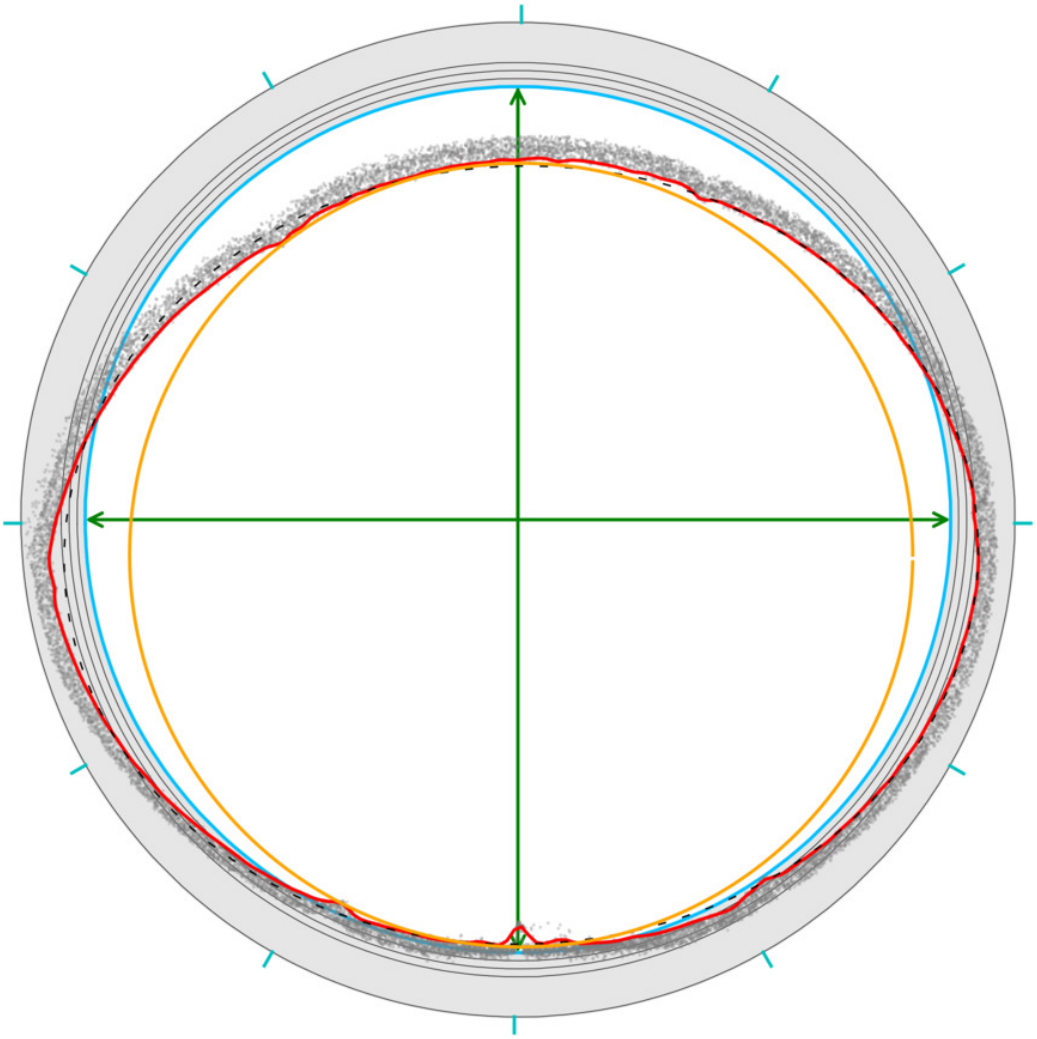
```
Footage   :  292 ft
Width     :  116.5" | 108.0"
Height    :  99.5" | 108.0"

Area      :  8795 sq in
Perimeter :  336.6 in
Ovality   :  7.8%

Interior Diameter : 98.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 293.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



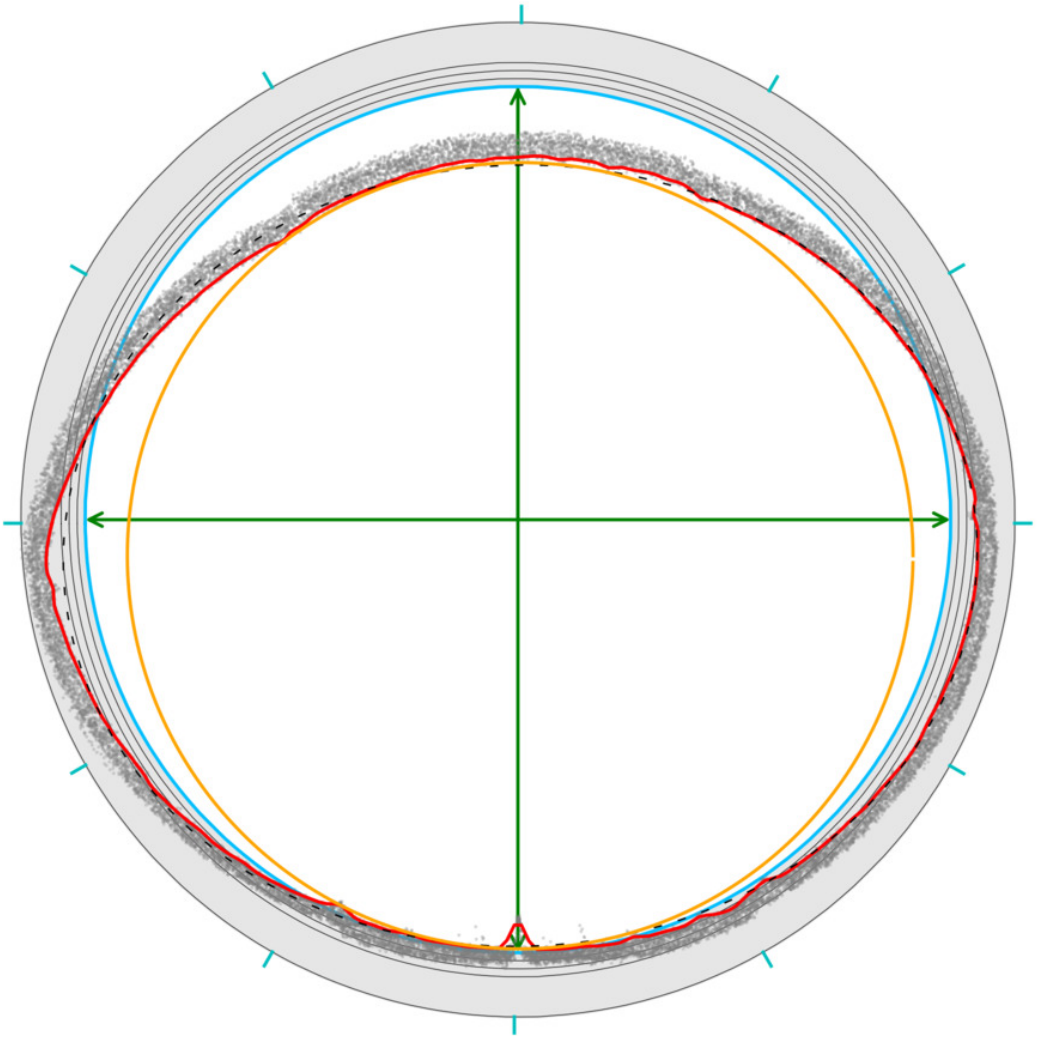
```
Footage   :  293 ft
Width     :  116.0" | 108.0"
Height    :  98.9" | 108.0"

Area      :  8685 sq in
Perimeter :  336.0 in
Ovality   :  7.9%

Interior Diameter : 97.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 294.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



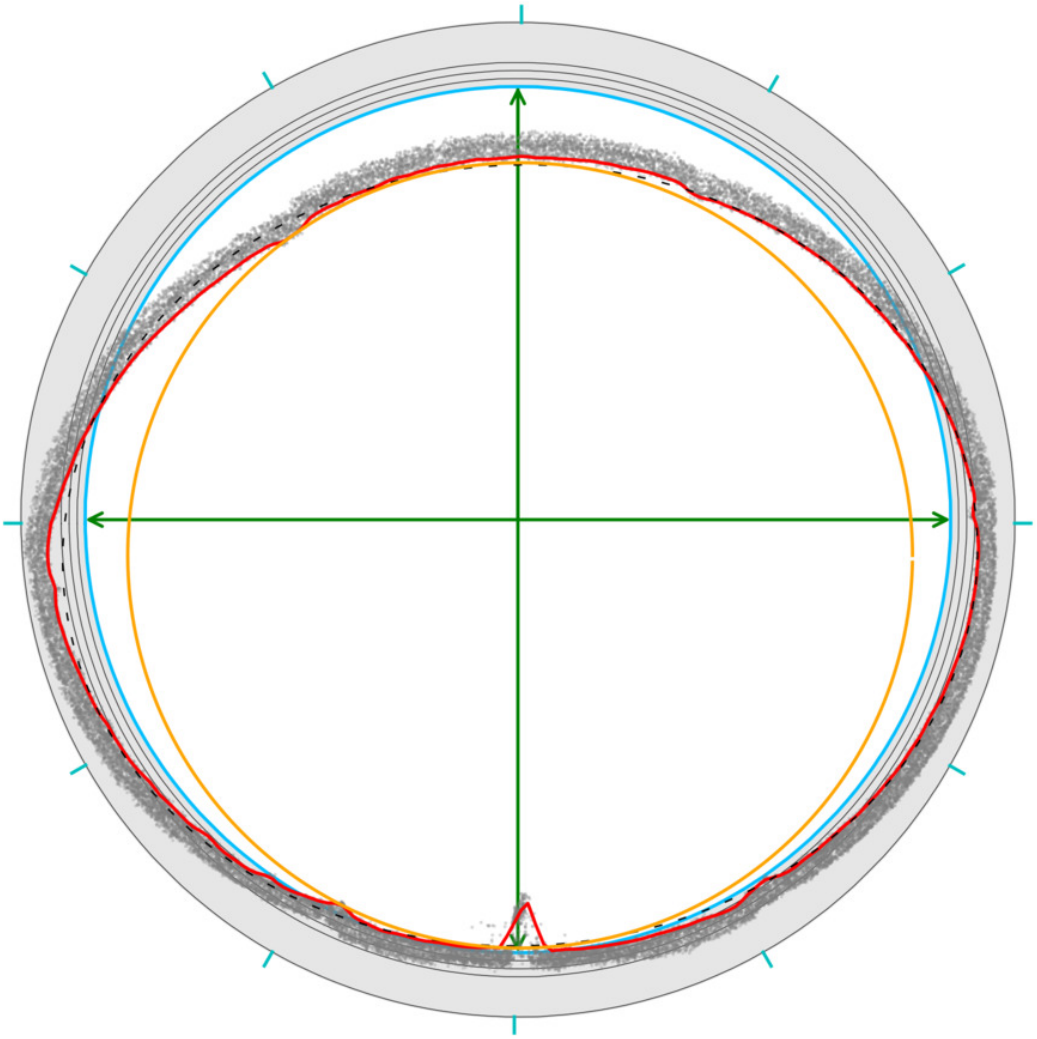
```
Footage   :  294 ft
Width     :  116.3" | 108.0"
Height    :  99.2" | 108.0"

Area      :  8718 sq in
Perimeter :  338.2 in
Ovality   :  7.7%

Interior Diameter : 98.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 295.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



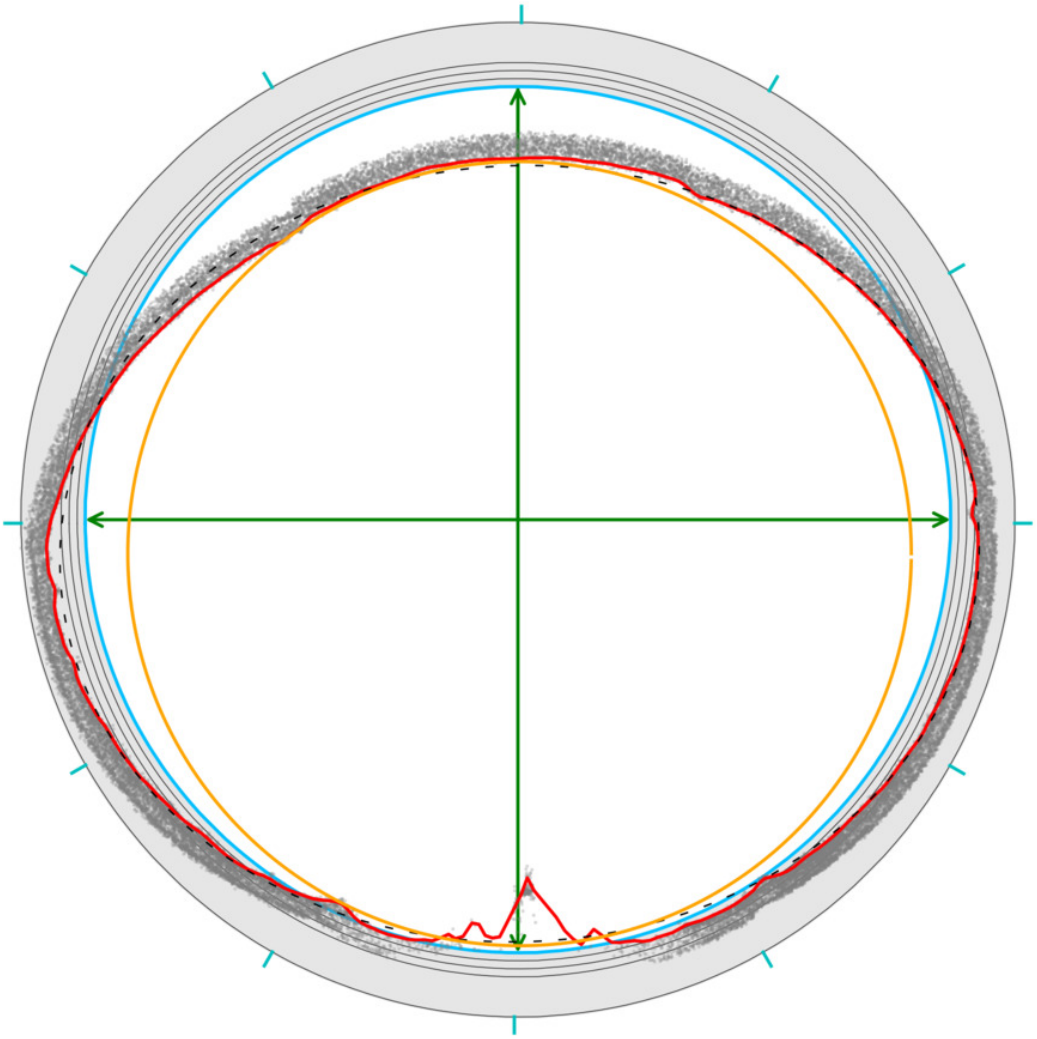
```
Footage    :  295 ft
Width      :  116.2" | 108.0"
Height     :  99.2" | 108.0"

Area       :  8724 sq in
Perimeter  :  341.8 in
Ovality    :  7.8%

Interior Diameter : 97.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 296.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



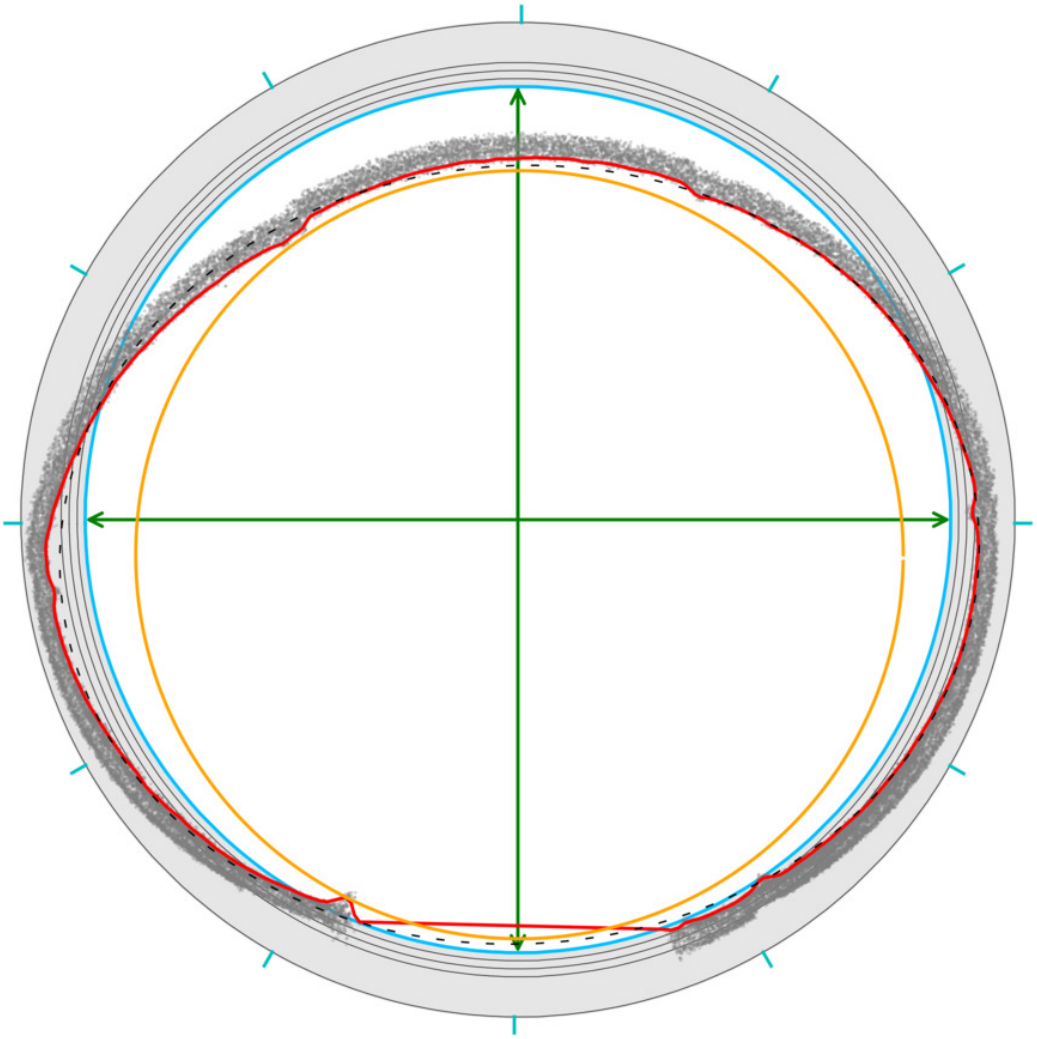
```
Footage   :  296 ft
Width     :  116.2" | 108.0"
Height    :  99.0" | 108.0"

Area      :  8705 sq in
Perimeter :  348.1 in
Ovality   :  8.3%

Interior Diameter : 97.8"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 297.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



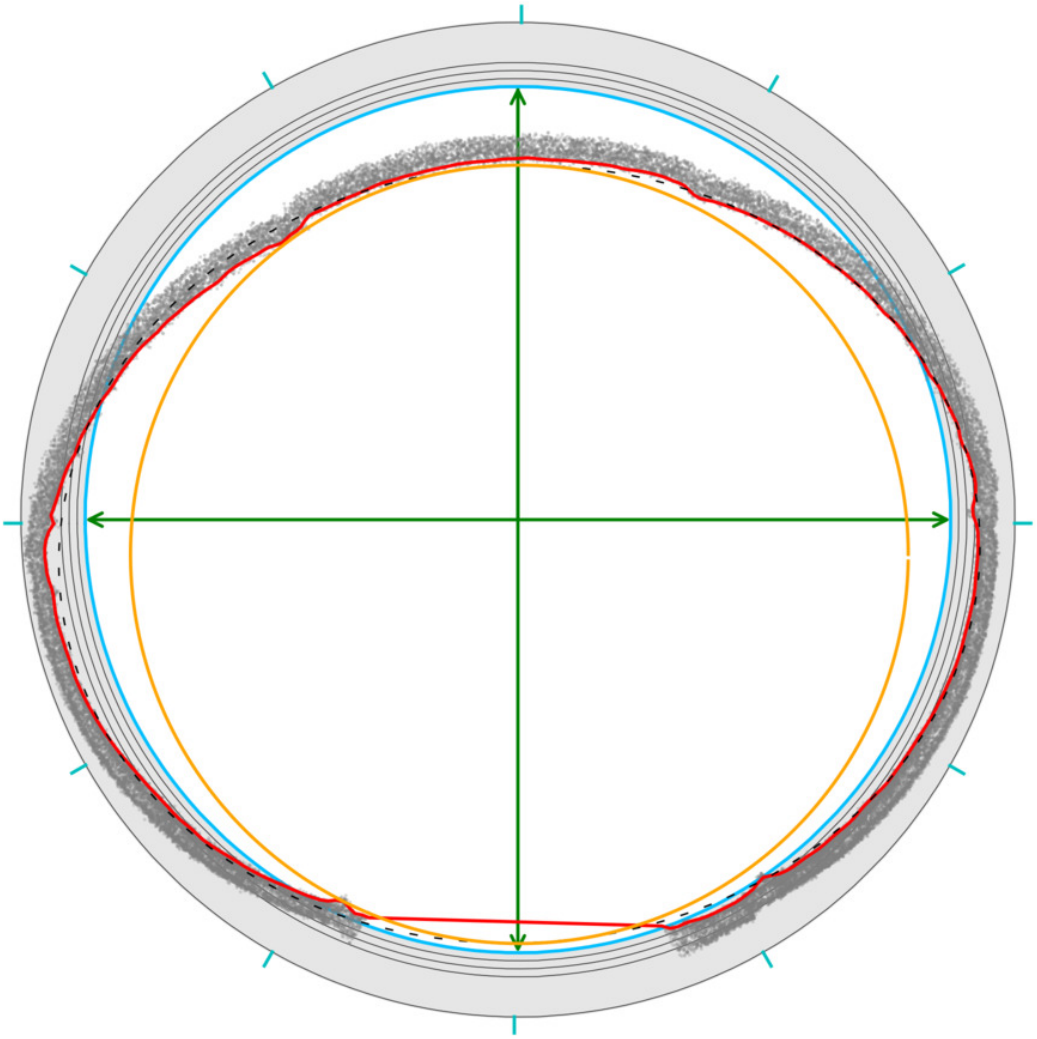
```
Footage   :  297 ft
Width     :  116.4" | 108.0"
Height    :  99.1" | 108.0"

Area      :  8687 sq in
Perimeter :  336.3 in
Ovality   :  8.2%

Interior Diameter : 95.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 298.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



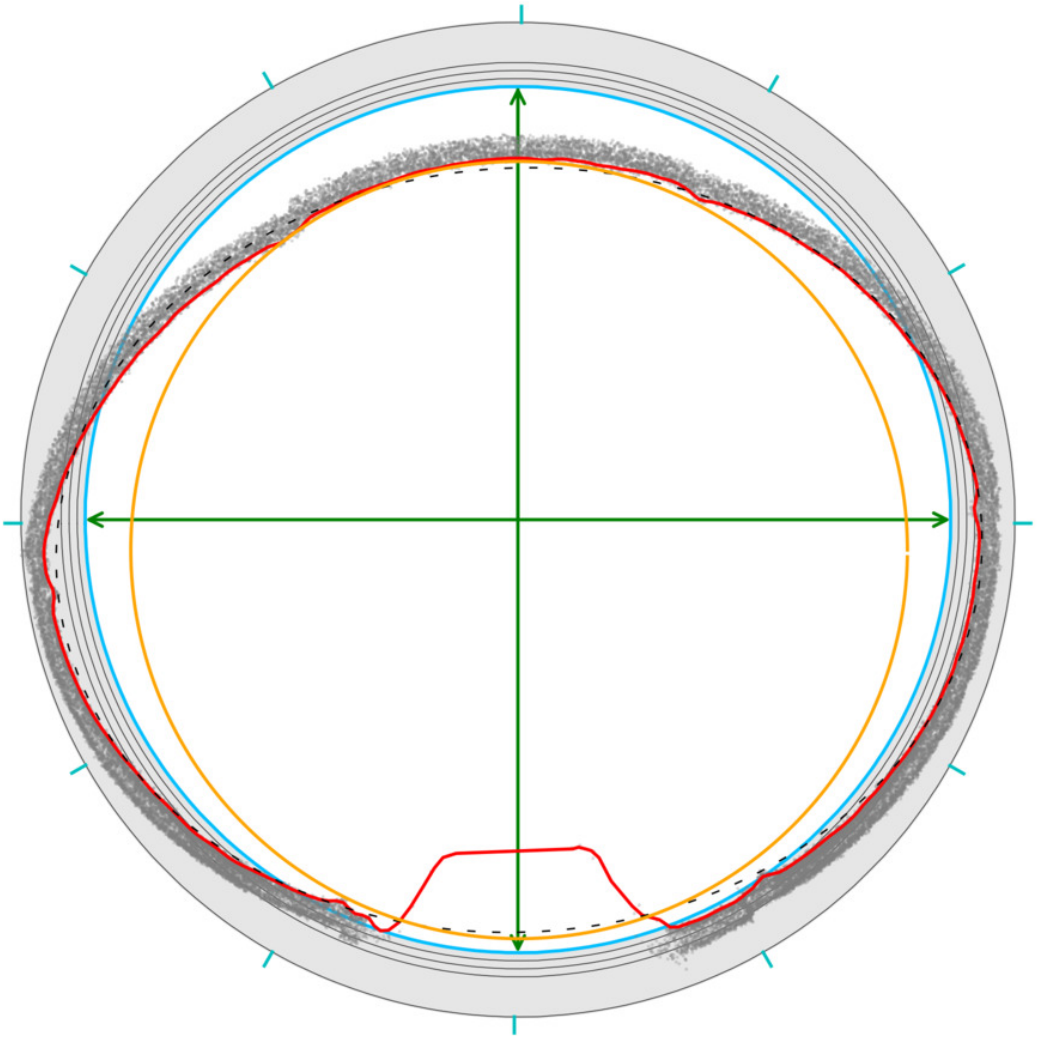
```
Footage   :  298 ft
Width     :  116.5" | 108.0"
Height    :  99.1" | 108.0"

Area      :  8677 sq in
Perimeter :  335.4 in
Ovality   :  8.4%

Interior Diameter : 97.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 299.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



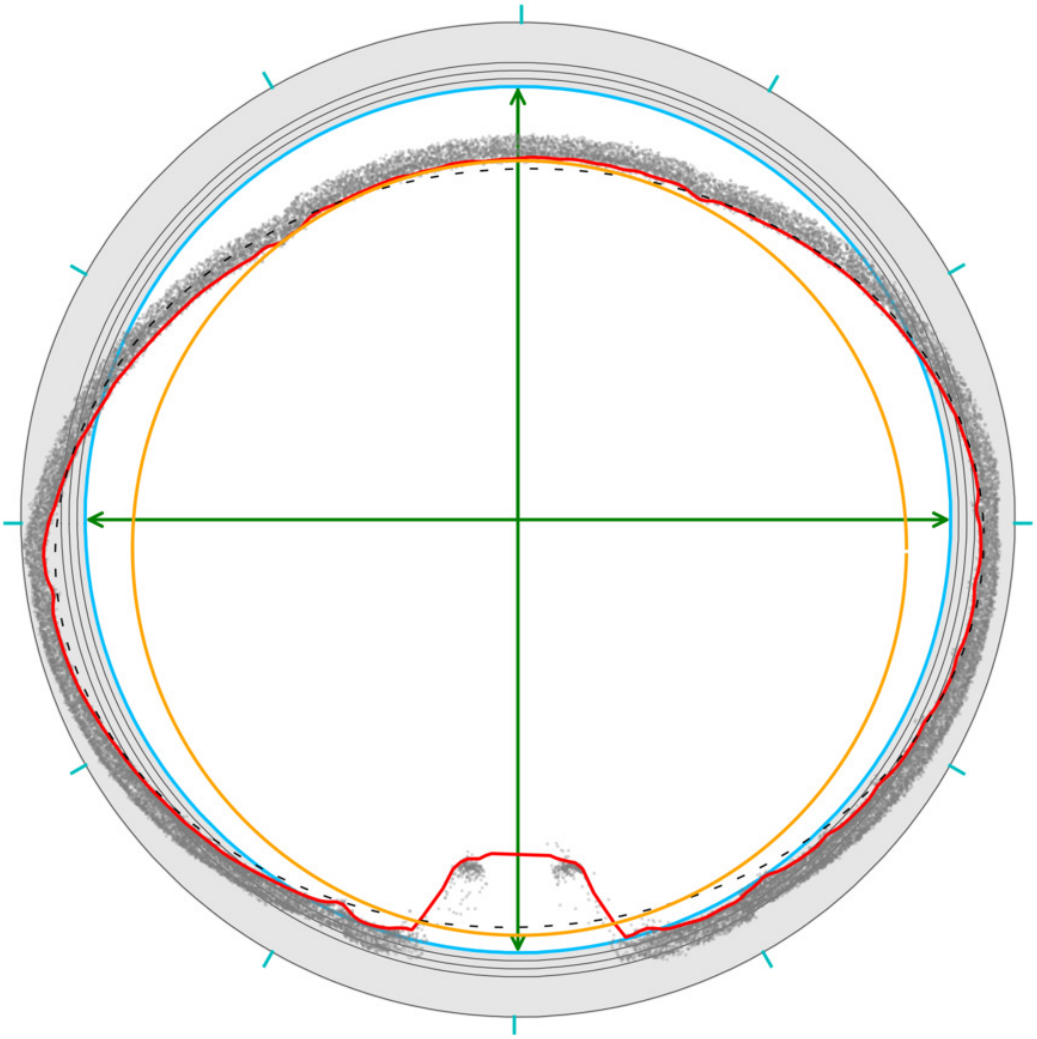
```
Footage   :  299 ft
Width     :  116.7" | 108.0"
Height    :  99.1" | 108.0"

Area      :  8460 sq in
Perimeter :  344.7 in
Ovality   :  9.4%

Interior Diameter : 96.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 300.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



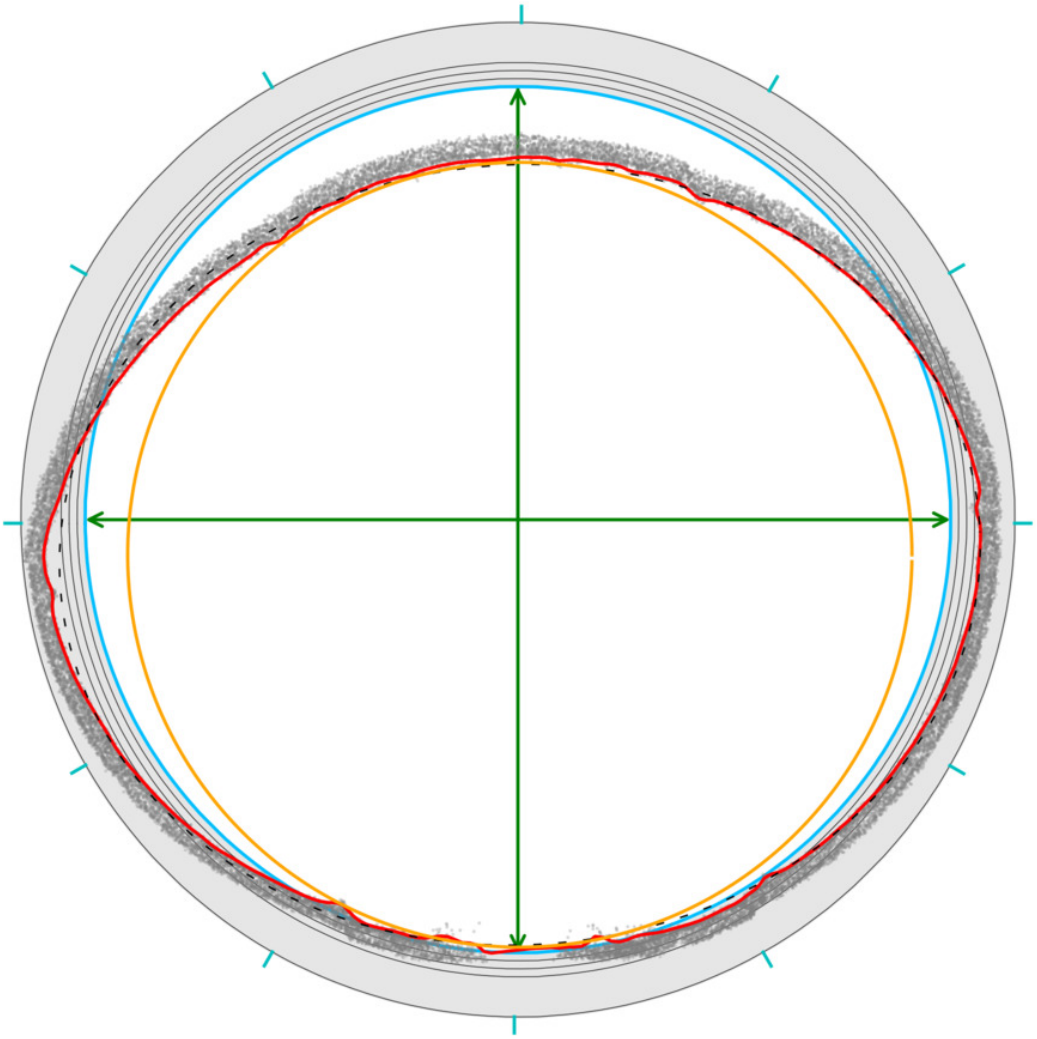
```
Footage   :  300 ft
Width     :  117.0" | 108.0"
Height    :  99.1" | 108.0"

Area      :  8533 sq in
Perimeter :  345.5 in
Ovality   :  9.9%

Interior Diameter : 96.6"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 301.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



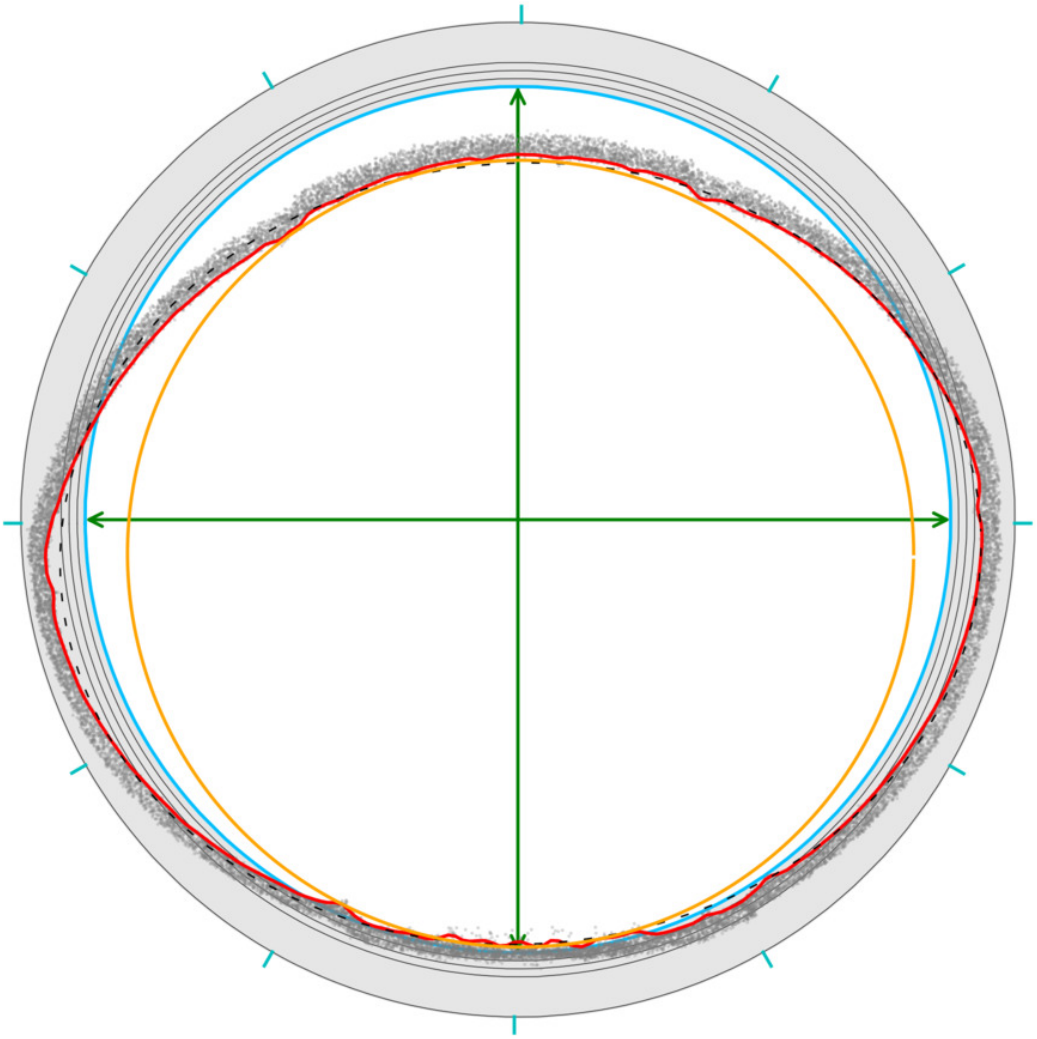
```
Footage   :  301 ft
Width     :  116.9" | 108.0"
Height    :  99.1" | 108.0"

Area      :  8781 sq in
Perimeter :  337.3 in
Ovality   :  8.1%

Interior Diameter : 97.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 302.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



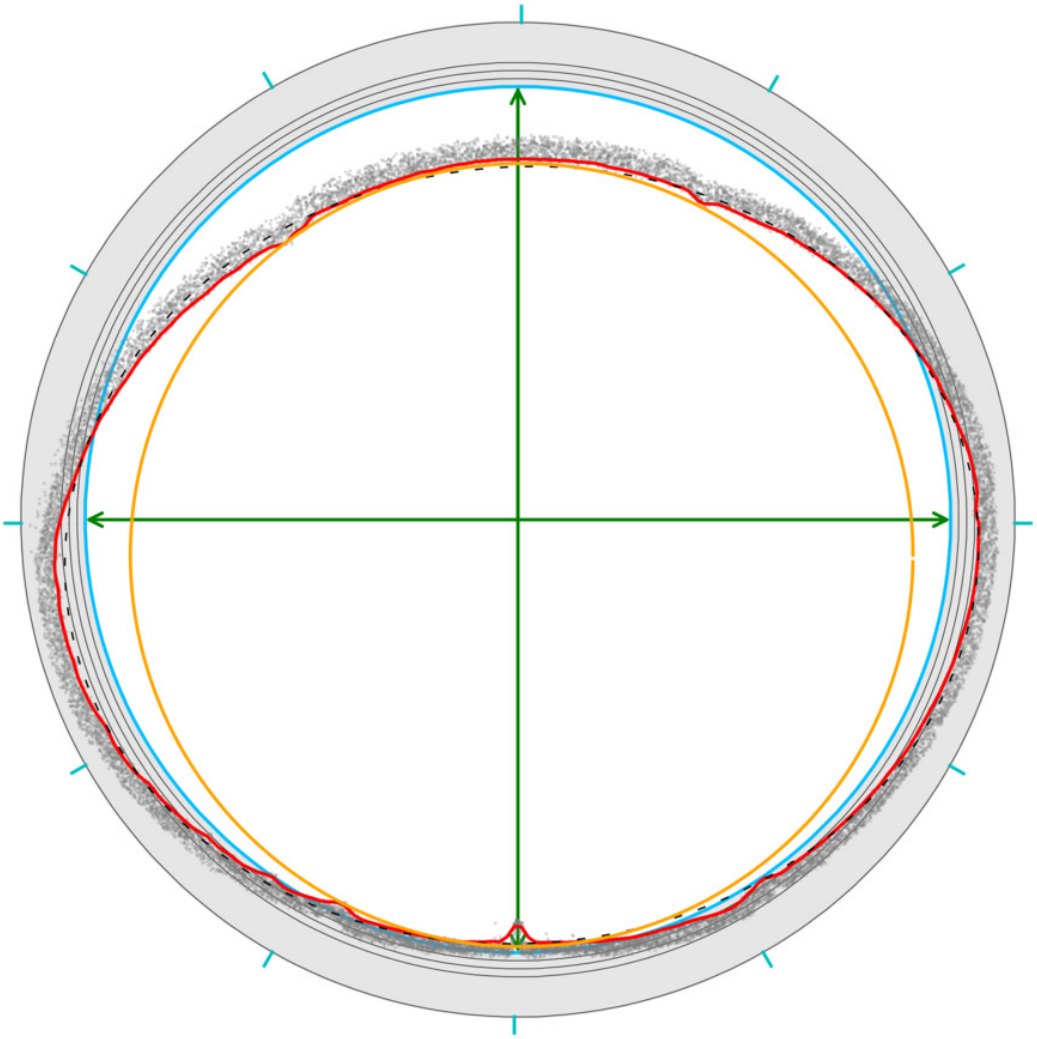
```
Footage    :  302 ft
Width      :  116.9" | 108.0"
Height     :  99.5" | 108.0"

Area       :  8786 sq in
Perimeter  :  337.6 in
Ovality    :  8.1%

Interior Diameter : 98.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 303.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



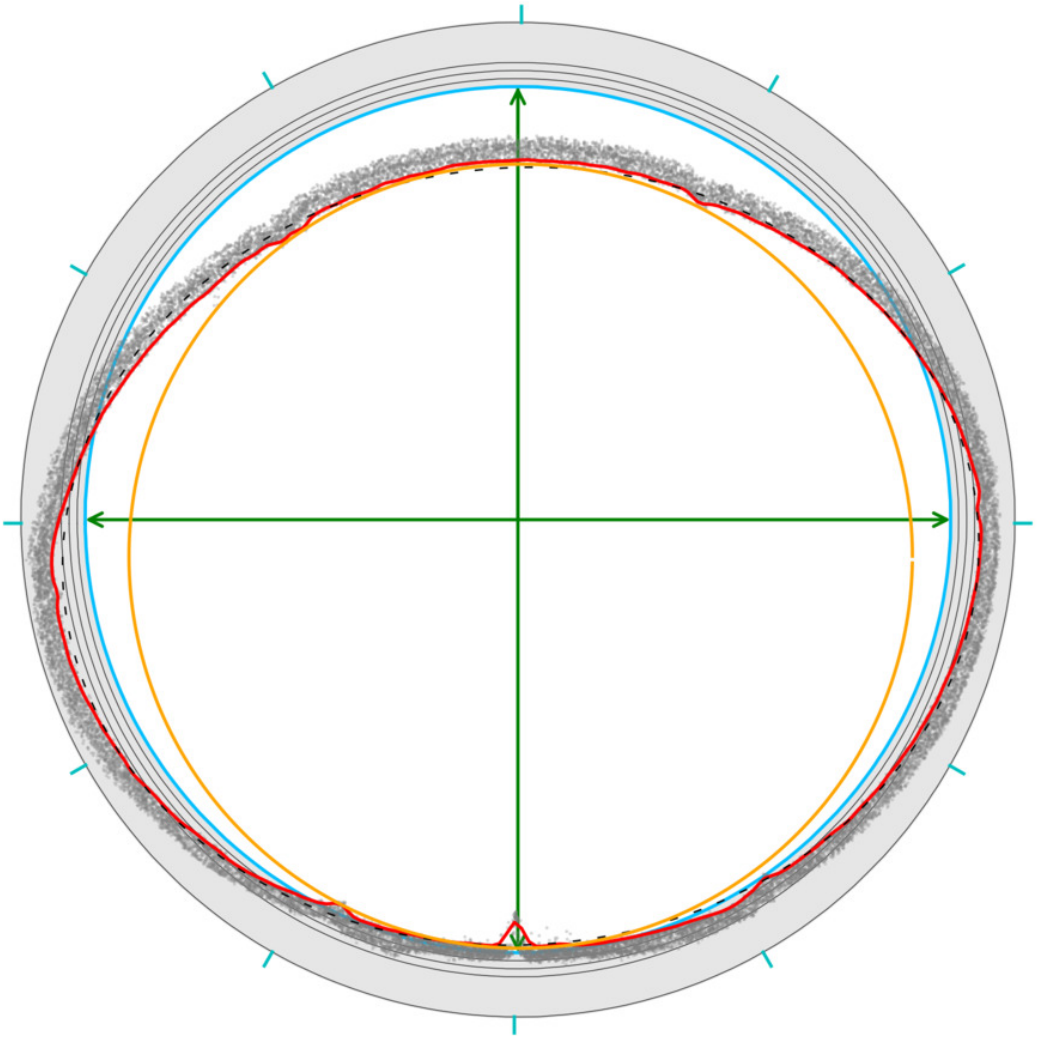
```
Footage   :  303 ft
Width     :  115.4" | 108.0"
Height    :  98.9" | 108.0"

Area      :  8668 sq in
Perimeter :  335.8 in
Ovality   :  8.0%

Interior Diameter : 97.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 304.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 304 ft
Width : 116.0" | 108.0"
Height : 98.8" | 108.0"

Area : 8701 sq in
Perimeter : 337.4 in
Ovality : 8.1%

Interior Diameter : 97.8"

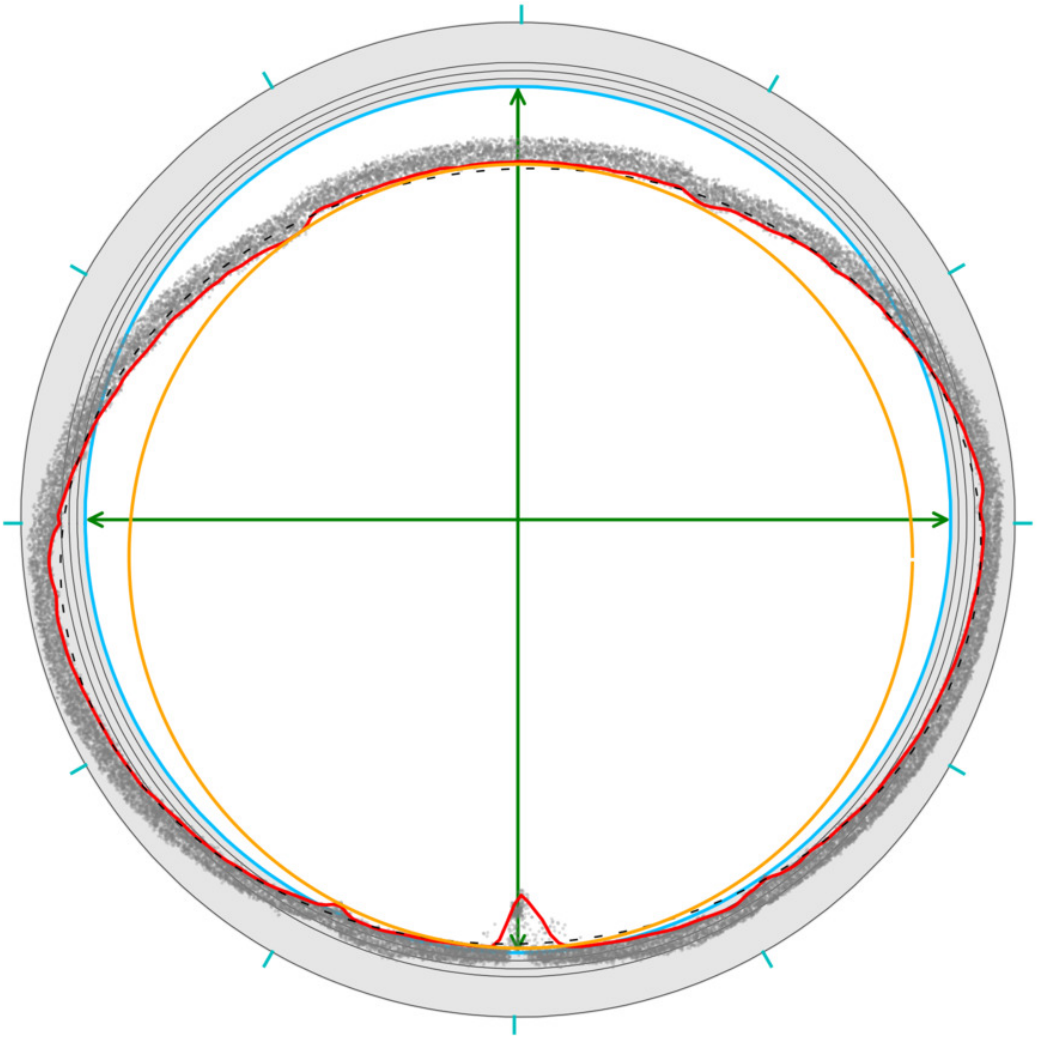
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 305.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



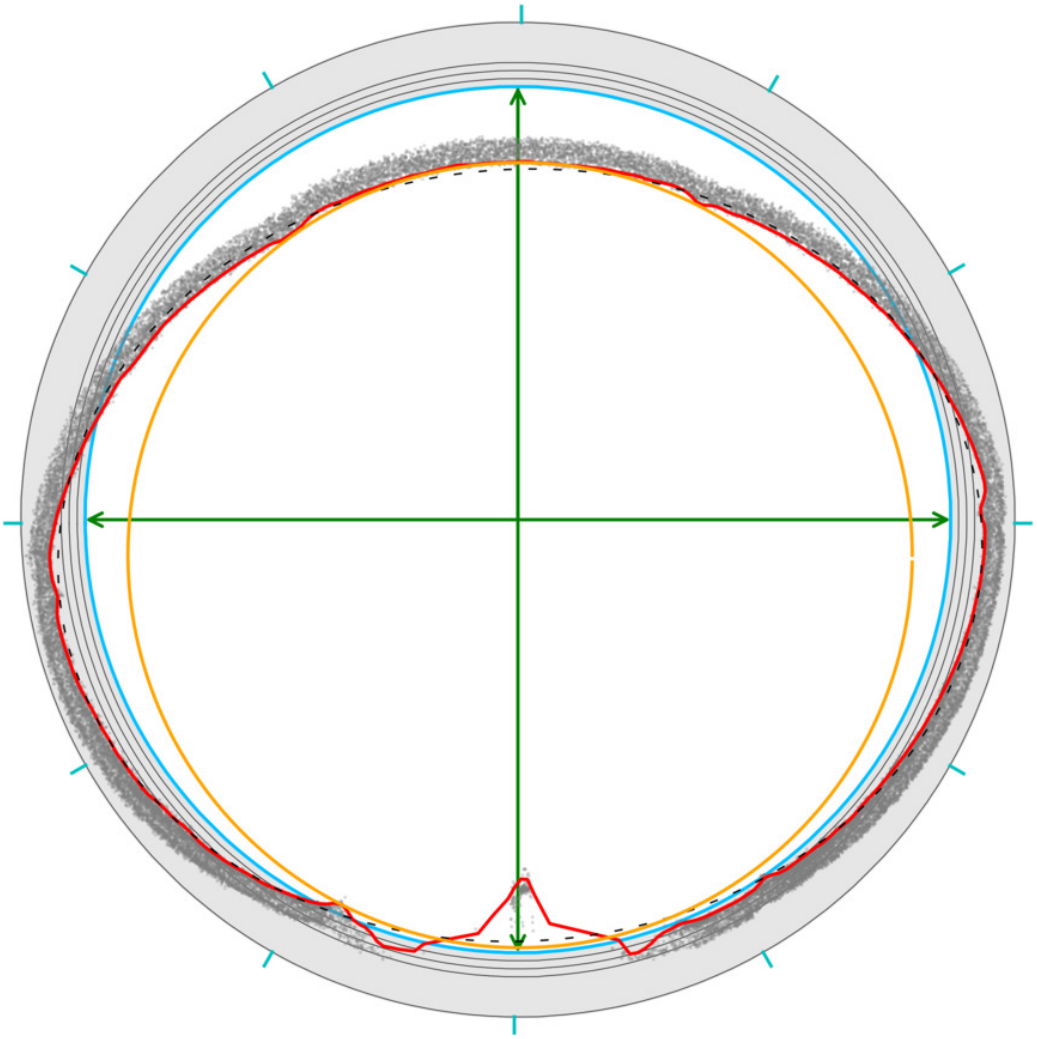
```
Footage   :  305 ft
Width     :  116.6" | 108.0"
Height    :  98.6" | 108.0"

Area      :  8712 sq in
Perimeter :  342.5 in
Ovality   :  8.5%

Interior Diameter : 97.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 306.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



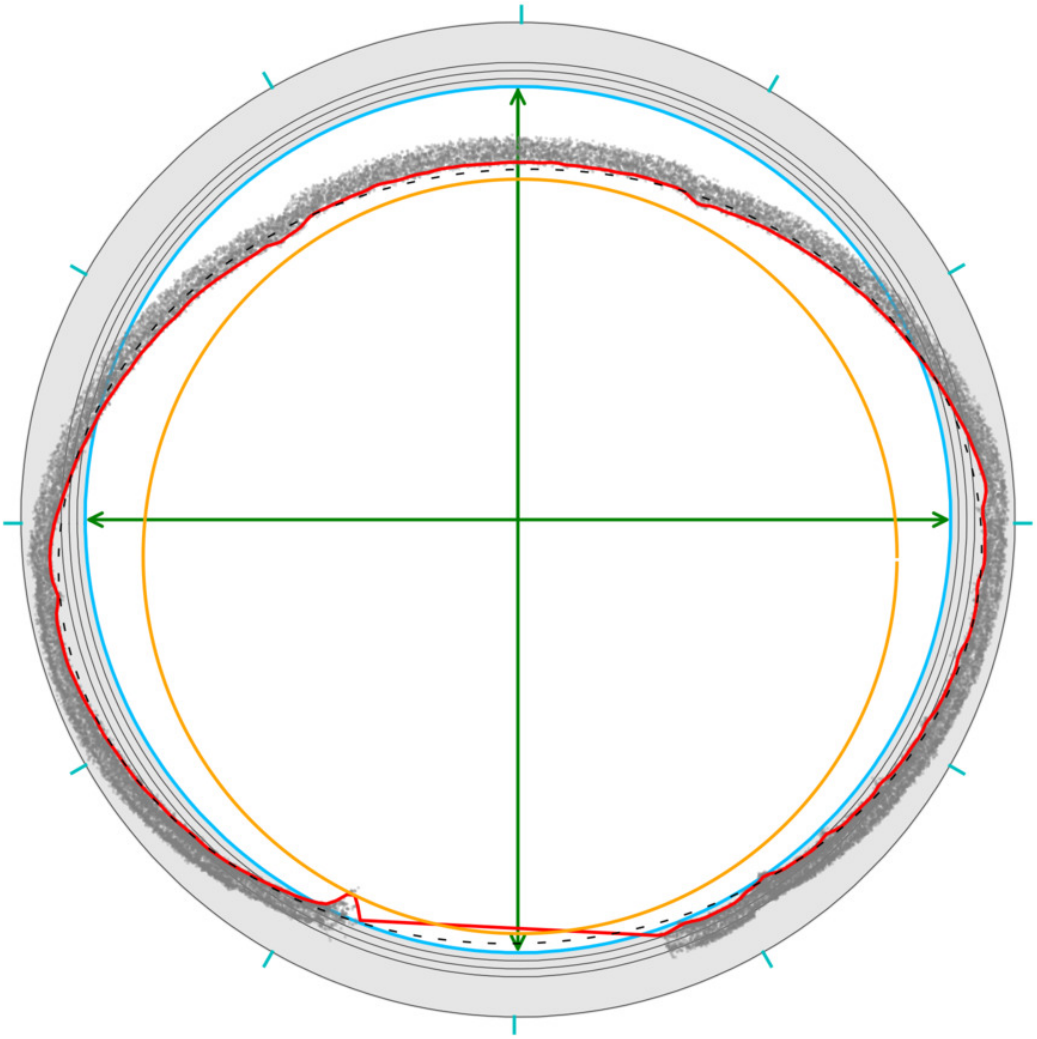
```
Footage   :  306 ft
Width     :  116.8" | 108.0"
Height    :  98.6" | 108.0"

Area      :  8711 sq in
Perimeter :  345.9 in
Ovality   :  8.8%

Interior Diameter : 97.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 307.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



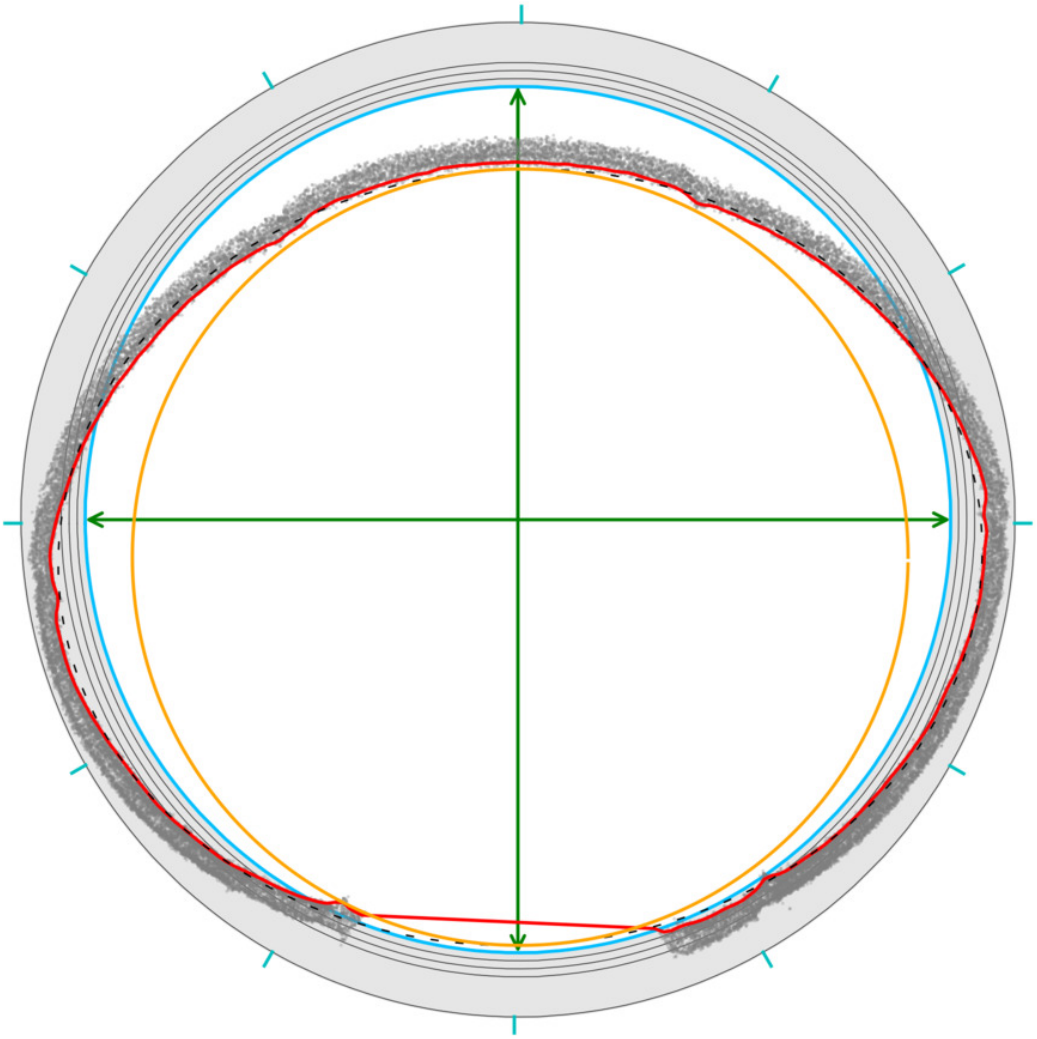
```
Footage   :  307 ft
Width     :  116.8" | 108.0"
Height    :  98.6" | 108.0"

Area      :  8685 sq in
Perimeter :  337.6 in
Ovality   :  8.7%

Interior Diameter : 94.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 308.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



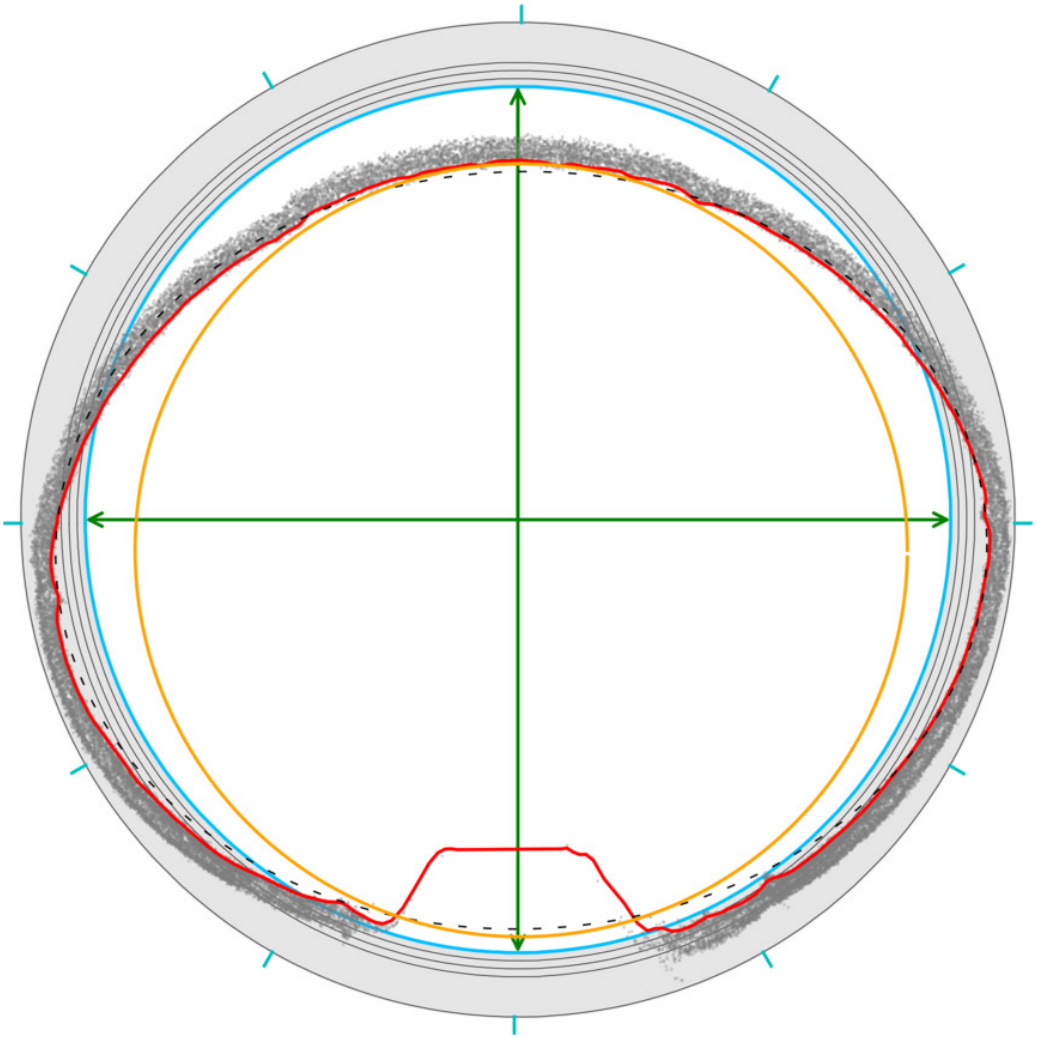
```
Footage   :  308 ft
Width     :  116.9" | 108.0"
Height    :  98.6" | 108.0"

Area      :  8682 sq in
Perimeter :  335.1 in
Ovality   :  8.5%

Interior Diameter : 96.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 309.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



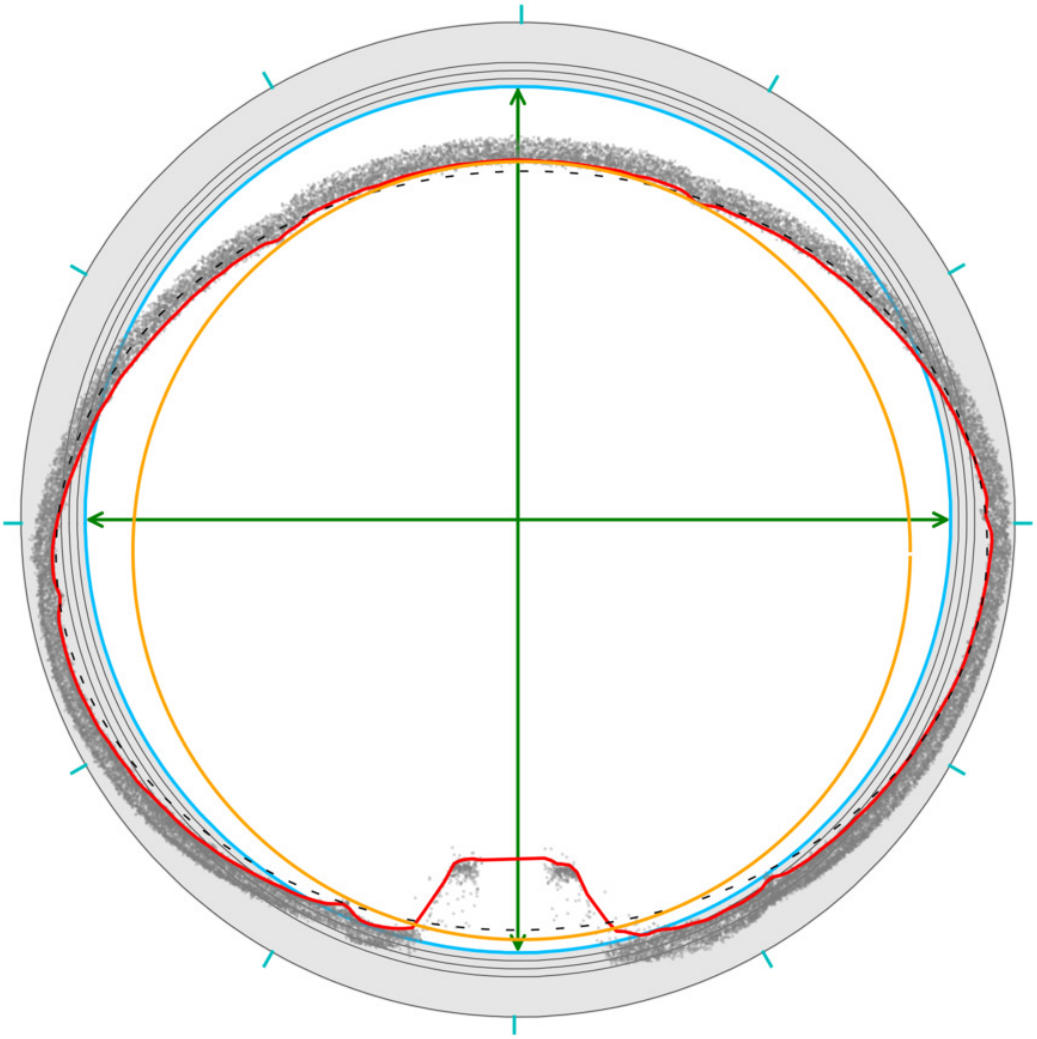
```
Footage   :  309 ft
Width     :  117.2" | 108.0"
Height    :  98.8" | 108.0"

Area      :  8477 sq in
Perimeter :  345.2 in
Ovality   :  10.0%

Interior Diameter : 96.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 310.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



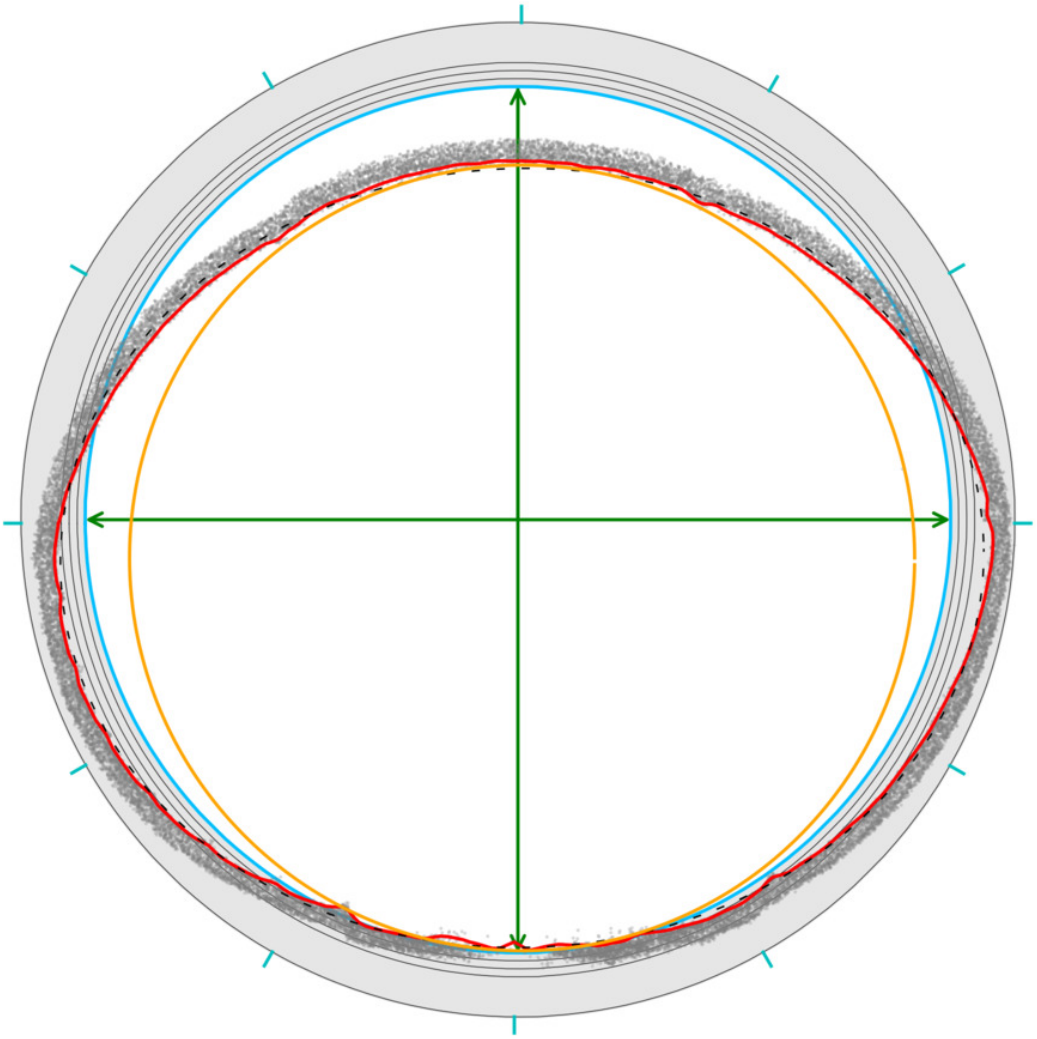
```
Footage   :  310 ft
Width     :  117.3" | 108.0"
Height    :  98.8" | 108.0"

Area      :  8570 sq in
Perimeter :  344.9 in
Ovality   :  10.0%

Interior Diameter : 97.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 311.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



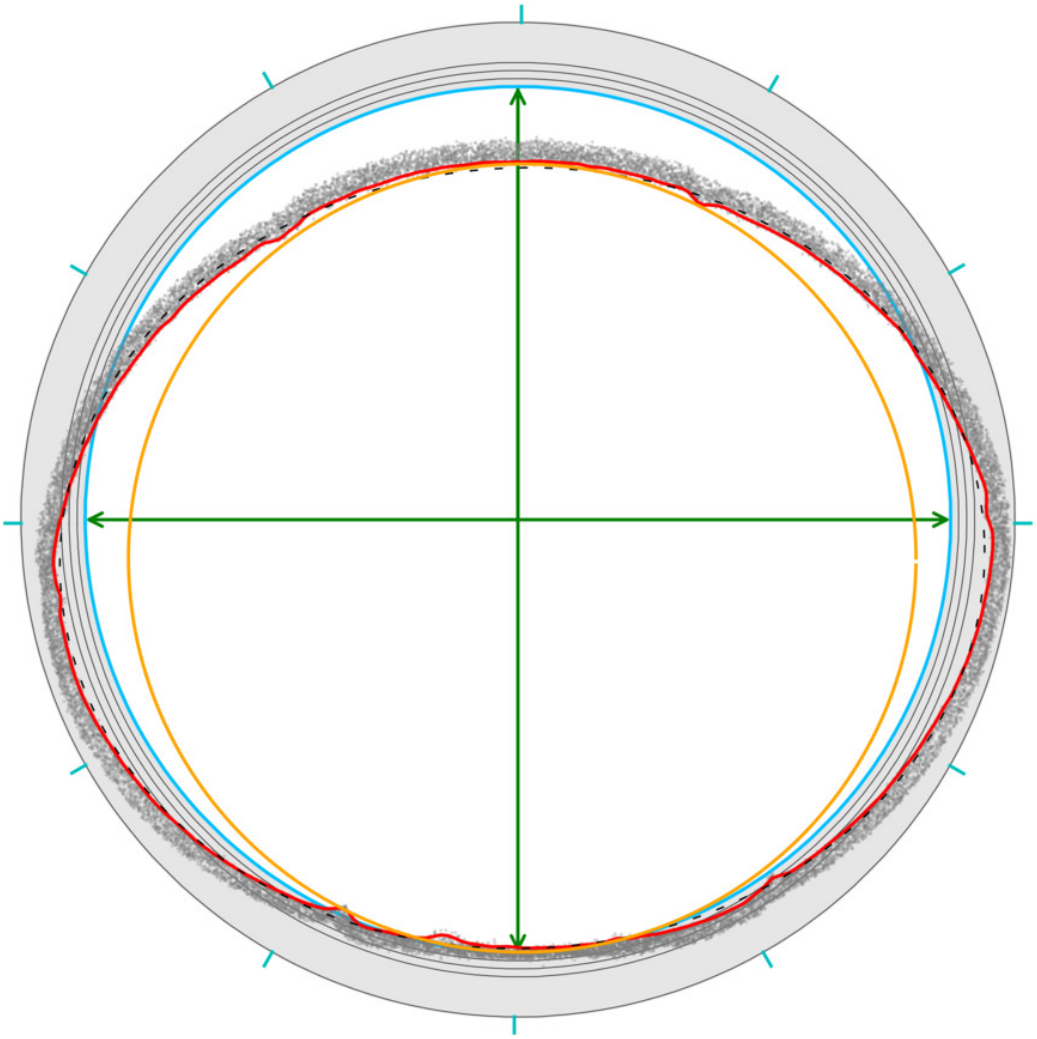
```
Footage   :  311 ft
Width     :  117.1" | 108.0"
Height    :  98.7" | 108.0"

Area      :  8783 sq in
Perimeter :  336.9 in
Ovality   :  8.3%

Interior Diameter : 98.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 312.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



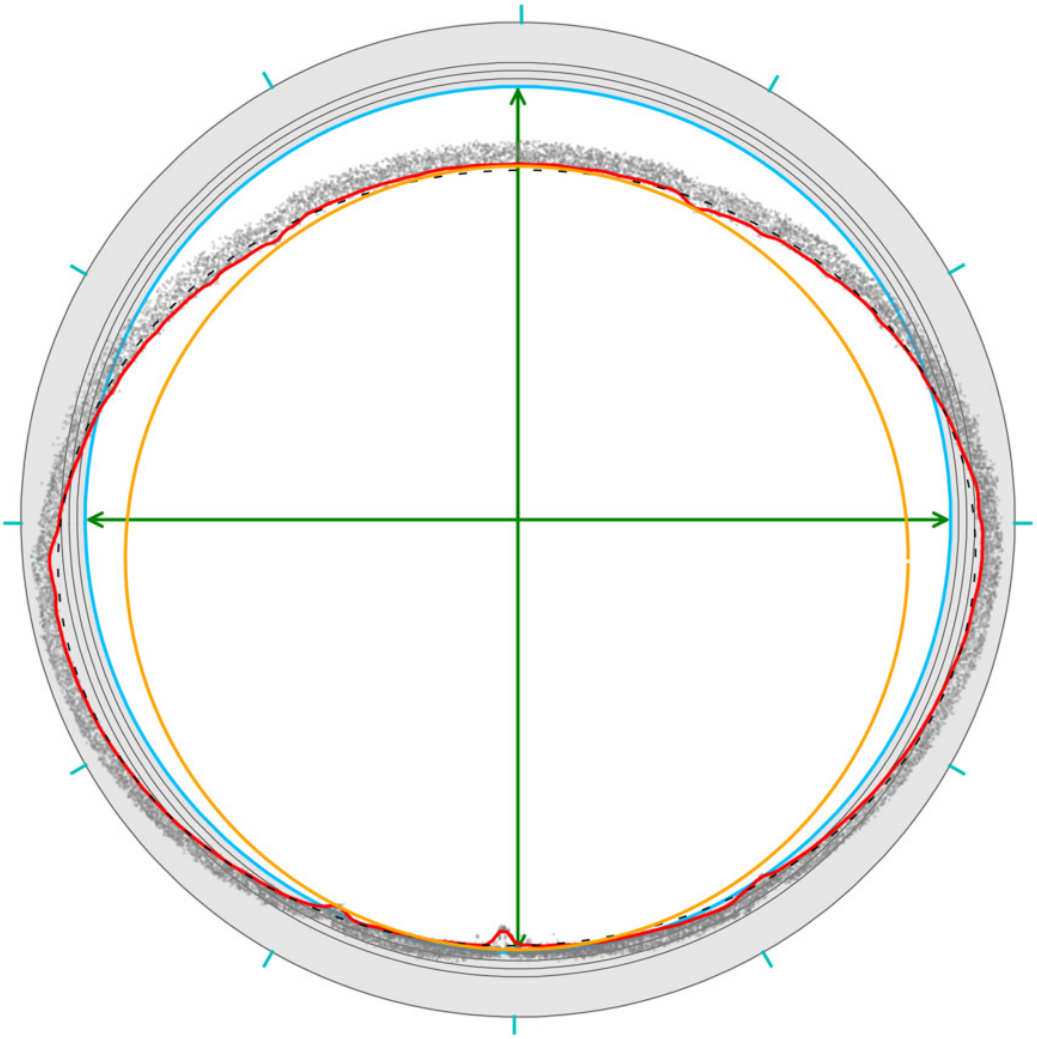
```
Footage   :  312 ft
Width     :  117.2" | 108.0"
Height    :  98.6" | 108.0"

Area      :  8817 sq in
Perimeter :  337.0 in
Ovality   :  8.3%

Interior Diameter : 98.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 313.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



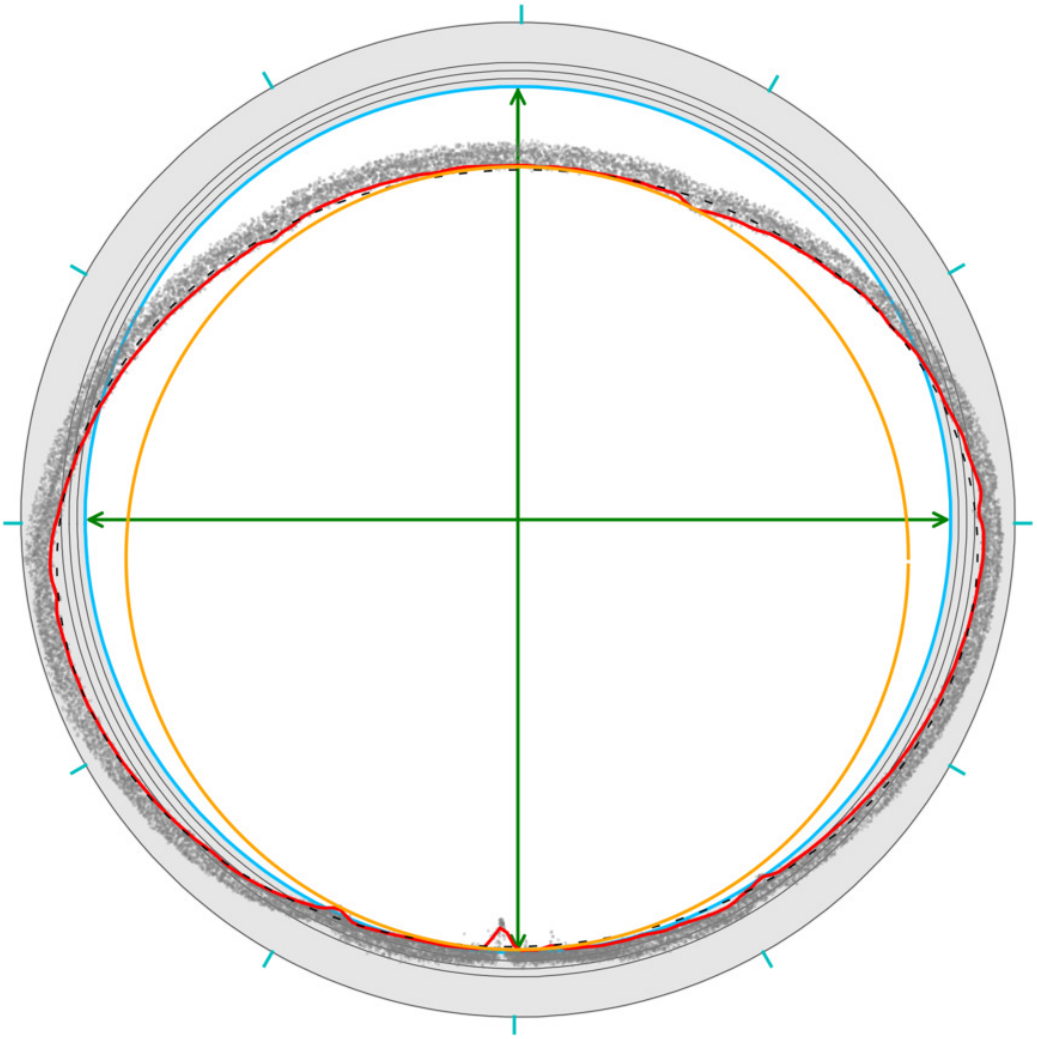
```
Footage   :  313 ft
Width     :  116.5" | 108.0"
Height    :  98.3" | 108.0"

Area      :  8688 sq in
Perimeter :  335.8 in
Ovality   :  8.3%

Interior Diameter : 97.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 314.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



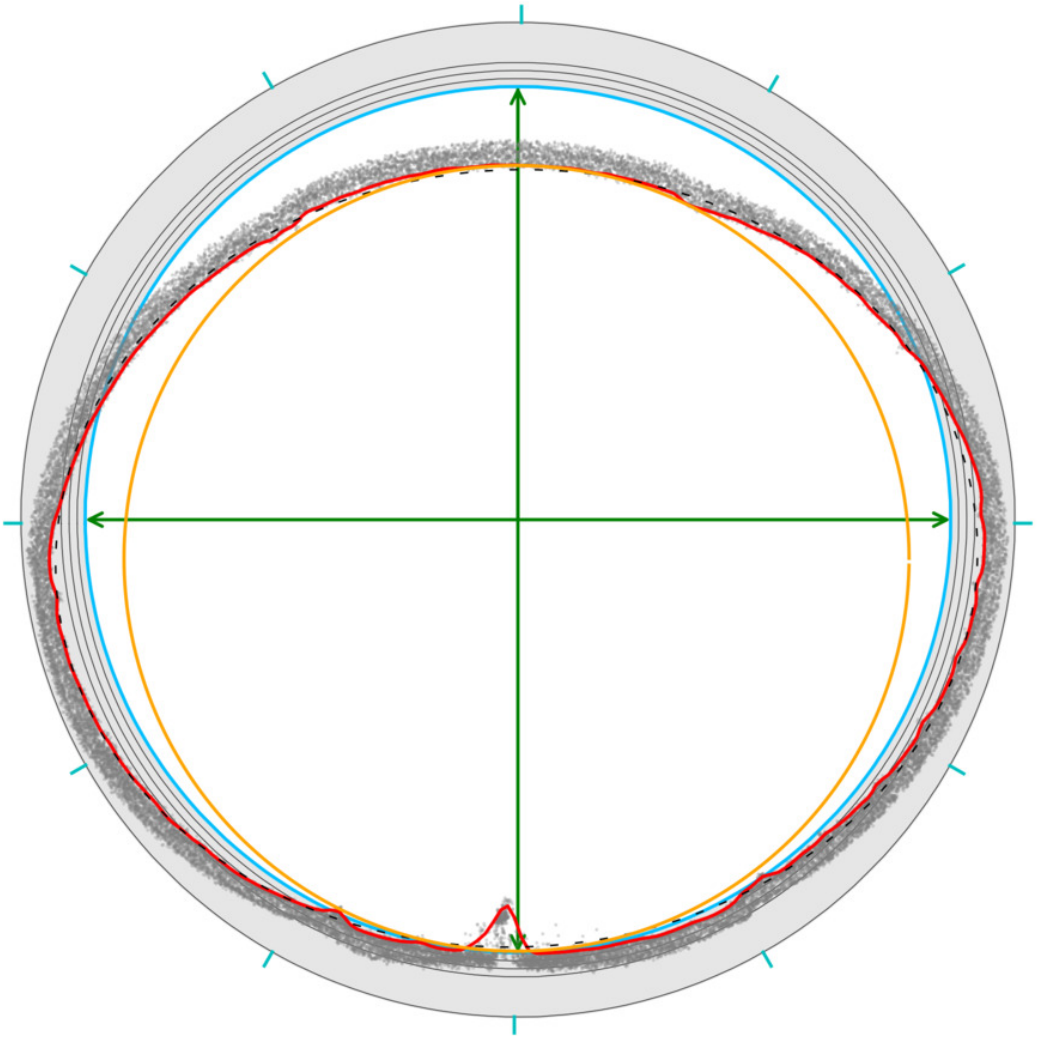
```
Footage   :  314 ft
Width     :  116.5" | 108.0"
Height    :  98.2" | 108.0"

Area      :  8735 sq in
Perimeter :  337.7 in
Ovality   :  8.3%

Interior Diameter : 97.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 315.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



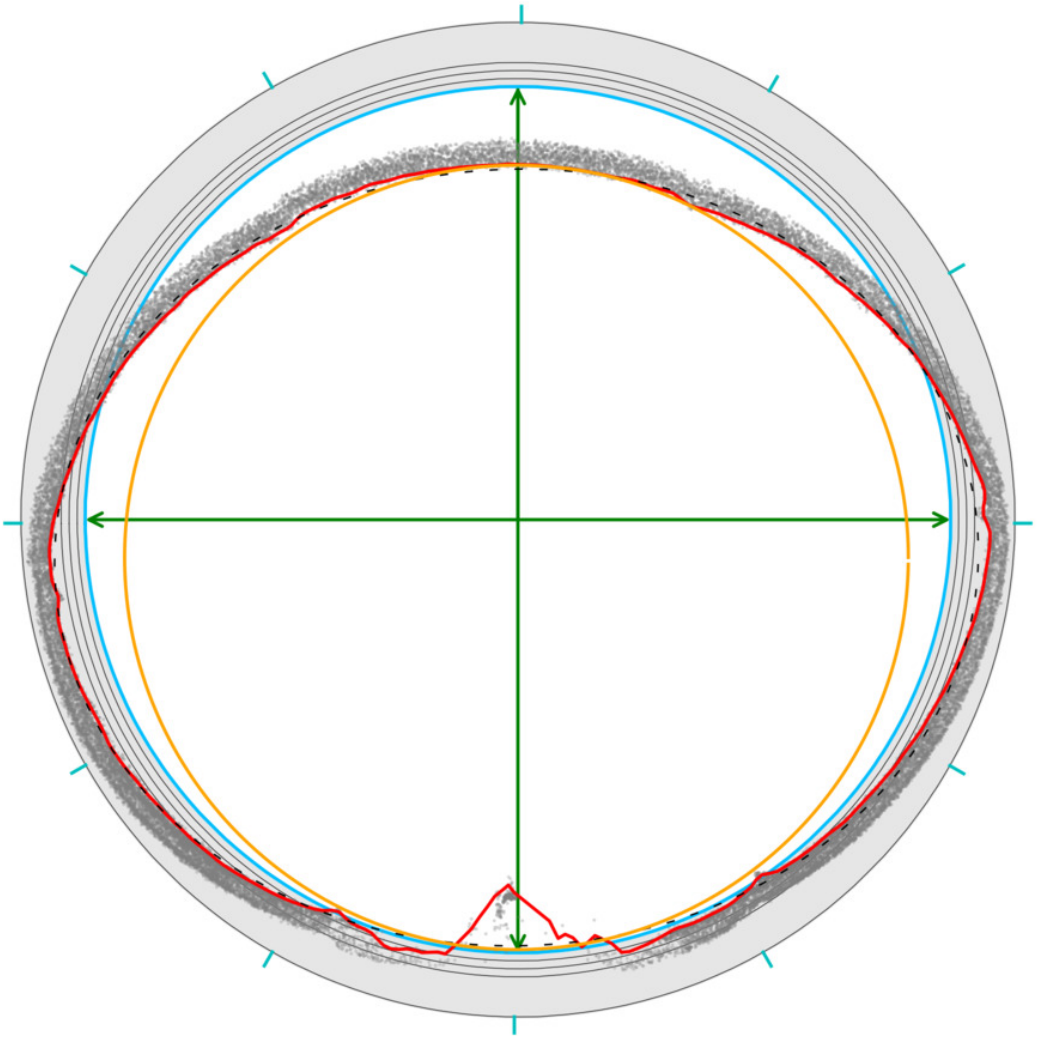
```
Footage   :  315 ft
Width     :  116.7" | 108.0"
Height    :  98.2" | 108.0"

Area      :  8753 sq in
Perimeter :  342.1 in
Ovality   :  8.4%

Interior Diameter : 98.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 316.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



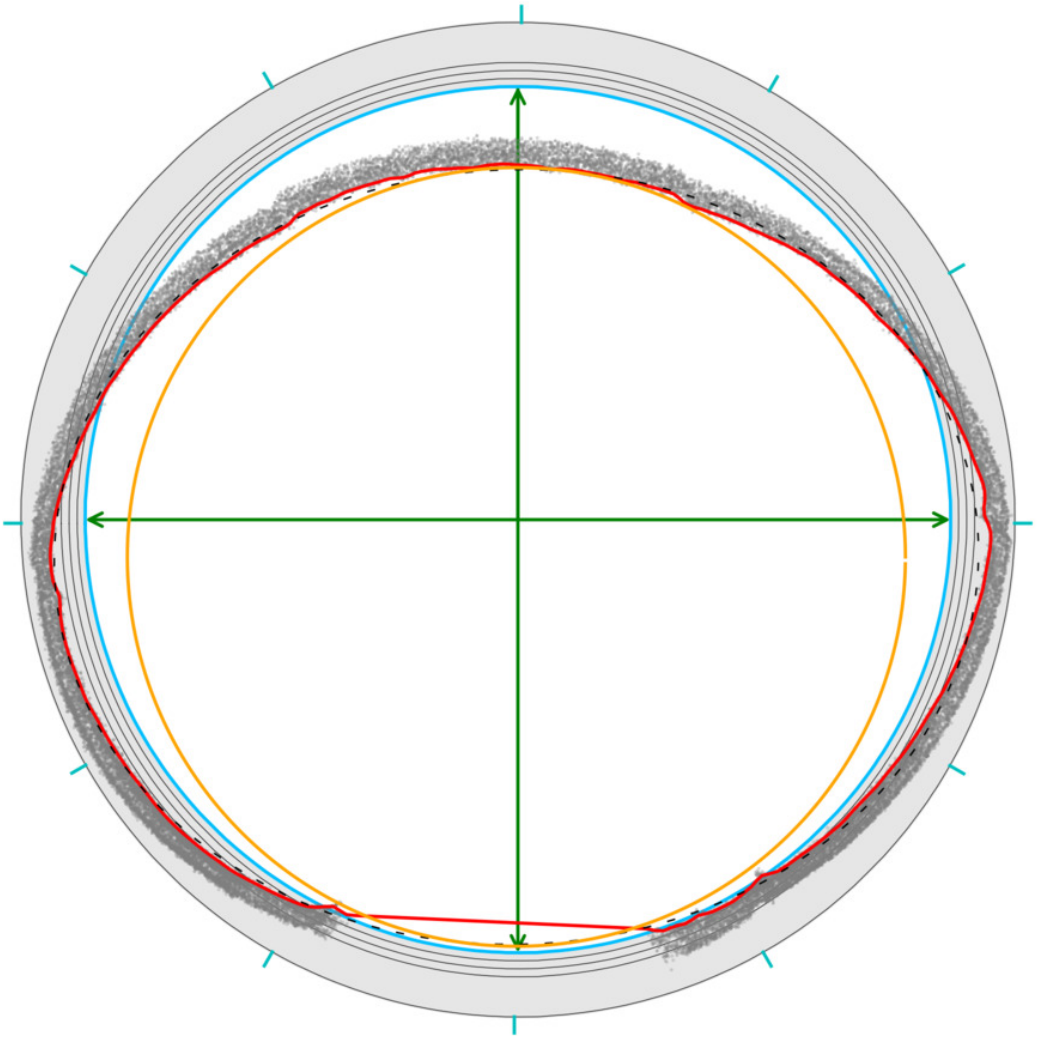
```
Footage   :  316 ft
Width     :  117.4" | 108.0"
Height    :  98.3" | 108.0"

Area      :  8732 sq in
Perimeter :  345.8 in
Ovality   :  8.5%

Interior Diameter : 97.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 317.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



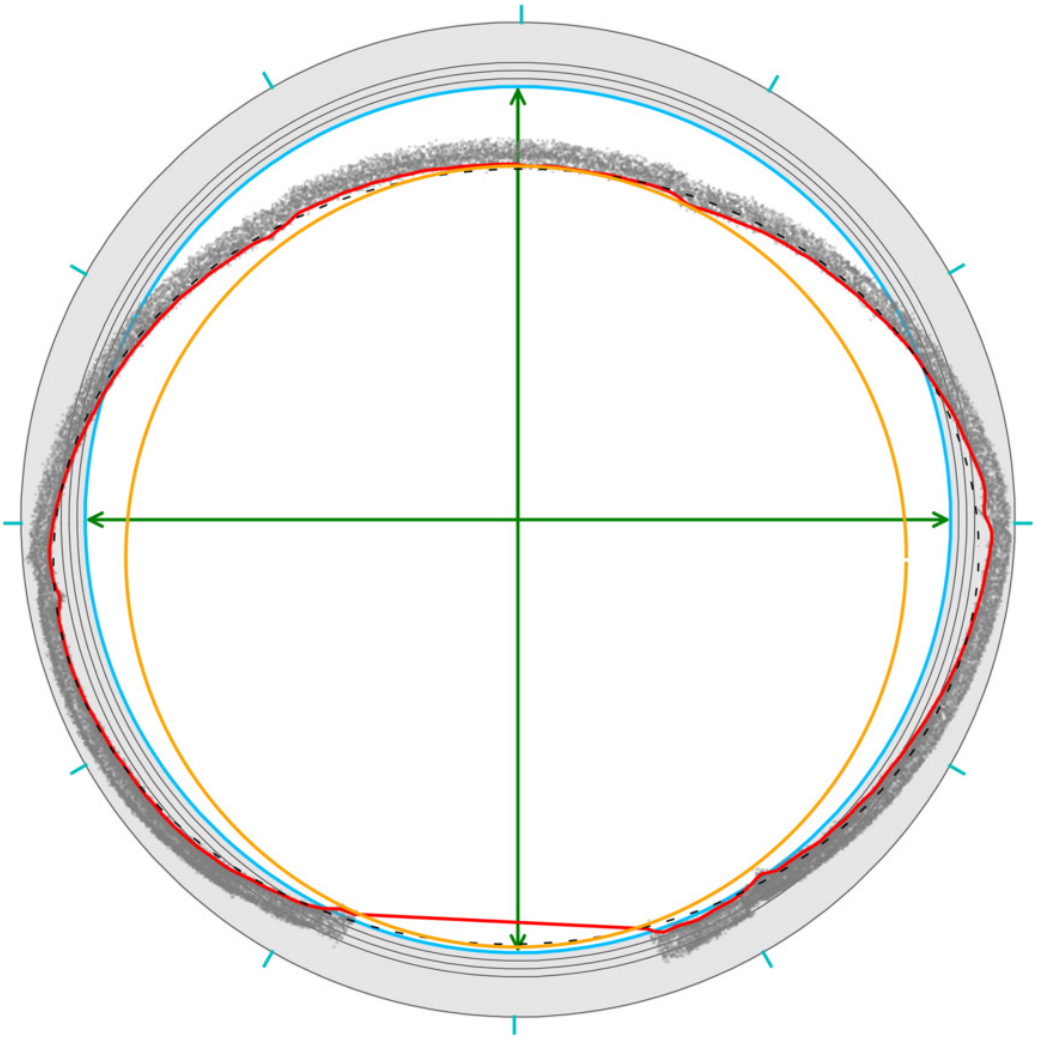
```
Footage   :  317 ft
Width     :  117.4" | 108.0"
Height    :  98.2" | 108.0"

Area      :  8675 sq in
Perimeter :  334.9 in
Ovality   :  8.6%

Interior Diameter : 97.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 318.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



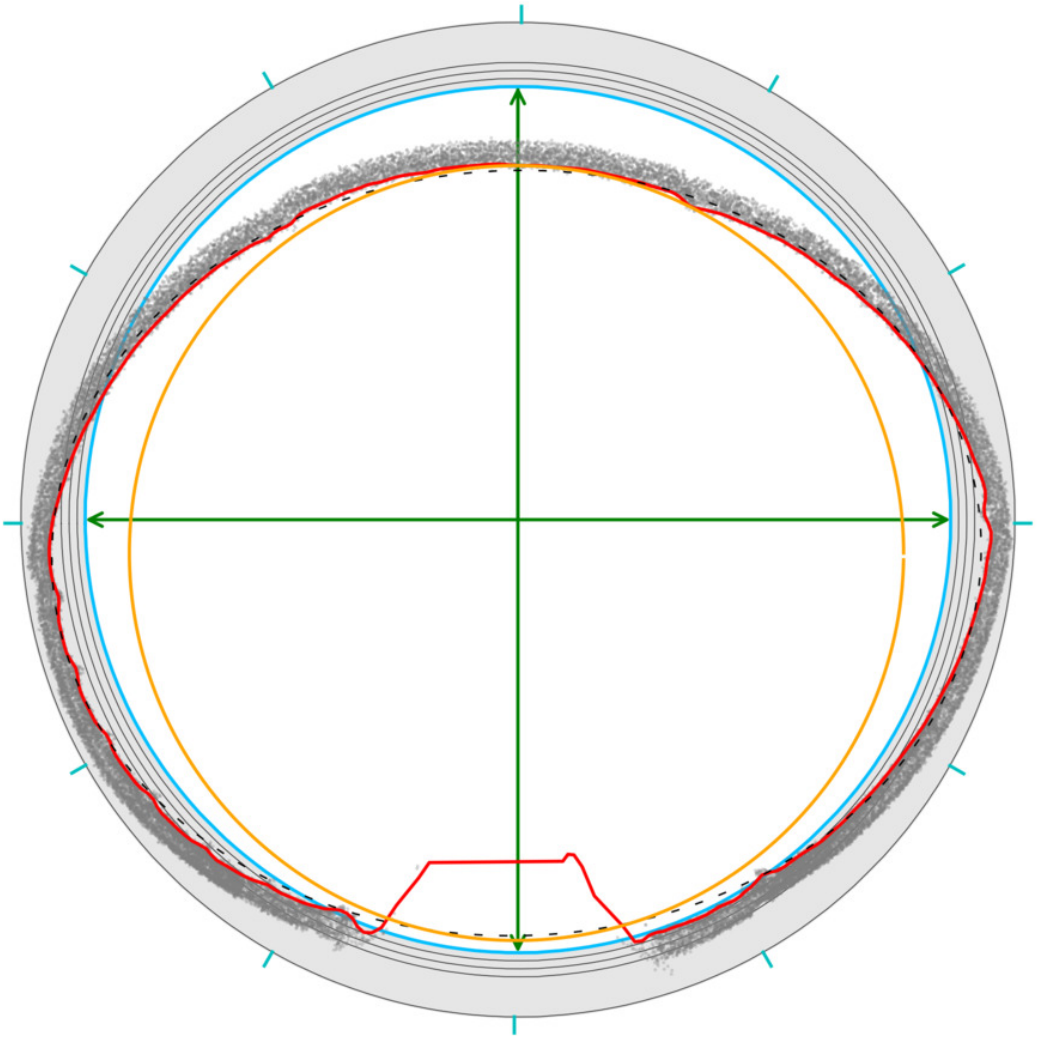
```
Footage   :  318 ft
Width     :  117.6" | 108.0"
Height    :  98.3" | 108.0"

Area      :  8687 sq in
Perimeter :  335.1 in
Ovality   :  8.7%

Interior Diameter : 97.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 319.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



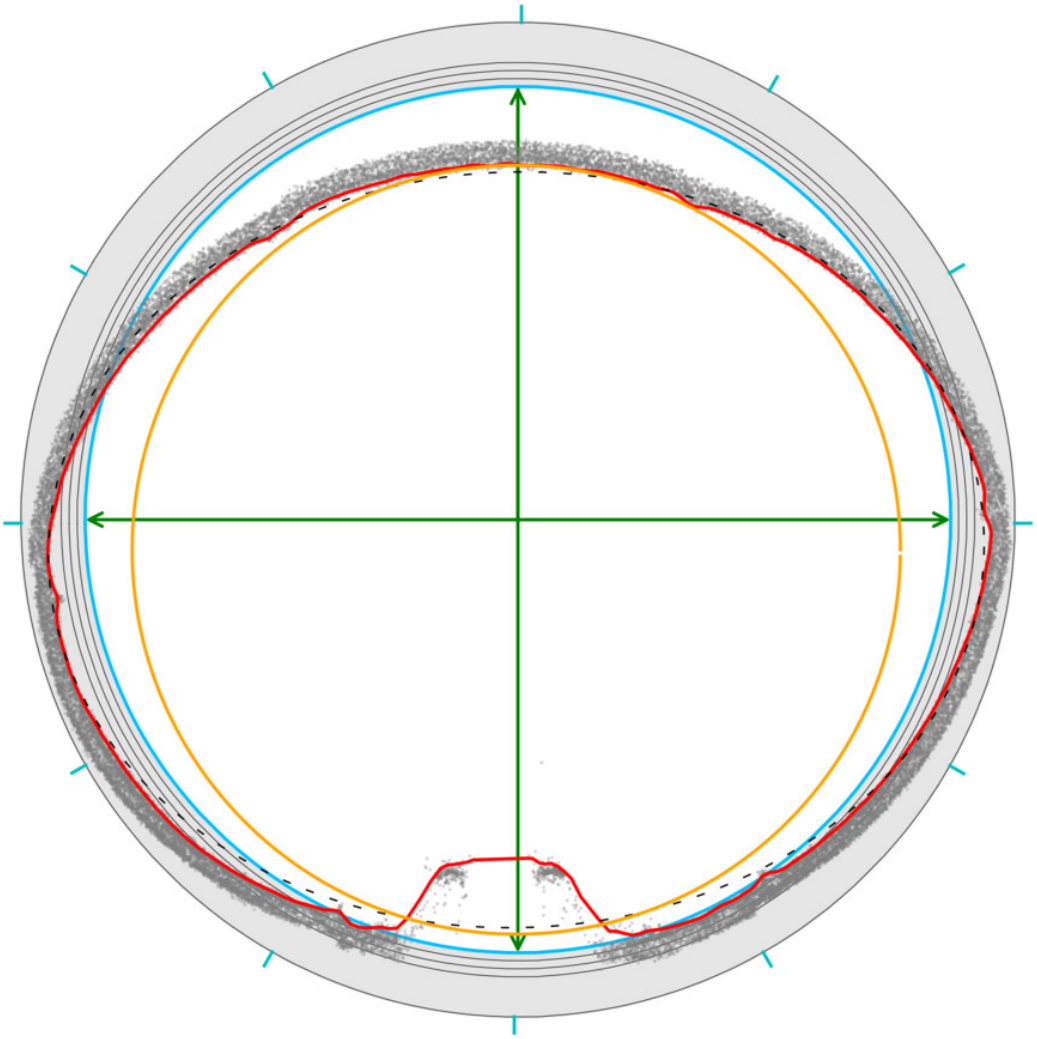
```
Footage   :  319 ft
Width     :  117.5" | 108.0"
Height    :  98.2" | 108.0"

Area      :  8526 sq in
Perimeter :  347.3 in
Ovality   :  9.5%

Interior Diameter : 96.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 320.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



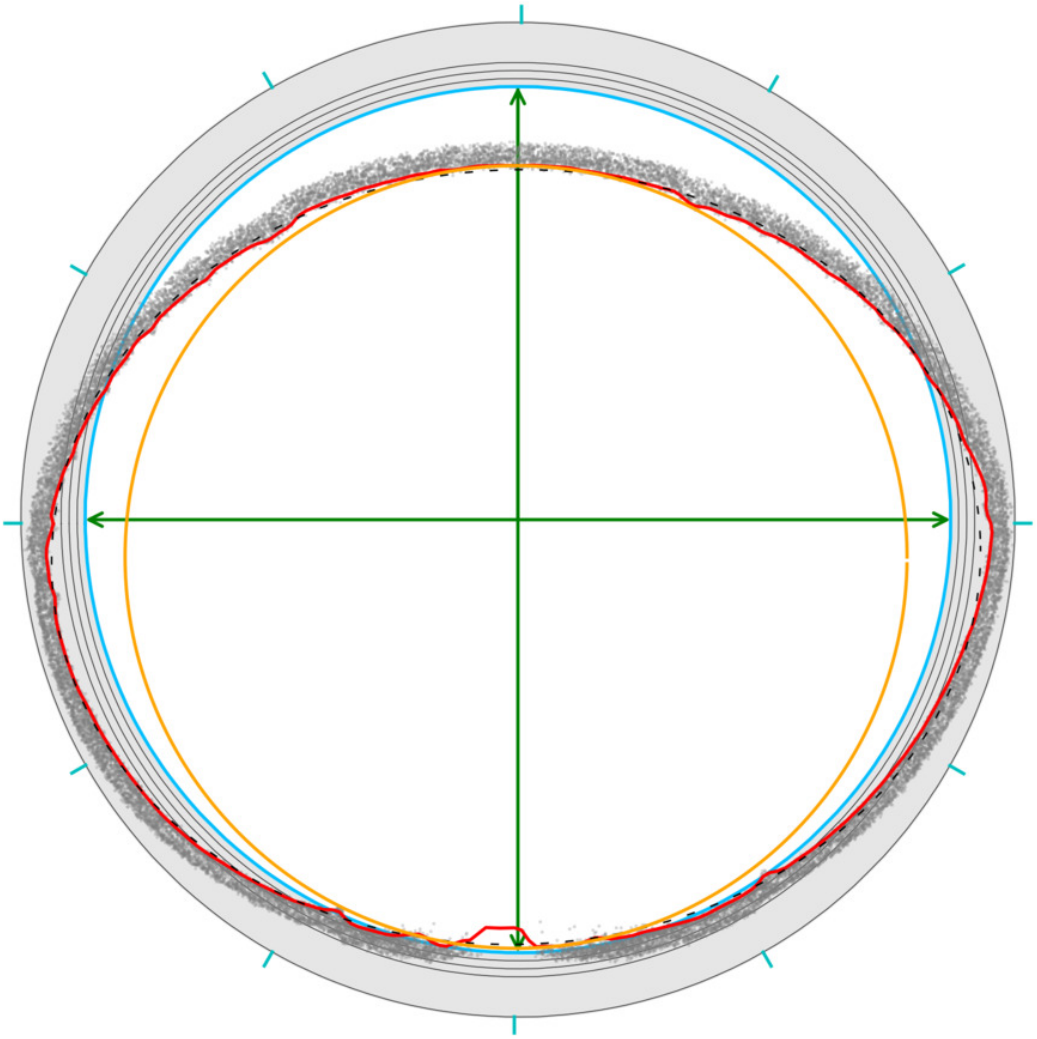
```
Footage   :  320 ft
Width     :  117.8" | 108.0"
Height    :  98.3" | 108.0"

Area      :  8588 sq in
Perimeter :  344.7 in
Ovality   :  10.4%

Interior Diameter : 95.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 321.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



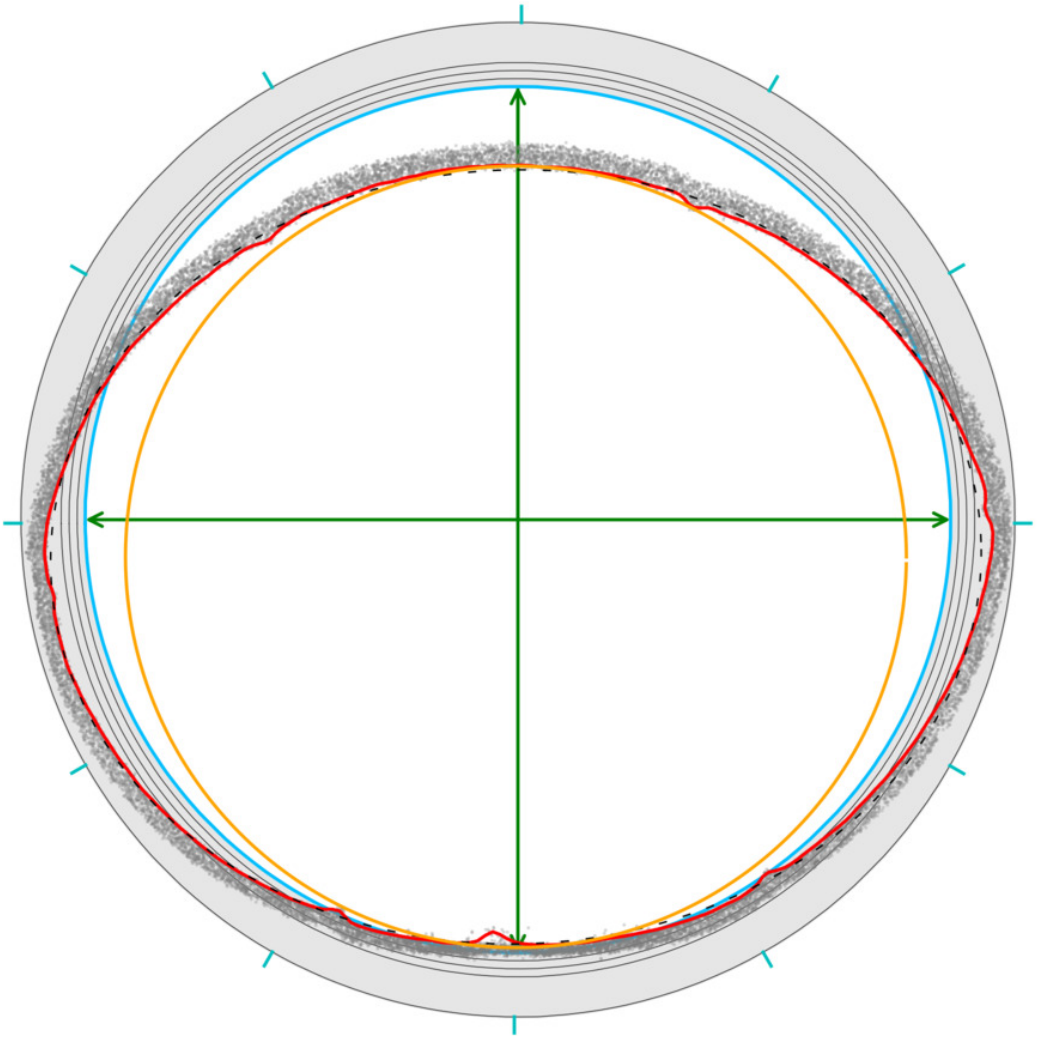
```
Footage   :  321 ft
Width     :  118.0" | 108.0"
Height    :  98.2" | 108.0"

Area      :  8785 sq in
Perimeter :  338.8 in
Ovality   :  8.9%

Interior Diameter : 97.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 322.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



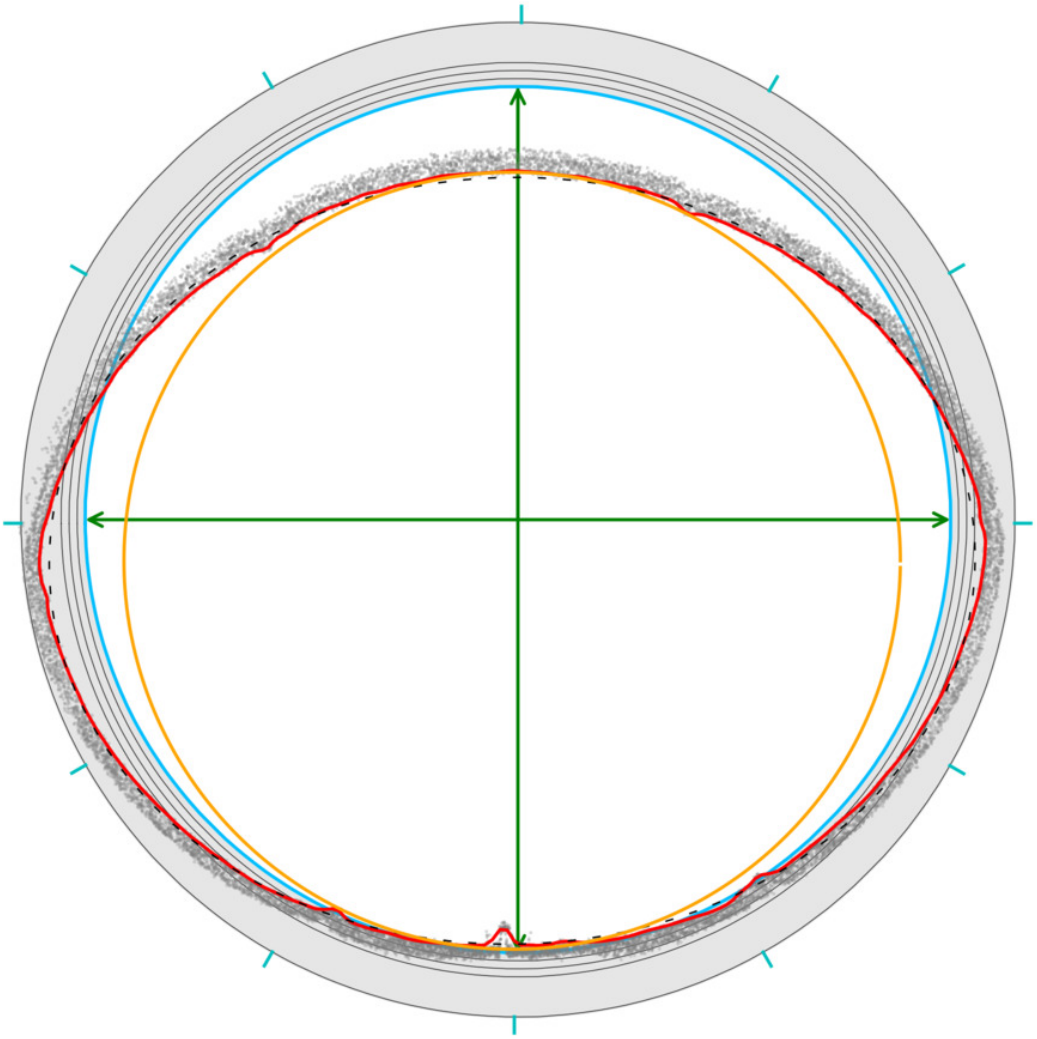
```
Footage   :  322 ft
Width     :  118.3" | 108.0"
Height    :  98.2" | 108.0"

Area      :  8798 sq in
Perimeter :  337.3 in
Ovality   :  9.0%

Interior Diameter : 97.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 323.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



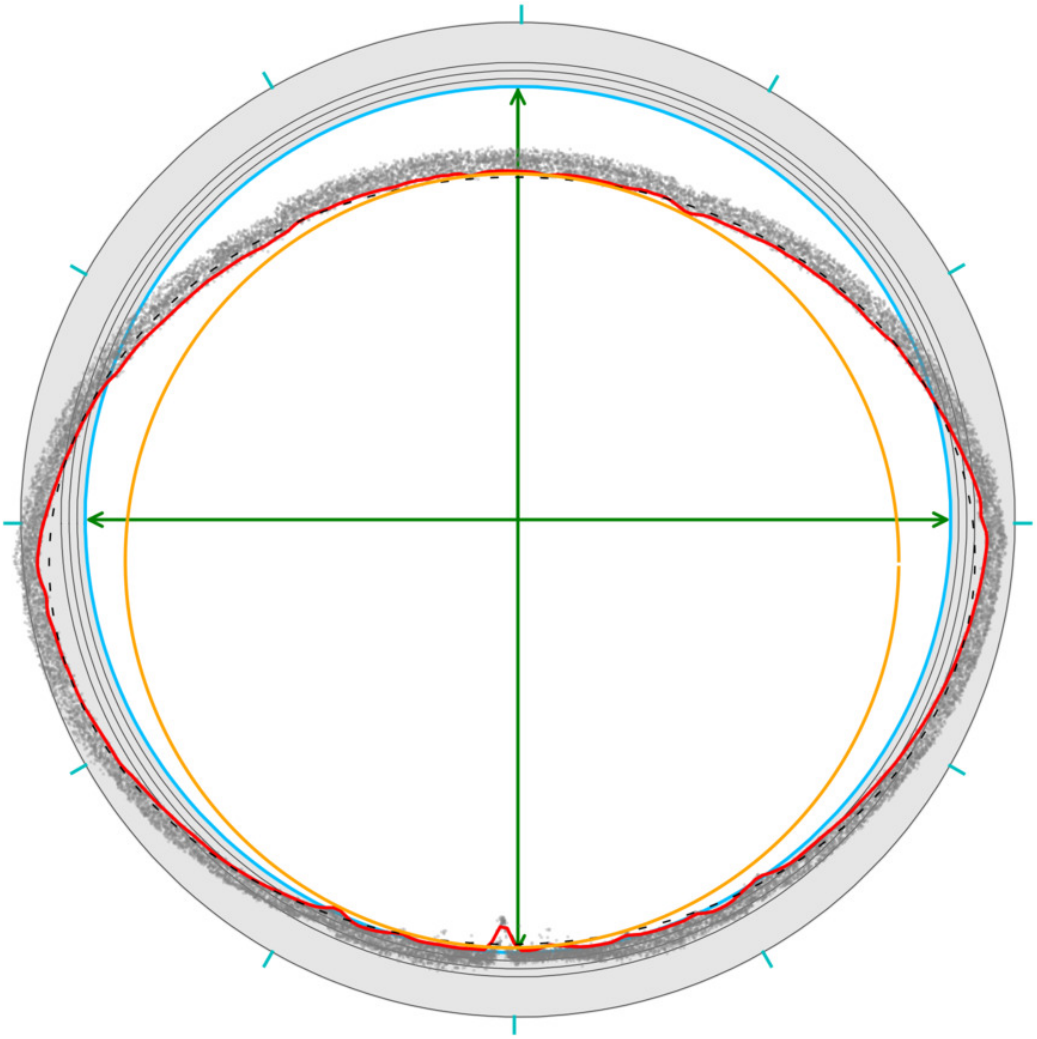
```
Footage   :  323 ft
Width     :  118.1" | 108.0"
Height    :  97.5" | 108.0"

Area      :  8667 sq in
Perimeter :  336.1 in
Ovality   :  9.2%

Interior Diameter : 96.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 324.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



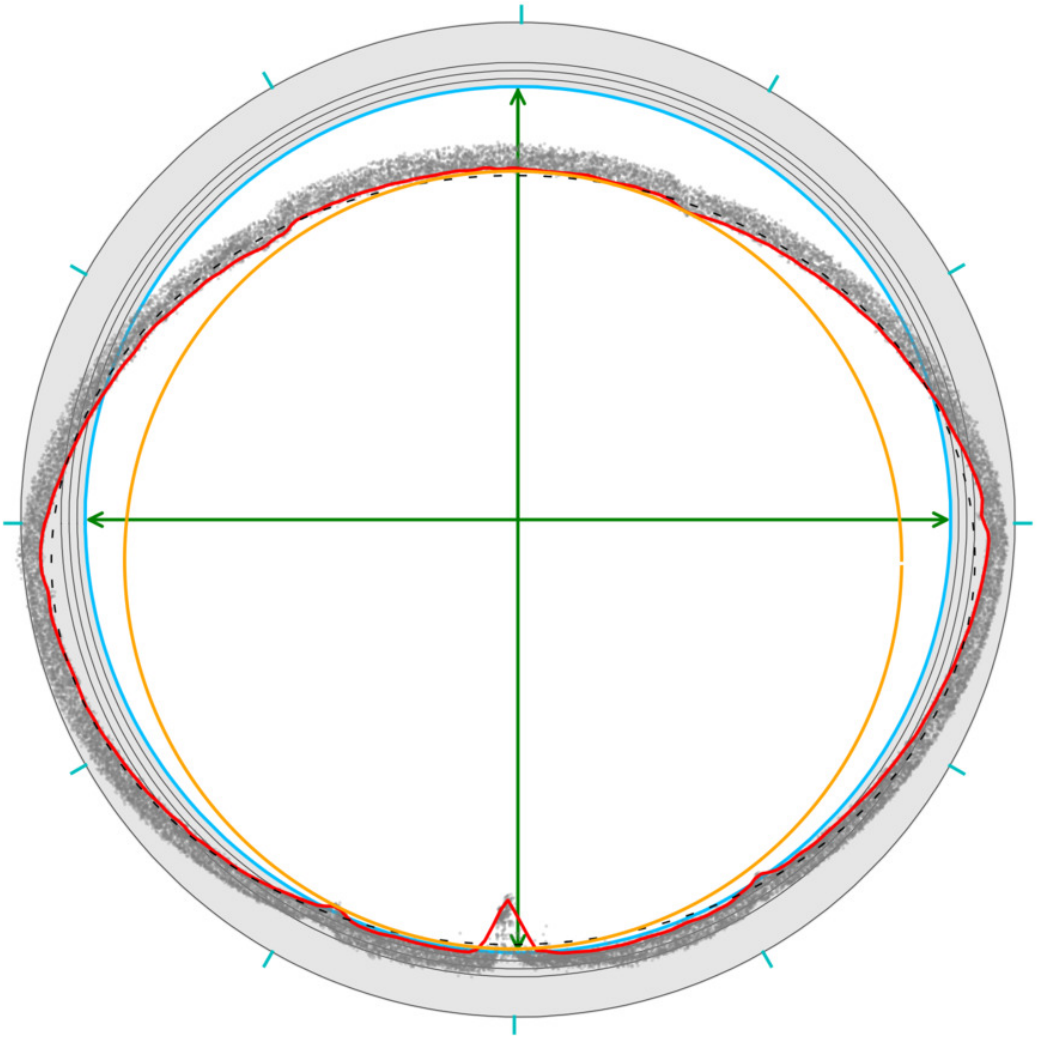
```
Footage   :  324 ft
Width     :  118.5" | 108.0"
Height    :  97.5" | 108.0"

Area      :  8672 sq in
Perimeter :  337.9 in
Ovality   :  9.2%

Interior Diameter : 96.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 325.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



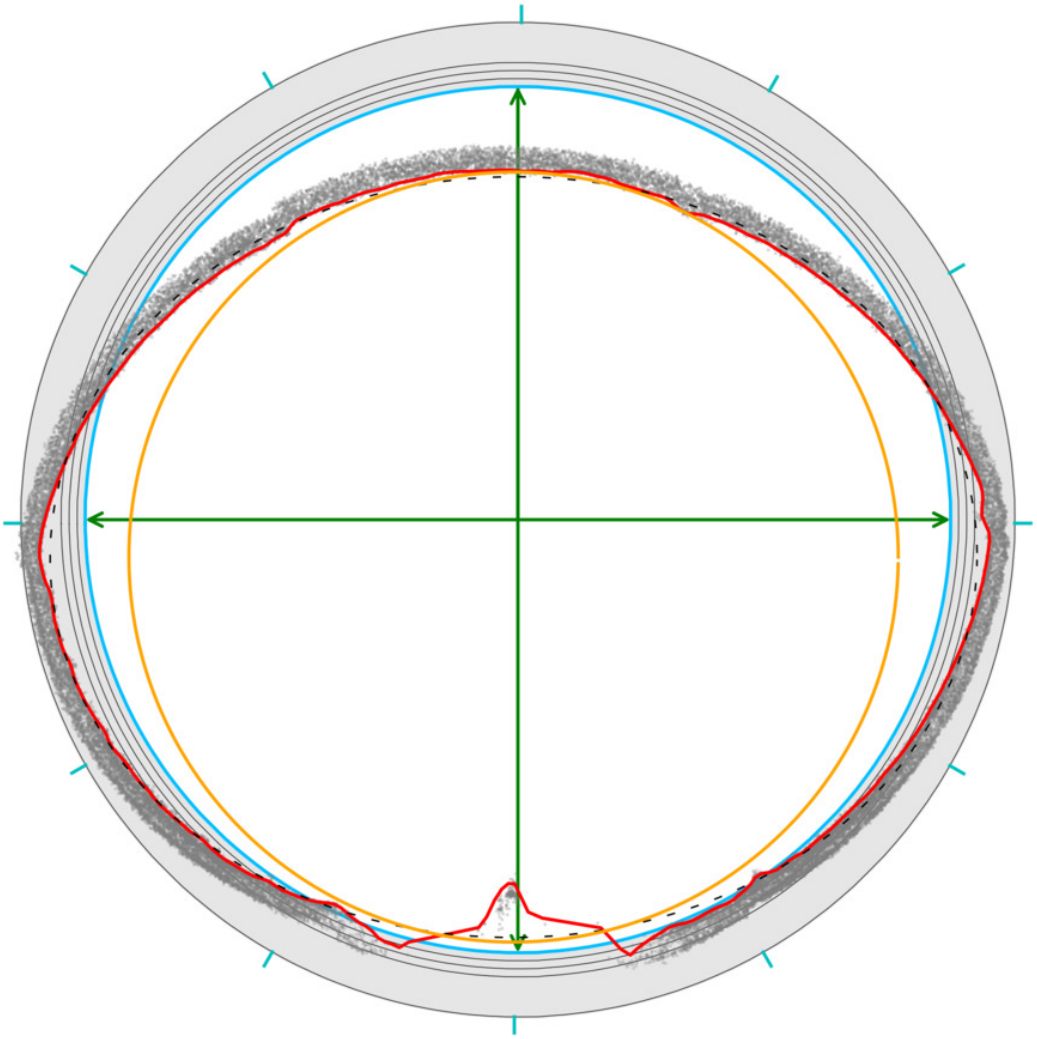
```
Footage    :  325 ft
Width      :  118.3" | 108.0"
Height     :  97.8" | 108.0"

Area       :  8670 sq in
Perimeter  :  342.1 in
Ovality    :  8.9%

Interior Diameter : 97.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 326.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



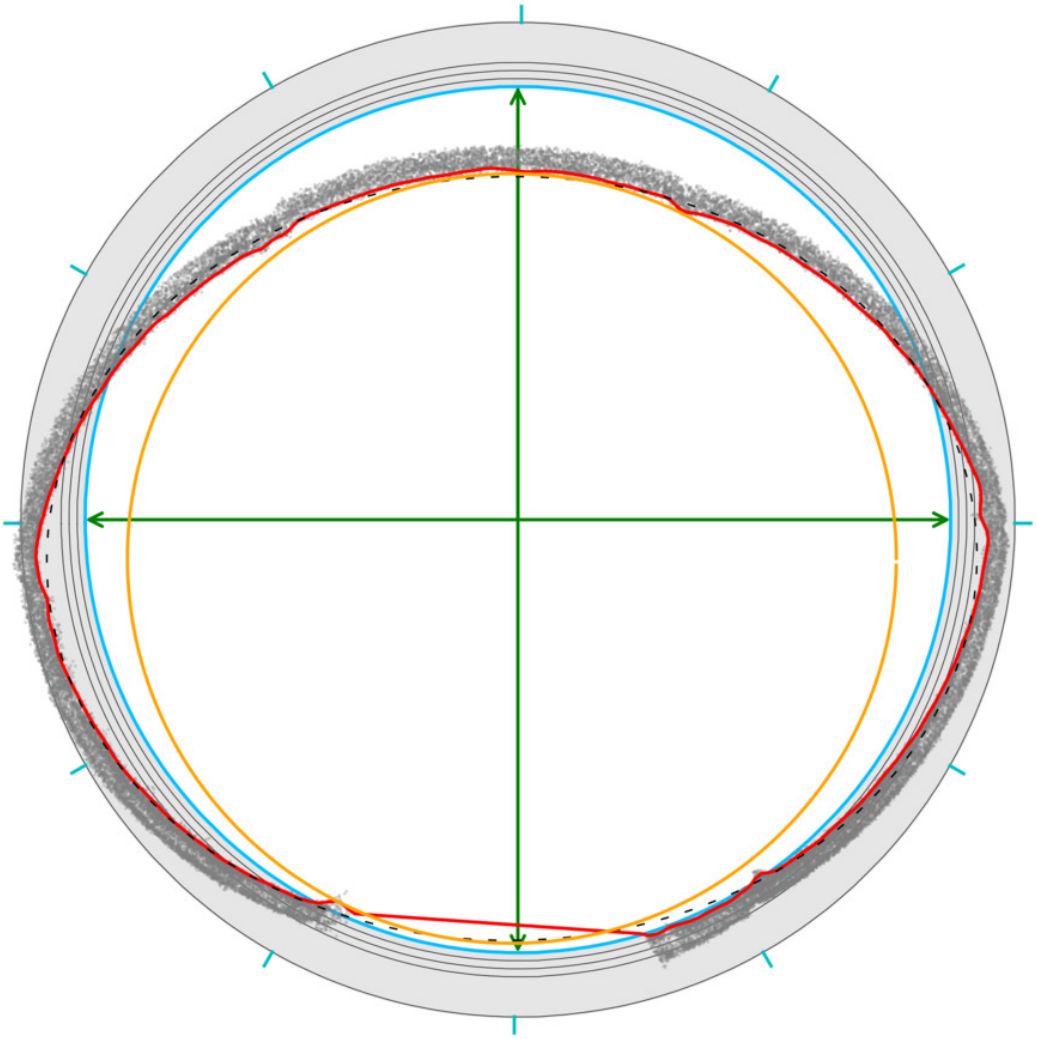
```
Footage    :  326 ft
Width      :  118.5" | 108.0"
Height     :  97.5" | 108.0"

Area       :  8603 sq in
Perimeter  :  343.3 in
Ovality    :  9.6%

Interior Diameter : 96.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 327.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



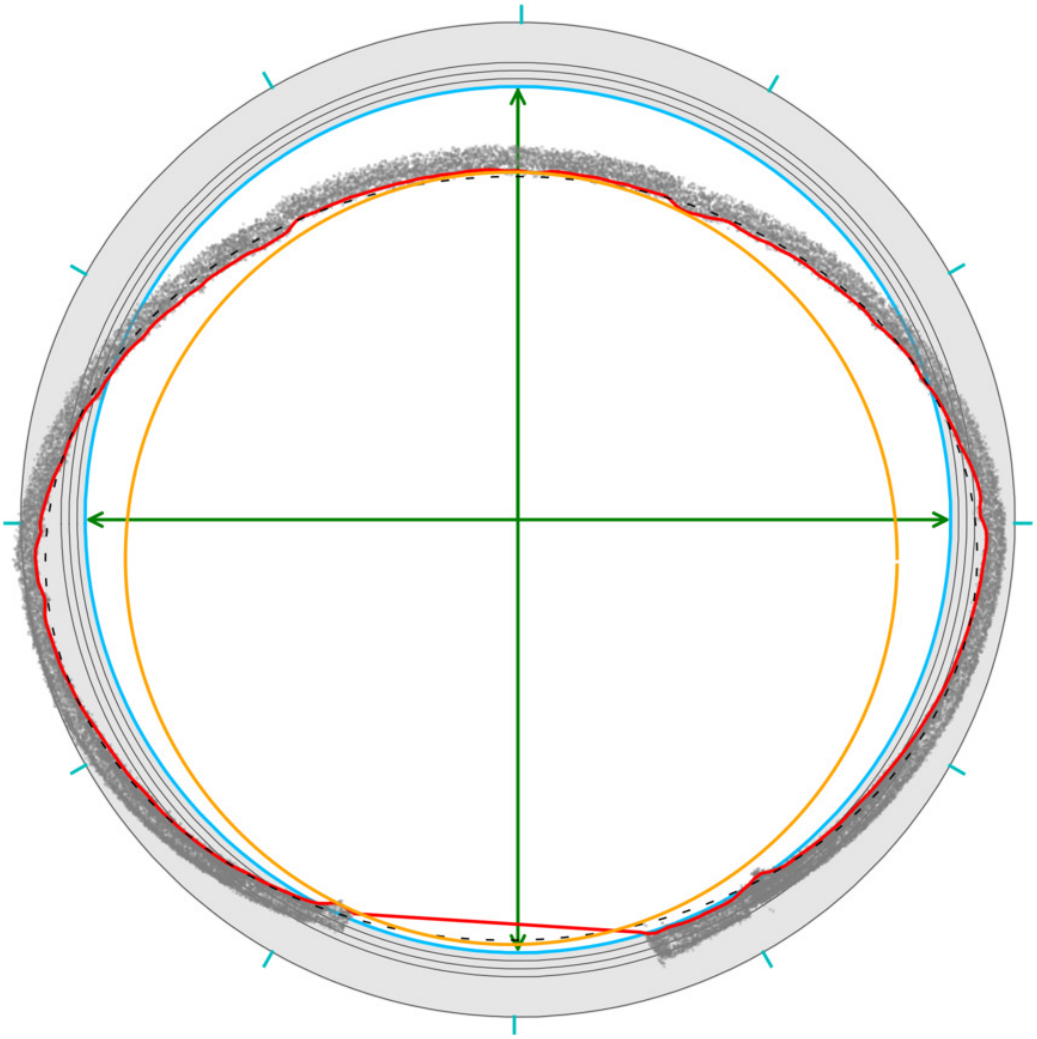
```
Footage   :  327 ft
Width     :  118.8" | 108.0"
Height    :  97.5" | 108.0"

Area      :  8628 sq in
Perimeter :  334.8 in
Ovality   :  9.6%

Interior Diameter : 96.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 328.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



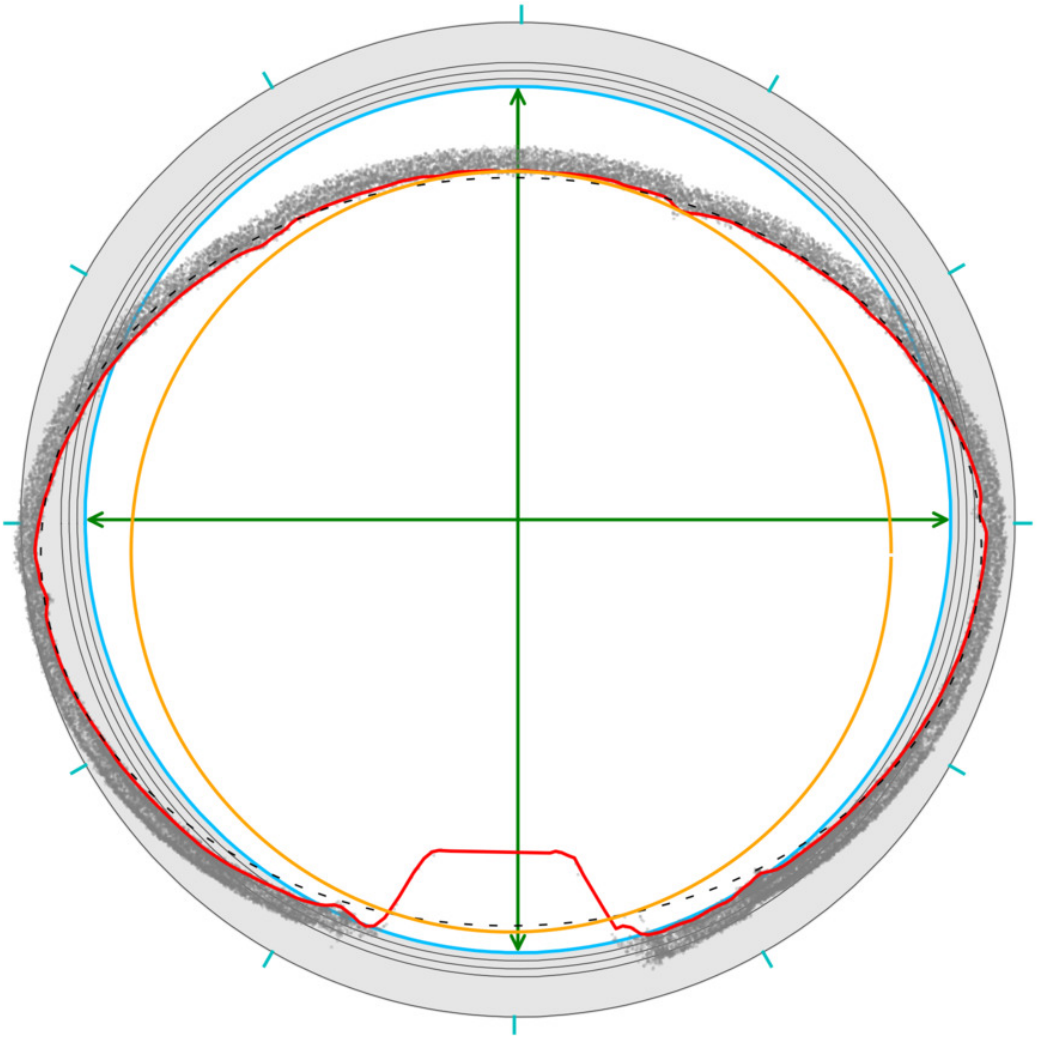
```
Footage   :  328 ft
Width     :  118.7" | 108.0"
Height    :  97.5" | 108.0"

Area      :  8641 sq in
Perimeter :  335.0 in
Ovality   :  9.7%

Interior Diameter : 96.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 329.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



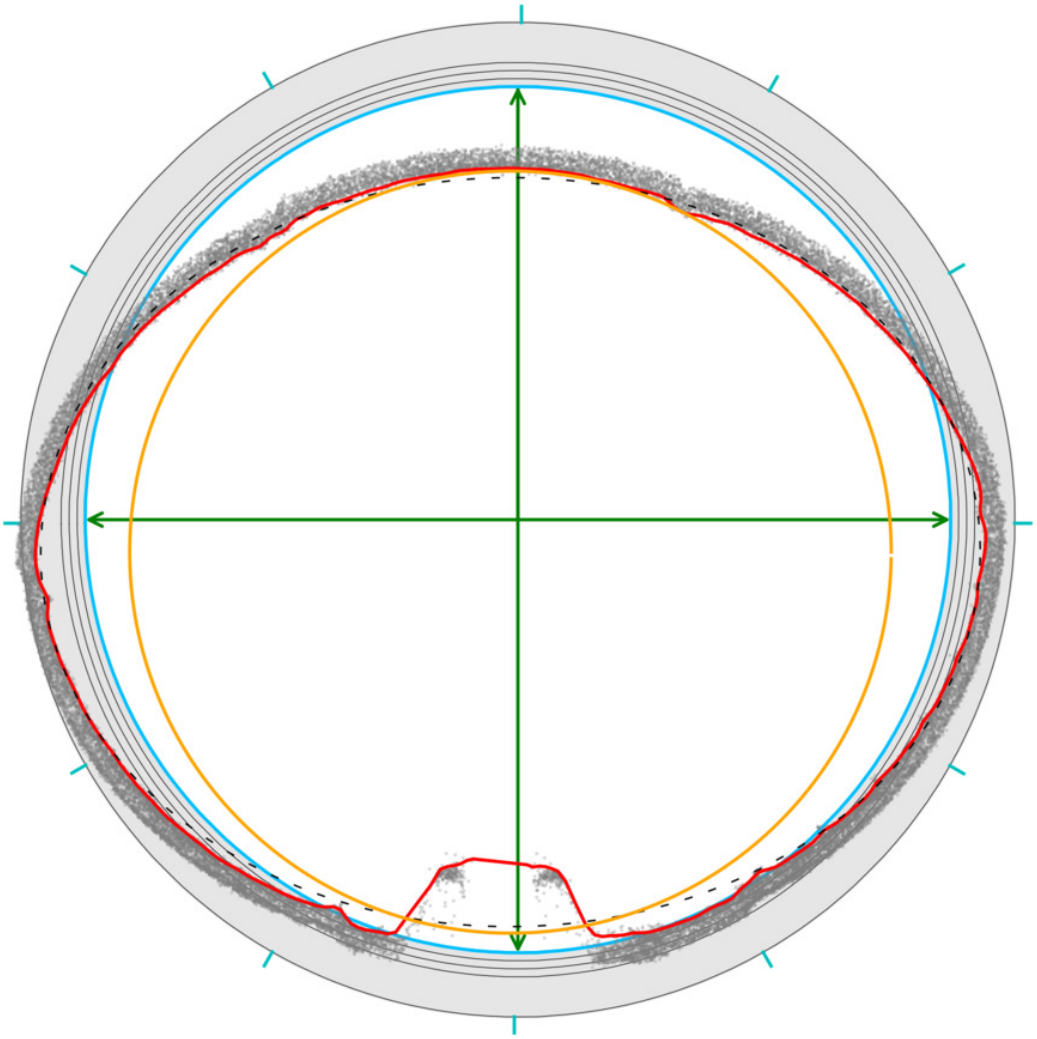
```
Footage   :  329 ft
Width     :  118.7" | 108.0"
Height    :  97.5" | 108.0"

Area      :  8474 sq in
Perimeter :  346.1 in
Ovality   :  11.1%

Interior Diameter : 94.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 330.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



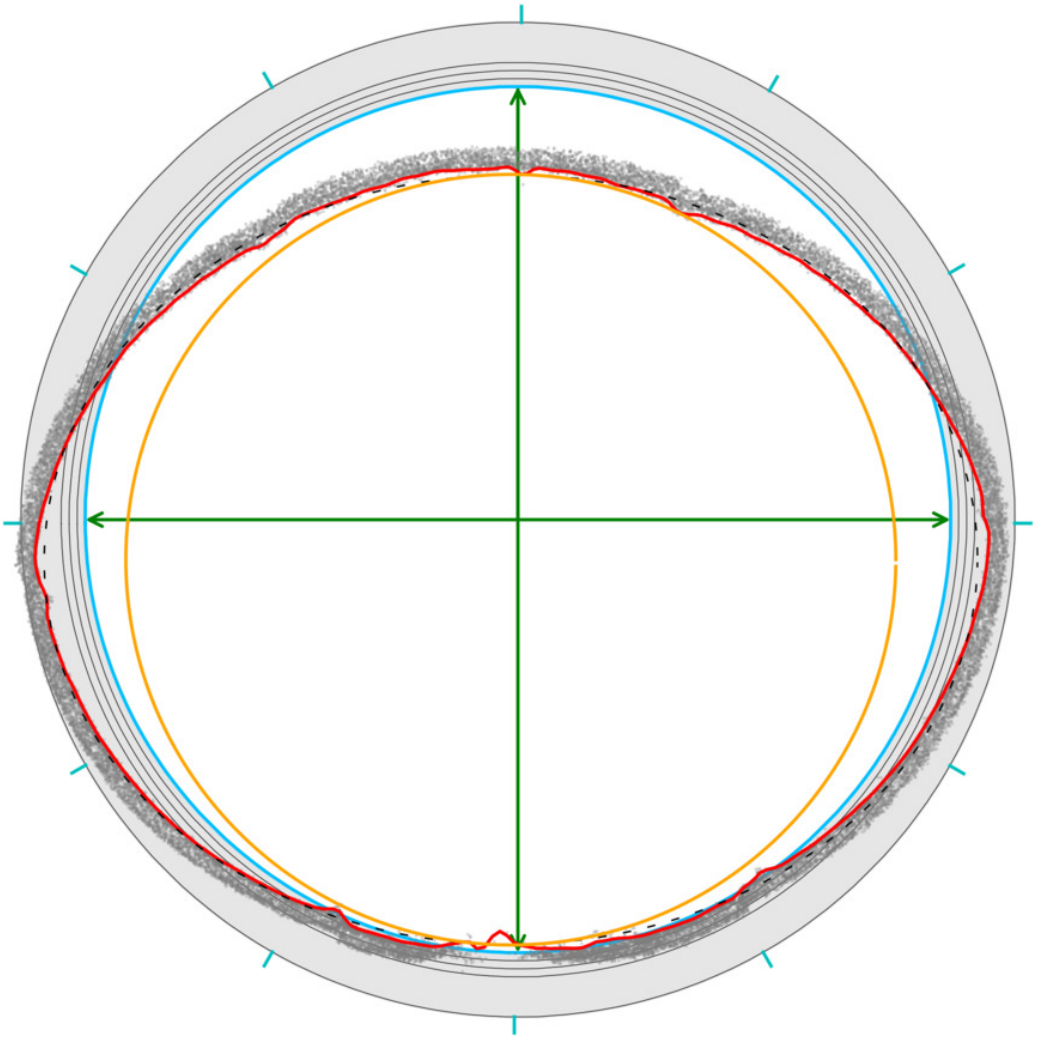
```
Footage   :  330 ft
Width     :  118.6" | 108.0"
Height    :  97.8" | 108.0"

Area      :  8545 sq in
Perimeter :  345.3 in
Ovality   :  11.0%

Interior Diameter : 95.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 331.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



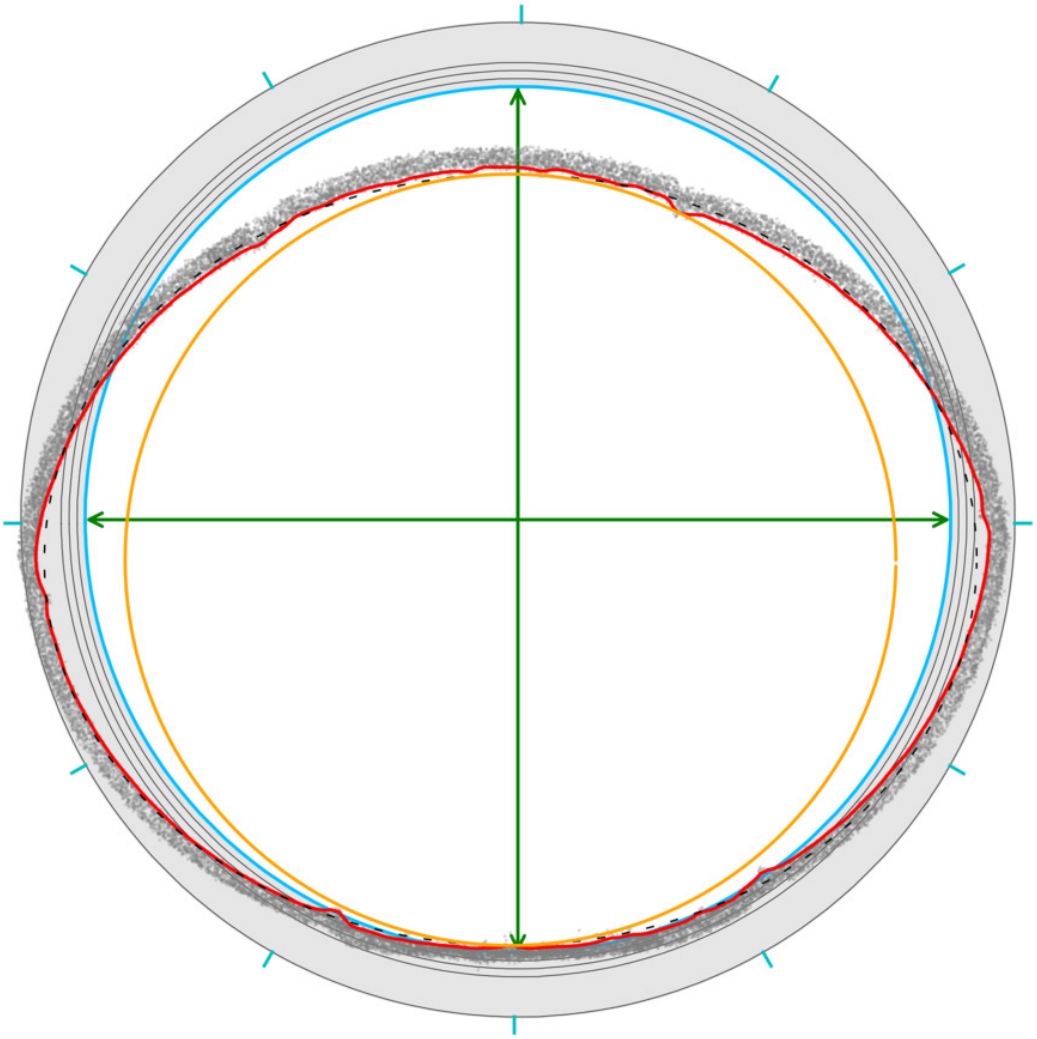
```
Footage    :  331 ft
Width      :  119.0" | 108.0"
Height     :  97.5" | 108.0"

Area       :  8771 sq in
Perimeter  :  339.2 in
Ovality    :  9.4%

Interior Diameter : 96.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 332.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



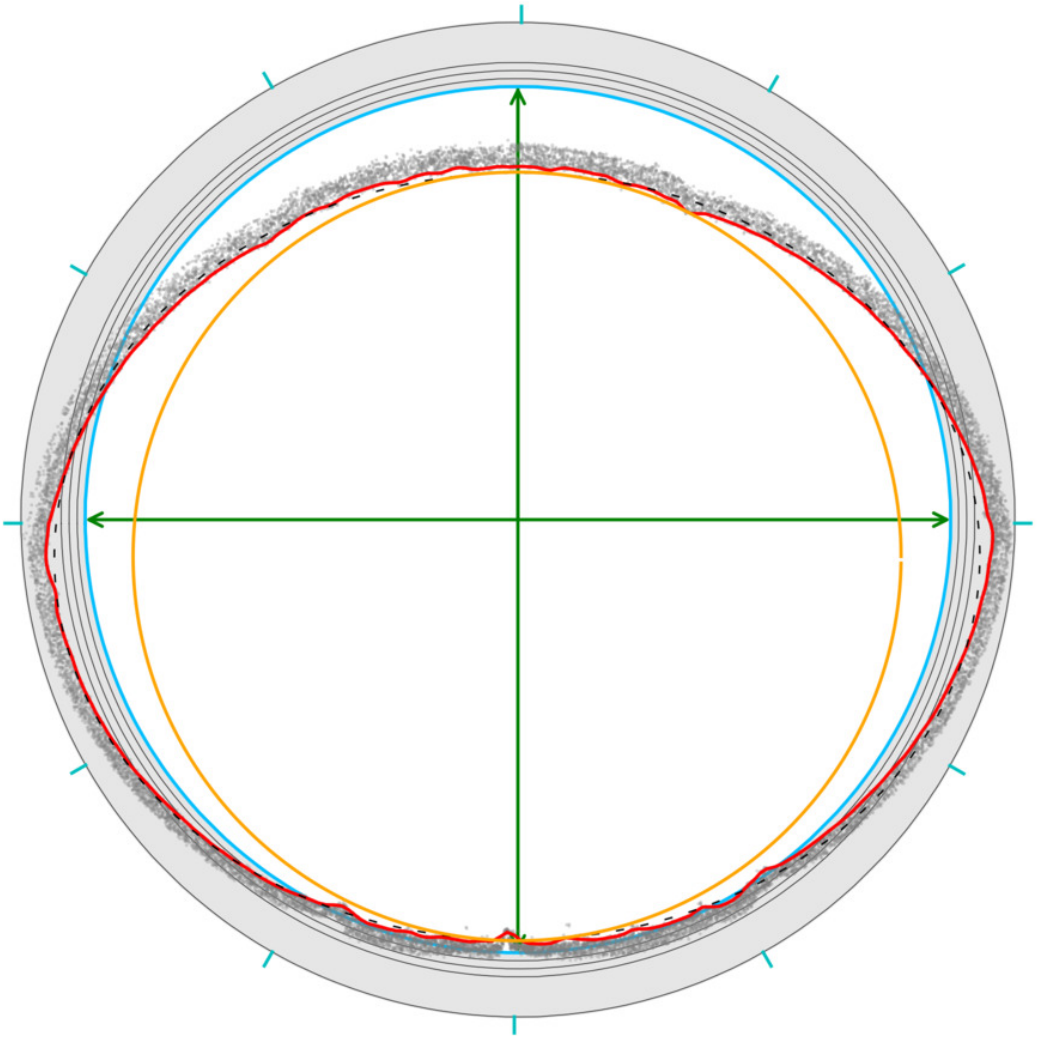
```
Footage    :  332 ft
Width      :  119.0" | 108.0"
Height     :  97.9" | 108.0"

Area       :  8780 sq in
Perimeter  :  337.0 in
Ovality    :  9.2%

Interior Diameter : 96.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 333.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



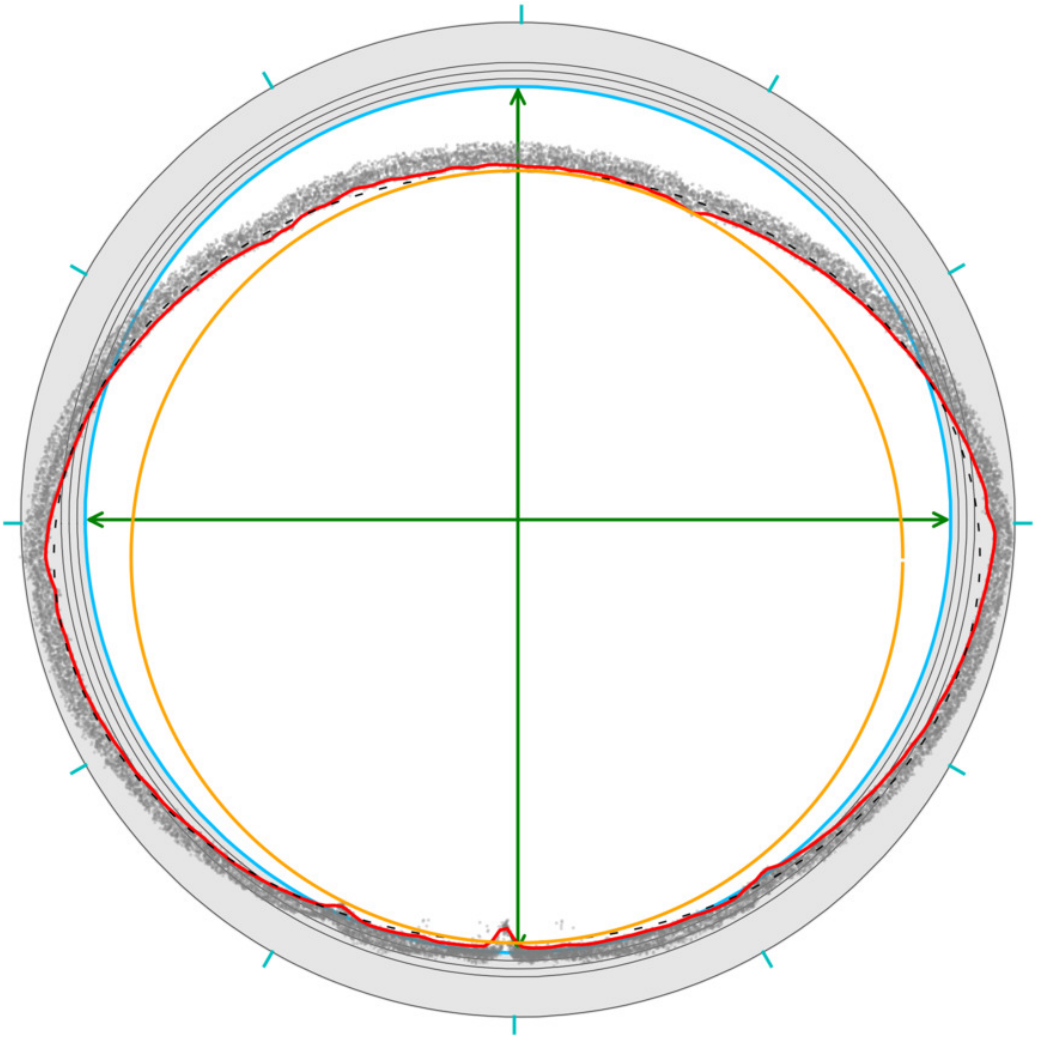
```
Footage   :  333 ft
Width     :  118.1" | 108.0"
Height    :  98.0" | 108.0"

Area      :  8668 sq in
Perimeter :  335.7 in
Ovality   :  9.1%

Interior Diameter : 95.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 334.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



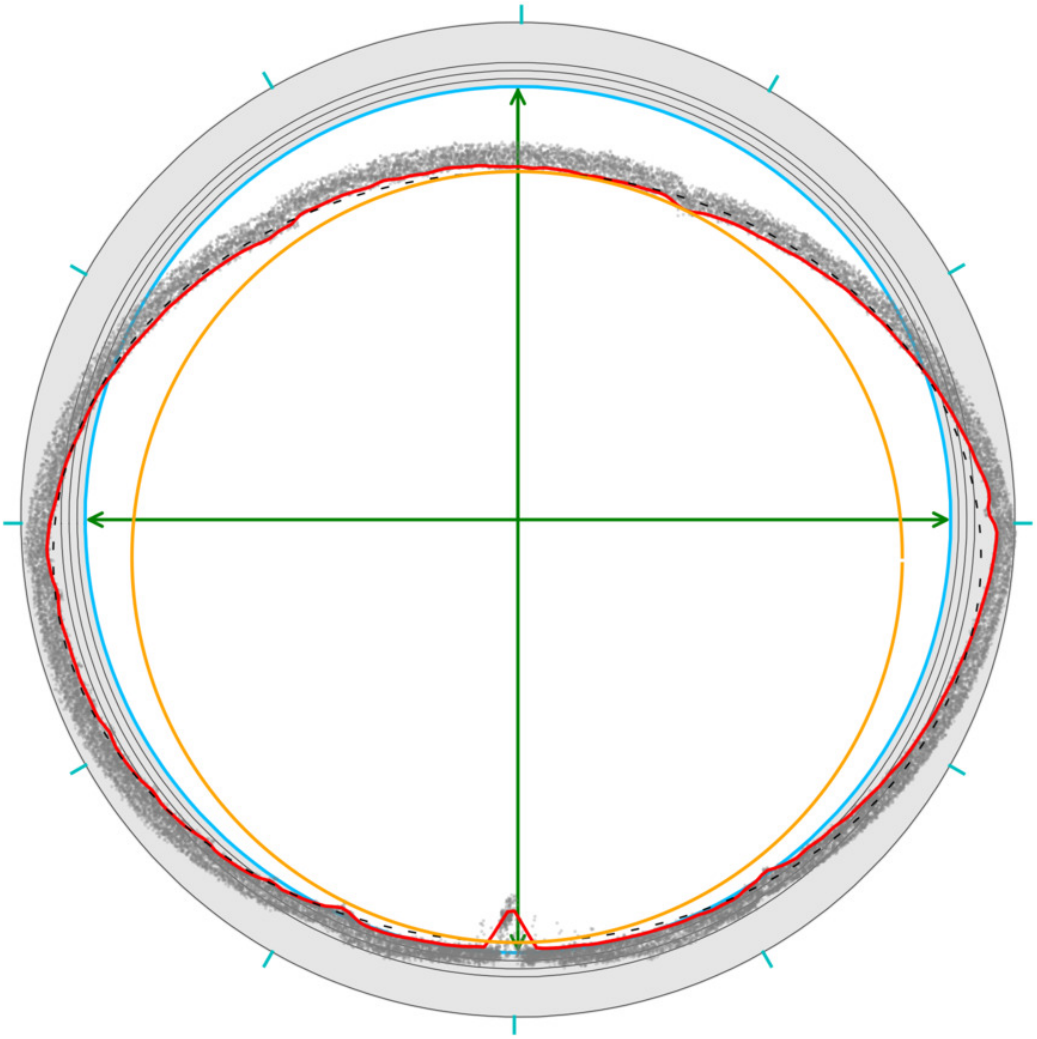
```
Footage    :  334 ft
Width      :  118.4" | 108.0"
Height     :  98.1" | 108.0"

Area       :  8711 sq in
Perimeter  :  337.2 in
Ovality    :  9.0%

Interior Diameter : 96.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 335.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



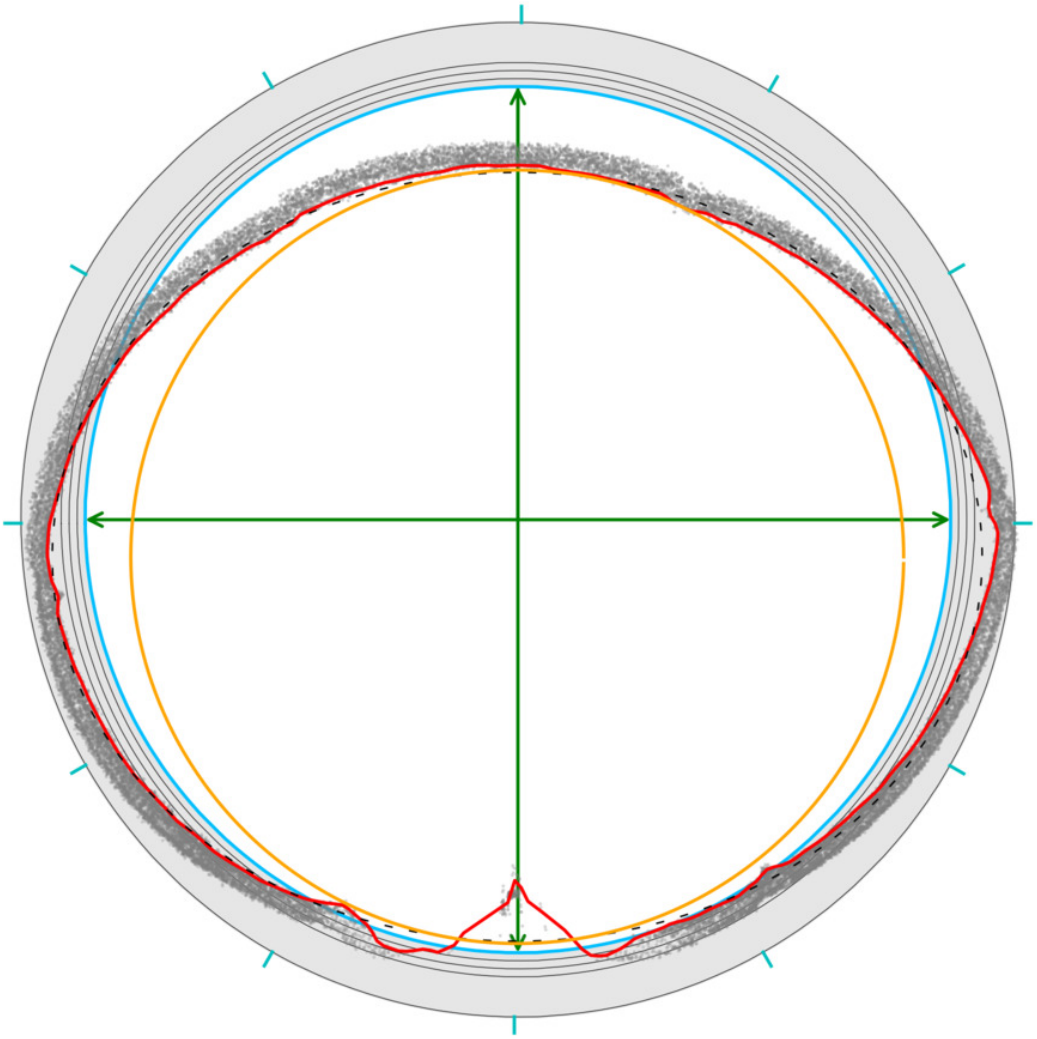
```
Footage   :  335 ft
Width     :  118.5" | 108.0"
Height    :  98.0" | 108.0"

Area      :  8726 sq in
Perimeter :  340.8 in
Ovality   :  9.1%

Interior Diameter : 96.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 336.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



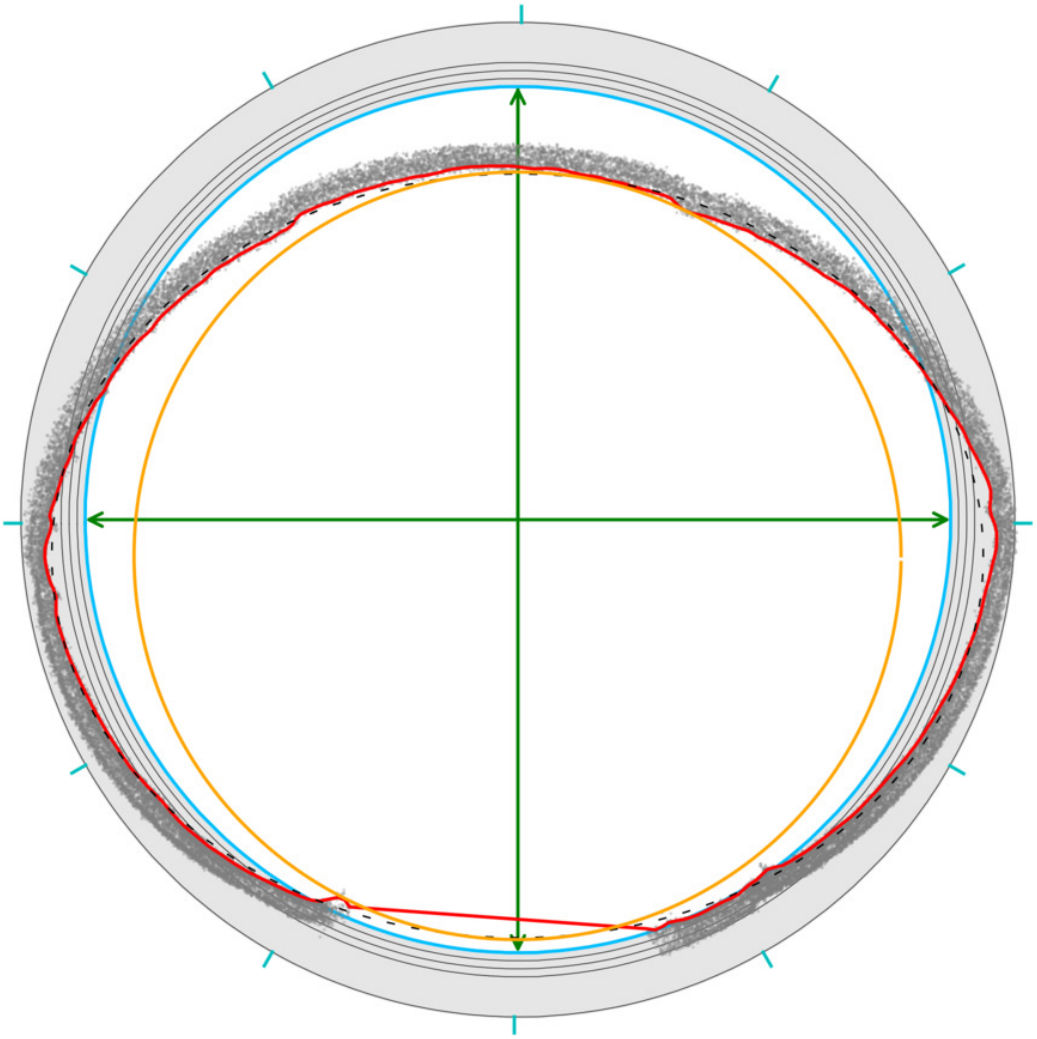
```
Footage   :  336 ft
Width     :  118.6" | 108.0"
Height    :  98.2" | 108.0"

Area      :  8713 sq in
Perimeter :  345.8 in
Ovality   :  9.3%

Interior Diameter : 96.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 337.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



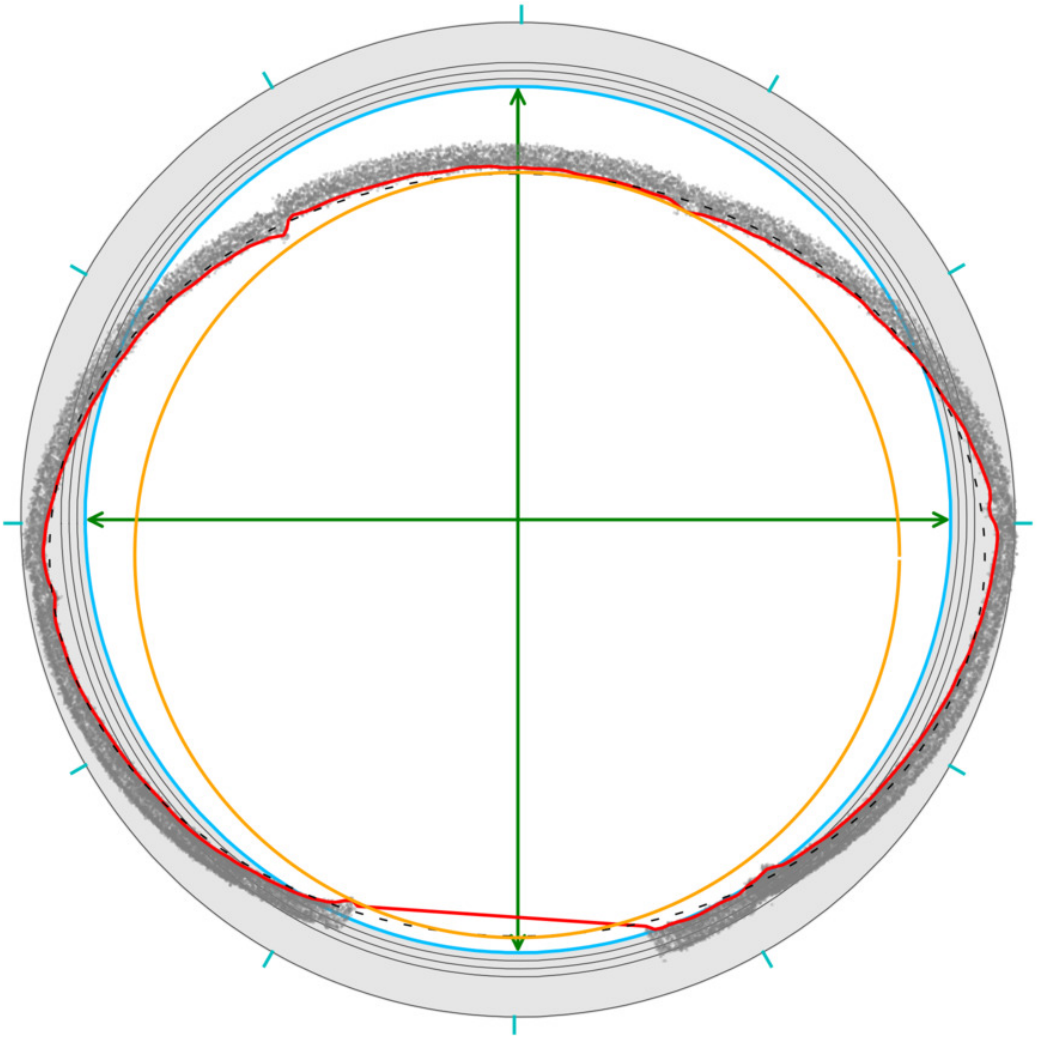
```
Footage   :  337 ft
Width     :  118.8" | 108.0"
Height    :  98.0" | 108.0"

Area      :  8627 sq in
Perimeter :  335.3 in
Ovality   :  9.6%

Interior Diameter : 95.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 338.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



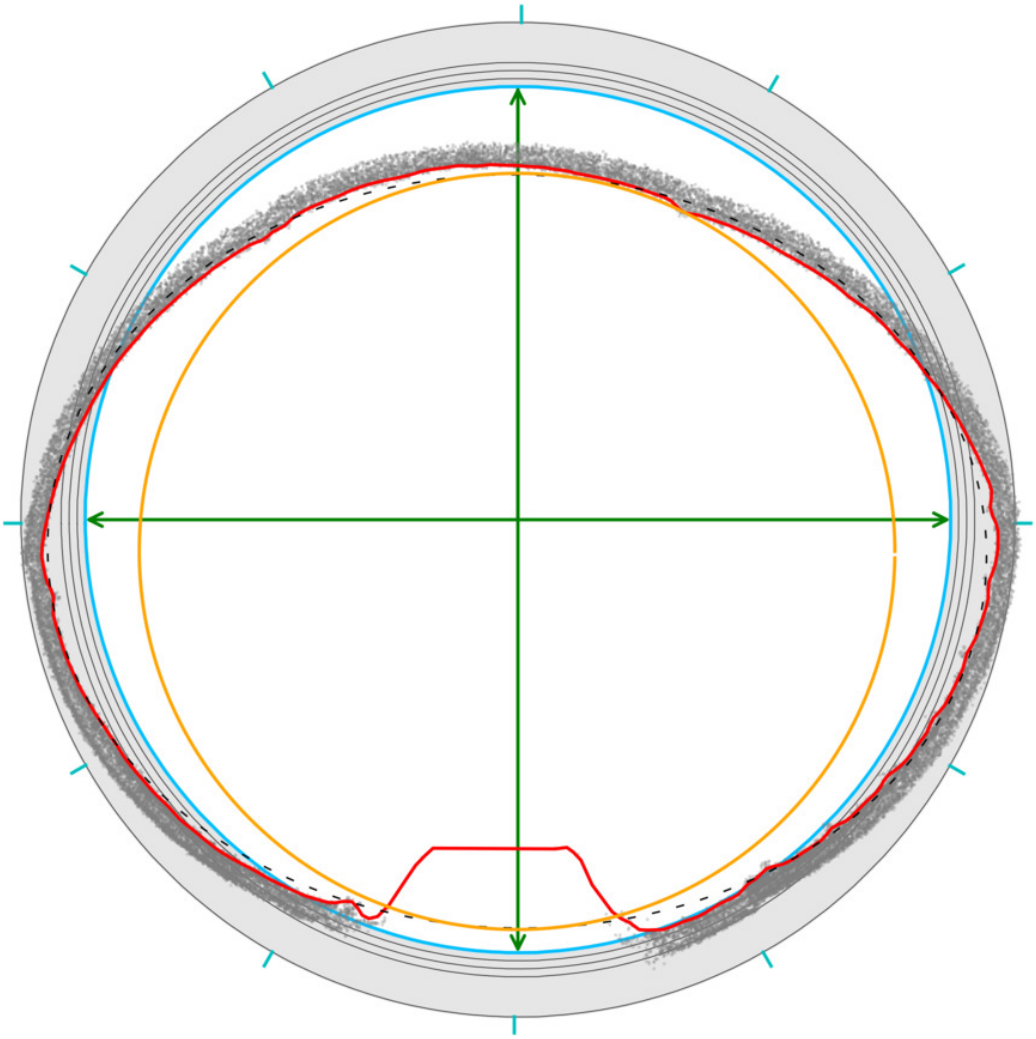
```
Footage   :  338 ft
Width     :  119.1" | 108.0"
Height    :  97.9" | 108.0"

Area      :  8647 sq in
Perimeter :  336.0 in
Ovality   :  9.9%

Interior Diameter : 95.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 339.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



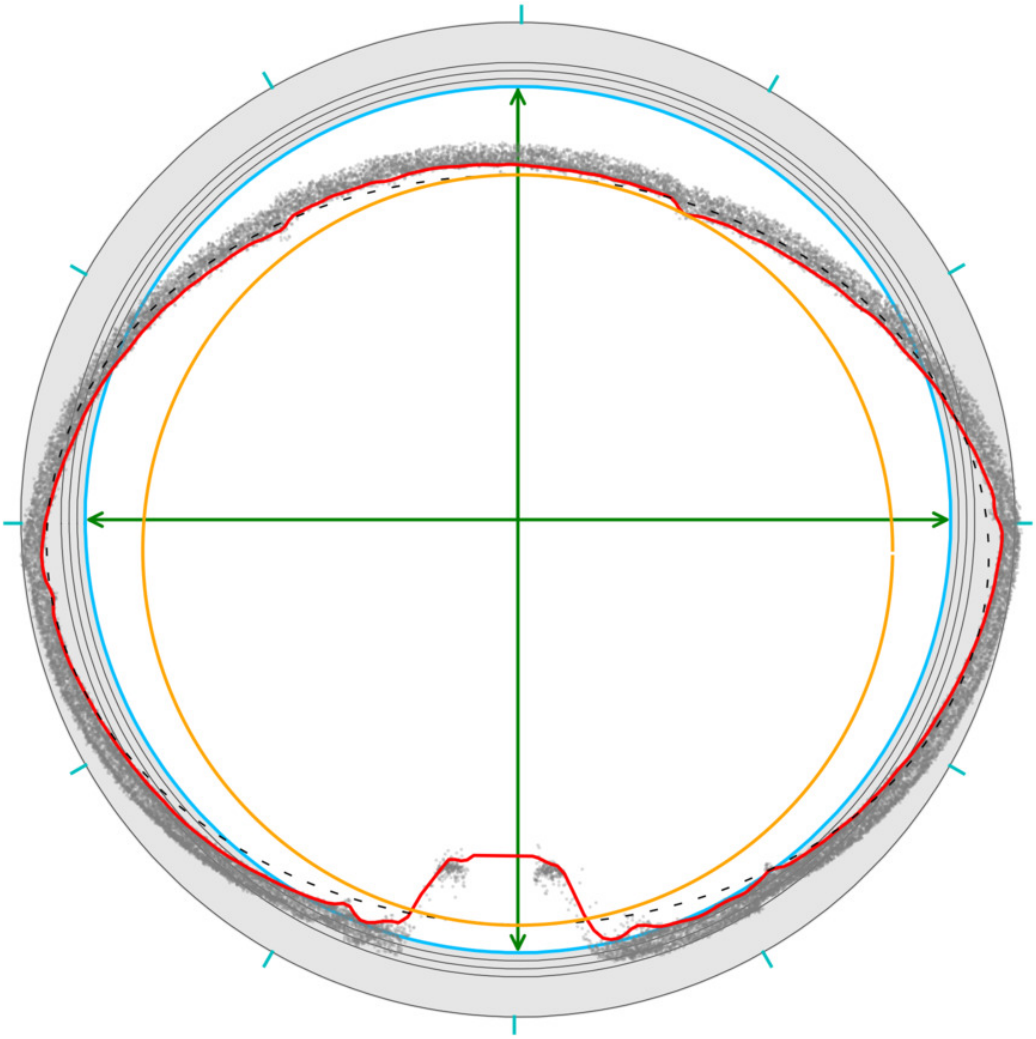
```
Footage   :  339 ft
Width     :  119.3" | 108.0"
Height    :  98.1" | 108.0"

Area      :  8460 sq in
Perimeter :  345.5 in
Ovality   :  10.7%

Interior Diameter : 94.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 340.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



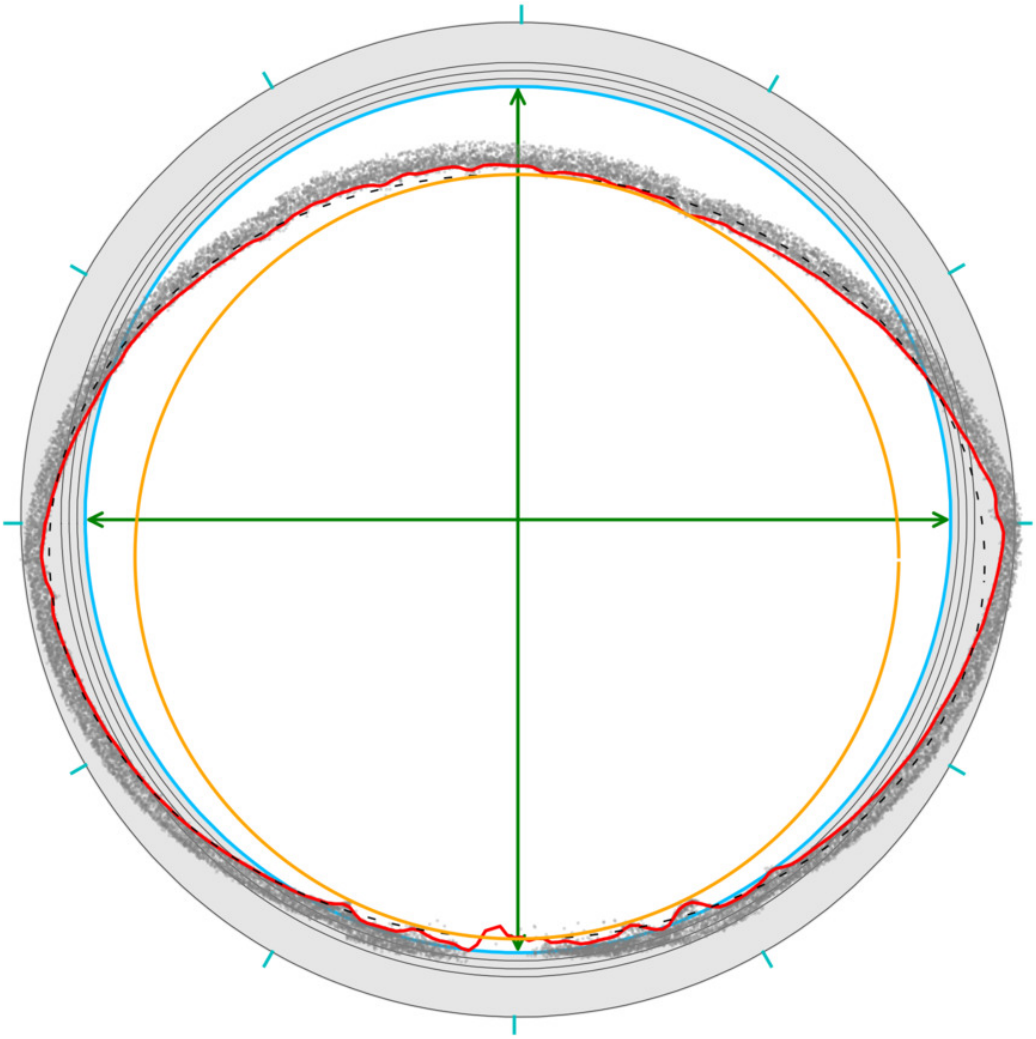
```
Footage   :  340 ft
Width     :  119.9" | 108.0"
Height    :  98.2" | 108.0"

Area      :  8560 sq in
Perimeter :  346.6 in
Ovality   :  11.1%

Interior Diameter : 93.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 341.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



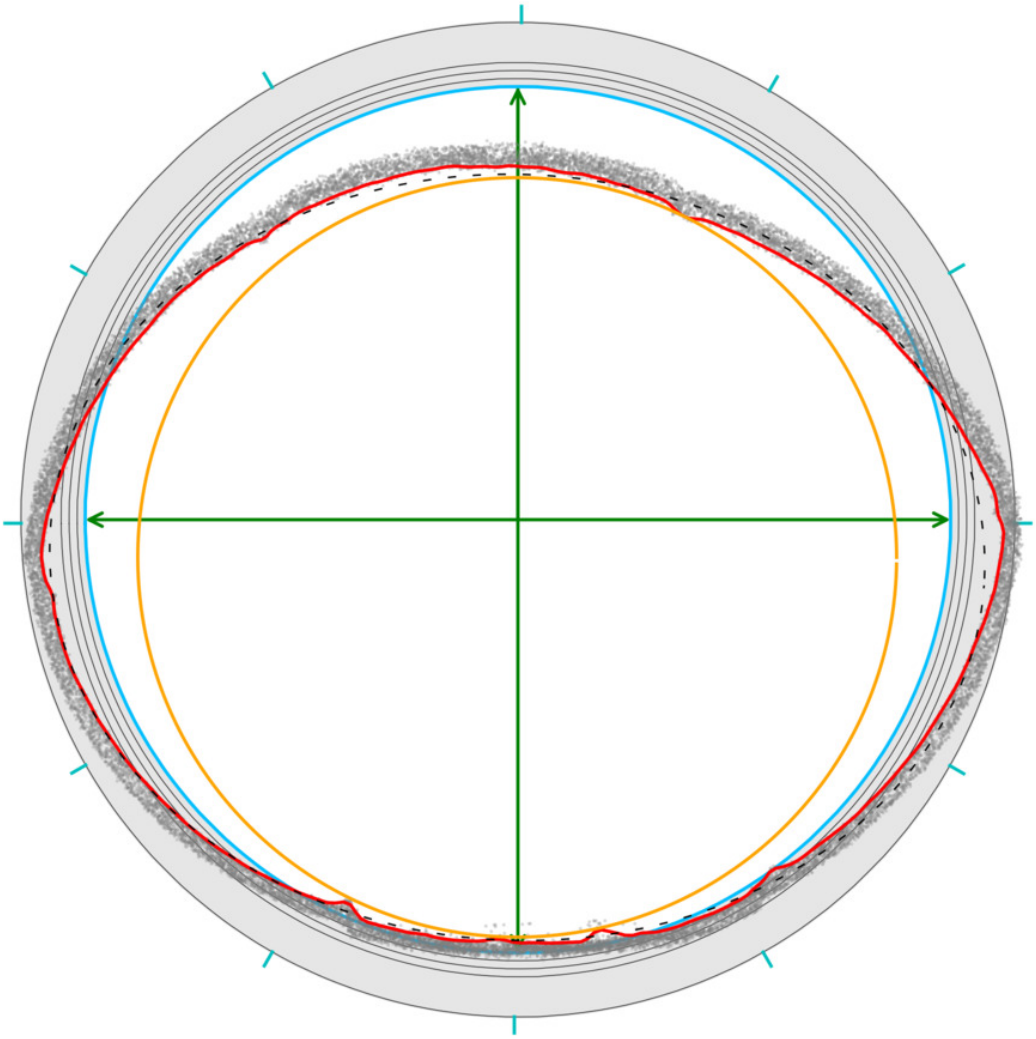
```
Footage   :  341 ft
Width     :  120.1" | 108.0"
Height    :  98.1" | 108.0"

Area      :  8734 sq in
Perimeter :  341.2 in
Ovality   :  9.8%

Interior Diameter : 95.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 342.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



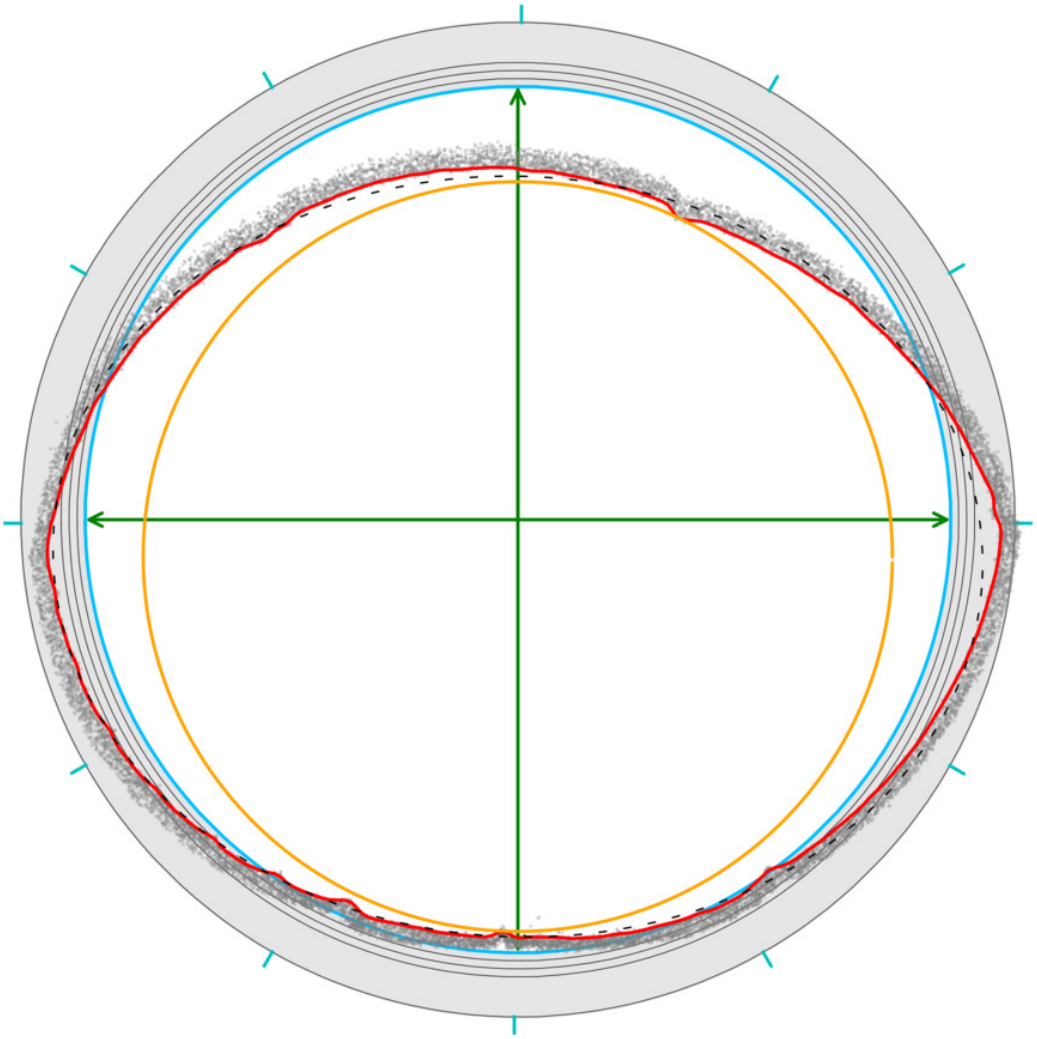
```
Footage    :  342 ft
Width      :  120.1" | 108.0"
Height     :  98.1" | 108.0"

Area       :  8747 sq in
Perimeter  :  337.3 in
Ovality    :  9.7%

Interior Diameter : 94.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 343.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



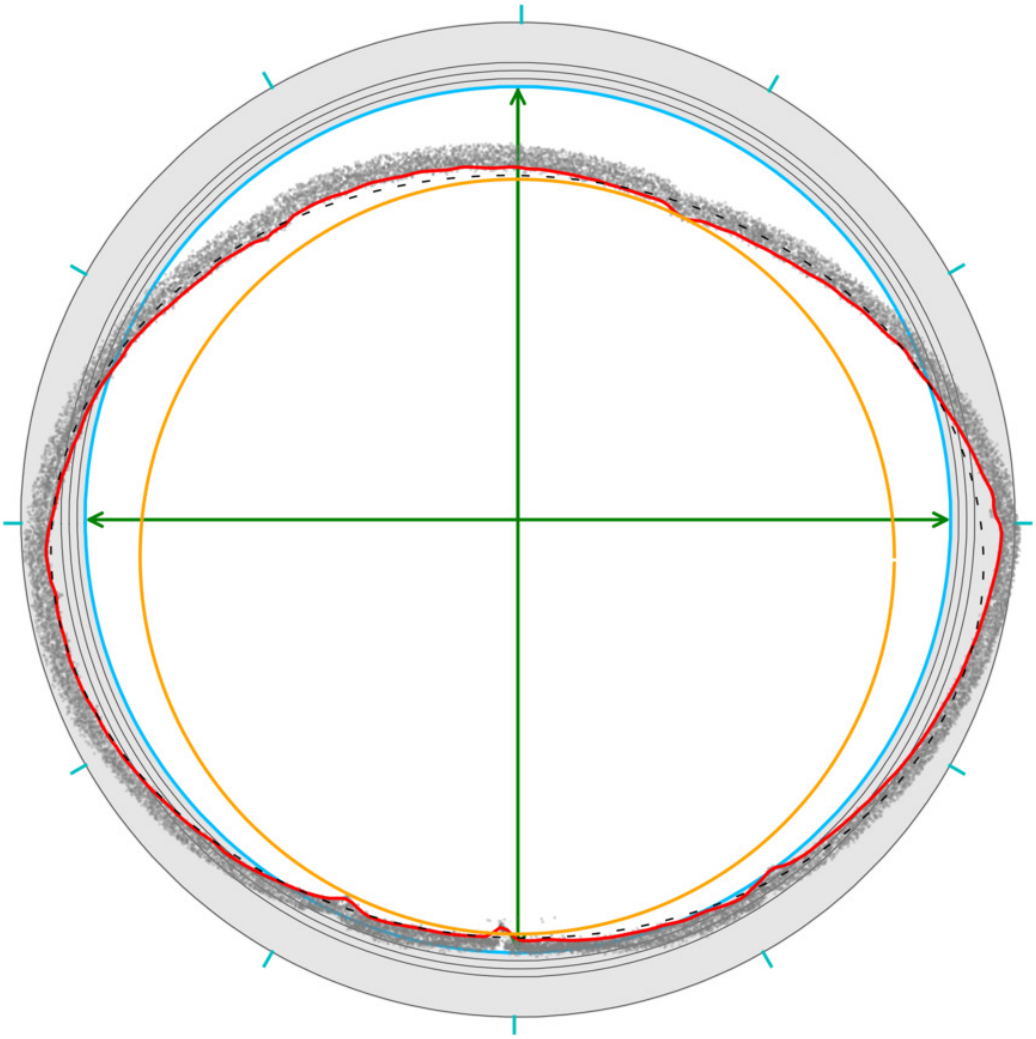
```
Footage    :  343 ft
Width      :  119.0" | 108.0"
Height     :  97.8" | 108.0"

Area       :  8636 sq in
Perimeter  :  335.0 in
Ovality    :  9.8%

Interior Diameter : 93.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 344.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



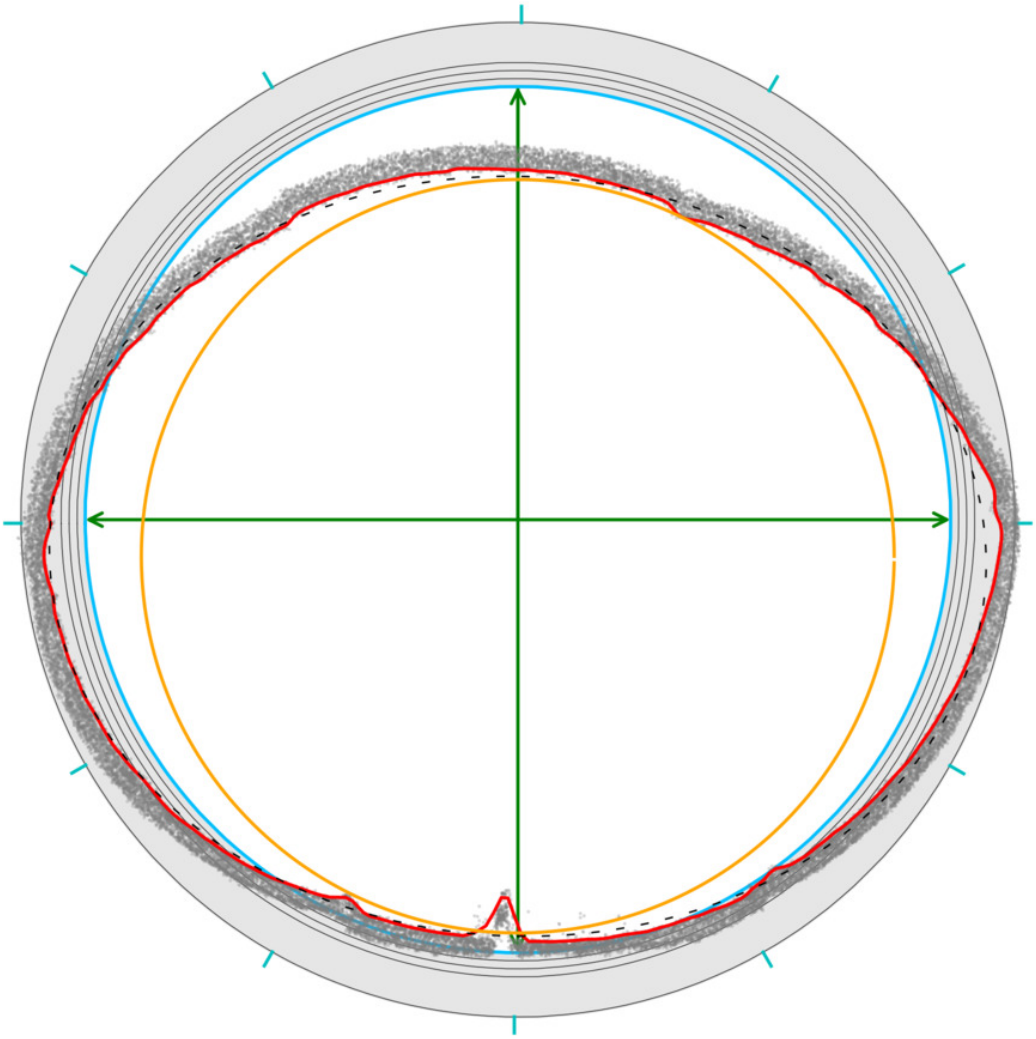
```
Footage   :  344 ft
Width     :  119.2" | 108.0"
Height    :  97.9" | 108.0"

Area      :  8682 sq in
Perimeter :  336.2 in
Ovality   :  9.8%

Interior Diameter : 94.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 345.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



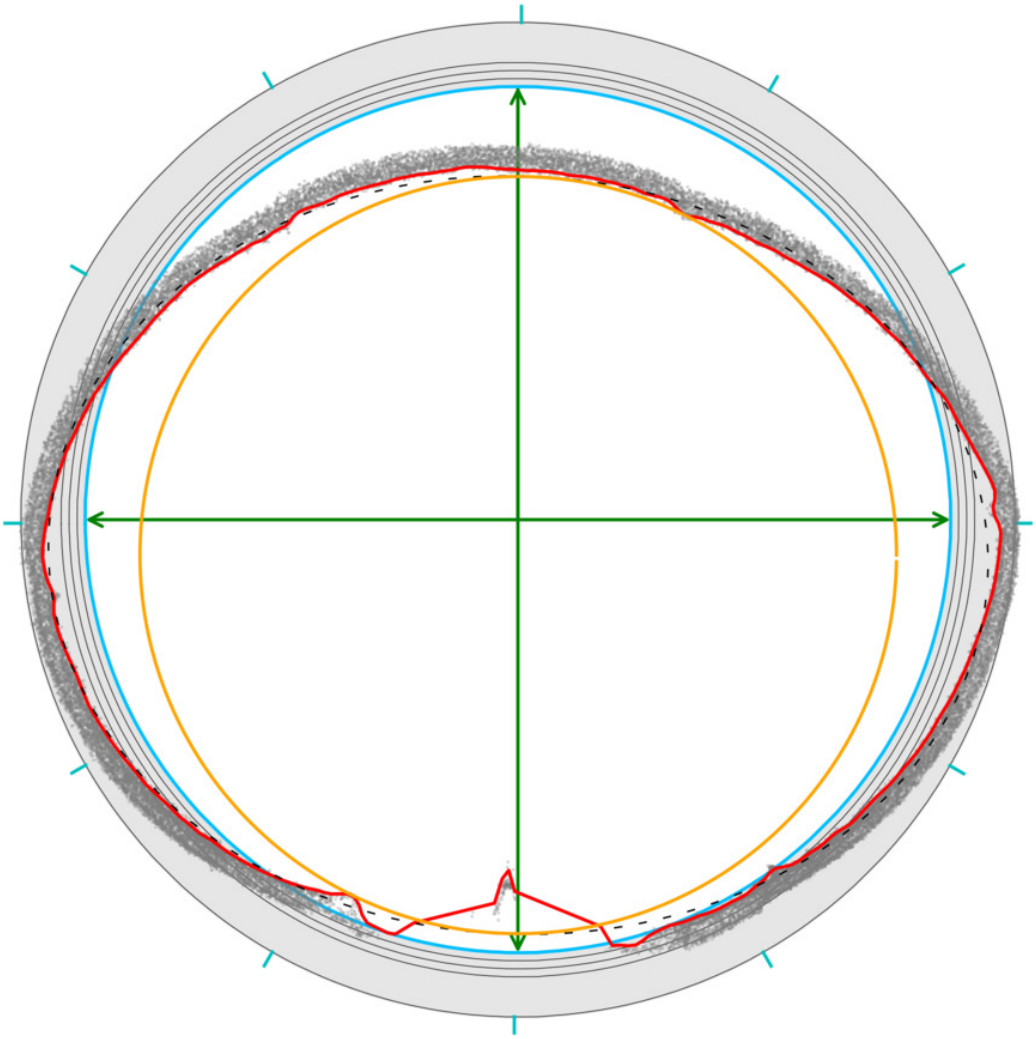
```
Footage    :  345 ft
Width      :  119.5" | 108.0"
Height     :  97.6" | 108.0"

Area       :  8694 sq in
Perimeter  :  342.1 in
Ovality    :  10.2%

Interior Diameter : 94.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 346.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 346 ft
Width : 119.6" | 108.0"
Height : 97.6" | 108.0"

Area : 8656 sq in
Perimeter : 345.7 in
Ovality : 10.4%

Interior Diameter : 94.4"

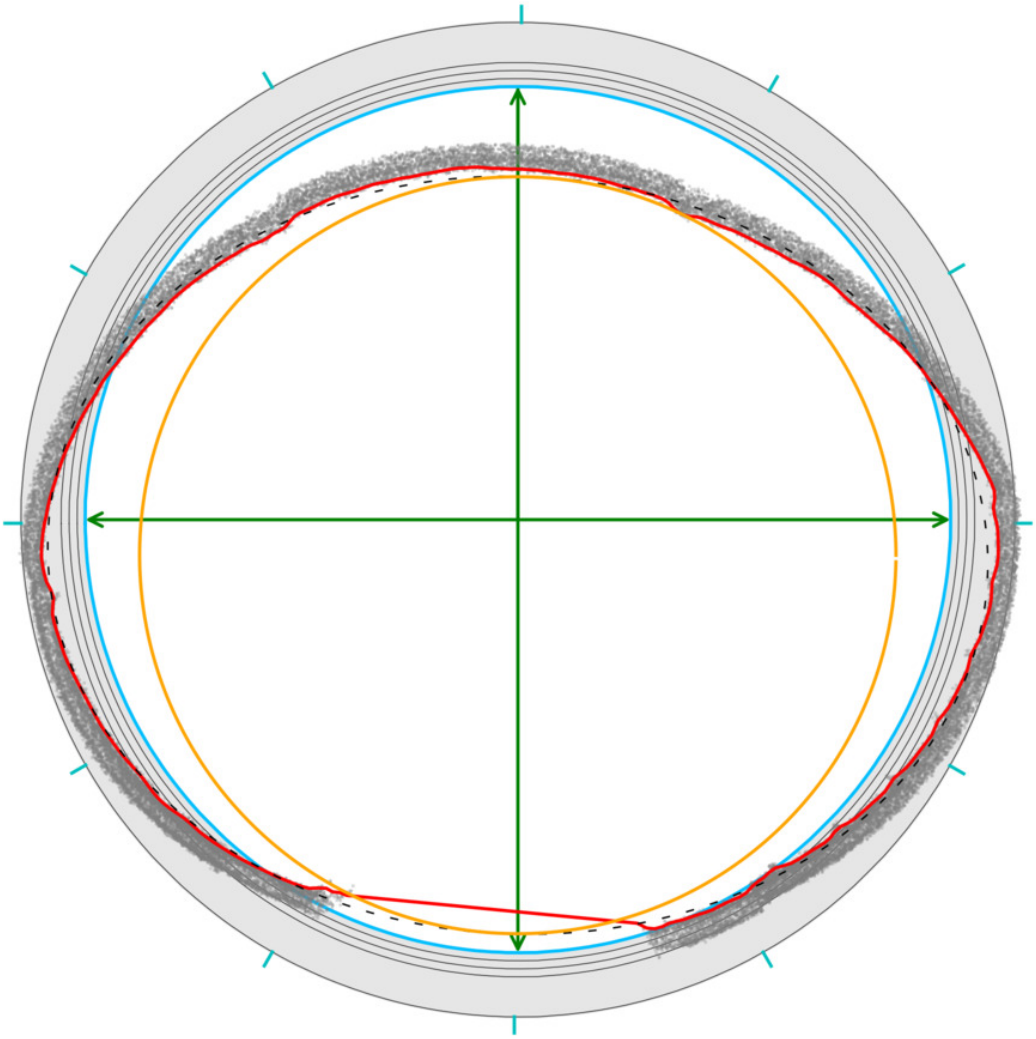
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 347.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



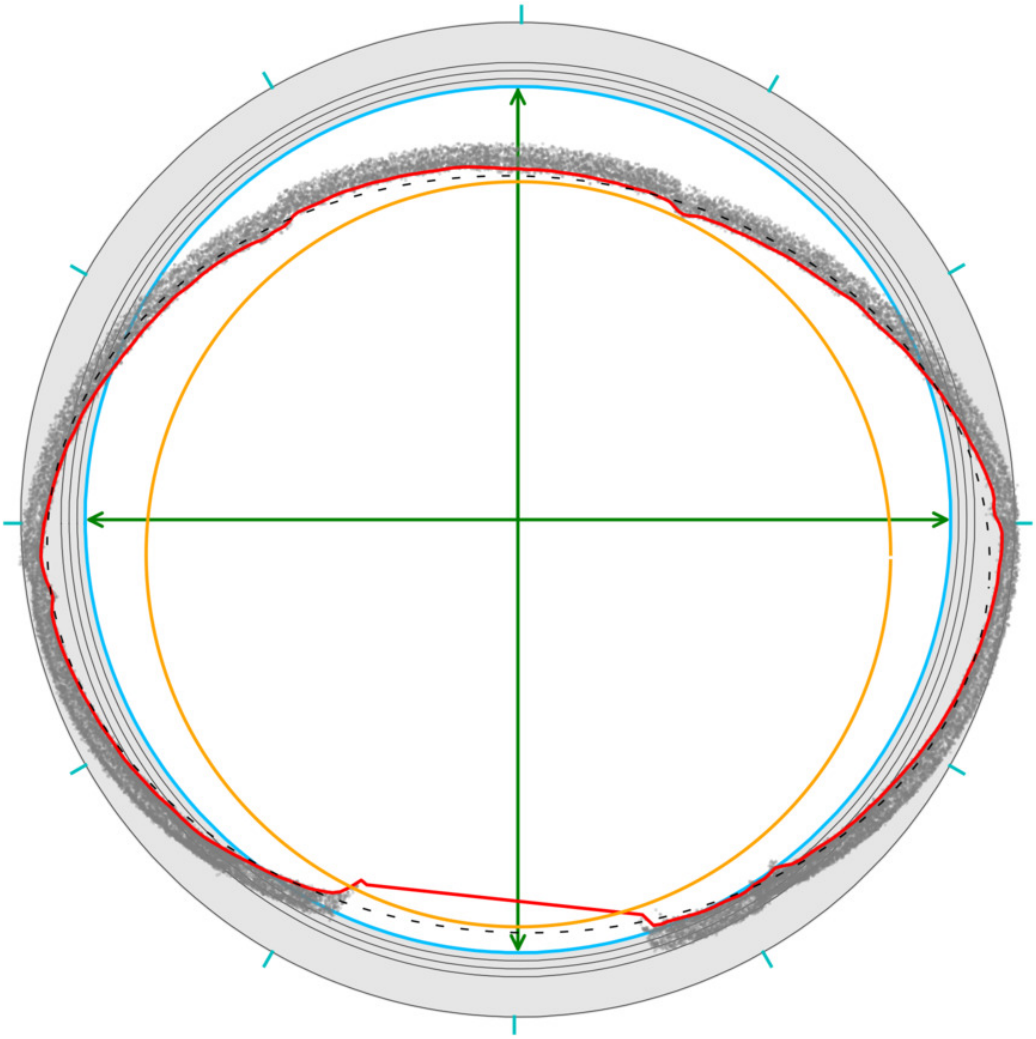
```
Footage   :  347 ft
Width     :  119.4" | 108.0"
Height    :  97.7" | 108.0"

Area      :  8620 sq in
Perimeter :  335.5 in
Ovality   :  10.5%

Interior Diameter : 94.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 348.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



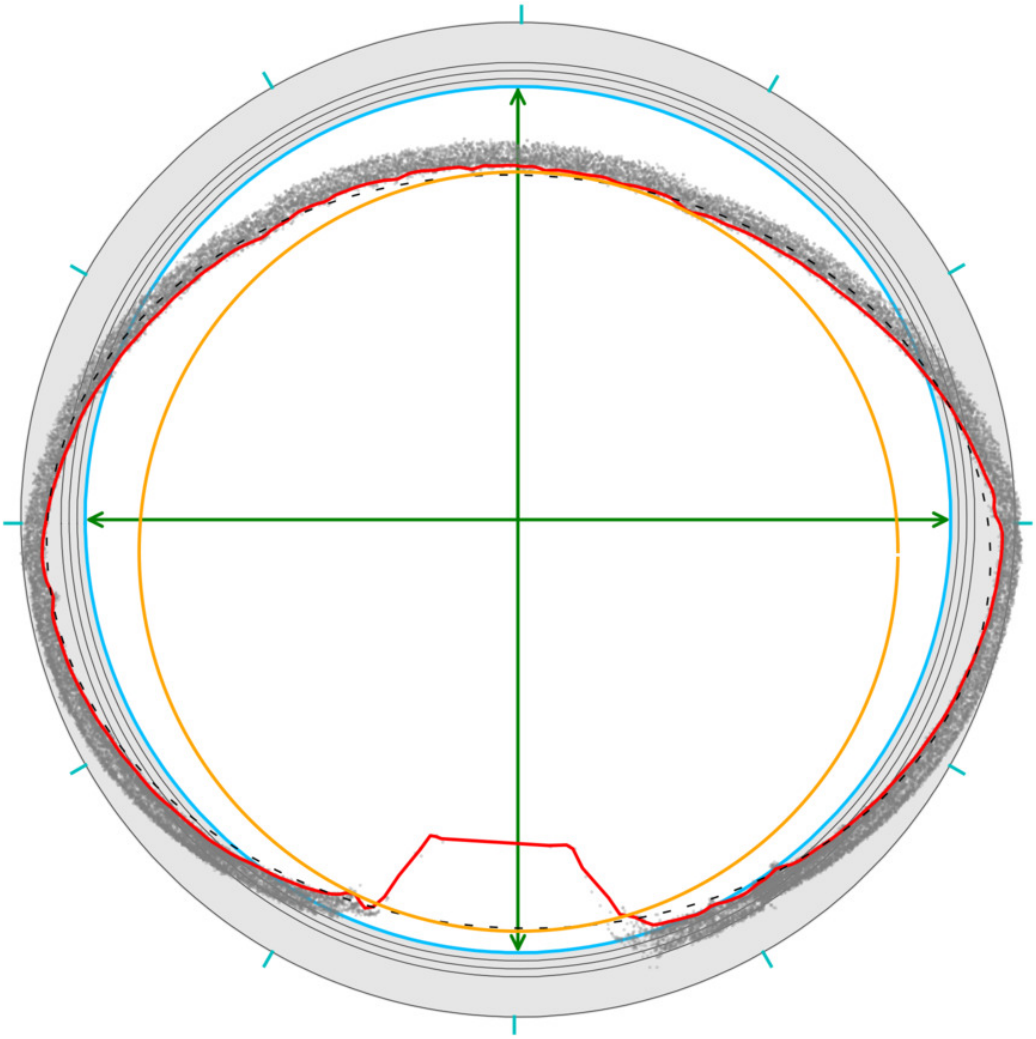
```
Footage   :  348 ft
Width     :  119.9" | 108.0"
Height    :  97.7" | 108.0"

Area      :  8594 sq in
Perimeter :  336.5 in
Ovality   :  10.7%

Interior Diameter : 92.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 349.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



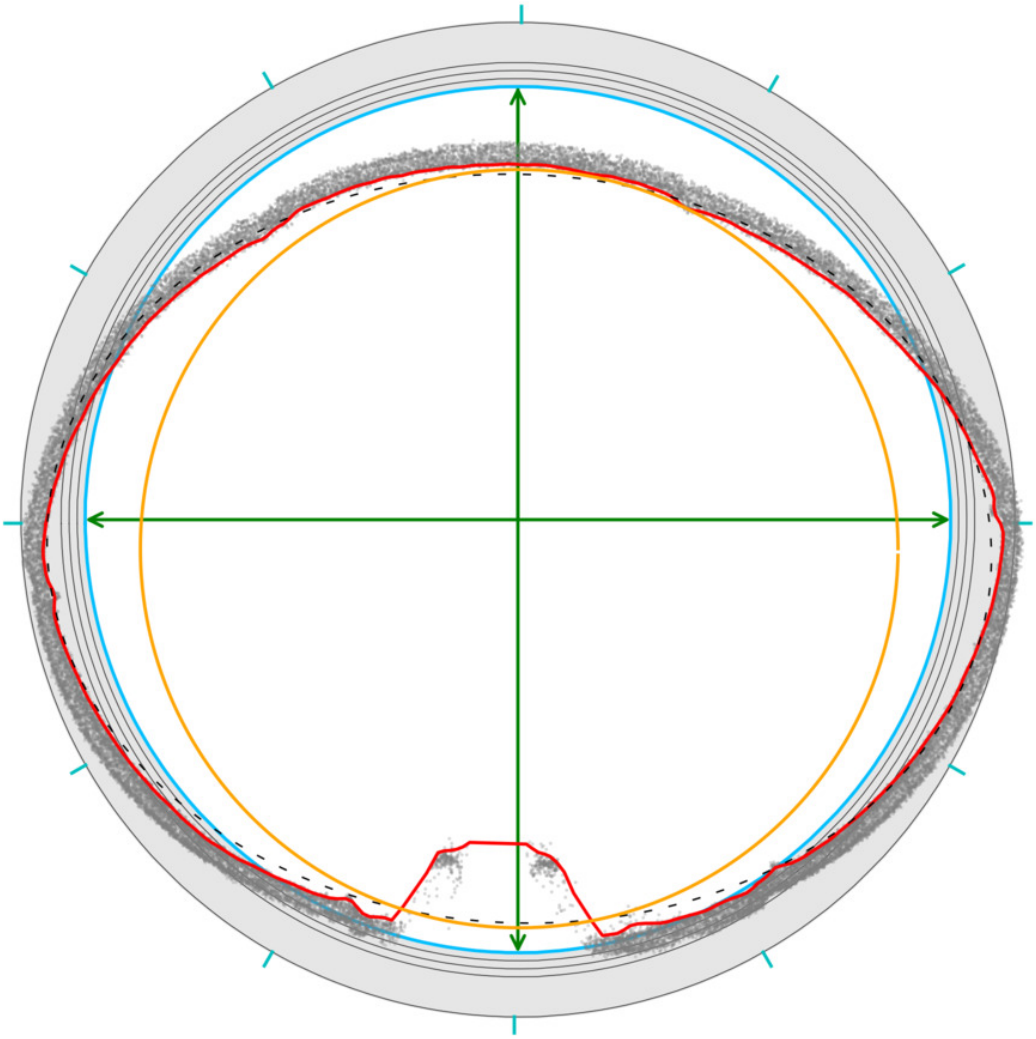
```
Footage   :  349 ft
Width     :  119.8" | 108.0"
Height    :  98.1" | 108.0"

Area      :  8458 sq in
Perimeter :  345.4 in
Ovality   :  10.9%

Interior Diameter : 94.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 350.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



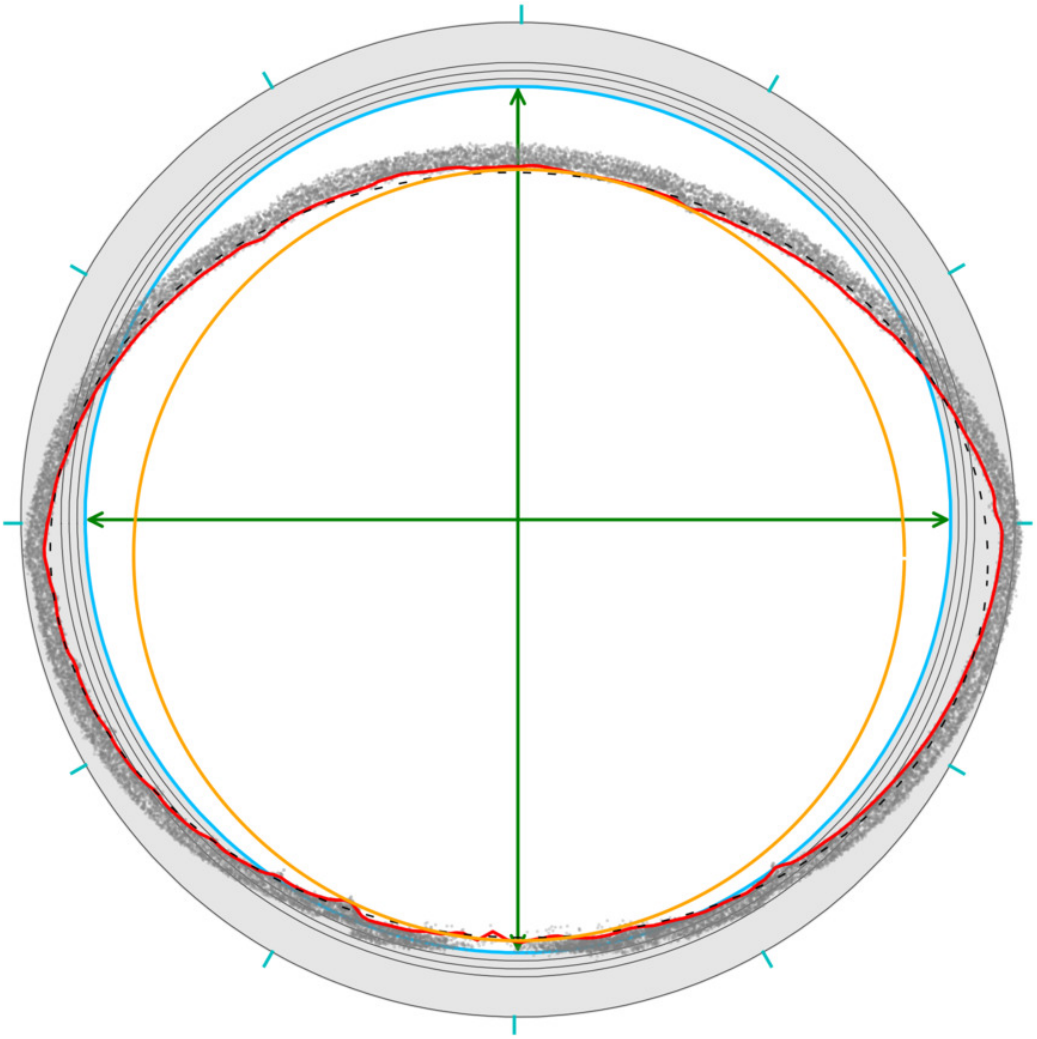
```
Footage    :  350 ft
Width      :  119.8" | 108.0"
Height     :  98.3" | 108.0"

Area       :  8547 sq in
Perimeter  :  347.2 in
Ovality    :  11.2%

Interior Diameter : 94.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 351.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



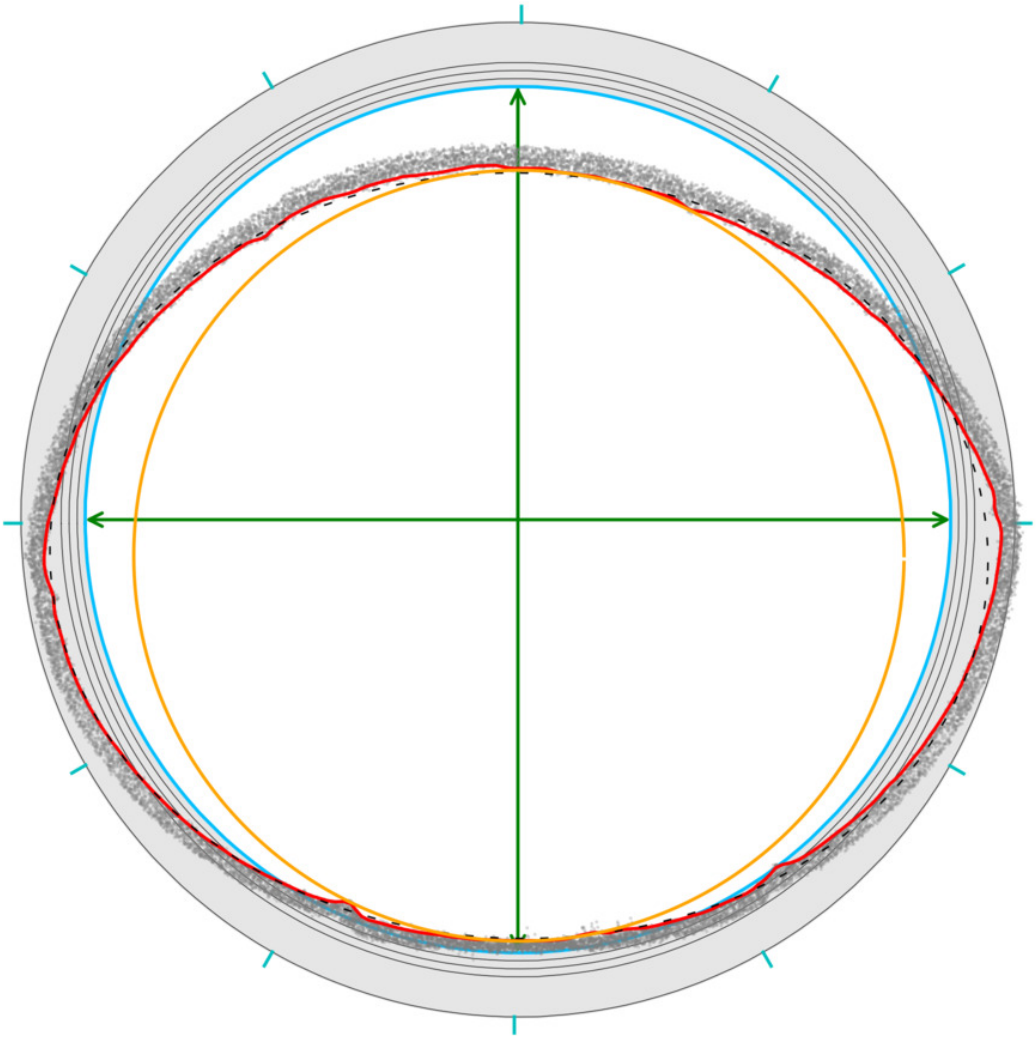
```
Footage   :  351 ft
Width     :  119.5" | 108.0"
Height    :  98.1" | 108.0"

Area      :  8758 sq in
Perimeter :  337.5 in
Ovality   :  9.9%

Interior Diameter : 96.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 352.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



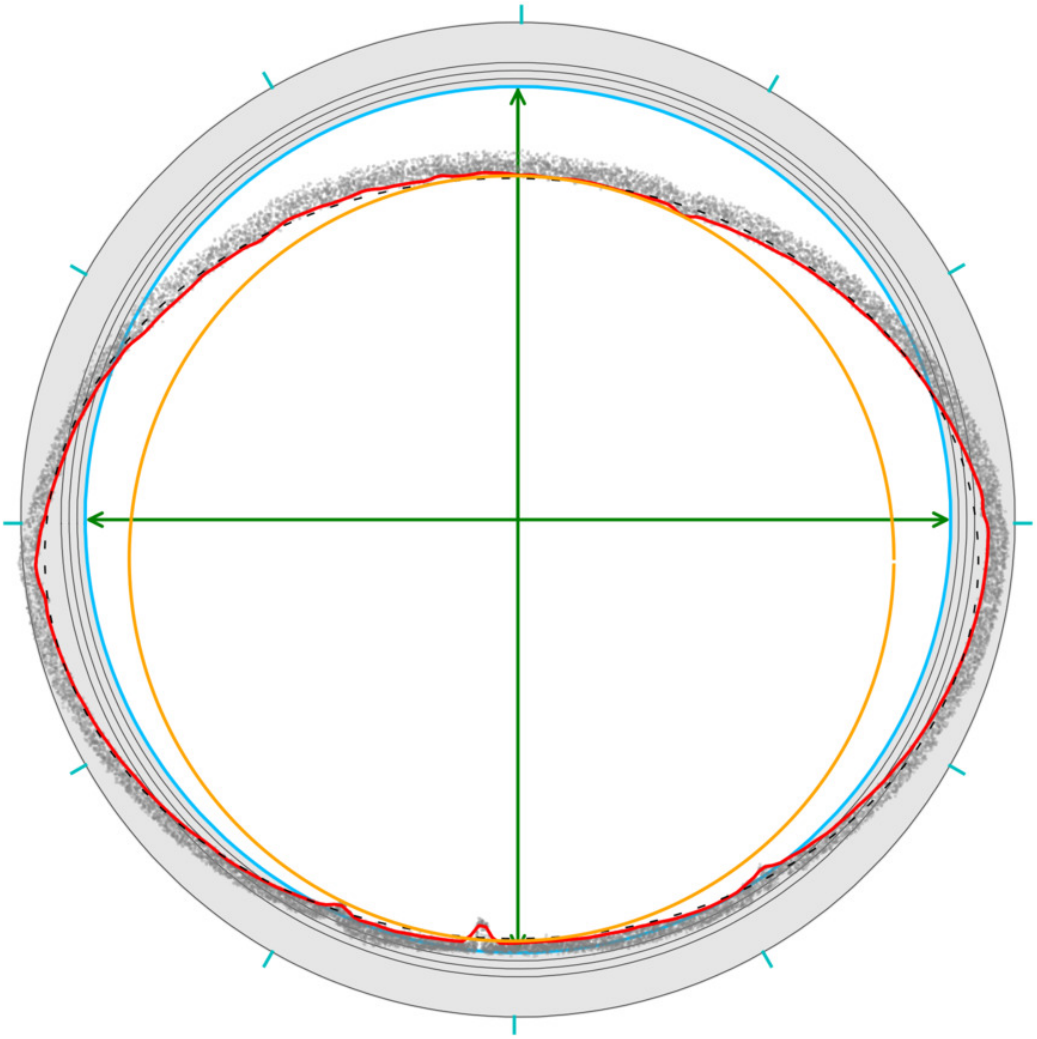
```
Footage    :  352 ft
Width      :  119.5" | 108.0"
Height     :  97.8" | 108.0"

Area       :  8768 sq in
Perimeter  :  336.6 in
Ovality    :  9.9%

Interior Diameter : 96.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 353.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



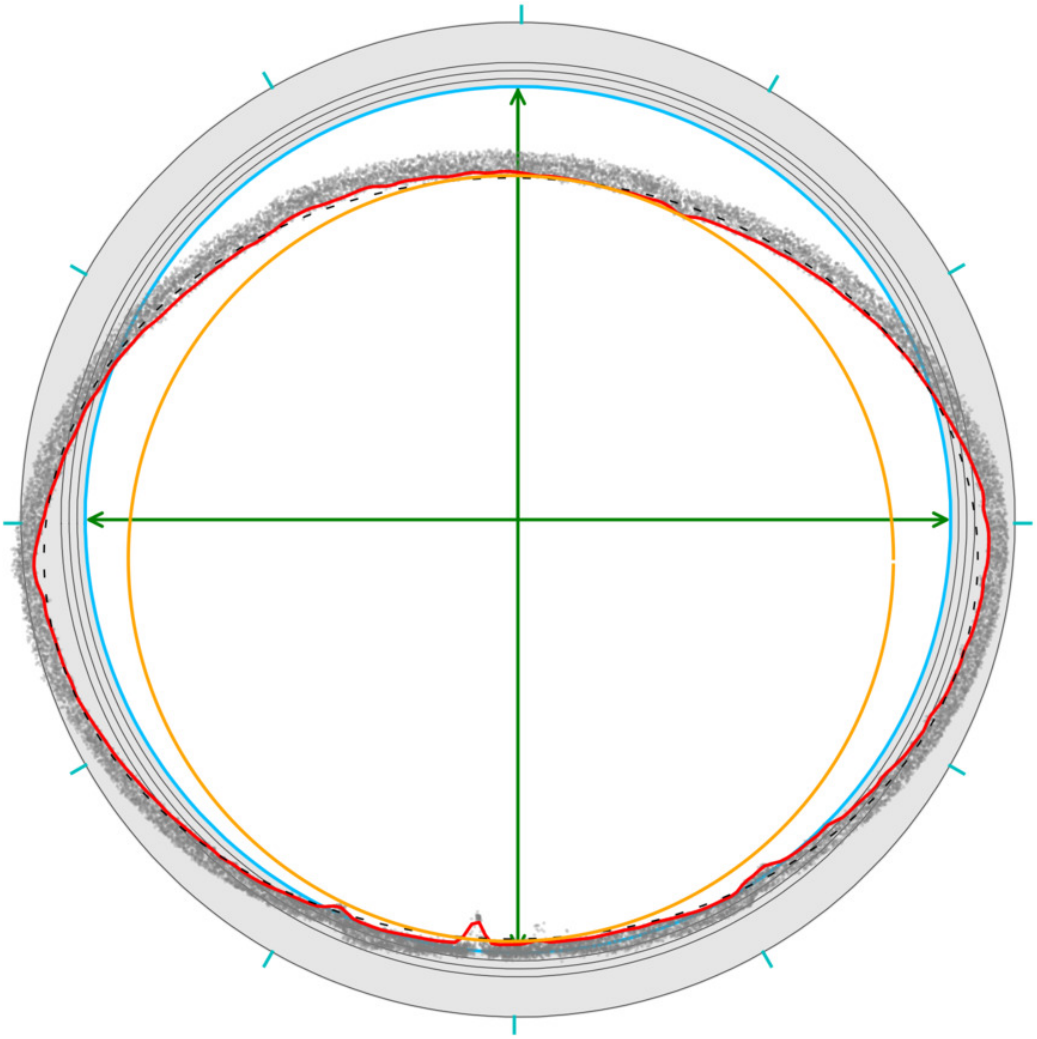
```
Footage   :  353 ft
Width     :  118.9" | 108.0"
Height    :  97.0" | 108.0"

Area      :  8668 sq in
Perimeter :  336.5 in
Ovality   :  10.0%

Interior Diameter : 95.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 354.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



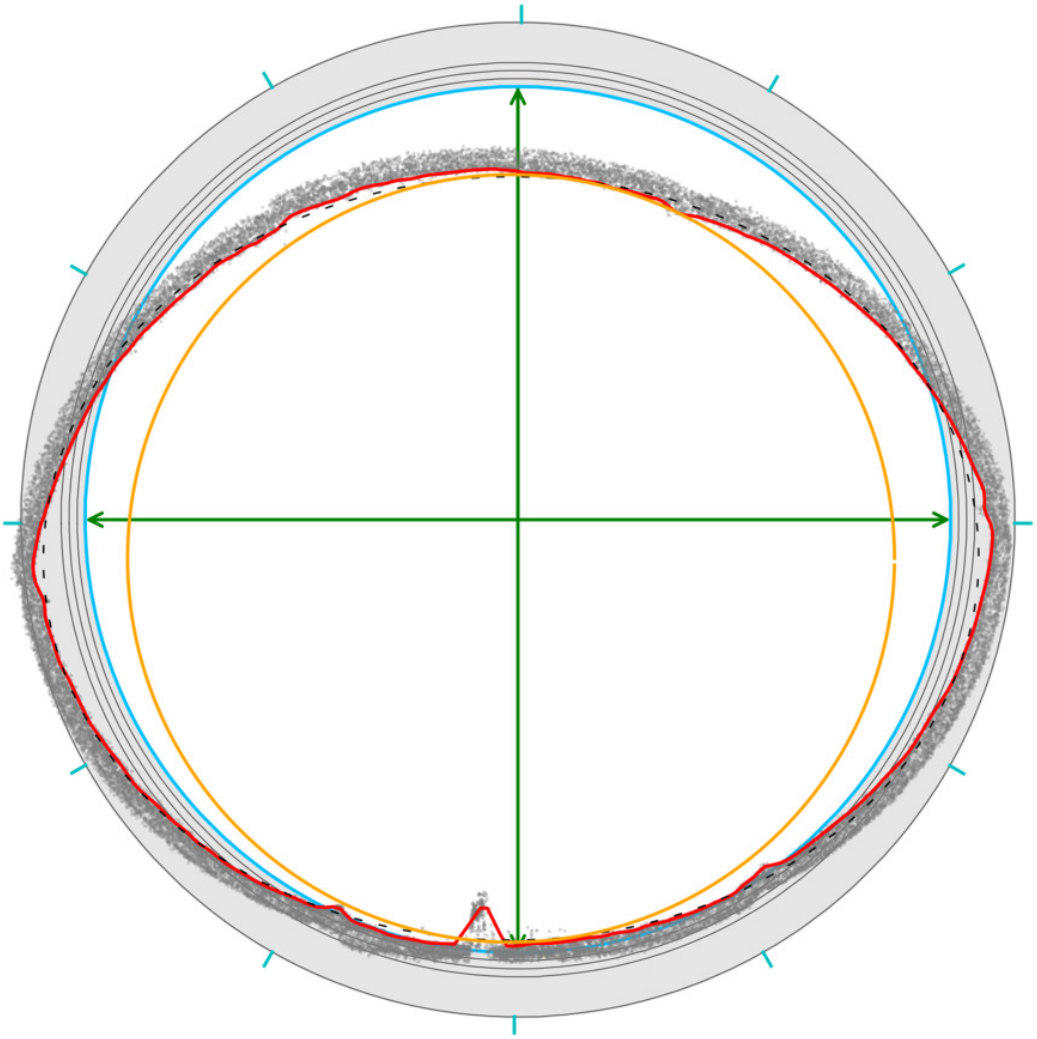
```
Footage    :  354 ft
Width      :  119.2" | 108.0"
Height     :  97.3" | 108.0"

Area       :  8679 sq in
Perimeter  :  337.8 in
Ovality    :  9.9%

Interior Diameter : 95.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 355.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 355 ft
Width : 119.7" | 108.0"
Height : 97.4" | 108.0"

Area : 8716 sq in
Perimeter : 341.3 in
Ovality : 9.9%

Interior Diameter : 95.7"

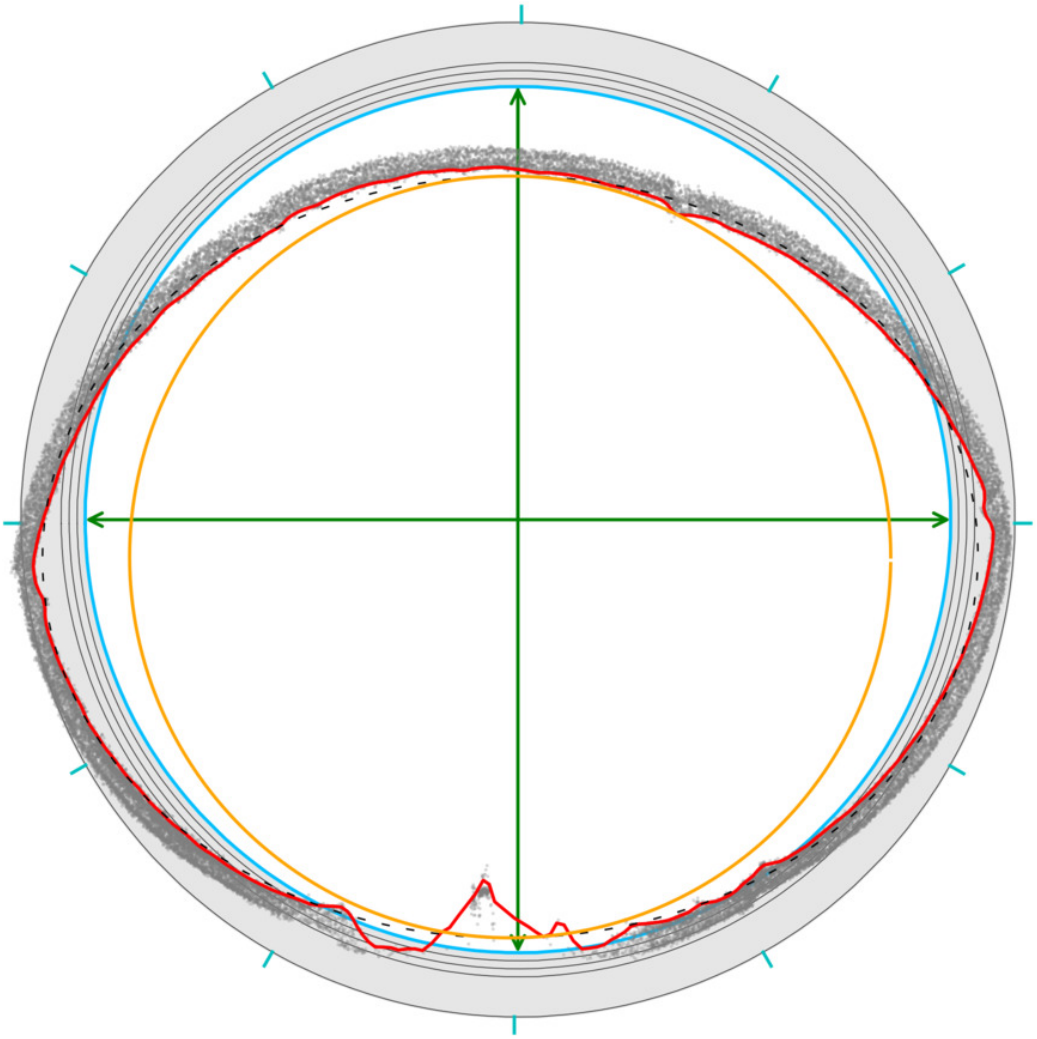
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 356.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 356 ft
Width : 119.8" | 108.0"
Height : 97.7" | 108.0"

Area : 8695 sq in
Perimeter : 348.2 in
Ovality : 9.9%

Interior Diameter : 95.0"

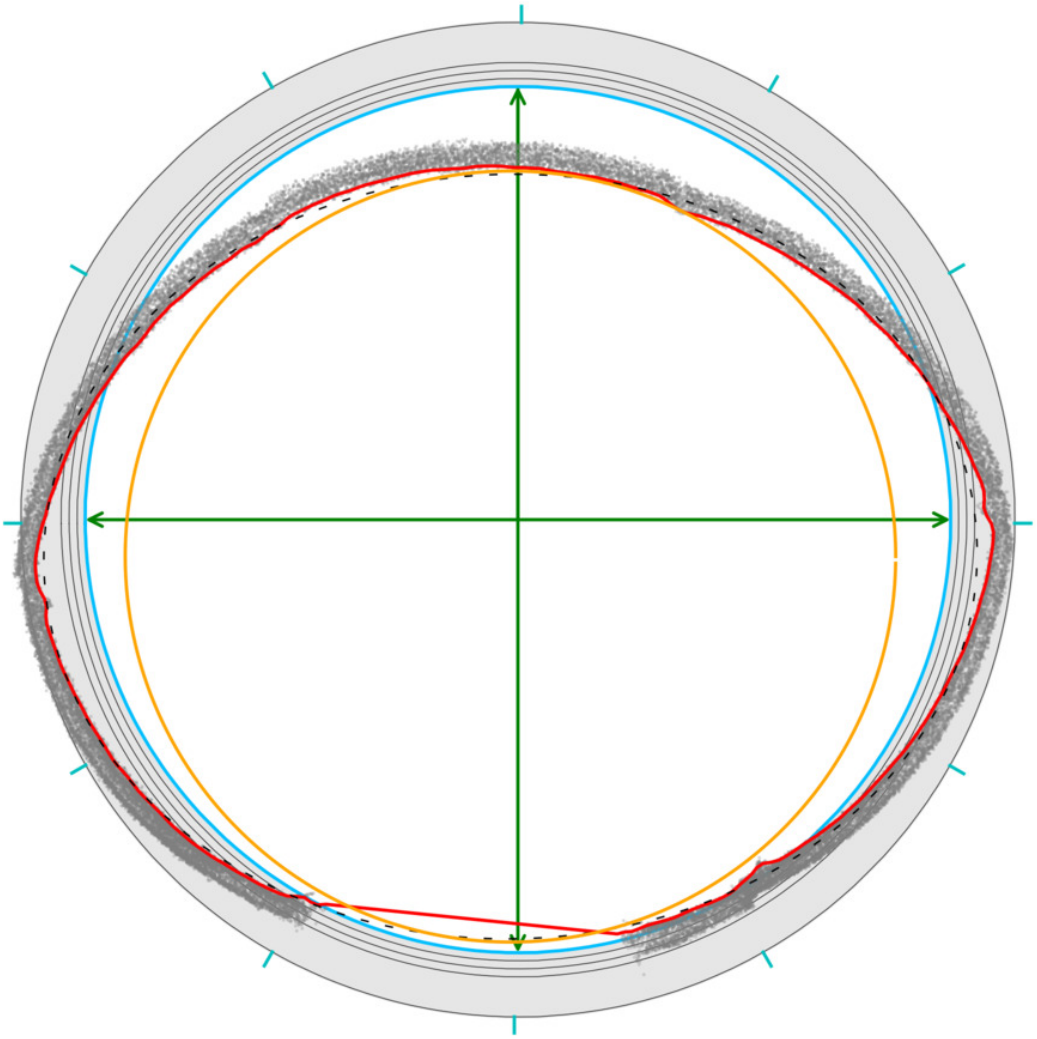
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 357.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



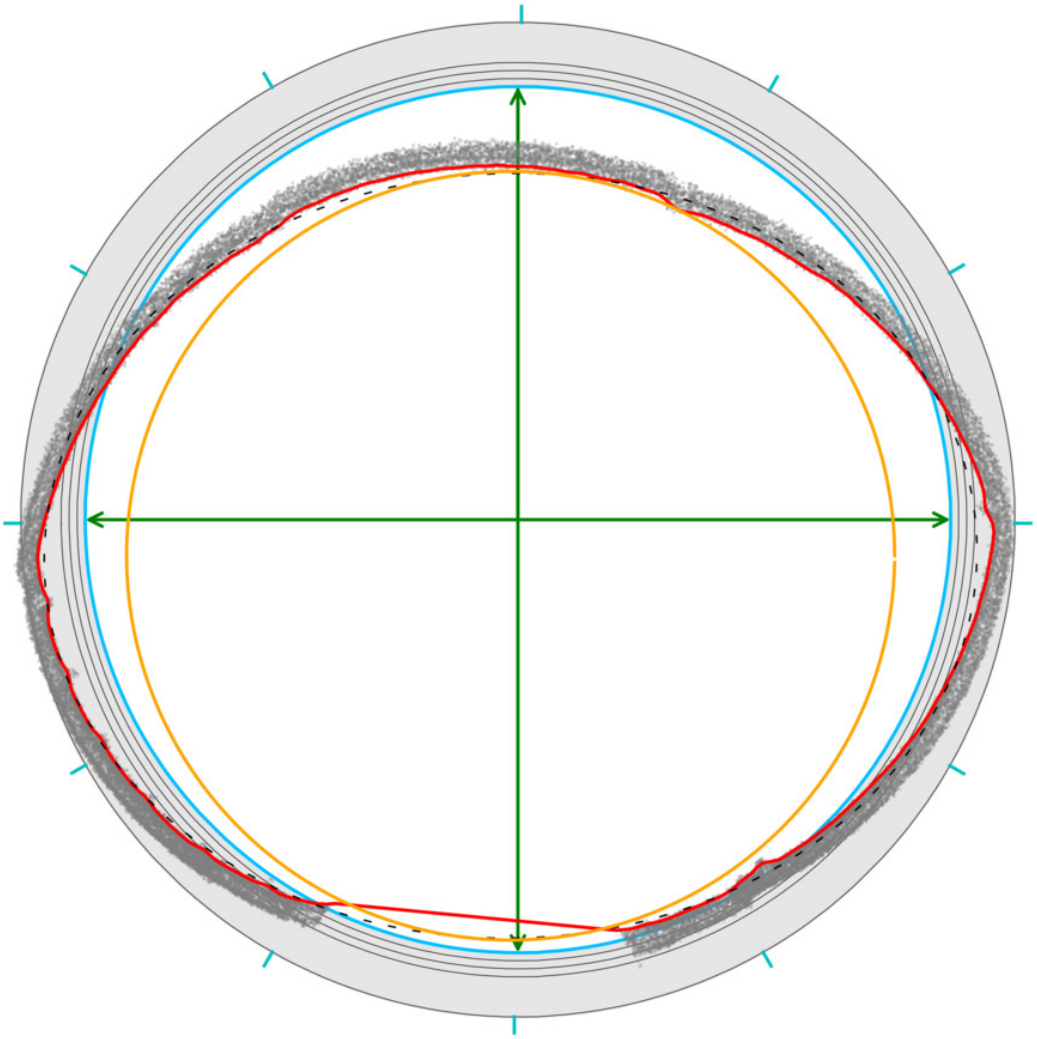
```
Footage    :  357 ft
Width      :  119.6" | 108.0"
Height     :  97.9" | 108.0"

Area       :  8657 sq in
Perimeter  :  335.2 in
Ovality    :  9.7%

Interior Diameter : 96.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 358.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



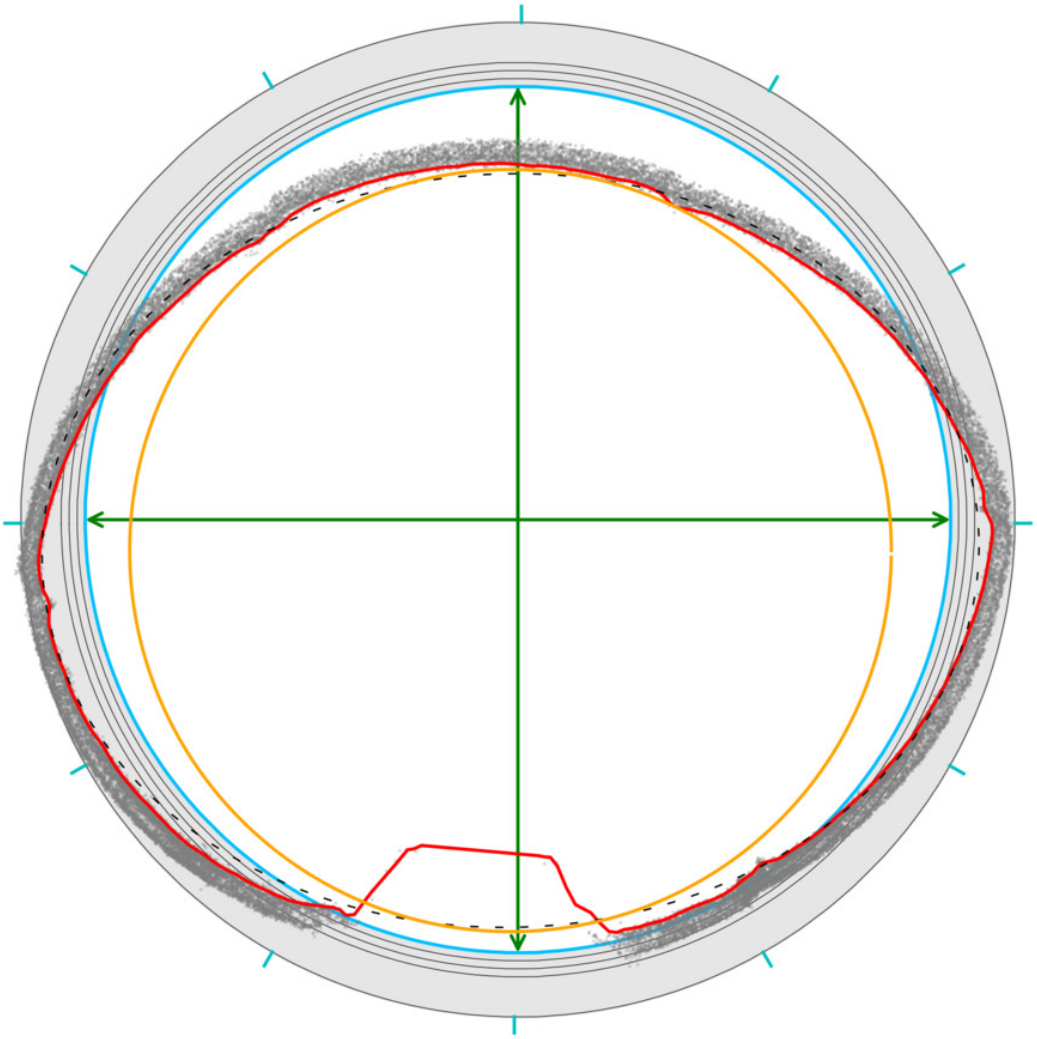
```
Footage   :  358 ft
Width     :  119.3" | 108.0"
Height    :  98.1" | 108.0"

Area      :  8648 sq in
Perimeter :  335.0 in
Ovality   :  9.7%

Interior Diameter : 95.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 359.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 359 ft
Width : 119.0" | 108.0"
Height : 98.3" | 108.0"

Area : 8480 sq in
Perimeter : 344.4 in
Ovality : 10.6%

Interior Diameter : 95.1"

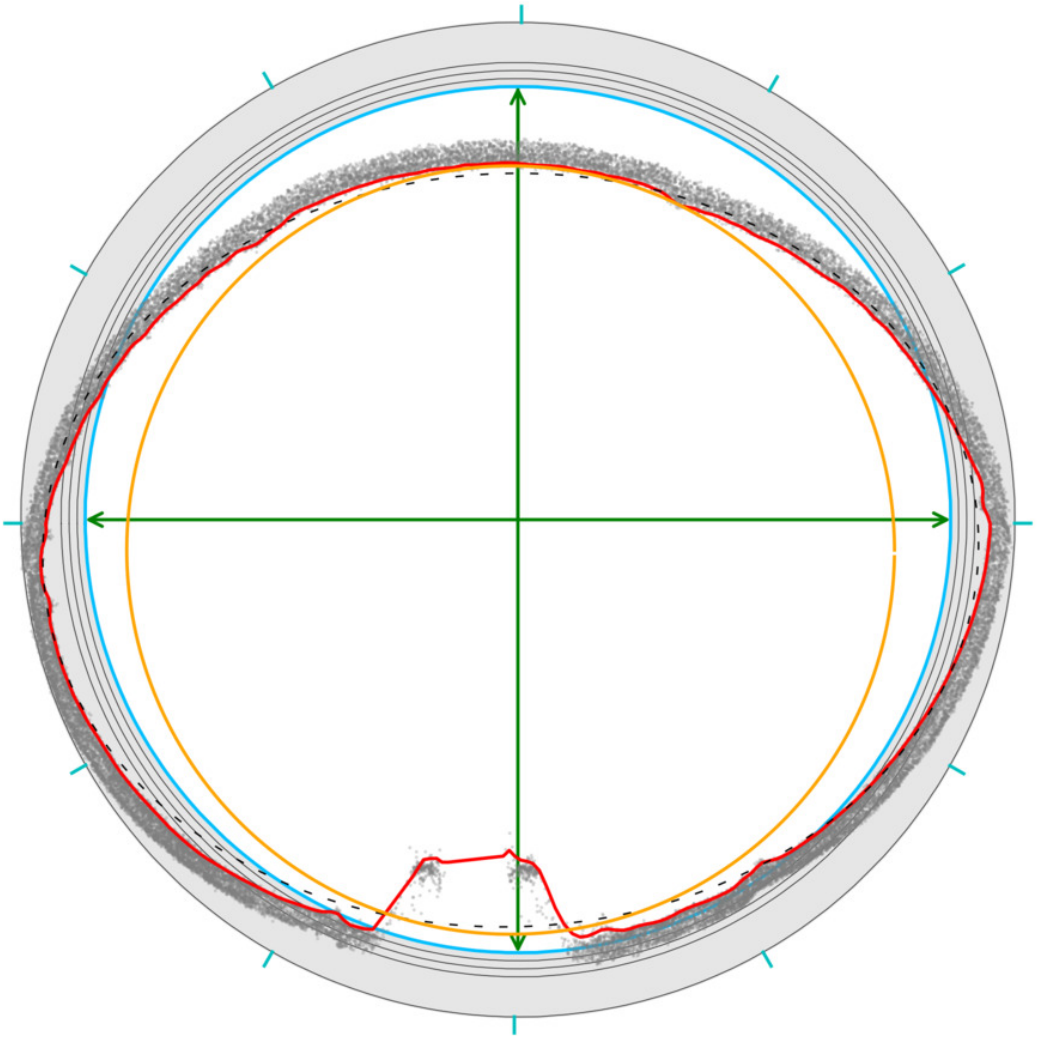
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 360.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



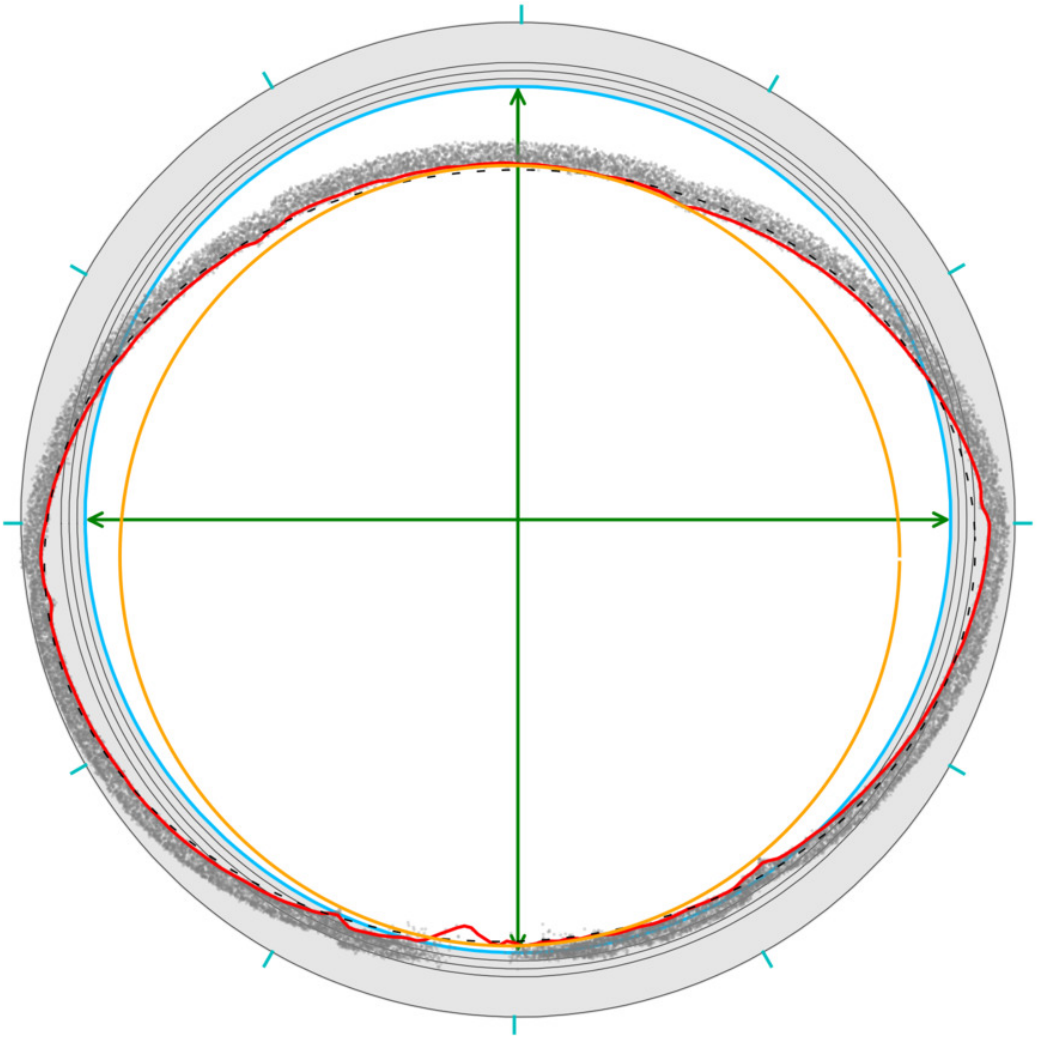
```
Footage   :  360 ft
Width     :  118.5" | 108.0"
Height    :  98.4" | 108.0"

Area      :  8553 sq in
Perimeter :  346.7 in
Ovality   :  10.5%

Interior Diameter : 95.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 361.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 361 ft
Width : 118.4" | 108.0"
Height : 98.4" | 108.0"

Area : 8769 sq in
Perimeter : 337.6 in
Ovality : 9.2%

Interior Diameter : 97.3"

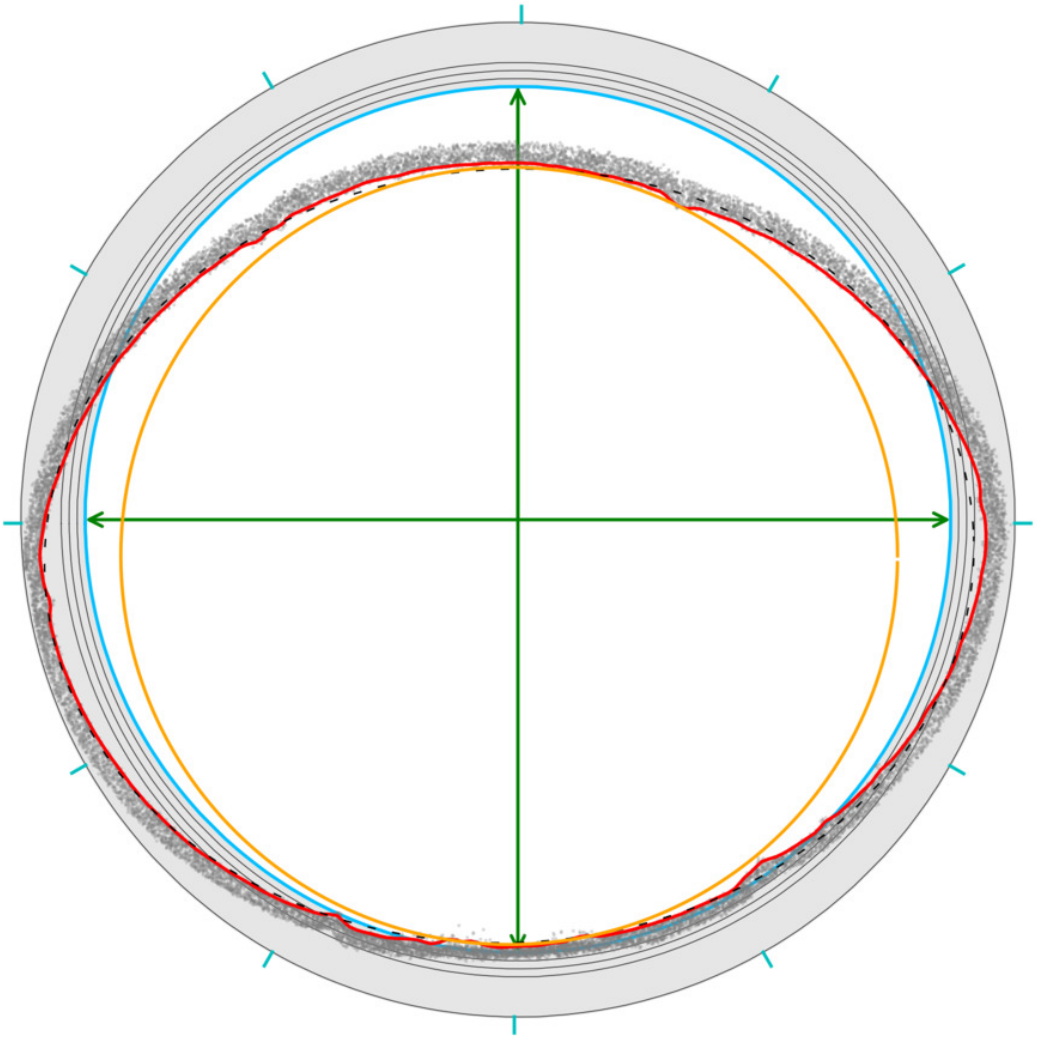
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 362.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



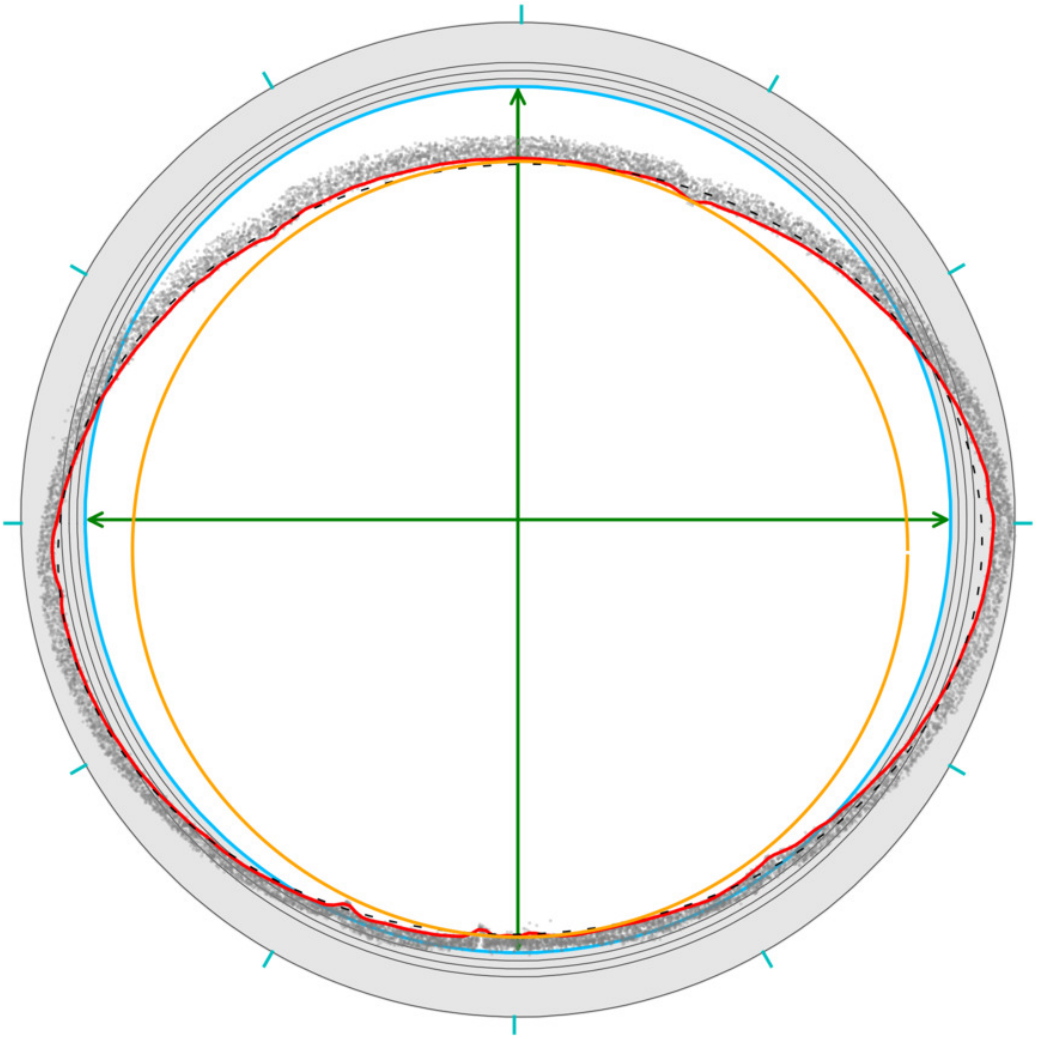
```
Footage   :  362 ft
Width     :  118.1" | 108.0"
Height    :  98.5" | 108.0"

Area      :  8780 sq in
Perimeter :  336.7 in
Ovality   :  9.0%

Interior Diameter : 96.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 363.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



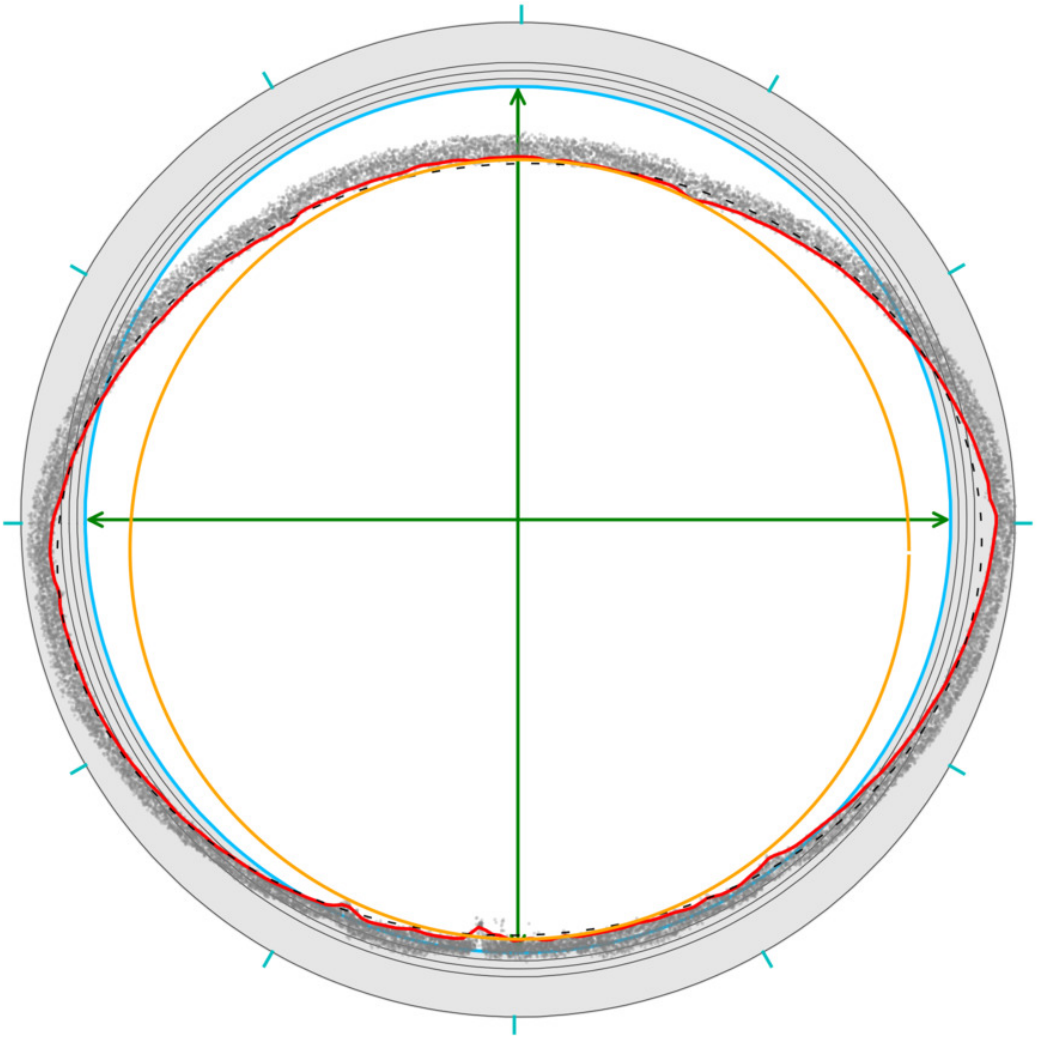
```
Footage   :  363 ft
Width     :  117.5" | 108.0"
Height    :  99.1" | 108.0"

Area      :  8690 sq in
Perimeter :  334.9 in
Ovality   :  8.9%

Interior Diameter : 96.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 364.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



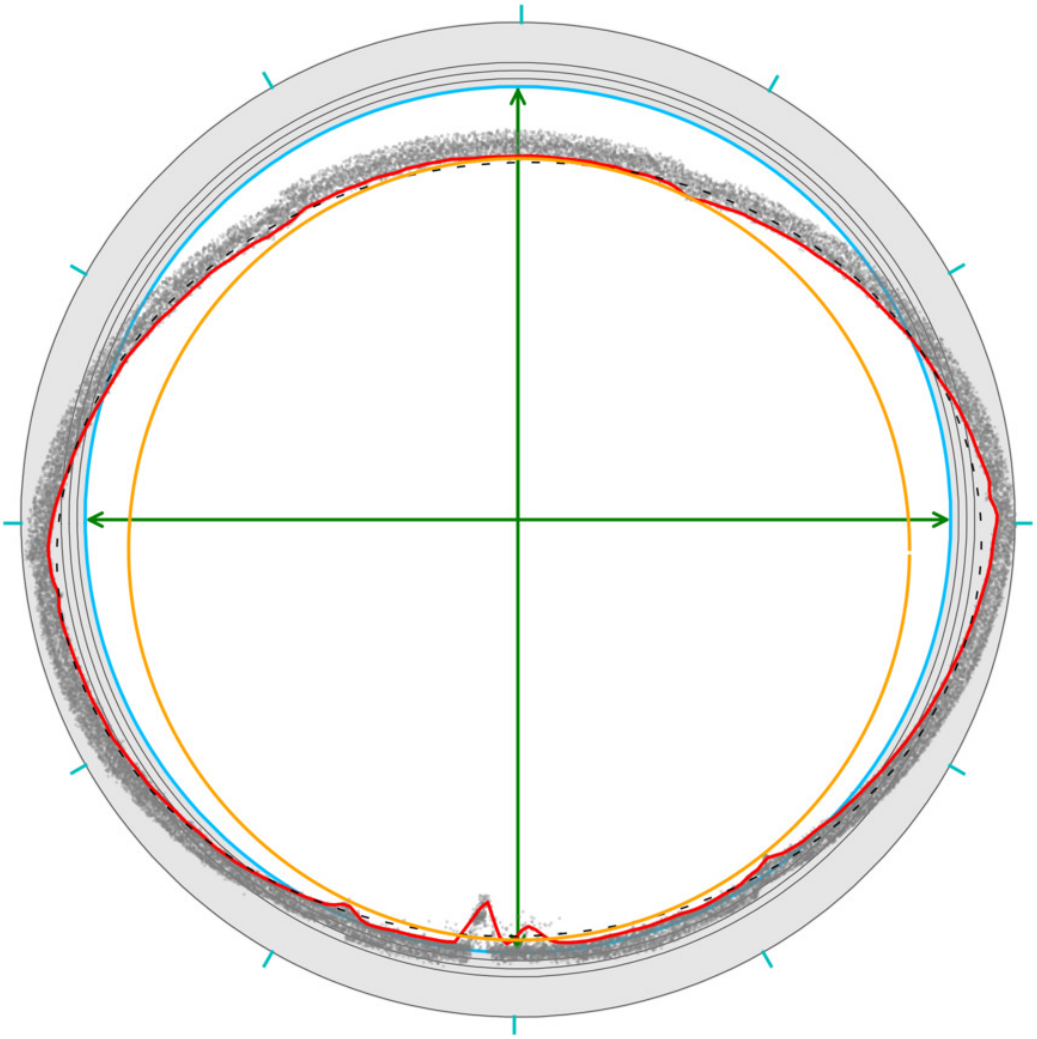
```
Footage   :  364 ft
Width     :  118.1" | 108.0"
Height    :  99.2" | 108.0"

Area      :  8712 sq in
Perimeter :  335.9 in
Ovality   :  8.9%

Interior Diameter : 97.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 365.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



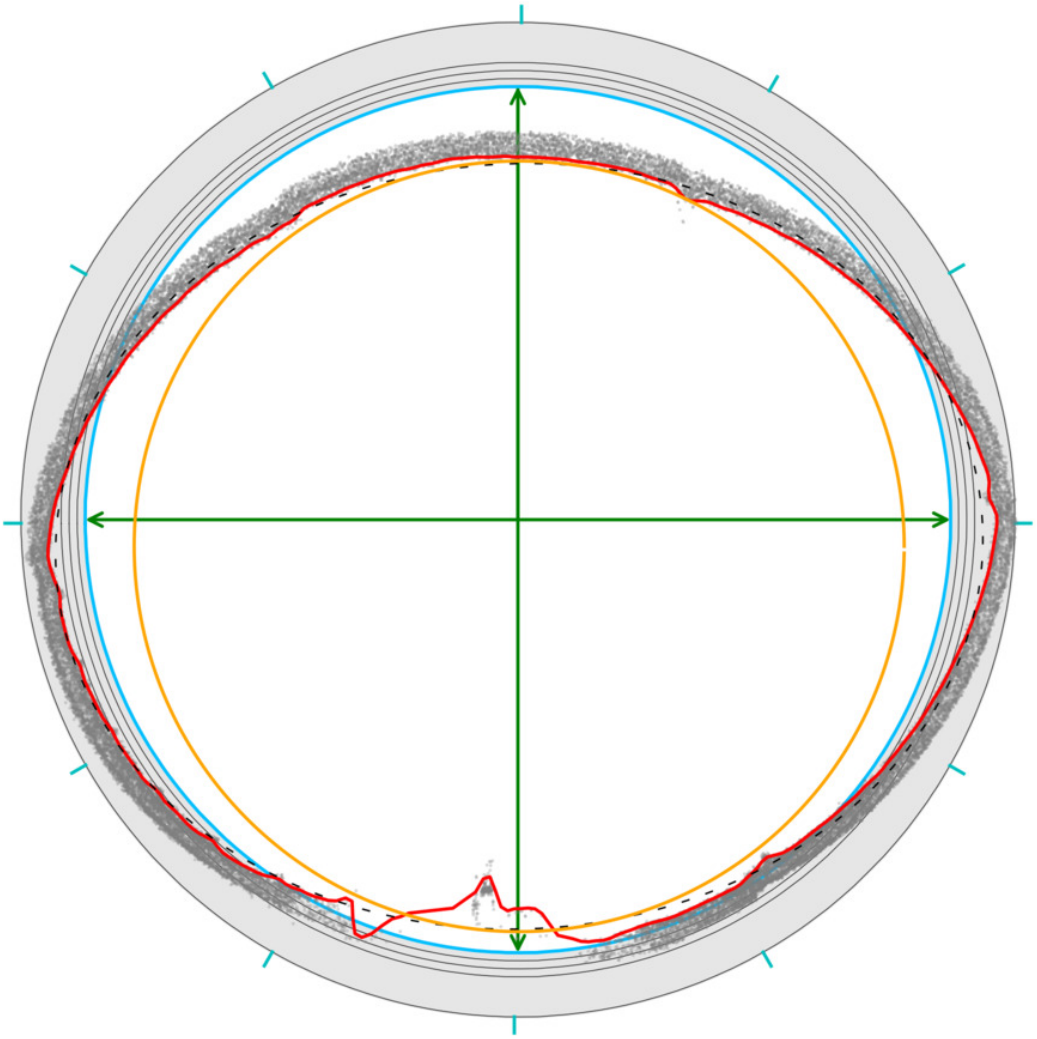
```
Footage   :  365 ft
Width     :  118.4" | 108.0"
Height    :  99.3" | 108.0"

Area      :  8735 sq in
Perimeter :  343.1 in
Ovality   :  8.7%

Interior Diameter : 97.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 366.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



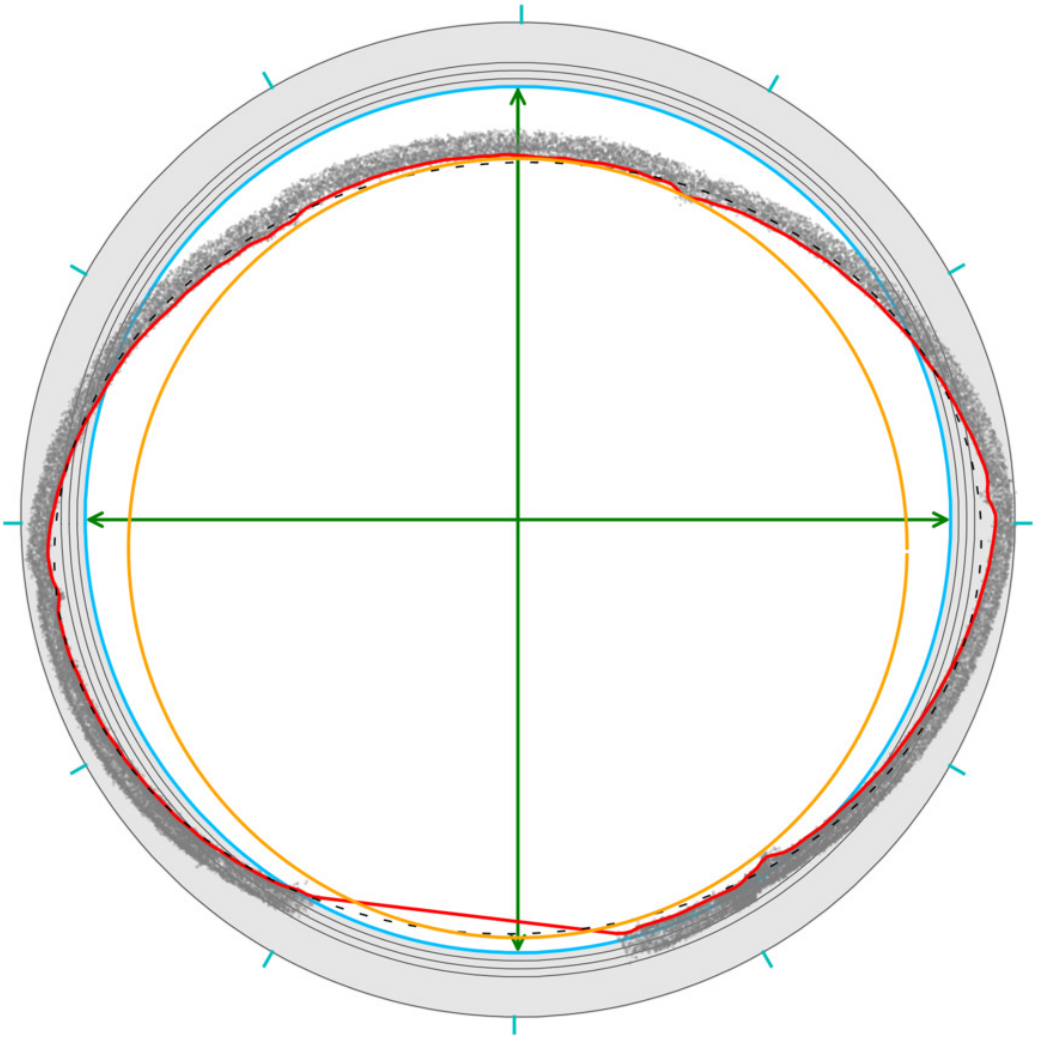
```
Footage   :  366 ft
Width     :  118.4" | 108.0"
Height    :  99.2" | 108.0"

Area      :  8660 sq in
Perimeter :  345.9 in
Ovality   :  9.4%

Interior Diameter : 96.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 367.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



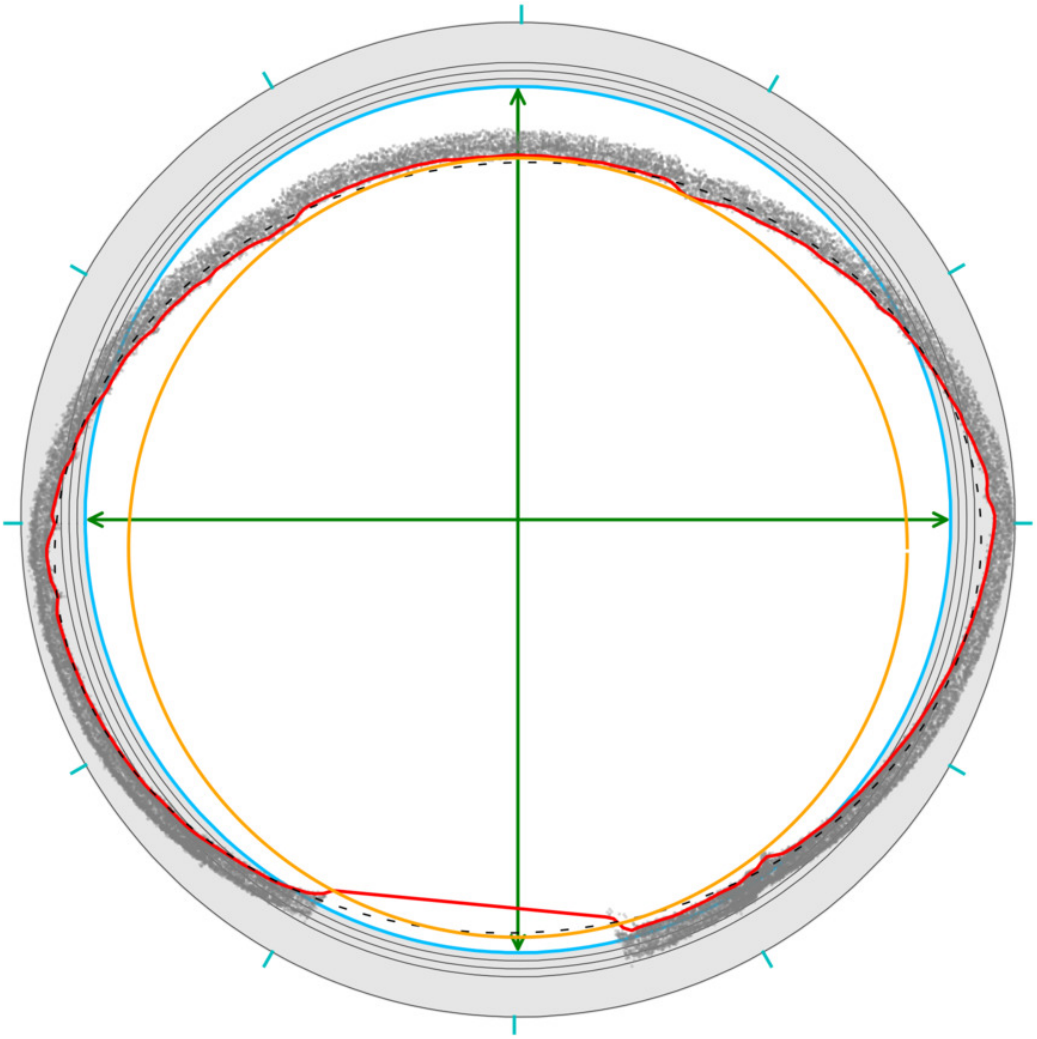
```
Footage   :  367 ft
Width     :  118.3" | 108.0"
Height    :  99.4" | 108.0"

Area      :  8684 sq in
Perimeter :  335.2 in
Ovality   :  9.0%

Interior Diameter : 97.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 368.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 368 ft
Width : 118.3" | 108.0"
Height : 99.4" | 108.0"

Area : 8622 sq in
Perimeter : 335.7 in
Ovality : 9.1%

Interior Diameter : 97.2"

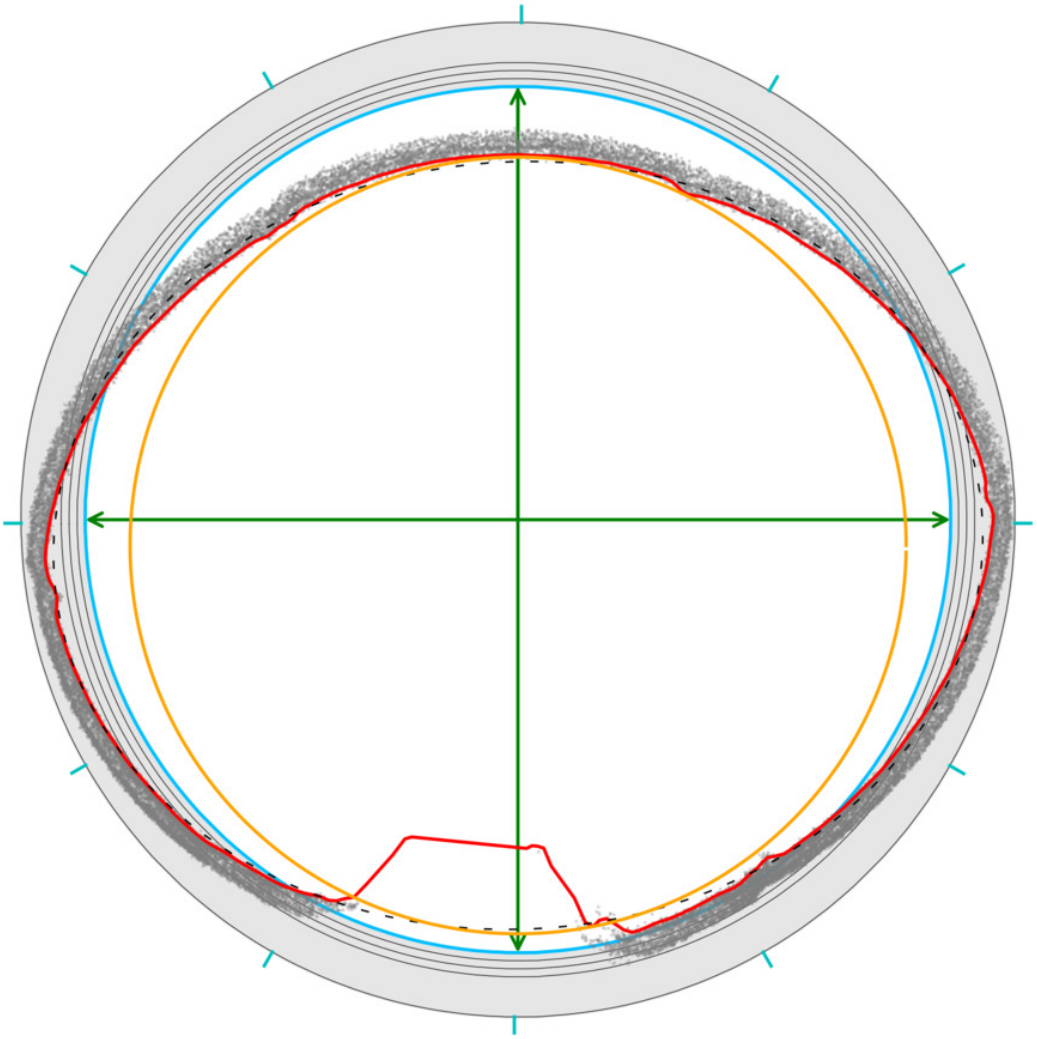
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 369.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



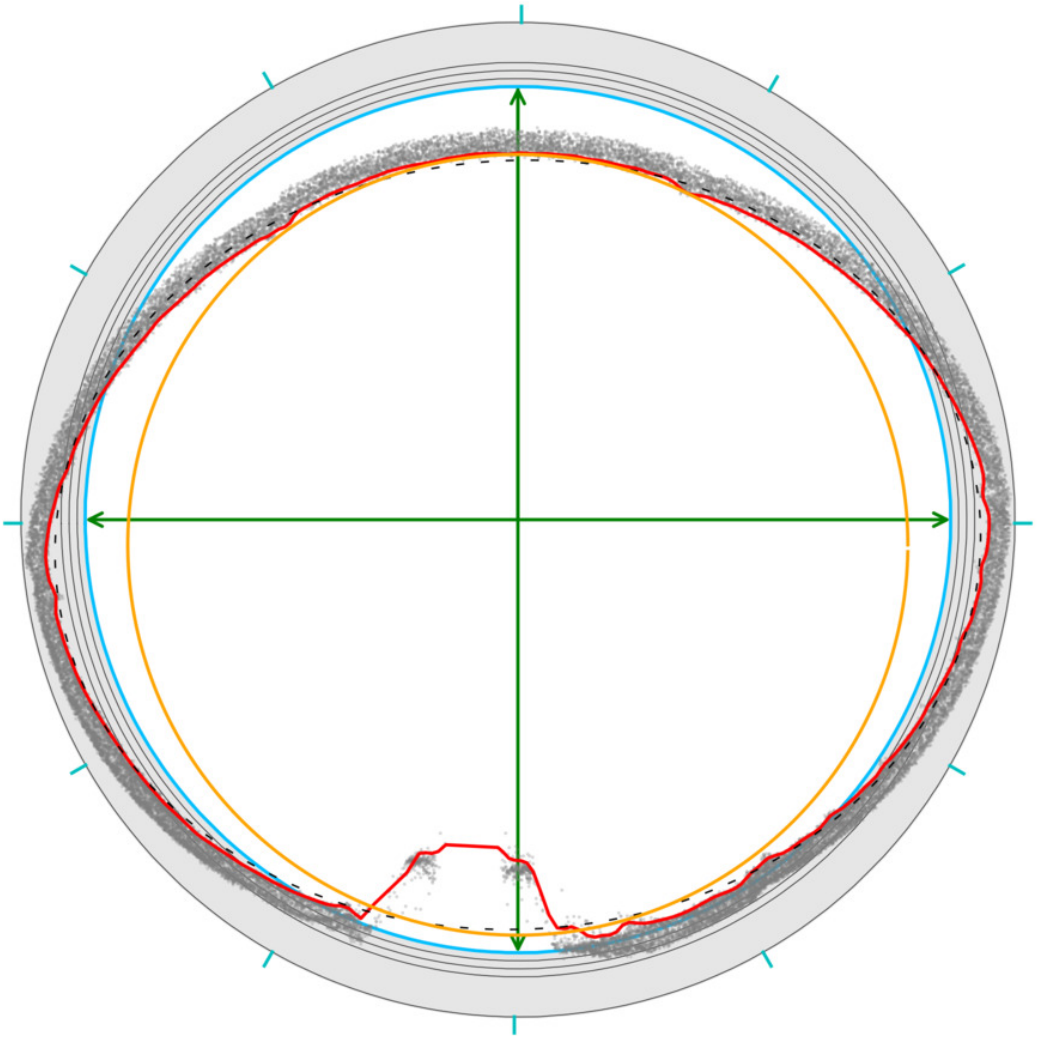
```
Footage    :  369 ft
Width      :  118.3" | 108.0"
Height     :  99.5" | 108.0"

Area       :  8488 sq in
Perimeter  :  345.1 in
Ovality    :  9.4%

Interior Diameter : 96.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 370.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



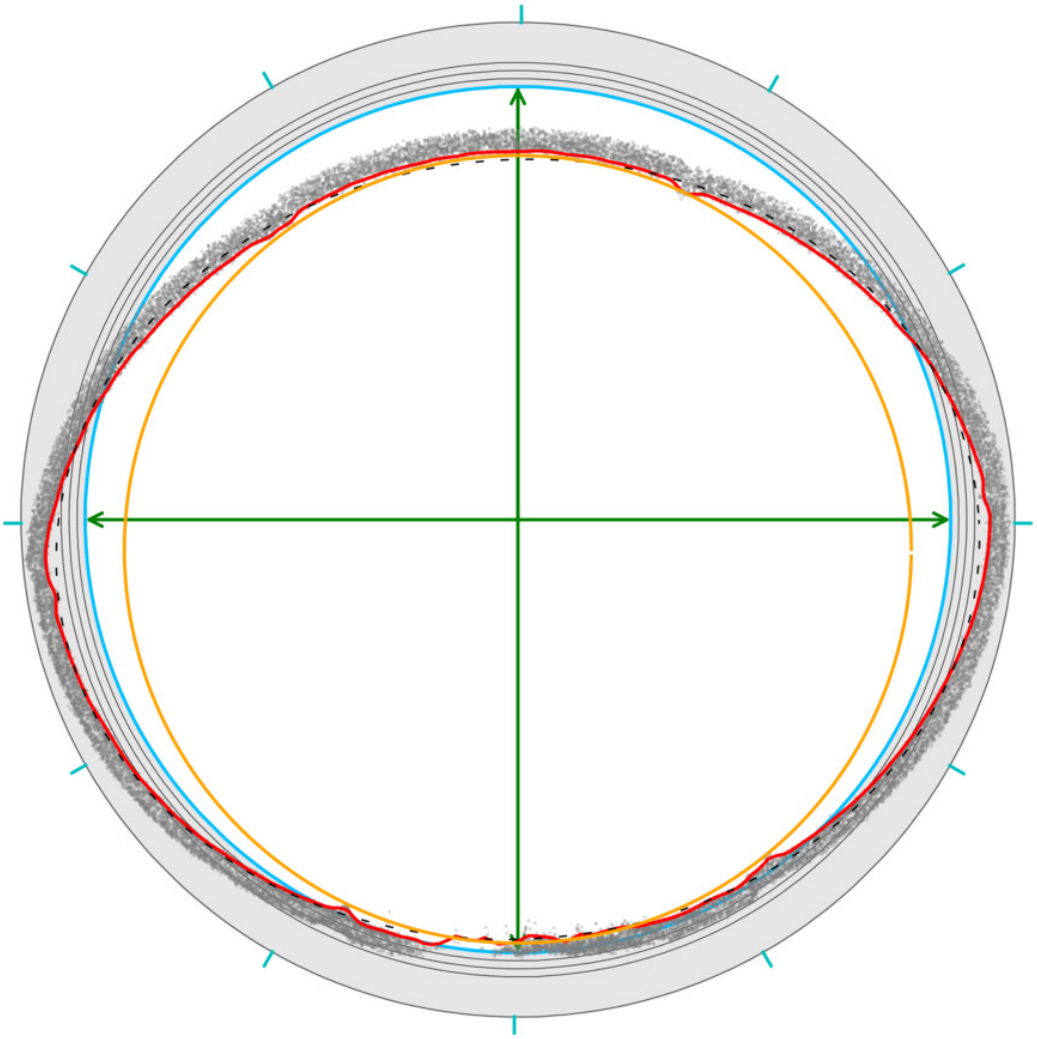
```
Footage   :  370 ft
Width     :  117.7" | 108.0"
Height    :  99.7" | 108.0"

Area      :  8553 sq in
Perimeter :  346.2 in
Ovality   :  9.1%

Interior Diameter : 97.4"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 371.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



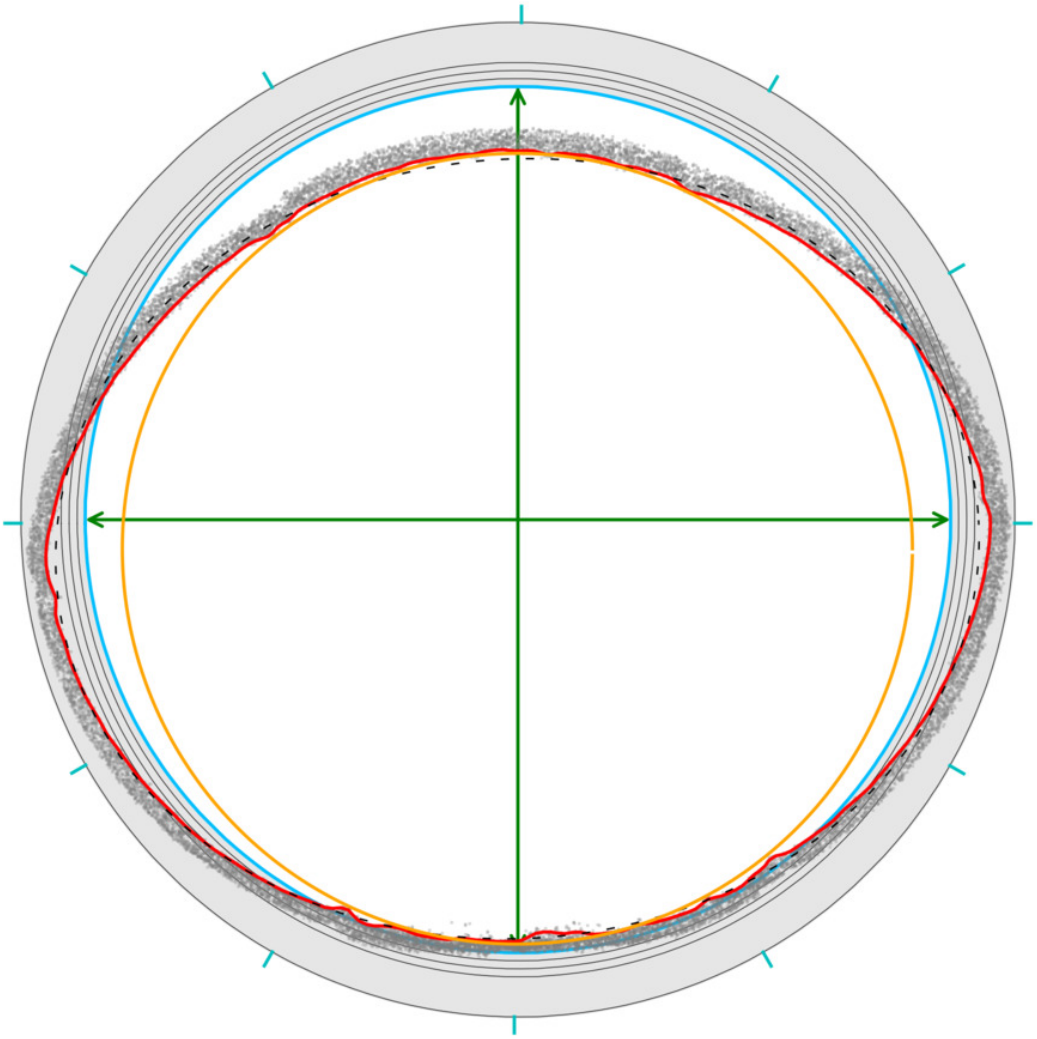
```
Footage   :  371 ft
Width     :  117.8" | 108.0"
Height    :  99.9" | 108.0"

Area      :  8791 sq in
Perimeter :  337.5 in
Ovality   :  8.3%

Interior Diameter : 98.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 372.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



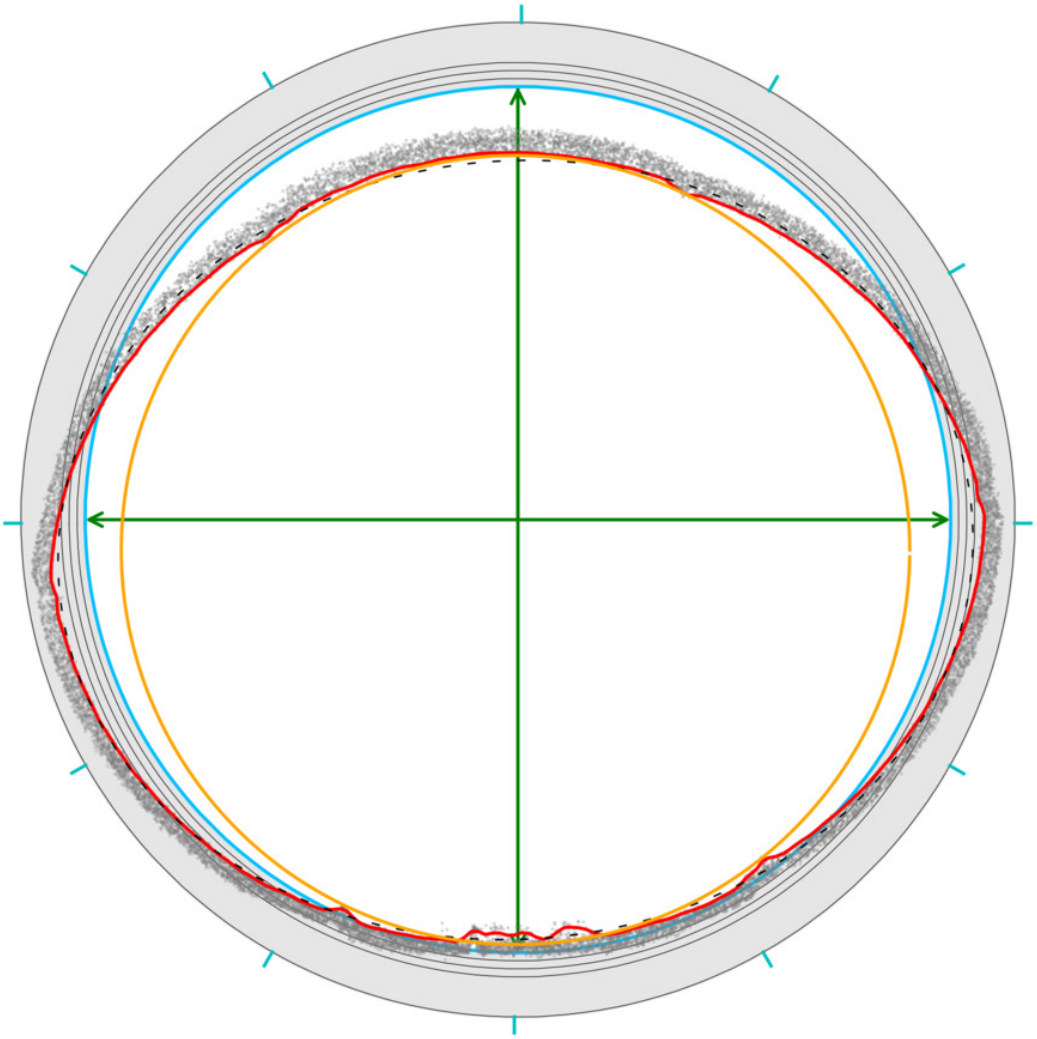
```
Footage   :  372 ft
Width     :  117.9" | 108.0"
Height    :  100.0" | 108.0"

Area      :  8794 sq in
Perimeter :  336.9 in
Ovality   :  8.3%

Interior Diameter : 98.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 373.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  373 ft
Width     :  116.5" | 108.0"
Height    :  99.8" | 108.0"

Area      :  8701 sq in
Perimeter :  335.8 in
Ovality   :  8.0%

Interior Diameter : 98.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

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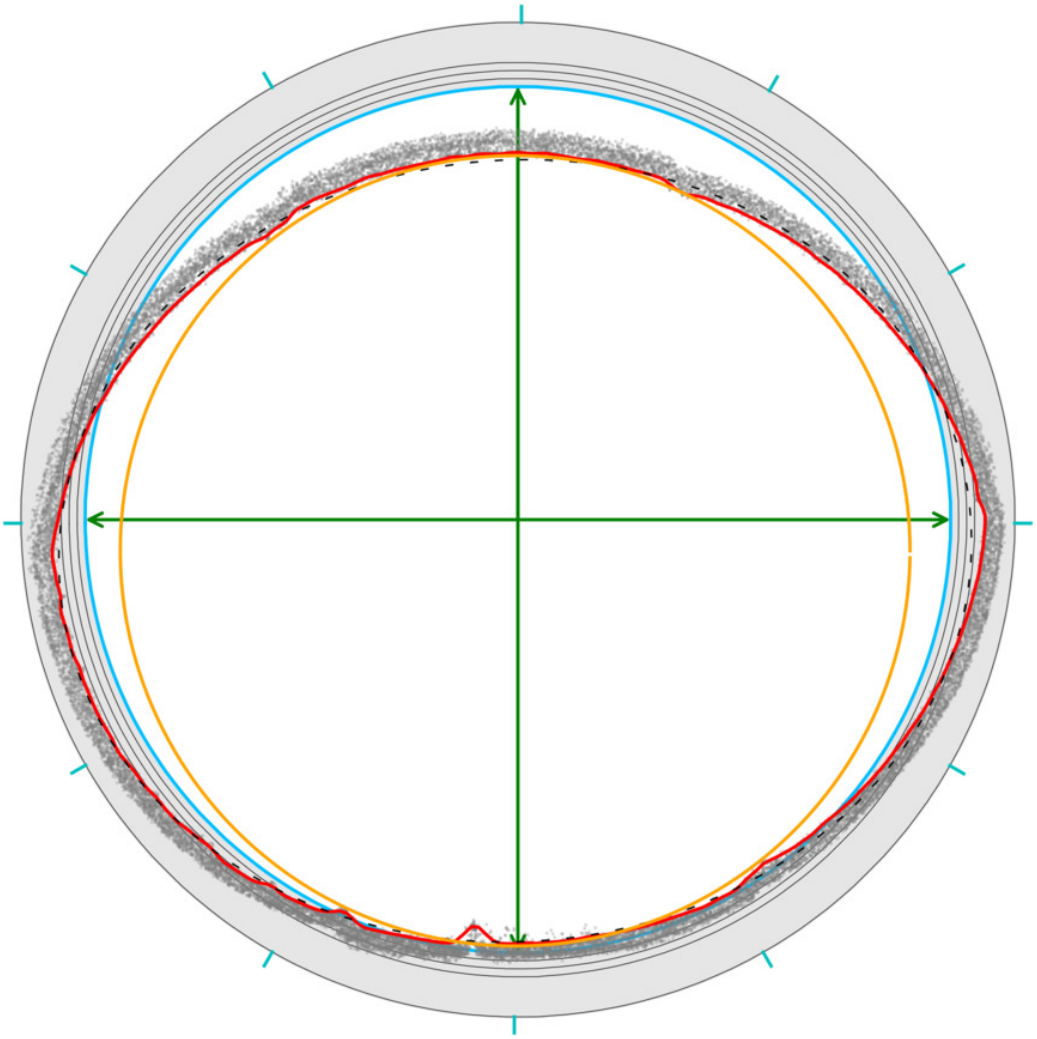
SFX-3D Cross Section Report
Inspection #1 : / , 374.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



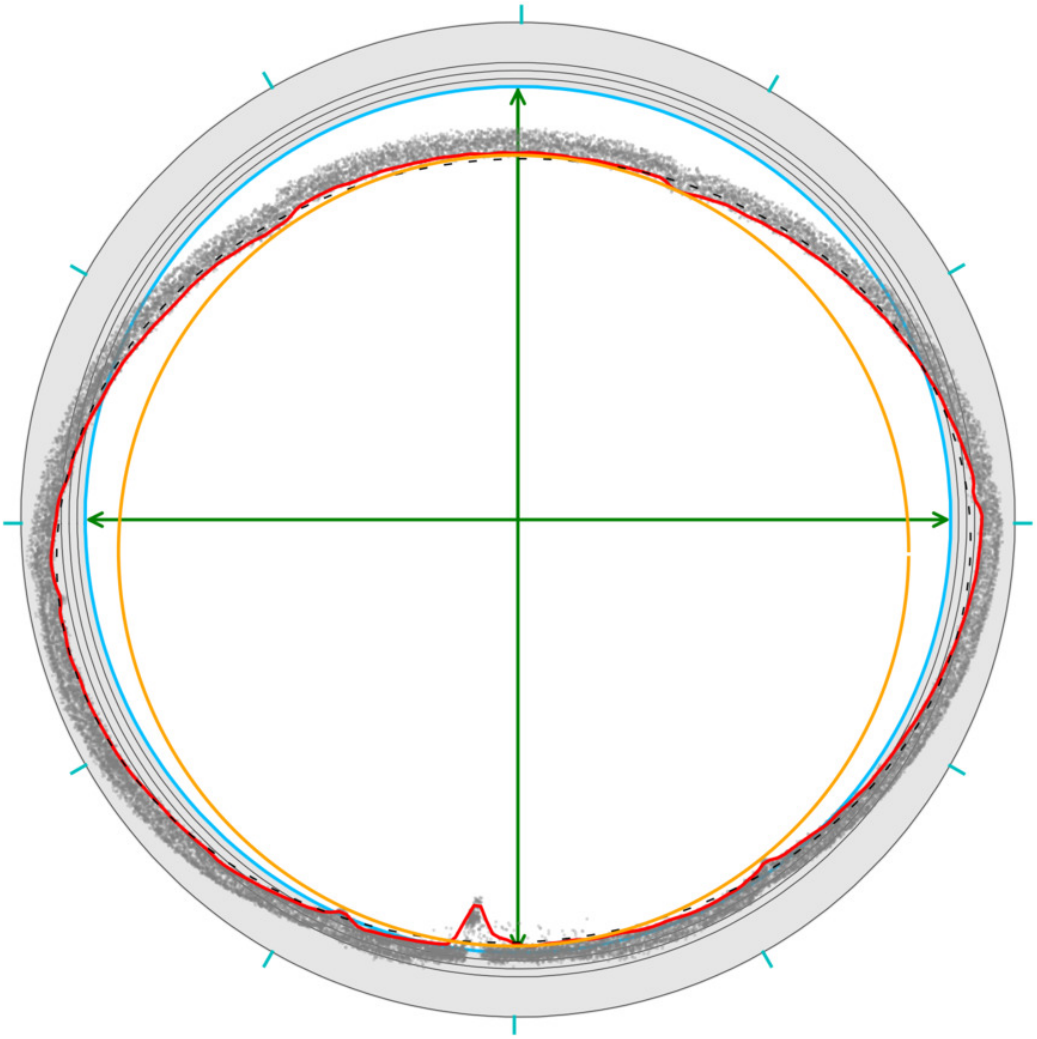
```
Footage    :  374 ft
Width      :  116.4" | 108.0"
Height     :  99.8" | 108.0"

Area       :  8716 sq in
Perimeter  :  336.1 in
Ovality    :  7.6%

Interior Diameter : 98.6"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 375.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



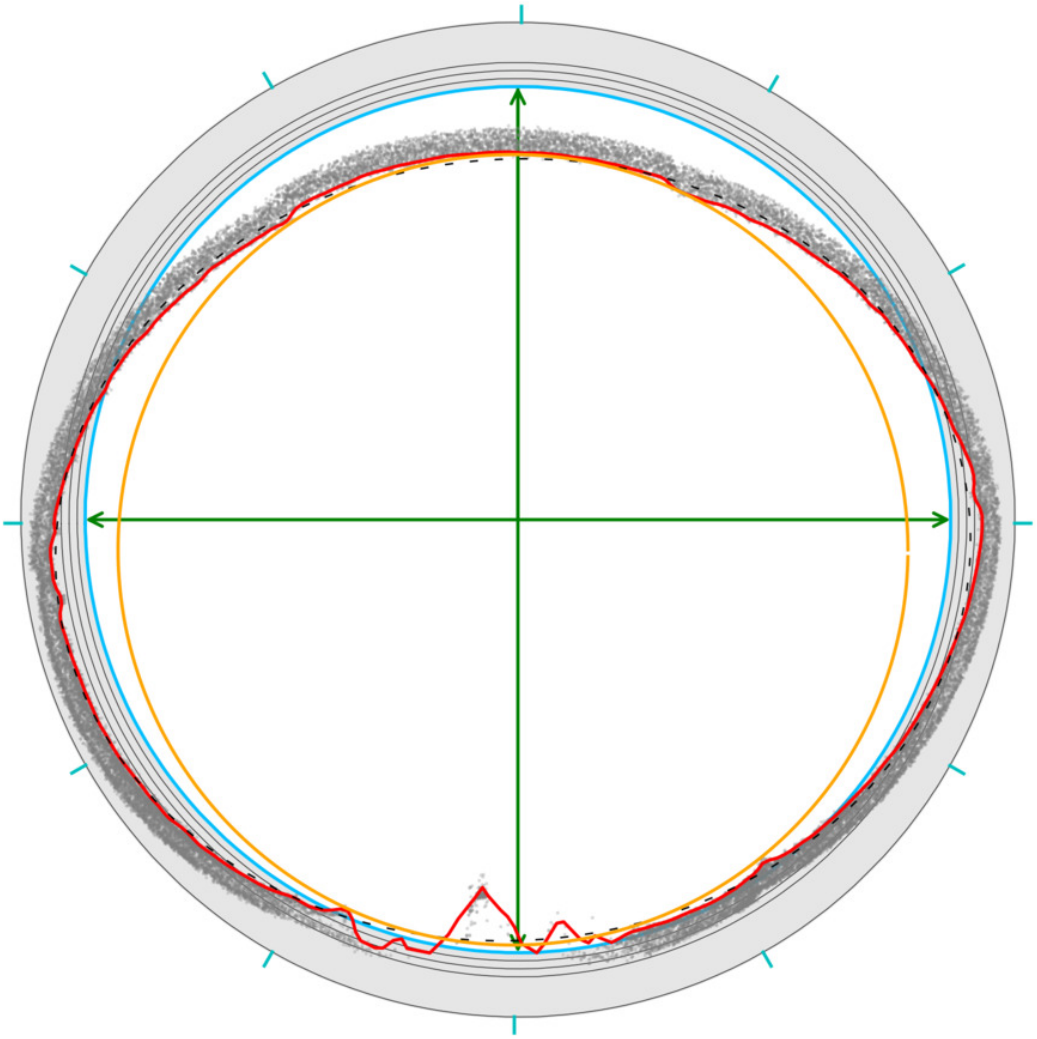
```
Footage   :  375 ft
Width     :  116.2" | 108.0"
Height    :  99.7" | 108.0"

Area      :  8747 sq in
Perimeter :  340.5 in
Ovality   :  7.6%

Interior Diameter : 98.6"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 376.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 376 ft
Width : 116.3" | 108.0"
Height : 99.8" | 108.0"

Area : 8732 sq in
Perimeter : 350.2 in
Ovality : 7.8%

Interior Diameter : 98.6"

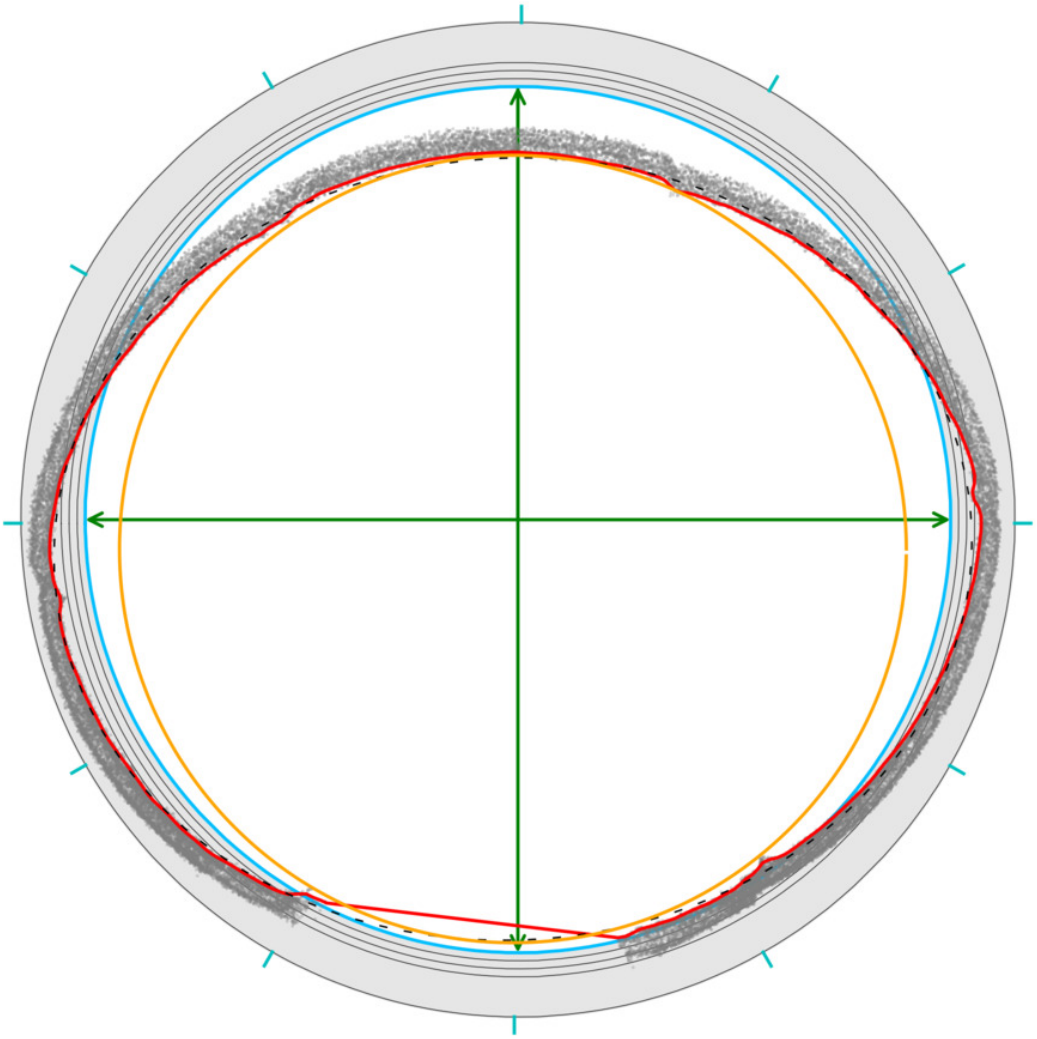
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 377.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



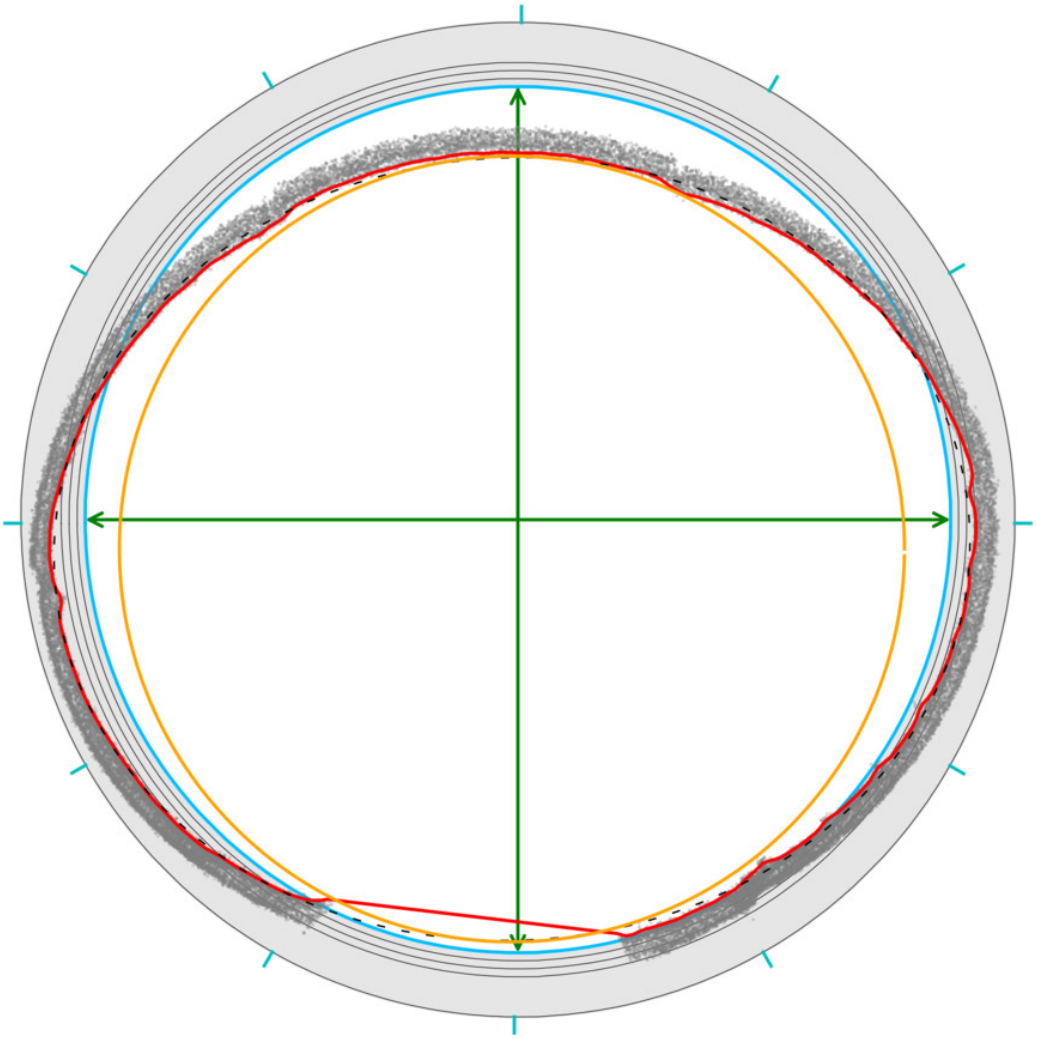
```
Footage   :  377 ft
Width     :  116.3" | 108.0"
Height    :  99.8" | 108.0"

Area      :  8712 sq in
Perimeter :  335.1 in
Ovality   :  7.9%

Interior Diameter : 98.2"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 378.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 378 ft
Width : 115.6" | 108.0"
Height : 99.7" | 108.0"

Area : 8684 sq in
Perimeter : 334.8 in
Ovality : 7.7%

Interior Diameter : 98.0"

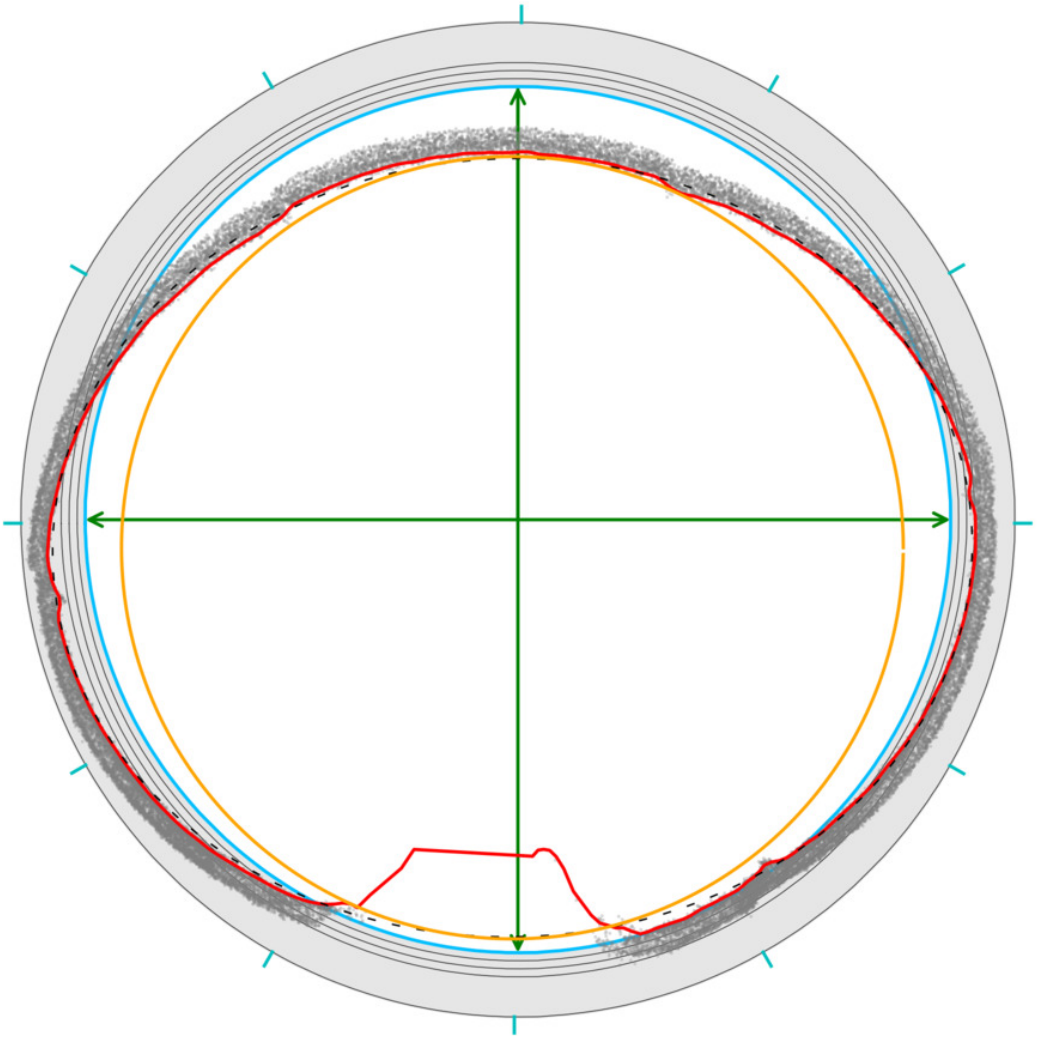
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 379.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



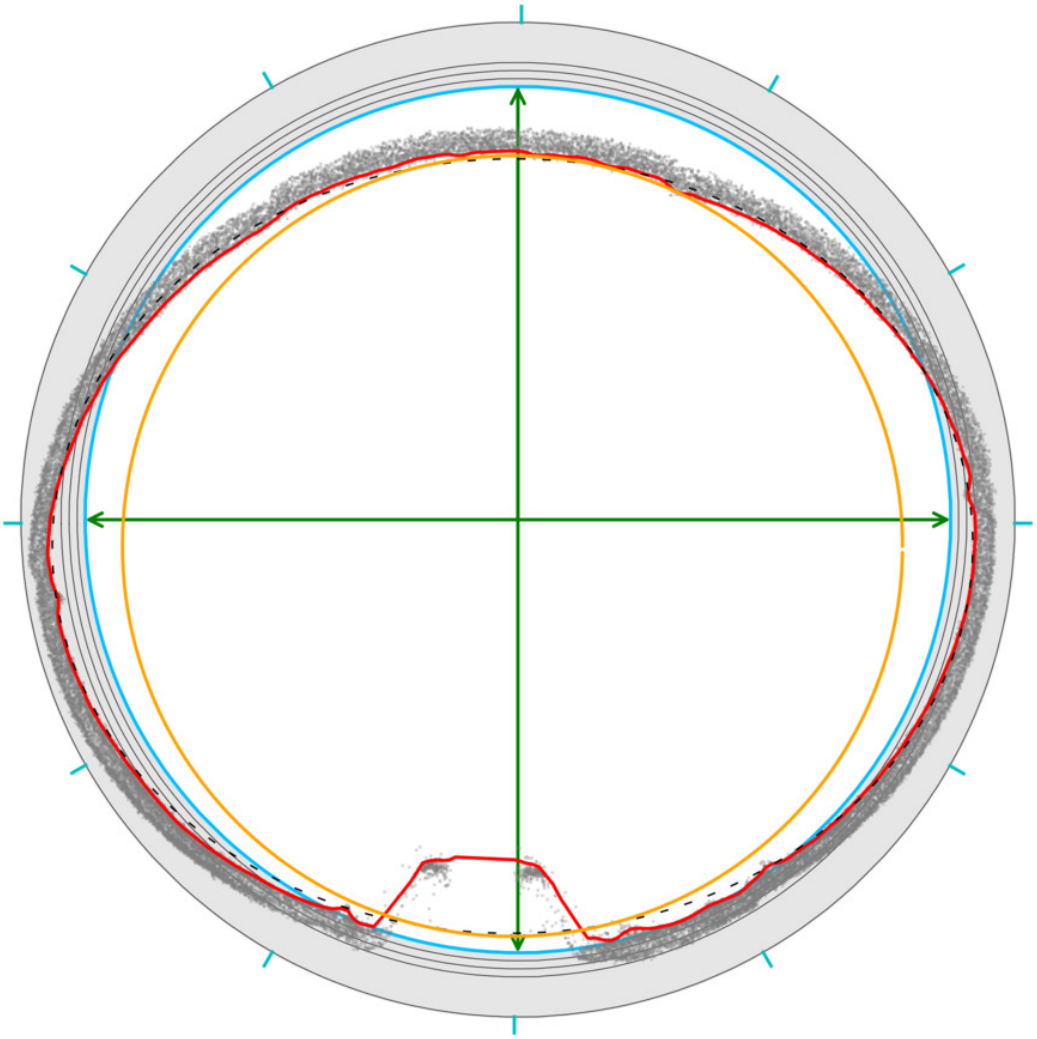
```
Footage   :  379 ft
Width     :  115.8" | 108.0"
Height    :  99.8" | 108.0"

Area      :  8521 sq in
Perimeter :  343.6 in
Ovality   :  8.2%

Interior Diameter : 97.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 380.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



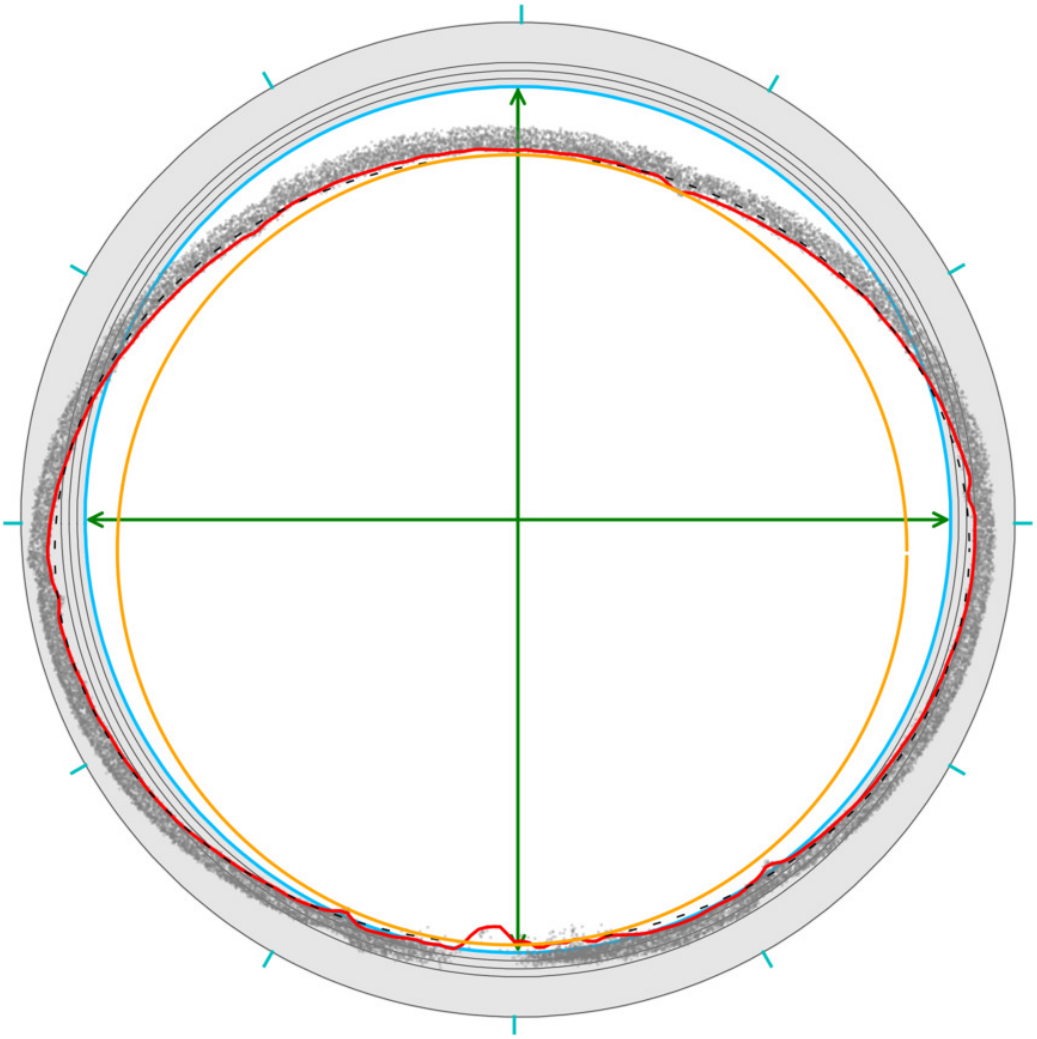
```
Footage    :  380 ft
Width      :  115.8" | 108.0"
Height     :  99.9" | 108.0"

Area       :  8594 sq in
Perimeter  :  345.0 in
Ovality    :  8.4%

Interior Diameter : 97.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 381.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



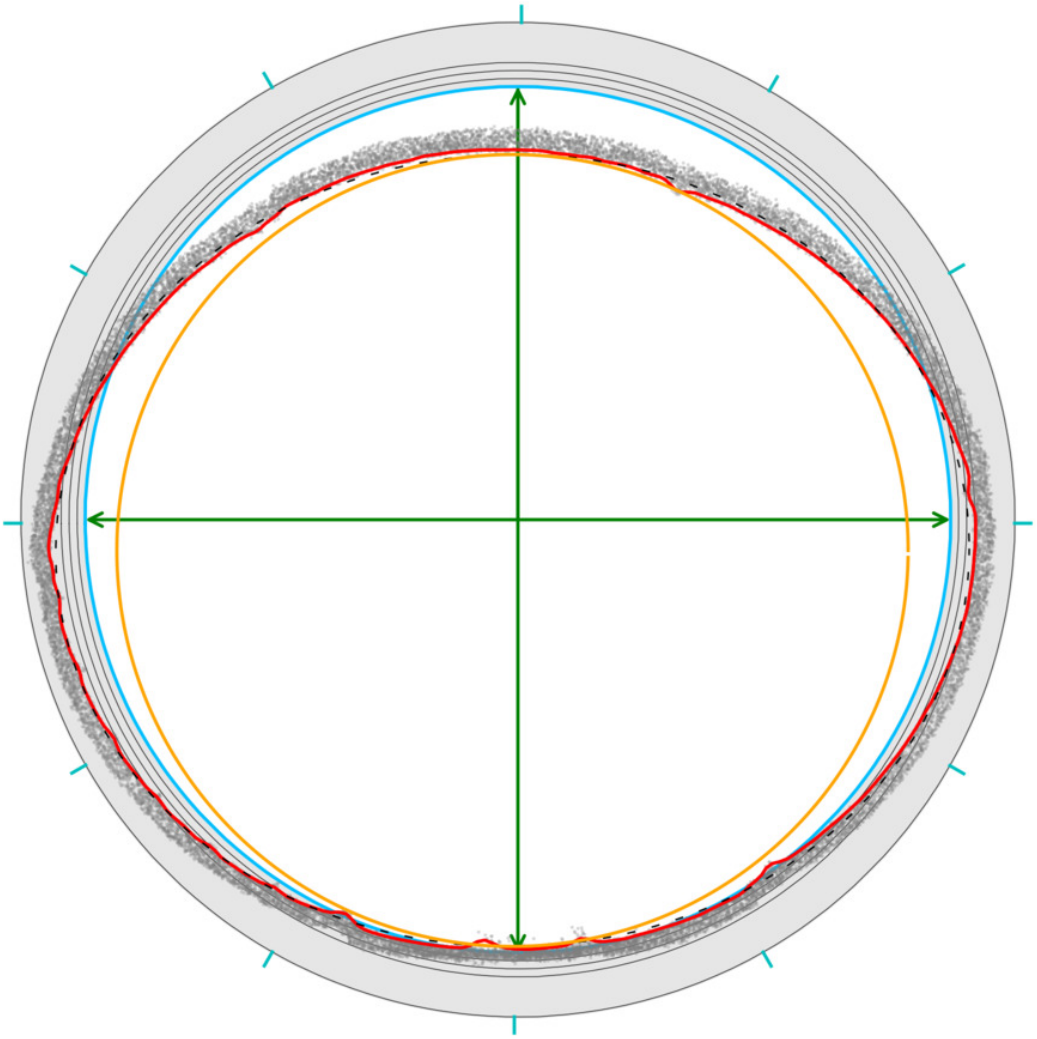
```
Footage   :  381 ft
Width     :  115.7" | 108.0"
Height    :  100.1" | 108.0"

Area      :  8815 sq in
Perimeter :  338.7 in
Ovality   :  7.2%

Interior Diameter : 98.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 382.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



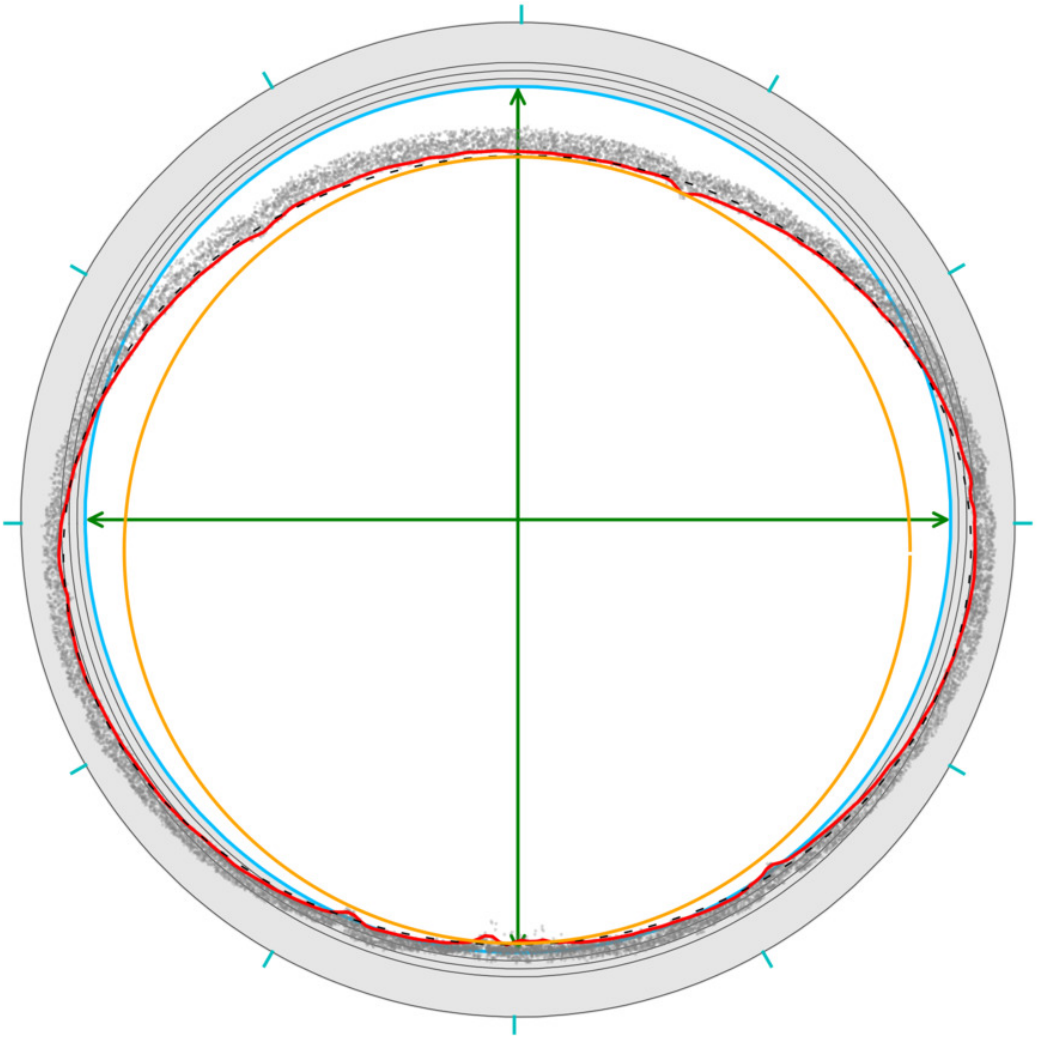
```
Footage   :  382 ft
Width     :  115.7" | 108.0"
Height    :  100.1" | 108.0"

Area      :  8840 sq in
Perimeter :  337.2 in
Ovality   :  7.0%

Interior Diameter : 98.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 383.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



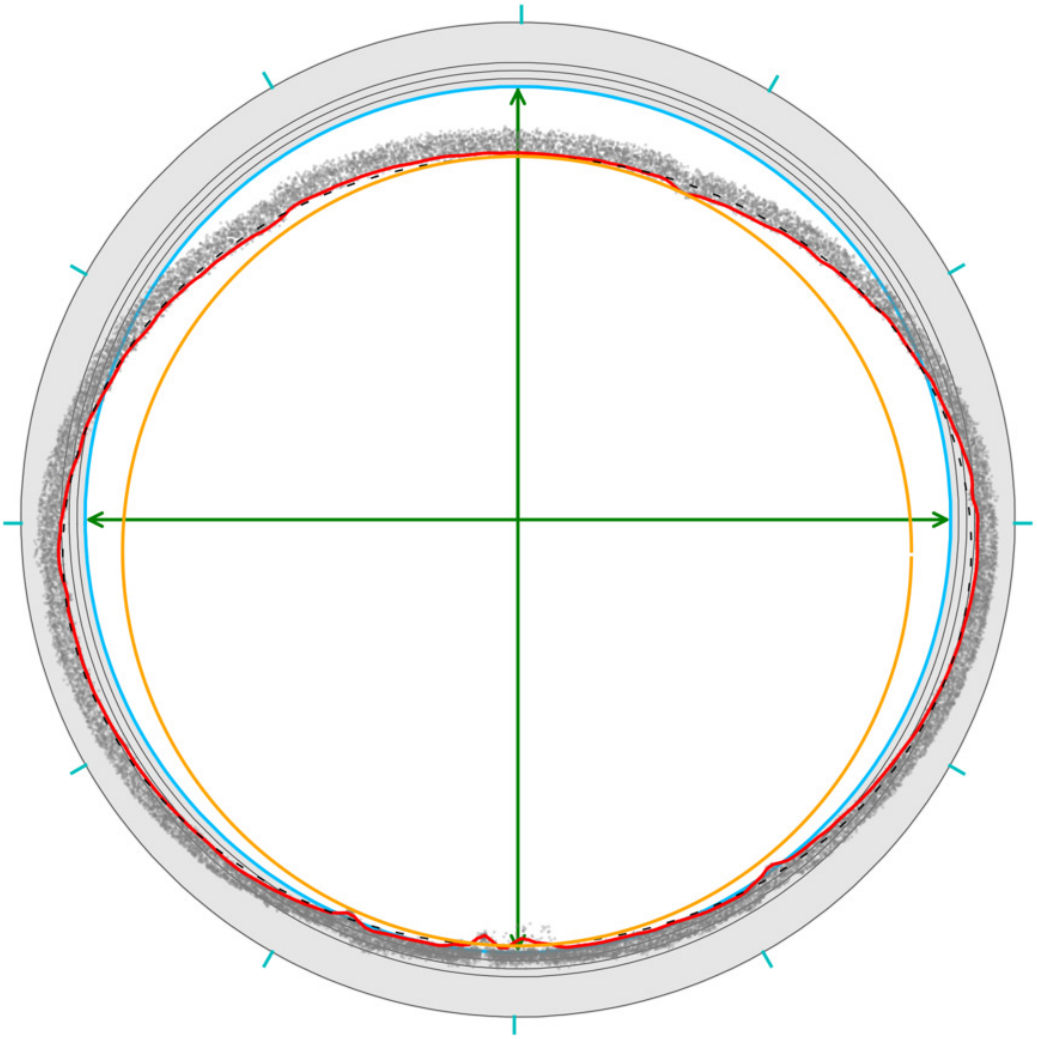
```
Footage   :  383 ft
Width     :  114.3" | 108.0"
Height    :  99.9" | 108.0"

Area      :  8748 sq in
Perimeter :  335.2 in
Ovality   :  6.9%

Interior Diameter : 98.1"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 384.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



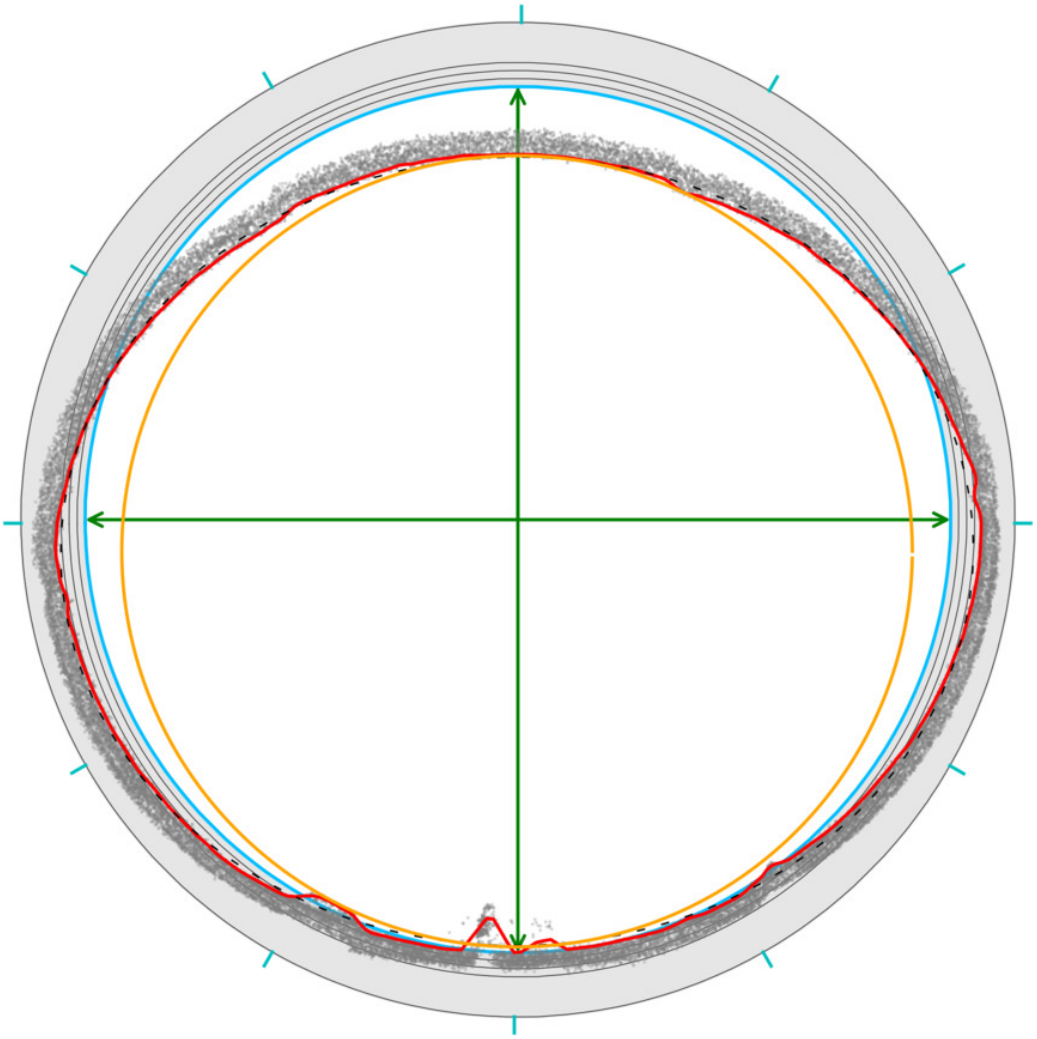
```
Footage   :  384 ft
Width     :  114.7" | 108.0"
Height    :  99.7" | 108.0"

Area      :  8760 sq in
Perimeter :  336.3 in
Ovality   :  6.9%

Interior Diameter : 98.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 385.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



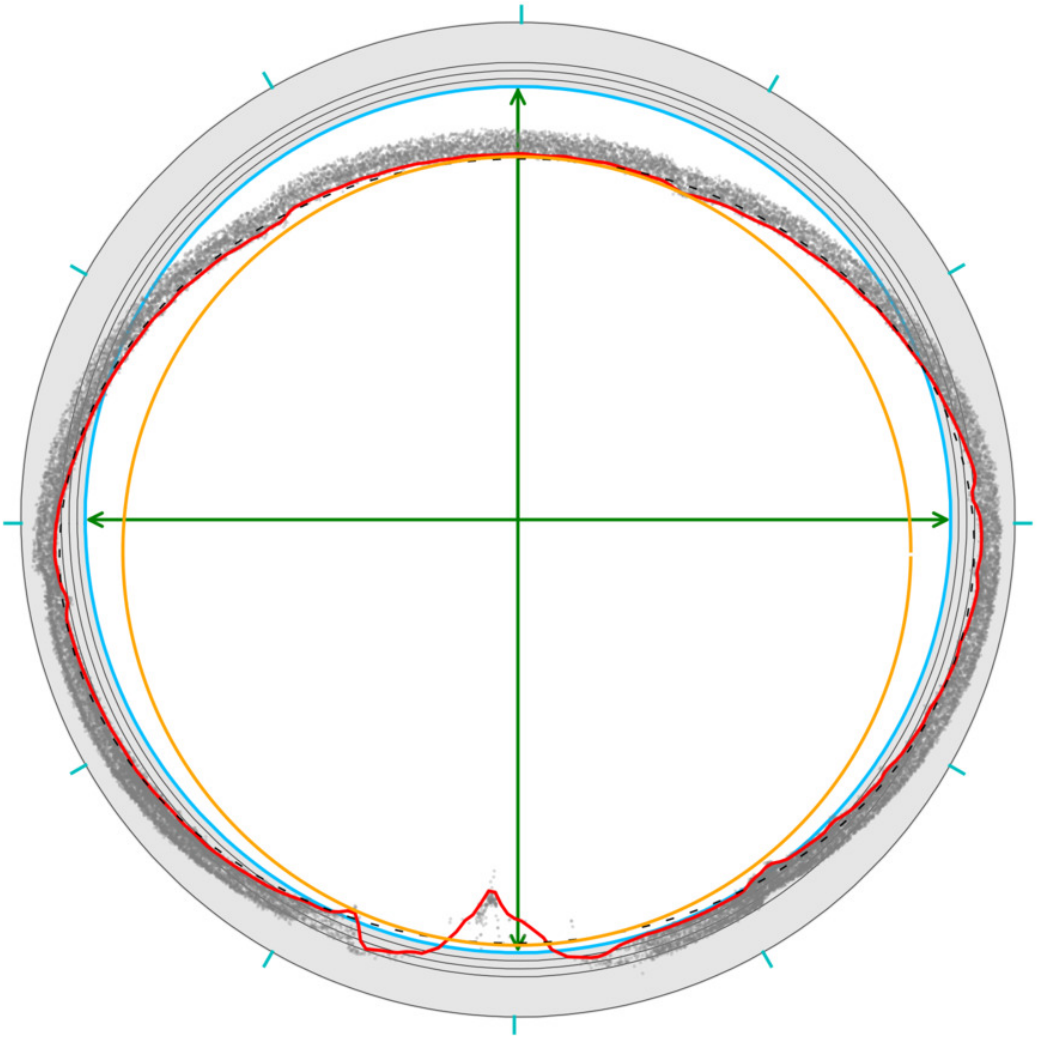
```
Footage   :  385 ft
Width     :  115.5" | 108.0"
Height    :  99.5" | 108.0"

Area      :  8782 sq in
Perimeter :  340.9 in
Ovality   :  7.2%

Interior Diameter : 98.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 386.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 386 ft
Width : 115.7" | 108.0"
Height : 99.6" | 108.0"

Area : 8769 sq in
Perimeter : 345.7 in
Ovality : 7.5%

Interior Diameter : 98.3"

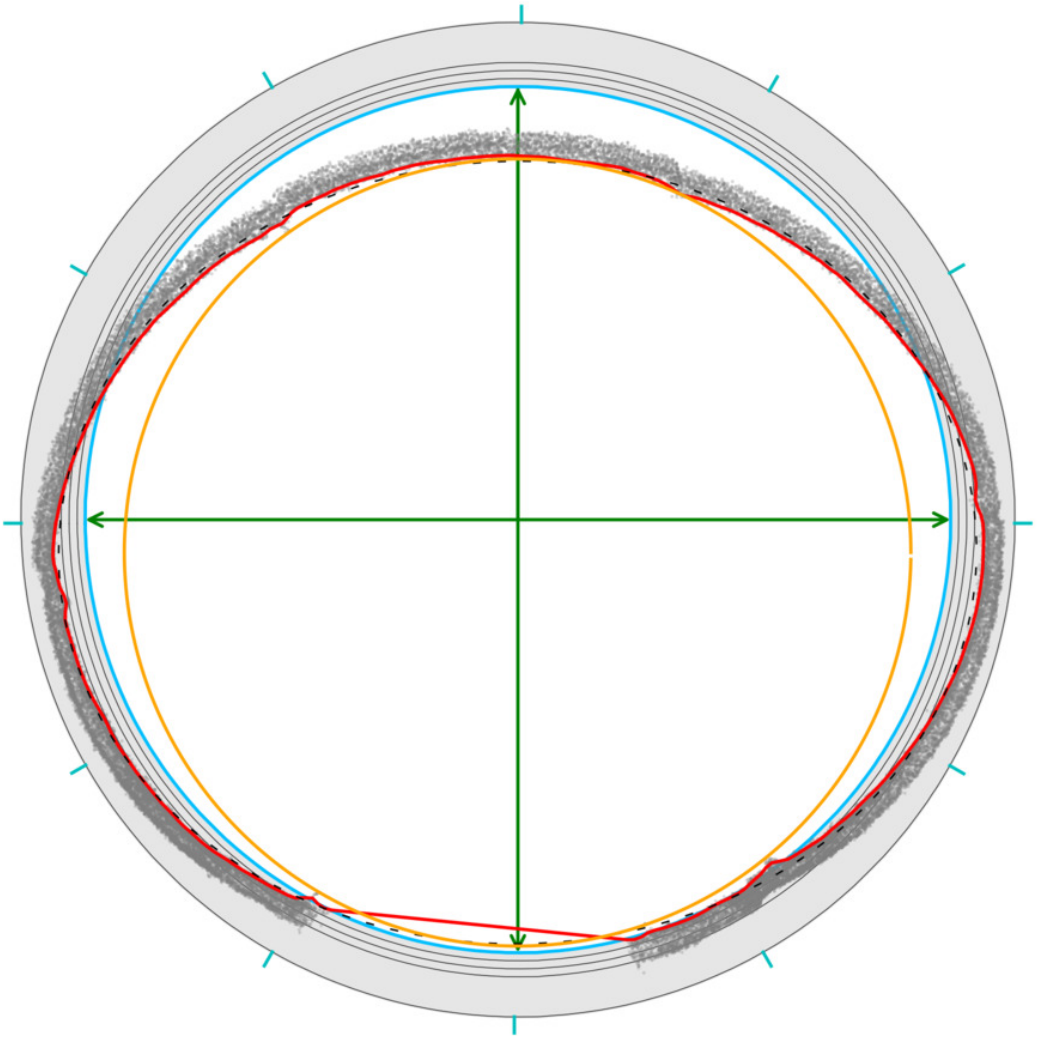
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 387.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



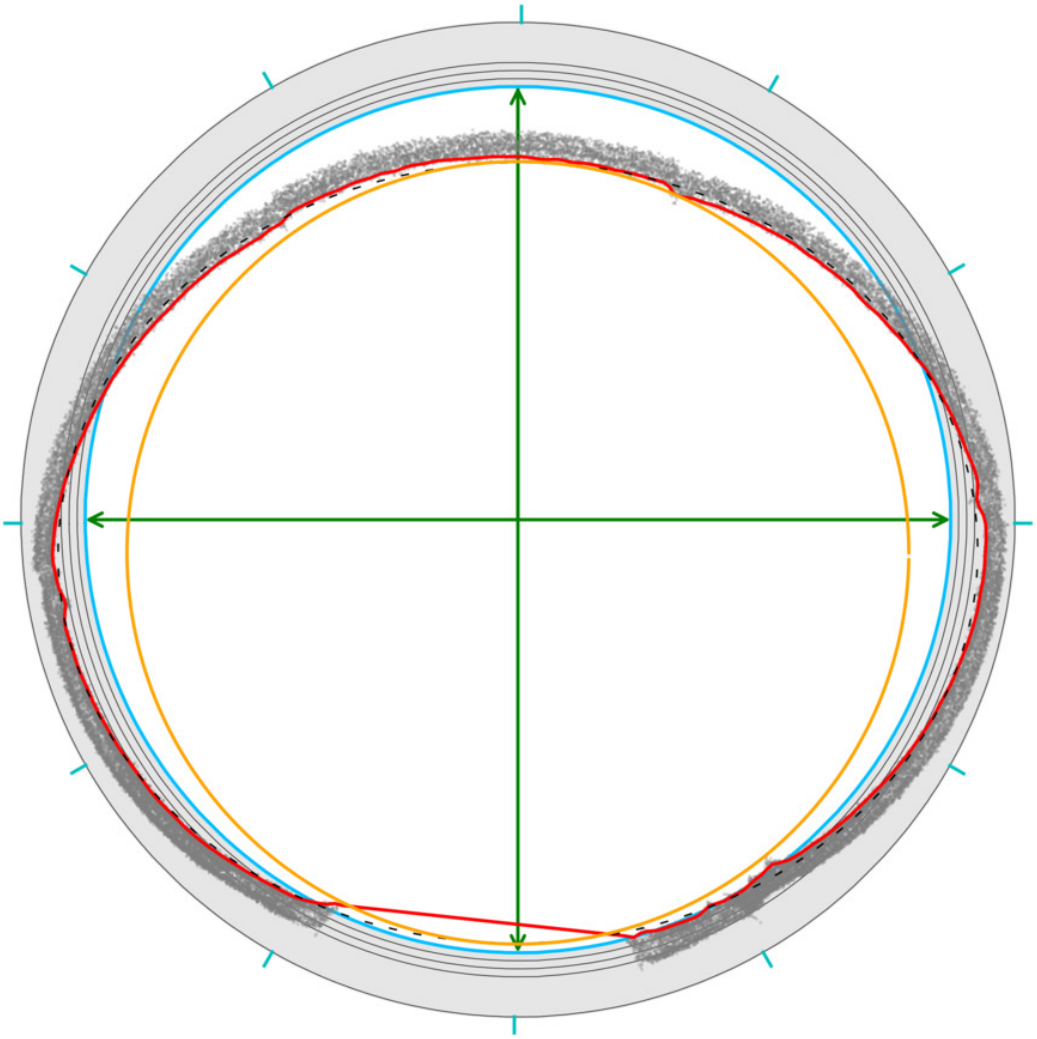
```
Footage   :  387 ft
Width     :  116.1" | 108.0"
Height    :  99.4" | 108.0"

Area      :  8721 sq in
Perimeter :  335.2 in
Ovality   :  7.8%

Interior Diameter : 98.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 388.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



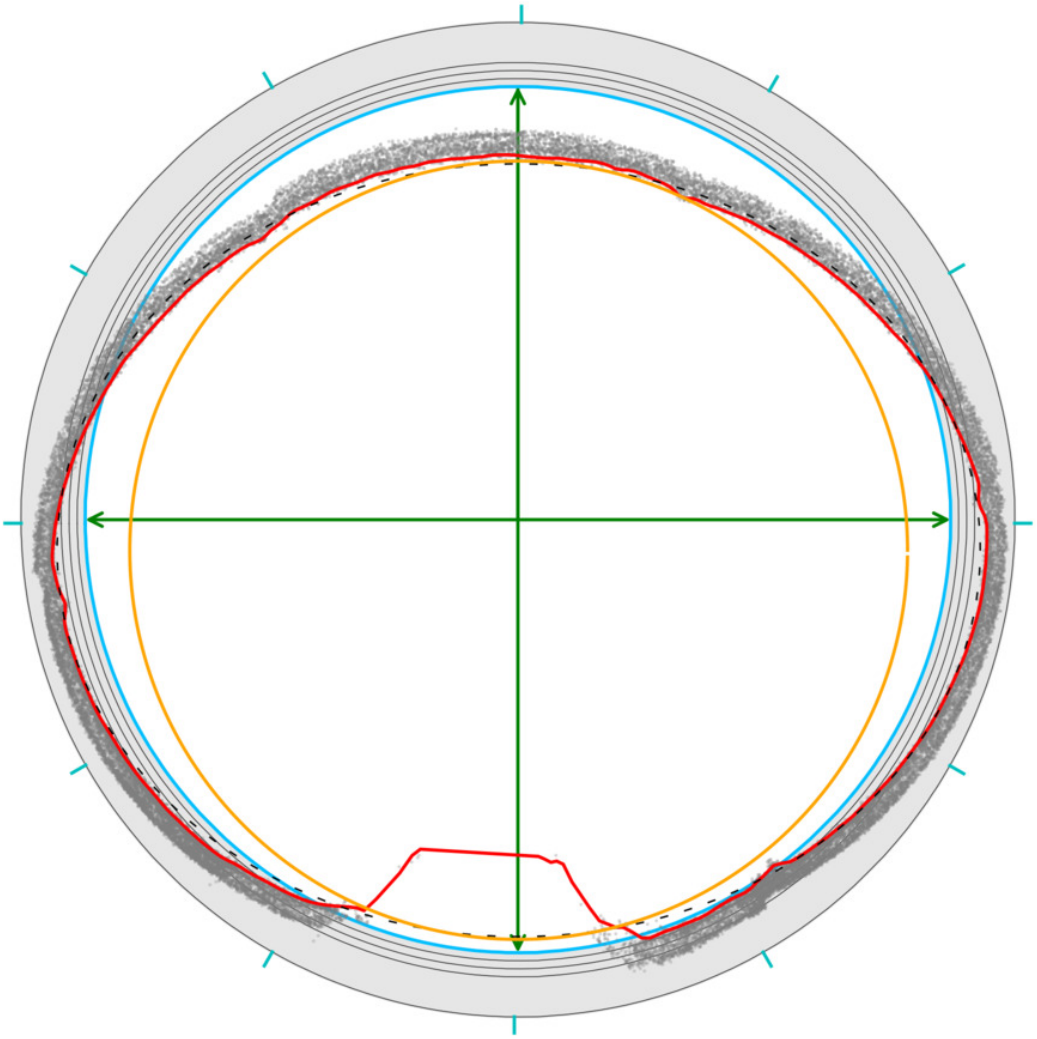
```
Footage   :  388 ft
Width     :  116.5" | 108.0"
Height    :  99.3" | 108.0"

Area      :  8701 sq in
Perimeter :  335.1 in
Ovality   :  8.0%

Interior Diameter : 97.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 389.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



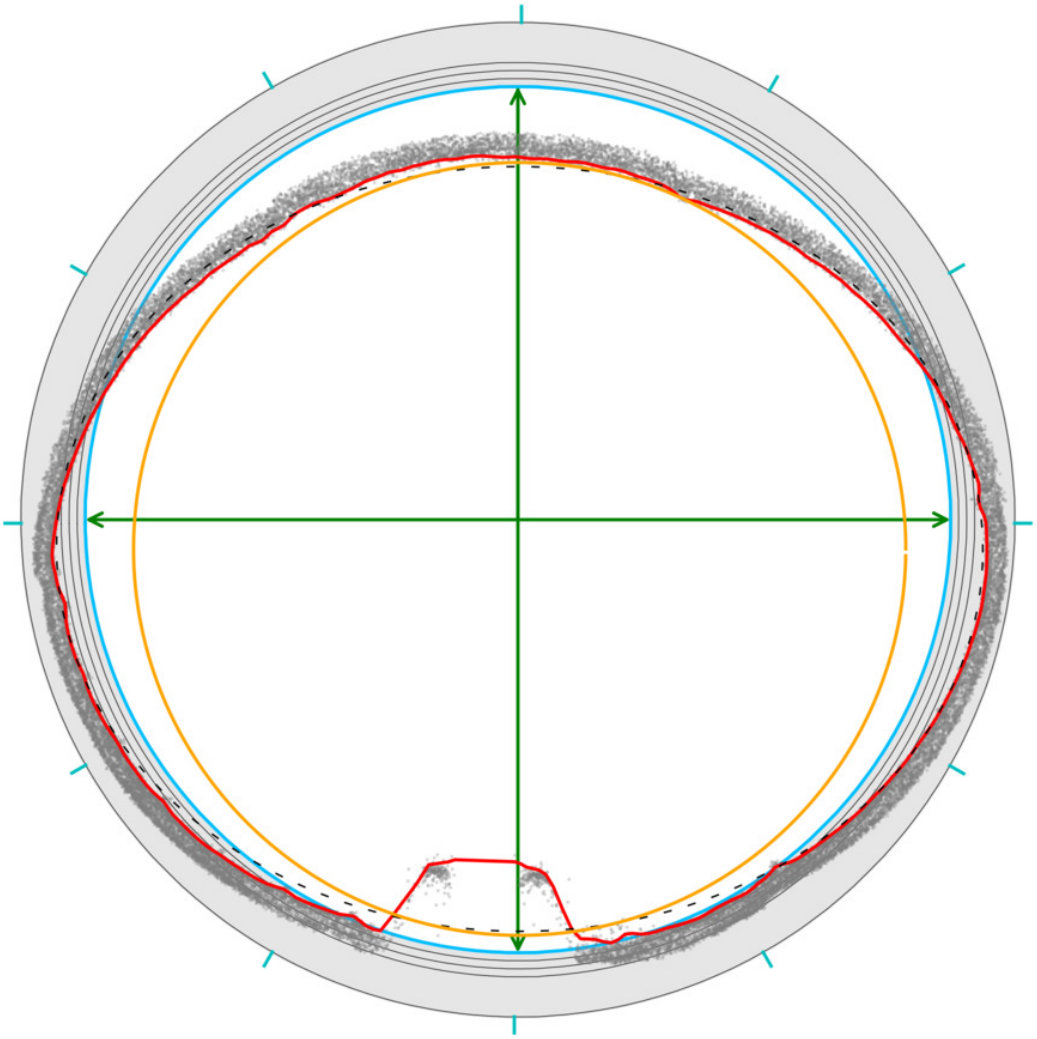
```
Footage   :  389 ft
Width     :  116.7" | 108.0"
Height    :  99.4" | 108.0"

Area      :  8516 sq in
Perimeter :  343.3 in
Ovality   :  8.7%

Interior Diameter : 97.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 390.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



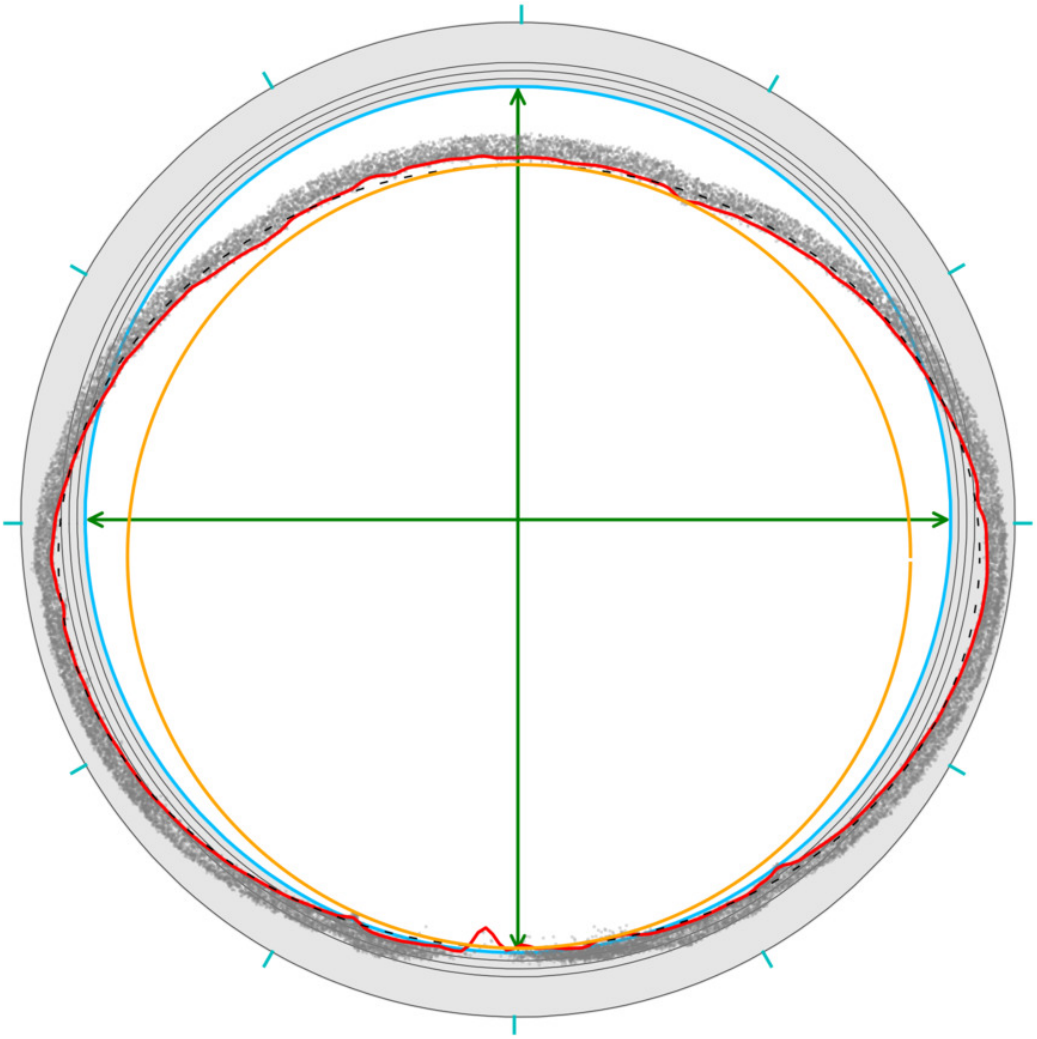
```
Footage   :  390 ft
Width     :  116.7" | 108.0"
Height    :  99.2" | 108.0"

Area      :  8592 sq in
Perimeter :  345.3 in
Ovality   :  9.3%

Interior Diameter : 96.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 391.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 391 ft
Width : 116.8" | 108.0"
Height : 99.2" | 108.0"

Area : 8812 sq in
Perimeter : 339.4 in
Ovality : 8.0%

Interior Diameter : 97.7"

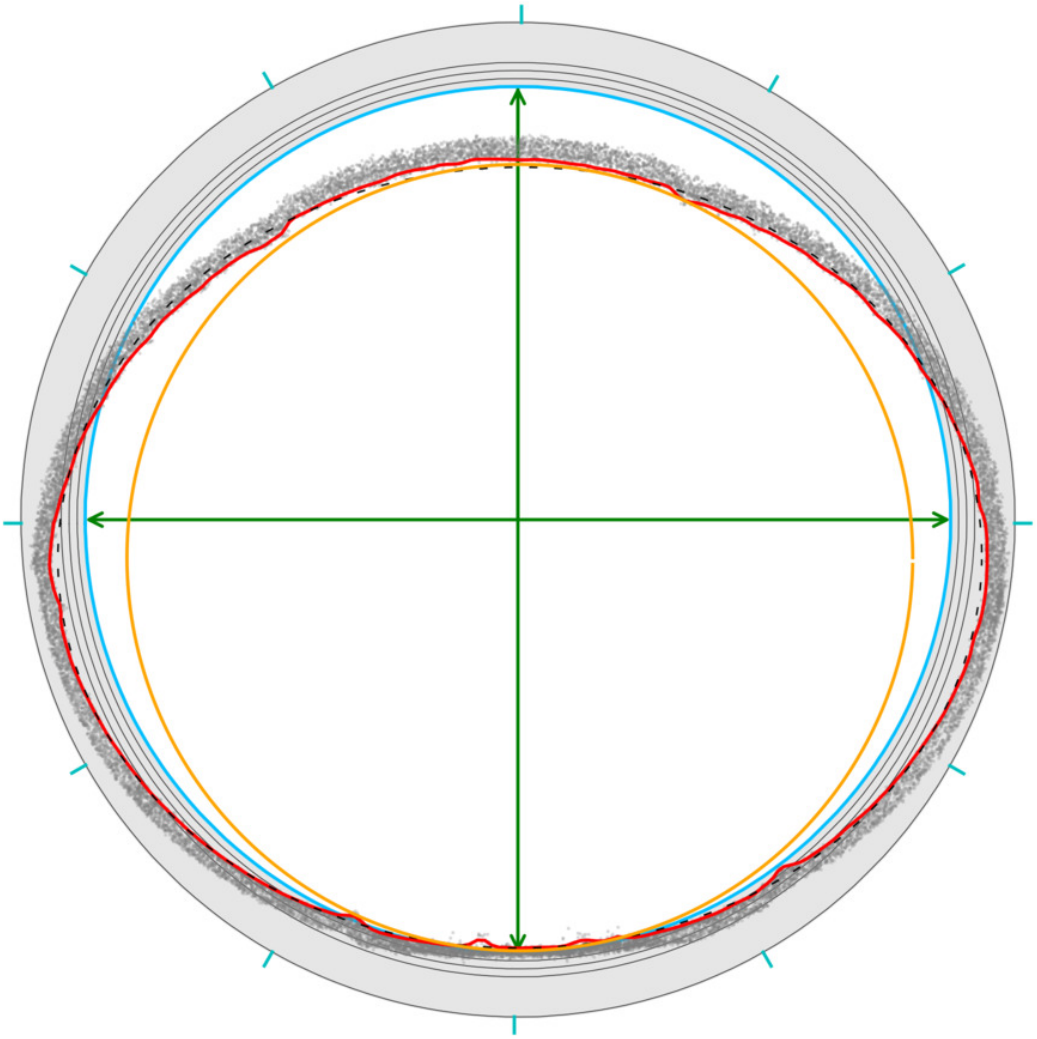
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 392.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



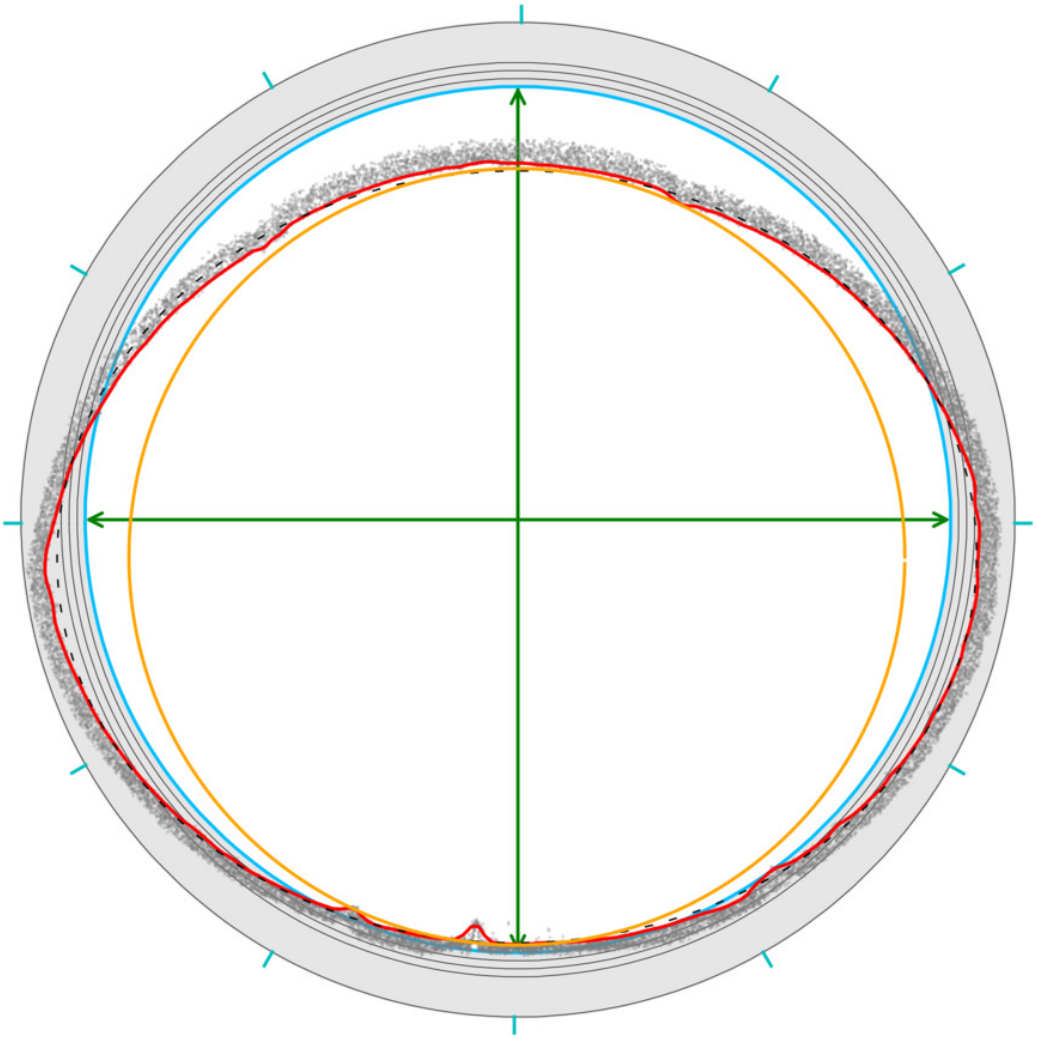
```
Footage   :  392 ft
Width     :  117.0" | 108.0"
Height    :  98.9" | 108.0"

Area      :  8809 sq in
Perimeter :  337.0 in
Ovality   :  8.2%

Interior Diameter : 98.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 393.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



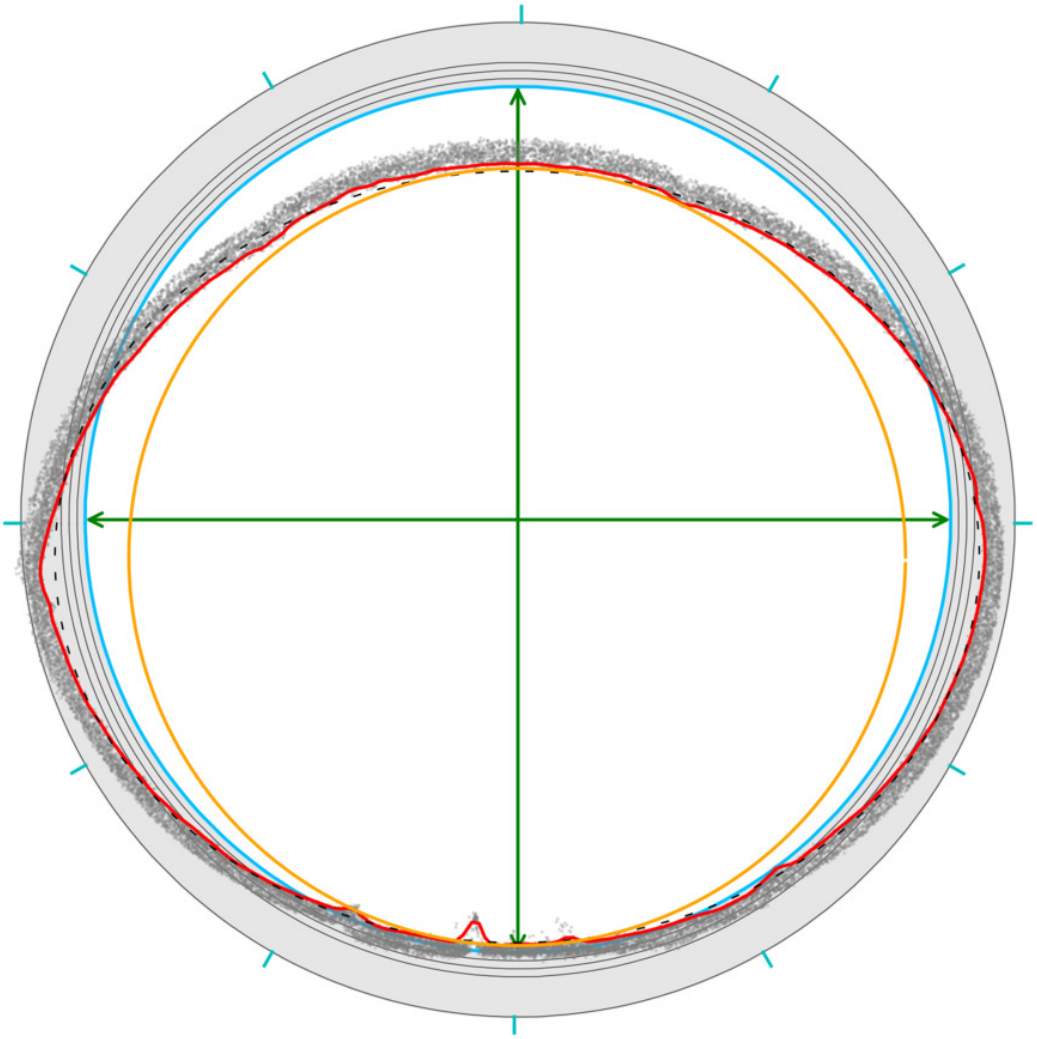
```
Footage   :  393 ft
Width     :  116.6" | 108.0"
Height    :  98.4" | 108.0"

Area      :  8667 sq in
Perimeter :  335.5 in
Ovality   :  8.6%

Interior Diameter : 96.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 394.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 394 ft
Width : 117.9" | 108.0"
Height : 98.4" | 108.0"

Area : 8708 sq in
Perimeter : 337.8 in
Ovality : 8.8%

Interior Diameter : 96.9"

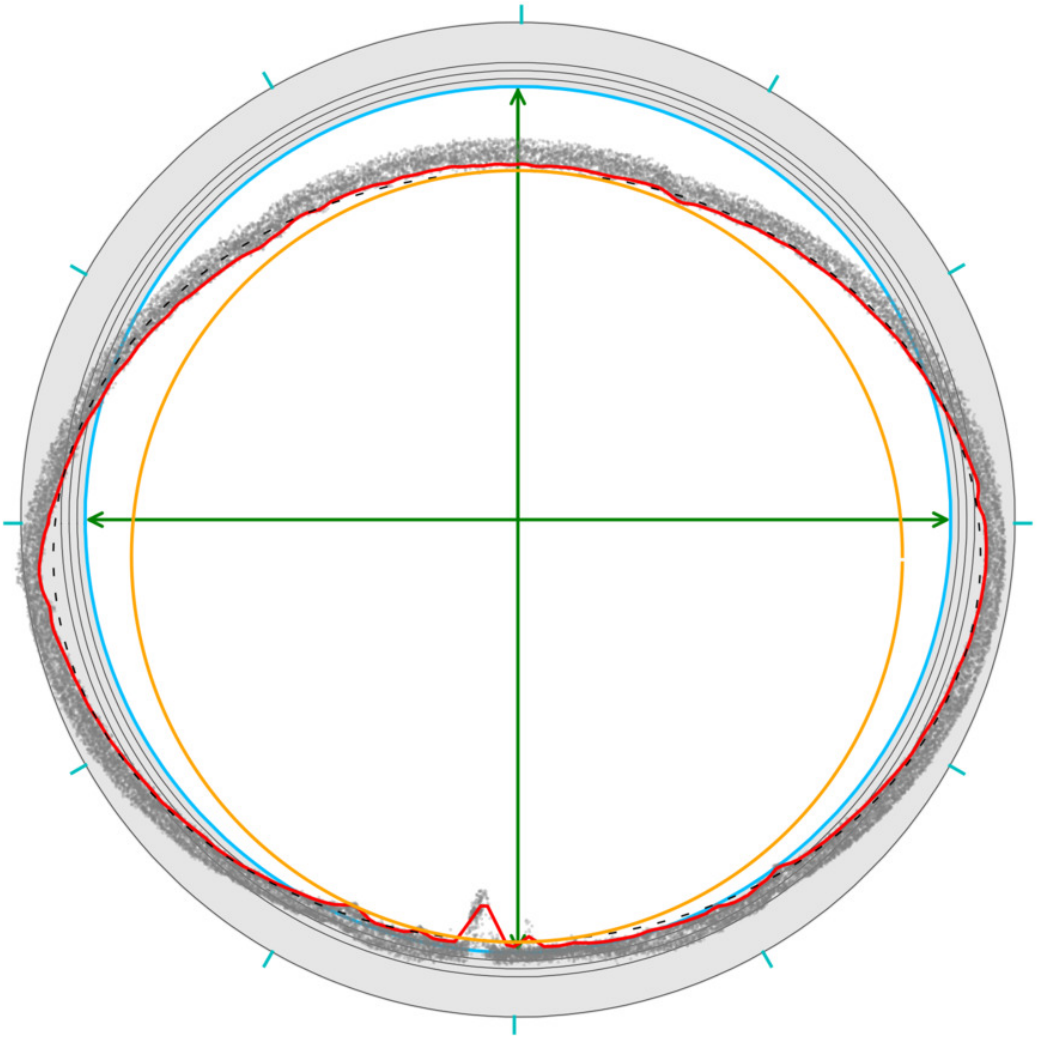
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 395.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



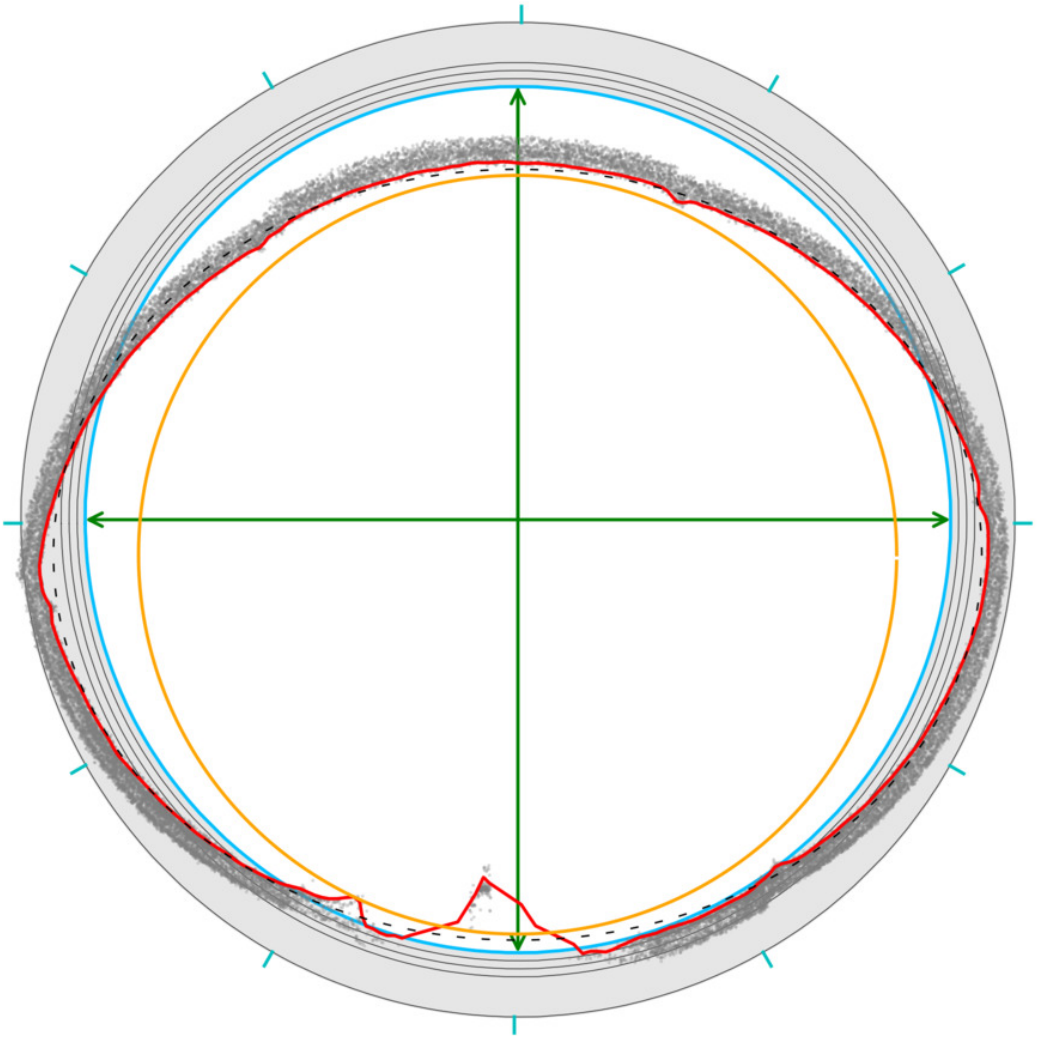
```
Footage   :  395 ft
Width     :  118.2" | 108.0"
Height    :  98.3" | 108.0"

Area      :  8712 sq in
Perimeter :  341.8 in
Ovality   :  9.1%

Interior Diameter : 96.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 396.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



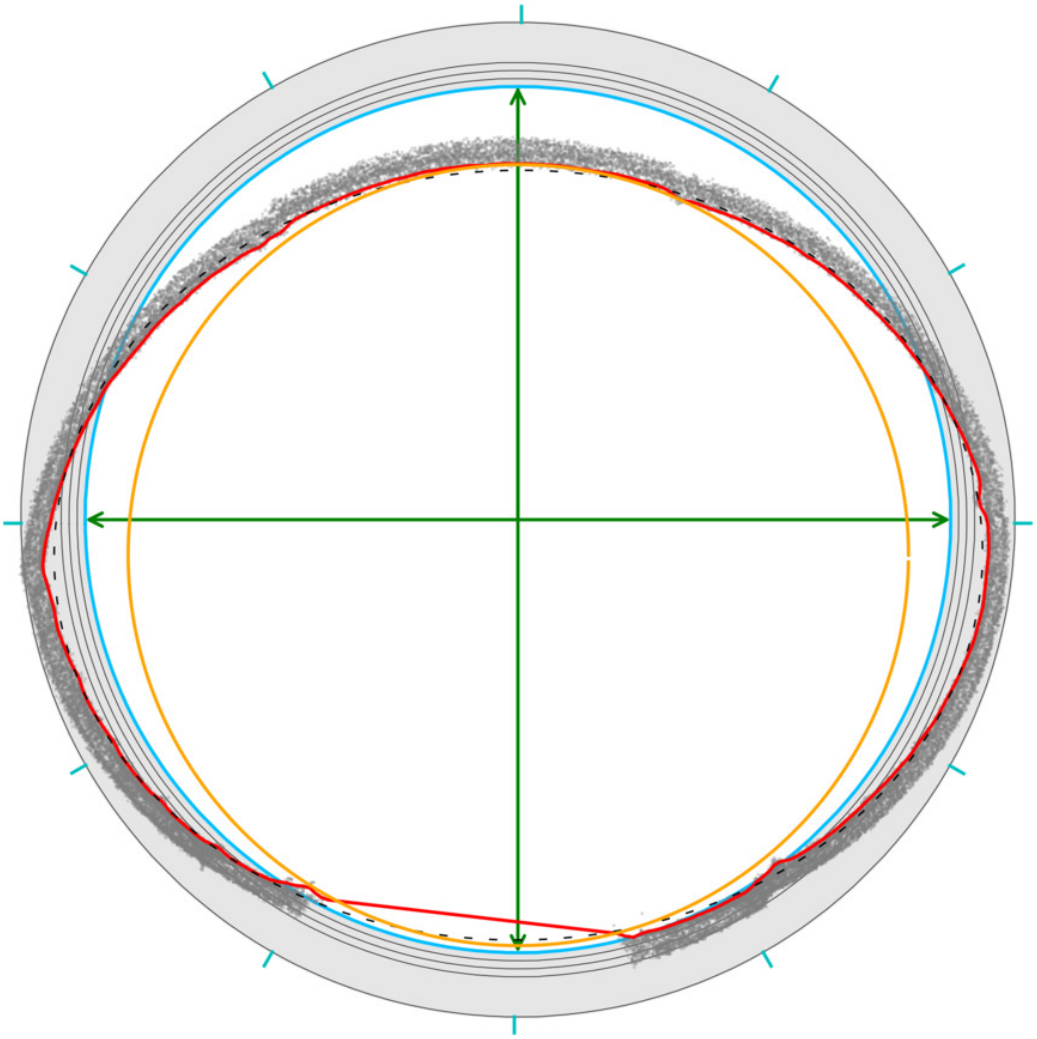
```
Footage    :  396 ft
Width      :  118.4" | 108.0"
Height     :  98.5" | 108.0"

Area       :  8701 sq in
Perimeter  :  345.2 in
Ovality    :  9.1%

Interior Diameter : 94.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 397.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



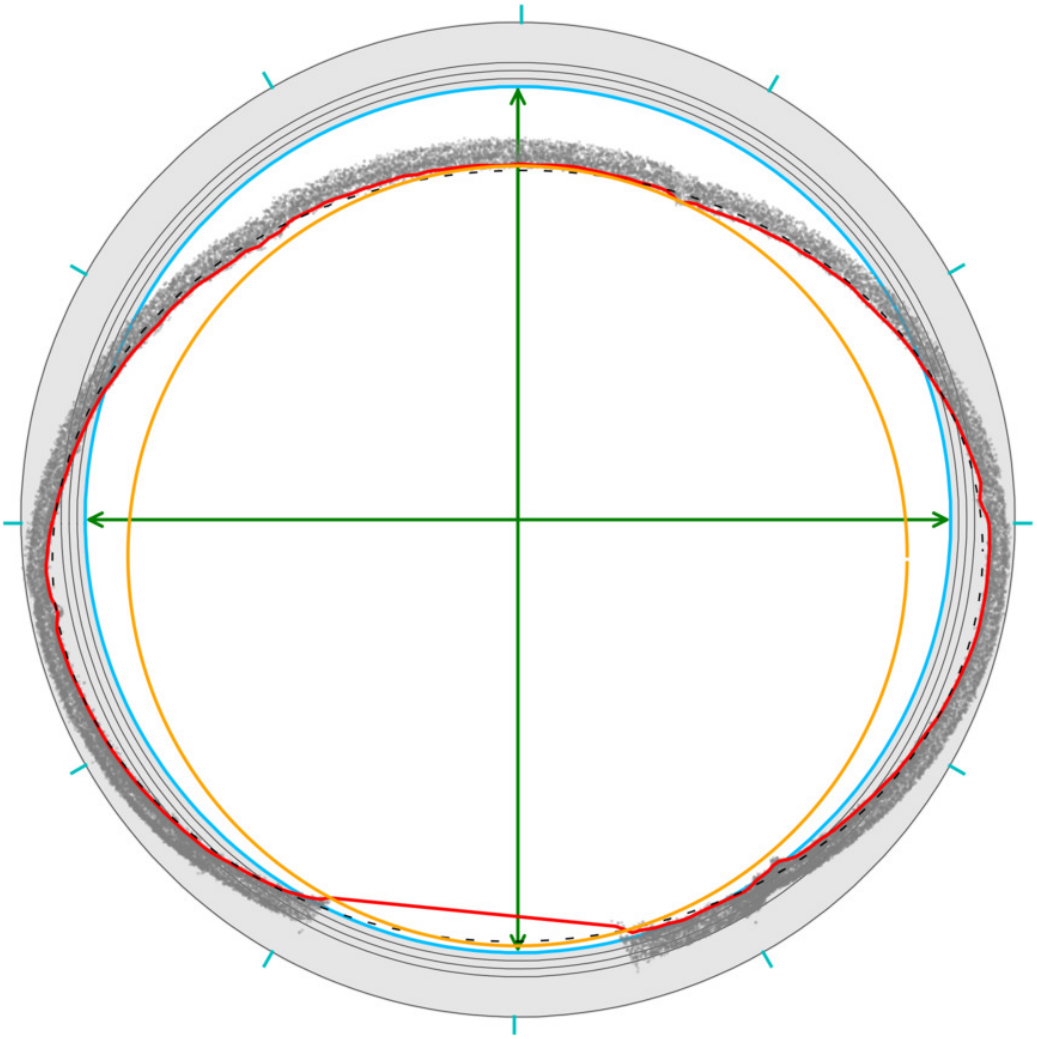
```
Footage   :  397 ft
Width     :  118.0" | 108.0"
Height    :  98.4" | 108.0"

Area      :  8657 sq in
Perimeter :  334.8 in
Ovality   :  9.1%

Interior Diameter : 97.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 398.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



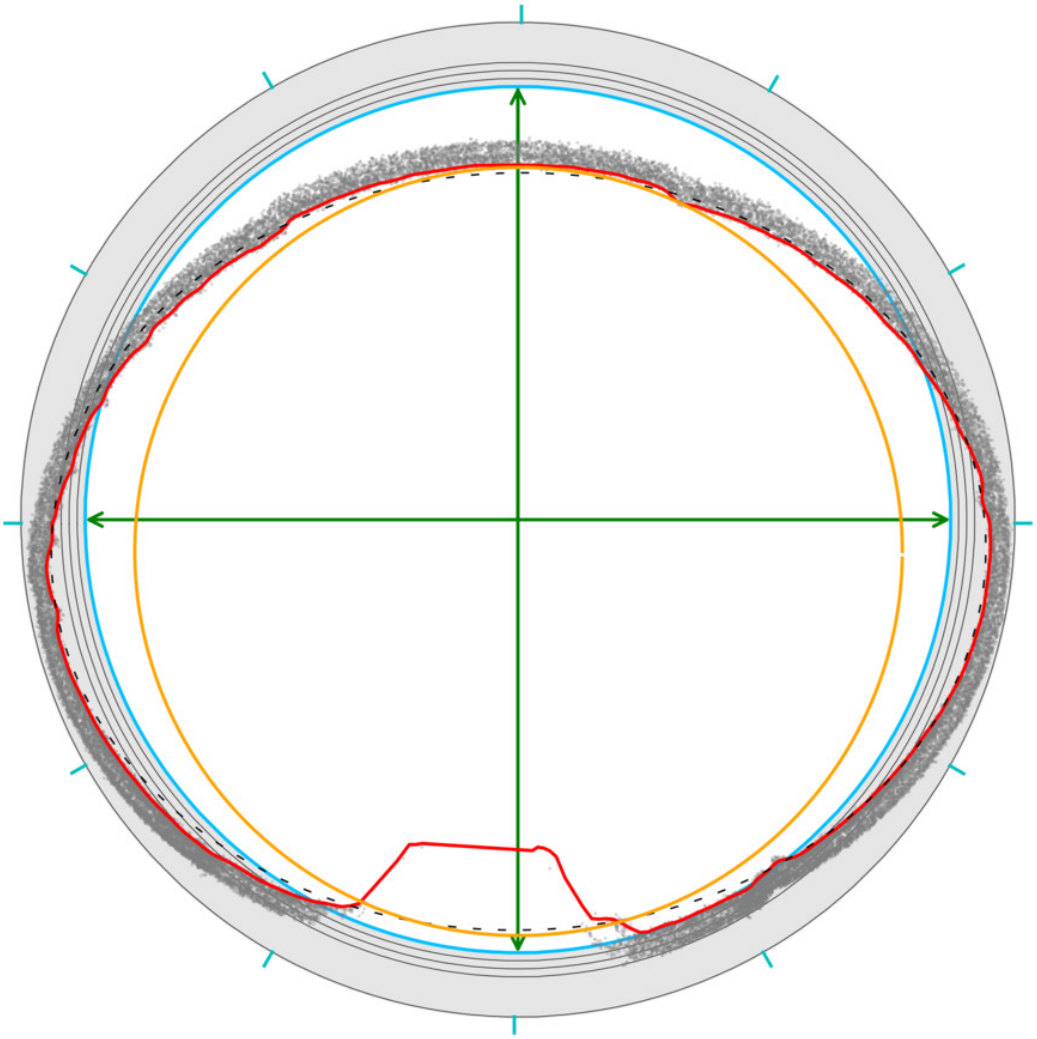
```
Footage   :  398 ft
Width     :  117.7" | 108.0"
Height    :  98.3" | 108.0"

Area      :  8663 sq in
Perimeter :  335.1 in
Ovality   :  9.2%

Interior Diameter : 97.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 399.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  399 ft
Width     :  117.8" | 108.0"
Height    :  98.2" | 108.0"

Area      :  8468 sq in
Perimeter :  344.1 in
Ovality   :  10.2%

Interior Diameter : 95.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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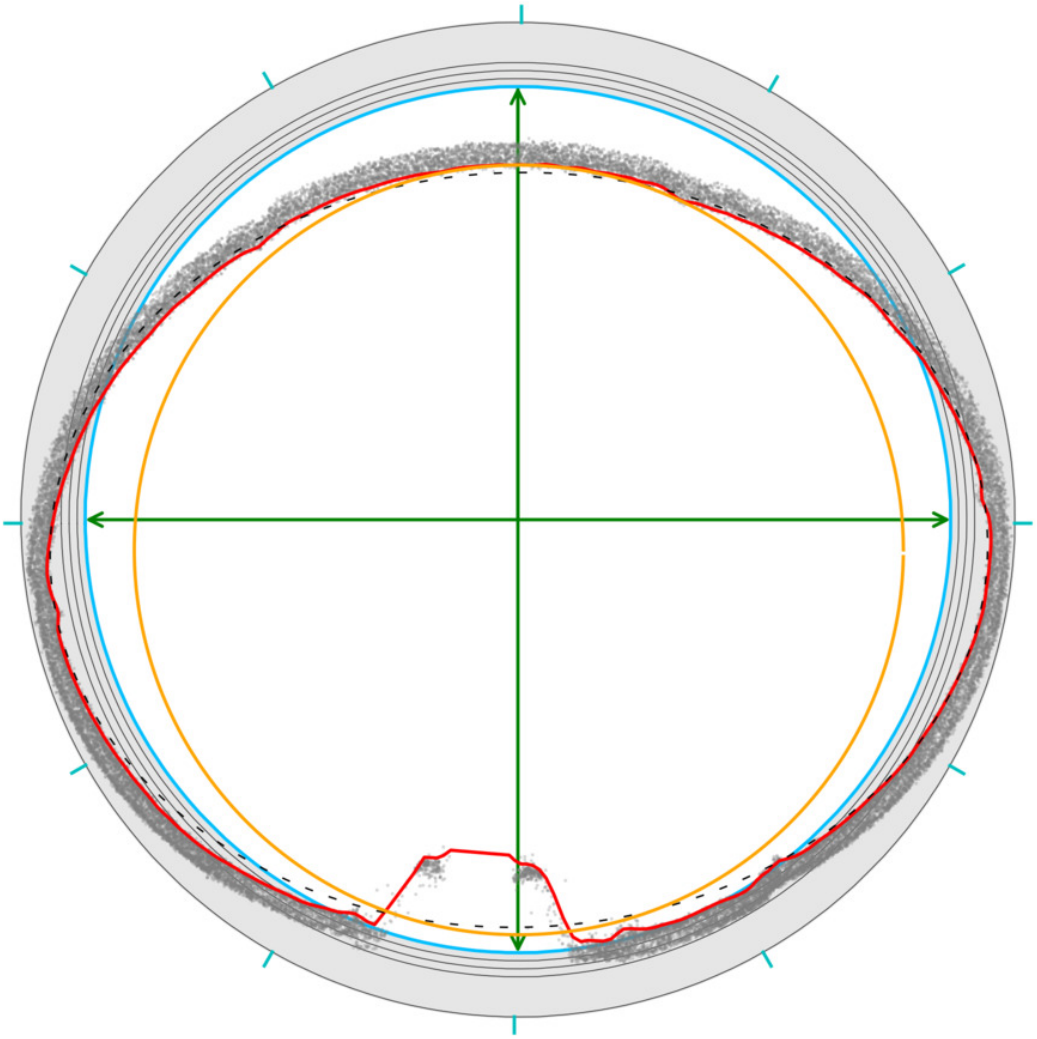
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 400.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 400 ft
Width : 117.8" | 108.0"
Height : 98.2" | 108.0"

Area : 8581 sq in
Perimeter : 346.6 in
Ovality : 10.5%

Interior Diameter : 96.0"

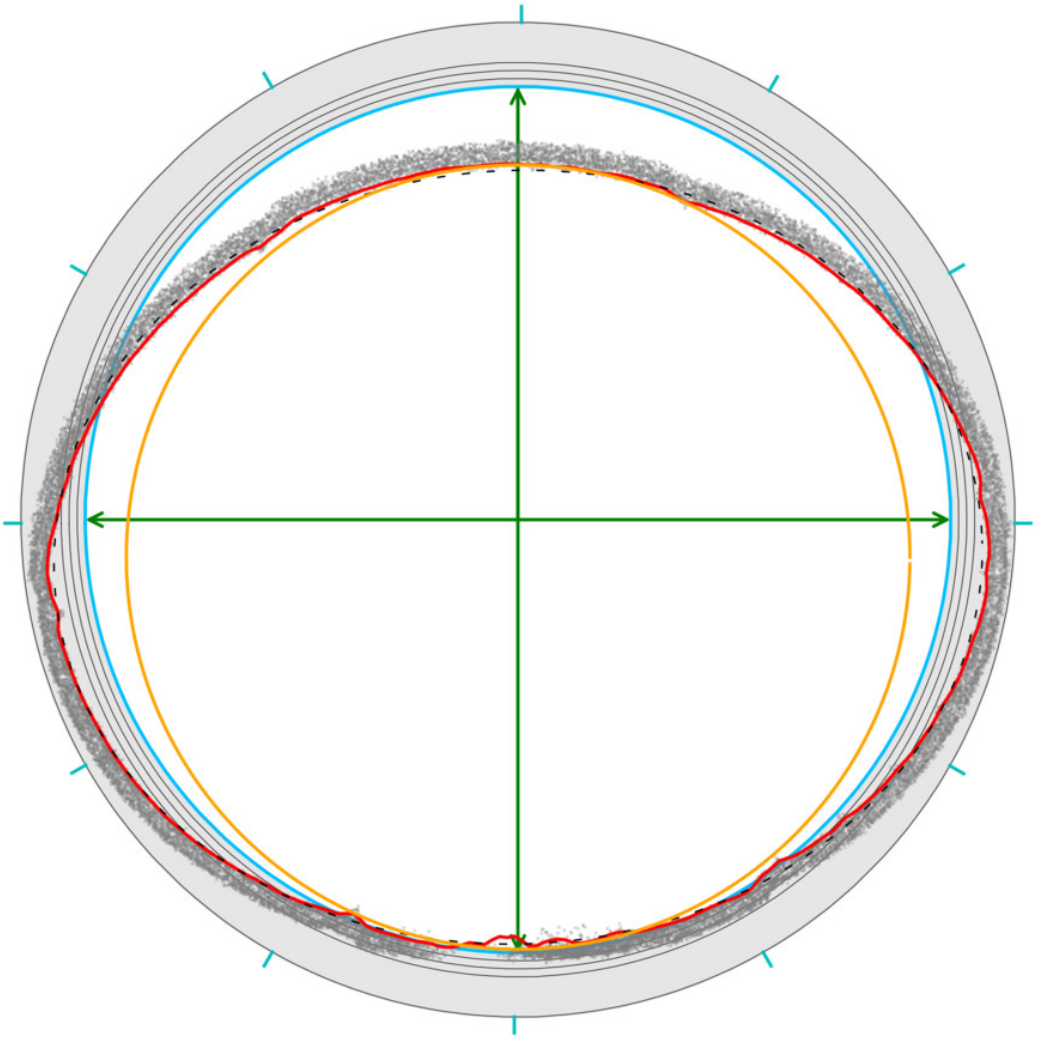
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 401.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  401 ft
Width     :  117.6" | 108.0"
Height    :  98.3" | 108.0"

Area      :  8770 sq in
Perimeter :  337.1 in
Ovality   :  8.9%

Interior Diameter : 97.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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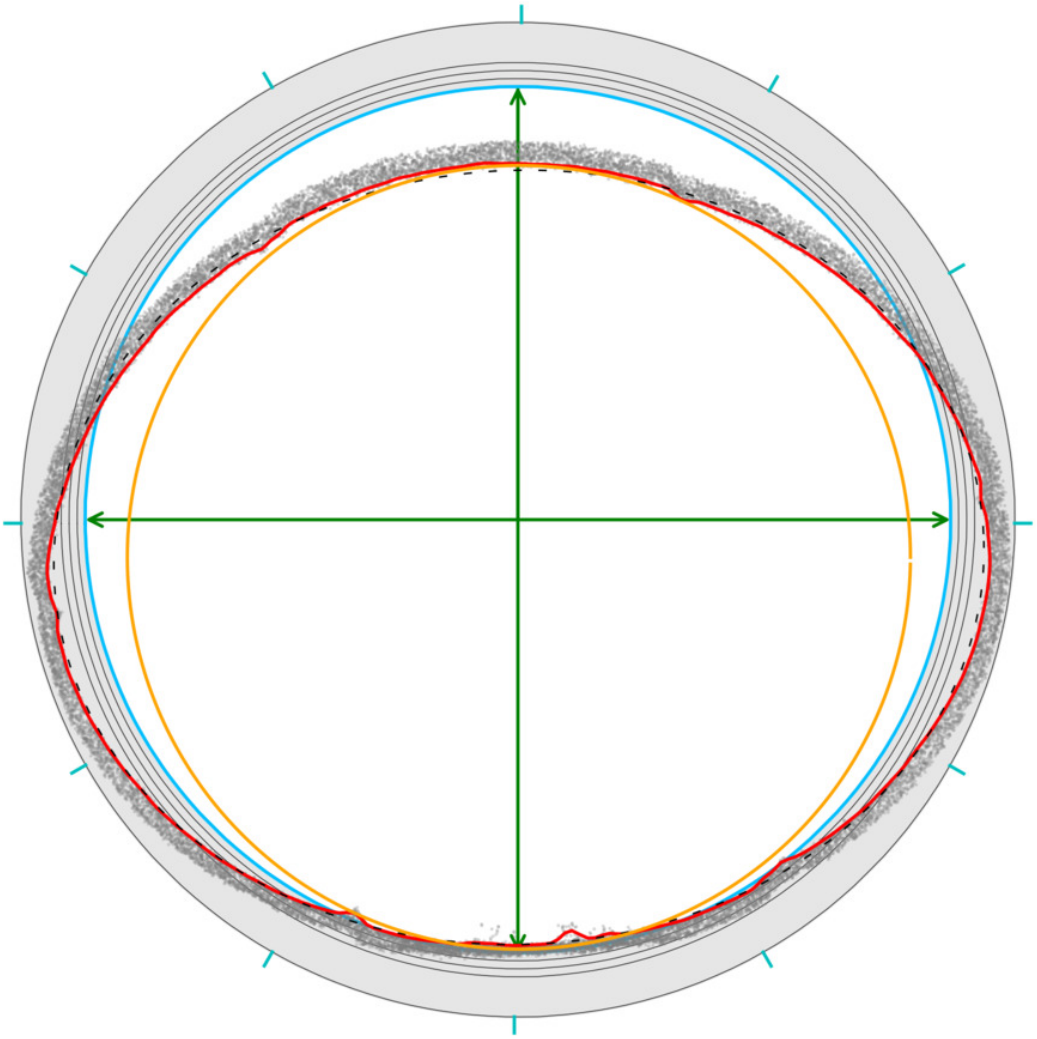
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 402.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



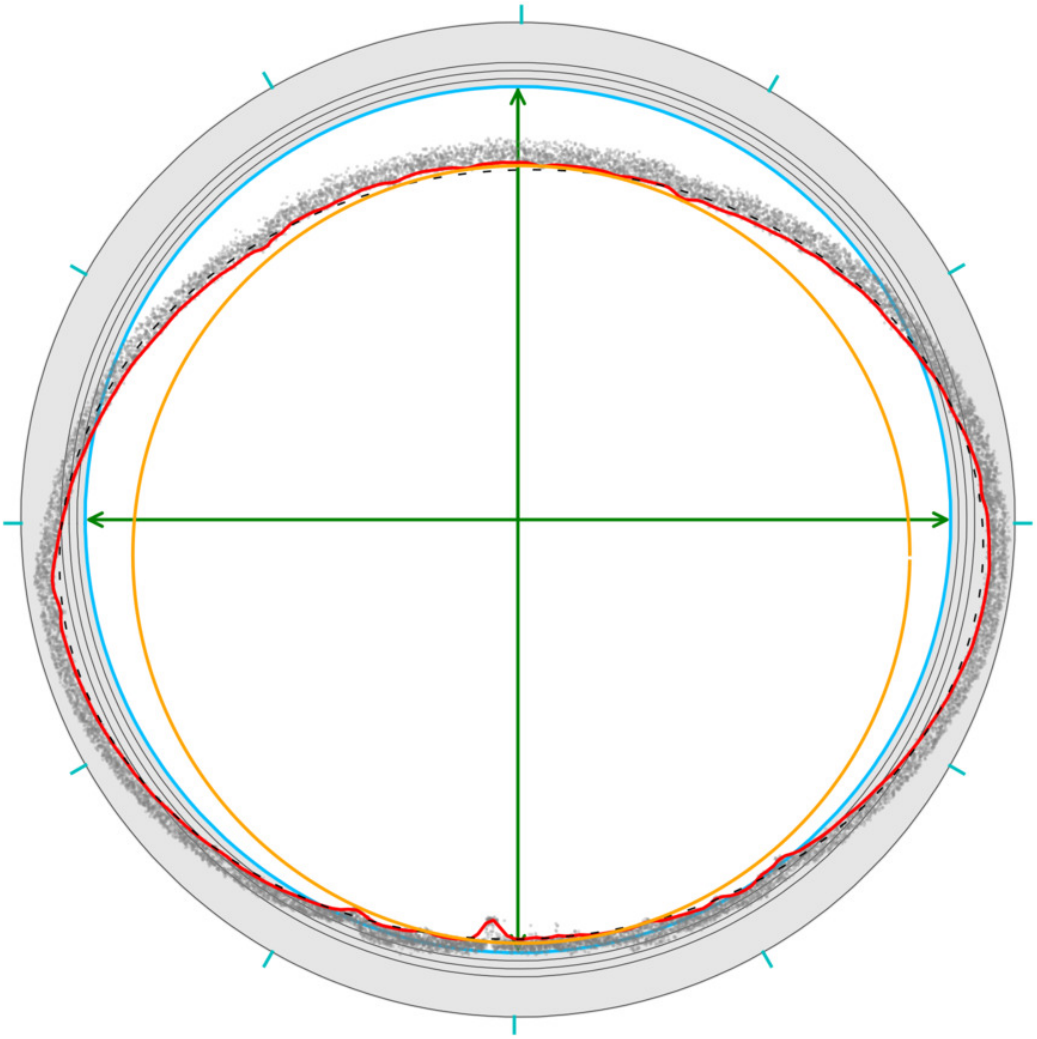
```
Footage   :  402 ft
Width     :  117.6" | 108.0"
Height    :  98.4" | 108.0"

Area      :  8793 sq in
Perimeter :  337.0 in
Ovality   :  9.0%

Interior Diameter : 97.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 403.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  403 ft
Width     :  116.9" | 108.0"
Height    :  98.5" | 108.0"

Area      :  8678 sq in
Perimeter :  336.5 in
Ovality   :  9.0%

Interior Diameter : 97.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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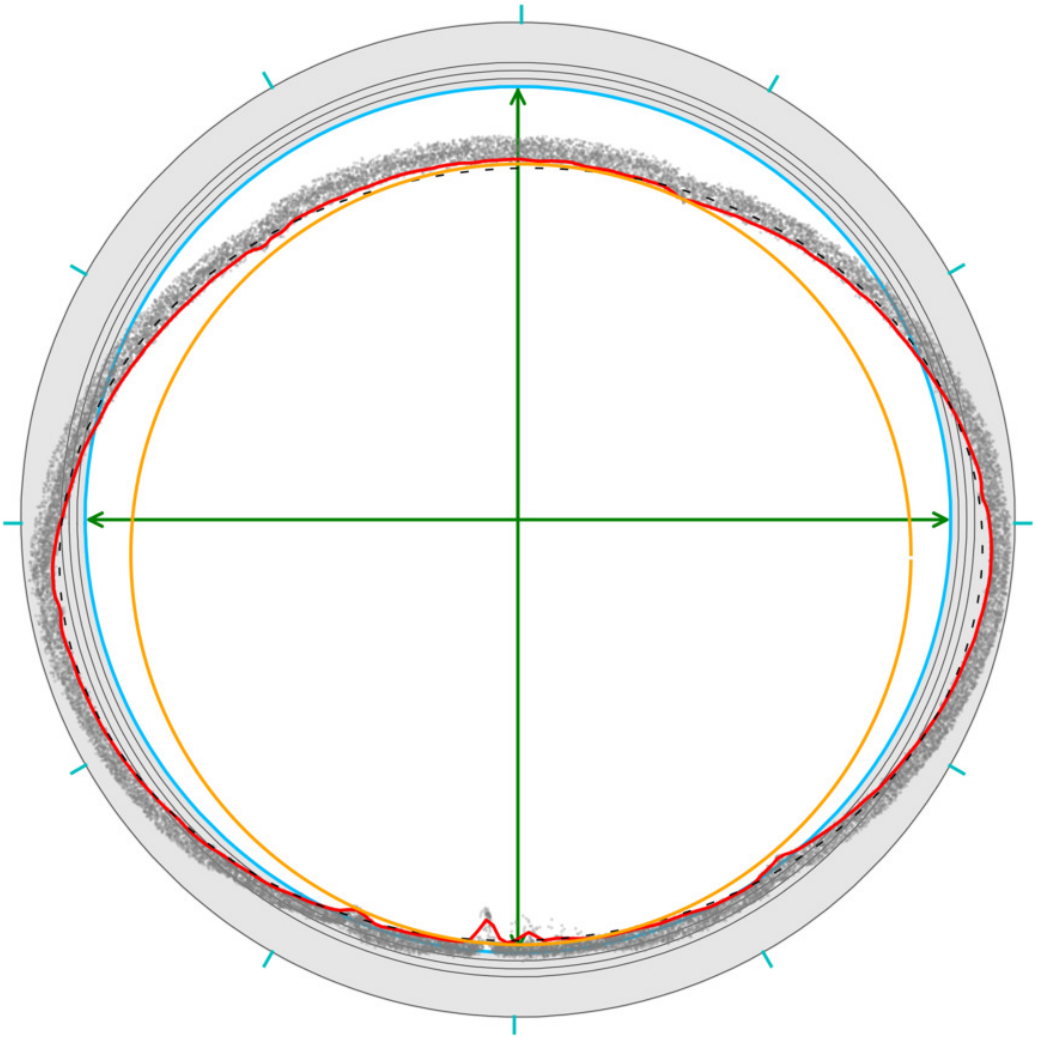
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 404.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 404 ft
Width : 117.1" | 108.0"
Height : 98.9" | 108.0"

Area : 8706 sq in
Perimeter : 337.9 in
Ovality : 8.7%

Interior Diameter : 97.4"

Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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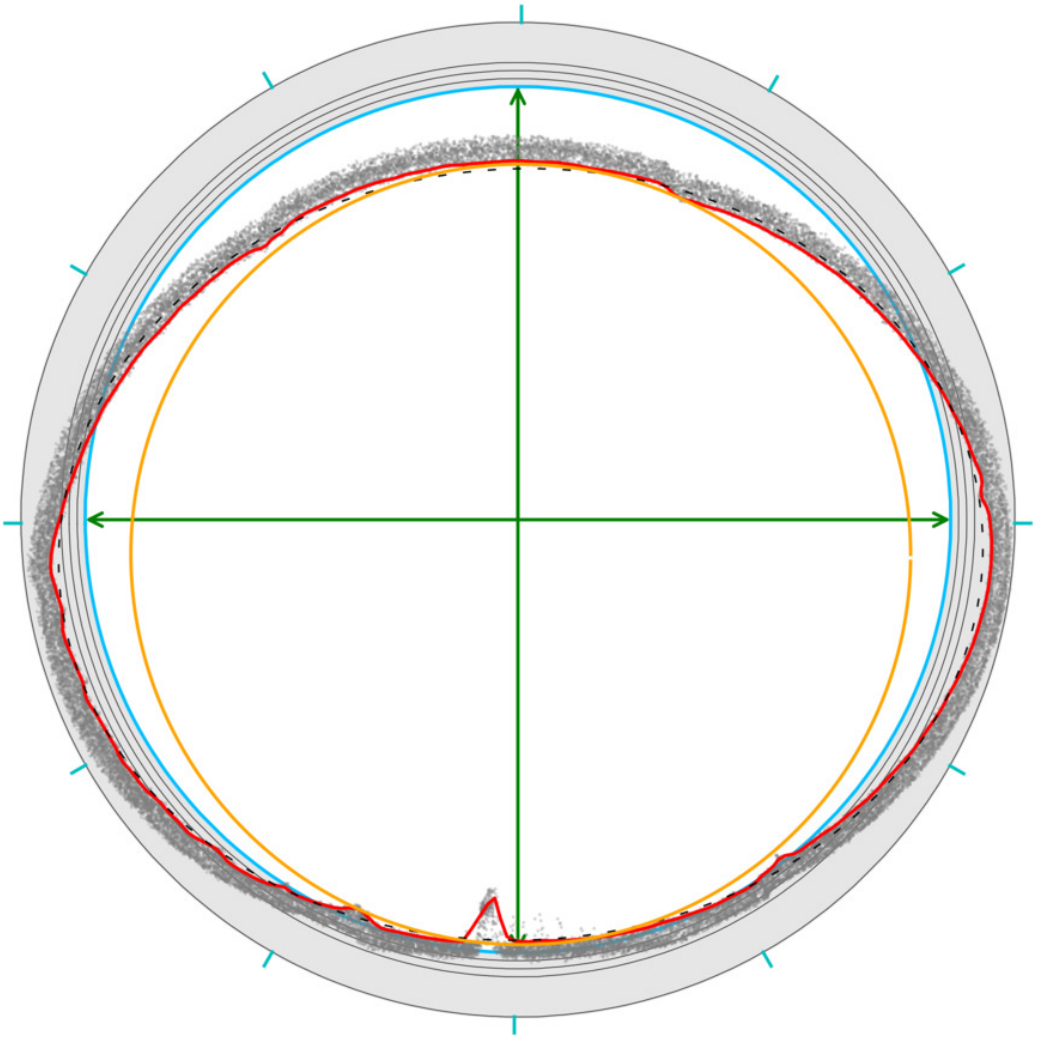
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 405.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 405 ft
Width : 117.4" | 108.0"
Height : 98.7" | 108.0"

Area : 8705 sq in
Perimeter : 341.9 in
Ovality : 8.8%

Interior Diameter : 97.3"

Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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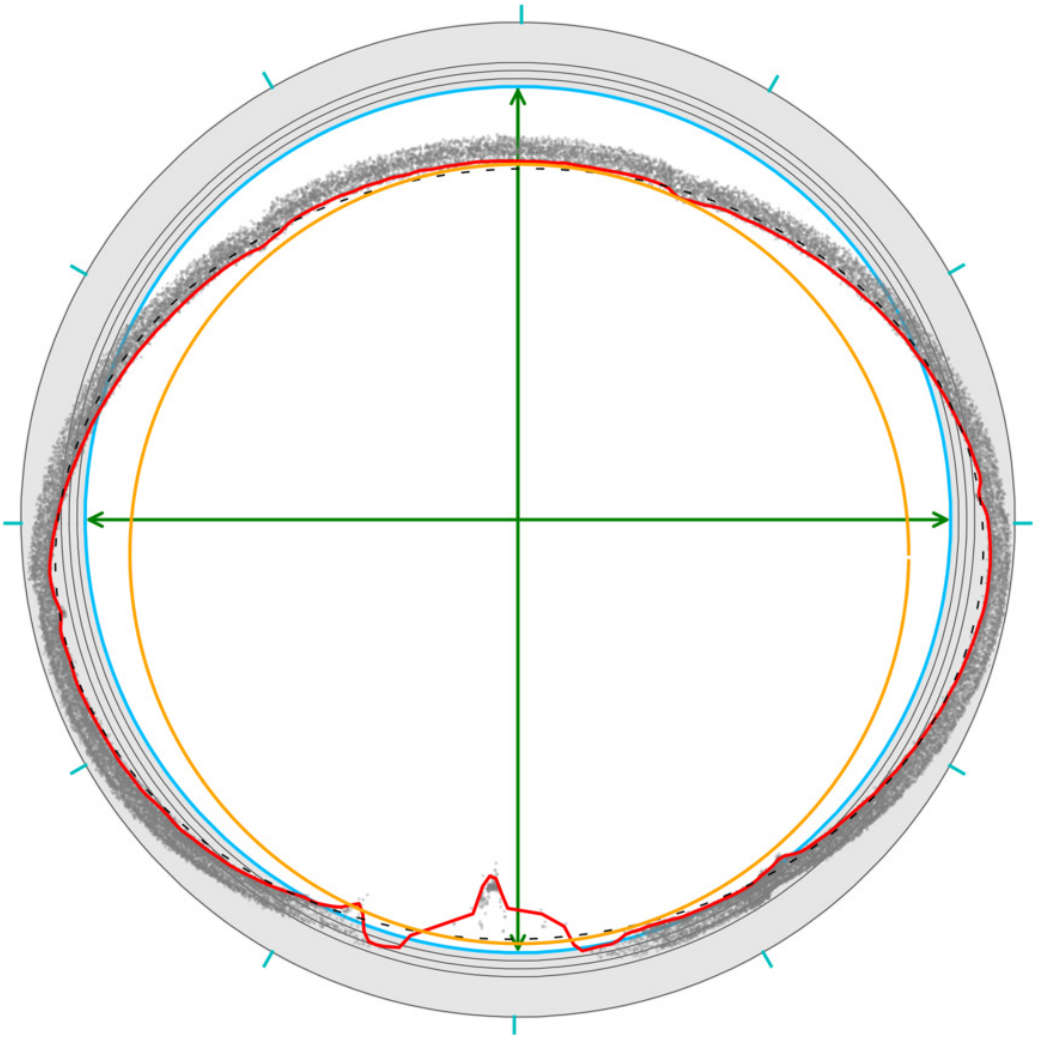
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 406.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 406 ft
Width : 117.4" | 108.0"
Height : 98.7" | 108.0"

Area : 8708 sq in
Perimeter : 348.0 in
Ovality : 9.1%

Interior Diameter : 97.2"

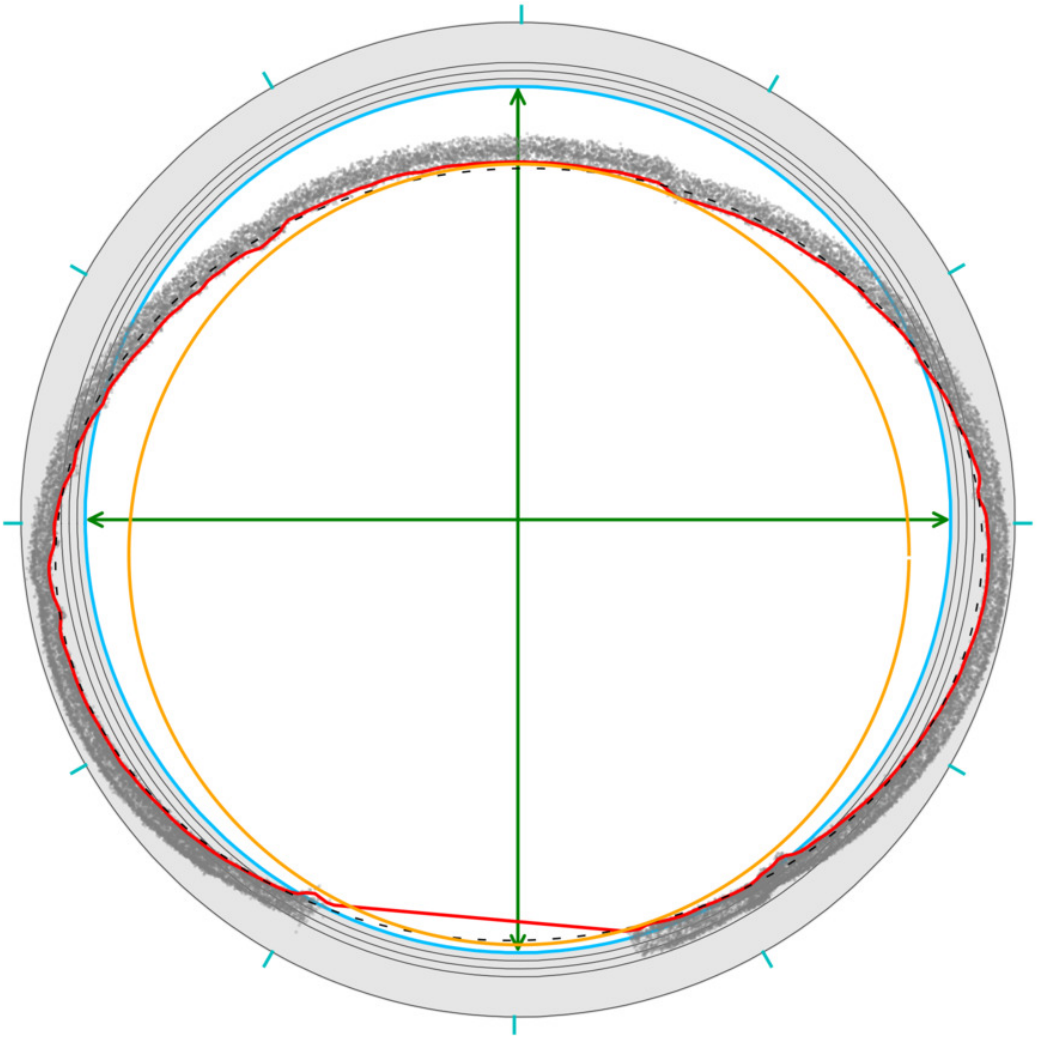
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 407.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



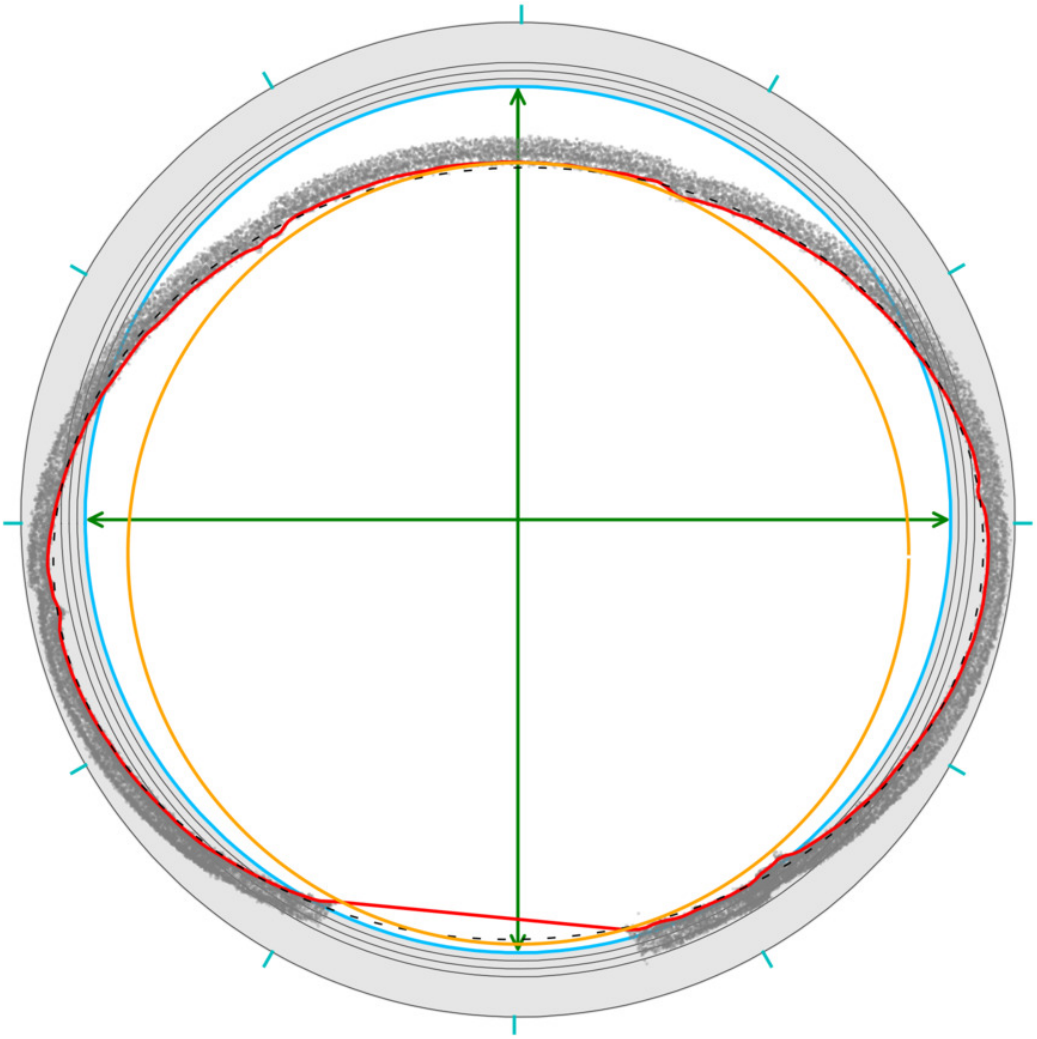
```
Footage   :  407 ft
Width     :  117.3" | 108.0"
Height    :  98.6" | 108.0"

Area      :  8670 sq in
Perimeter :  335.2 in
Ovality   :  9.0%

Interior Diameter : 97.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 408.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



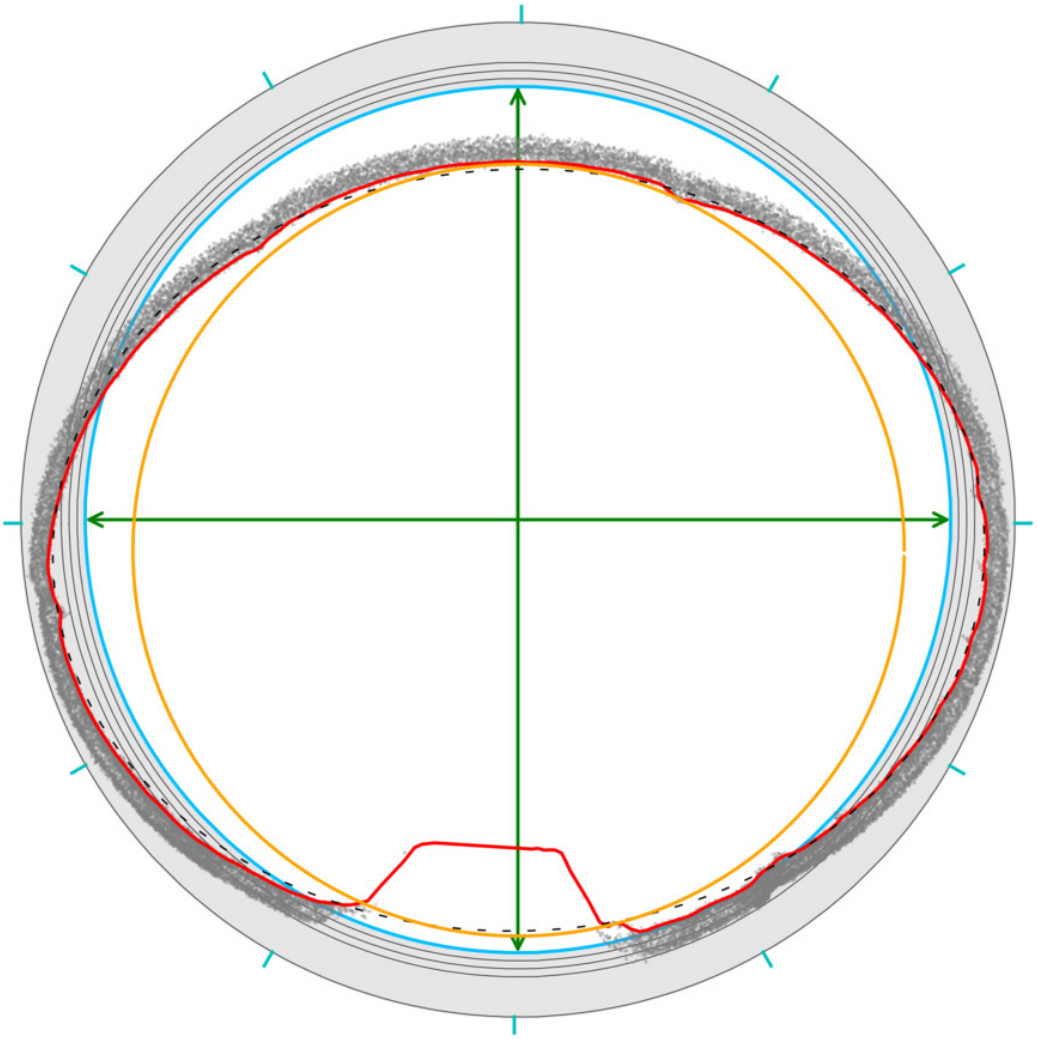
```
Footage   :  408 ft
Width     :  117.4" | 108.0"
Height    :  98.6" | 108.0"

Area      :  8689 sq in
Perimeter :  335.0 in
Ovality   :  9.1%

Interior Diameter : 97.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 409.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 409 ft
Width : 117.3" | 108.0"
Height : 98.6" | 108.0"

Area : 8469 sq in
Perimeter : 343.6 in
Ovality : 9.8%

Interior Diameter : 96.3"

Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
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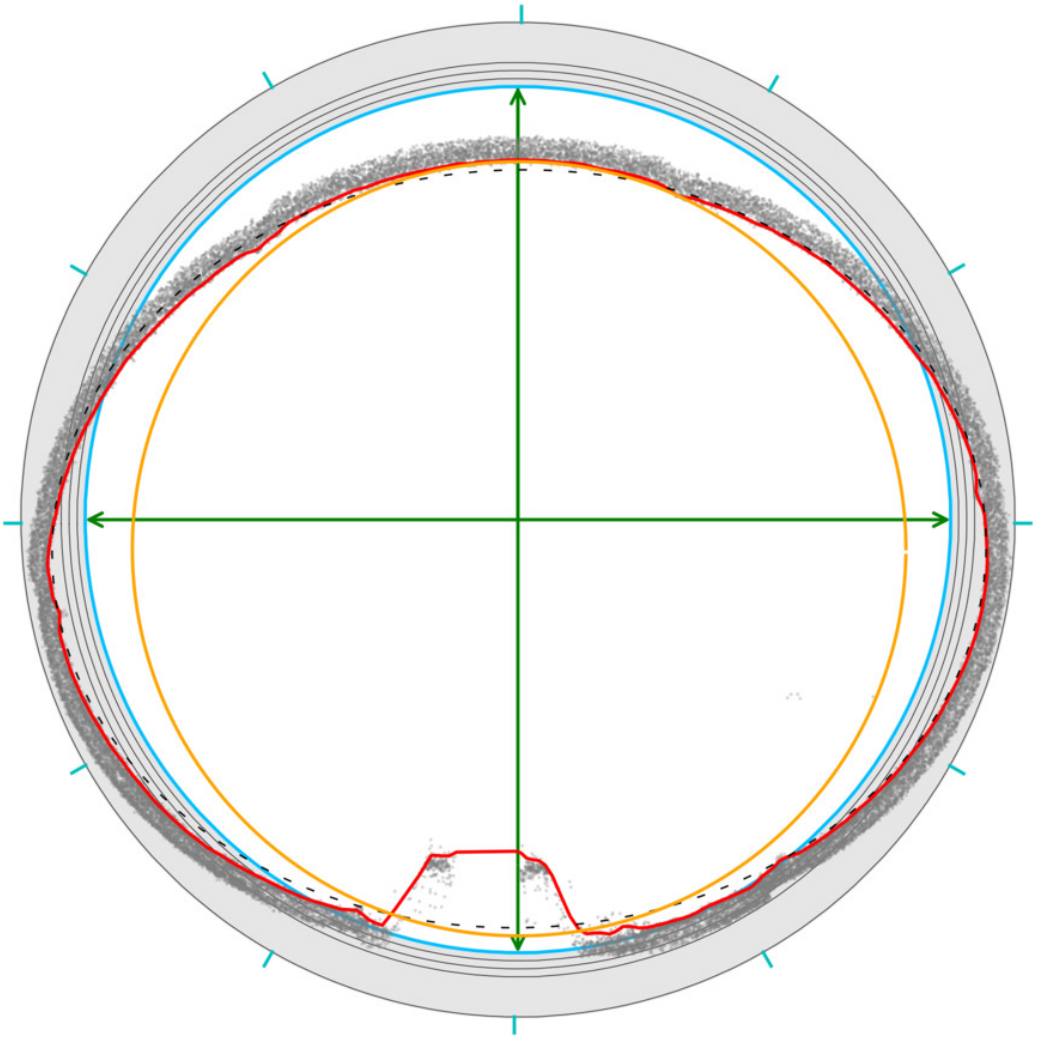
SFX-3D Cross Section Report
Inspection #1 : / , 410.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



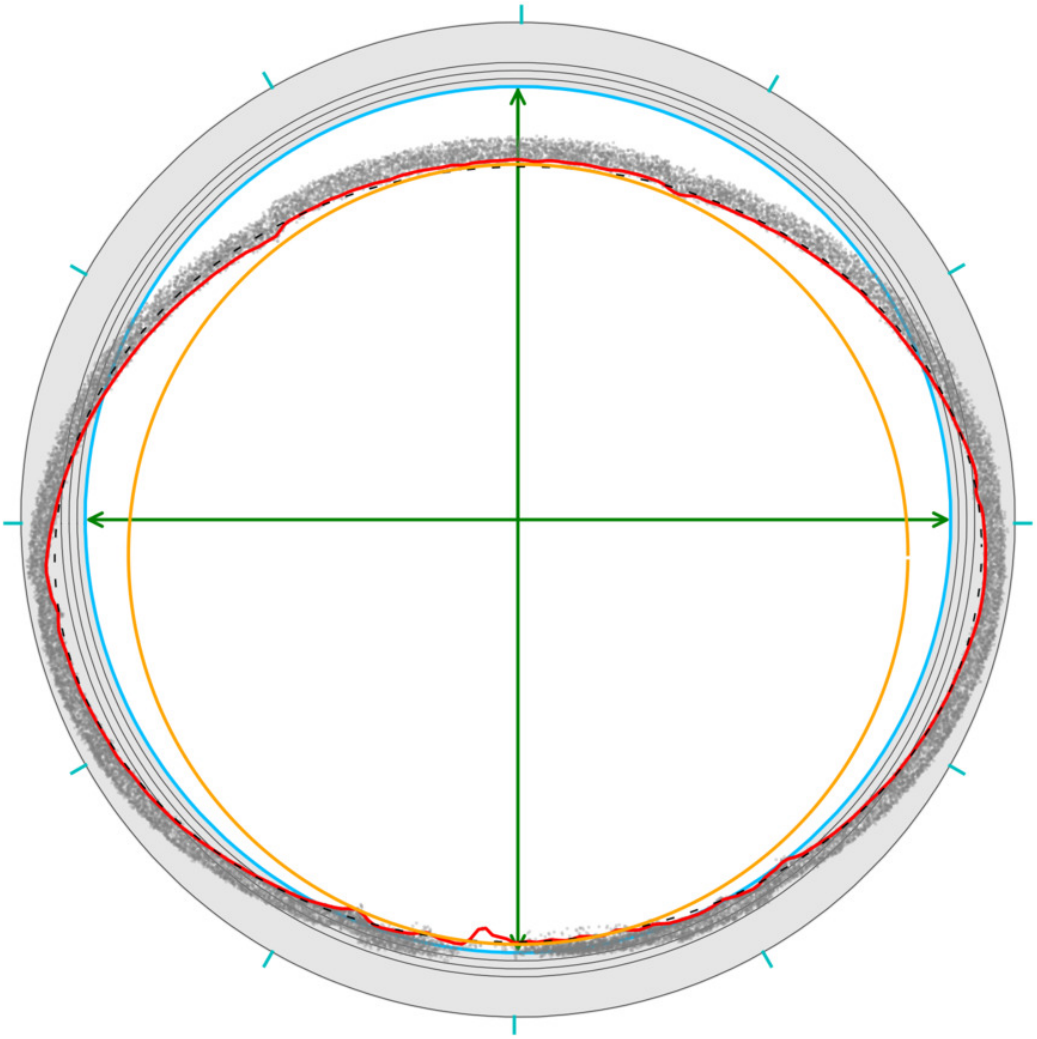
```
Footage   :  410 ft
Width     :  117.3" | 108.0"
Height    :  98.9" | 108.0"

Area      :  8565 sq in
Perimeter :  345.8 in
Ovality   :  10.1%

Interior Diameter : 96.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 411.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



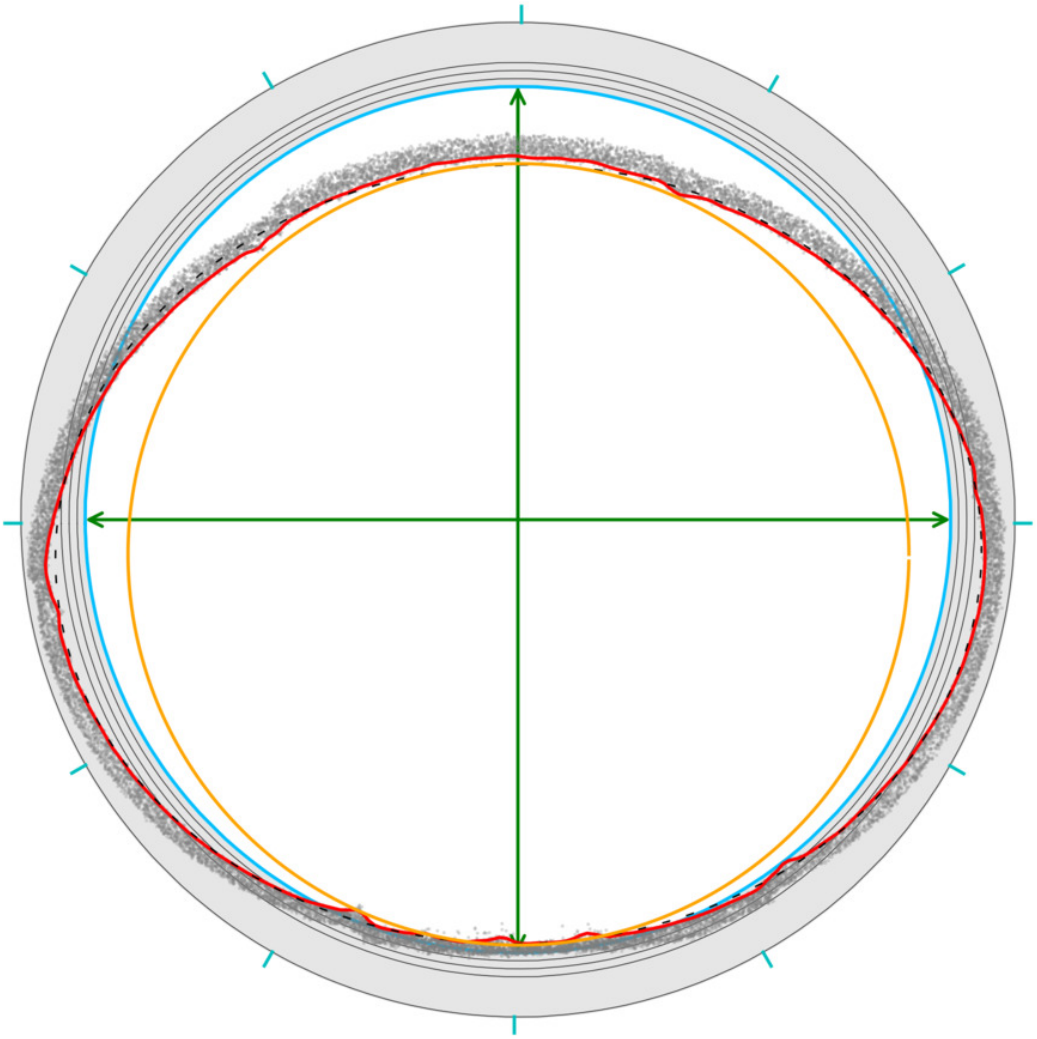
```
Footage   :  411 ft
Width     :  117.2" | 108.0"
Height    :  98.9" | 108.0"

Area      :  8773 sq in
Perimeter :  337.7 in
Ovality   :  8.7%

Interior Diameter : 97.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 412.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



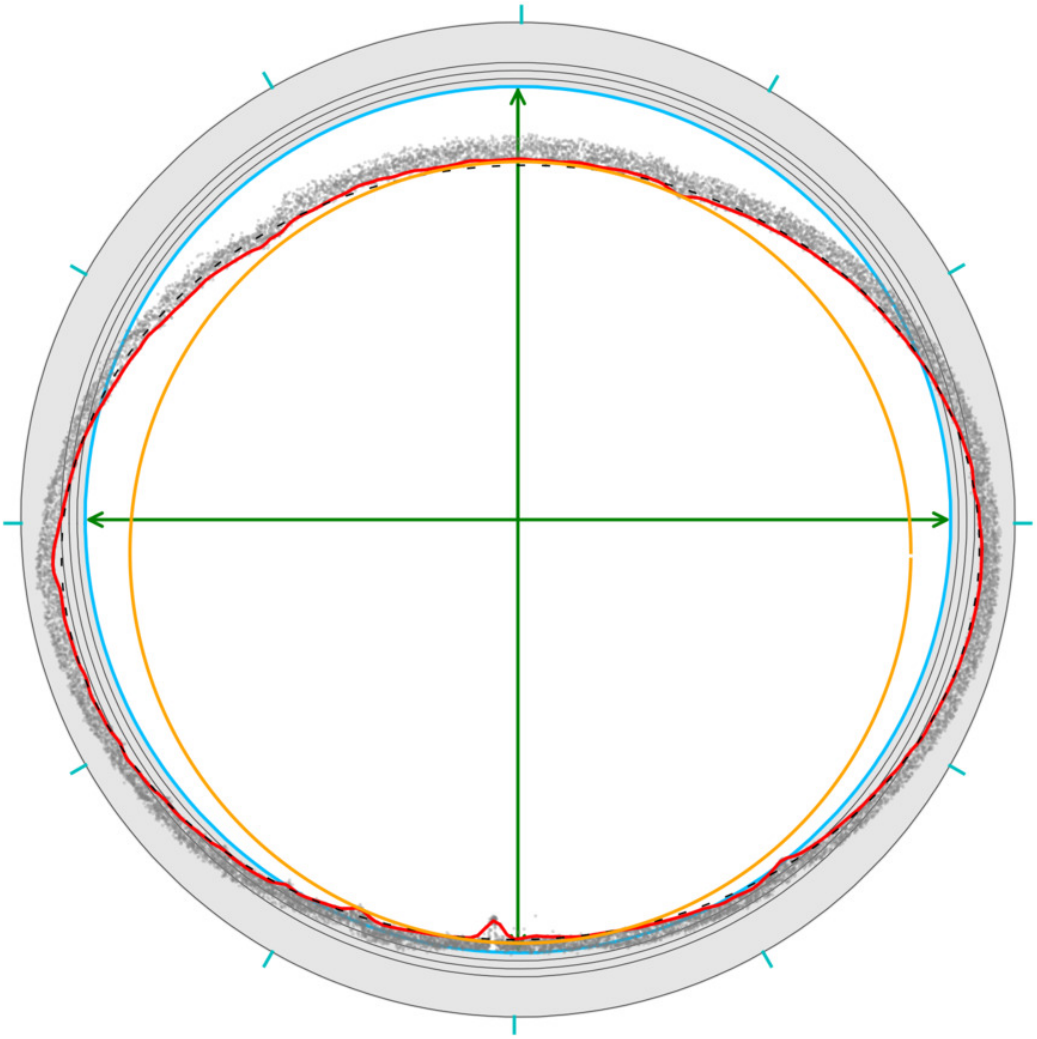
```
Footage   :  412 ft
Width     :  117.2" | 108.0"
Height    :  99.3" | 108.0"

Area      :  8807 sq in
Perimeter :  336.9 in
Ovality   :  8.5%

Interior Diameter : 97.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 413.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 413 ft
Width : 115.9" | 108.0"
Height : 98.9" | 108.0"

Area : 8680 sq in
Perimeter : 335.9 in
Ovality : 8.3%

Interior Diameter : 97.5"

Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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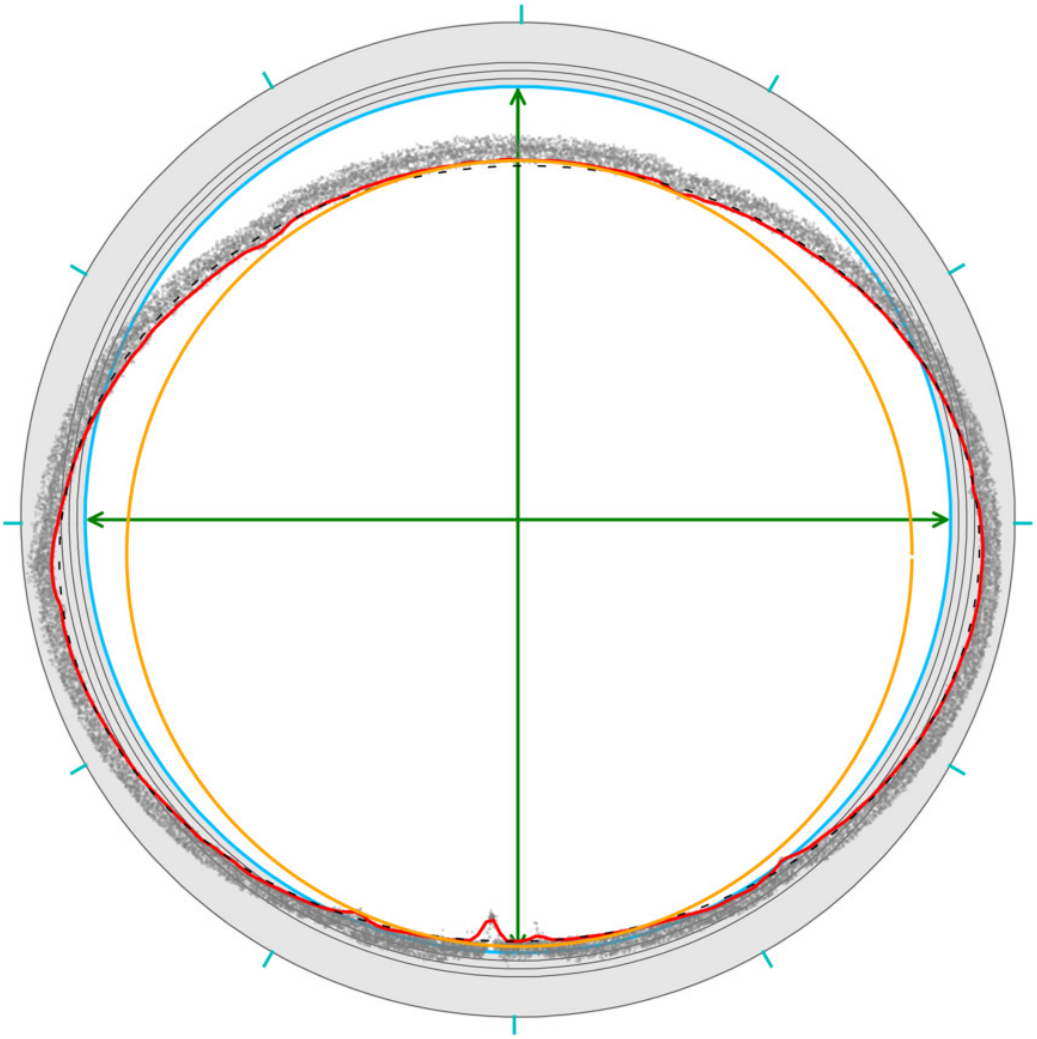
SFX-3D Cross Section Report
Inspection #1 : / , 414.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



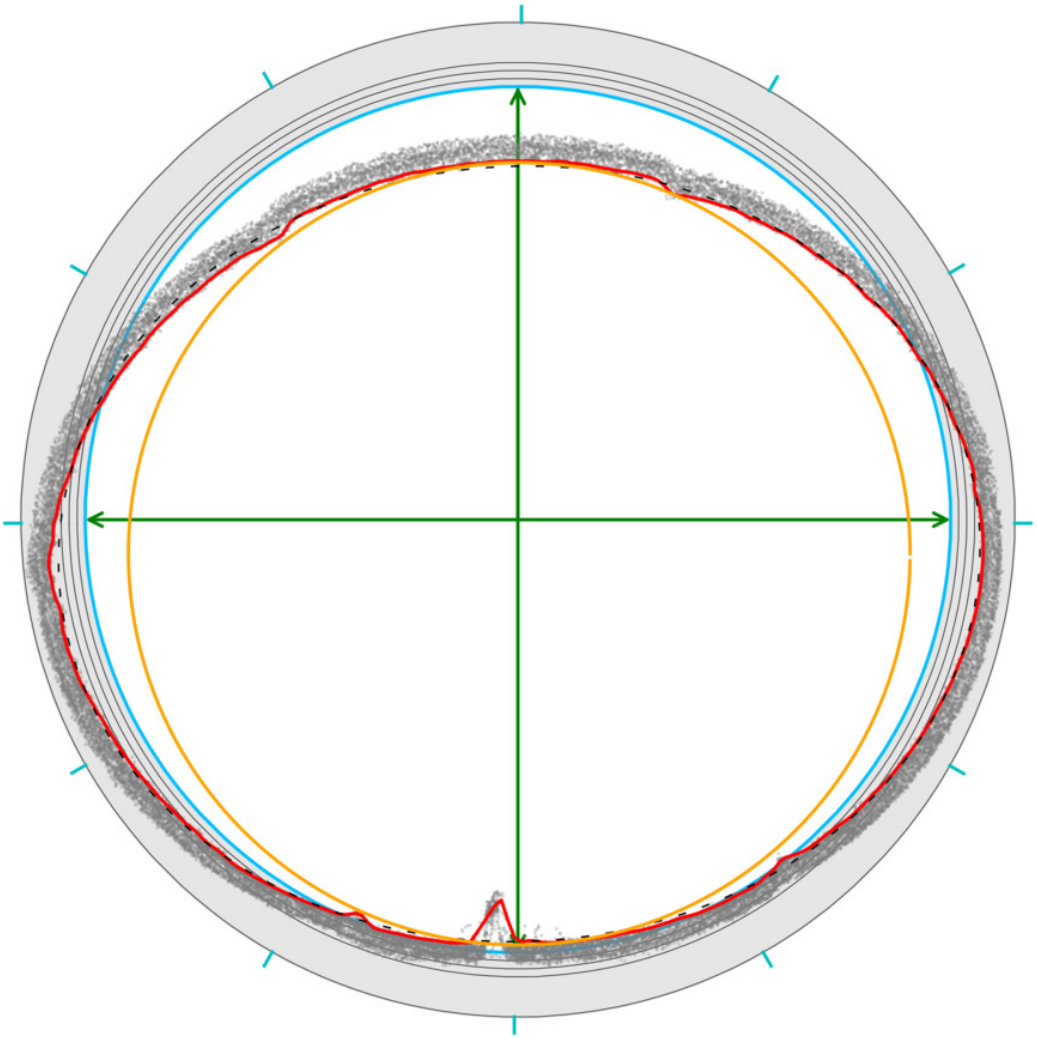
```
Footage   :  414 ft
Width     :  116.2" | 108.0"
Height    :  98.9" | 108.0"

Area      :  8714 sq in
Perimeter :  337.0 in
Ovality   :  8.4%

Interior Diameter : 98.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 415.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  415 ft
Width     :  116.6" | 108.0"
Height    :  98.7" | 108.0"

Area      :  8723 sq in
Perimeter :  341.6 in
Ovality   :  8.5%

Interior Diameter : 97.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

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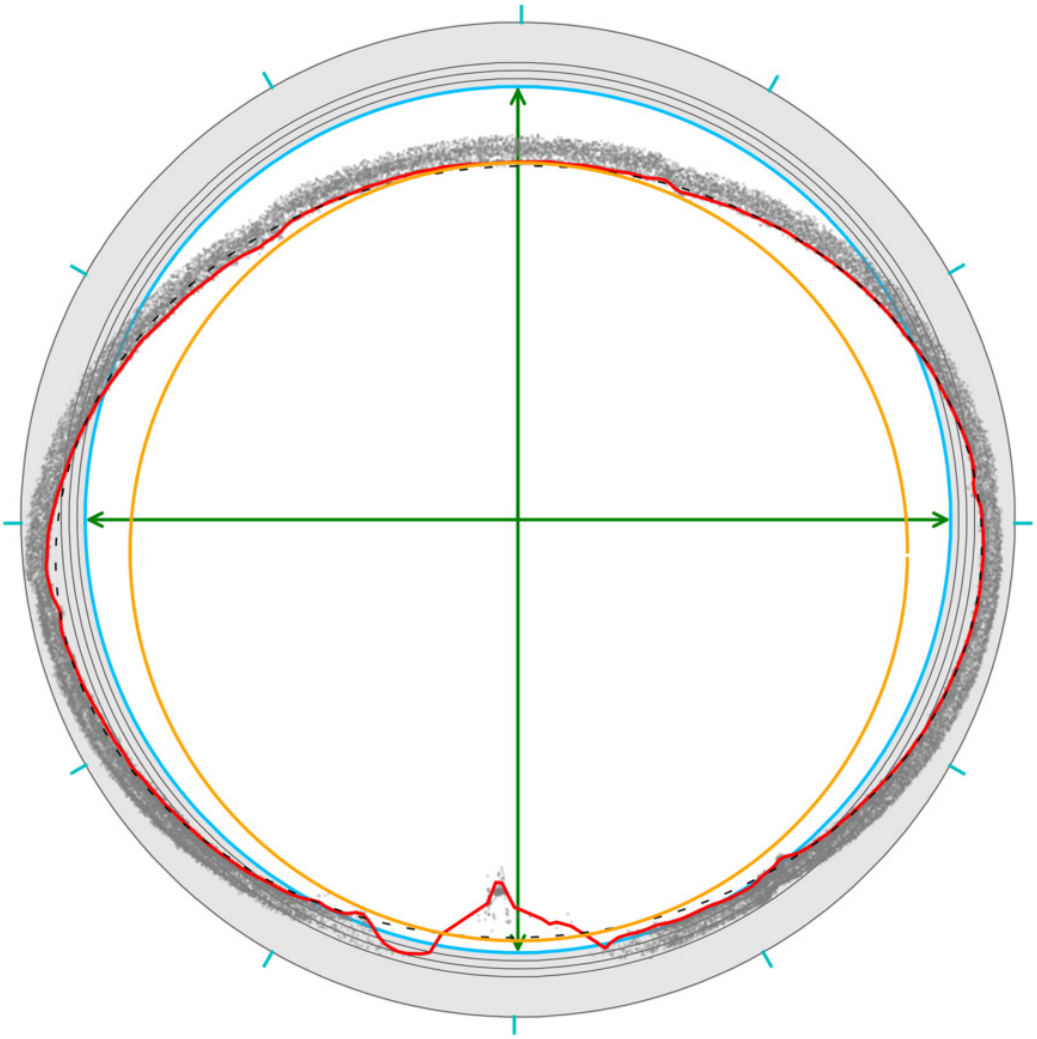
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 416.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



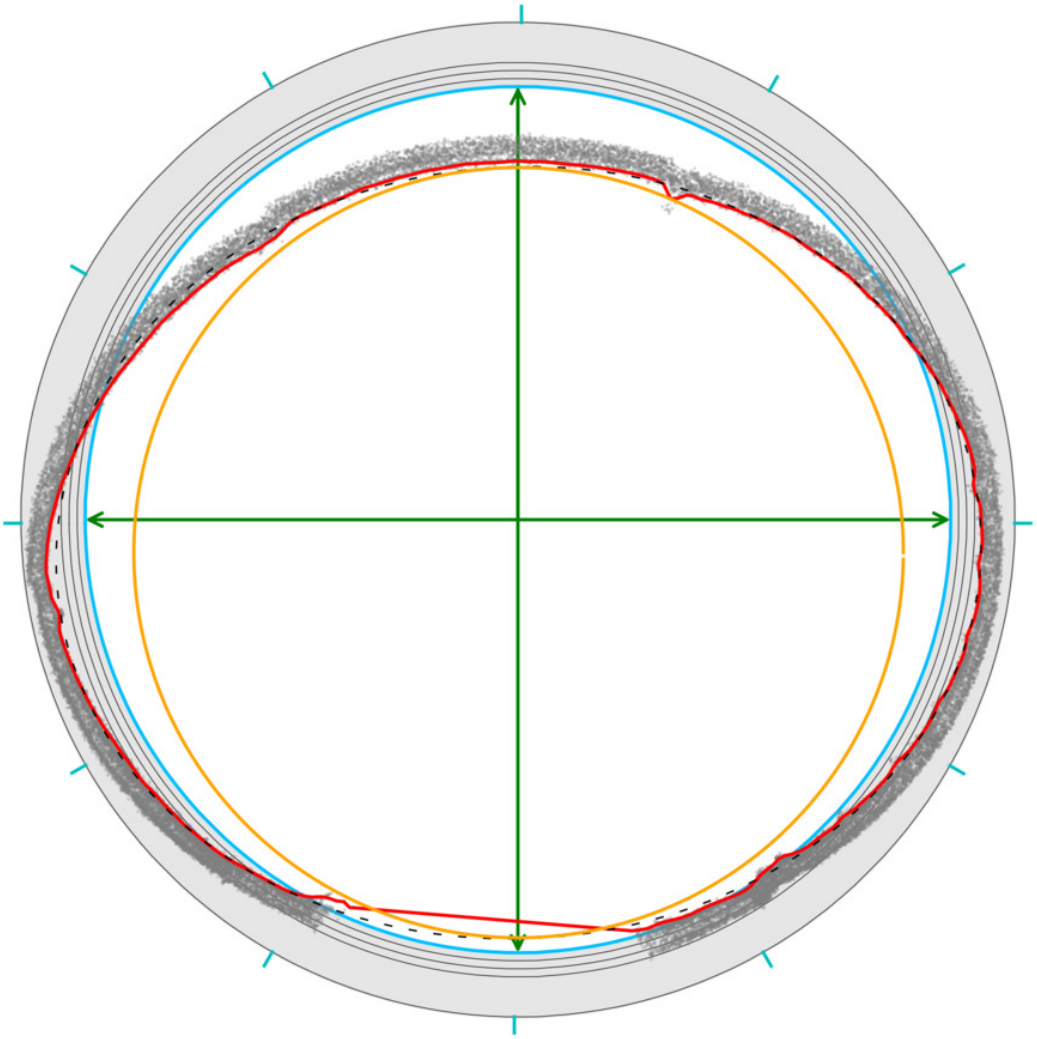
```
Footage   :  416 ft
Width     :  116.9" | 108.0"
Height    :  98.6" | 108.0"

Area      :  8719 sq in
Perimeter :  345.0 in
Ovality   :  9.0%

Interior Diameter : 97.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 417.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



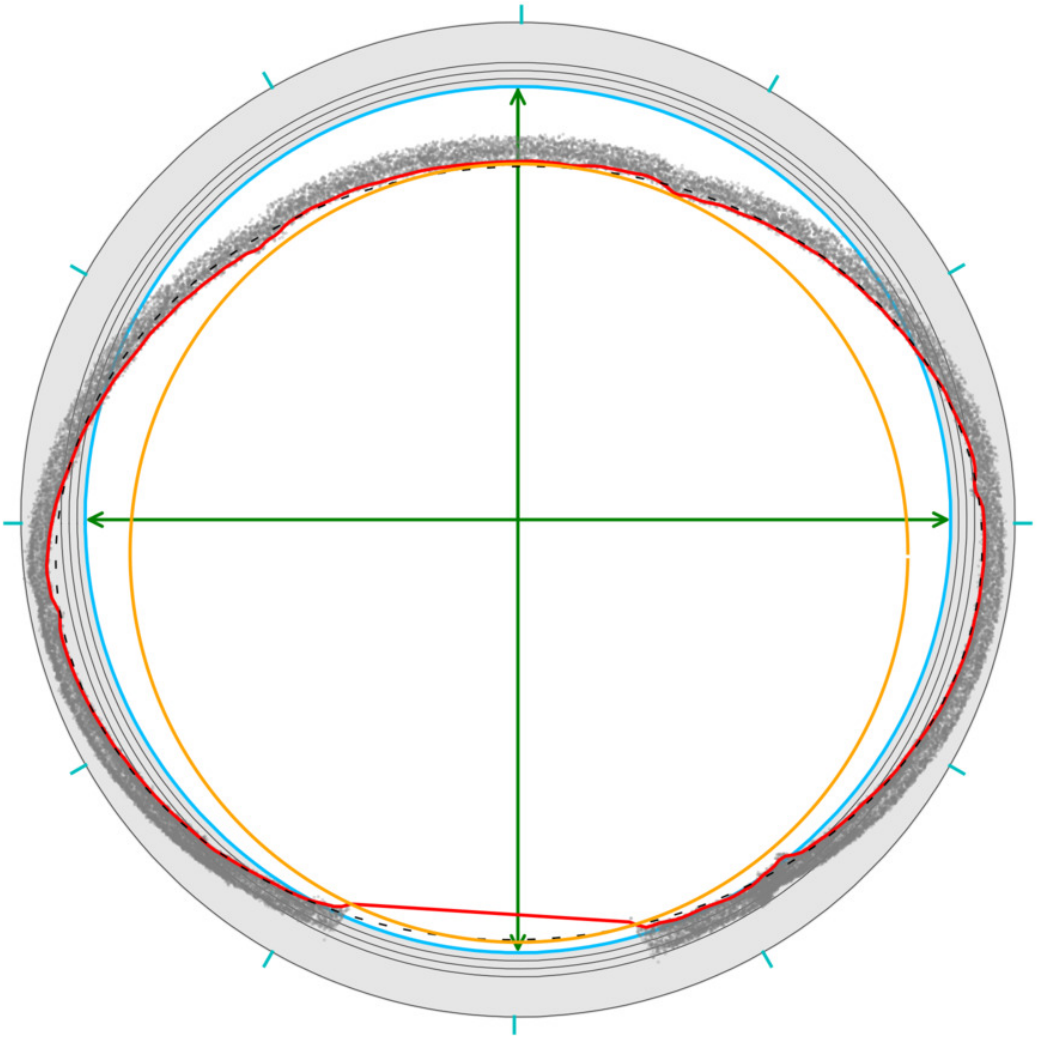
```
Footage   :  417 ft
Width     :  116.8" | 108.0"
Height    :  98.7" | 108.0"

Area      :  8661 sq in
Perimeter :  335.5 in
Ovality   :  8.9%

Interior Diameter : 96.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 418.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



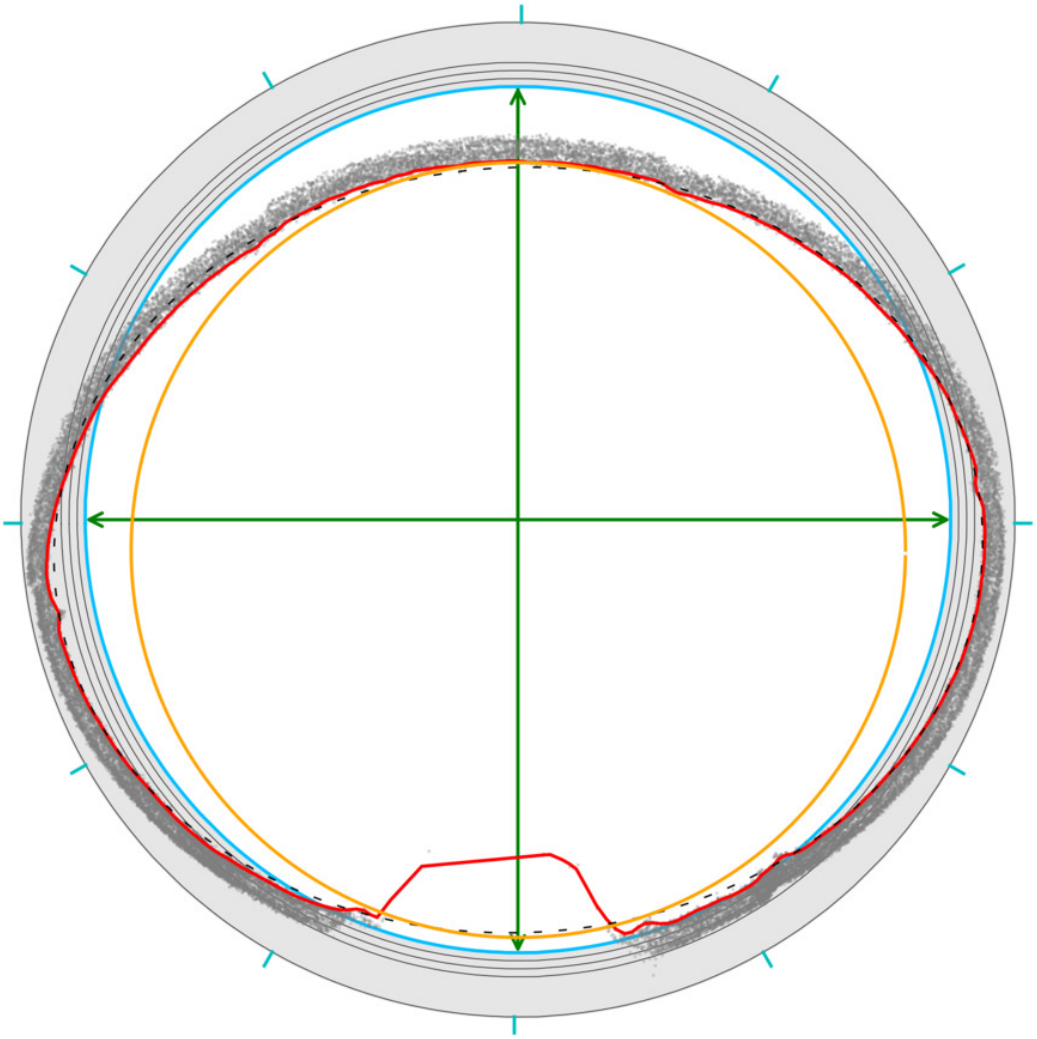
```
Footage   :  418 ft
Width     :  117.0" | 108.0"
Height    :  98.7" | 108.0"

Area      :  8659 sq in
Perimeter :  334.8 in
Ovality   :  8.8%

Interior Diameter : 97.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 419.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 419 ft
Width : 117.1" | 108.0"
Height : 98.7" | 108.0"

Area : 8514 sq in
Perimeter : 342.7 in
Ovality : 9.5%

Interior Diameter : 96.6"

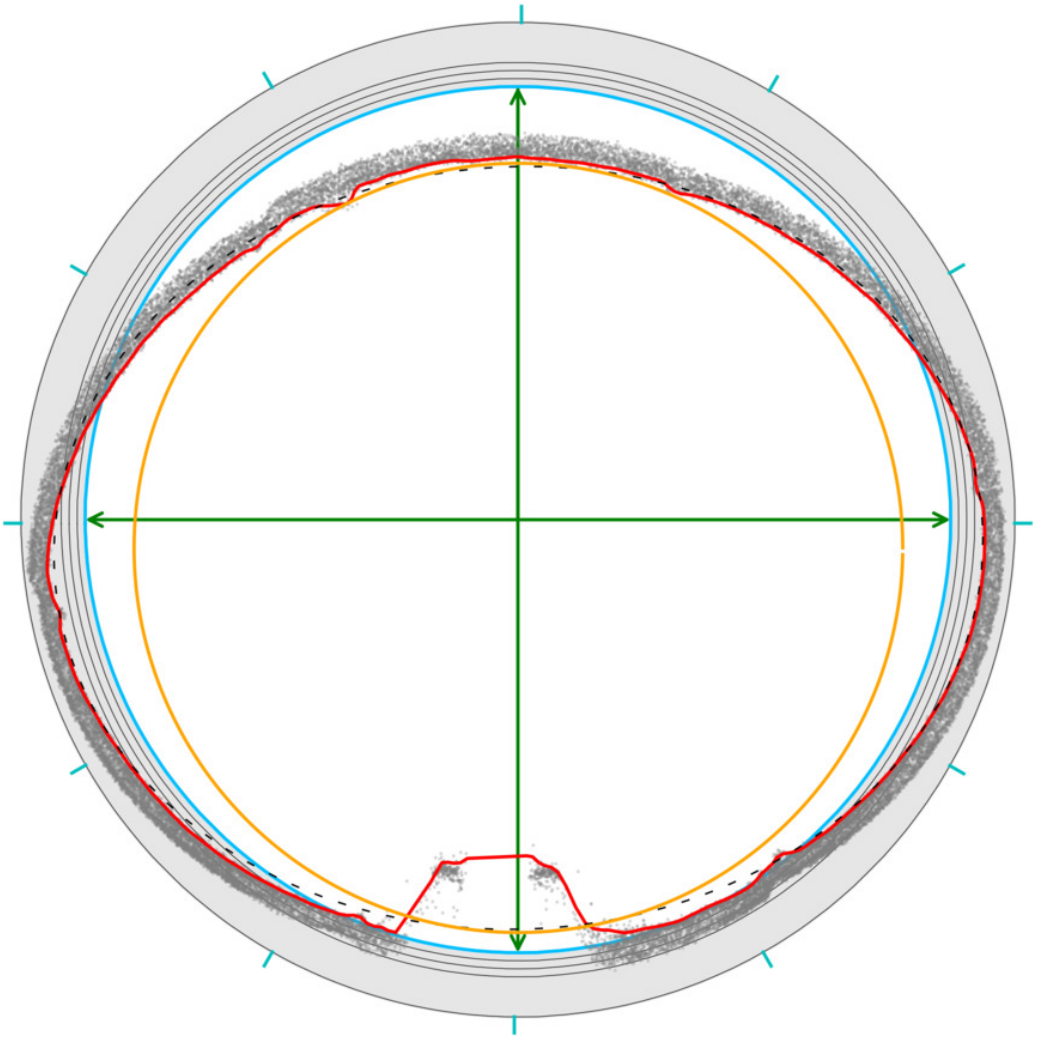
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 420.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 420 ft
Width : 117.0" | 108.0"
Height : 99.2" | 108.0"

Area : 8574 sq in
Perimeter : 345.7 in
Ovality : 9.6%

Interior Diameter : 95.9"

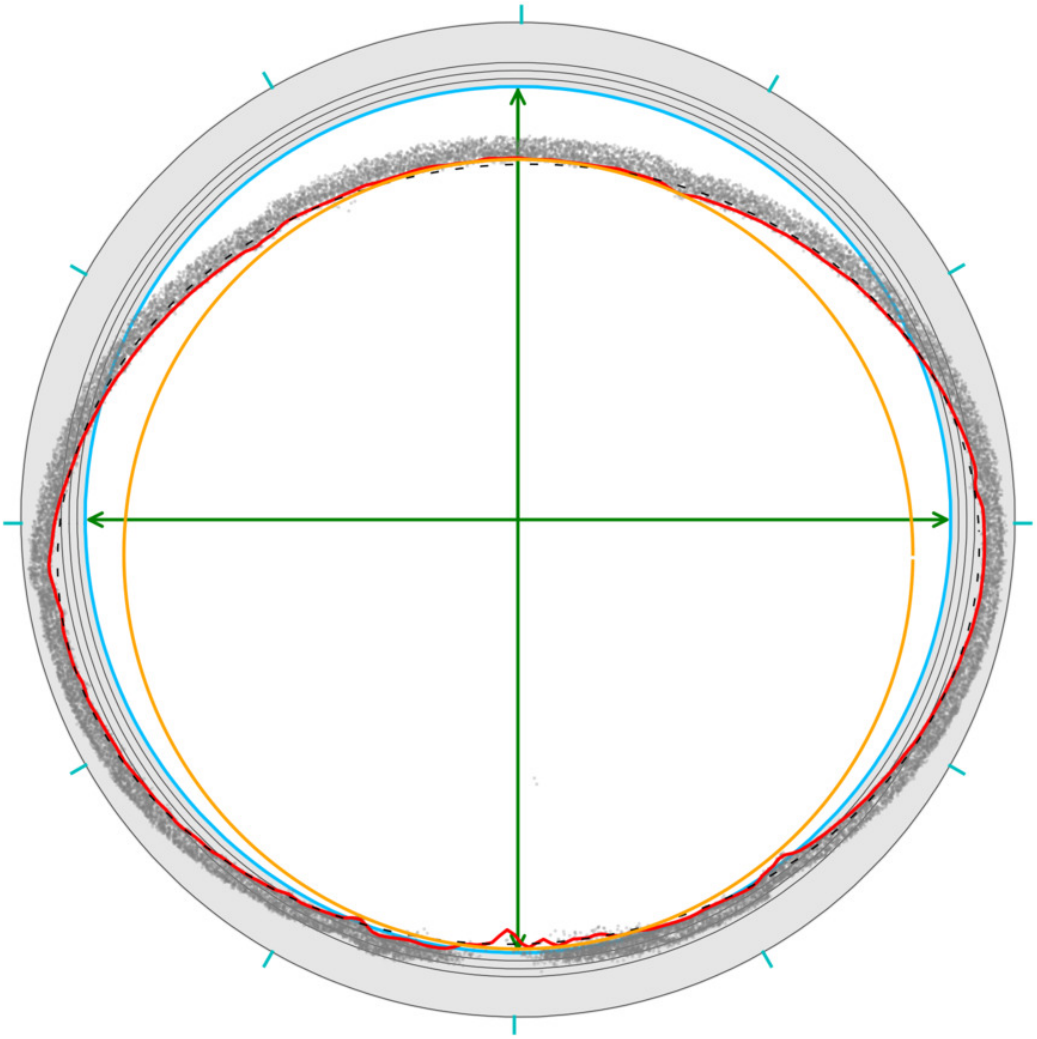
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 421.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



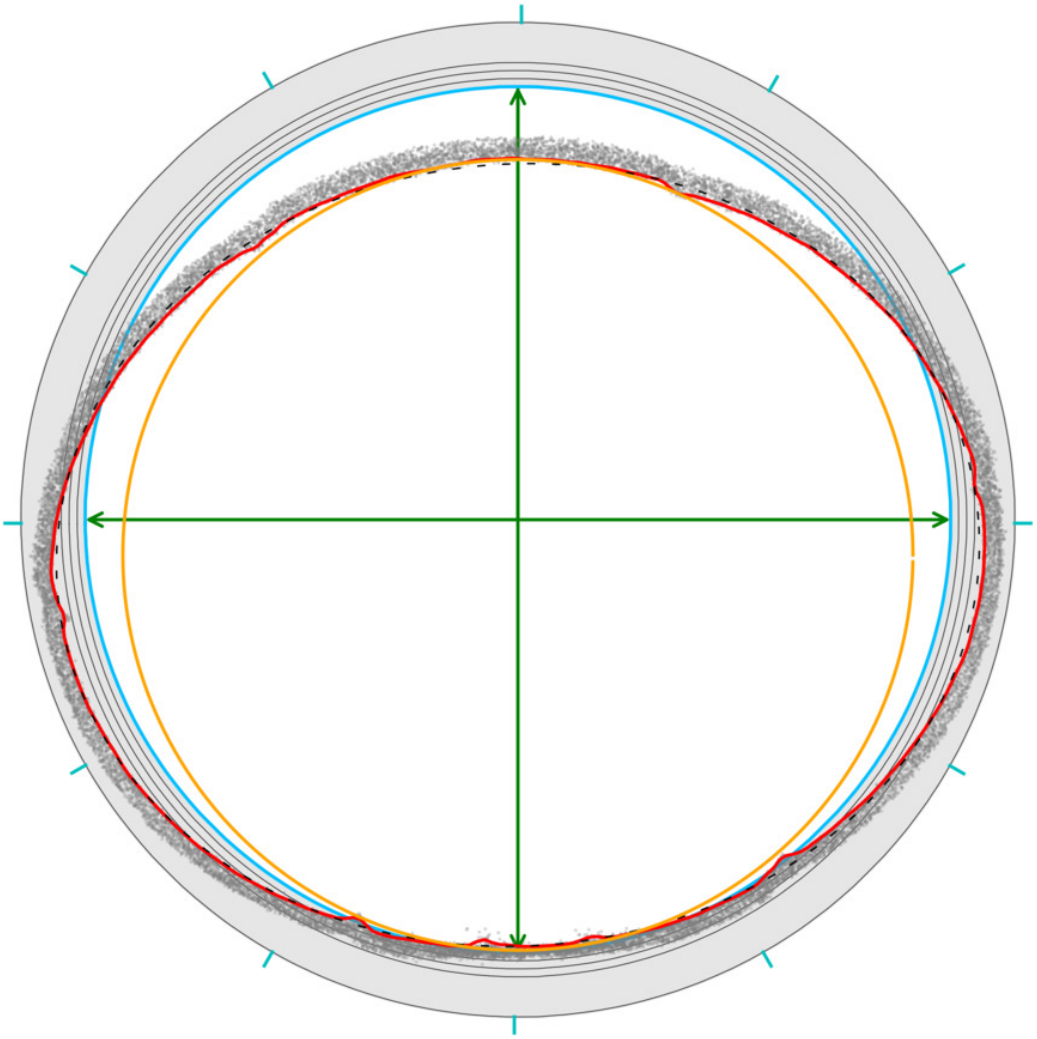
```
Footage   :  421 ft
Width     :  116.7" | 108.0"
Height    :  99.1" | 108.0"

Area      :  8778 sq in
Perimeter :  338.1 in
Ovality   :  8.2%

Interior Diameter : 98.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 422.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



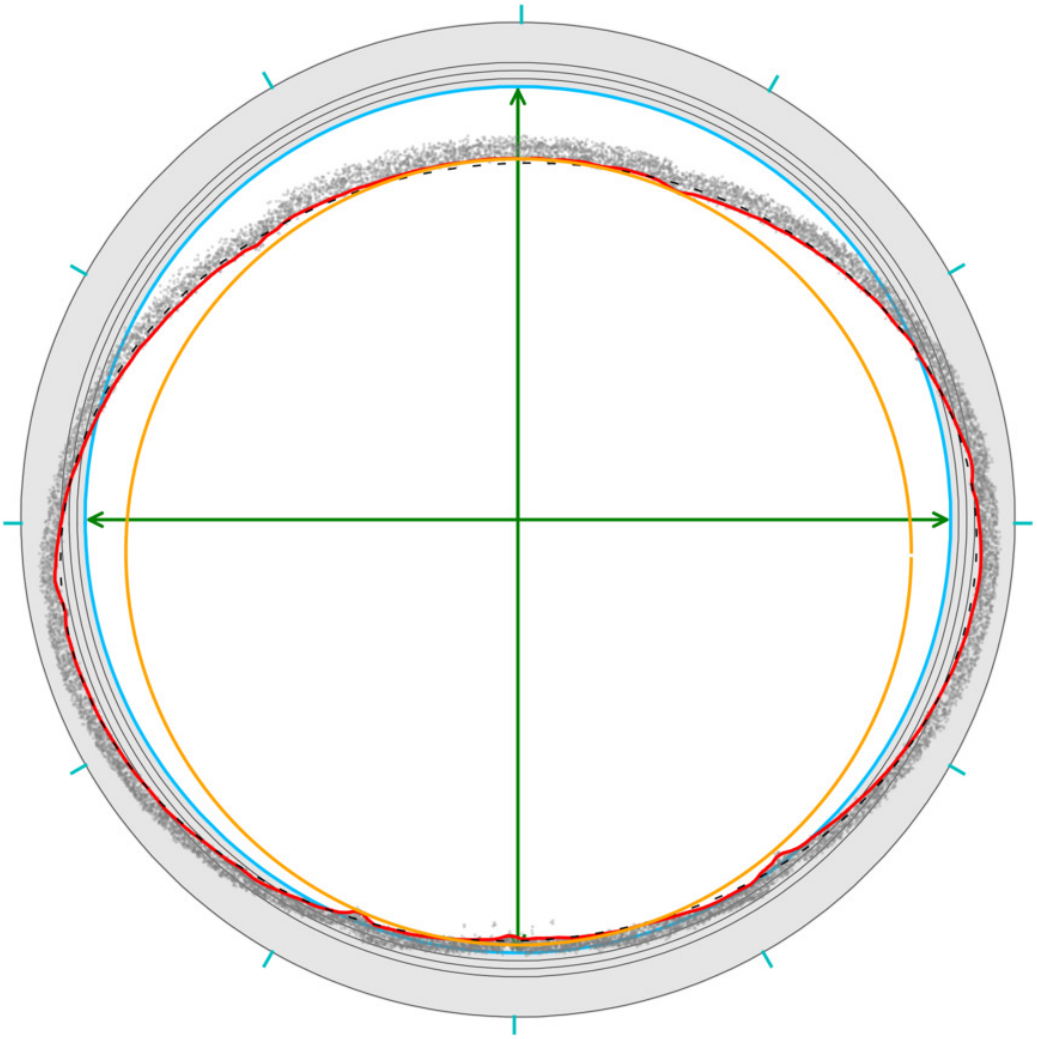
```
Footage   :  422 ft
Width     :  116.5" | 108.0"
Height    :  99.0" | 108.0"

Area      :  8818 sq in
Perimeter :  336.9 in
Ovality   :  8.2%

Interior Diameter : 98.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 423.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



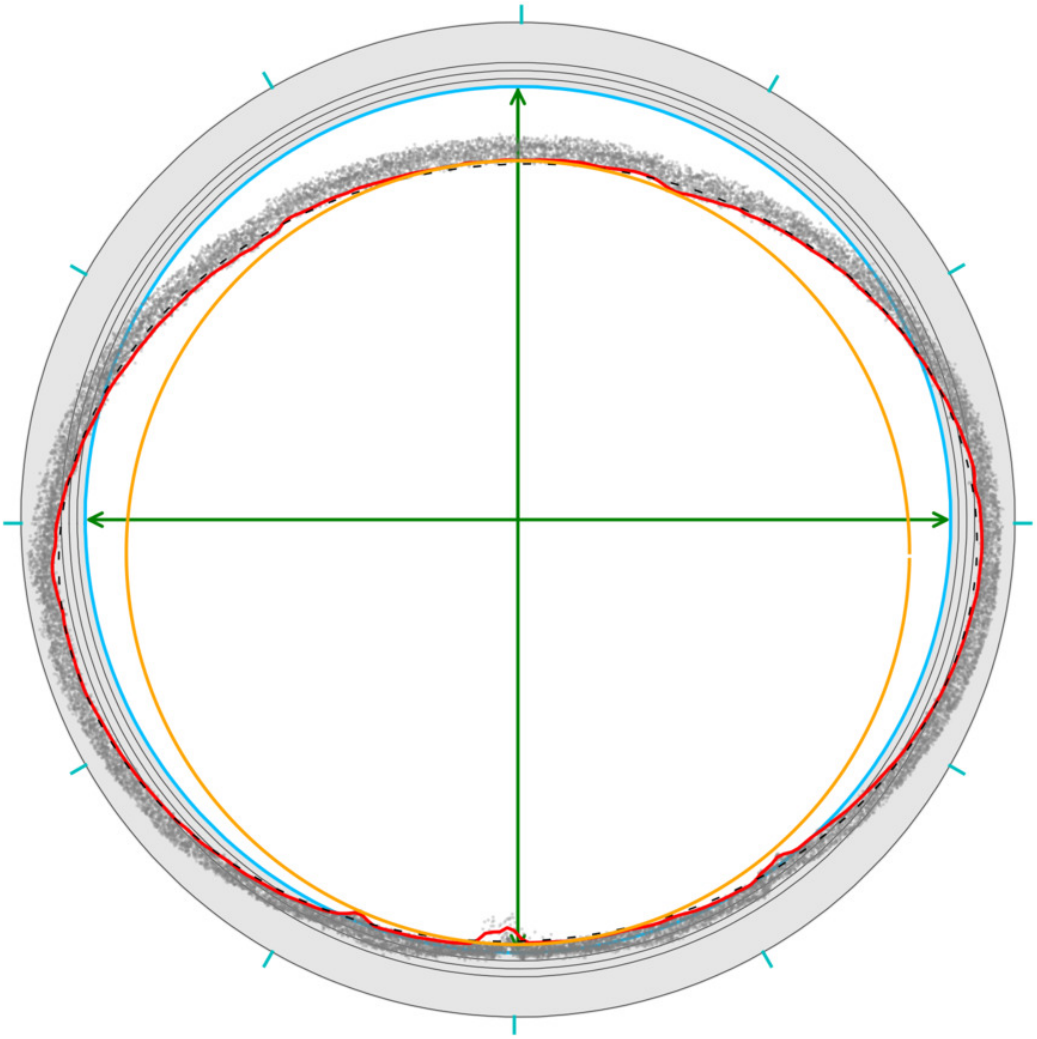
```
Footage   :  423 ft
Width     :  115.6" | 108.0"
Height    :  99.0" | 108.0"

Area      :  8700 sq in
Perimeter :  334.2 in
Ovality   :  8.1%

Interior Diameter : 98.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 424.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



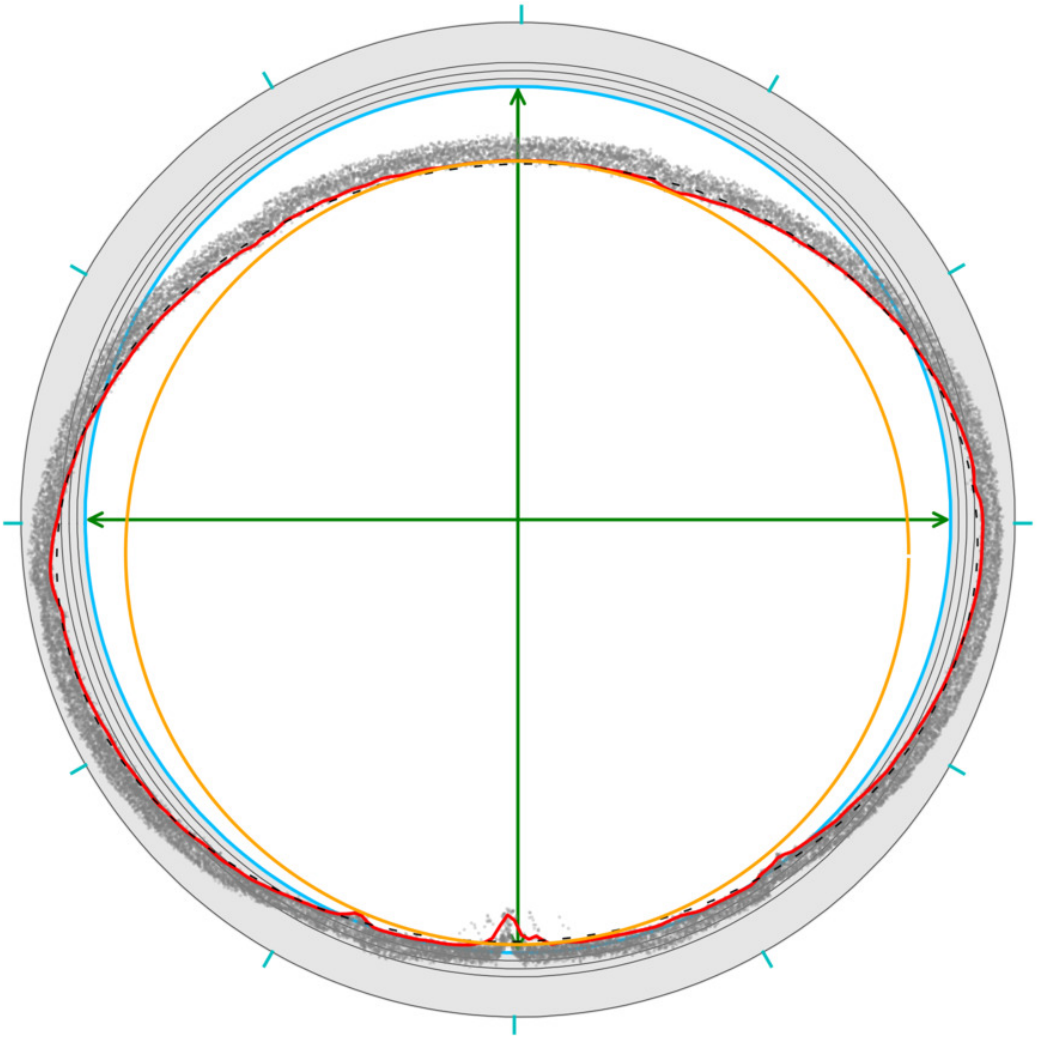
```
Footage   :  424 ft
Width     :  116.0" | 108.0"
Height    :  98.8" | 108.0"

Area      :  8716 sq in
Perimeter :  335.7 in
Ovality   :  8.2%

Interior Diameter : 97.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 425.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



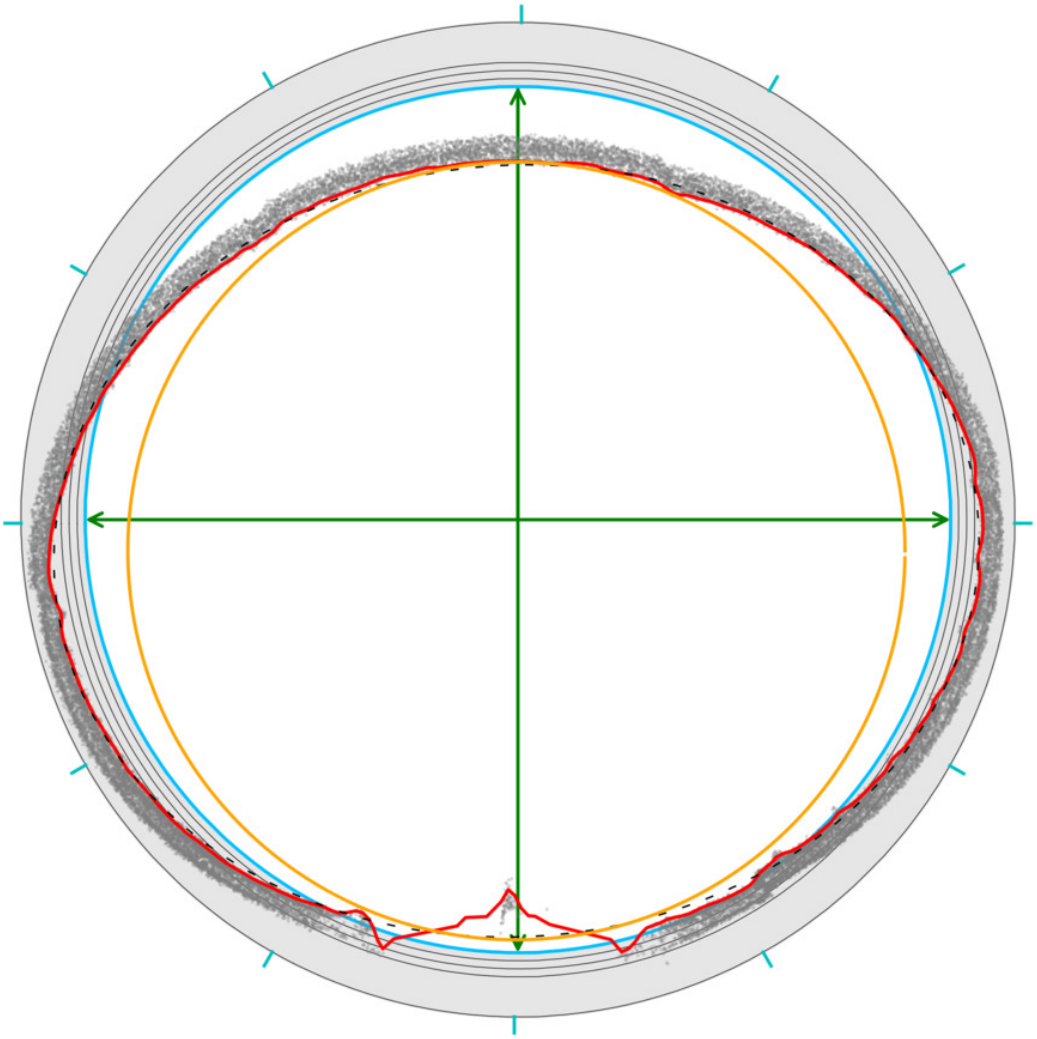
```
Footage   :  425 ft
Width     :  116.4" | 108.0"
Height    :  98.8" | 108.0"

Area      :  8744 sq in
Perimeter :  338.7 in
Ovality   :  8.3%

Interior Diameter : 97.7"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 426.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



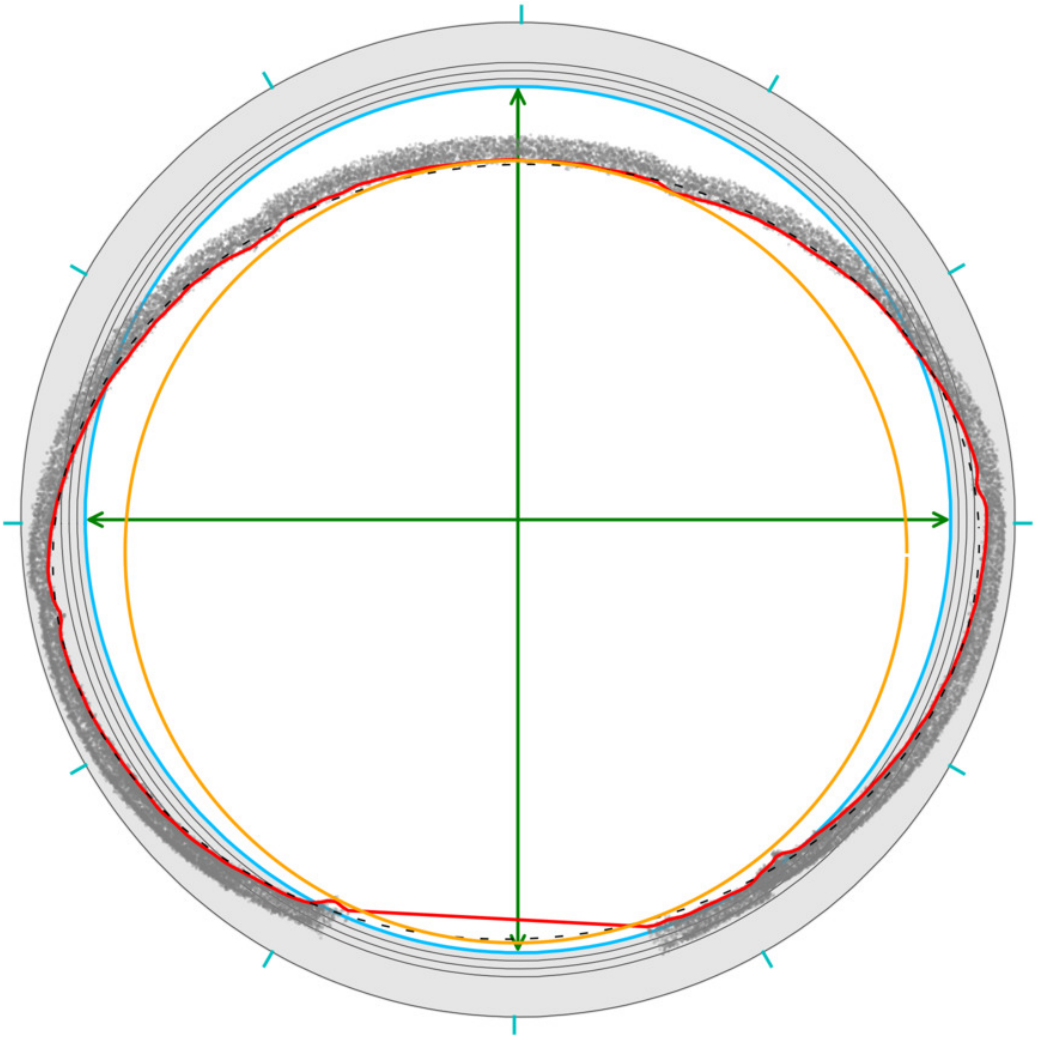
```
Footage   :  426 ft
Width     :  116.6" | 108.0"
Height    :  98.7" | 108.0"

Area      :  8714 sq in
Perimeter :  344.4 in
Ovality   :  8.9%

Interior Diameter : 97.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 427.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



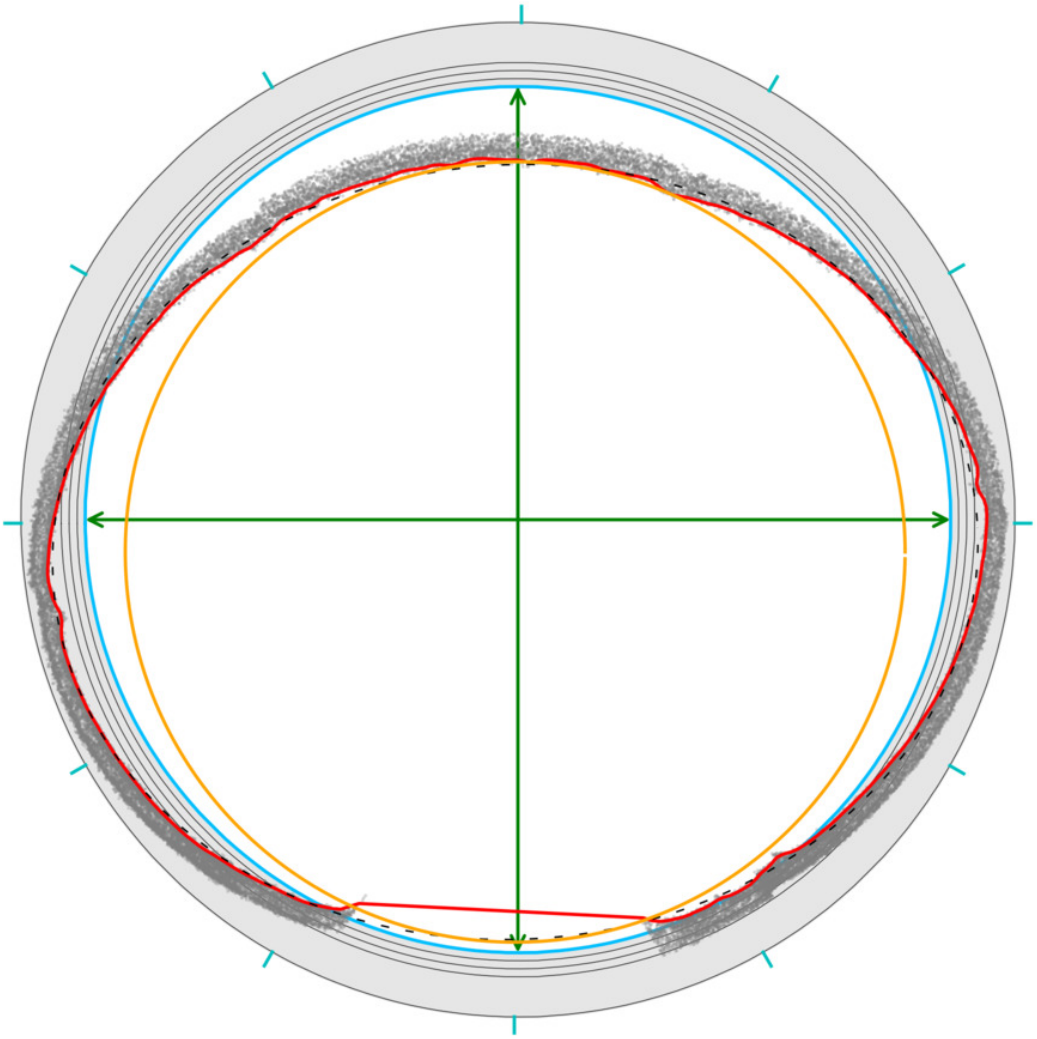
```
Footage   :  427 ft
Width     :  117.1" | 108.0"
Height    :  98.8" | 108.0"

Area      :  8698 sq in
Perimeter :  335.4 in
Ovality   :  8.8%

Interior Diameter : 97.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 428.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 428 ft
Width : 117.2" | 108.0"
Height : 98.8" | 108.0"

Area : 8655 sq in
Perimeter : 335.2 in
Ovality : 8.7%

Interior Diameter : 97.3"

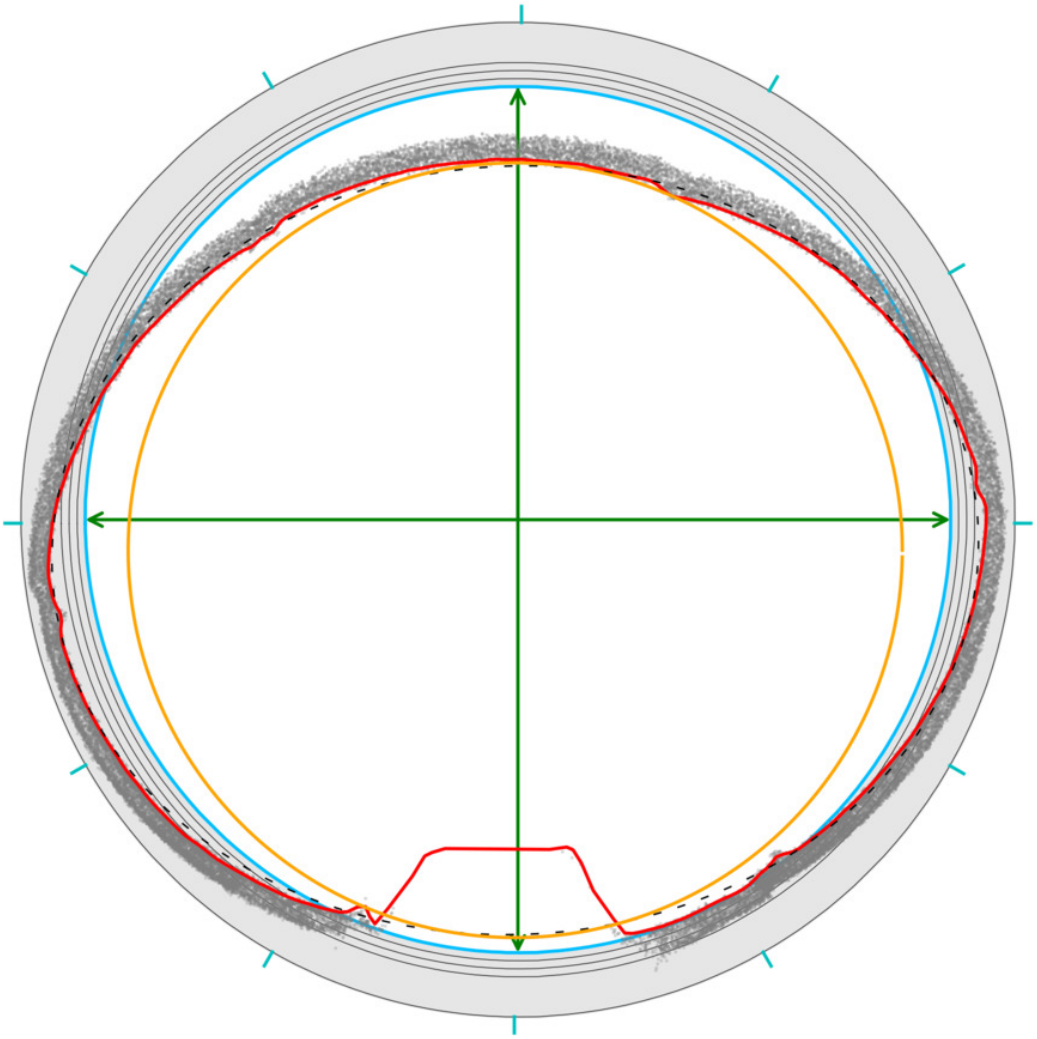
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 429.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 429 ft
Width : 117.0" | 108.0"
Height : 98.9" | 108.0"

Area : 8490 sq in
Perimeter : 346.8 in
Ovality : 9.1%

Interior Diameter : 96.6"

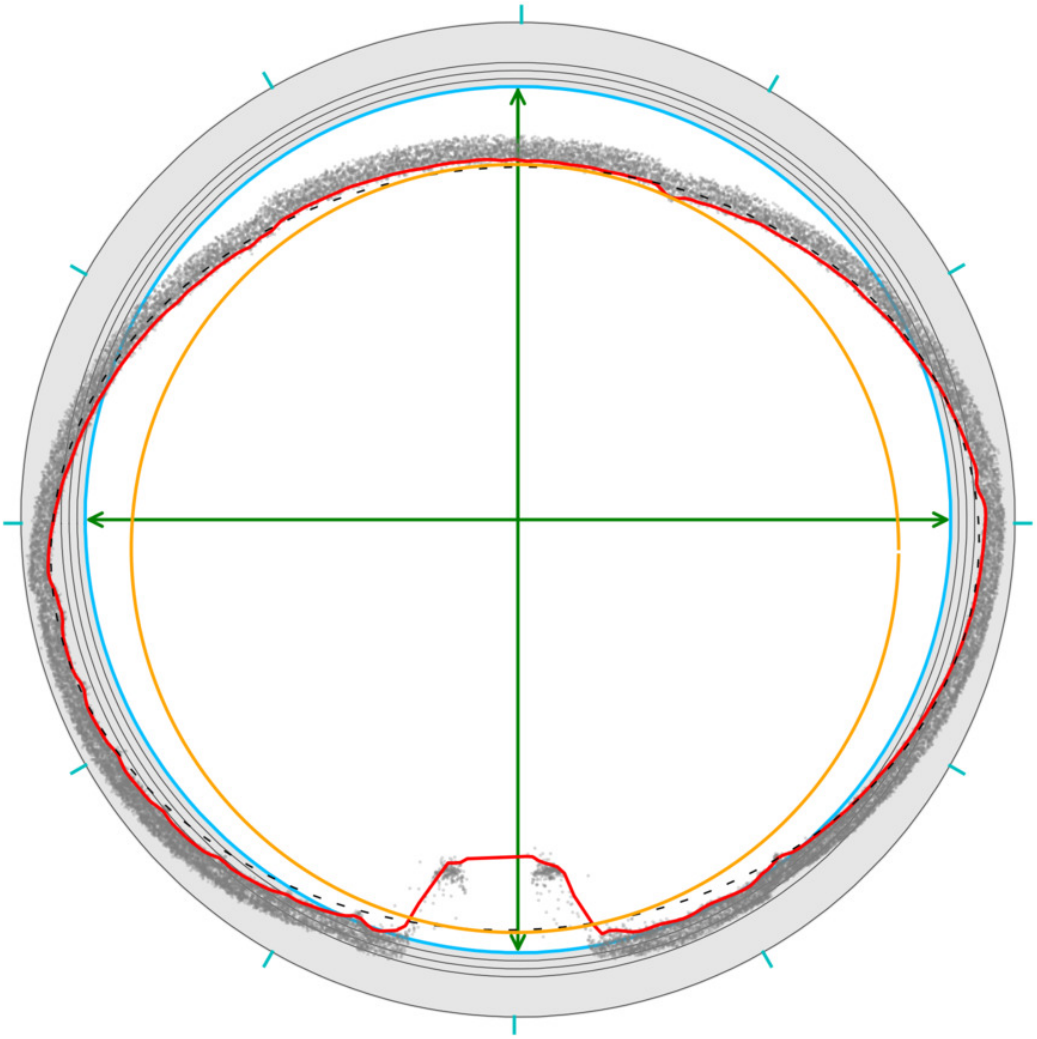
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 430.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 430 ft
Width : 117.0" | 108.0"
Height : 98.8" | 108.0"

Area : 8566 sq in
Perimeter : 345.2 in
Ovality : 9.6%

Interior Diameter : 95.8"

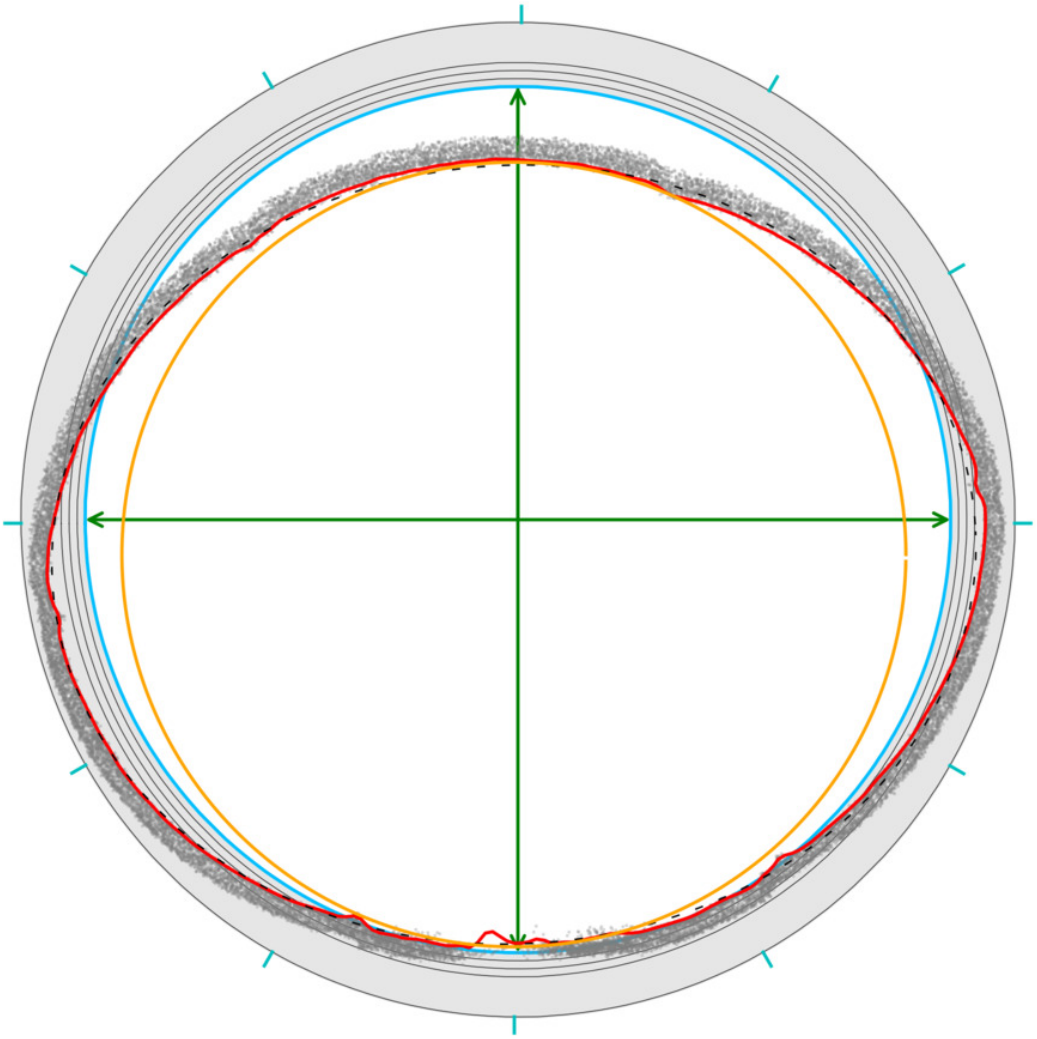
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 431.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



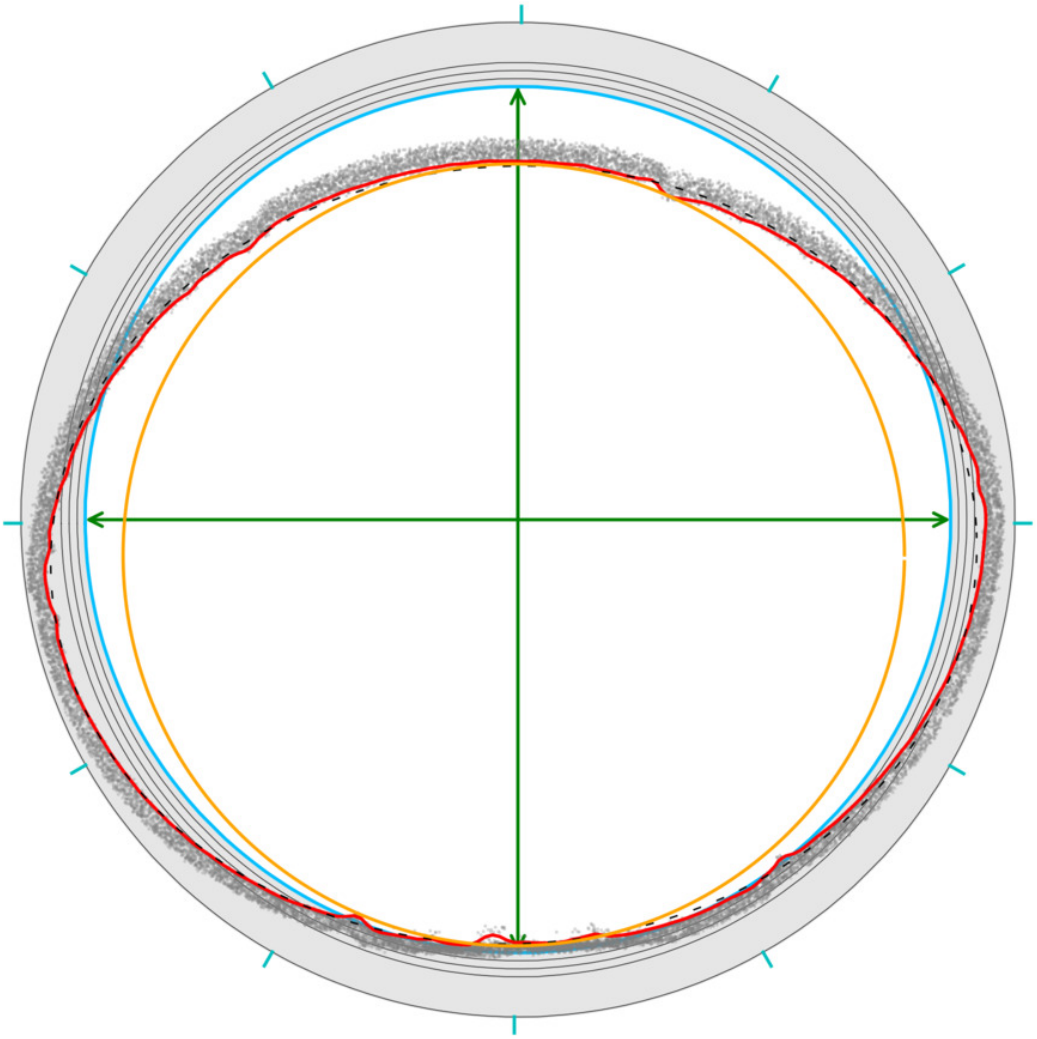
```
Footage   :  431 ft
Width     :  117.1" | 108.0"
Height    :  98.9" | 108.0"

Area      :  8789 sq in
Perimeter :  337.5 in
Ovality   :  8.4%

Interior Diameter : 97.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 432.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 432 ft
Width : 117.4" | 108.0"
Height : 98.7" | 108.0"

Area : 8797 sq in
Perimeter : 337.3 in
Ovality : 8.6%

Interior Diameter : 97.5"

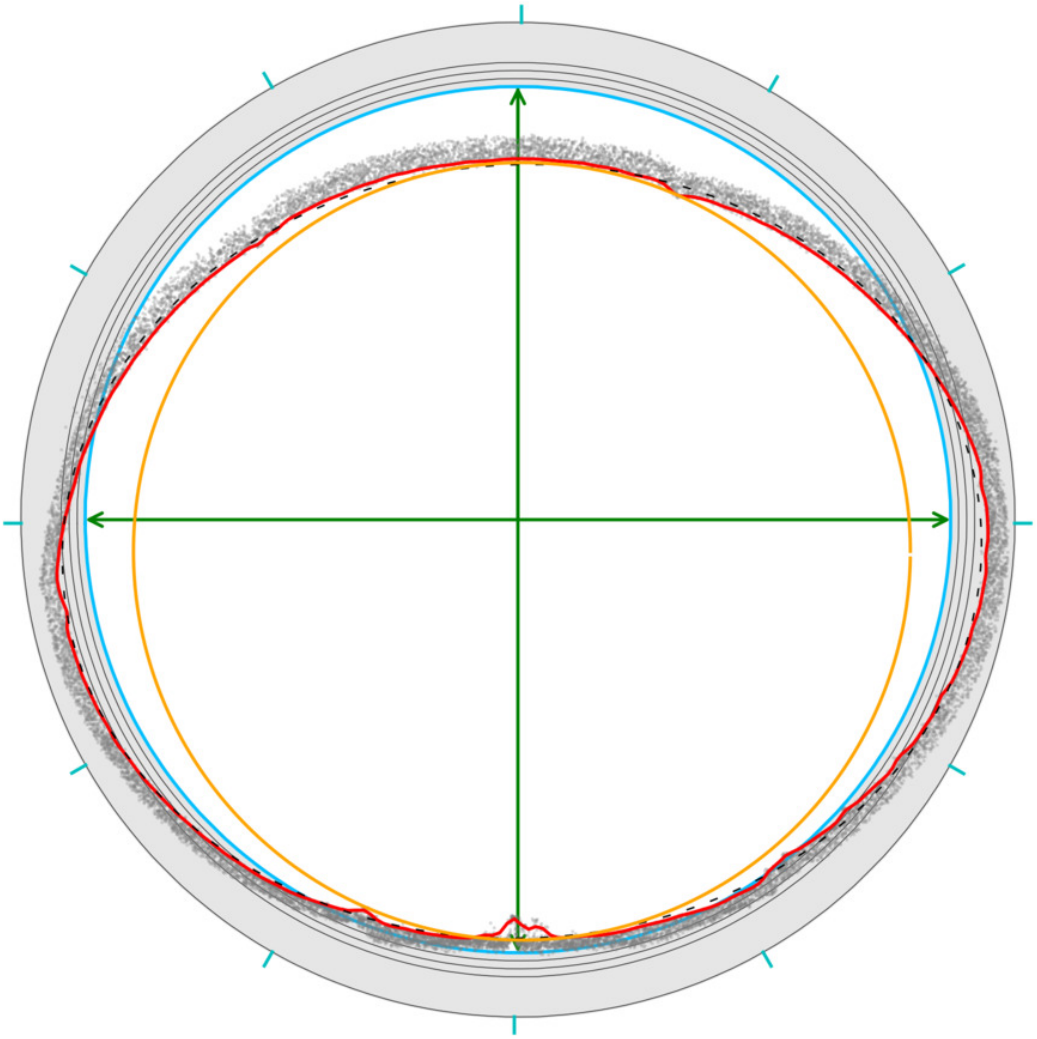
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 433.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



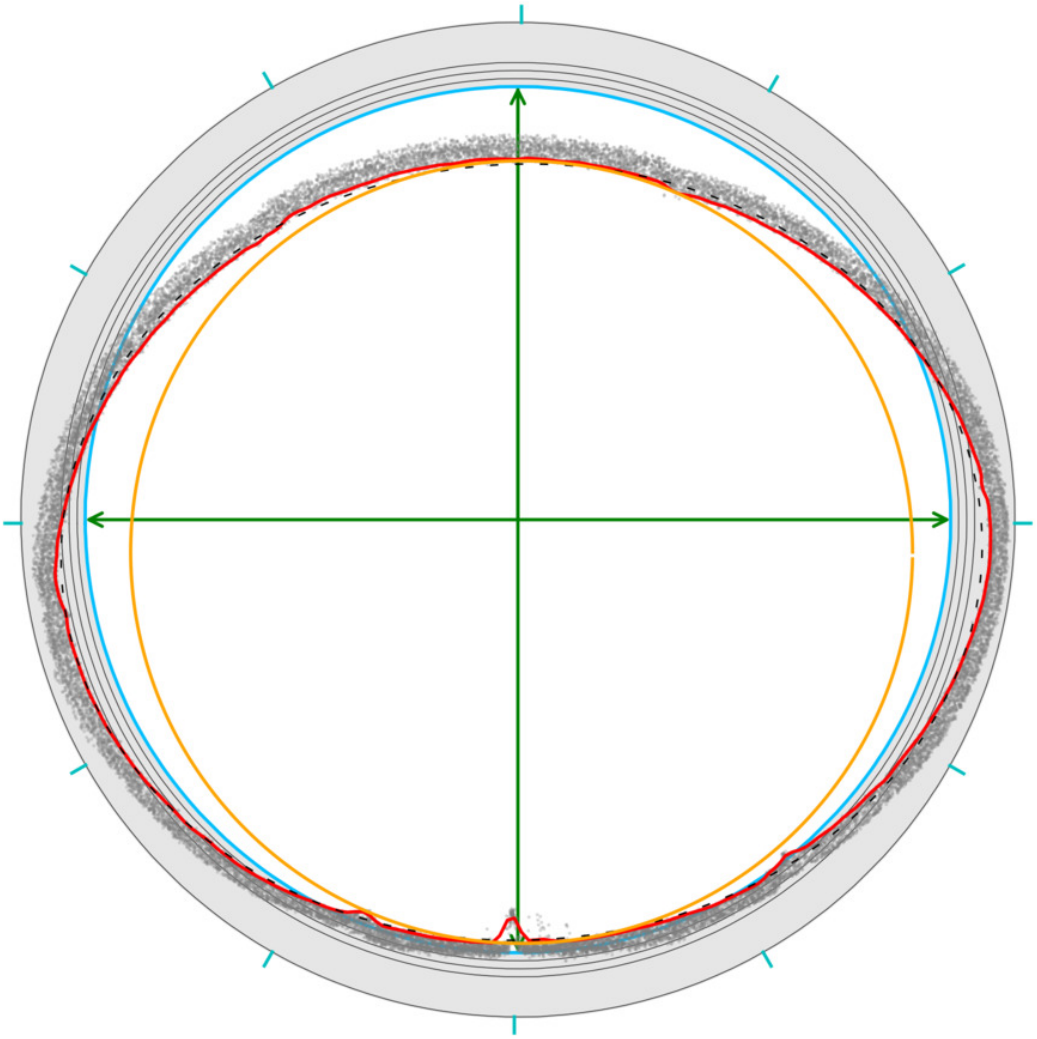
```
Footage   :  433 ft
Width     :  116.2" | 108.0"
Height    :  99.0" | 108.0"

Area      :  8685 sq in
Perimeter :  335.9 in
Ovality   :  8.5%

Interior Diameter : 97.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 434.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



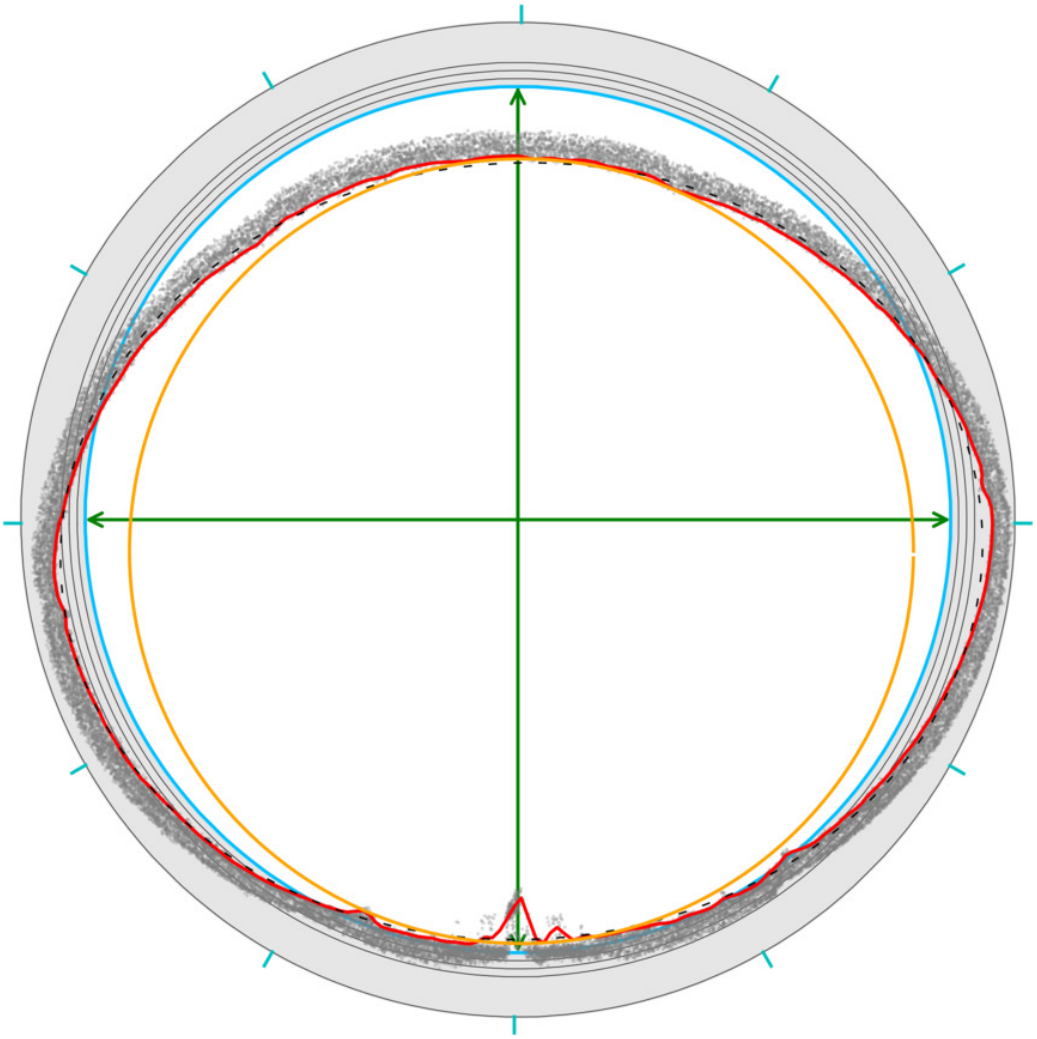
```
Footage    :  434 ft
Width      :  116.7" | 108.0"
Height     :  99.0" | 108.0"

Area       :  8730 sq in
Perimeter  :  337.9 in
Ovality    :  8.4%

Interior Diameter : 97.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 435.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



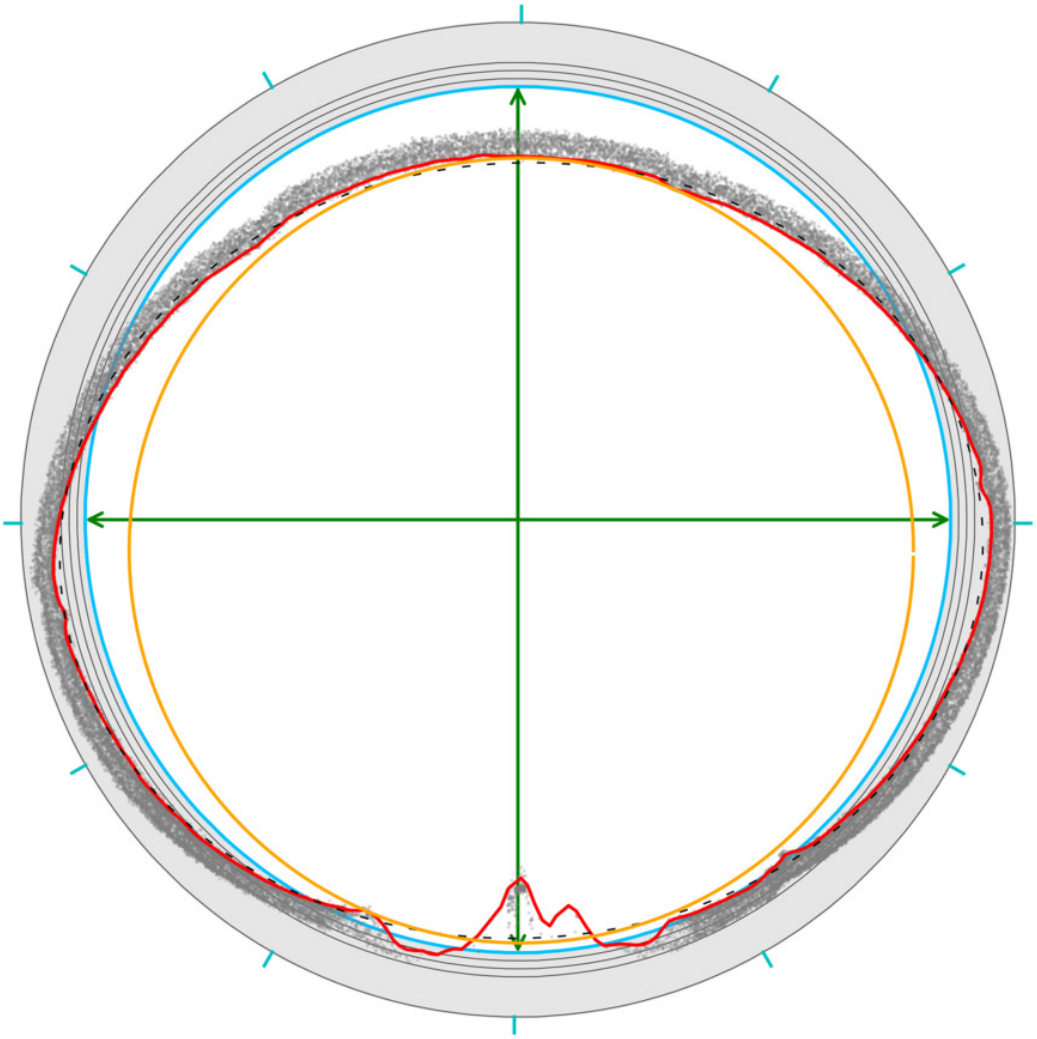
```
Footage   :  435 ft
Width     :  117.1" | 108.0"
Height    :  99.3" | 108.0"

Area      :  8744 sq in
Perimeter :  343.8 in
Ovality   :  8.4%

Interior Diameter : 97.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 436.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



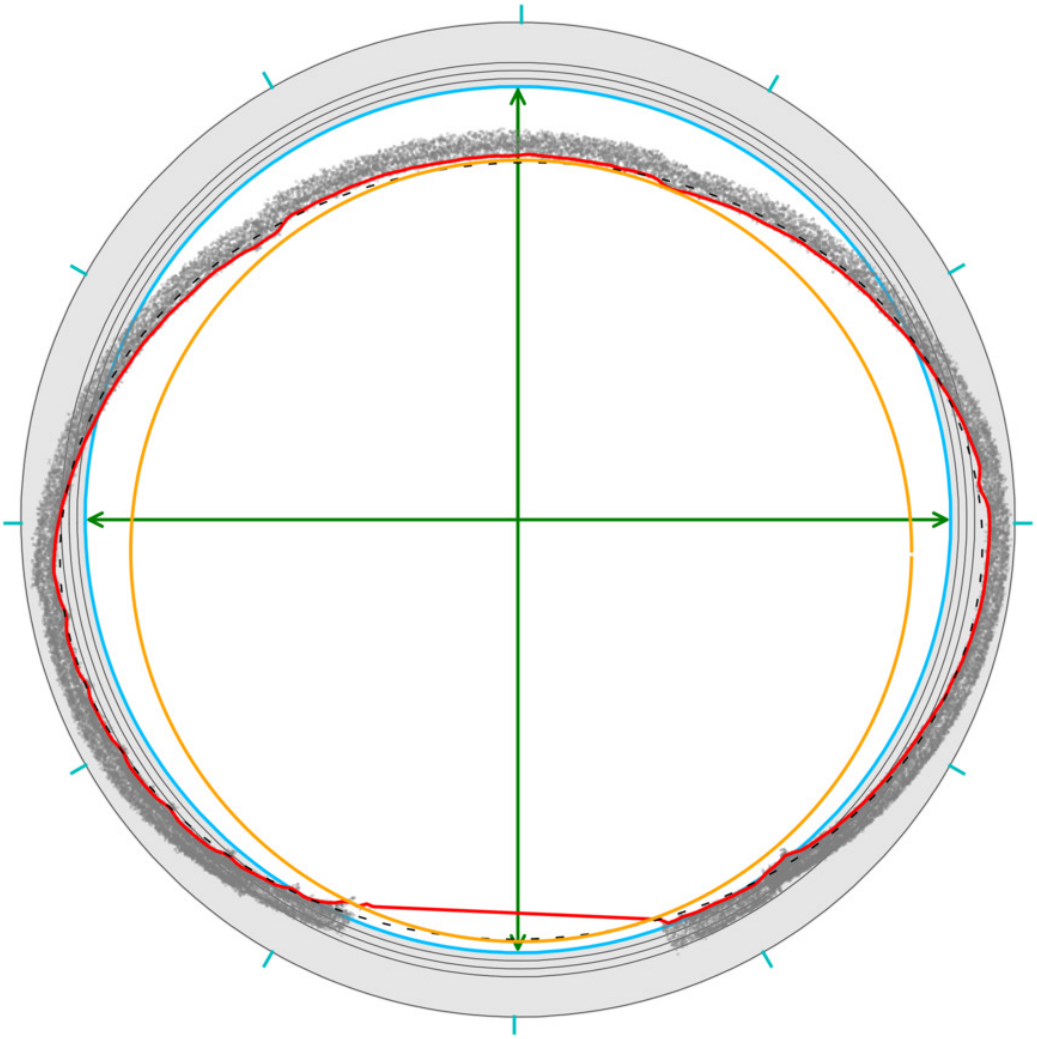
```
Footage   :  436 ft
Width     :  117.1" | 108.0"
Height    :  99.3" | 108.0"

Area      :  8740 sq in
Perimeter :  349.4 in
Ovality   :  8.5%

Interior Diameter : 97.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 437.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



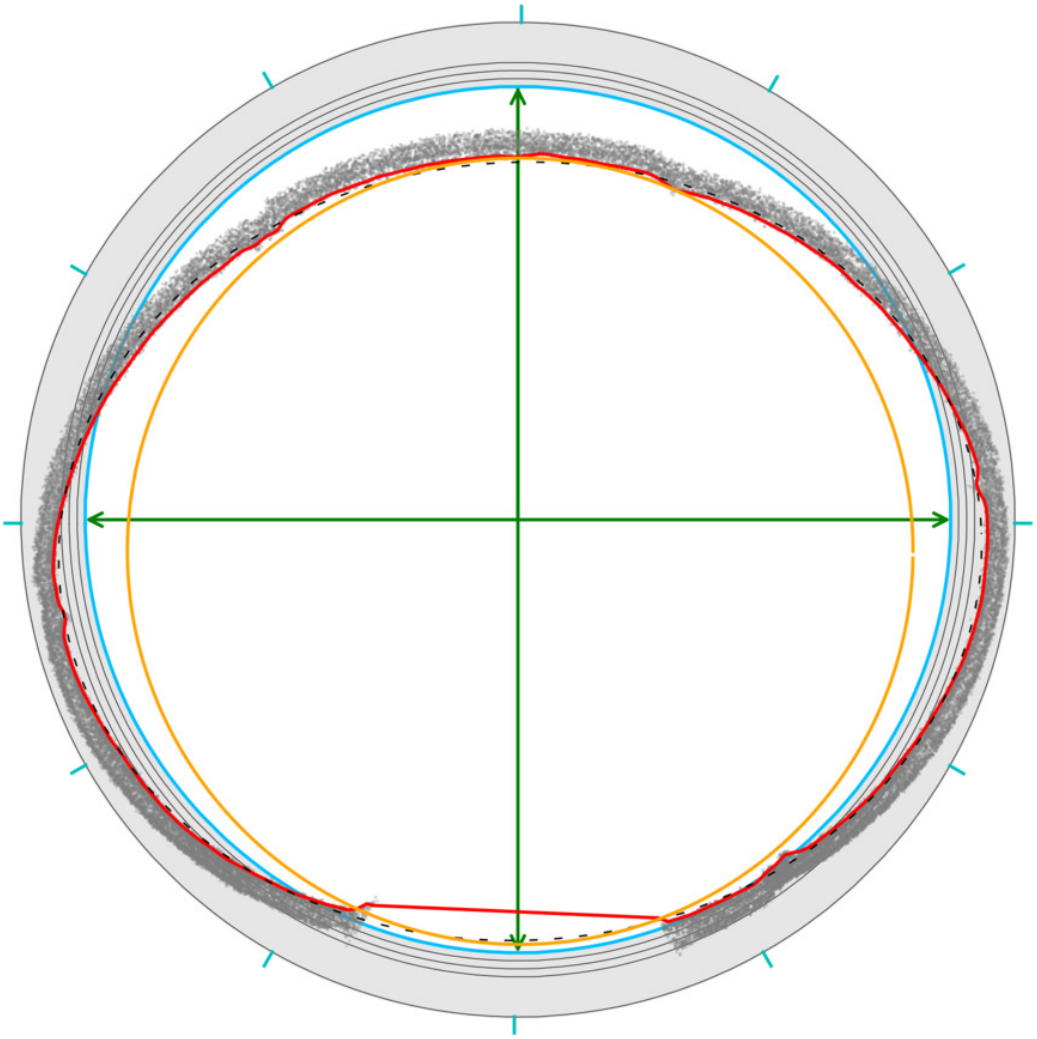
```
Footage   :  437 ft
Width     :  116.8" | 108.0"
Height    :  99.4" | 108.0"

Area      :  8658 sq in
Perimeter :  335.1 in
Ovality   :  8.4%

Interior Diameter : 97.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 438.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



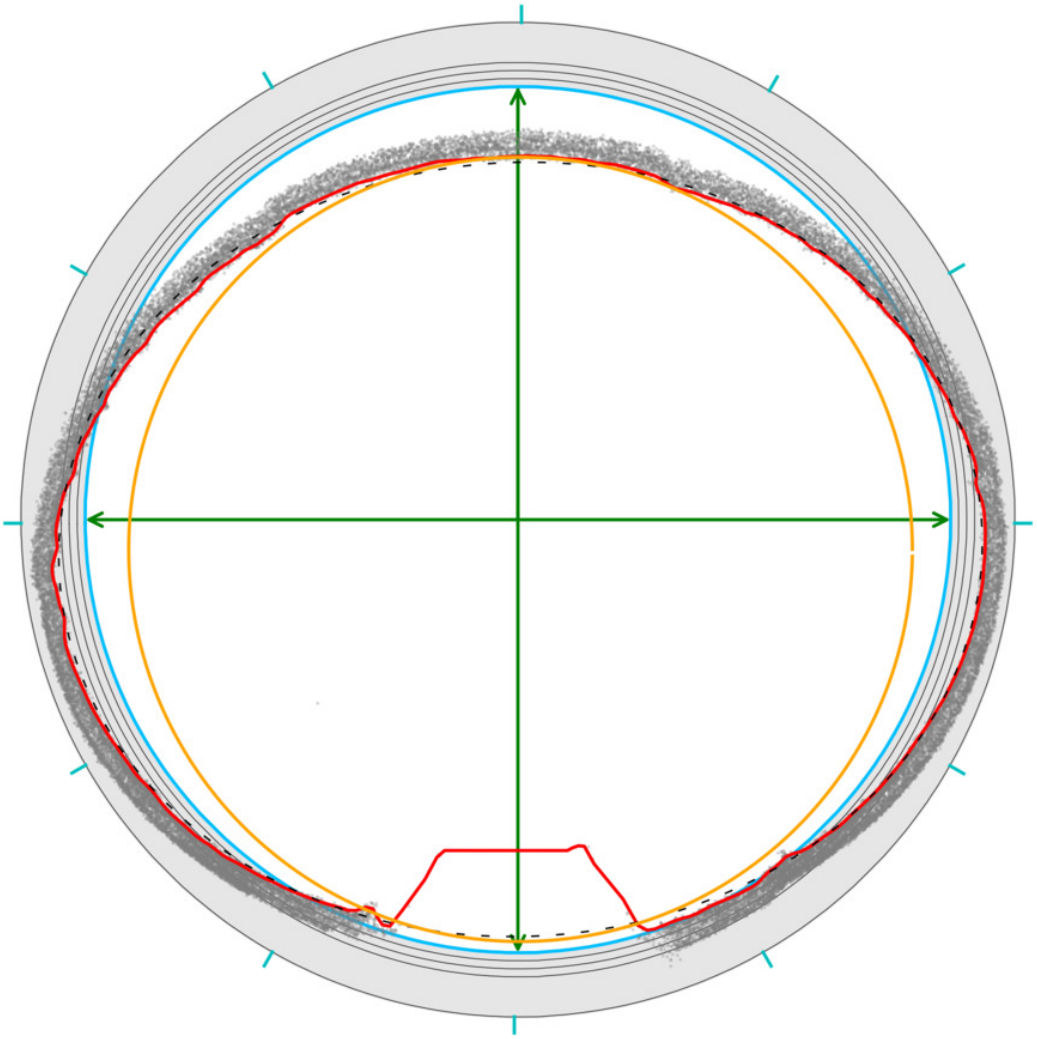
```
Footage   :  438 ft
Width     :  116.6" | 108.0"
Height    :  99.3" | 108.0"

Area      :  8673 sq in
Perimeter :  335.2 in
Ovality   :  8.4%

Interior Diameter : 98.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 439.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



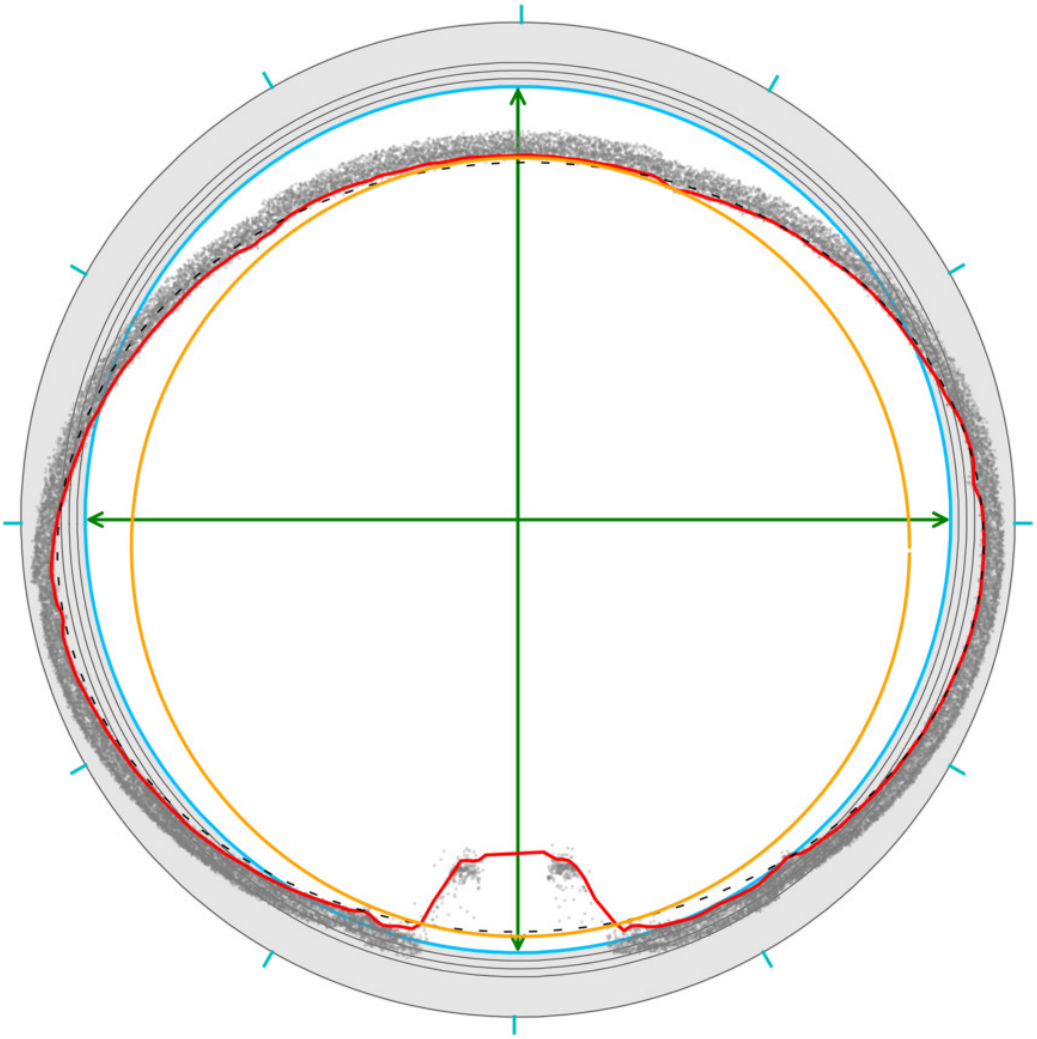
```
Footage   :  439 ft
Width     :  116.5" | 108.0"
Height    :  99.3" | 108.0"

Area      :  8505 sq in
Perimeter :  346.8 in
Ovality   :  8.6%

Interior Diameter : 97.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 440.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



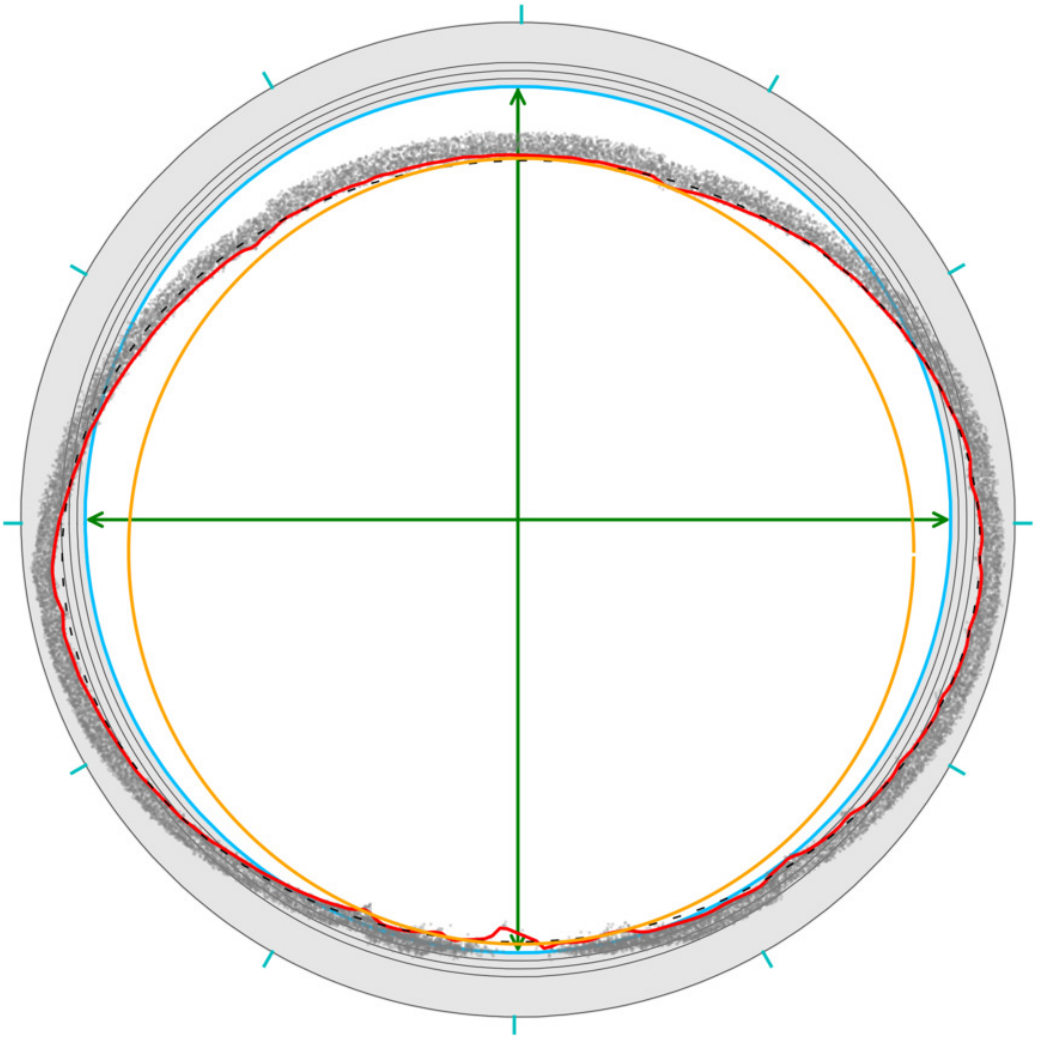
```
Footage   :  440 ft
Width     :  116.4" | 108.0"
Height    :  99.4" | 108.0"

Area      :  8586 sq in
Perimeter :  345.1 in
Ovality   :  9.1%

Interior Diameter : 97.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 441.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



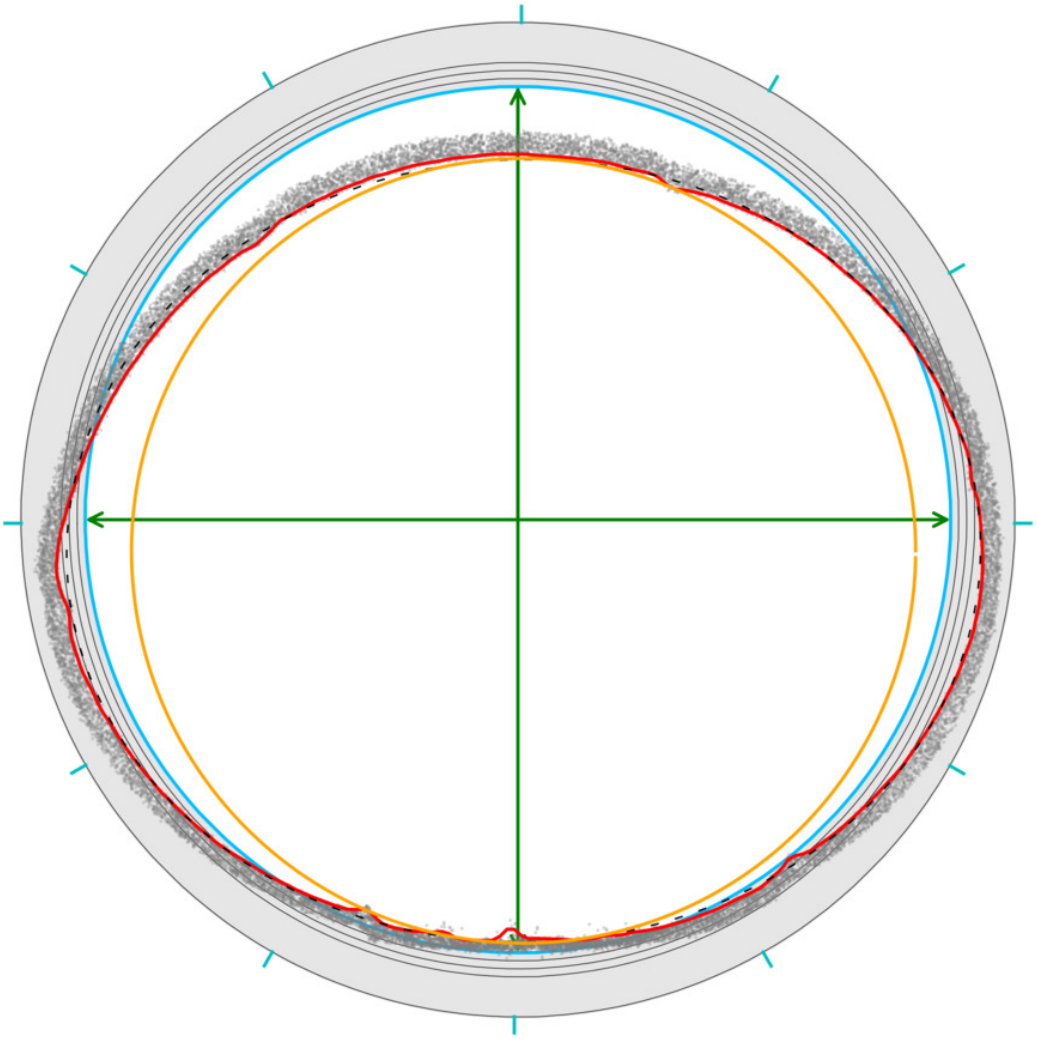
```
Footage   :  441 ft
Width     :  116.0" | 108.0"
Height    :  99.5" | 108.0"

Area      :  8756 sq in
Perimeter :  337.0 in
Ovality   :  7.9%

Interior Diameter : 98.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 442.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



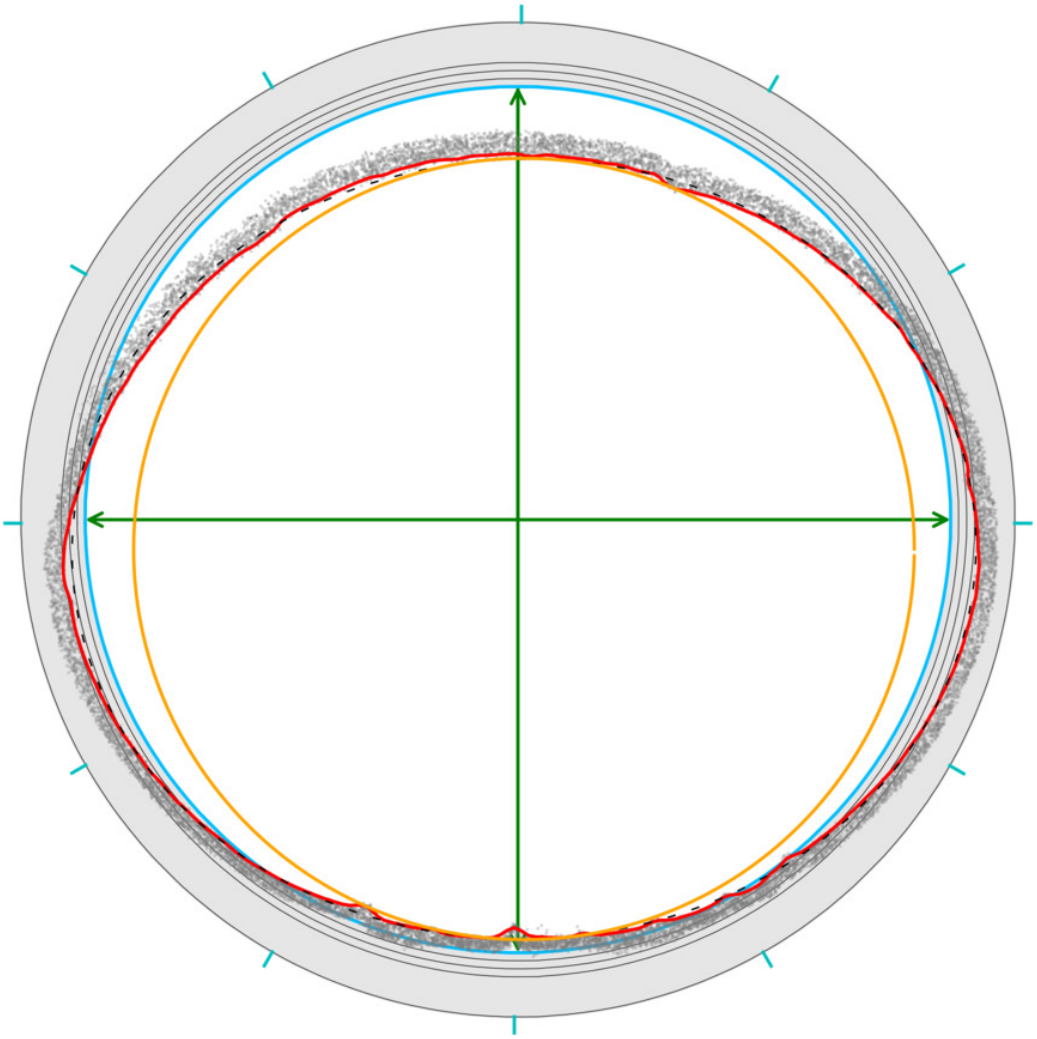
```
Footage    :  442 ft
Width      :  115.6" | 108.0"
Height     :  99.6" | 108.0"

Area       :  8730 sq in
Perimeter  :  335.5 in
Ovality    :  7.6%

Interior Diameter : 97.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 443.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 443 ft
Width : 114.3" | 108.0"
Height : 99.5" | 108.0"

Area : 8606 sq in
Perimeter : 332.8 in
Ovality : 7.3%

Interior Diameter : 97.4"

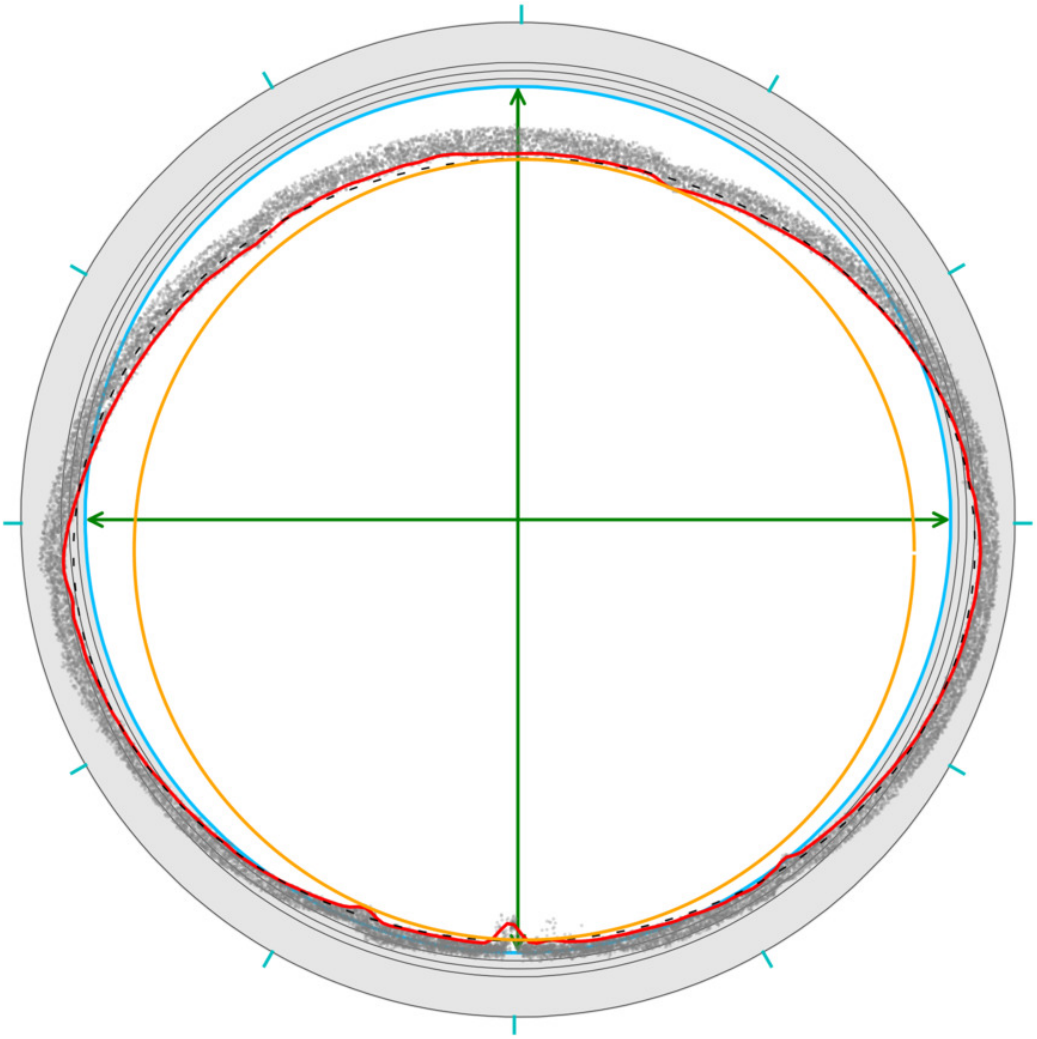
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 444.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 444 ft
Width : 114.4" | 108.0"
Height : 99.6" | 108.0"

Area : 8618 sq in
Perimeter : 334.1 in
Ovality : 6.9%

Interior Diameter : 97.3"

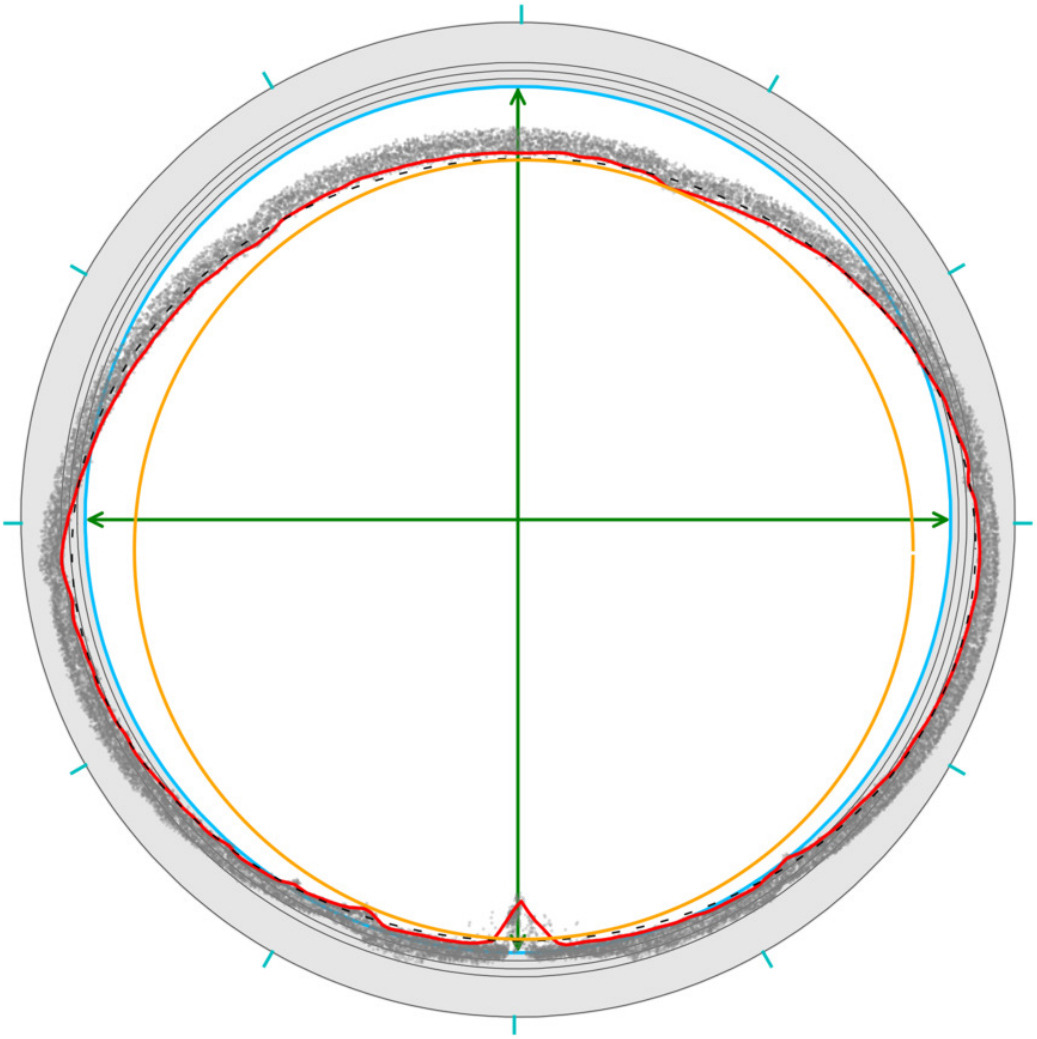
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 445.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



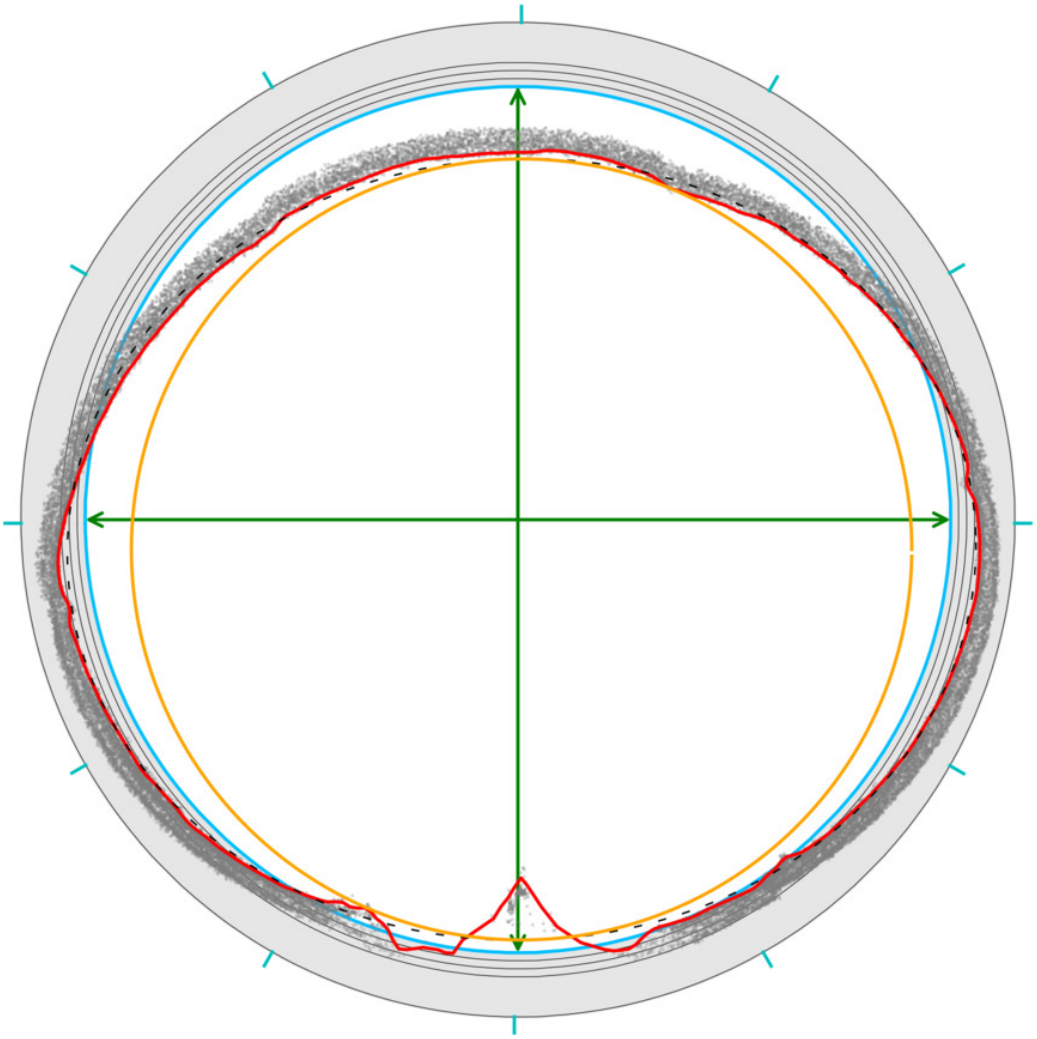
```
Footage    :  445 ft
Width      :  114.6" | 108.0"
Height     :  99.7" | 108.0"

Area       :  8634 sq in
Perimeter  :  338.1 in
Ovality    :  7.1%

Interior Diameter : 97.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 446.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



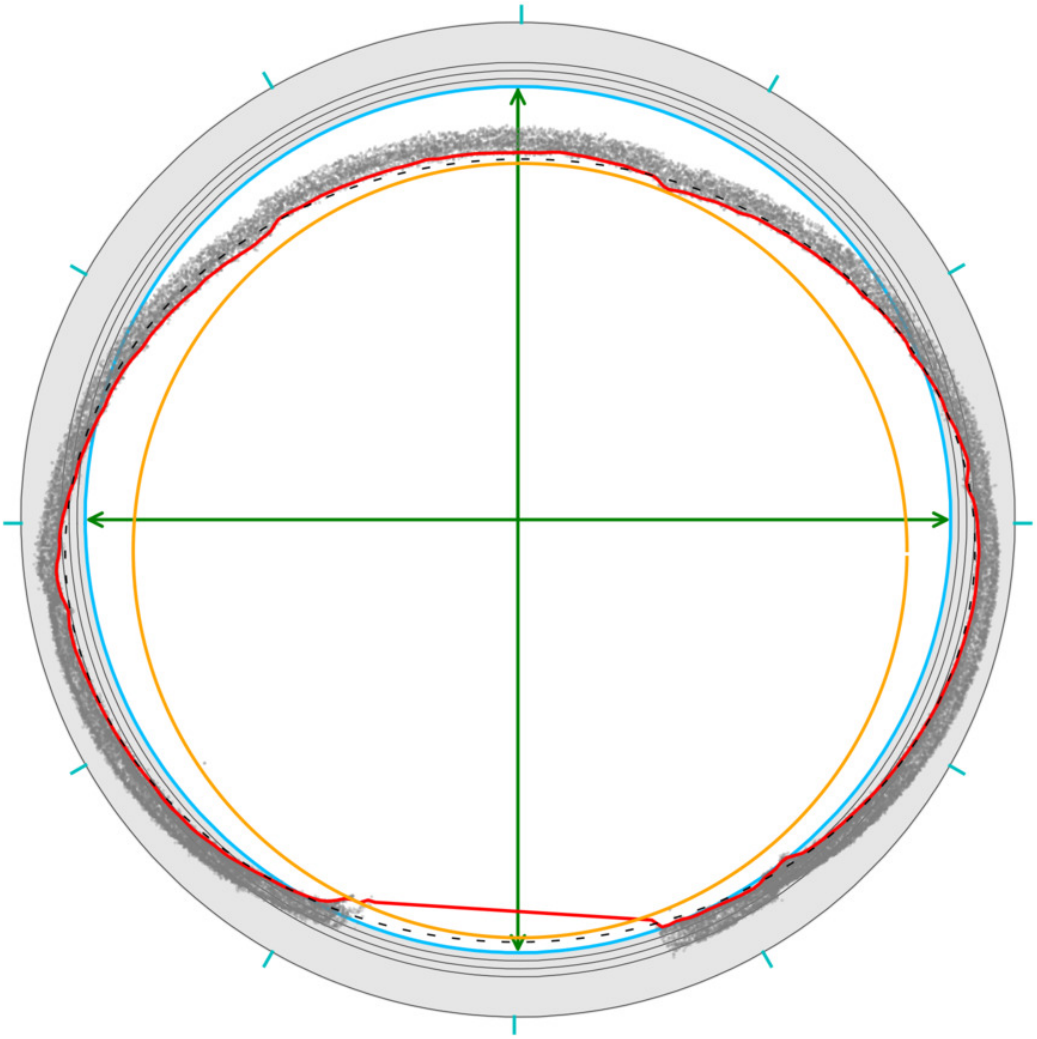
```
Footage   :  446 ft
Width     :  115.0" | 108.0"
Height    :  99.8" | 108.0"

Area      :  8675 sq in
Perimeter :  344.7 in
Ovality   :  7.4%

Interior Diameter : 97.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 447.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



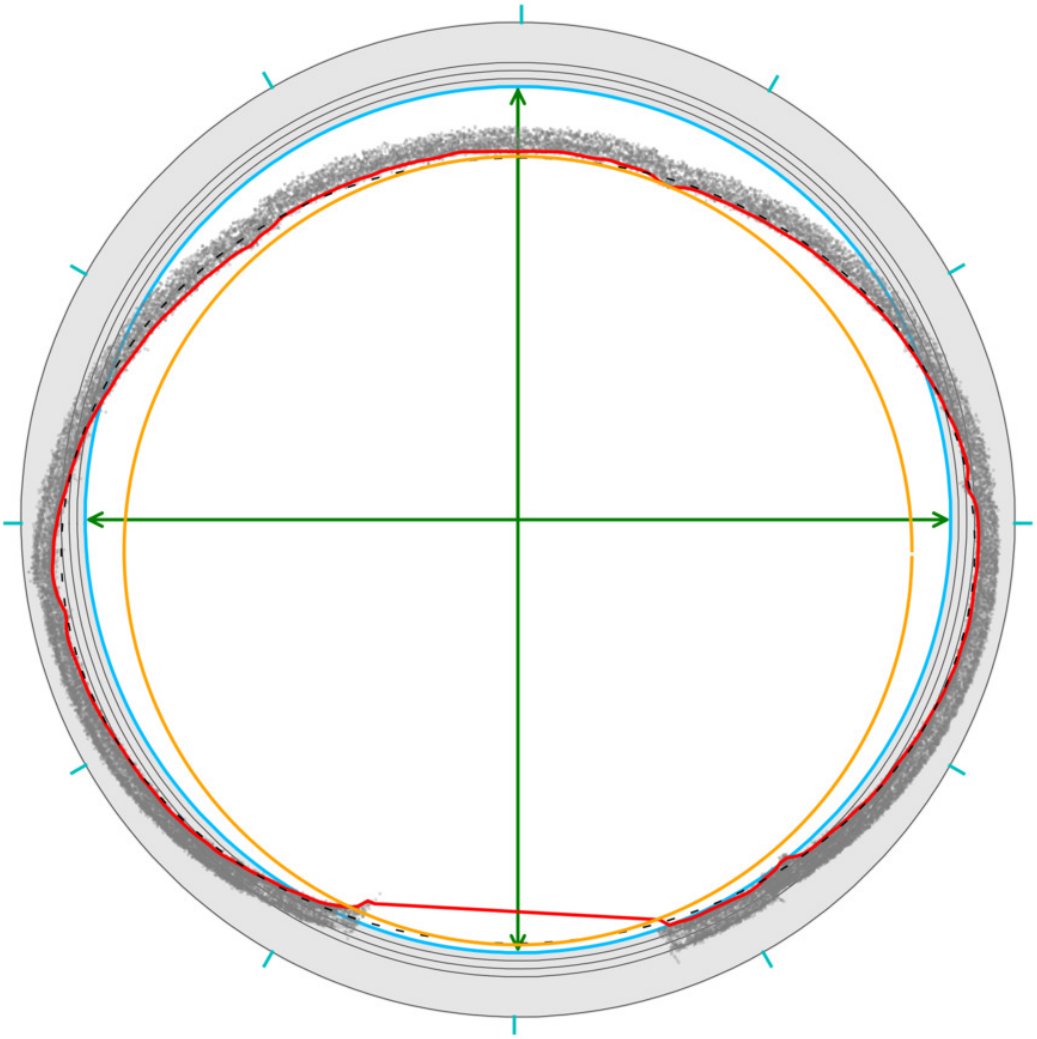
```
Footage   :  447 ft
Width     :  115.1" | 108.0"
Height    :  99.8" | 108.0"

Area      :  8594 sq in
Perimeter :  333.8 in
Ovality   :  7.4%

Interior Diameter : 96.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 448.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



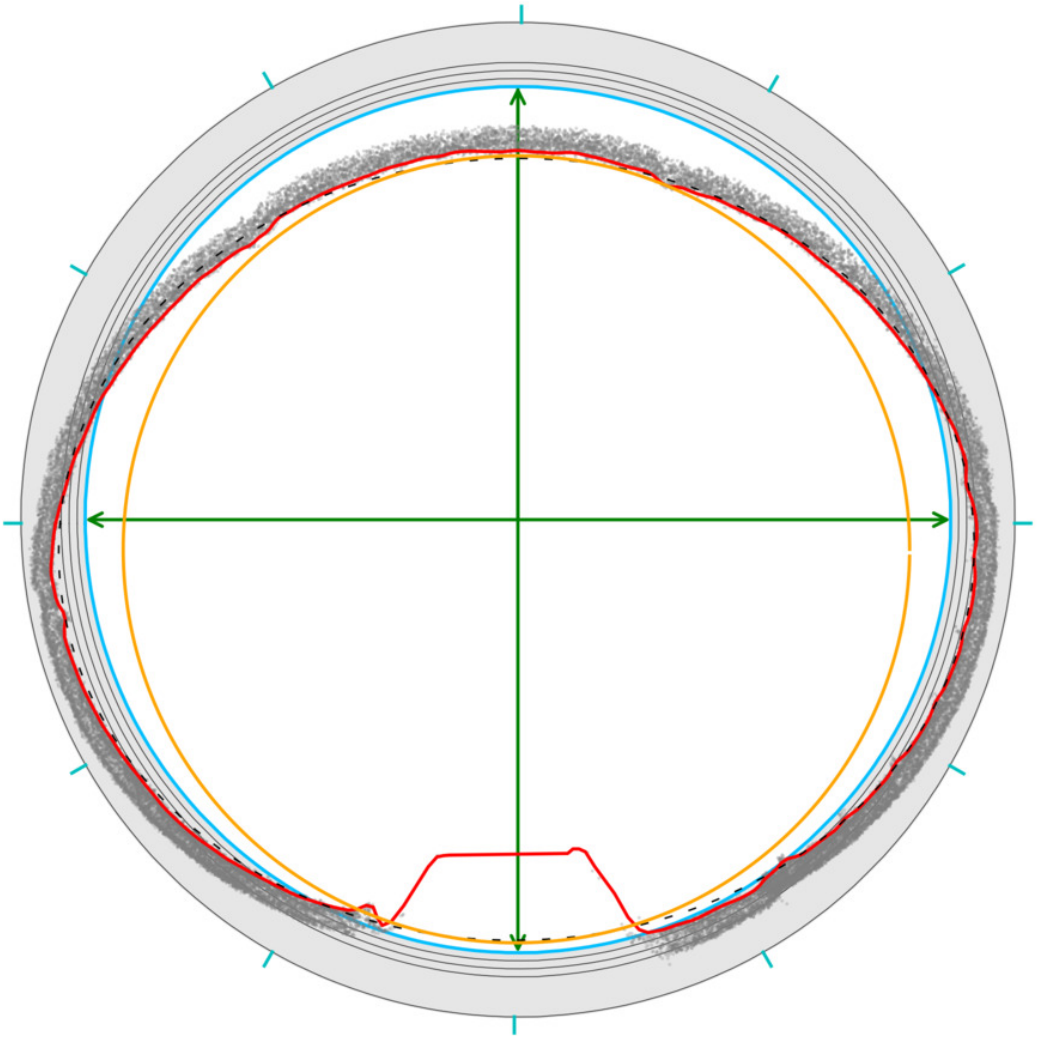
```
Footage   :  448 ft
Width     :  115.6" | 108.0"
Height    :  99.9" | 108.0"

Area      :  8650 sq in
Perimeter :  334.7 in
Ovality   :  7.4%

Interior Diameter : 98.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 449.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



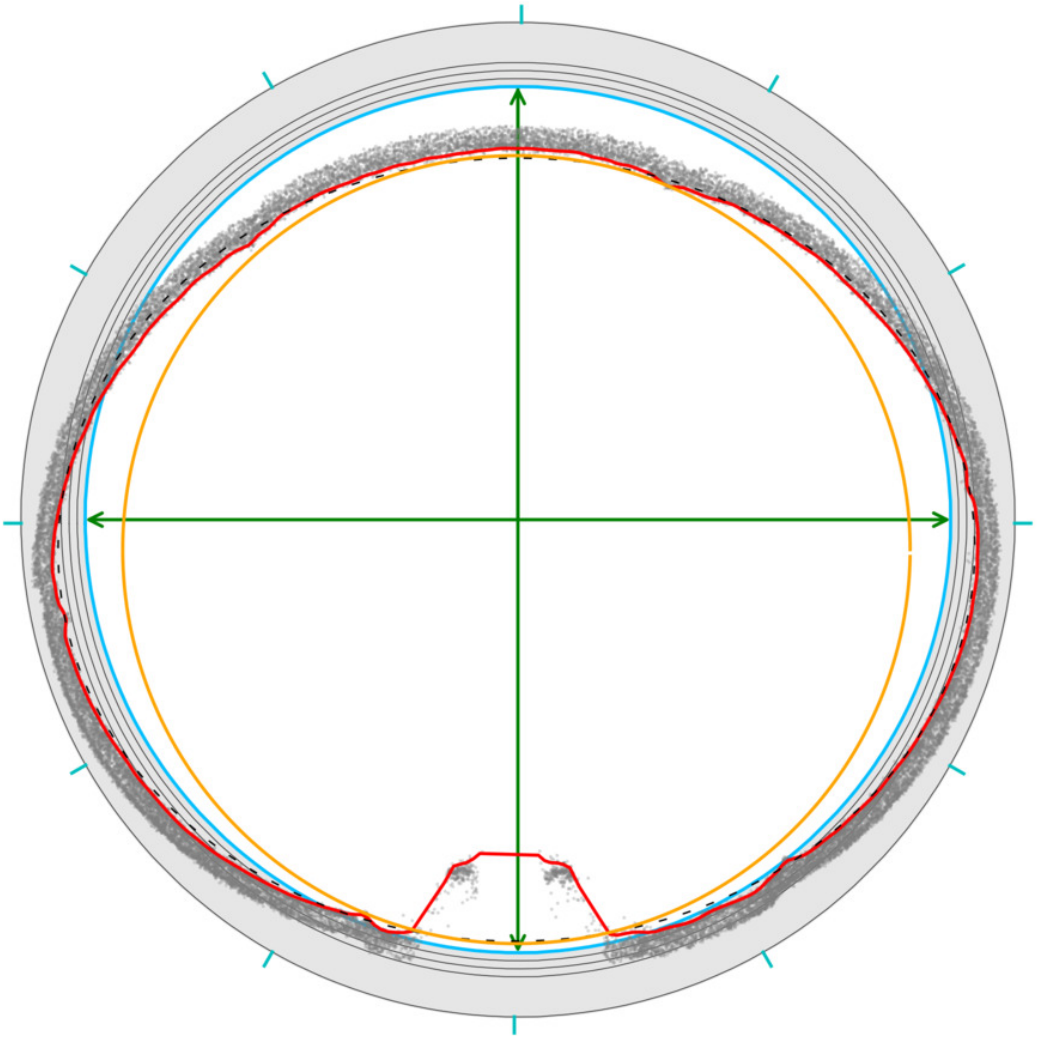
```
Footage   :  449 ft
Width     :  115.5" | 108.0"
Height    :  100.0" | 108.0"

Area      :  8512 sq in
Perimeter :  346.3 in
Ovality   :  7.7%

Interior Diameter : 98.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 450.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



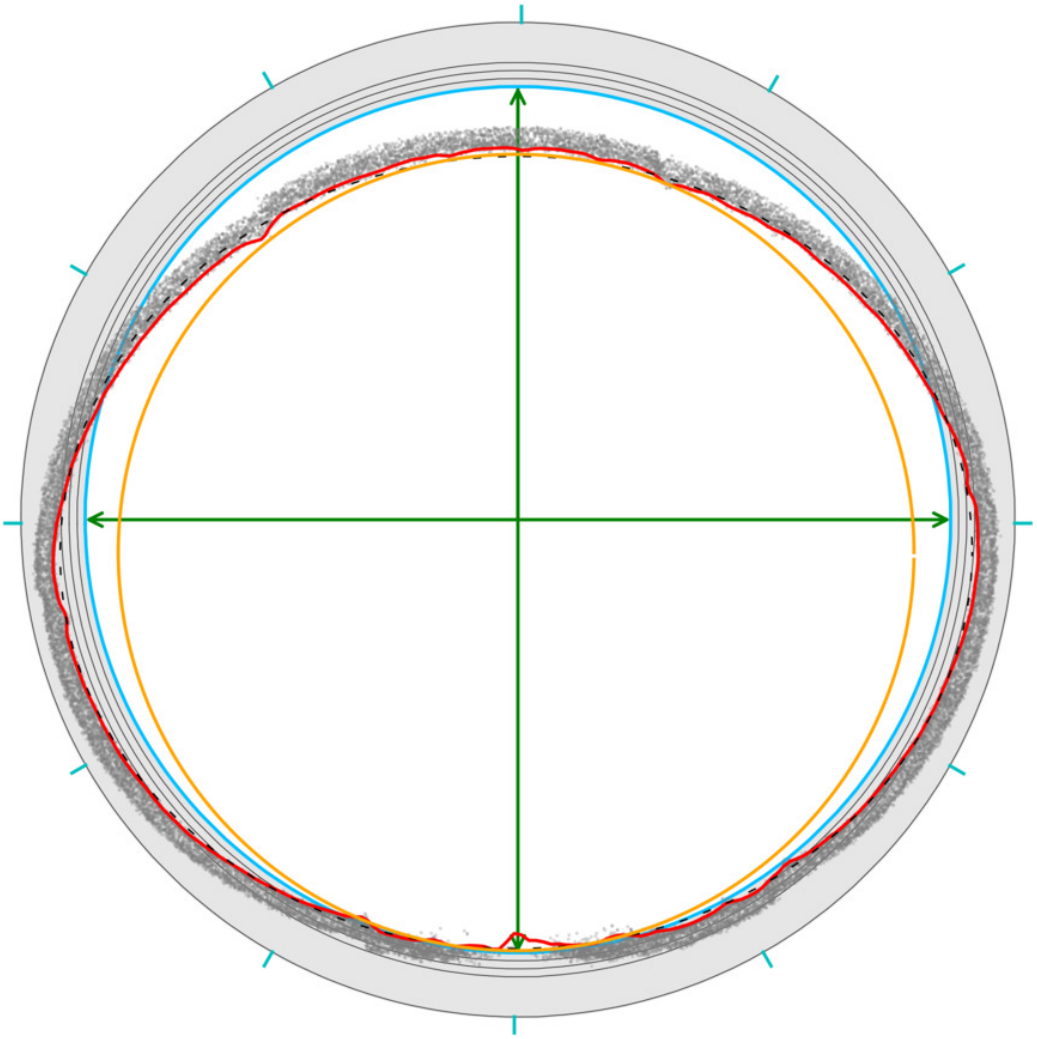
```
Footage   :  450 ft
Width     :  115.5" | 108.0"
Height    :  100.3" | 108.0"

Area      :  8615 sq in
Perimeter :  346.0 in
Ovality   :  7.7%

Interior Diameter : 98.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 451.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



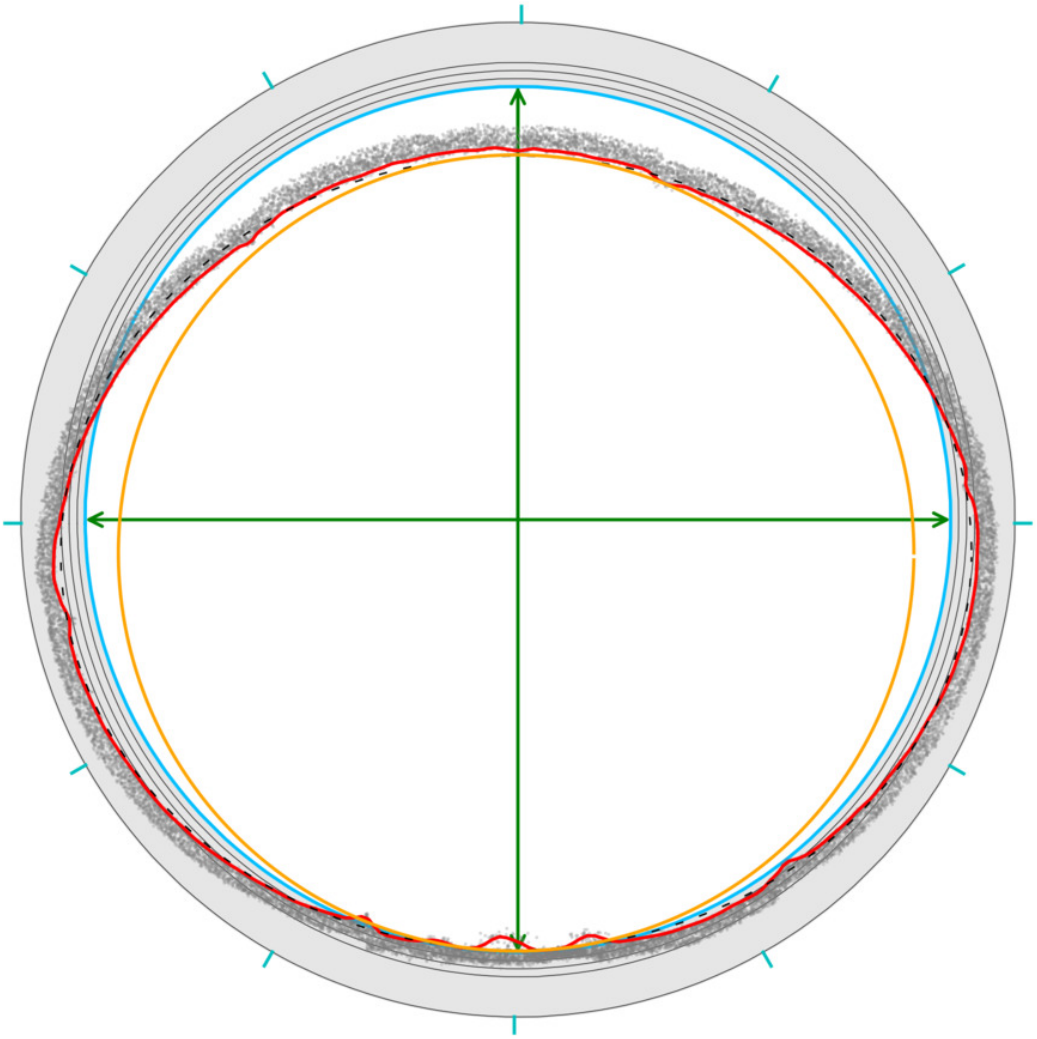
```
Footage   :  451 ft
Width     :  115.5" | 108.0"
Height    :  100.2" | 108.0"

Area      :  8823 sq in
Perimeter :  338.0 in
Ovality   :  6.9%

Interior Diameter : 99.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 452.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



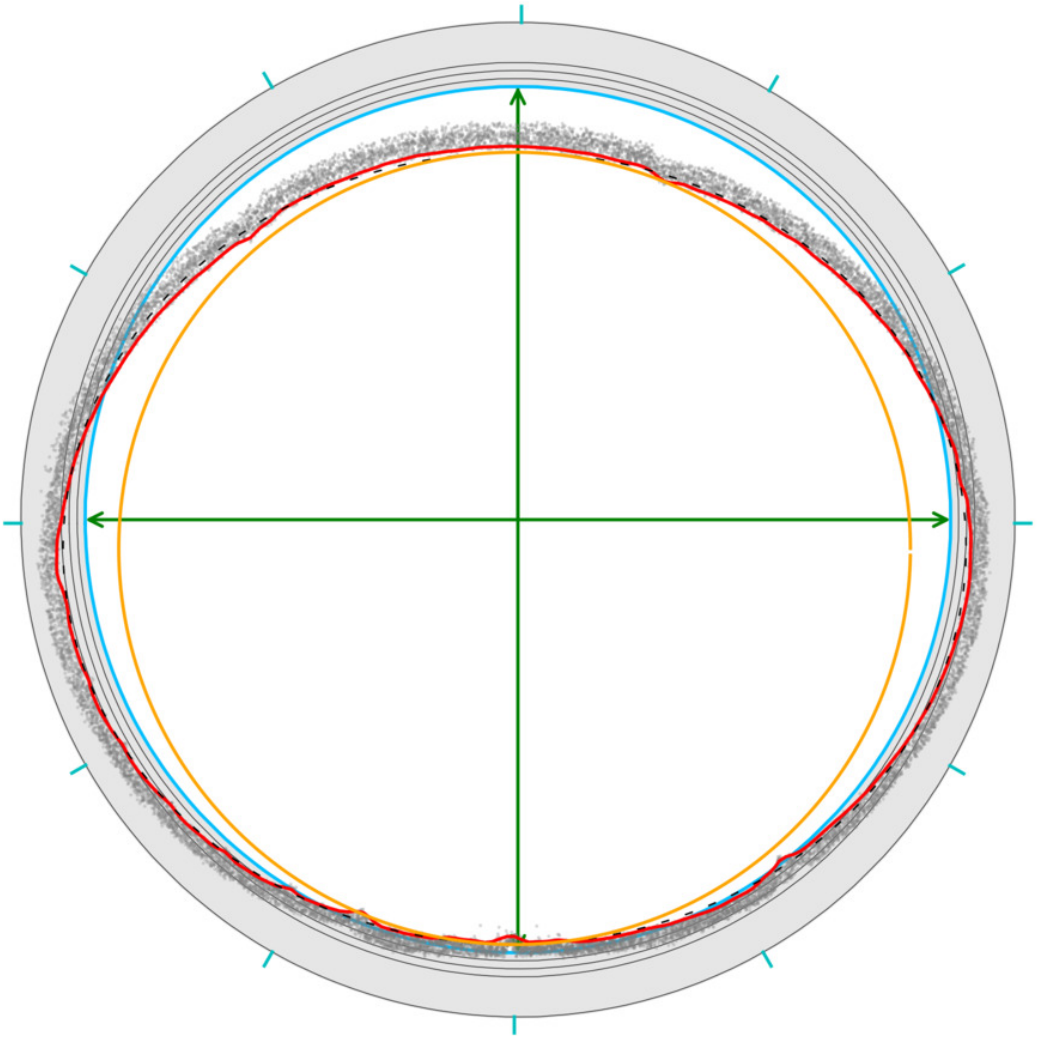
```
Footage    :  452 ft
Width      :  115.3" | 108.0"
Height     :  100.1" | 108.0"

Area       :  8831 sq in
Perimeter  :  337.8 in
Ovality    :  6.8%

Interior Diameter : 99.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 453.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



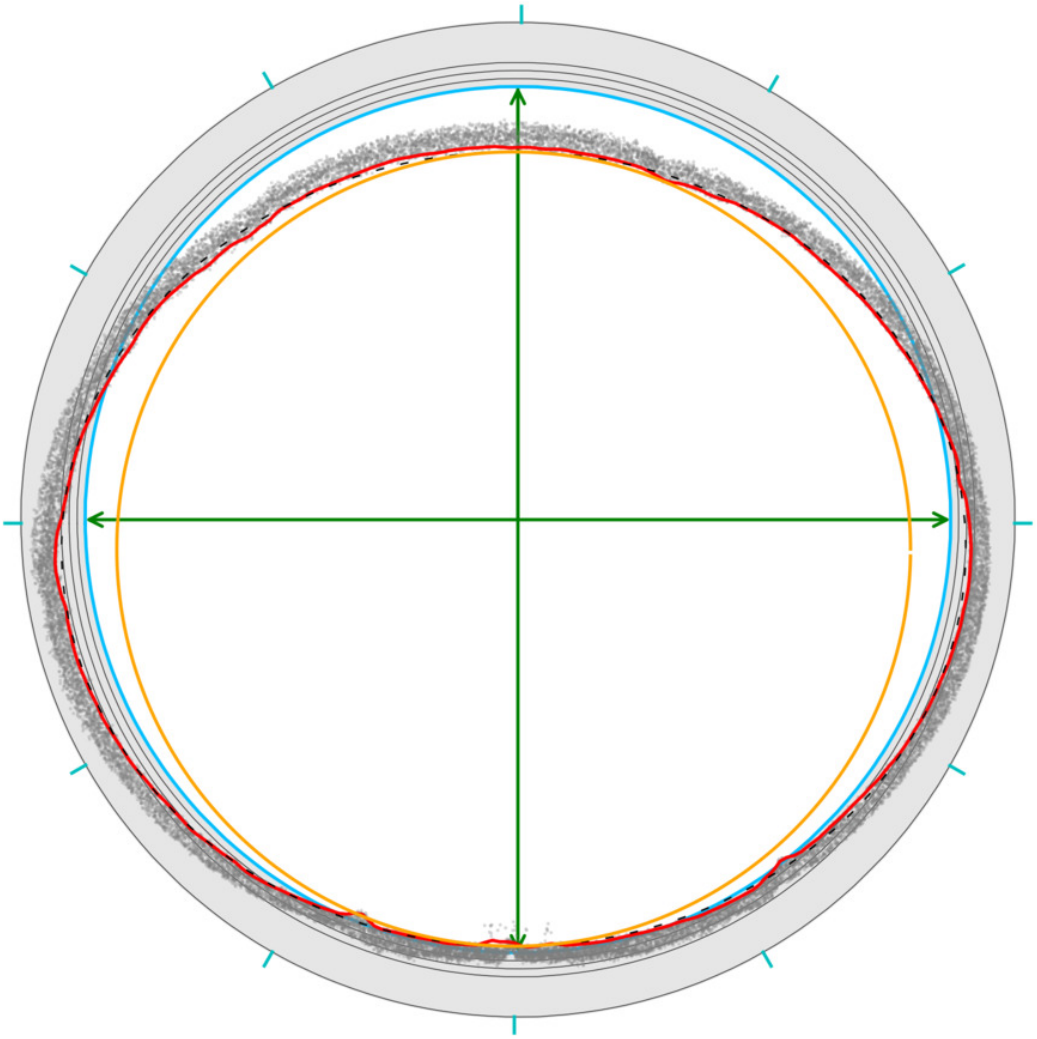
```
Footage   :  453 ft
Width     :  114.1" | 108.0"
Height    :  100.5" | 108.0"

Area      :  8733 sq in
Perimeter :  334.5 in
Ovality   :  6.5%

Interior Diameter : 98.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 454.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



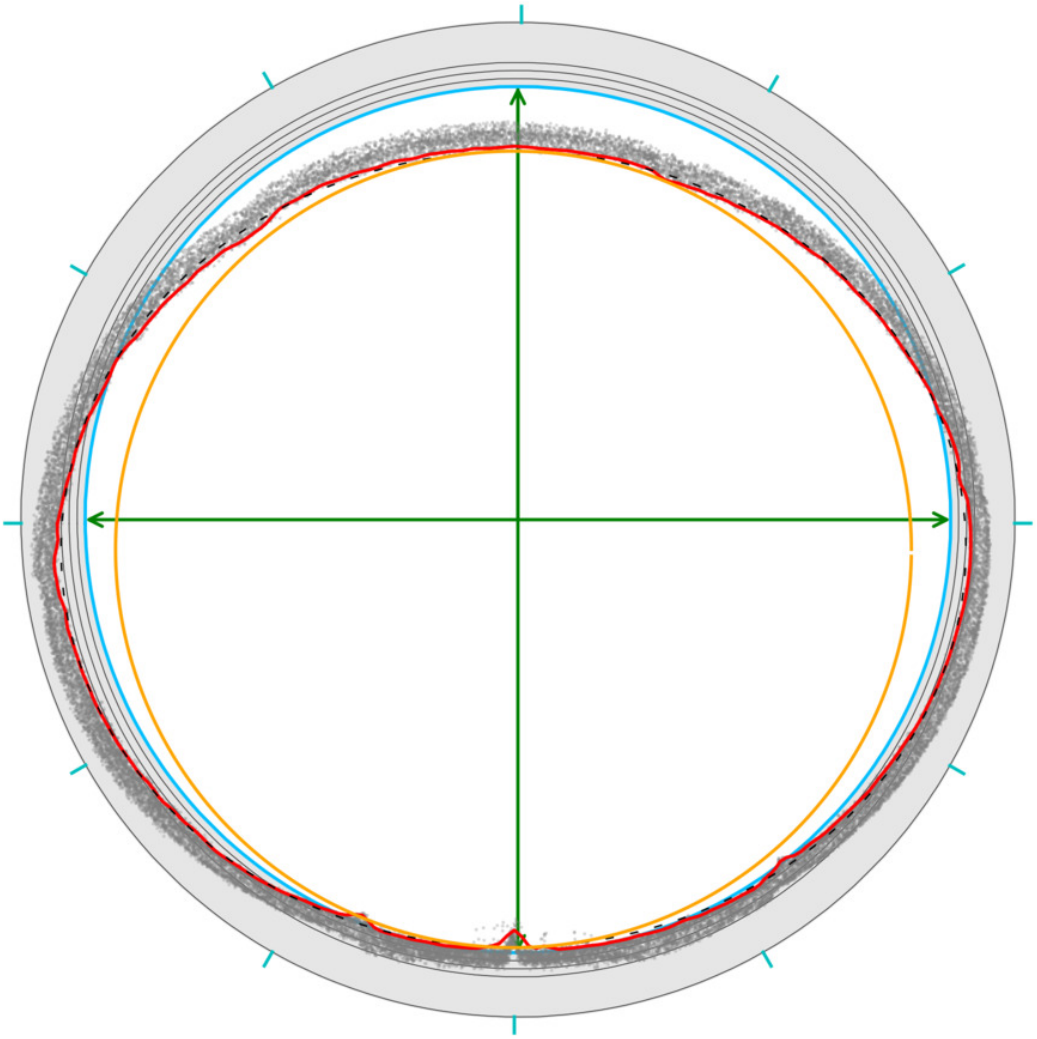
```
Footage   :  454 ft
Width     :  114.3" | 108.0"
Height    :  100.4" | 108.0"

Area      :  8779 sq in
Perimeter :  335.1 in
Ovality   :  6.3%

Interior Diameter : 99.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 455.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



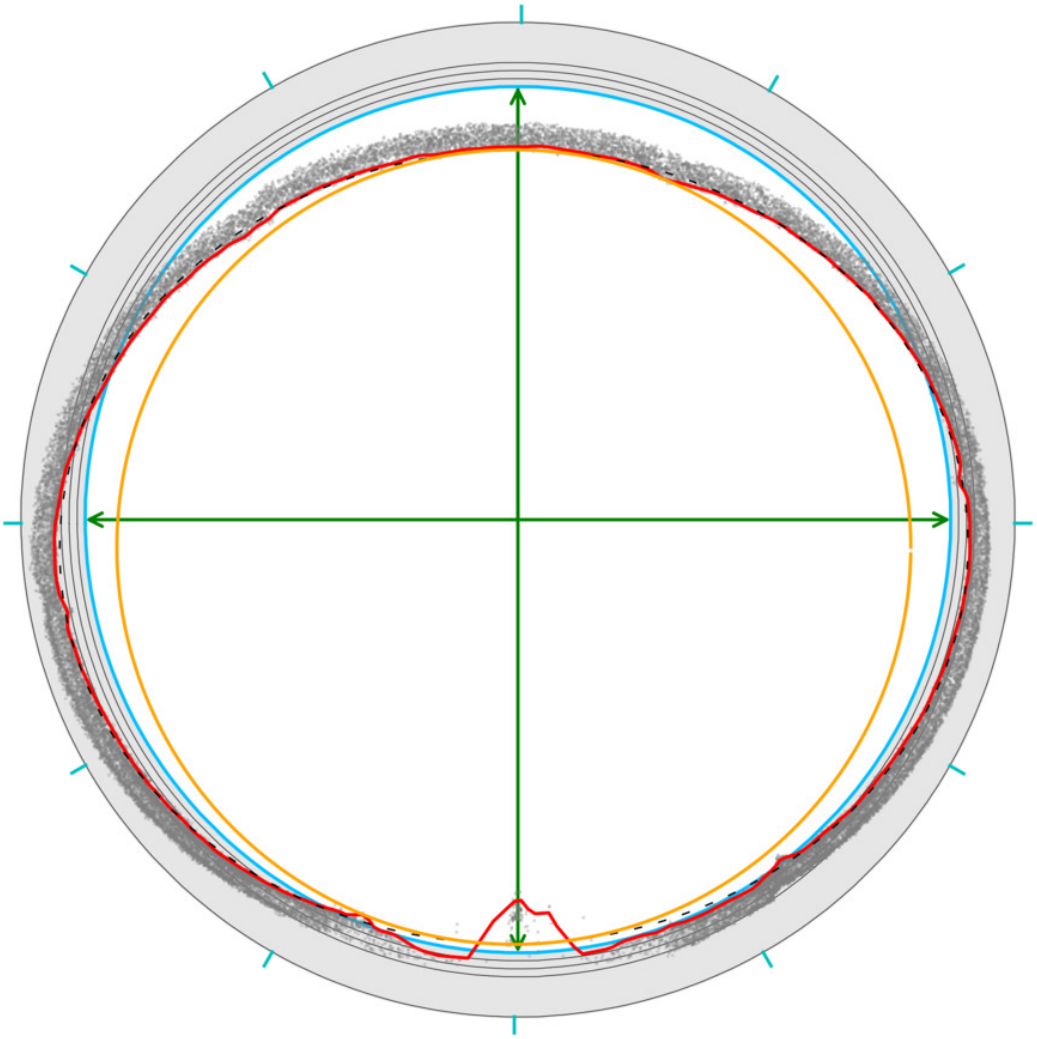
```
Footage   :  455 ft
Width     :  114.4" | 108.0"
Height    :  100.5" | 108.0"

Area      :  8796 sq in
Perimeter :  337.2 in
Ovality   :  6.3%

Interior Diameter : 99.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 456.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



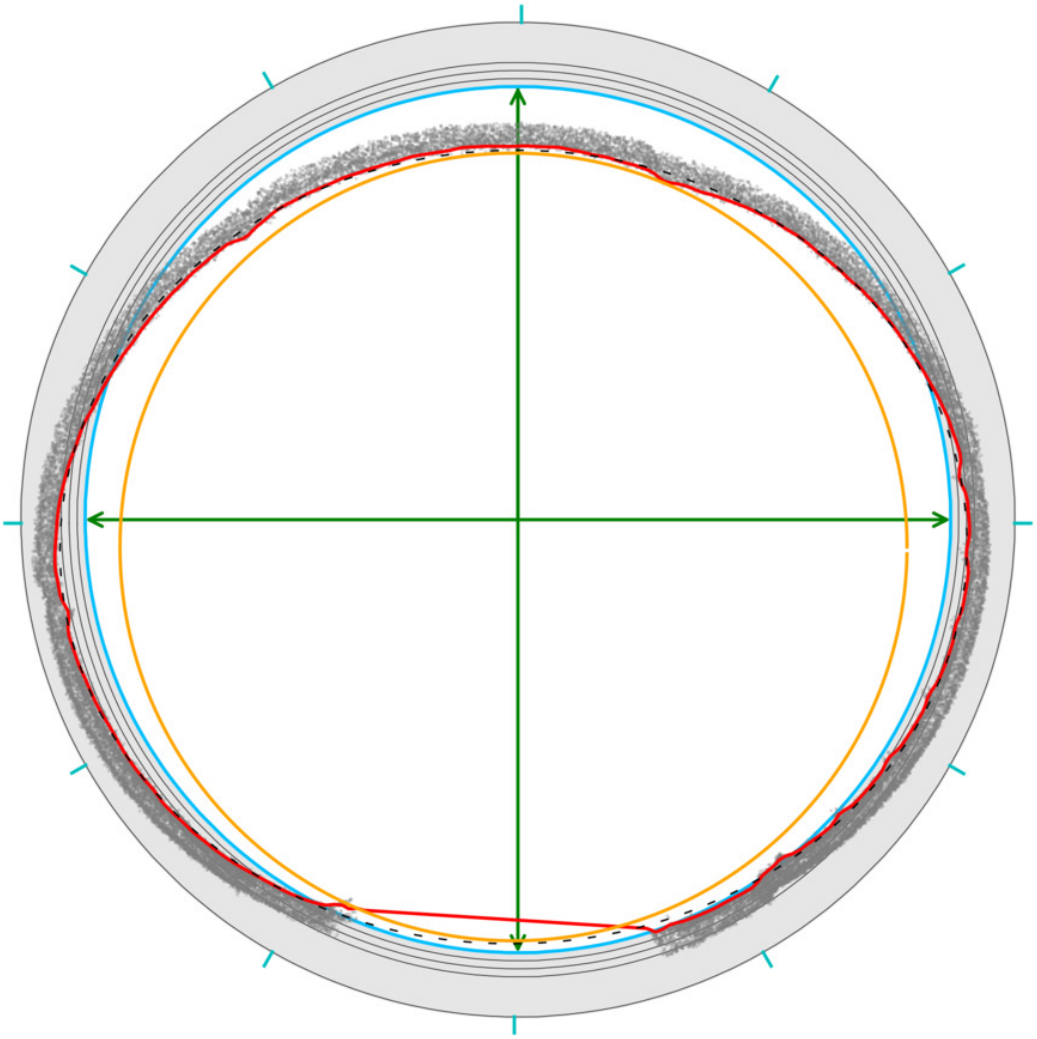
```
Footage   :  456 ft
Width     :  114.3" | 108.0"
Height    :  100.5" | 108.0"

Area      :  8802 sq in
Perimeter :  343.3 in
Ovality   :  6.7%

Interior Diameter : 99.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 457.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



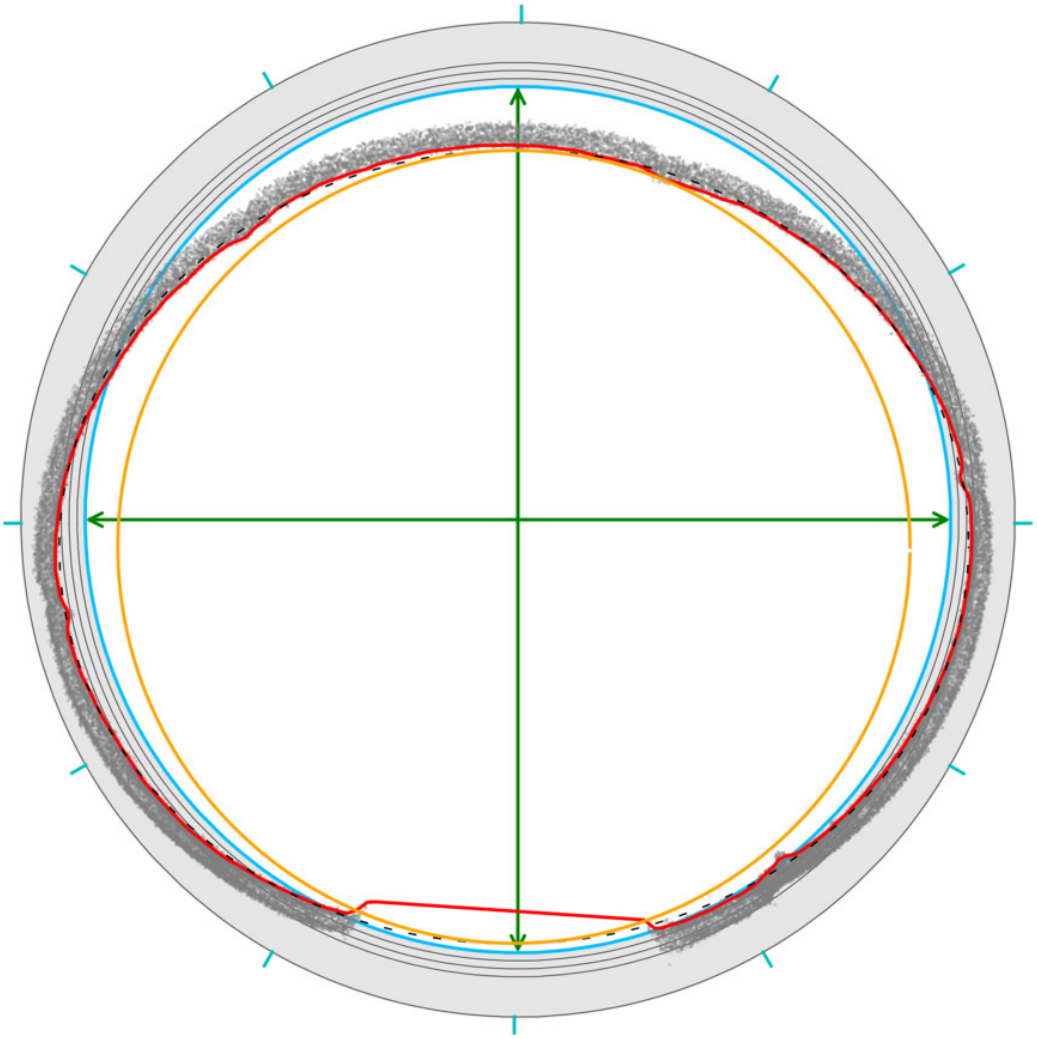
```
Footage   :  457 ft
Width     :  114.1" | 108.0"
Height    :  100.6" | 108.0"

Area      :  8711 sq in
Perimeter :  334.9 in
Ovality   :  6.6%

Interior Diameter : 98.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 458.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



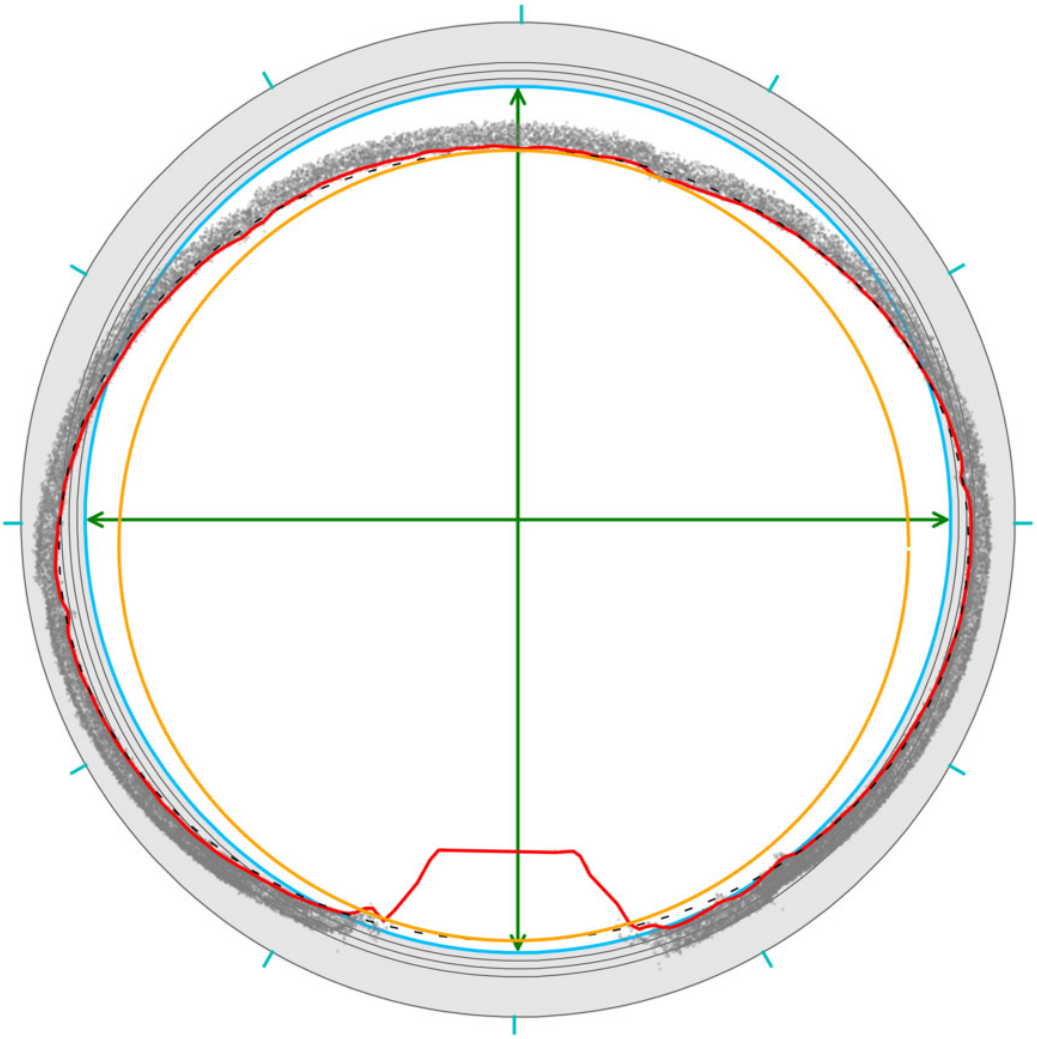
```
Footage   :  458 ft
Width     :  114.4" | 108.0"
Height    :  100.7" | 108.0"

Area      :  8701 sq in
Perimeter :  335.7 in
Ovality   :  6.7%

Interior Diameter : 98.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 459.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



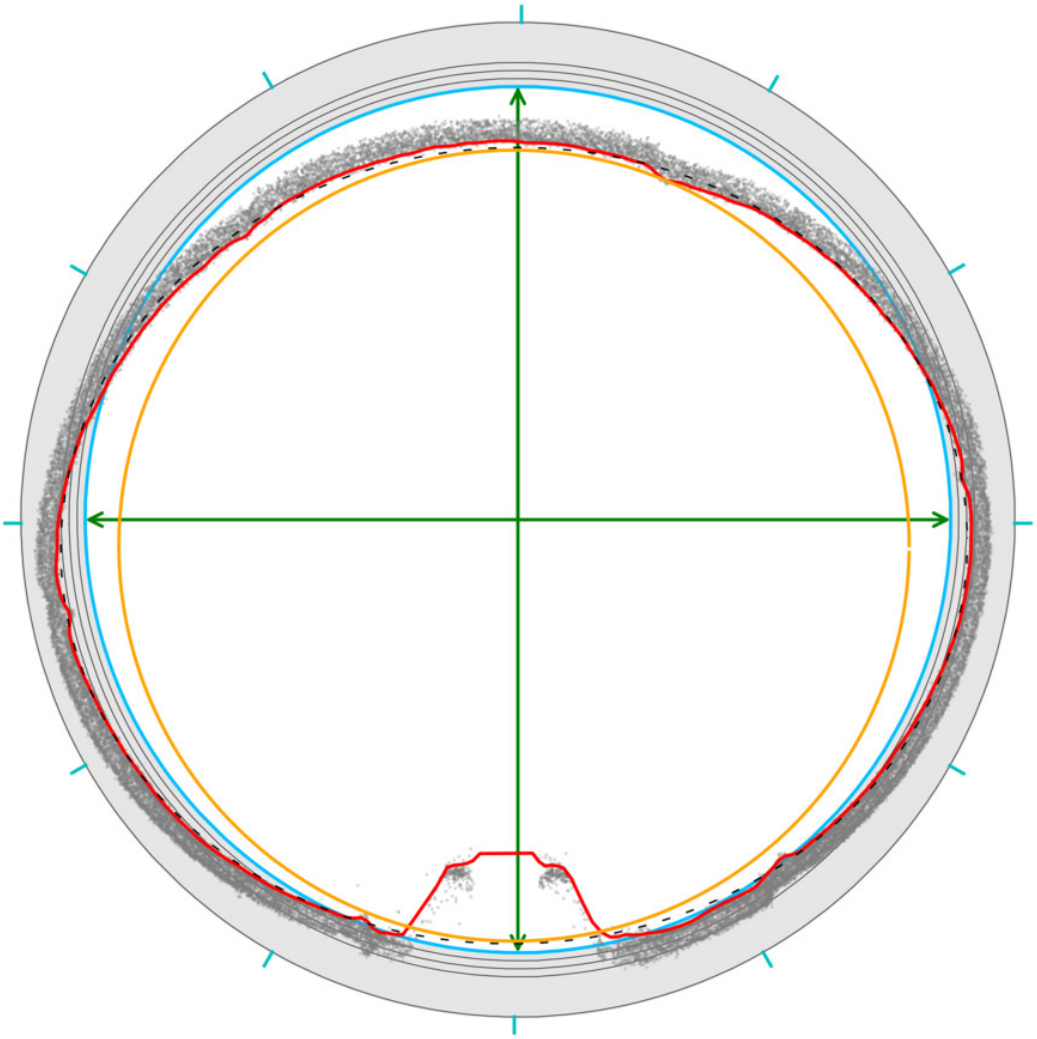
```
Footage   :  459 ft
Width     :  114.3" | 108.0"
Height    :  100.4" | 108.0"

Area      :  8537 sq in
Perimeter :  345.0 in
Ovality   :  6.9%

Interior Diameter : 98.5"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 460.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 460 ft
Width : 114.2" | 108.0"
Height : 101.1" | 108.0"

Area : 8637 sq in
Perimeter : 346.8 in
Ovality : 6.4%

Interior Diameter : 98.6"

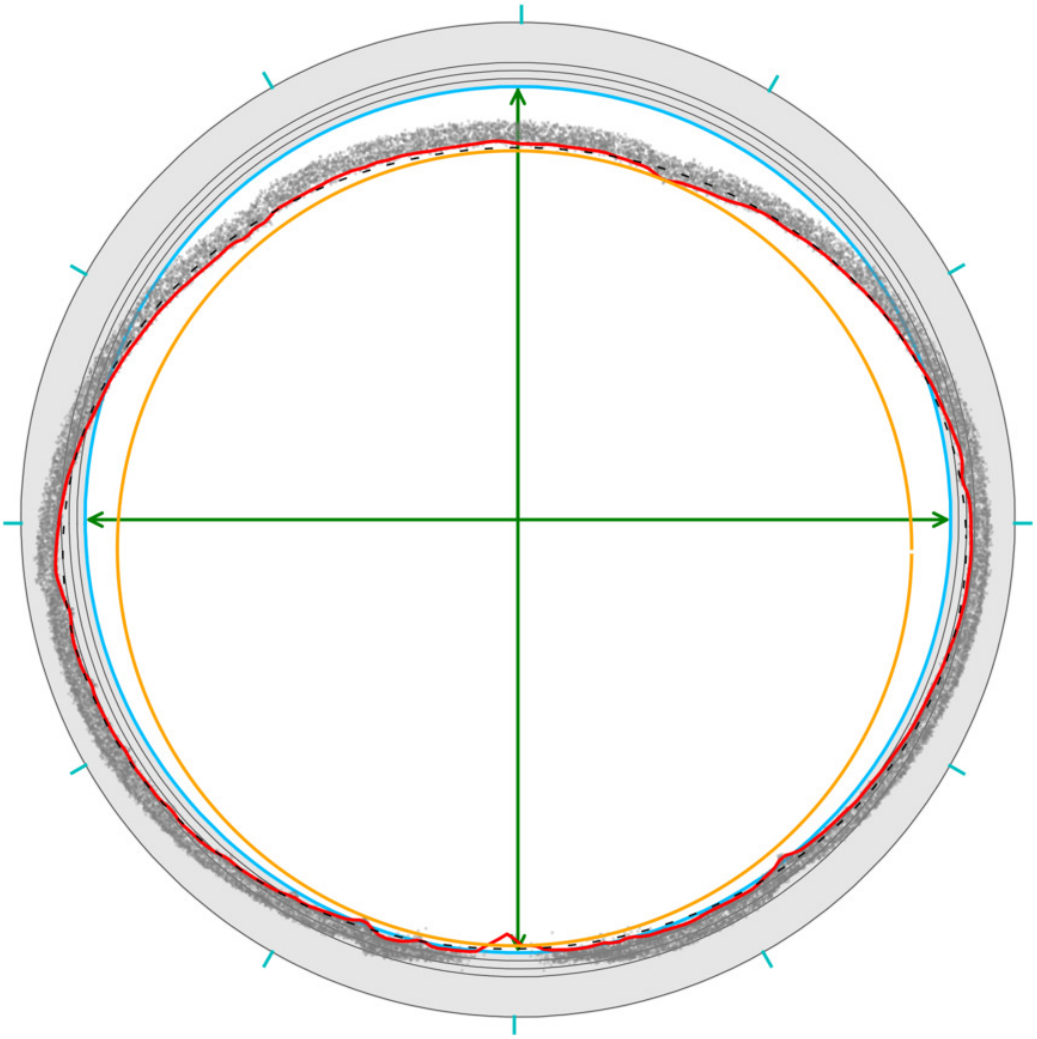
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 461.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



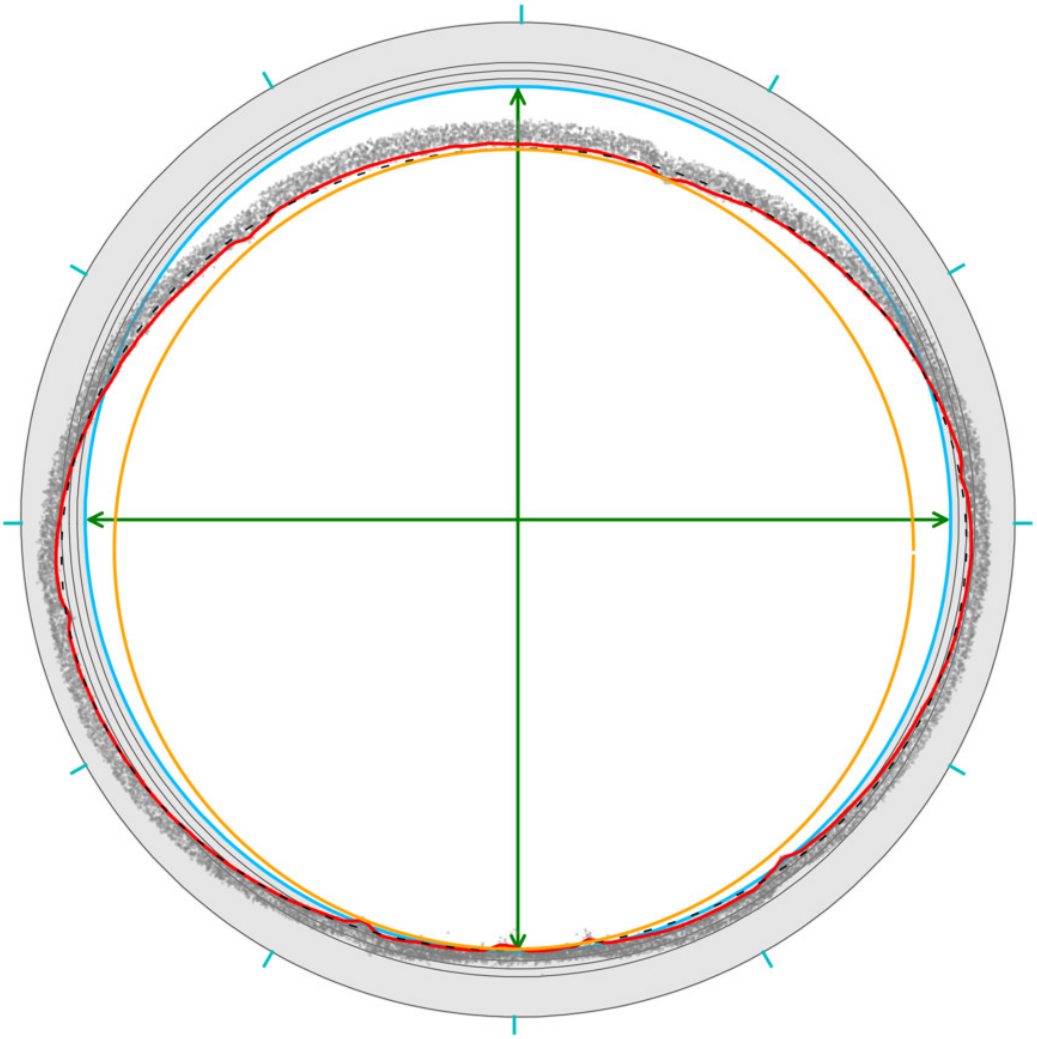
```
Footage   :  461 ft
Width     :  114.3" | 108.0"
Height    :  100.9" | 108.0"

Area      :  8840 sq in
Perimeter :  337.7 in
Ovality   :  5.9%

Interior Diameter : 99.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 462.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



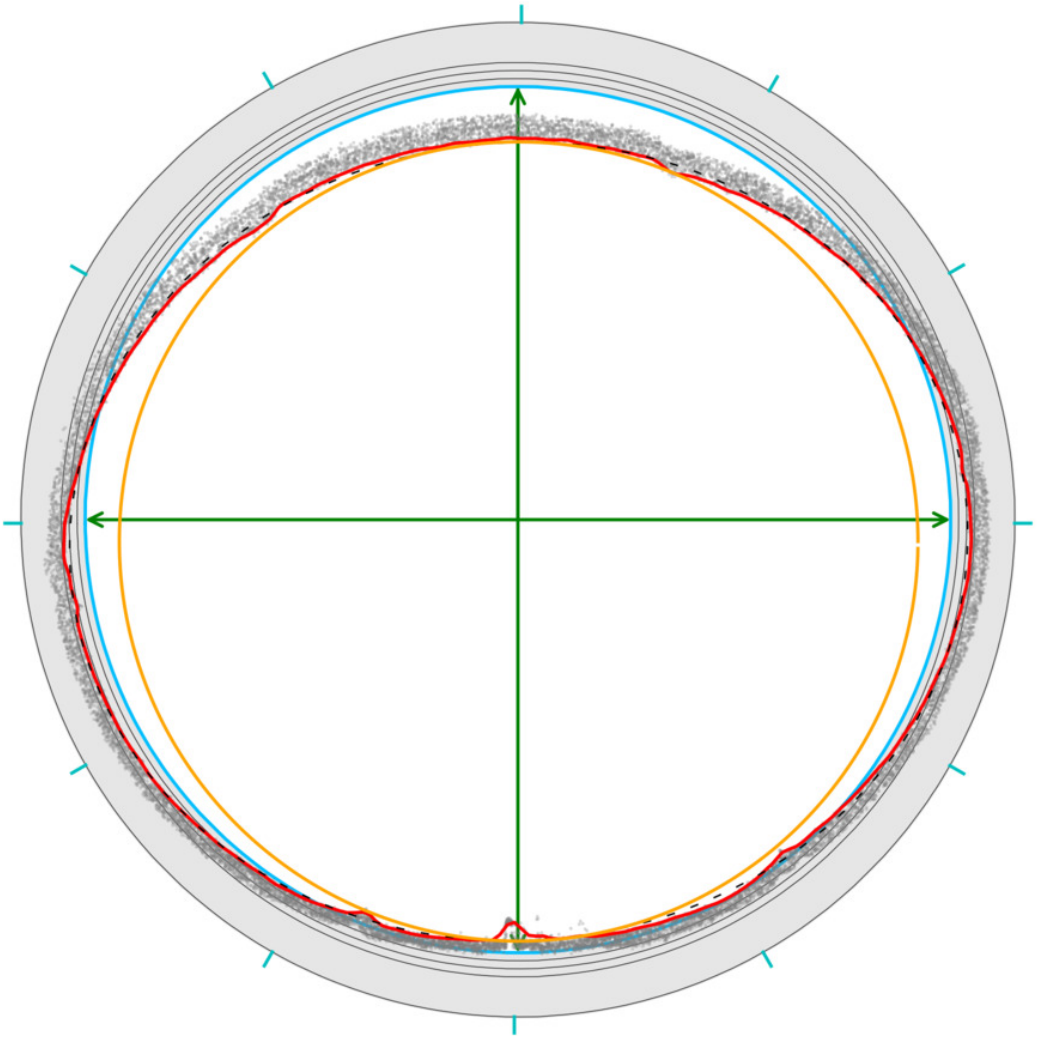
```
Footage   :  462 ft
Width     :  114.2" | 108.0"
Height    :  100.8" | 108.0"

Area      :  8862 sq in
Perimeter :  337.0 in
Ovality   :  6.0%

Interior Diameter : 99.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 463.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



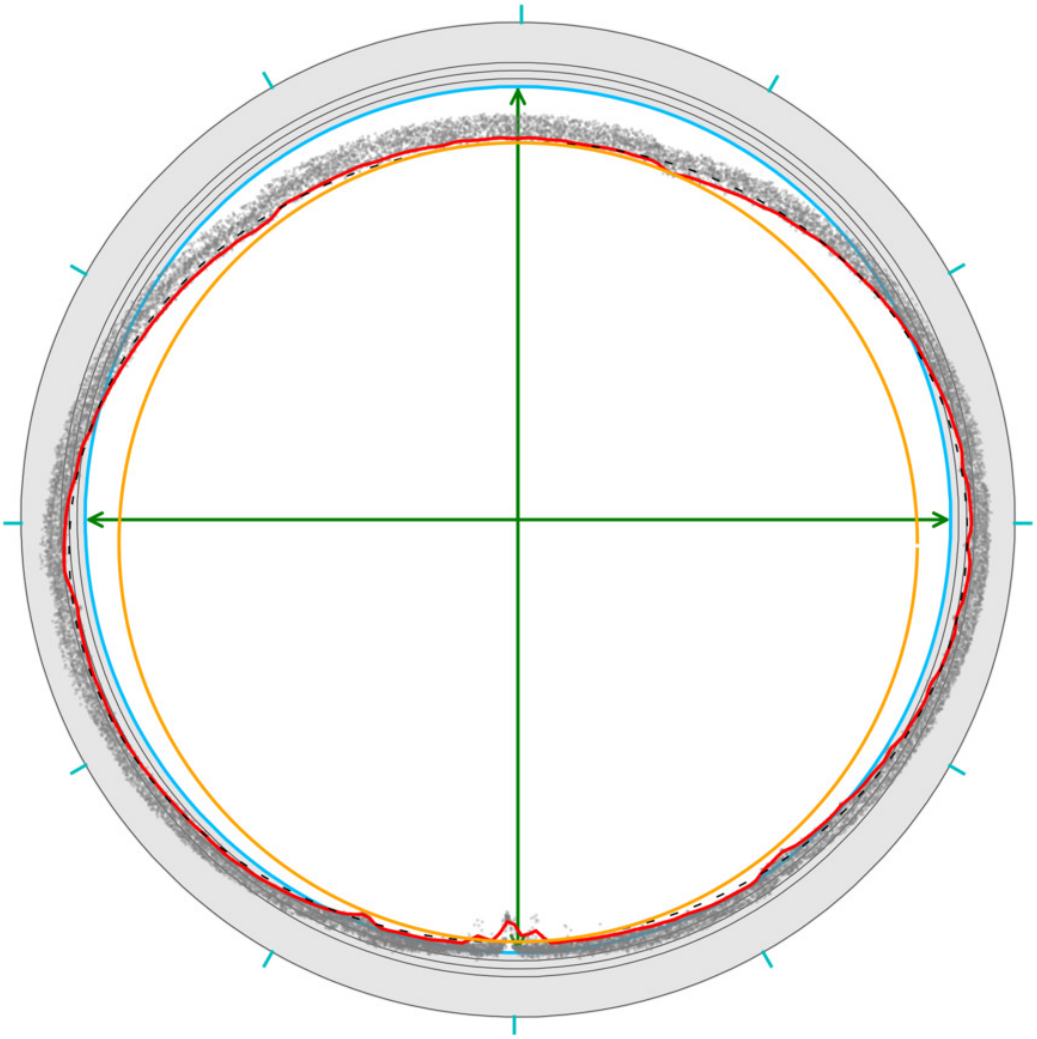
```
Footage   :  463 ft
Width     :  113.2" | 108.0"
Height    :  101.6" | 108.0"

Area      :  8757 sq in
Perimeter :  335.9 in
Ovality   :  5.9%

Interior Diameter : 99.7"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 464.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



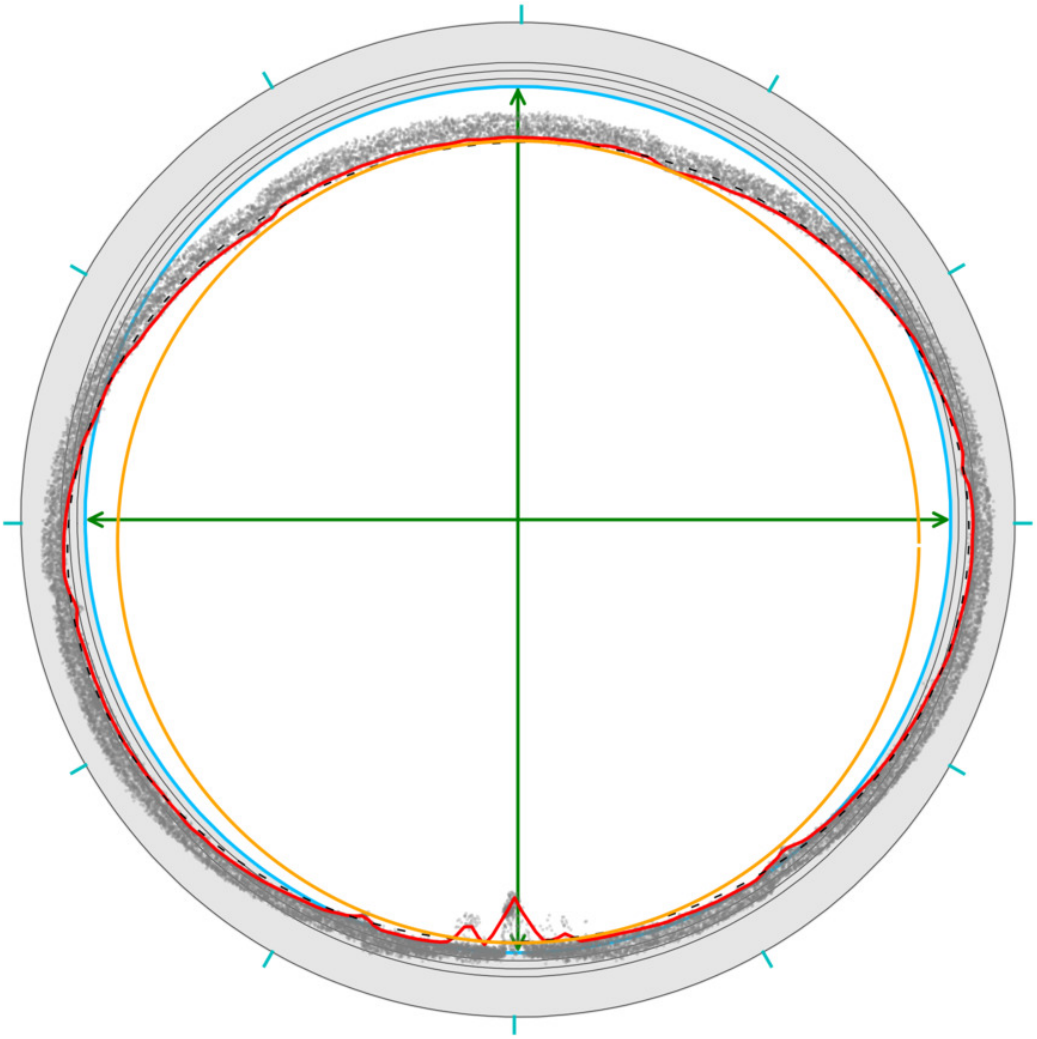
```
Footage    :  464 ft
Width      :  113.2" | 108.0"
Height     :  101.6" | 108.0"

Area       :  8770 sq in
Perimeter  :  337.8 in
Ovality    :  5.8%

Interior Diameter : 99.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 465.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



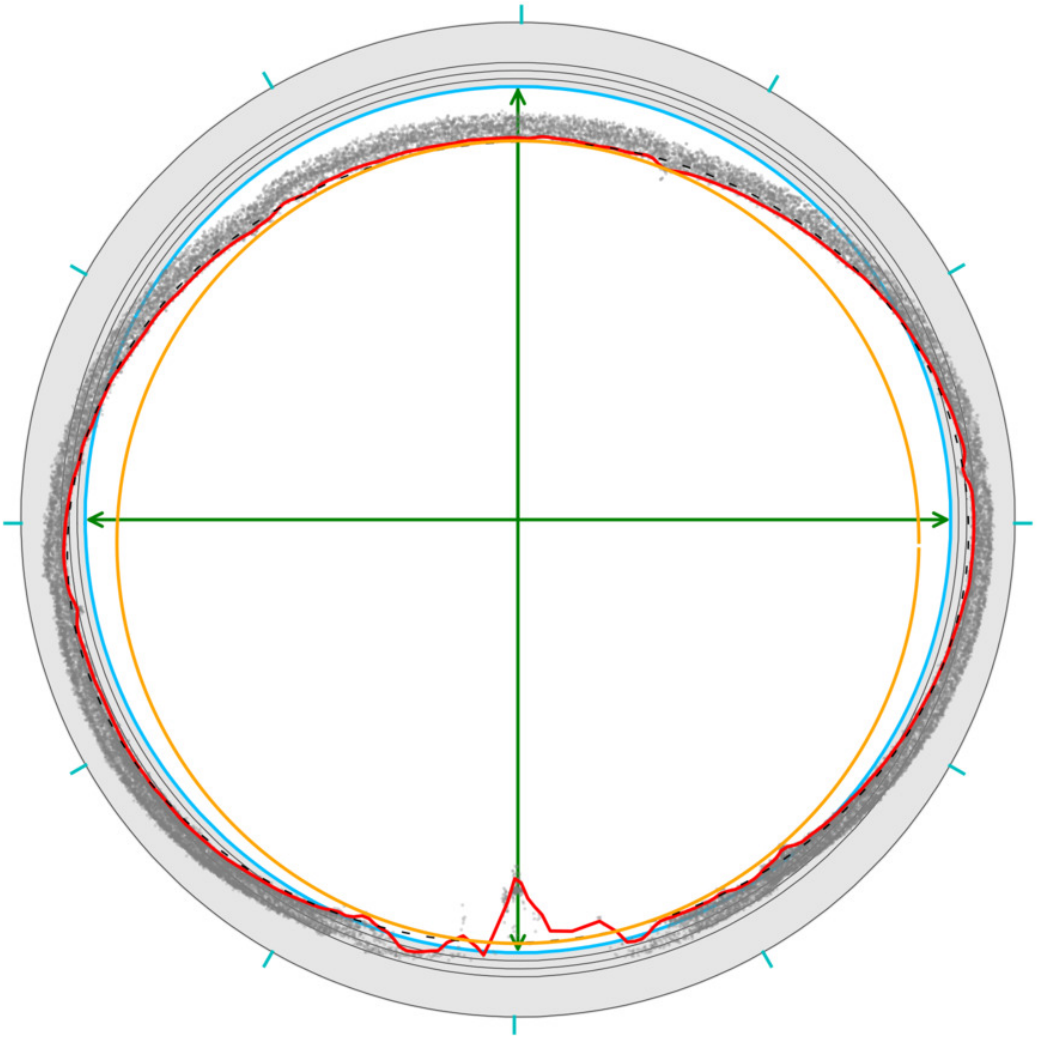
```
Footage   :  465 ft
Width     :  113.5" | 108.0"
Height    :  101.7" | 108.0"

Area      :  8797 sq in
Perimeter :  343.8 in
Ovality   :  6.0%

Interior Diameter : 100.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 466.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 466 ft
Width : 113.6" | 108.0"
Height : 101.6" | 108.0"

Area : 8790 sq in
Perimeter : 350.0 in
Ovality : 6.0%

Interior Diameter : 100.1"

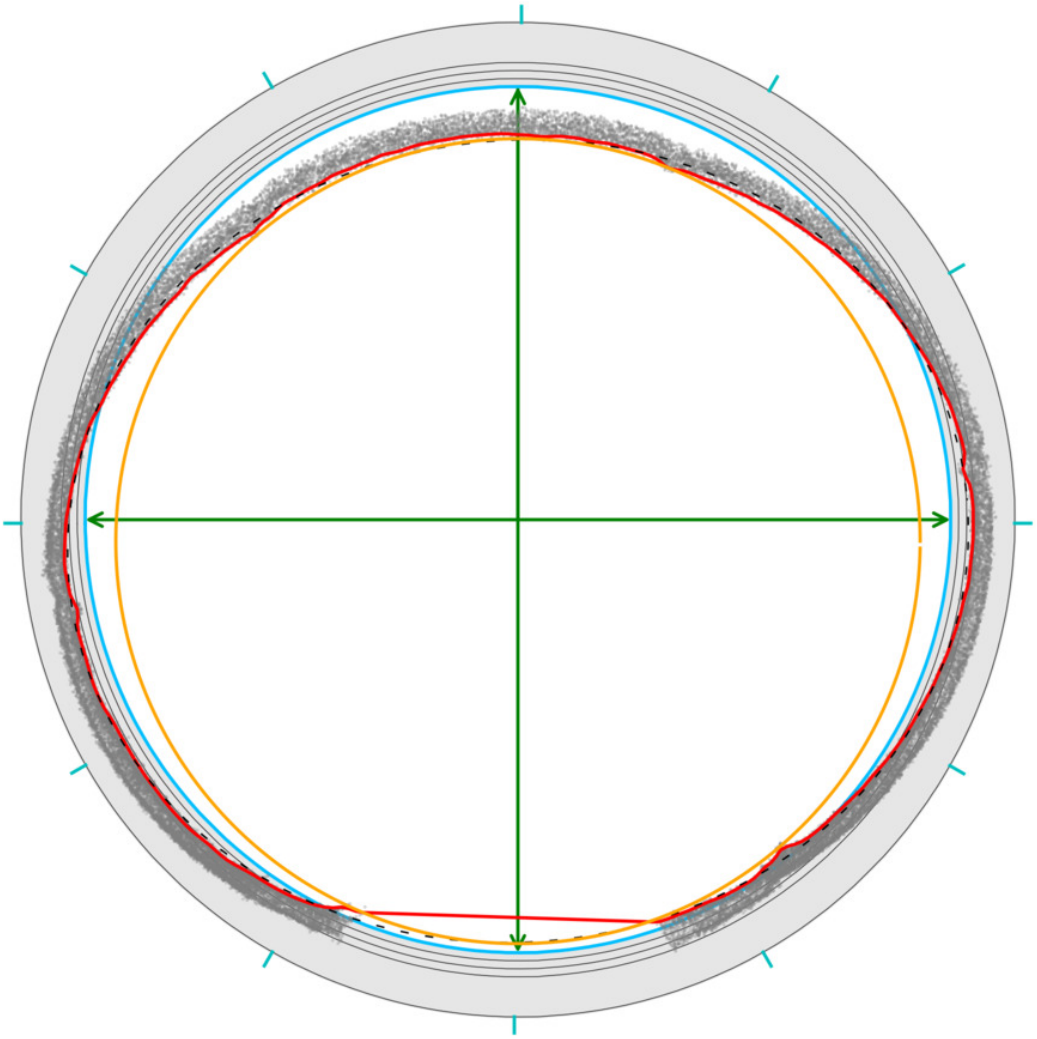
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 467.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



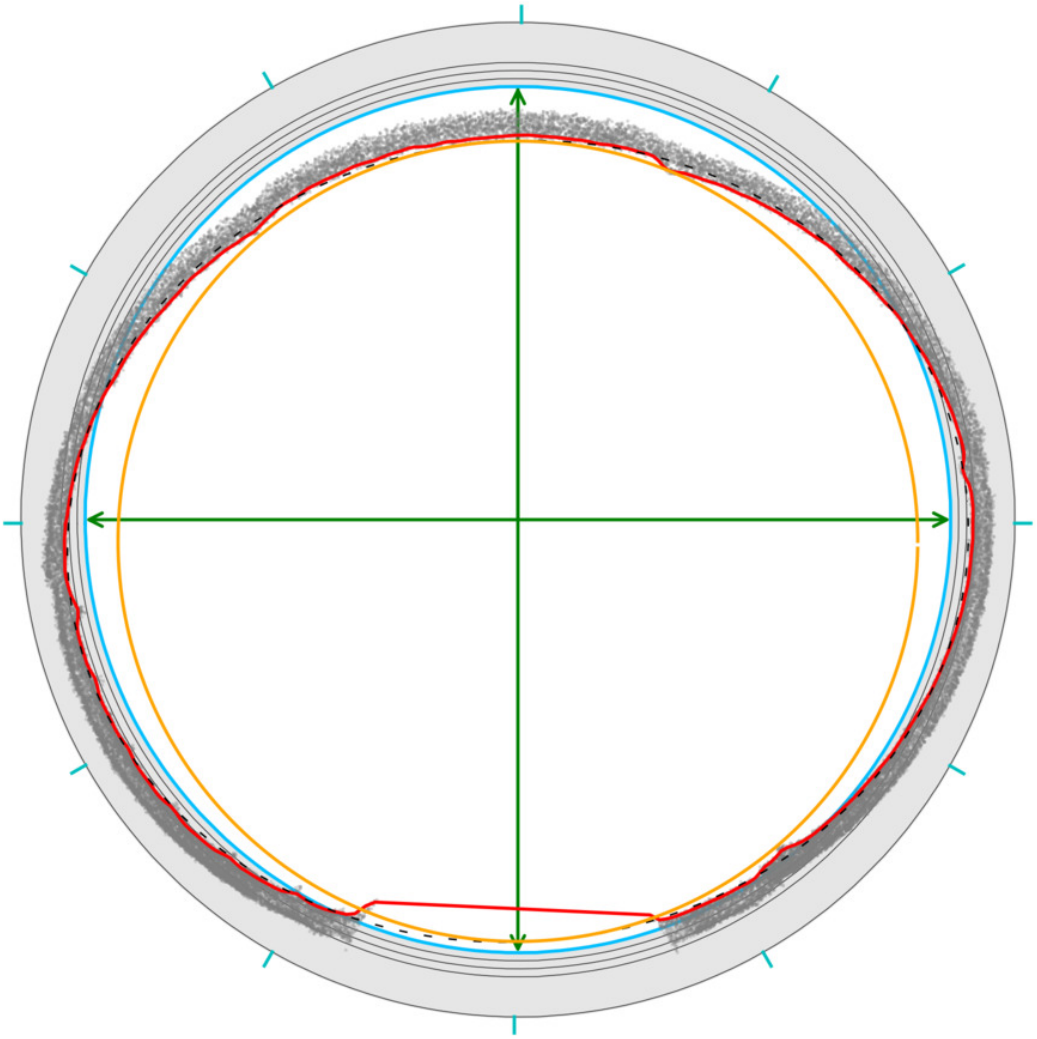
```
Footage   :  467 ft
Width     :  113.4" | 108.0"
Height    :  102.0" | 108.0"

Area      :  8746 sq in
Perimeter :  334.8 in
Ovality   :  5.8%

Interior Diameter : 100.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 468.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



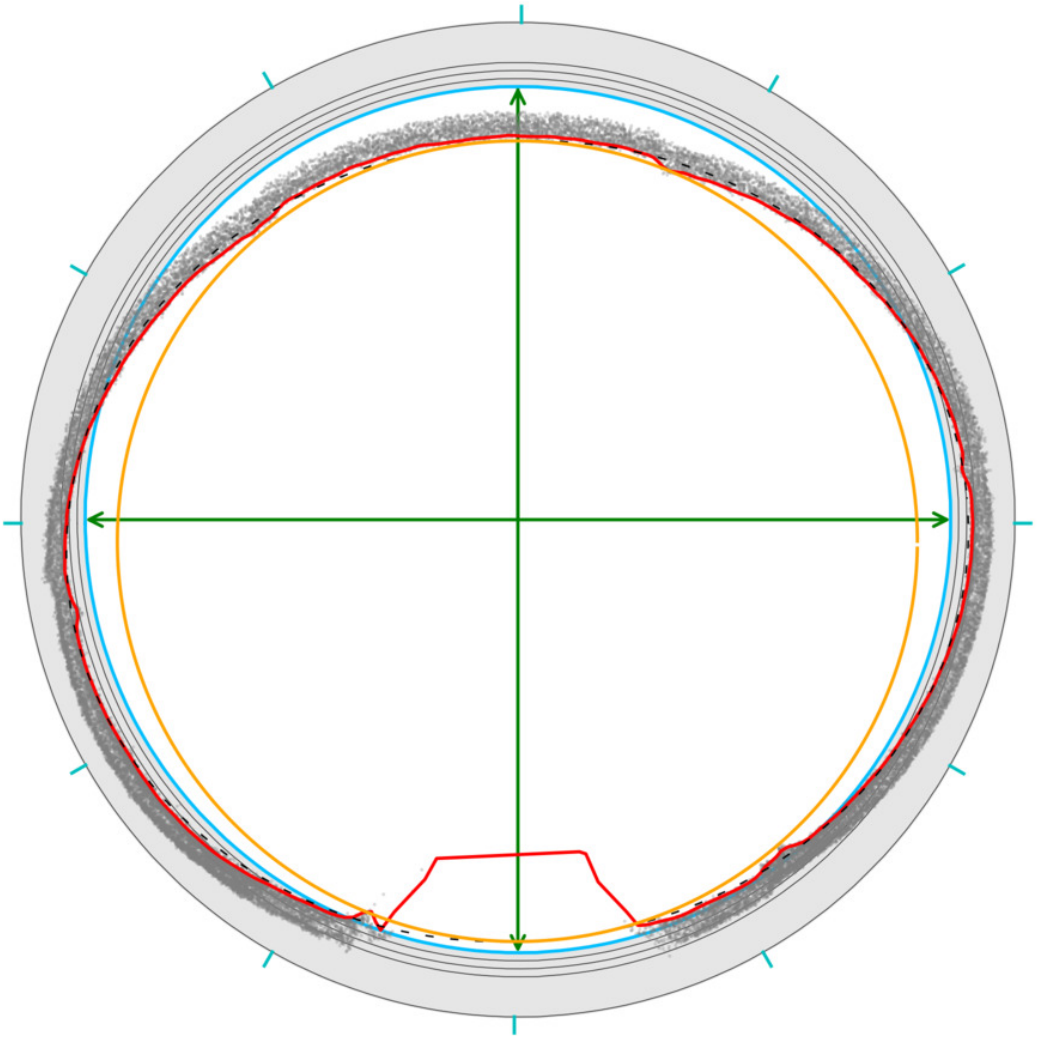
```
Footage   :  468 ft
Width     :  113.4" | 108.0"
Height    :  101.9" | 108.0"

Area      :  8698 sq in
Perimeter :  335.6 in
Ovality   :  5.9%

Interior Diameter : 99.8"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 469.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



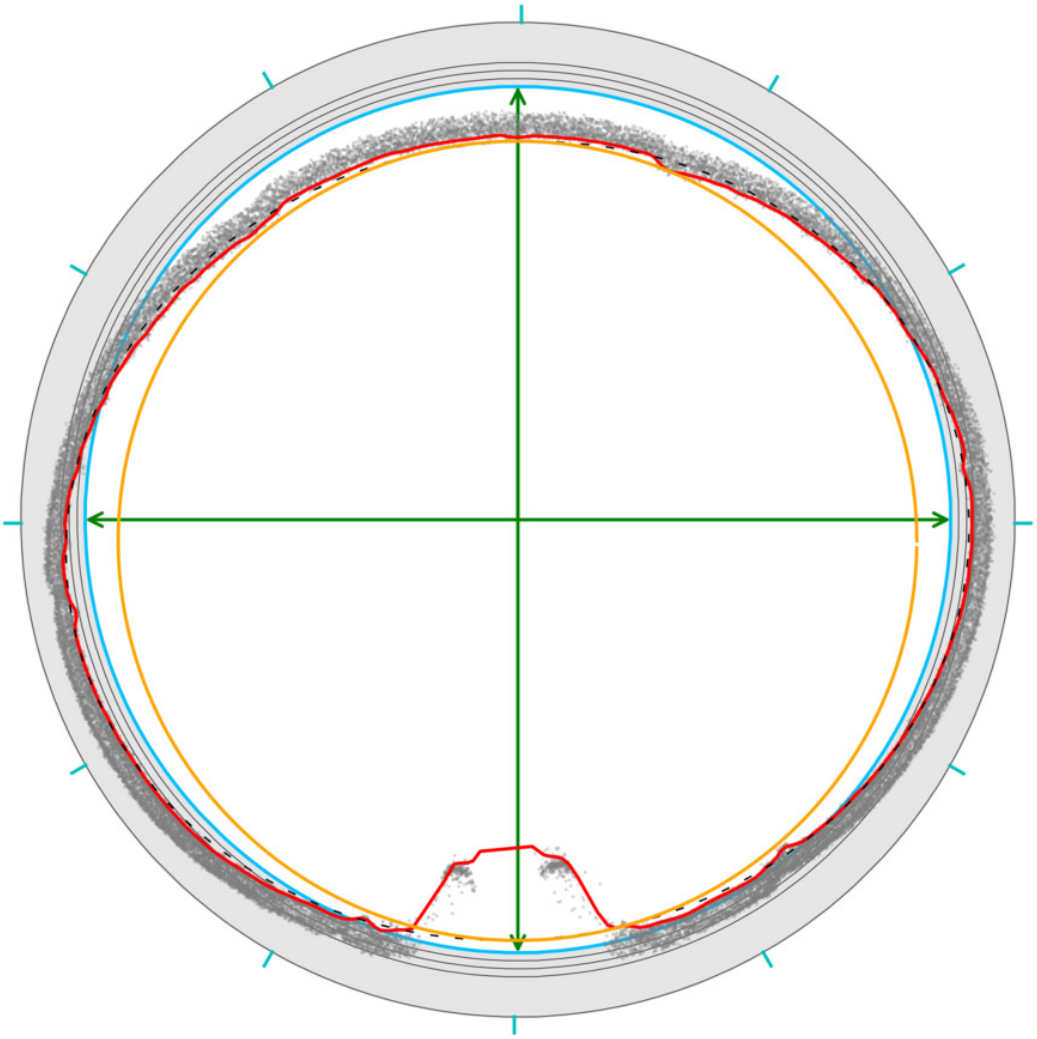
```
Footage   :  469 ft
Width     :  113.3" | 108.0"
Height    :  101.9" | 108.0"

Area      :  8577 sq in
Perimeter :  345.9 in
Ovality   :  6.0%

Interior Diameter : 99.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 470.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



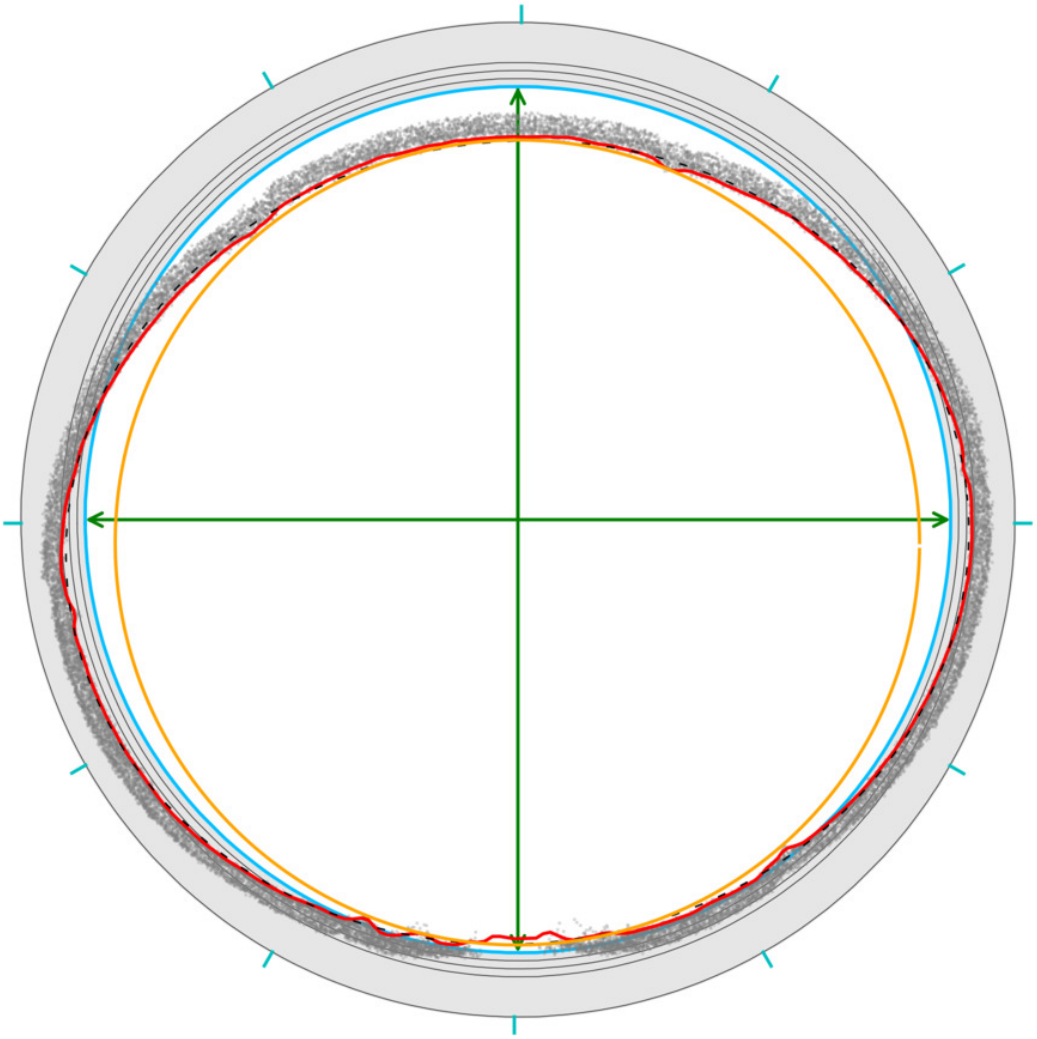
```
Footage   :  470 ft
Width     :  113.4" | 108.0"
Height    :  101.7" | 108.0"

Area      :  8630 sq in
Perimeter :  346.2 in
Ovality   :  6.2%

Interior Diameter : 99.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 471.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



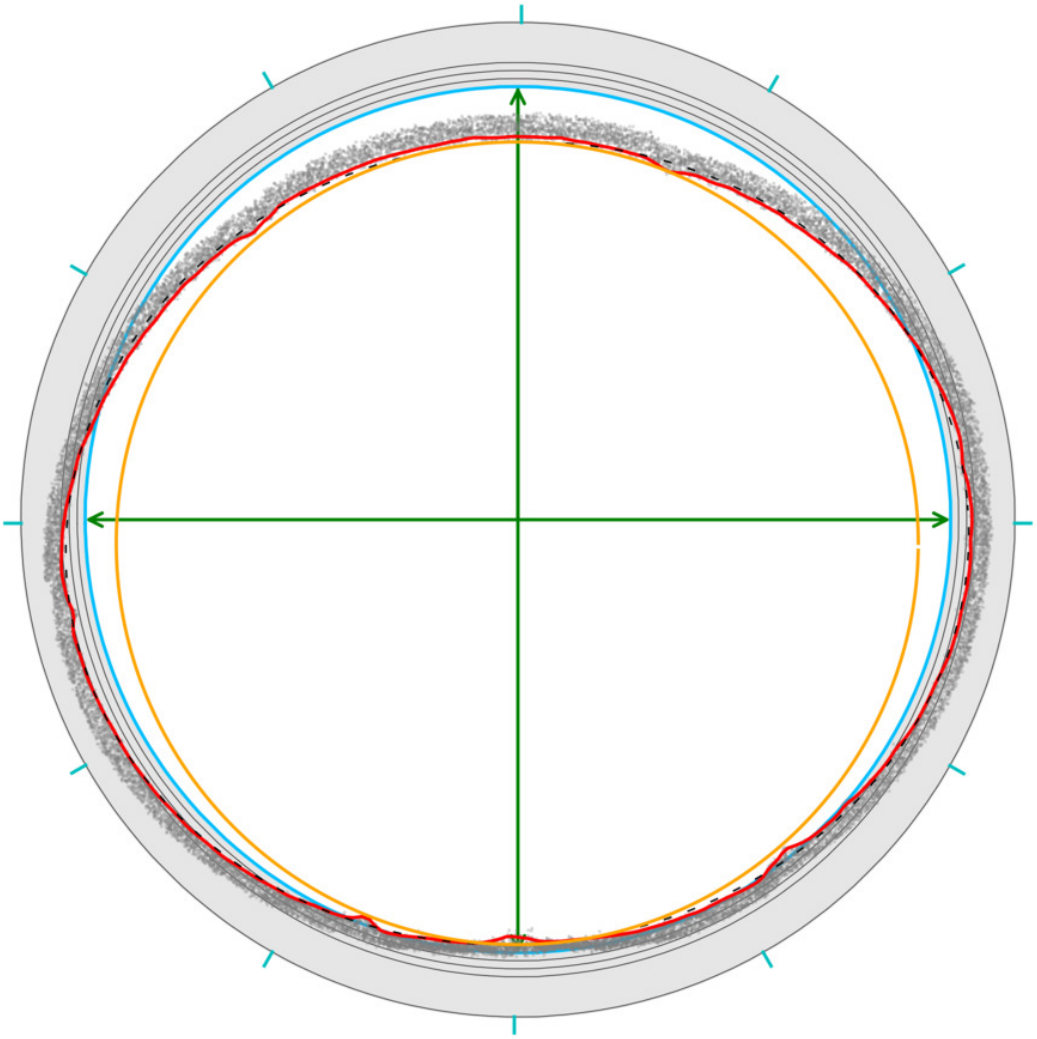
```
Footage   :  471 ft
Width     :  113.7" | 108.0"
Height    :  101.7" | 108.0"

Area      :  8853 sq in
Perimeter :  337.4 in
Ovality   :  5.9%

Interior Diameter : 100.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 472.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



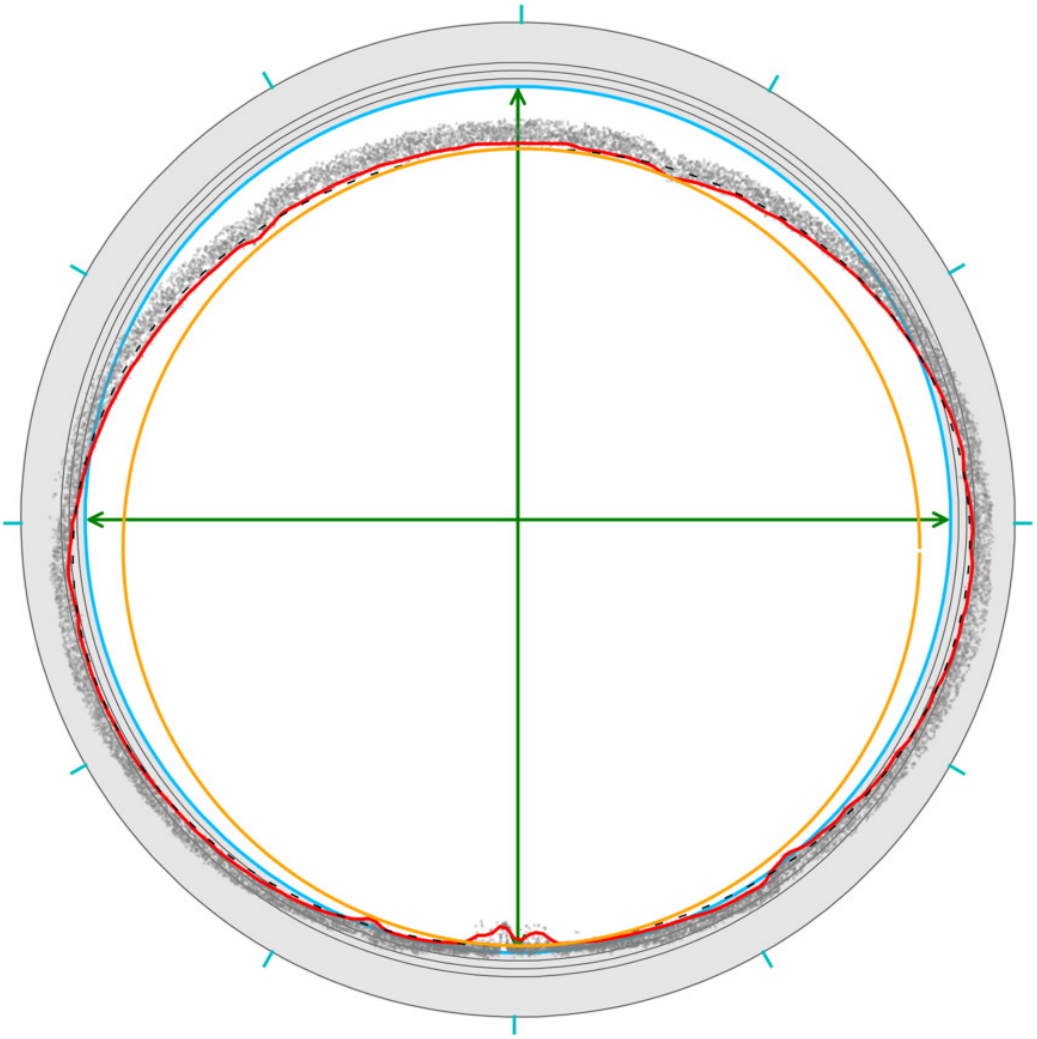
```
Footage    :  472 ft
Width      :  113.7" | 108.0"
Height     :  101.8" | 108.0"

Area       :  8851 sq in
Perimeter  :  336.4 in
Ovality    :  5.9%

Interior Diameter : 100.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 473.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



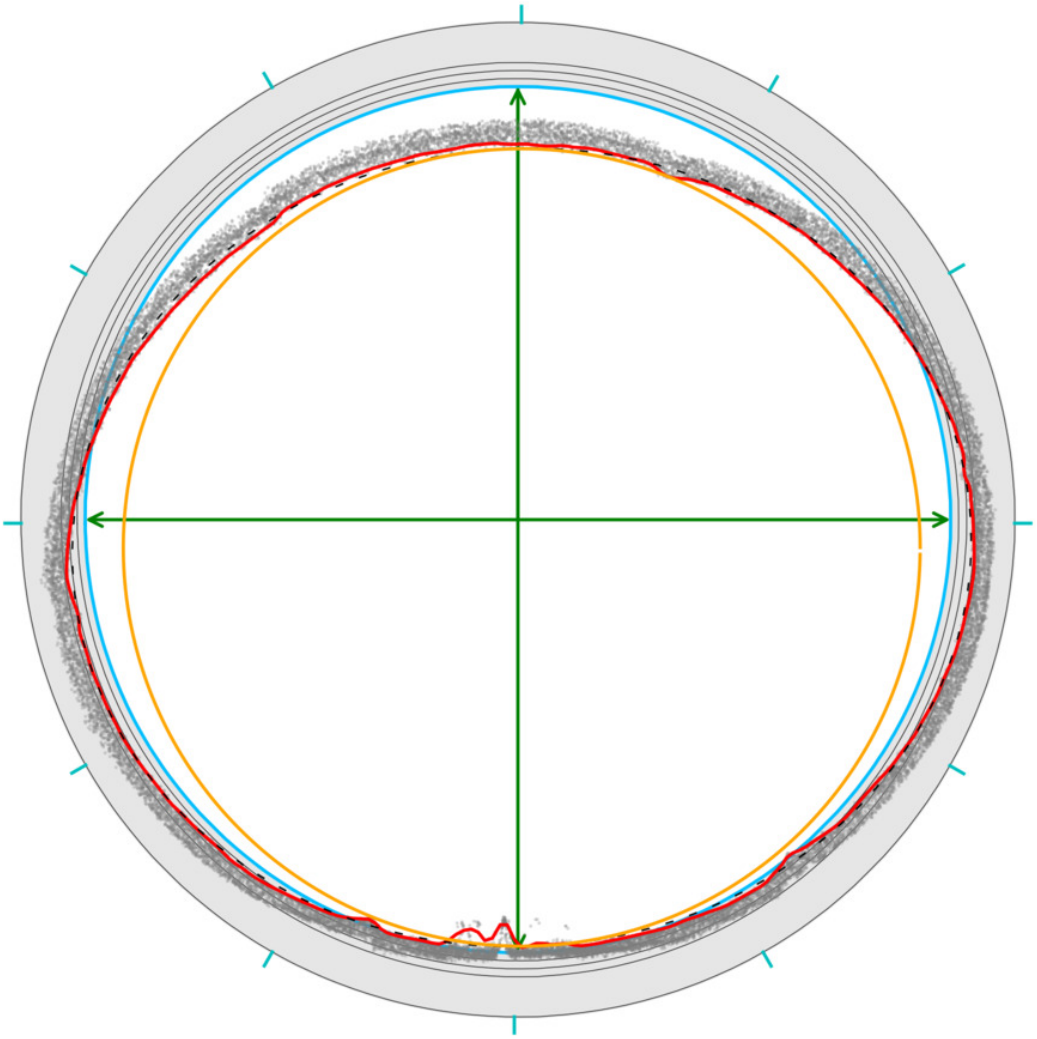
```
Footage   :  473 ft
Width     :  112.8" | 108.0"
Height    :  100.9" | 108.0"

Area      :  8734 sq in
Perimeter :  336.1 in
Ovality   :  5.9%

Interior Diameter : 99.4"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 474.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



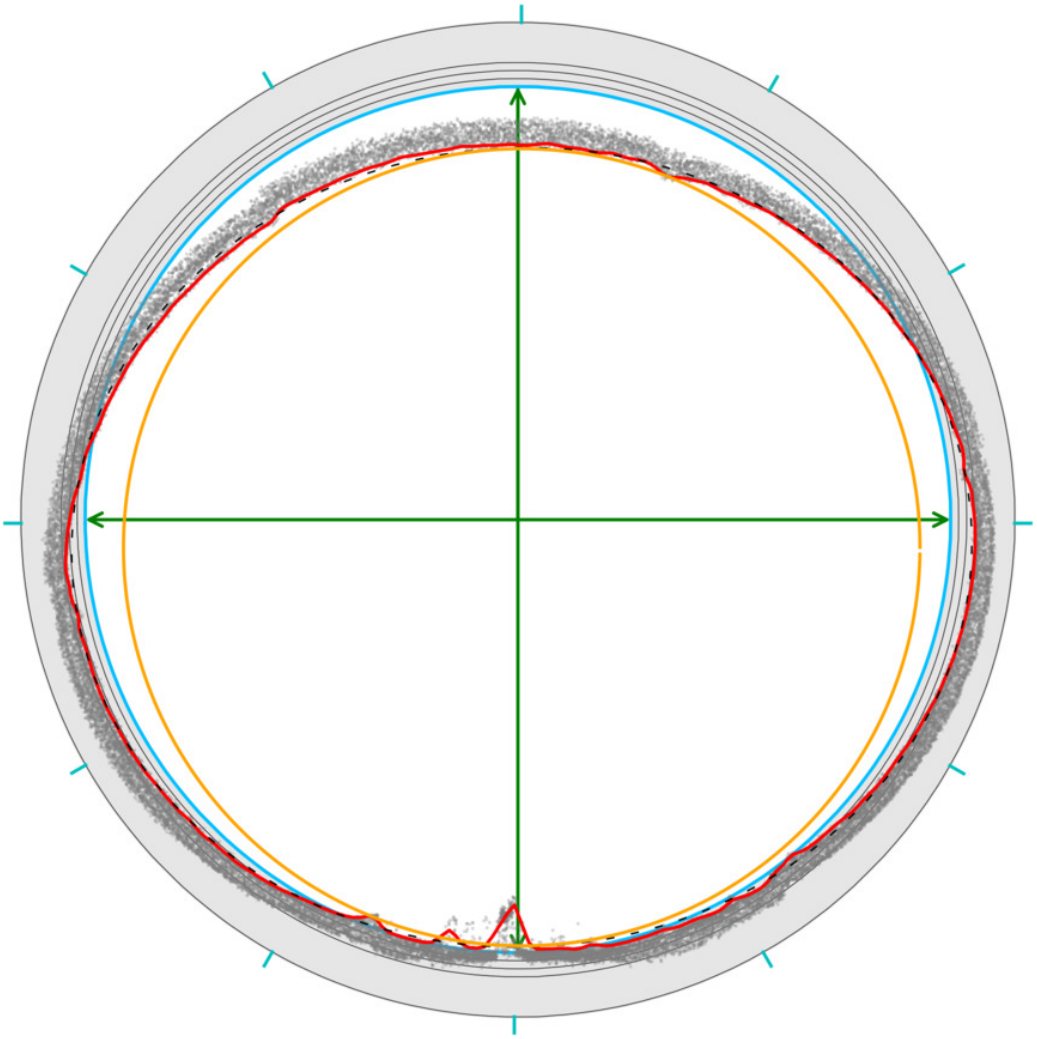
```
Footage   :  474 ft
Width     :  113.3" | 108.0"
Height    :  100.8" | 108.0"

Area      :  8765 sq in
Perimeter :  338.4 in
Ovality   :  5.9%

Interior Diameter : 99.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 475.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



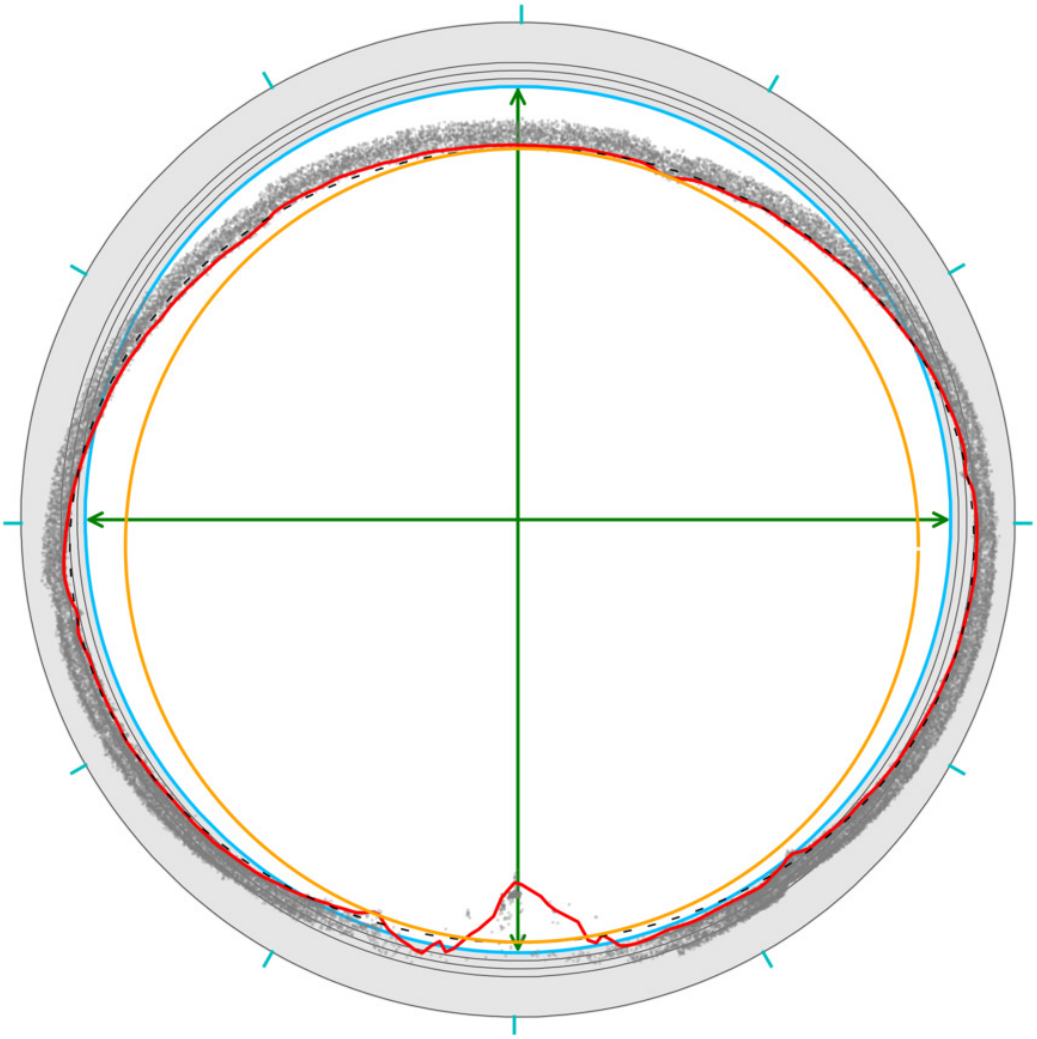
```
Footage   :  475 ft
Width     :  113.5" | 108.0"
Height    :  100.7" | 108.0"

Area      :  8785 sq in
Perimeter :  343.1 in
Ovality   :  5.9%

Interior Diameter : 99.4"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 476.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



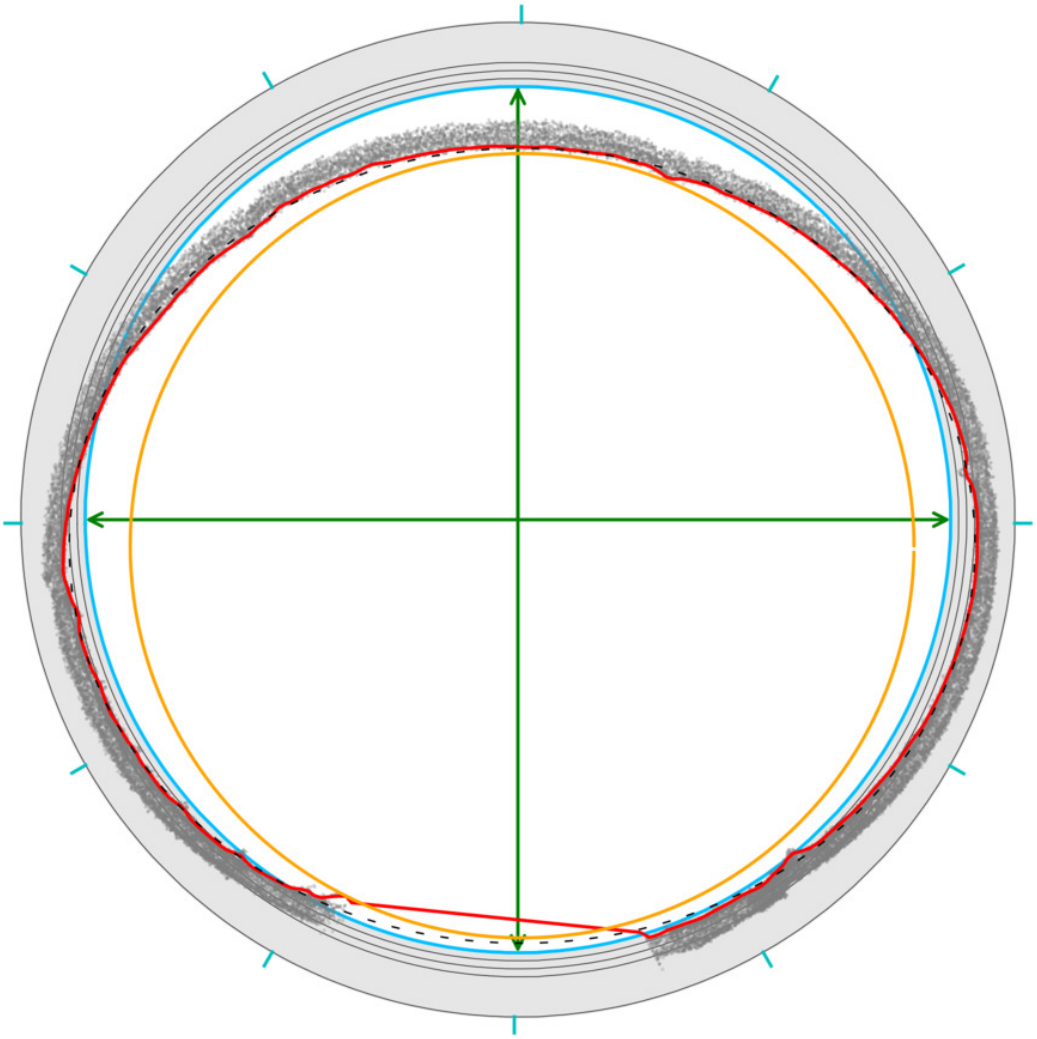
```
Footage    :  476 ft
Width      :  113.9" | 108.0"
Height     :  100.7" | 108.0"

Area       :  8742 sq in
Perimeter  :  345.4 in
Ovality    :  6.4%

Interior Diameter : 99.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 477.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



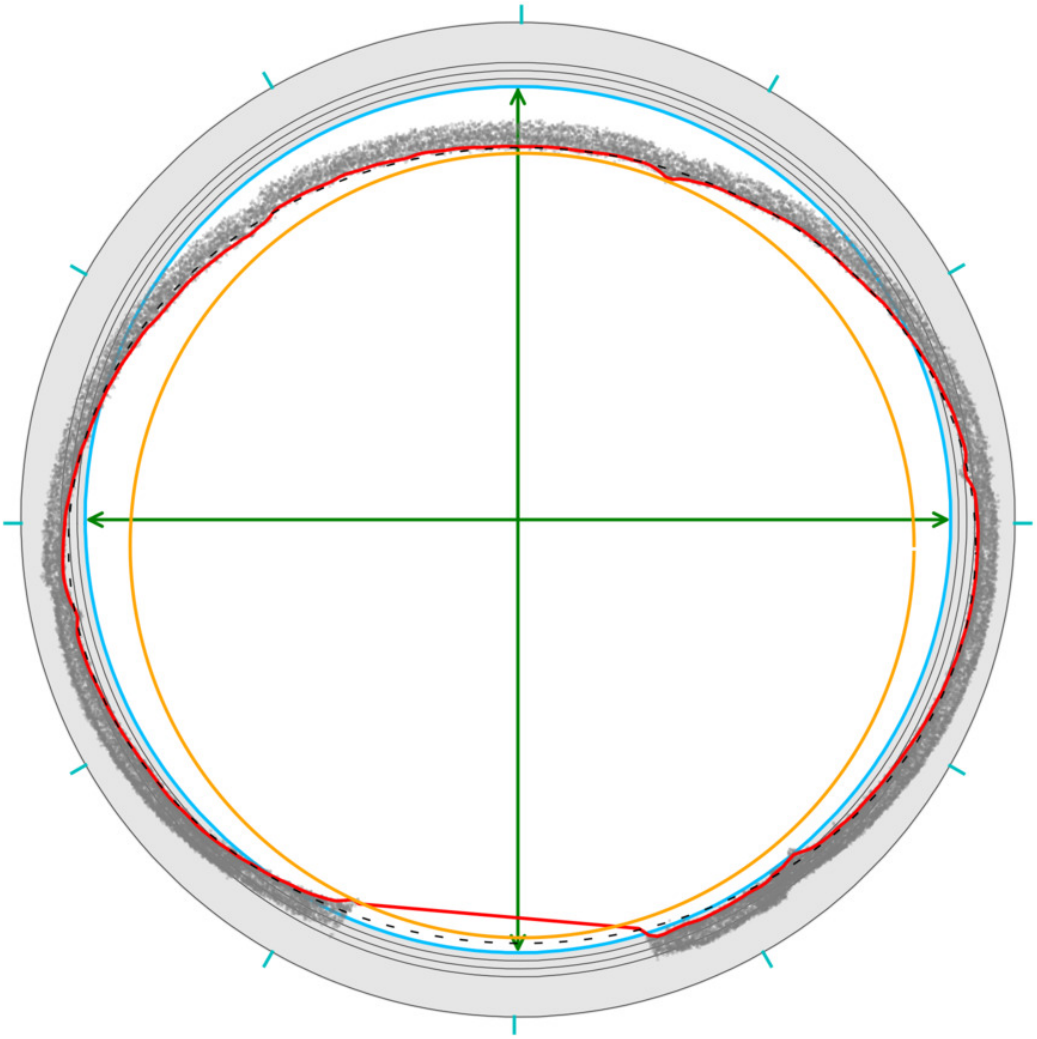
```
Footage   :  477 ft
Width     :  114.1" | 108.0"
Height    :  100.5" | 108.0"

Area      :  8711 sq in
Perimeter :  335.3 in
Ovality   :  6.4%

Interior Diameter : 97.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 478.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



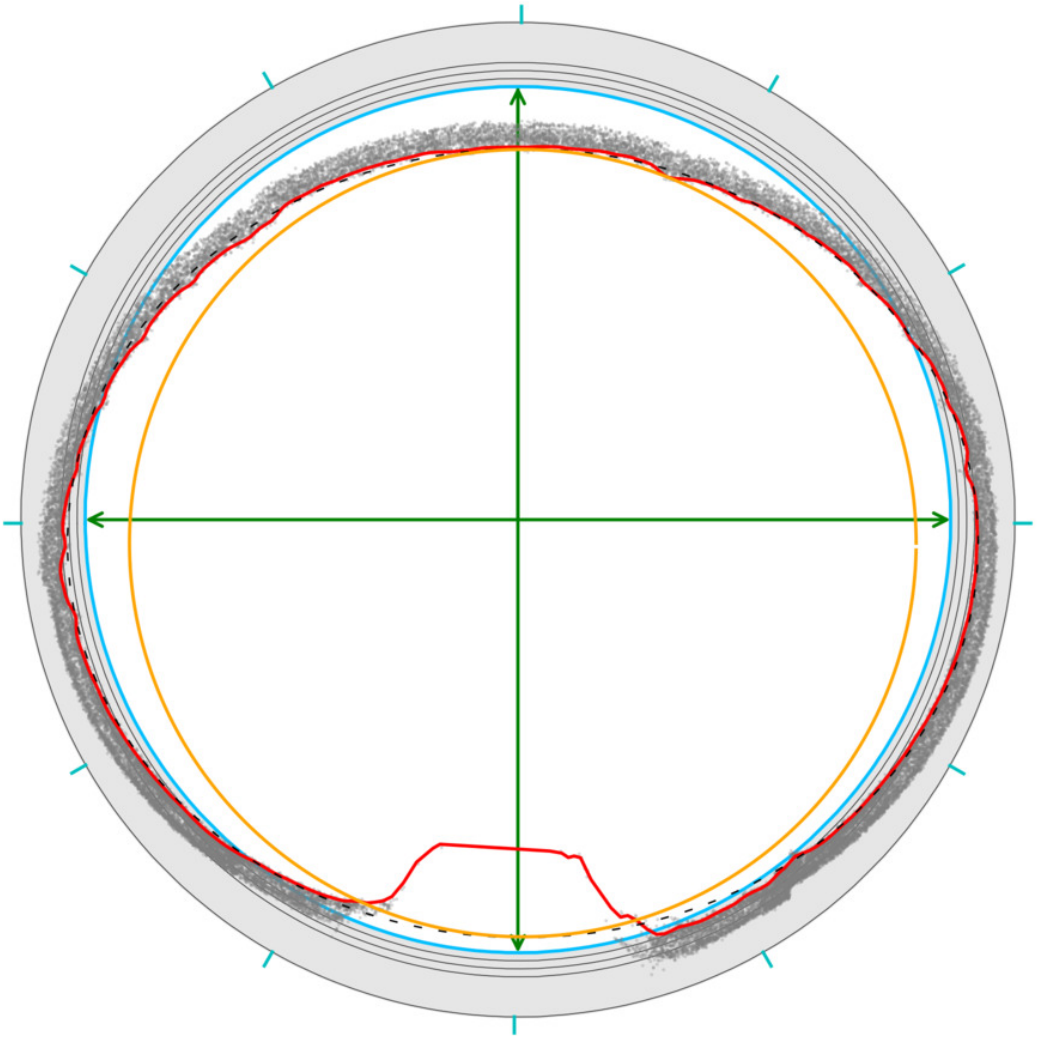
```
Footage   :  478 ft
Width     :  114.2" | 108.0"
Height    :  100.5" | 108.0"

Area      :  8729 sq in
Perimeter :  335.4 in
Ovality   :  6.5%

Interior Diameter : 97.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 479.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



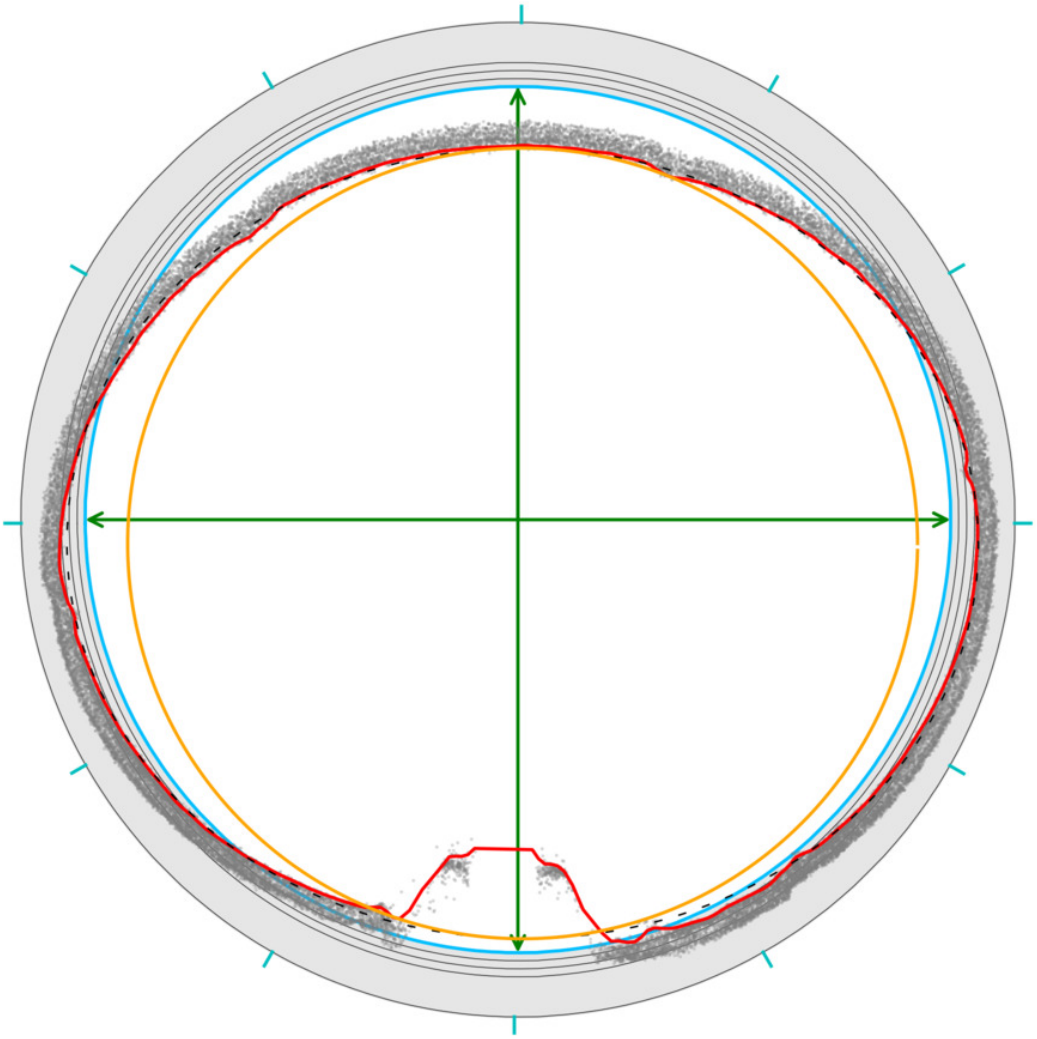
```
Footage   :  479 ft
Width     :  114.4" | 108.0"
Height    :  100.5" | 108.0"

Area      :  8531 sq in
Perimeter :  343.6 in
Ovality   :  7.1%

Interior Diameter : 98.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 480.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 480 ft
Width : 114.6" | 108.0"
Height : 100.6" | 108.0"

Area : 8616 sq in
Perimeter : 345.9 in
Ovality : 7.0%

Interior Diameter : 98.6"

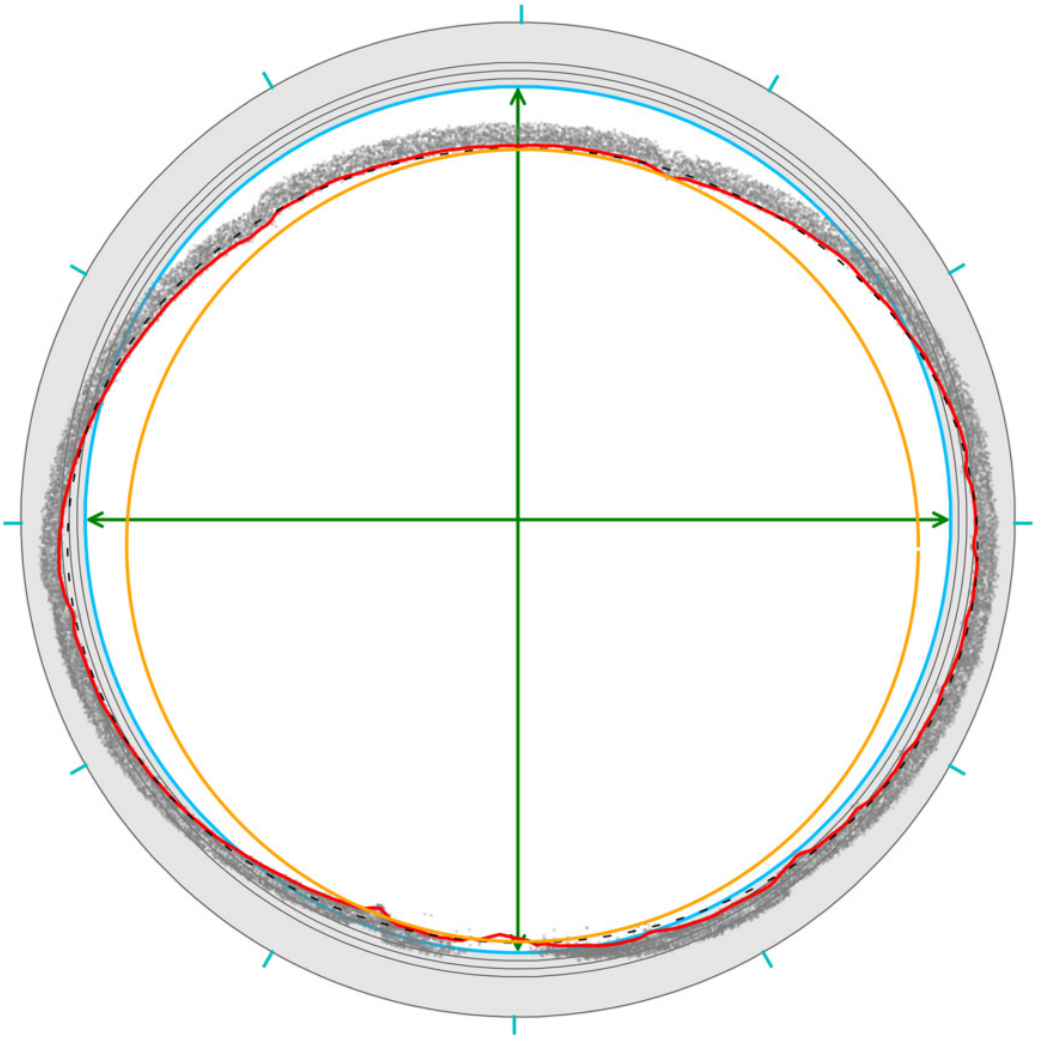
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 481.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



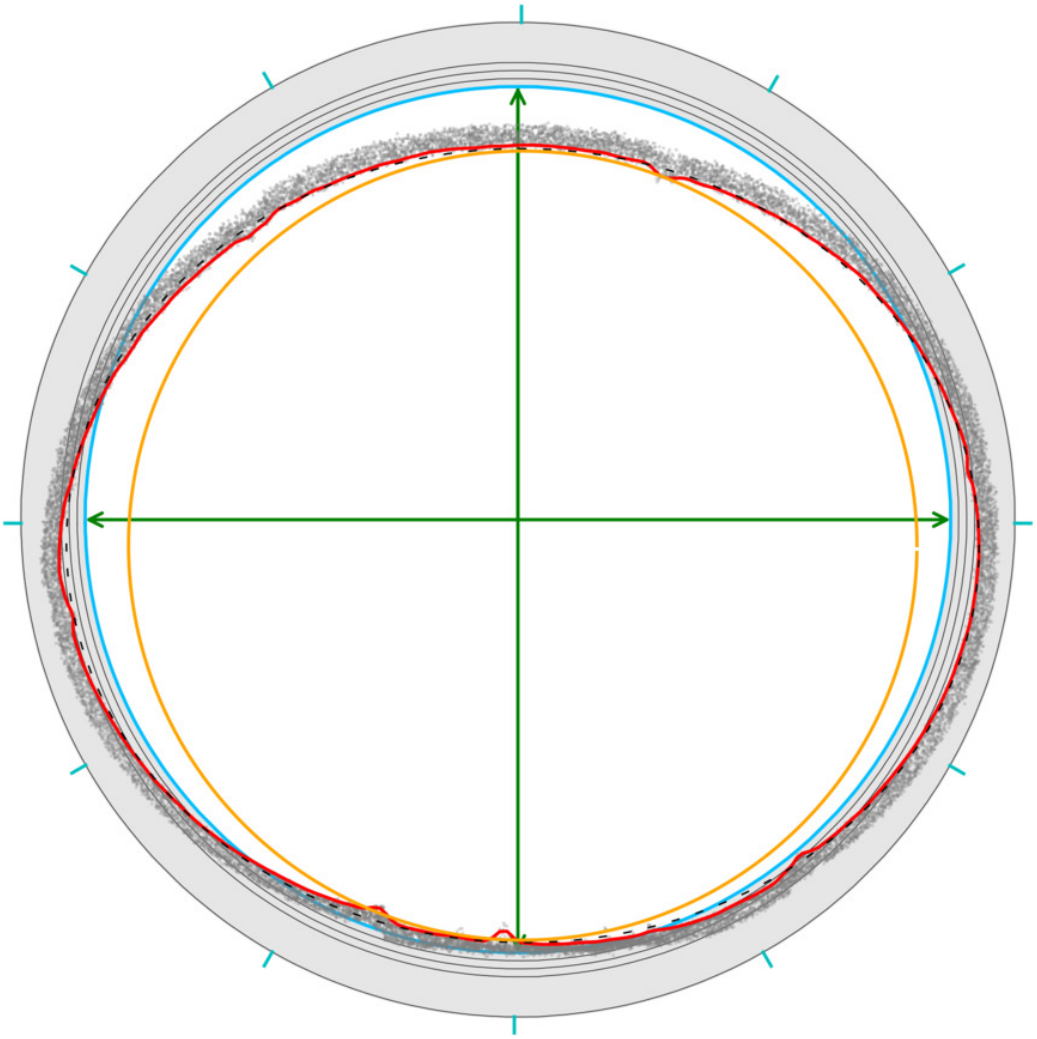
```
Footage   :  481 ft
Width     :  114.6" | 108.0"
Height    :  100.7" | 108.0"

Area      :  8832 sq in
Perimeter :  337.1 in
Ovality   :  6.7%

Interior Diameter : 98.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 482.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



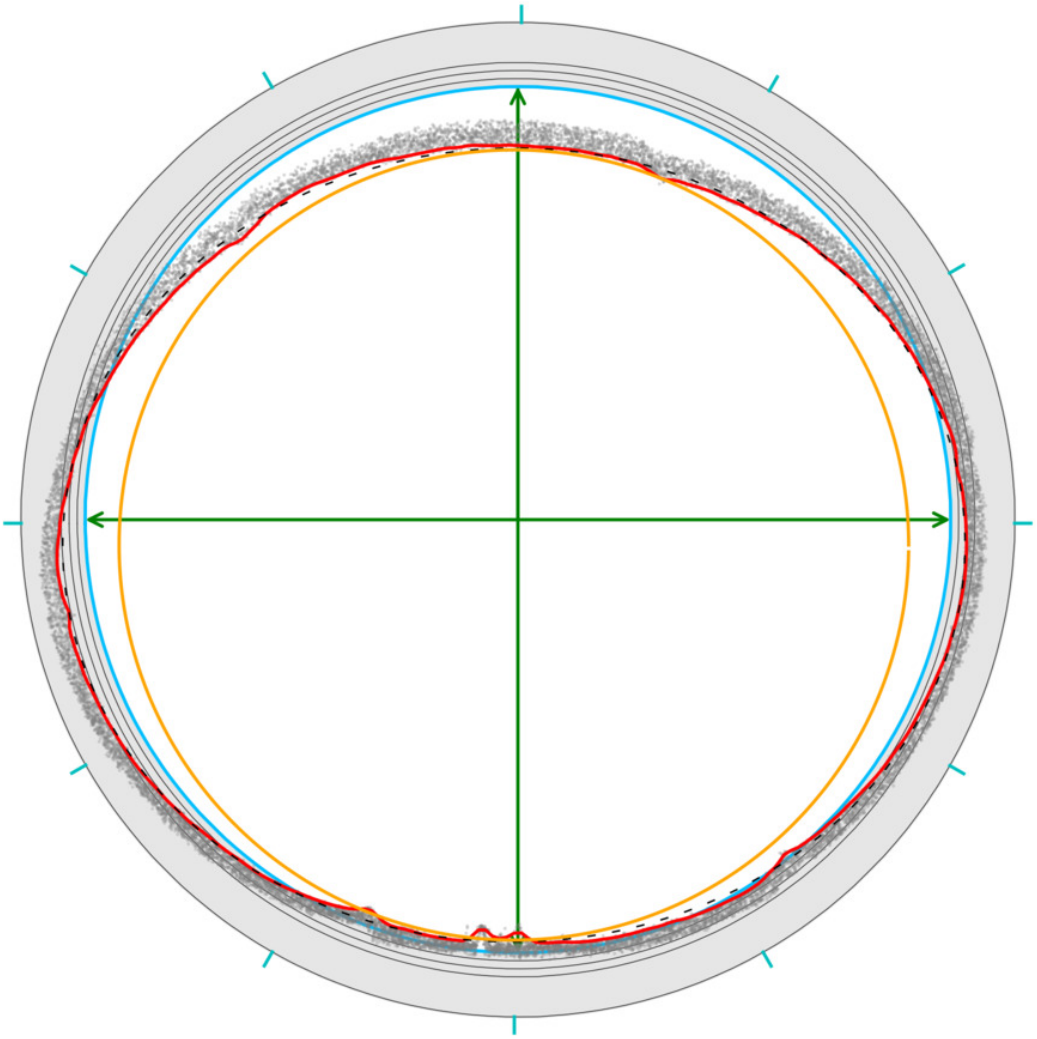
```
Footage   :  482 ft
Width     :  114.8" | 108.0"
Height    :  100.7" | 108.0"

Area      :  8848 sq in
Perimeter :  337.6 in
Ovality   :  6.9%

Interior Diameter : 98.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 483.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



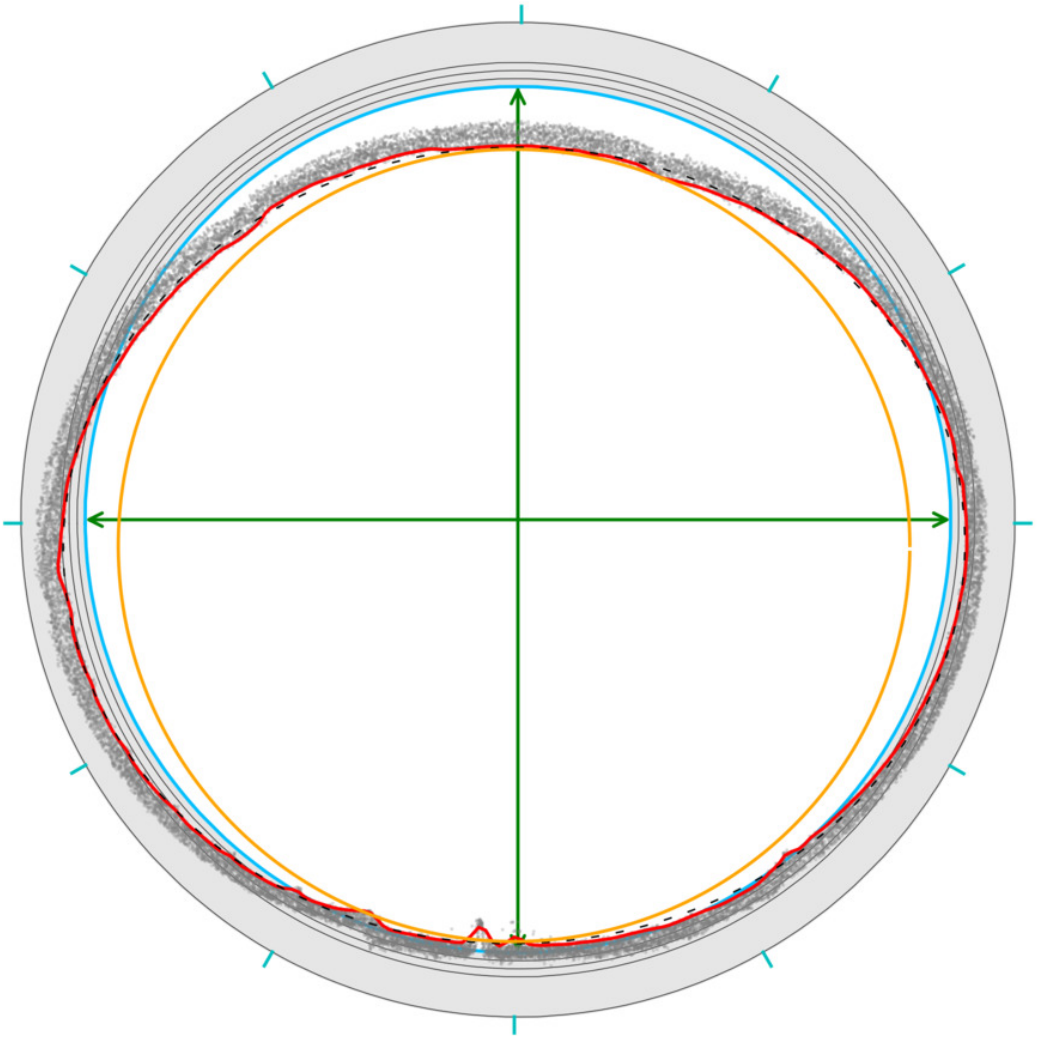
```
Footage   :  483 ft
Width     :  113.5" | 108.0"
Height    :  100.7" | 108.0"

Area      :  8747 sq in
Perimeter :  335.6 in
Ovality   :  6.3%

Interior Diameter : 98.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 484.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



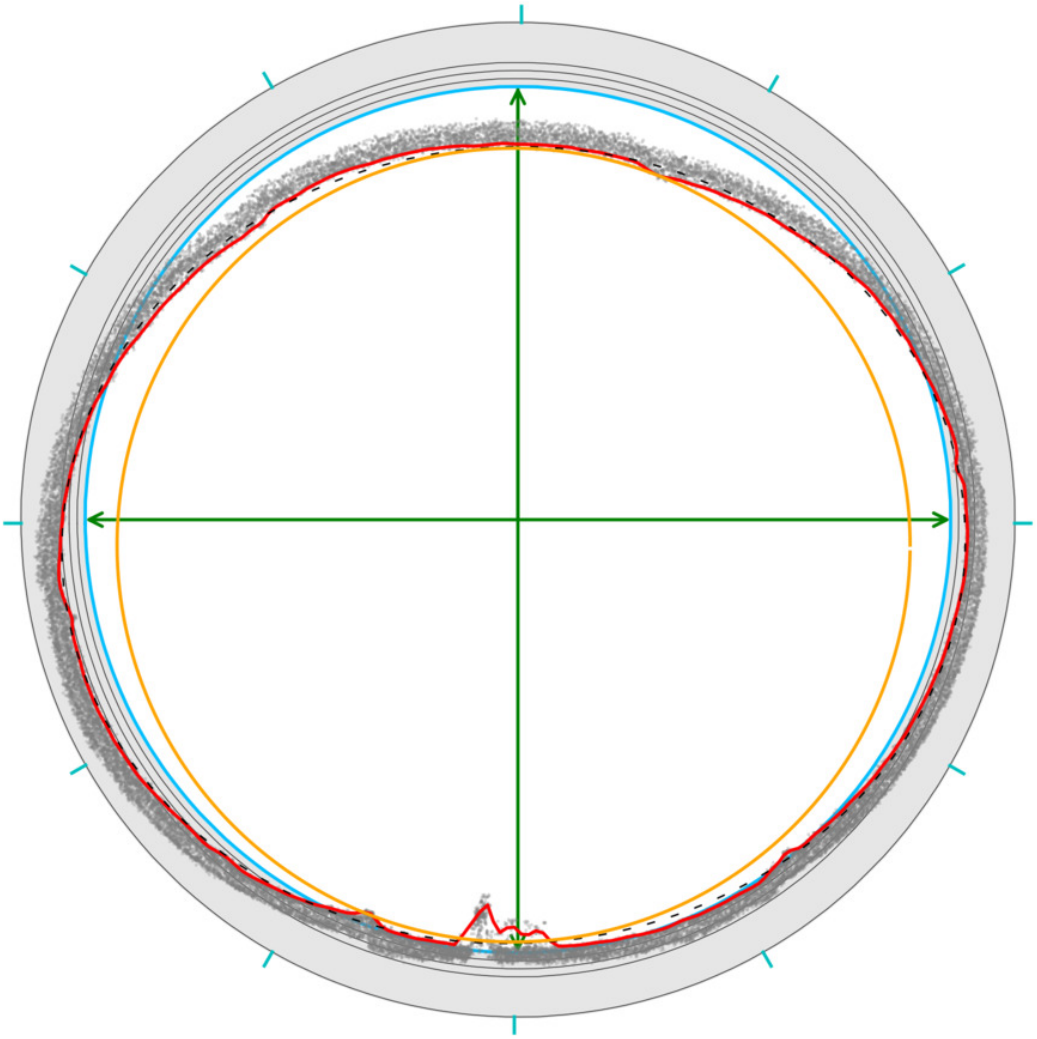
```
Footage   :  484 ft
Width     :  113.4" | 108.0"
Height    :  100.6" | 108.0"

Area      :  8769 sq in
Perimeter :  337.2 in
Ovality   :  6.1%

Interior Diameter : 98.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 485.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



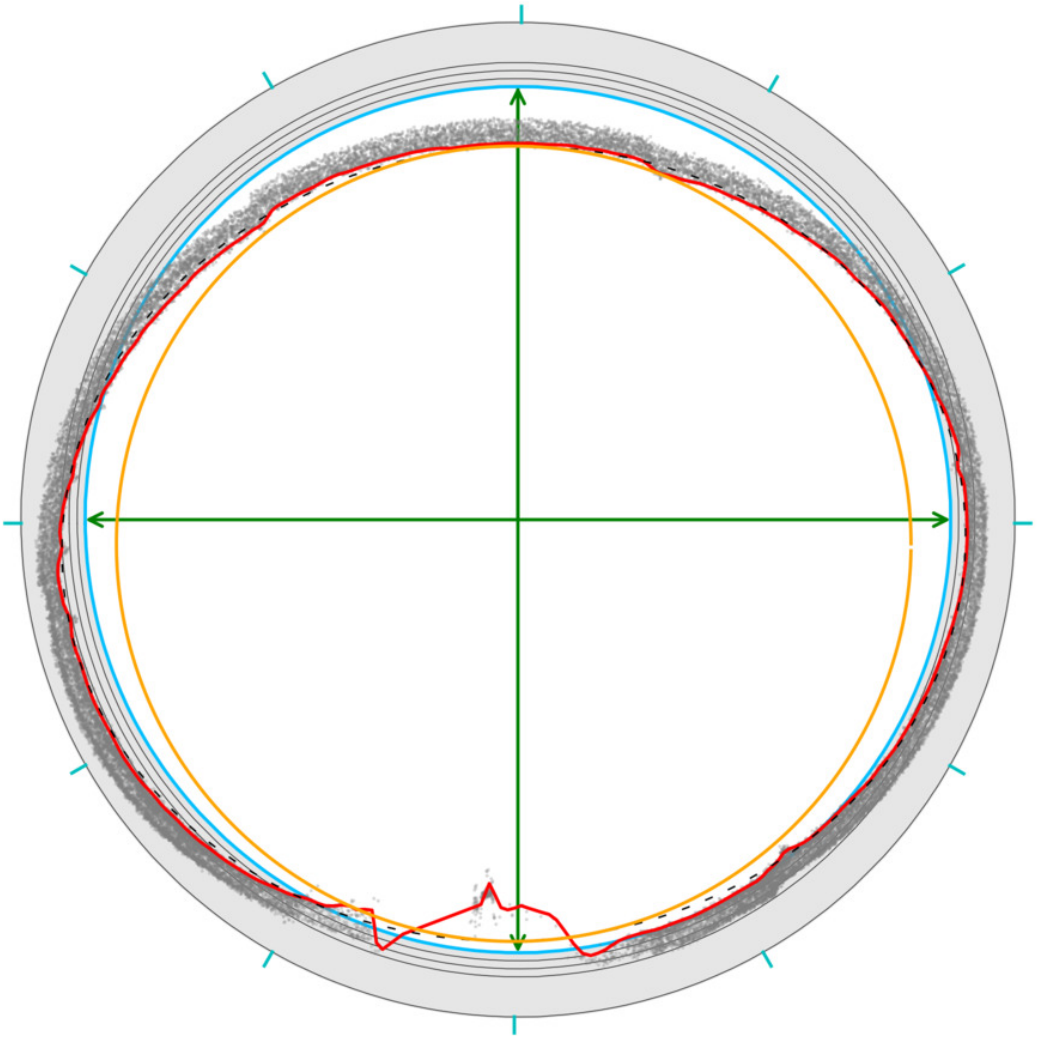
```
Footage   :  485 ft
Width     :  113.4" | 108.0"
Height    :  100.8" | 108.0"

Area      :  8789 sq in
Perimeter :  341.6 in
Ovality   :  6.2%

Interior Diameter : 99.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 486.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



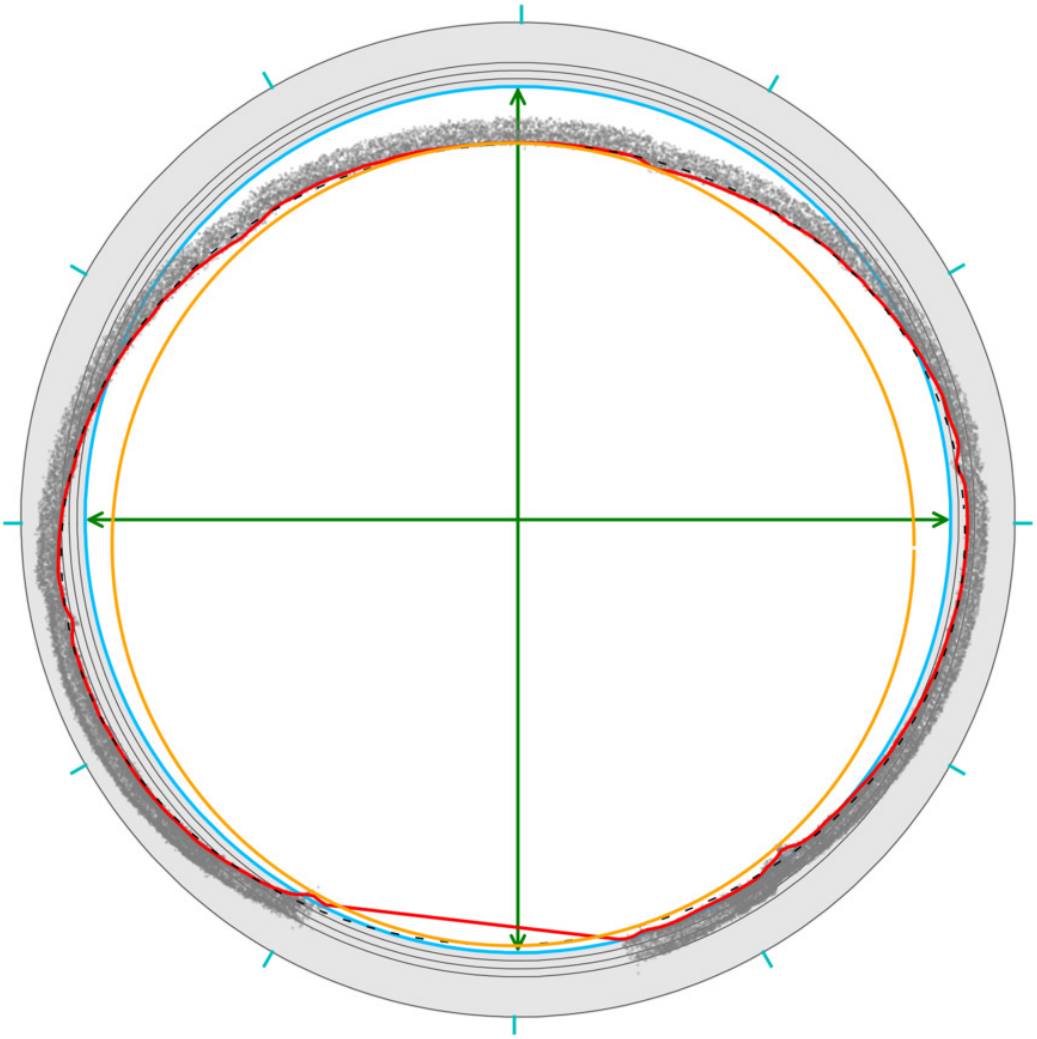
```
Footage   :  486 ft
Width     :  113.5" | 108.0"
Height    :  100.9" | 108.0"

Area      :  8743 sq in
Perimeter :  346.7 in
Ovality   :  6.4%

Interior Diameter : 99.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 487.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



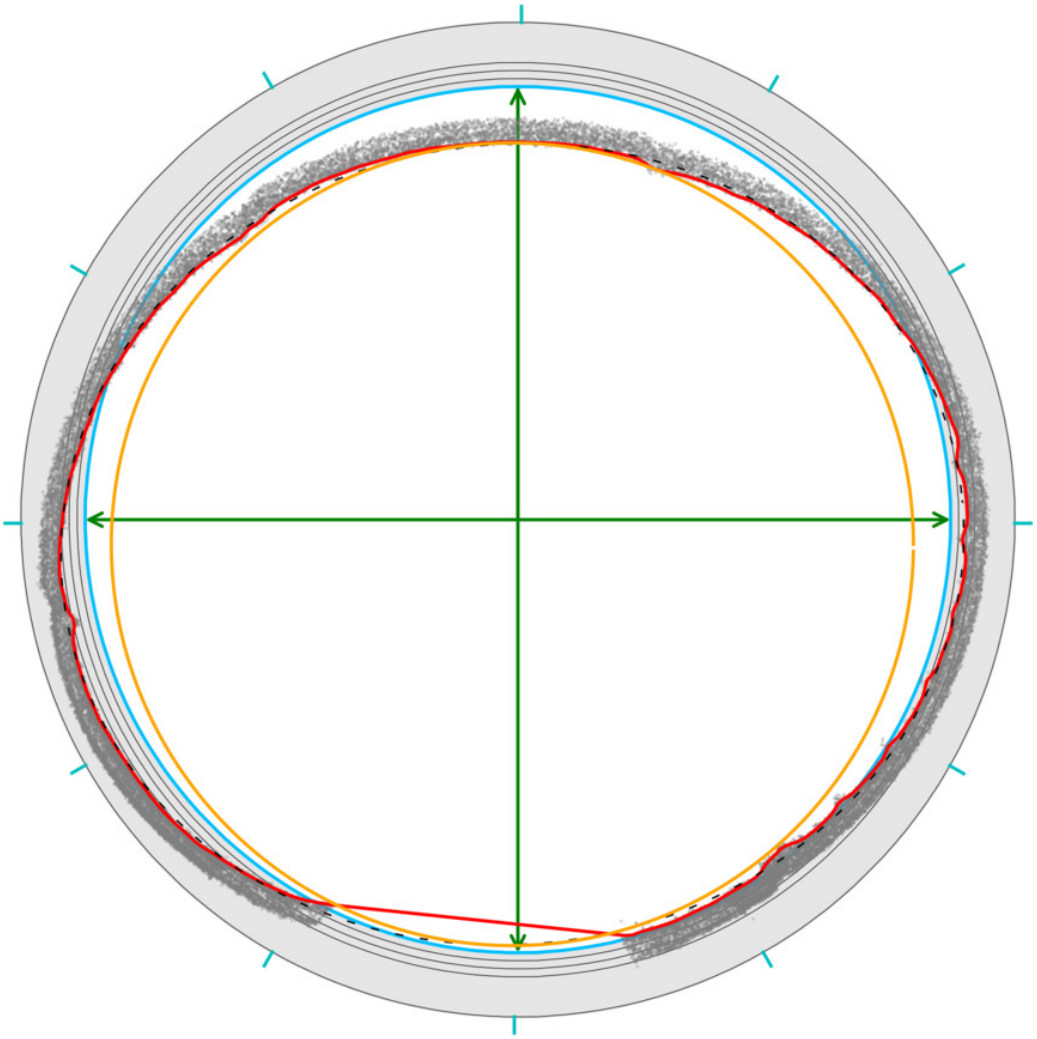
```
Footage   :  487 ft
Width     :  113.5" | 108.0"
Height    :  101.0" | 108.0"

Area      :  8771 sq in
Perimeter :  335.4 in
Ovality   :  6.1%

Interior Diameter : 100.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 488.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 488 ft
Width : 113.3" | 108.0"
Height : 101.1" | 108.0"

Area : 8752 sq in
Perimeter : 335.4 in
Ovality : 6.1%

Interior Diameter : 100.1"

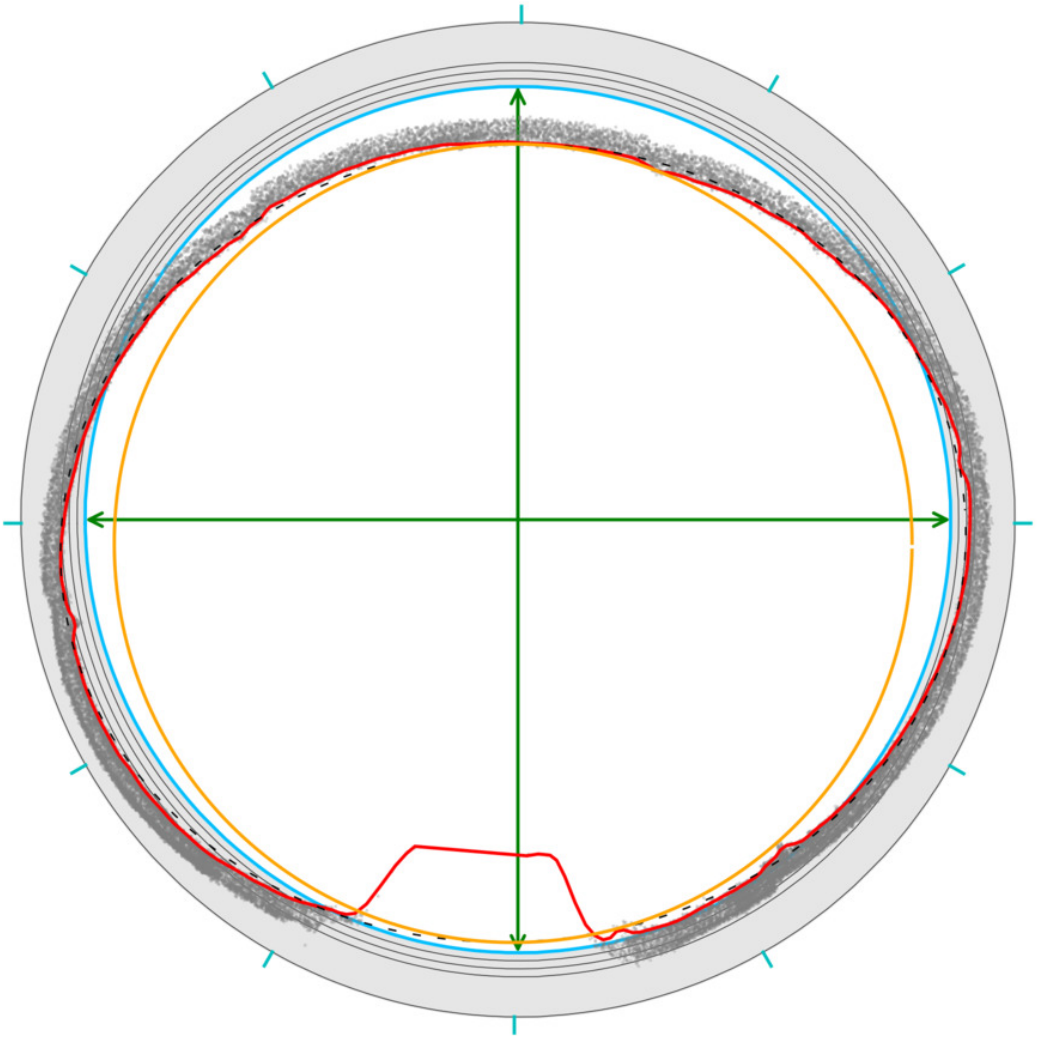
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 489.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 489 ft
Width : 113.5" | 108.0"
Height : 101.0" | 108.0"

Area : 8578 sq in
Perimeter : 345.9 in
Ovality : 6.3%

Interior Diameter : 99.6"

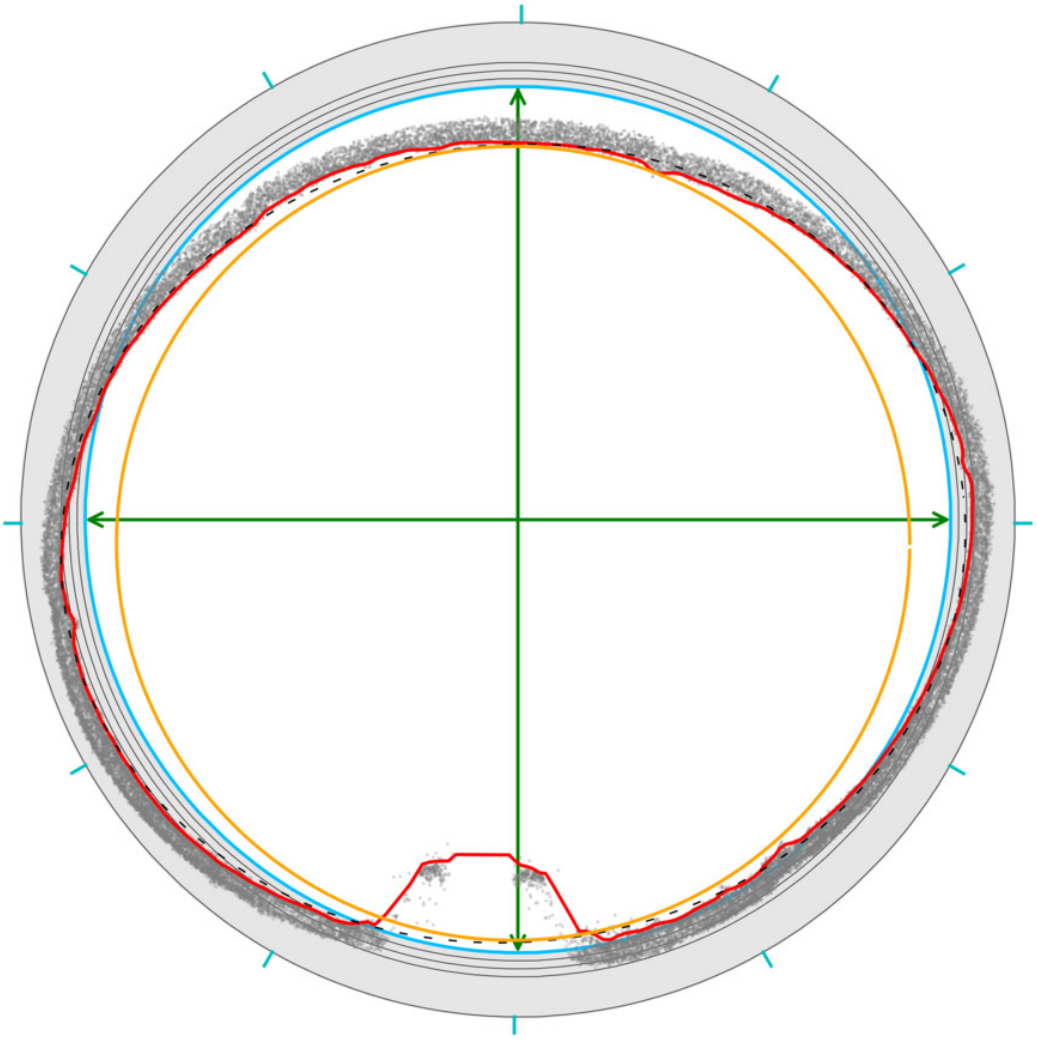
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 490.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



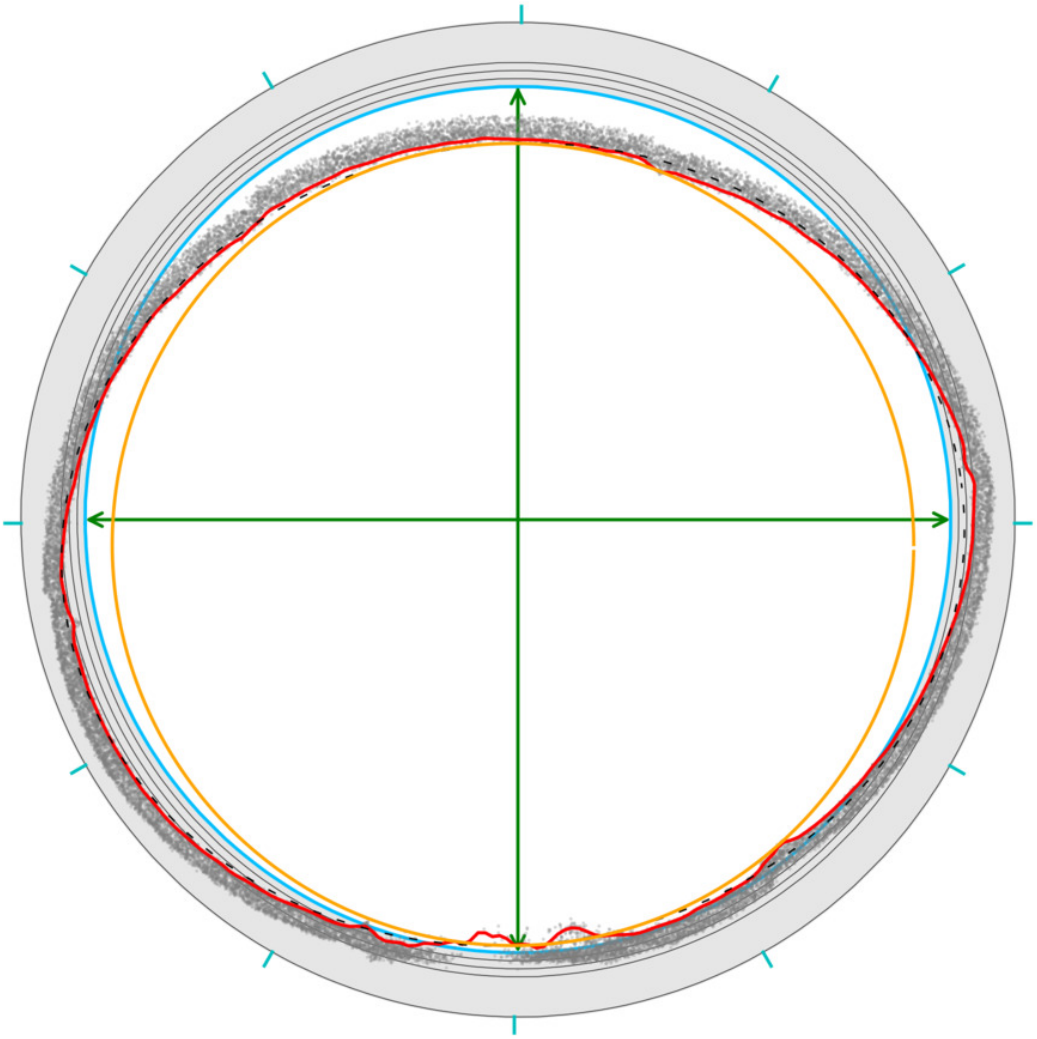
```
Footage   :  490 ft
Width     :  113.7" | 108.0"
Height    :  101.0" | 108.0"

Area      :  8635 sq in
Perimeter :  345.2 in
Ovality   :  6.3%

Interior Diameter : 99.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 491.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



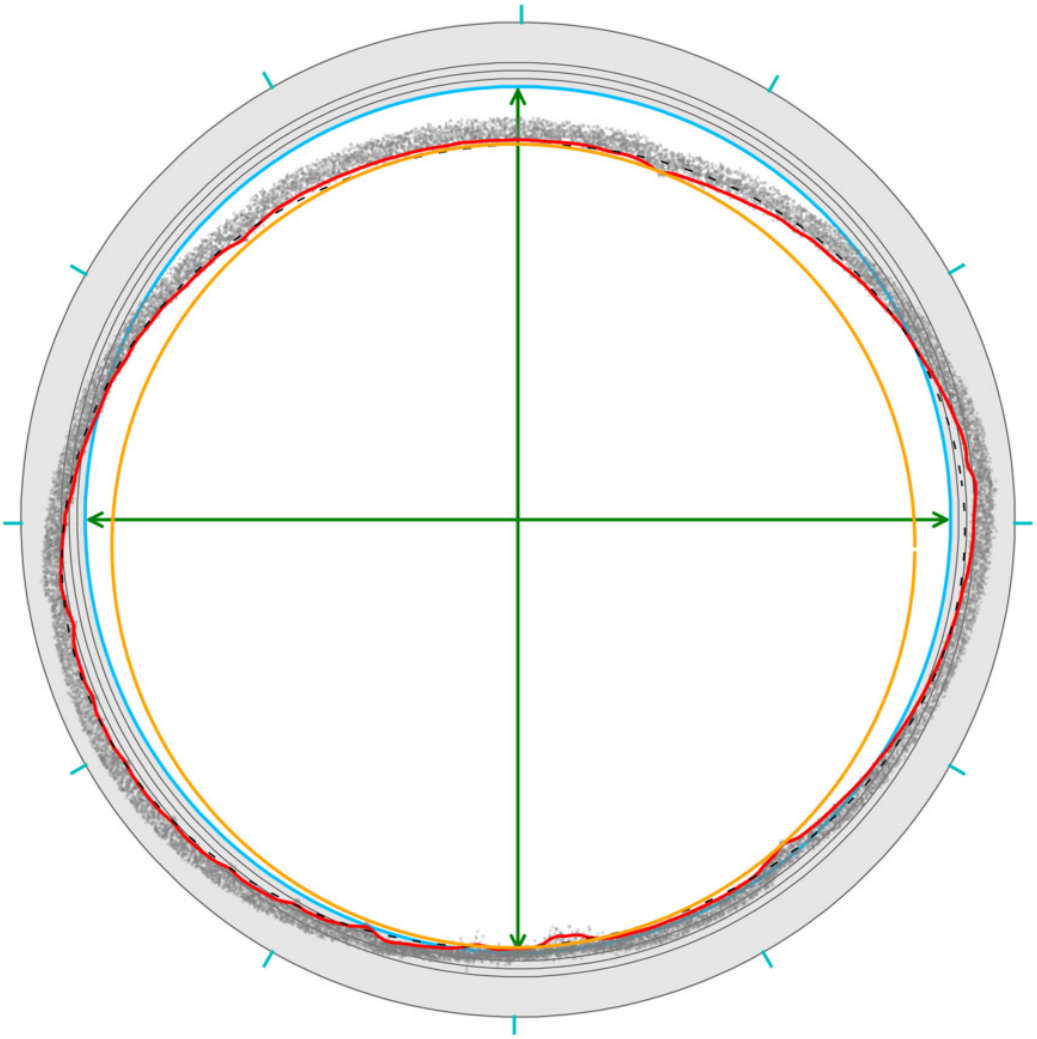
```
Footage   :  491 ft
Width     :  114.0" | 108.0"
Height    :  101.4" | 108.0"

Area      :  8845 sq in
Perimeter :  338.8 in
Ovality   :  6.1%

Interior Diameter : 100.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 492.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



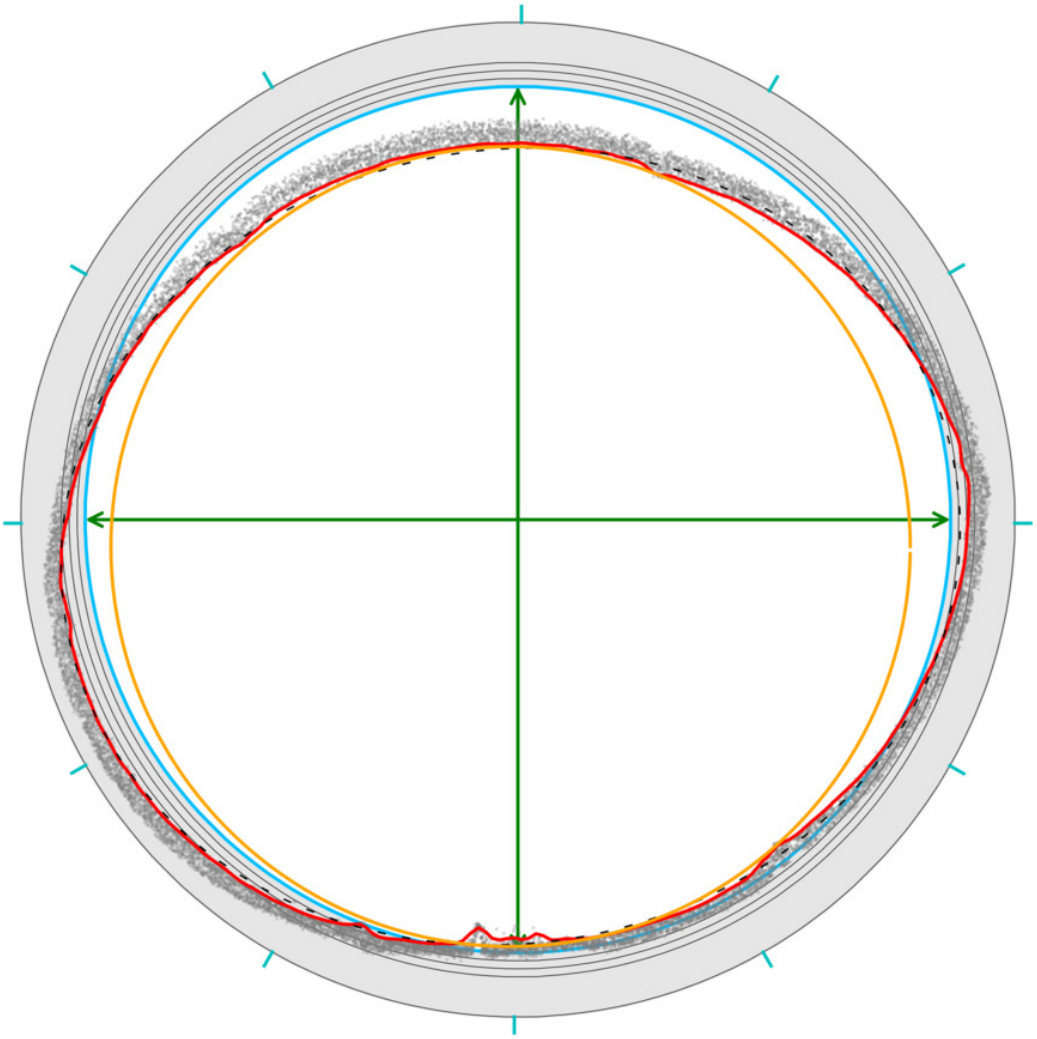
```
Footage   :  492 ft
Width     :  114.2" | 108.0"
Height    :  101.4" | 108.0"

Area      :  8850 sq in
Perimeter :  336.9 in
Ovality   :  6.1%

Interior Diameter : 100.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 493.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



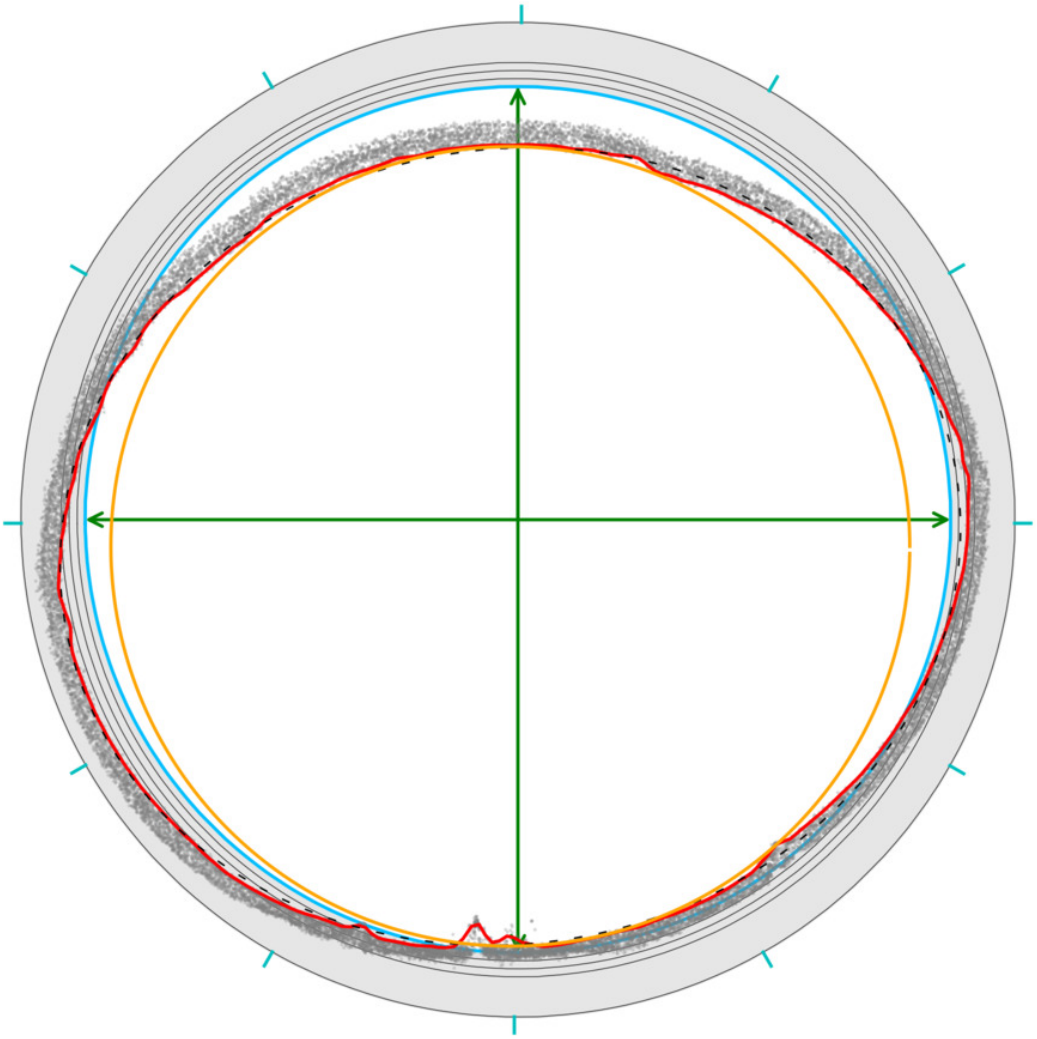
```
Footage   :  493 ft
Width     :  113.4" | 108.0"
Height    :  100.9" | 108.0"

Area      :  8741 sq in
Perimeter :  335.8 in
Ovality   :  6.3%

Interior Diameter : 99.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 494.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



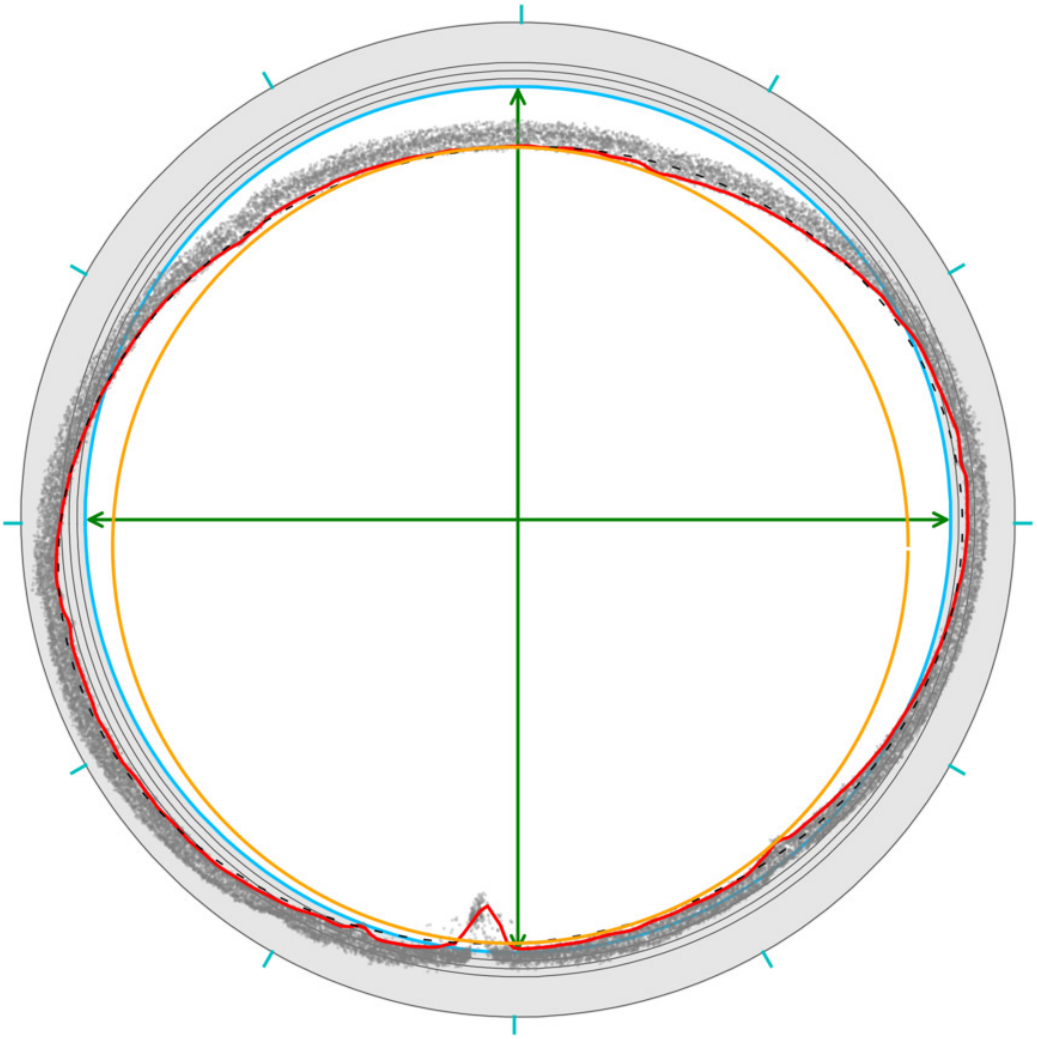
```
Footage   :  494 ft
Width     :  113.6" | 108.0"
Height    :  100.7" | 108.0"

Area      :  8762 sq in
Perimeter :  337.7 in
Ovality   :  6.4%

Interior Diameter : 99.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 495.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



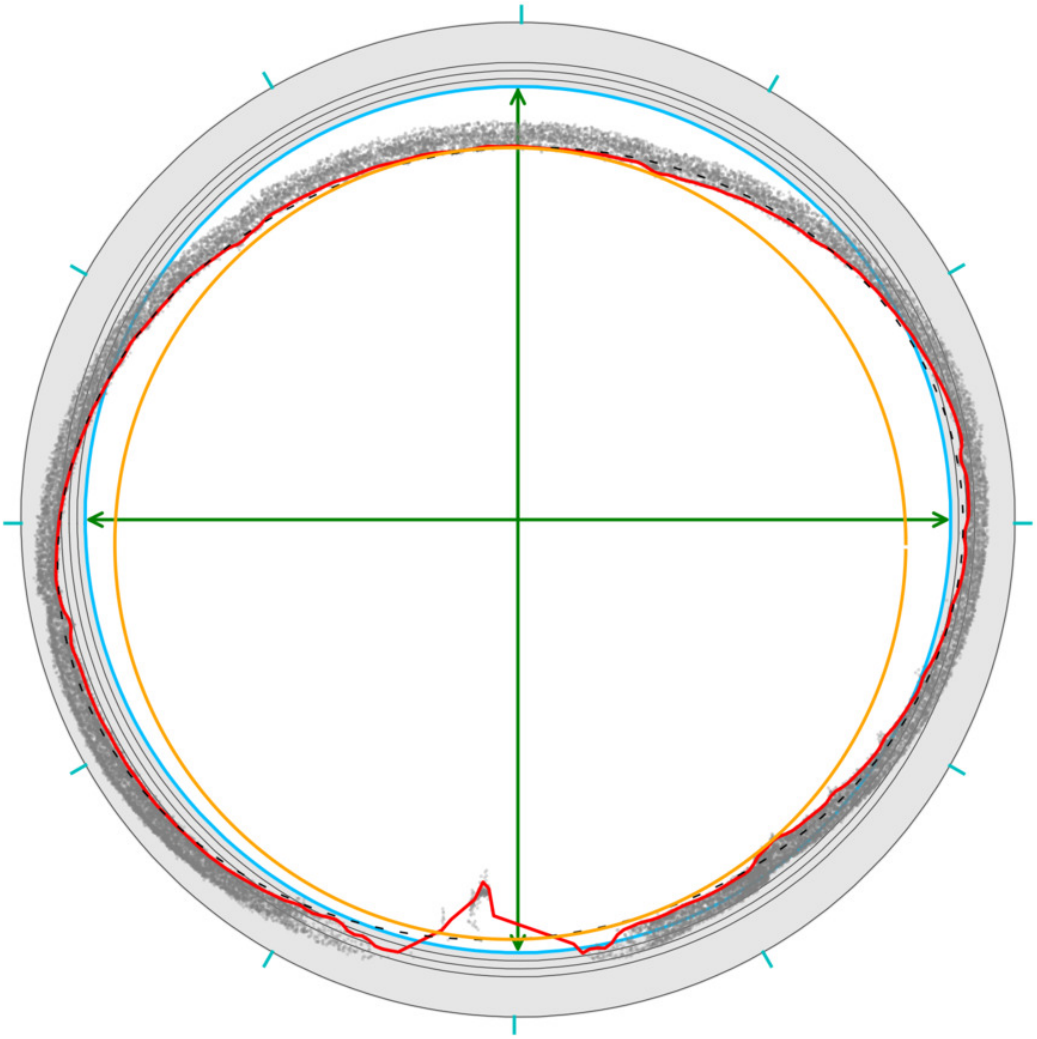
```
Footage   :  495 ft
Width     :  113.7" | 108.0"
Height    :  100.6" | 108.0"

Area      :  8784 sq in
Perimeter :  340.7 in
Ovality   :  6.7%

Interior Diameter : 99.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 496.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



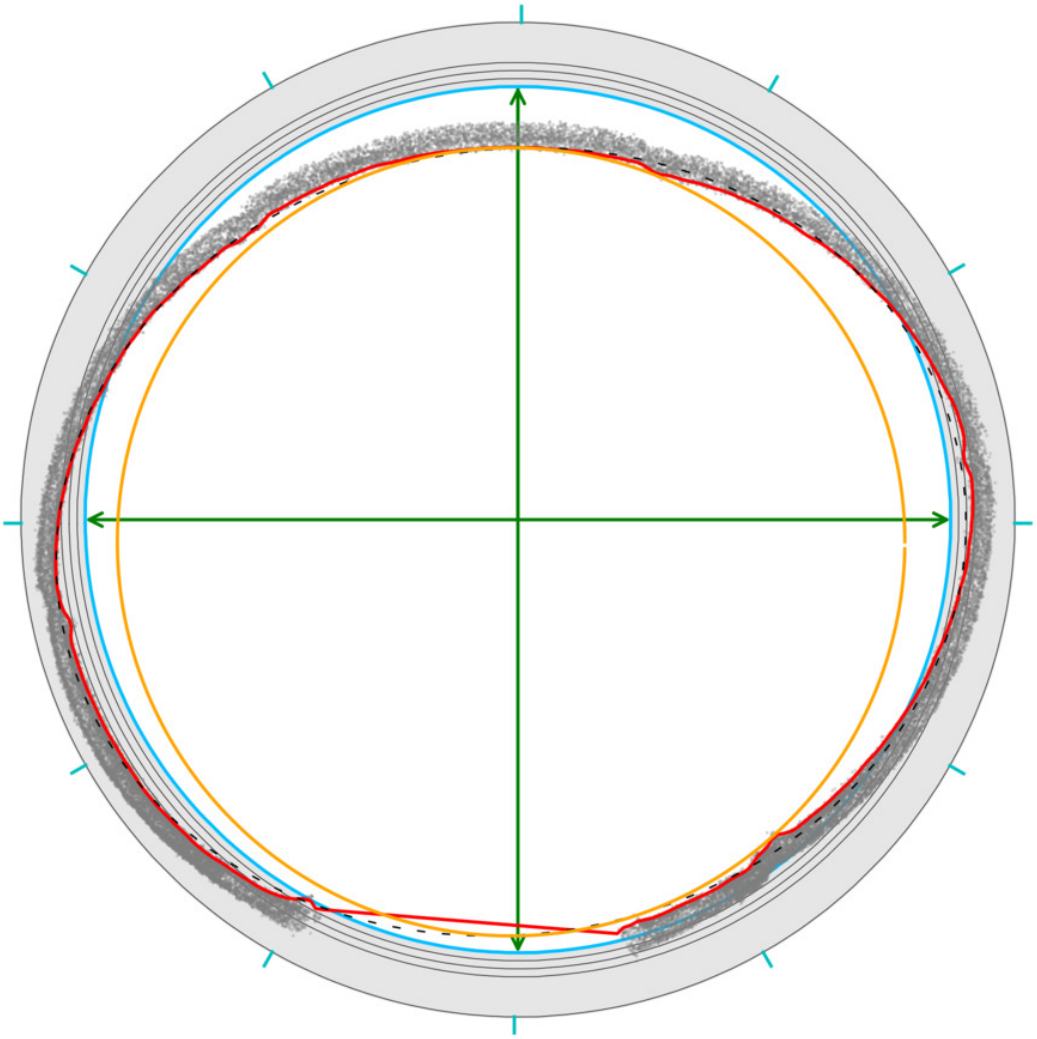
```
Footage    :  496 ft
Width      :  113.9" | 108.0"
Height     :  100.6" | 108.0"

Area       :  8737 sq in
Perimeter  :  344.6 in
Ovality    :  7.0%

Interior Diameter : 98.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 497.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



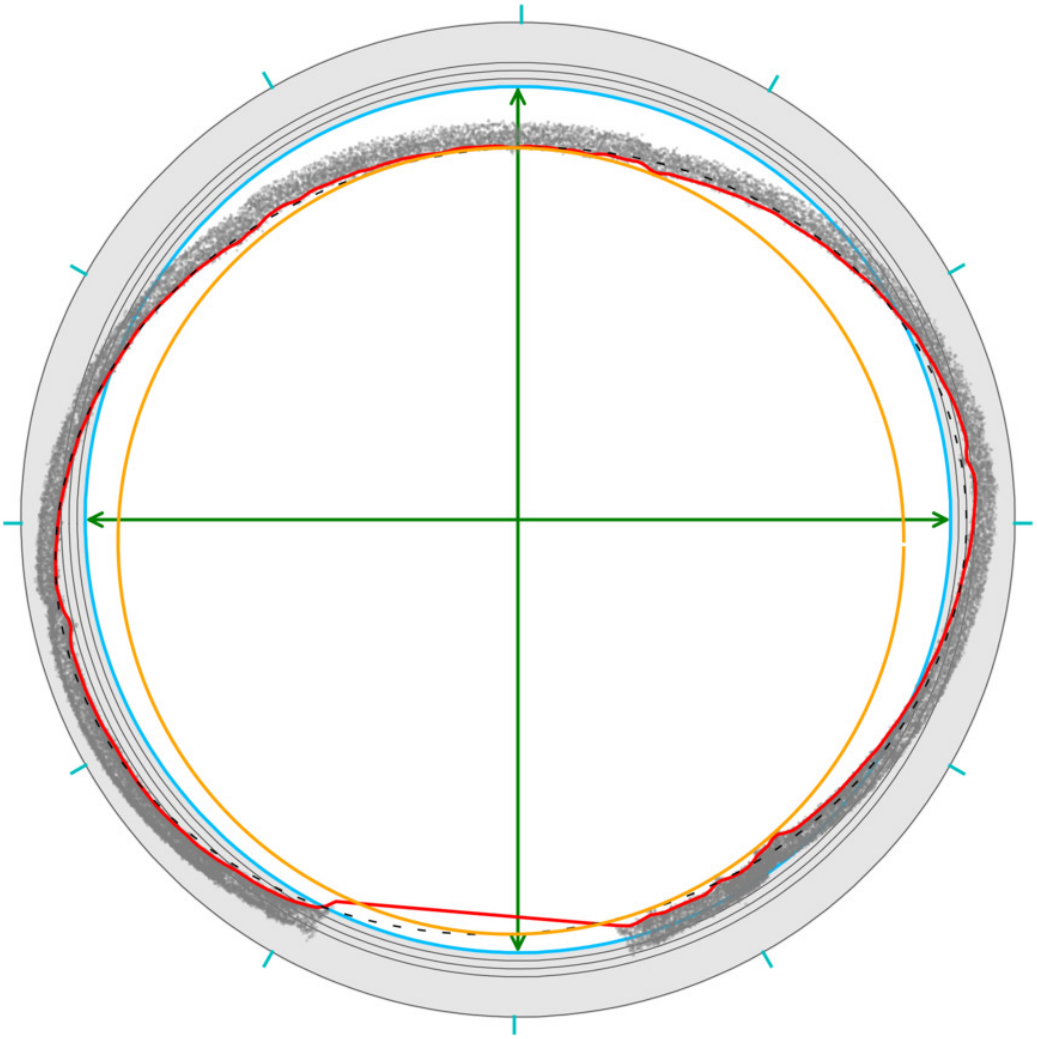
```
Footage   :  497 ft
Width     :  114.4" | 108.0"
Height    :  100.4" | 108.0"

Area      :  8712 sq in
Perimeter :  335.1 in
Ovality   :  7.4%

Interior Diameter : 98.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 498.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



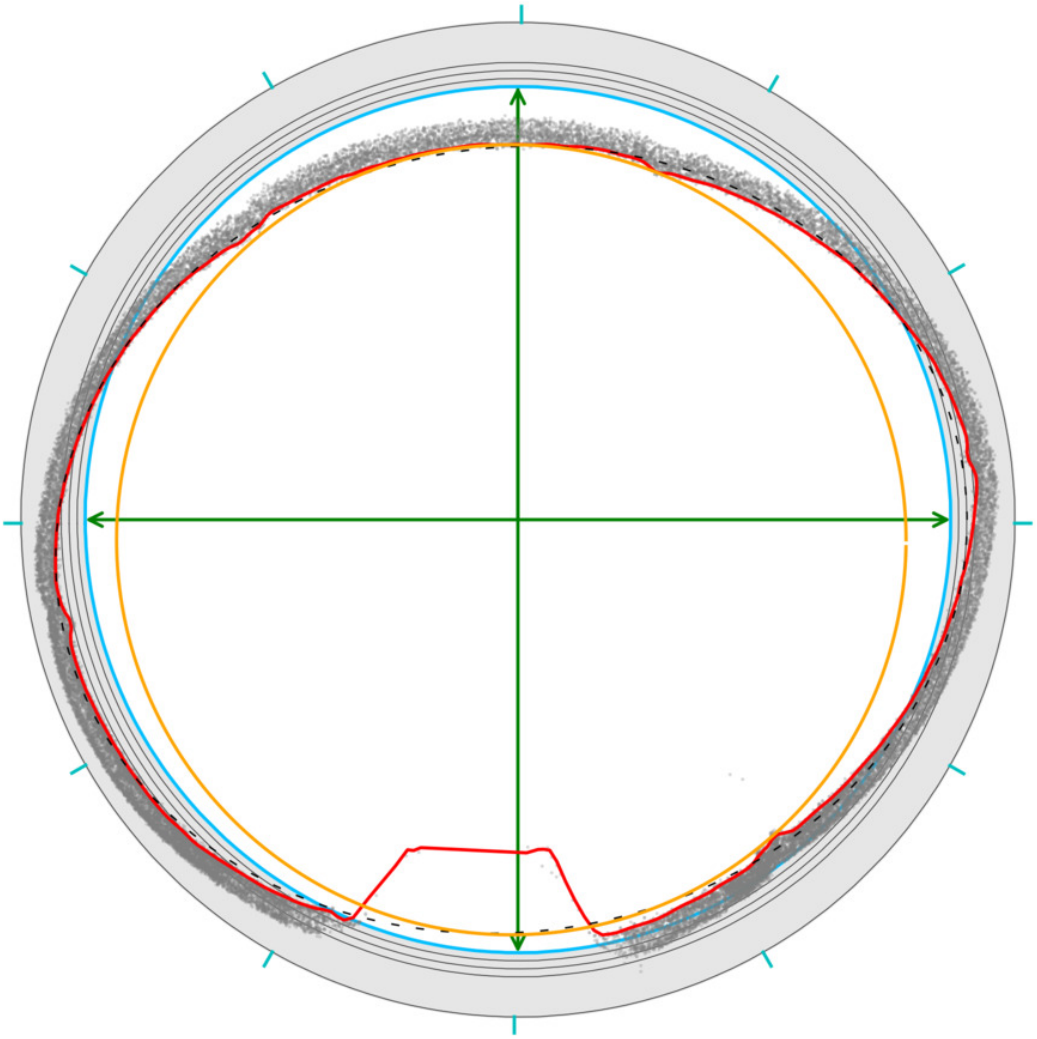
```
Footage   :  498 ft
Width     :  114.8" | 108.0"
Height    :  100.5" | 108.0"

Area      :  8681 sq in
Perimeter :  335.0 in
Ovality   :  7.6%

Interior Diameter : 98.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 499.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



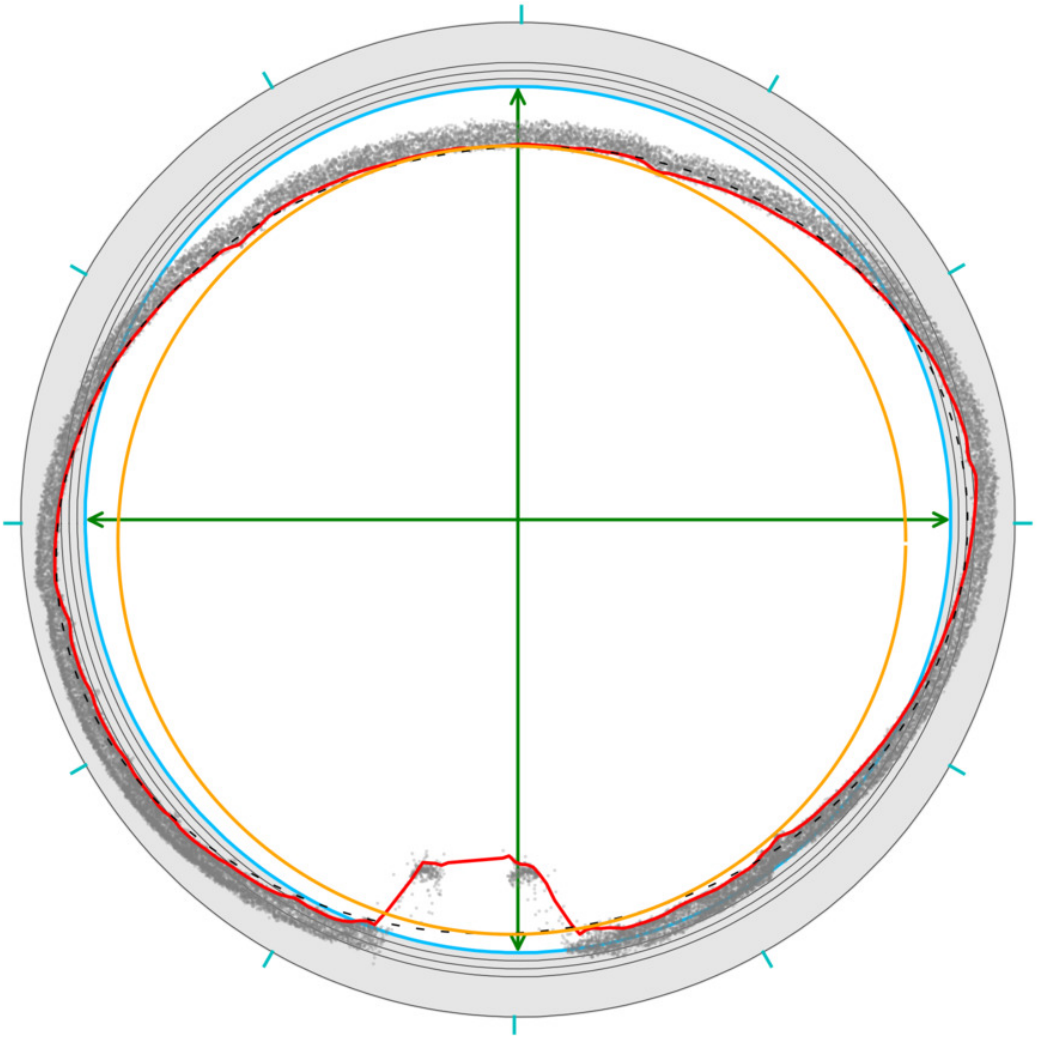
```
Footage    :  499 ft
Width      :  115.0" | 108.0"
Height     :  100.8" | 108.0"

Area       :  8533 sq in
Perimeter  :  345.8 in
Ovality    :  7.6%

Interior Diameter : 98.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 500.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 500 ft
Width : 115.0" | 108.0"
Height : 100.8" | 108.0"

Area : 8600 sq in
Perimeter : 344.2 in
Ovality : 7.6%

Interior Diameter : 98.3"

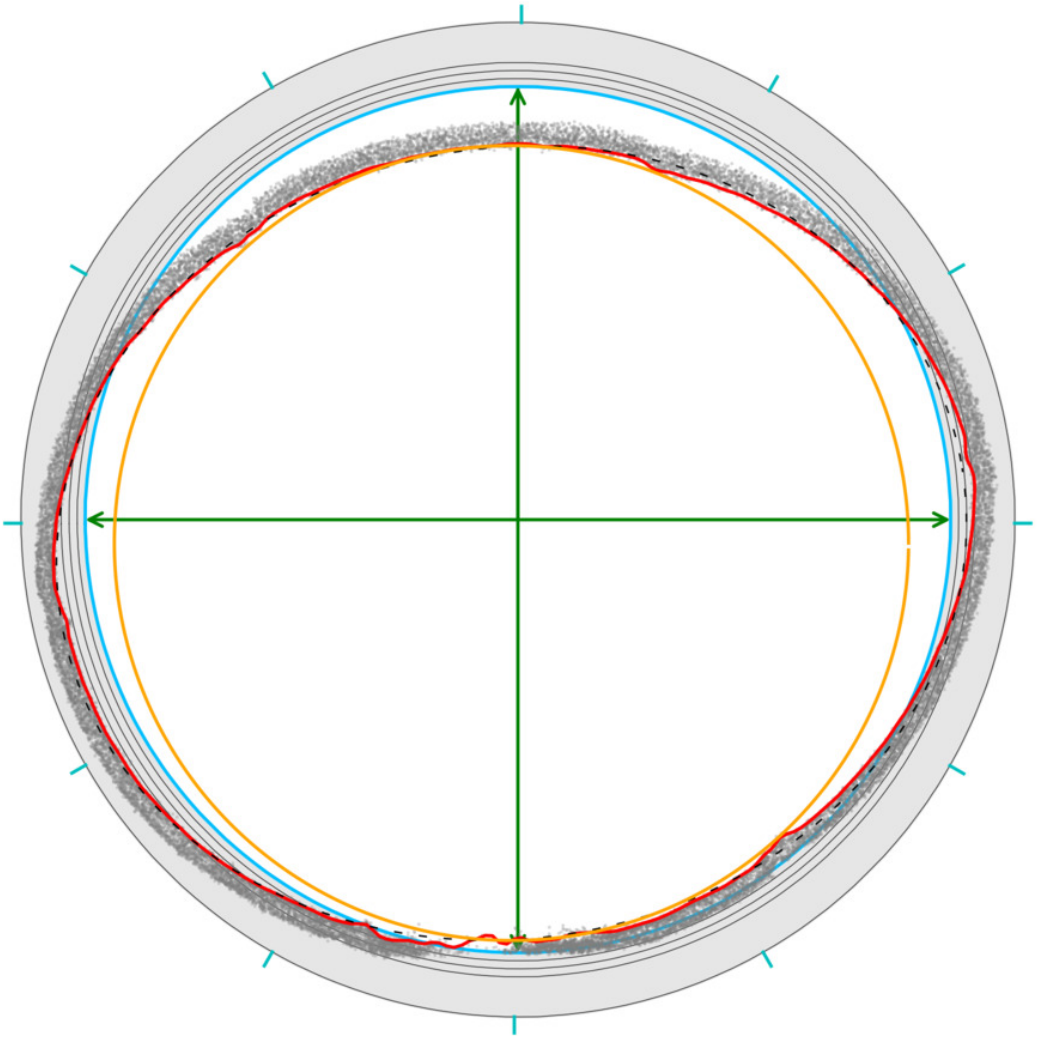
Profile Offsets : 1.0"

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 501.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



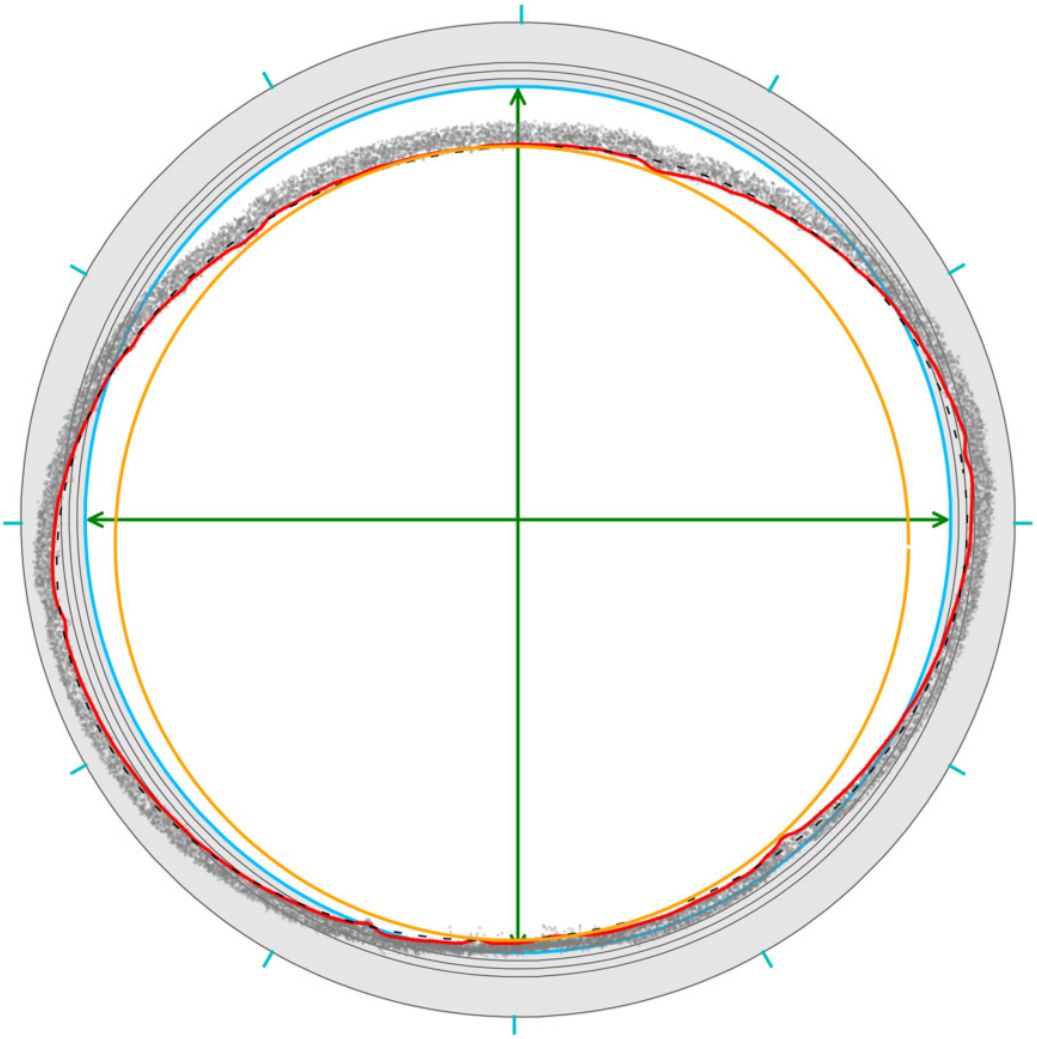
```
Footage   :  501 ft
Width     :  115.0" | 108.0"
Height    :  100.9" | 108.0"

Area      :  8819 sq in
Perimeter :  337.0 in
Ovality   :  7.1%

Interior Diameter : 99.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 502.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



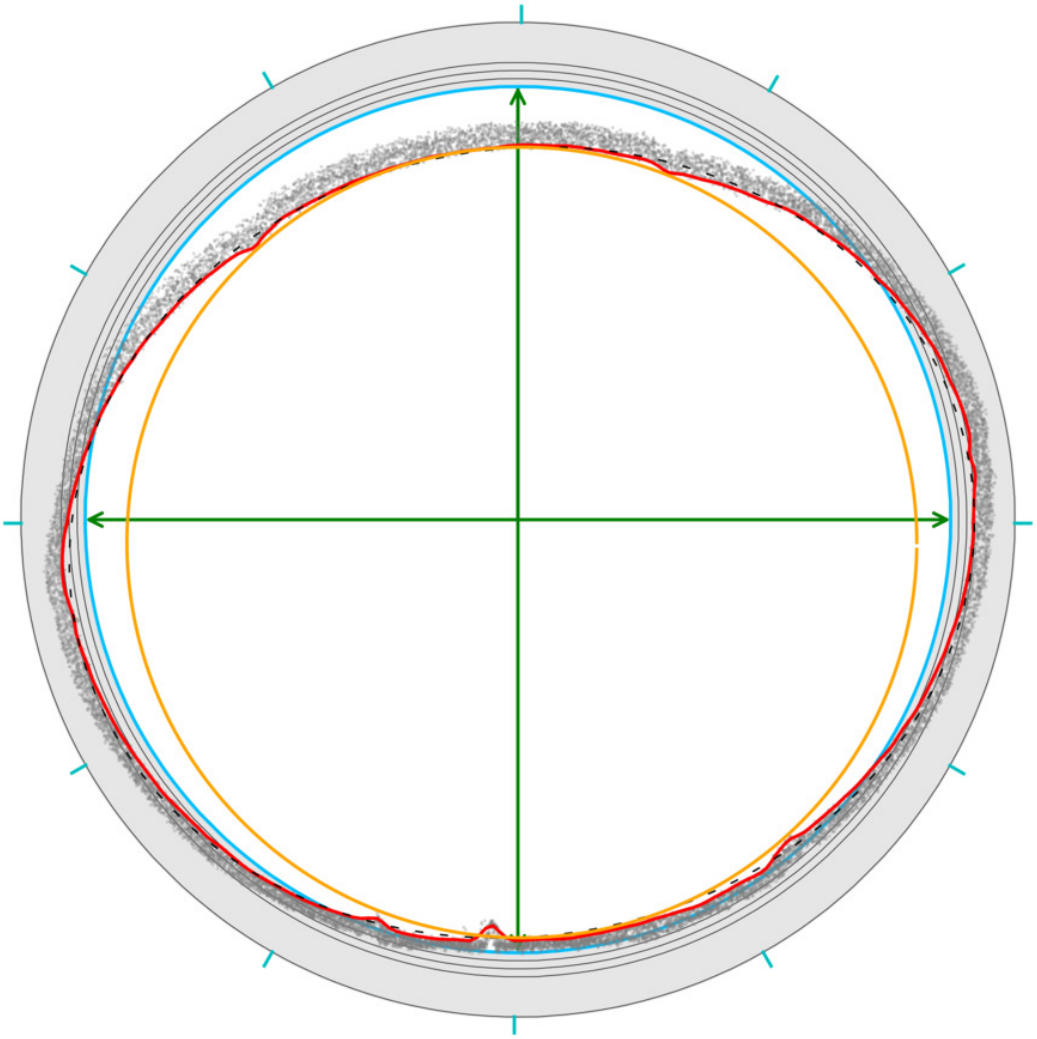
```
Footage    :  502 ft
Width      :  114.8" | 108.0"
Height     :  100.8" | 108.0"

Area       :  8820 sq in
Perimeter  :  336.1 in
Ovality    :  7.2%

Interior Diameter : 99.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 503.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



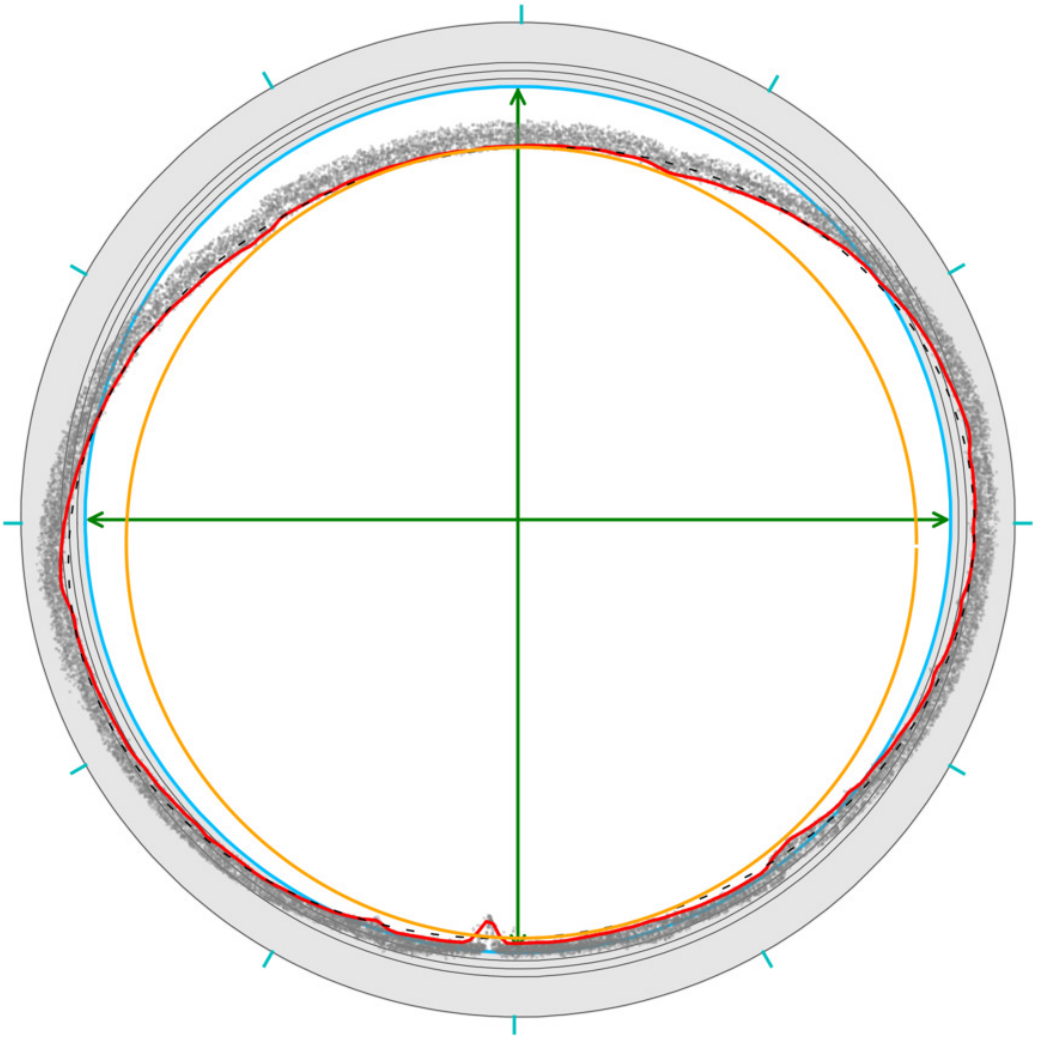
```
Footage   :  503 ft
Width     :  113.9" | 108.0"
Height    :  100.7" | 108.0"

Area      :  8731 sq in
Perimeter :  335.5 in
Ovality   :  7.1%

Interior Diameter : 98.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 504.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



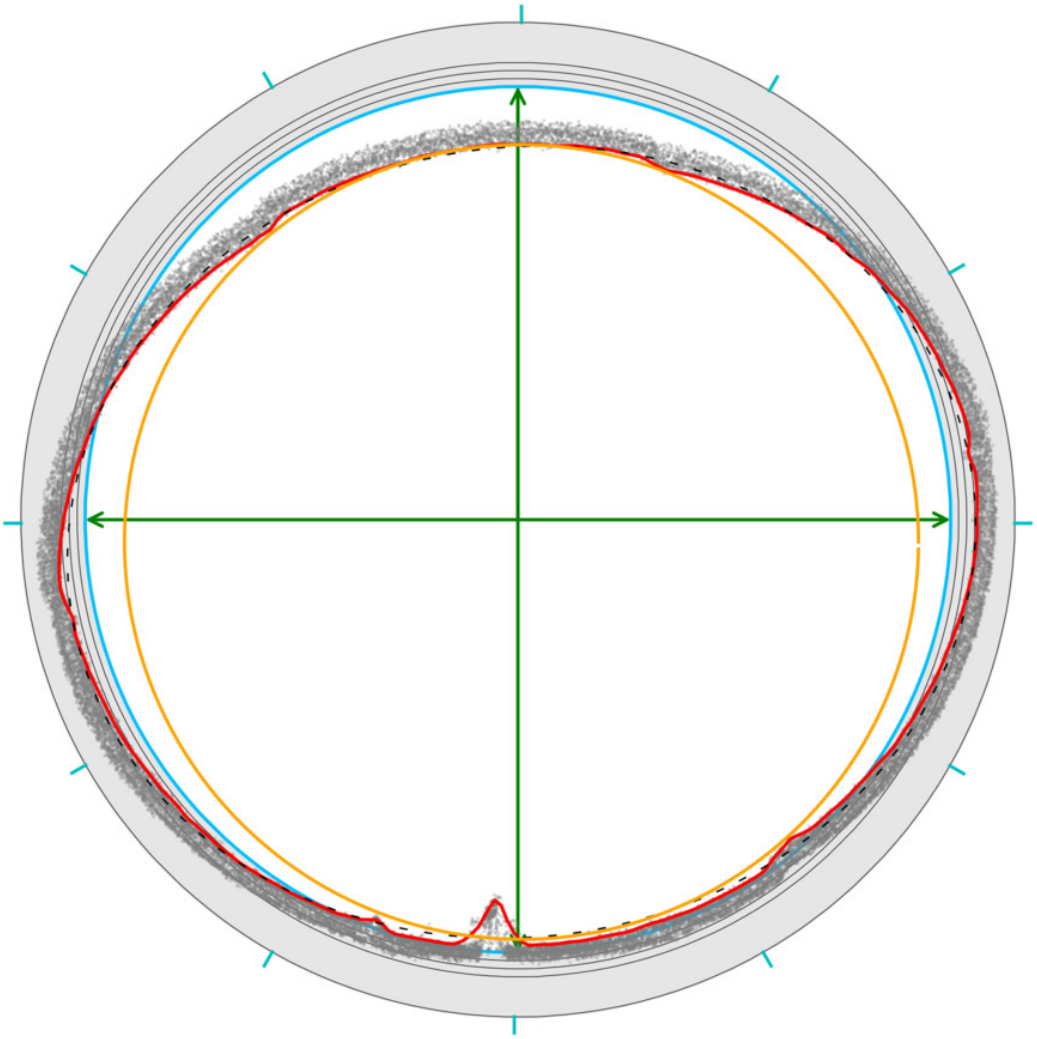
```
Footage   :  504 ft
Width     :  114.1" | 108.0"
Height    :  100.6" | 108.0"

Area      :  8748 sq in
Perimeter :  337.1 in
Ovality   :  7.0%

Interior Diameter : 98.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 505.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



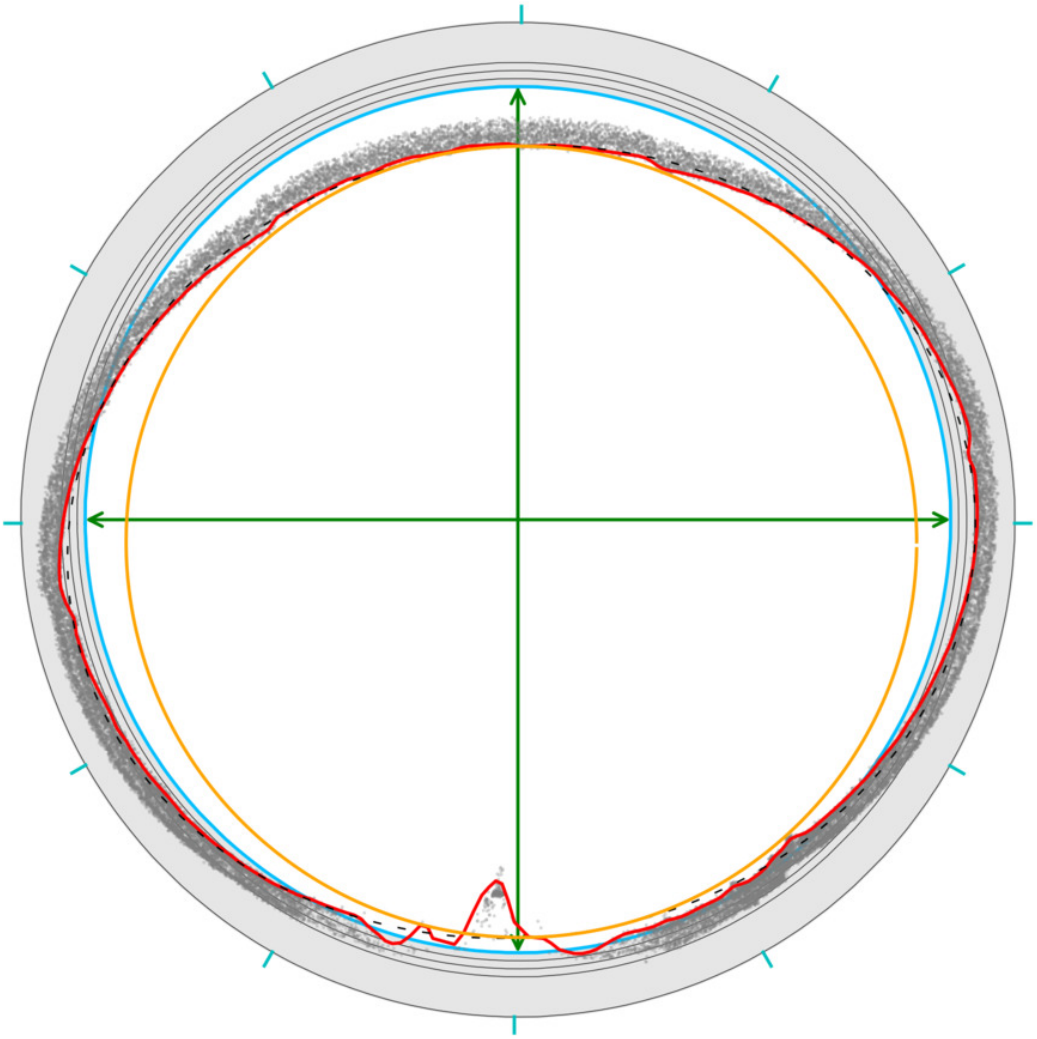
```
Footage   :  505 ft
Width     :  114.6" | 108.0"
Height    :  100.8" | 108.0"

Area      :  8779 sq in
Perimeter :  341.1 in
Ovality   :  7.1%

Interior Diameter : 99.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 506.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



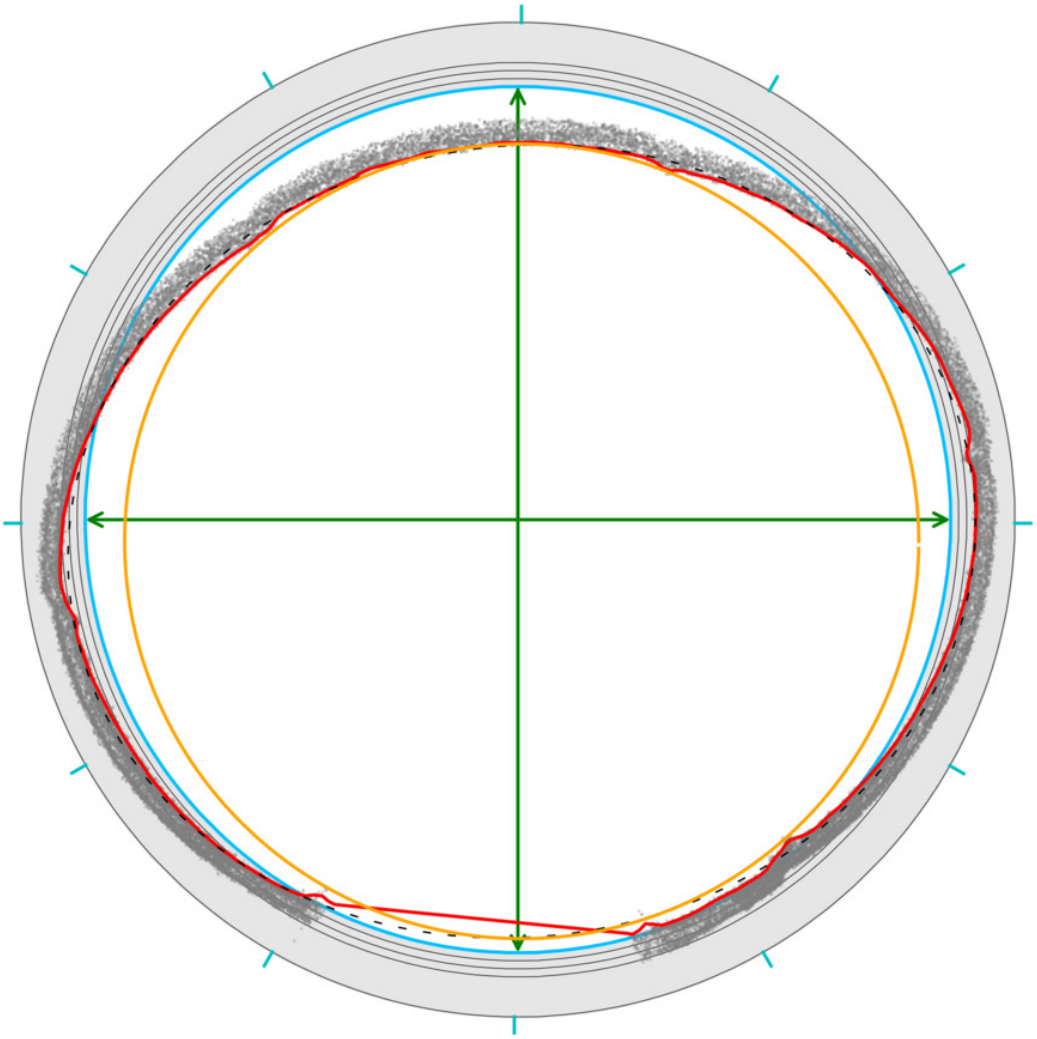
```
Footage   :  506 ft
Width     :  114.5" | 108.0"
Height    :  100.7" | 108.0"

Area      :  8774 sq in
Perimeter :  347.8 in
Ovality   :  7.0%

Interior Diameter : 98.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 507.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



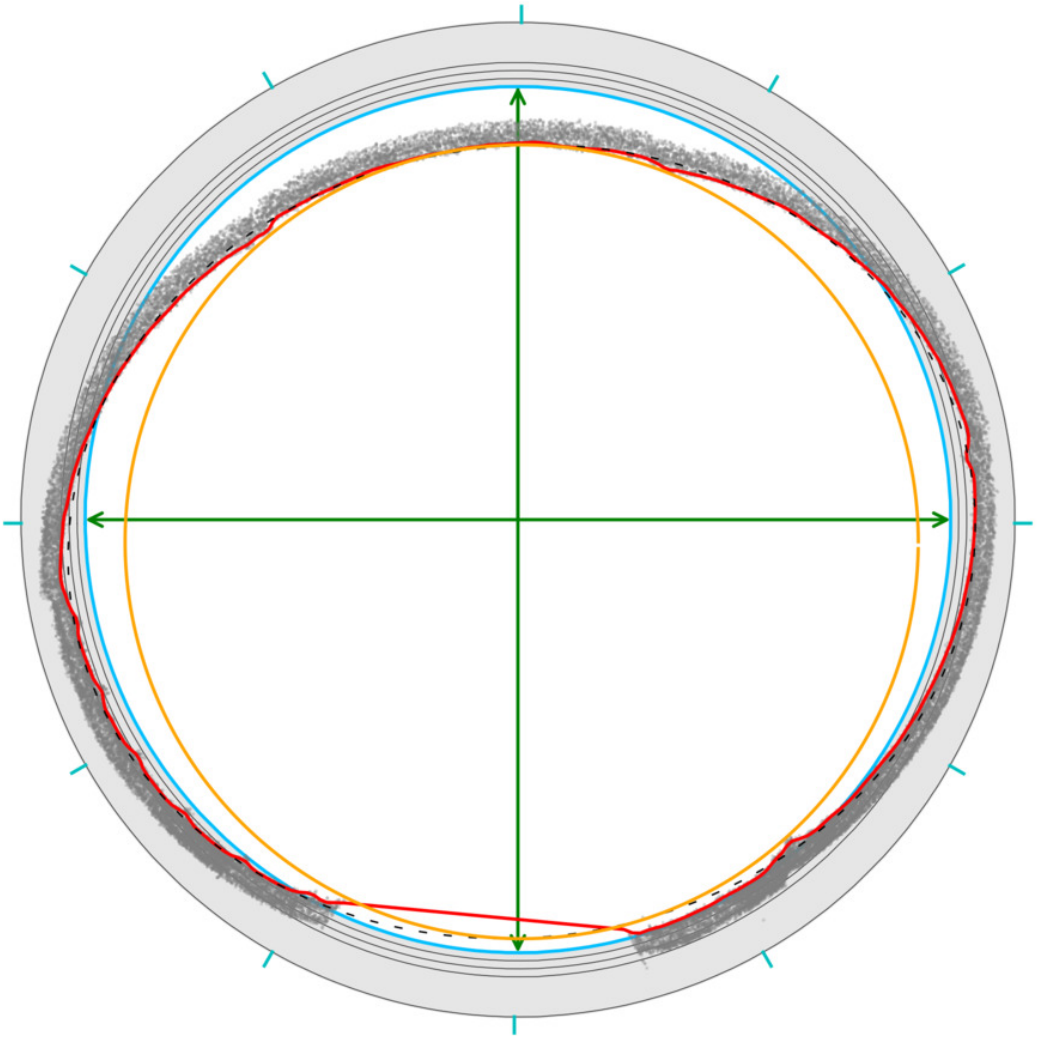
```
Footage   :  507 ft
Width     :  114.3" | 108.0"
Height    :  101.0" | 108.0"

Area      :  8728 sq in
Perimeter :  335.5 in
Ovality   :  6.9%

Interior Diameter : 99.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 508.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



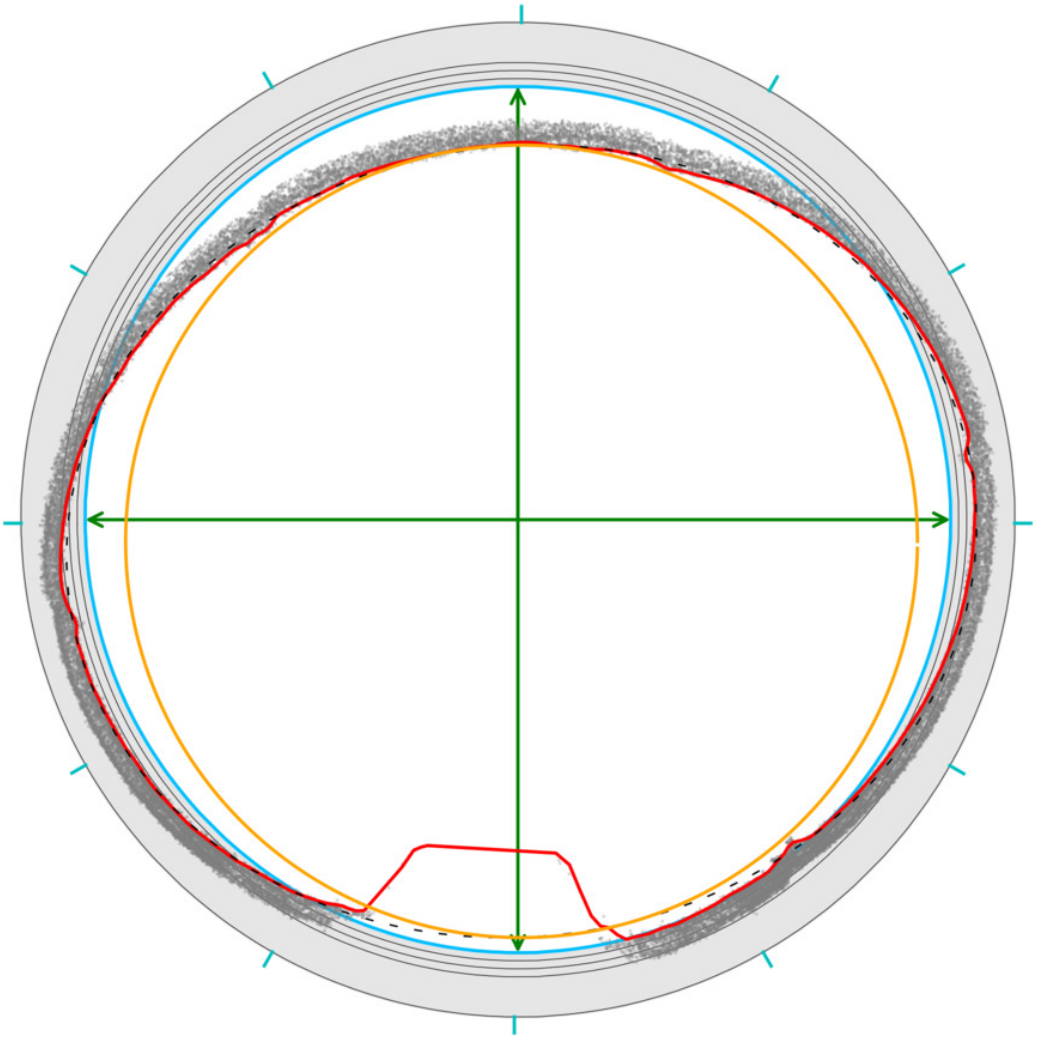
```
Footage   :  508 ft
Width     :  114.2" | 108.0"
Height    :  101.0" | 108.0"

Area      :  8714 sq in
Perimeter :  335.2 in
Ovality   :  6.9%

Interior Diameter : 99.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 509.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



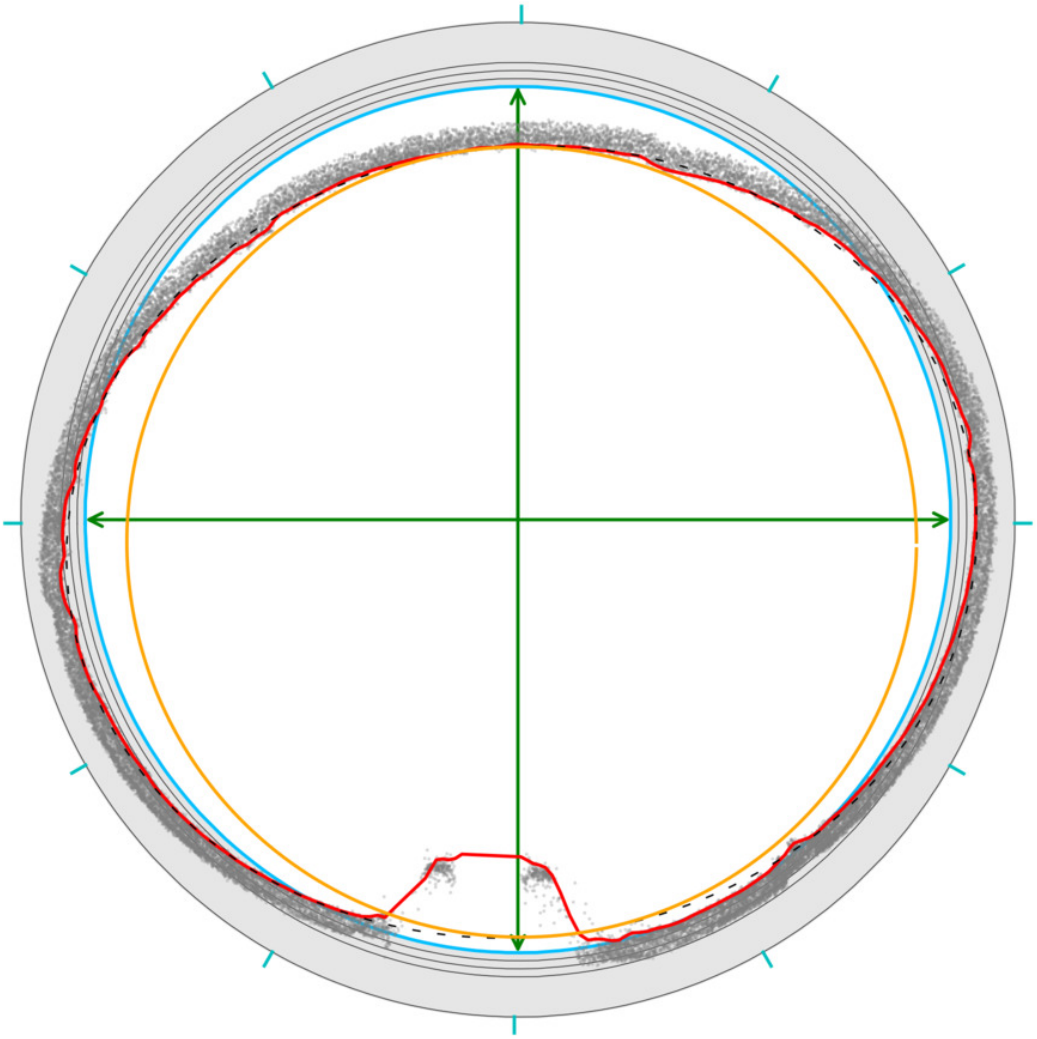
```
Footage   :  509 ft
Width     :  114.1" | 108.0"
Height    :  101.0" | 108.0"

Area      :  8562 sq in
Perimeter :  345.1 in
Ovality   :  7.1%

Interior Diameter : 98.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 510.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



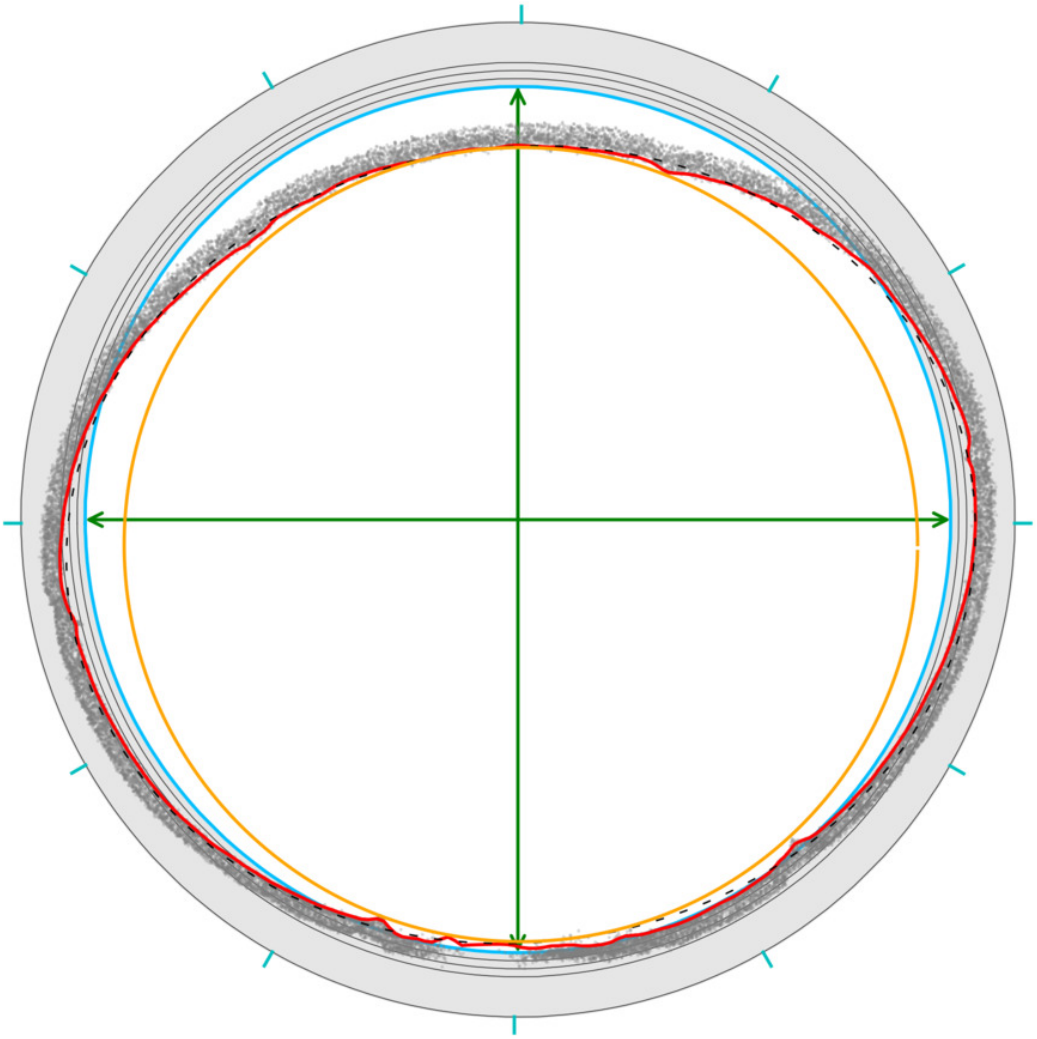
```
Footage   :  510 ft
Width     :  114.2" | 108.0"
Height    :  100.8" | 108.0"

Area      :  8634 sq in
Perimeter :  345.1 in
Ovality   :  7.1%

Interior Diameter : 98.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 511.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



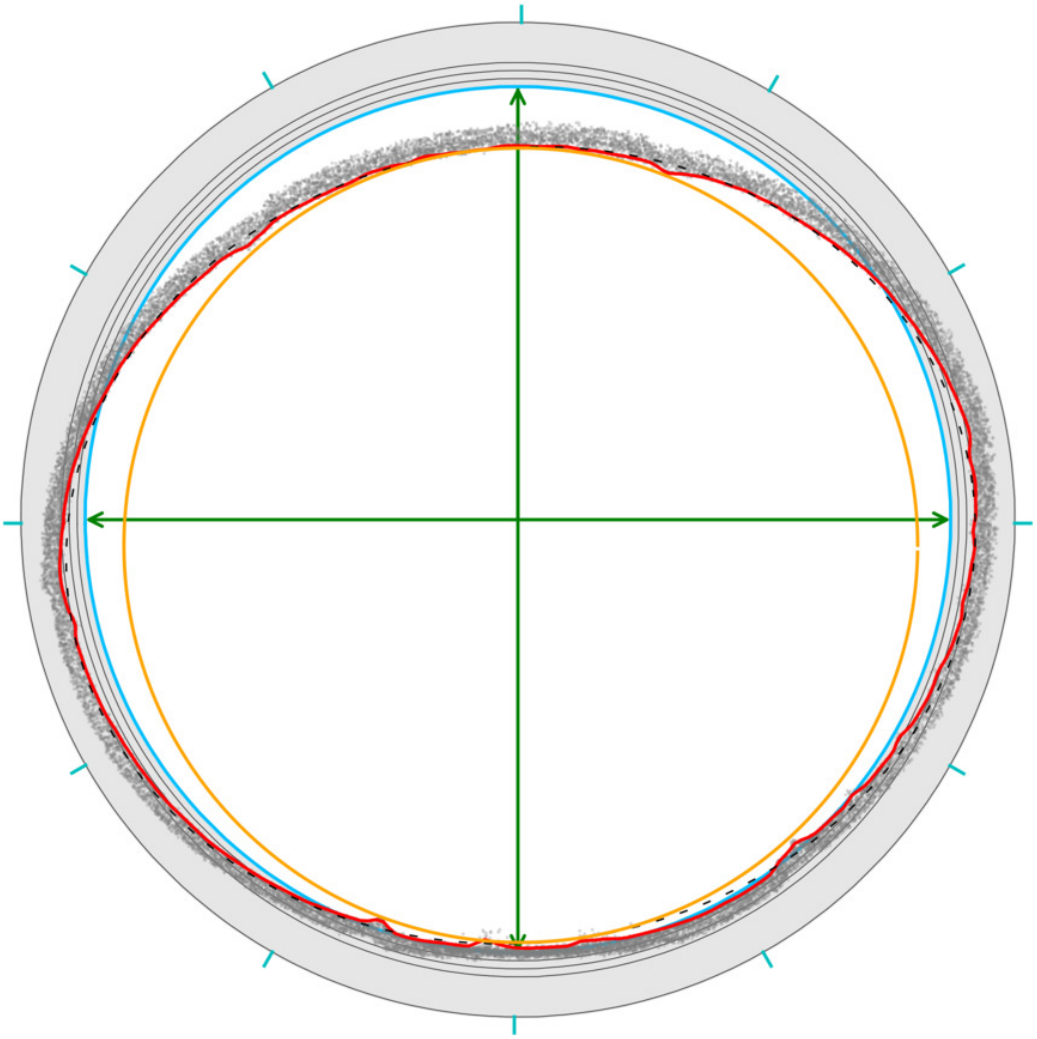
```
Footage   :  511 ft
Width     :  114.3" | 108.0"
Height    :  100.7" | 108.0"

Area      :  8852 sq in
Perimeter :  337.1 in
Ovality   :  6.7%

Interior Diameter : 99.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 512.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



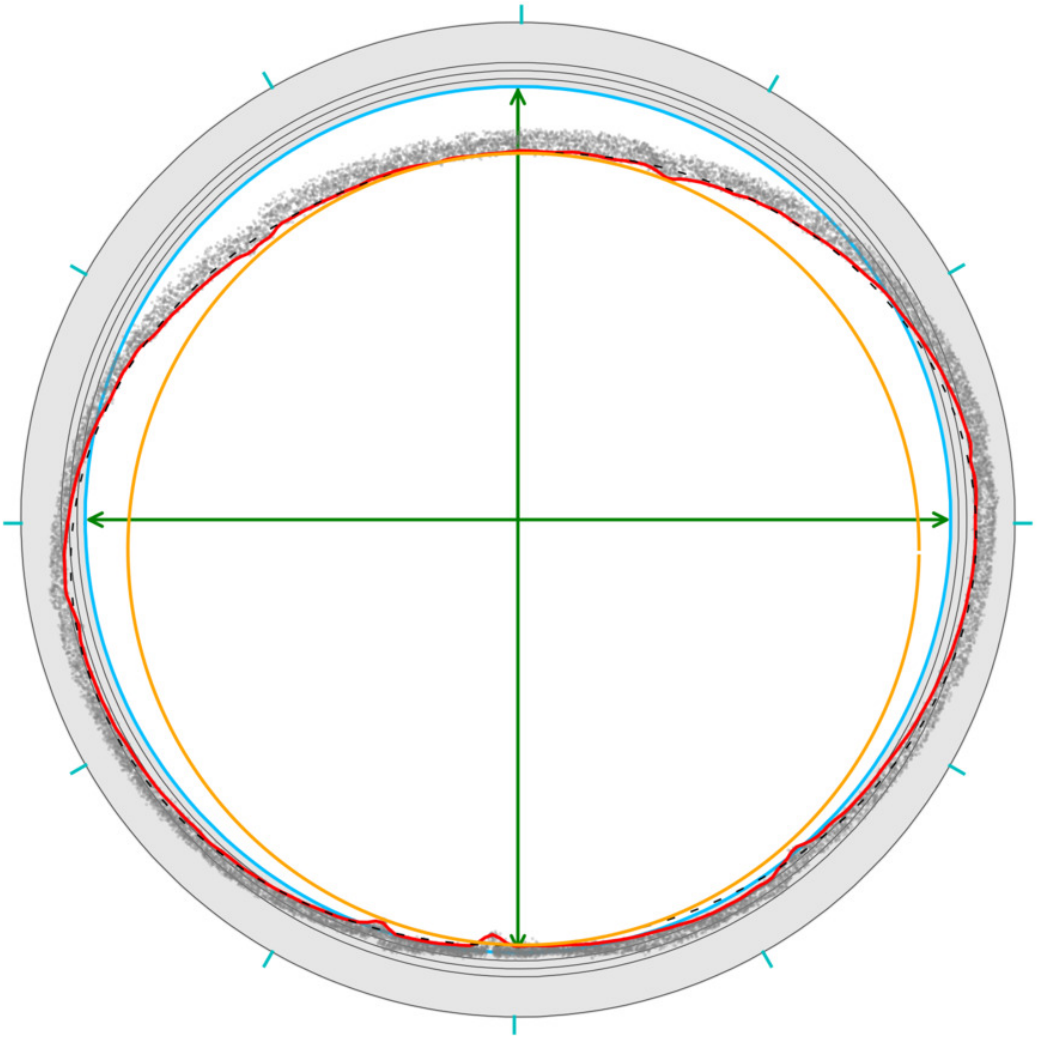
```
Footage   :  512 ft
Width     :  114.3" | 108.0"
Height    :  100.6" | 108.0"

Area      :  8848 sq in
Perimeter :  337.1 in
Ovality   :  6.7%

Interior Diameter : 99.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 513.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



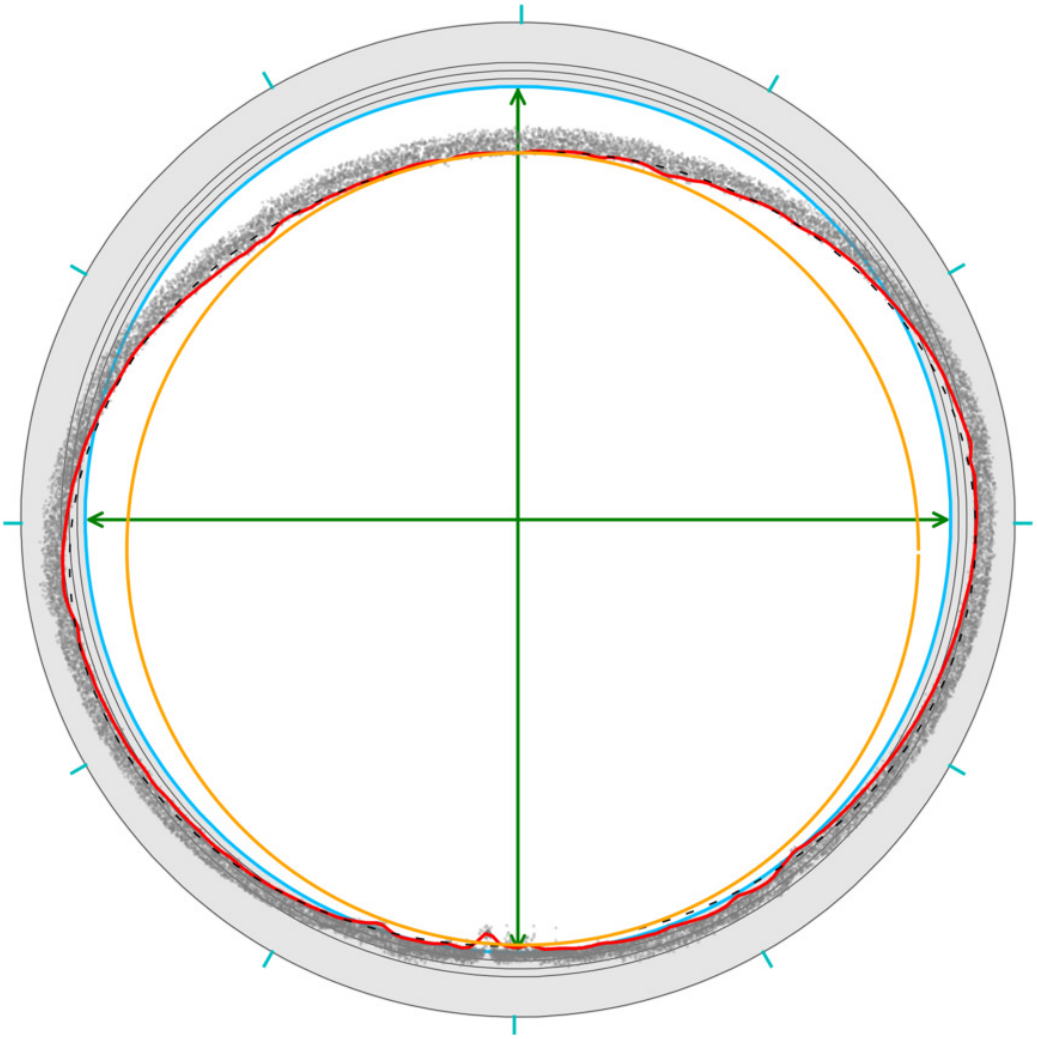
```
Footage    :  513 ft
Width      :  113.8" | 108.0"
Height     :  99.9" | 108.0"

Area       :  8763 sq in
Perimeter  :  335.8 in
Ovality    :  6.8%

Interior Diameter : 98.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 514.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 514 ft
Width : 114.1" | 108.0"
Height : 99.8" | 108.0"

Area : 8784 sq in
Perimeter : 336.6 in
Ovality : 6.7%

Interior Diameter : 98.8"

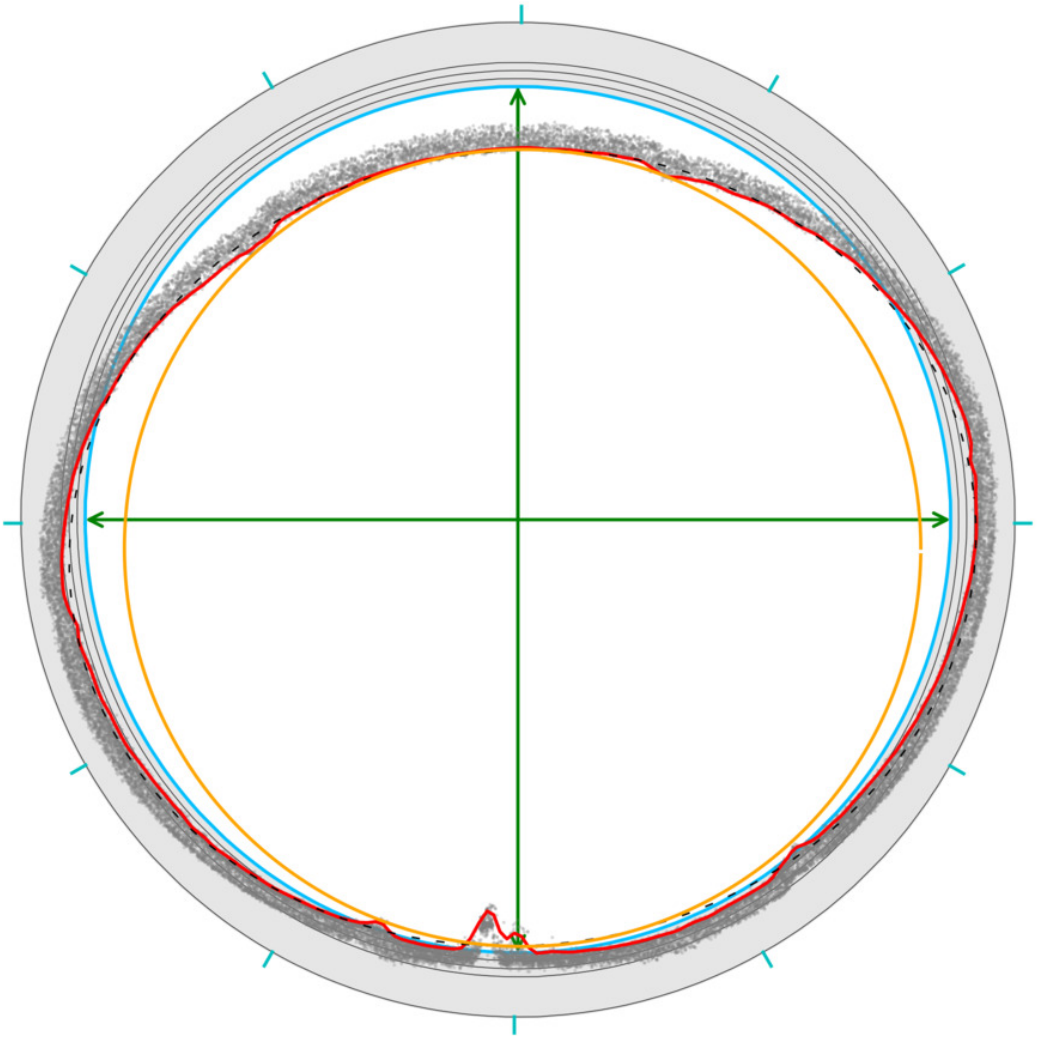
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 515.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



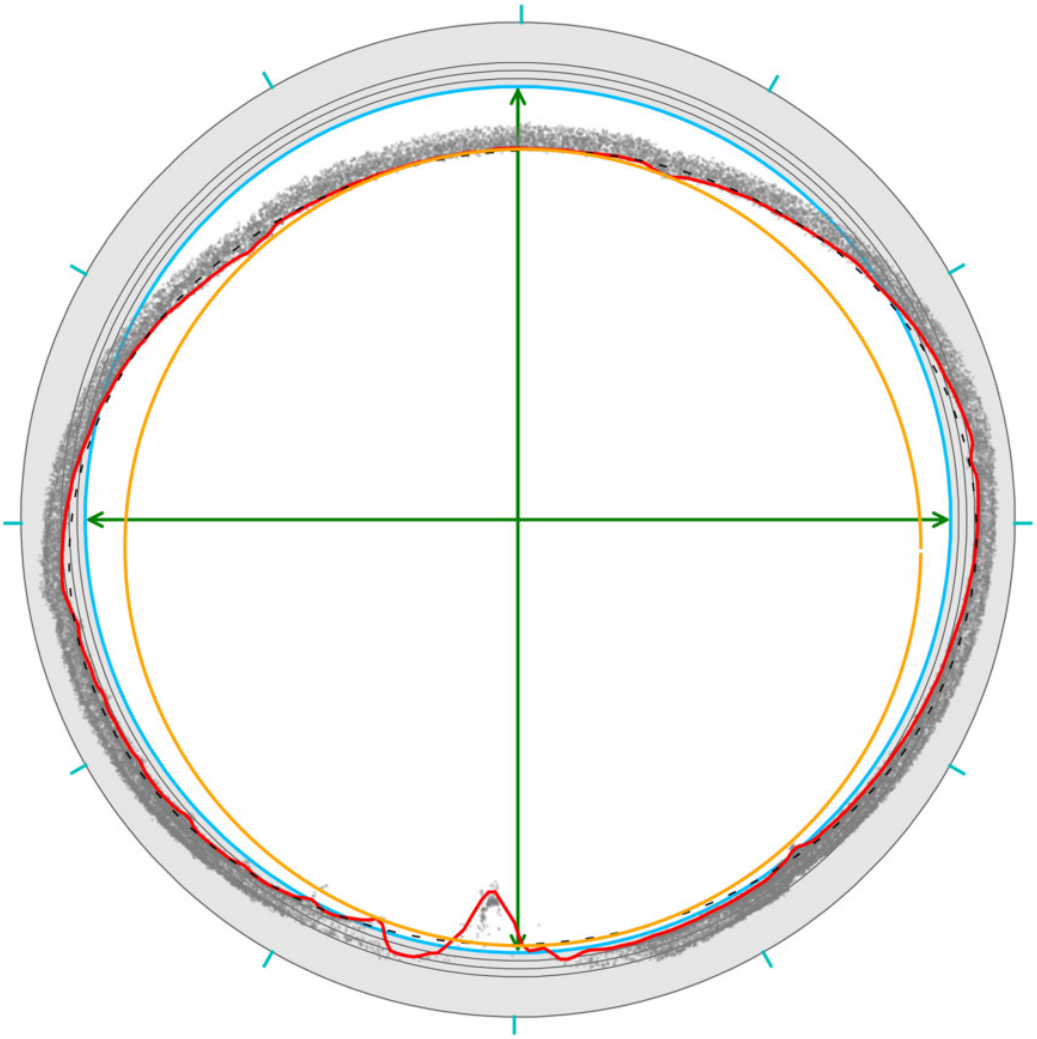
```
Footage   :  515 ft
Width     :  114.1" | 108.0"
Height    :  100.4" | 108.0"

Area      :  8813 sq in
Perimeter :  342.1 in
Ovality   :  6.6%

Interior Diameter : 99.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 516.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



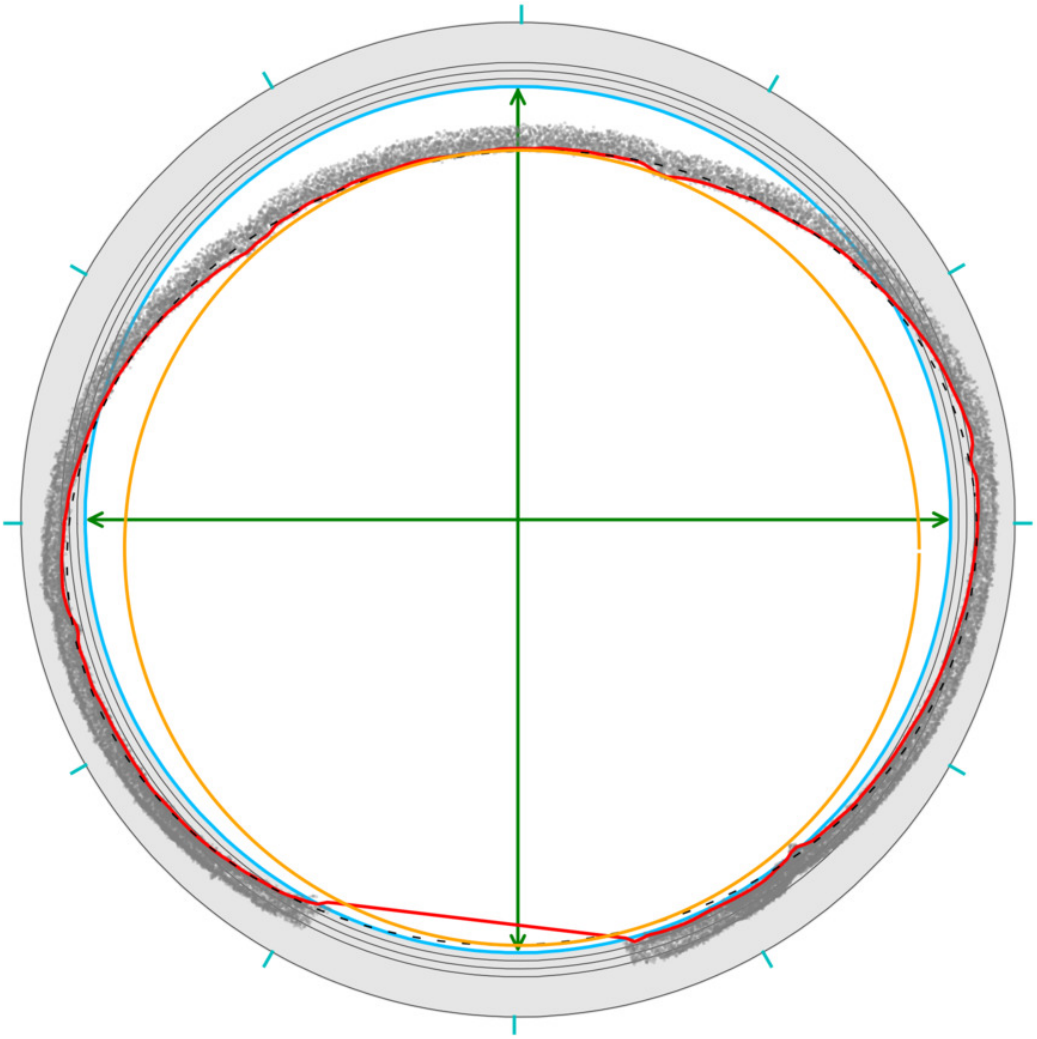
```
Footage   :  516 ft
Width     :  114.3" | 108.0"
Height    :  100.3" | 108.0"

Area      :  8797 sq in
Perimeter :  347.3 in
Ovality   :  6.8%

Interior Diameter : 99.3"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 517.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



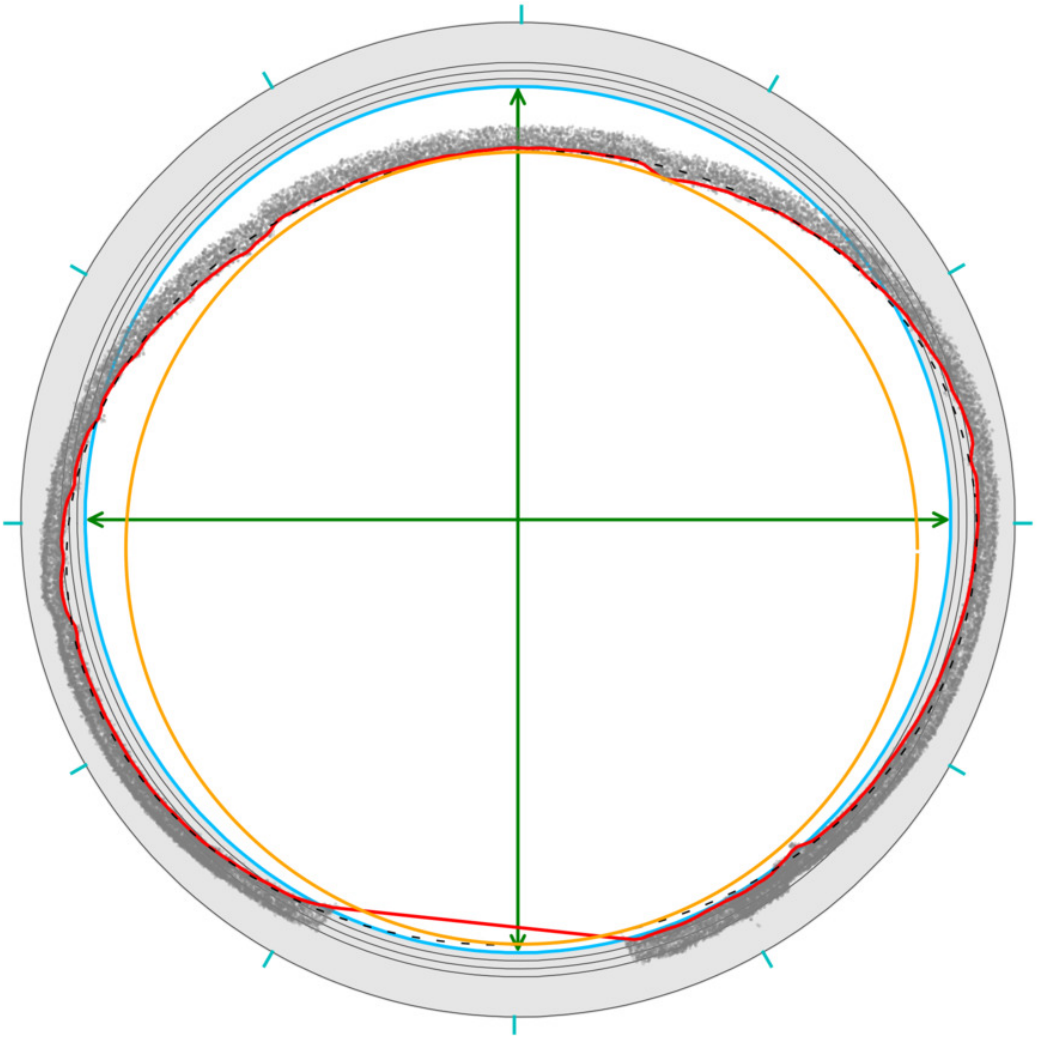
```
Footage   :  517 ft
Width     :  114.4" | 108.0"
Height    :  100.3" | 108.0"

Area      :  8744 sq in
Perimeter :  335.5 in
Ovality   :  6.9%

Interior Diameter : 99.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 518.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



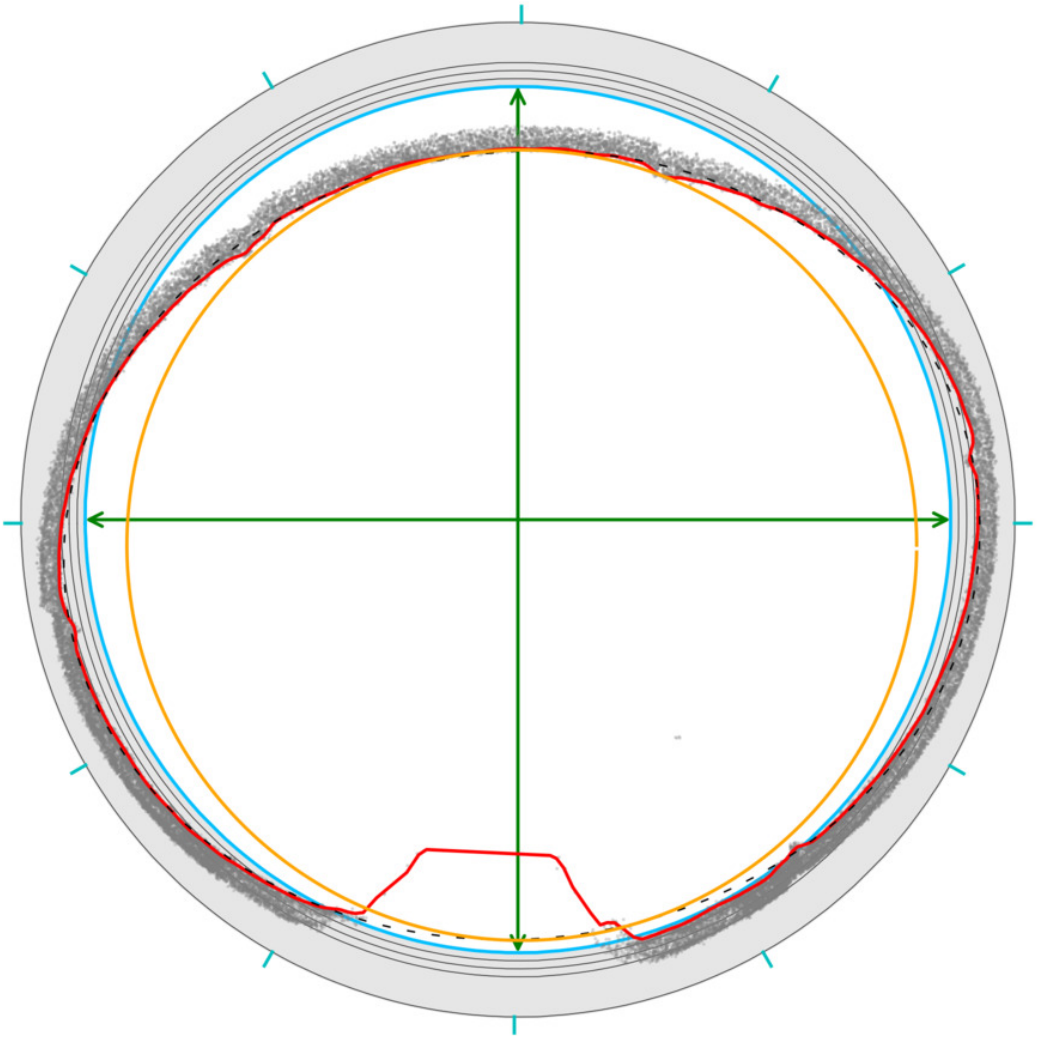
```
Footage   :  518 ft
Width     :  114.4" | 108.0"
Height    :  100.3" | 108.0"

Area      :  8753 sq in
Perimeter :  335.7 in
Ovality   :  7.0%

Interior Diameter : 98.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 519.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



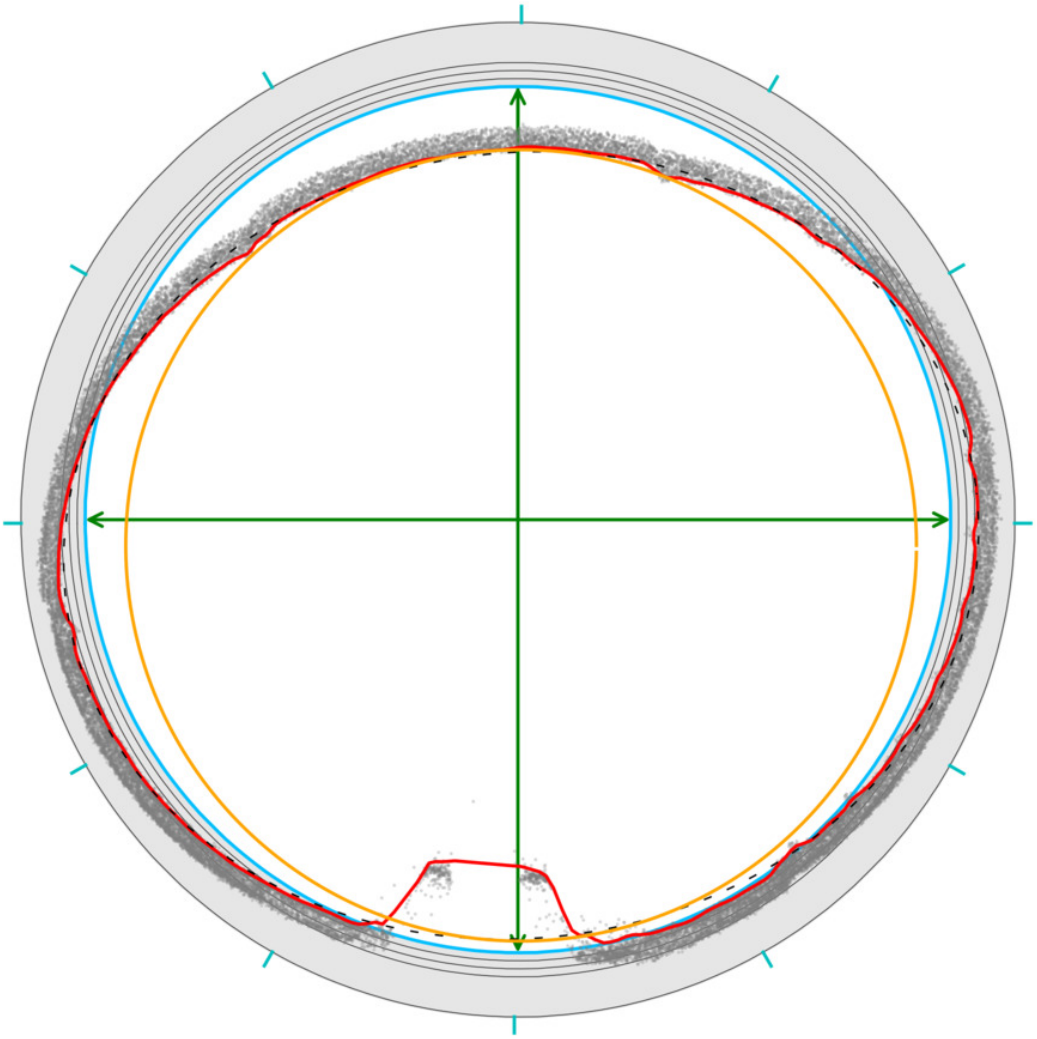
```
Footage   :  519 ft
Width     :  114.7" | 108.0"
Height    :  100.3" | 108.0"

Area      :  8591 sq in
Perimeter :  345.0 in
Ovality   :  7.6%

Interior Diameter : 98.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 520.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



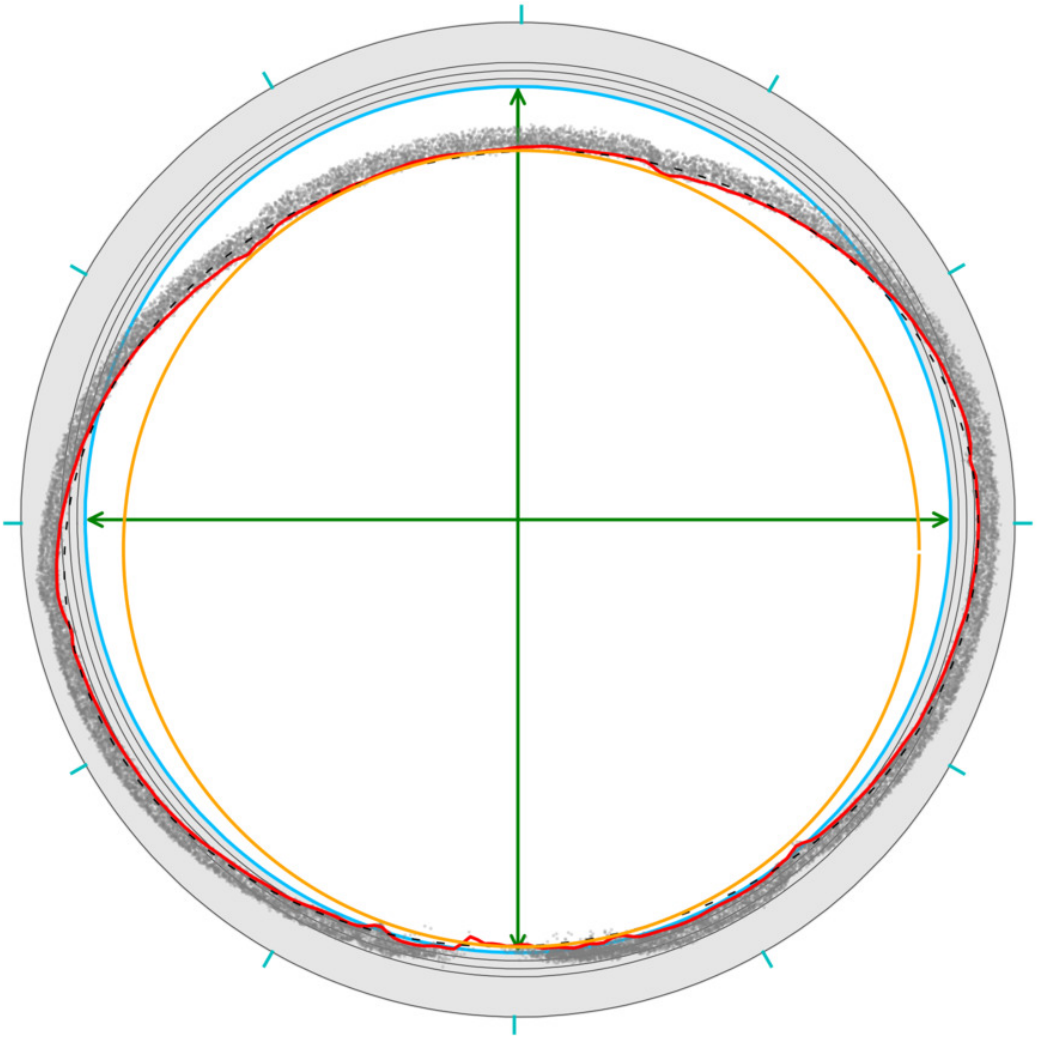
```
Footage    :  520 ft
Width      :  114.7" | 108.0"
Height     :  100.4" | 108.0"

Area       :  8653 sq in
Perimeter  :  345.3 in
Ovality    :  7.6%

Interior Diameter : 98.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 521.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



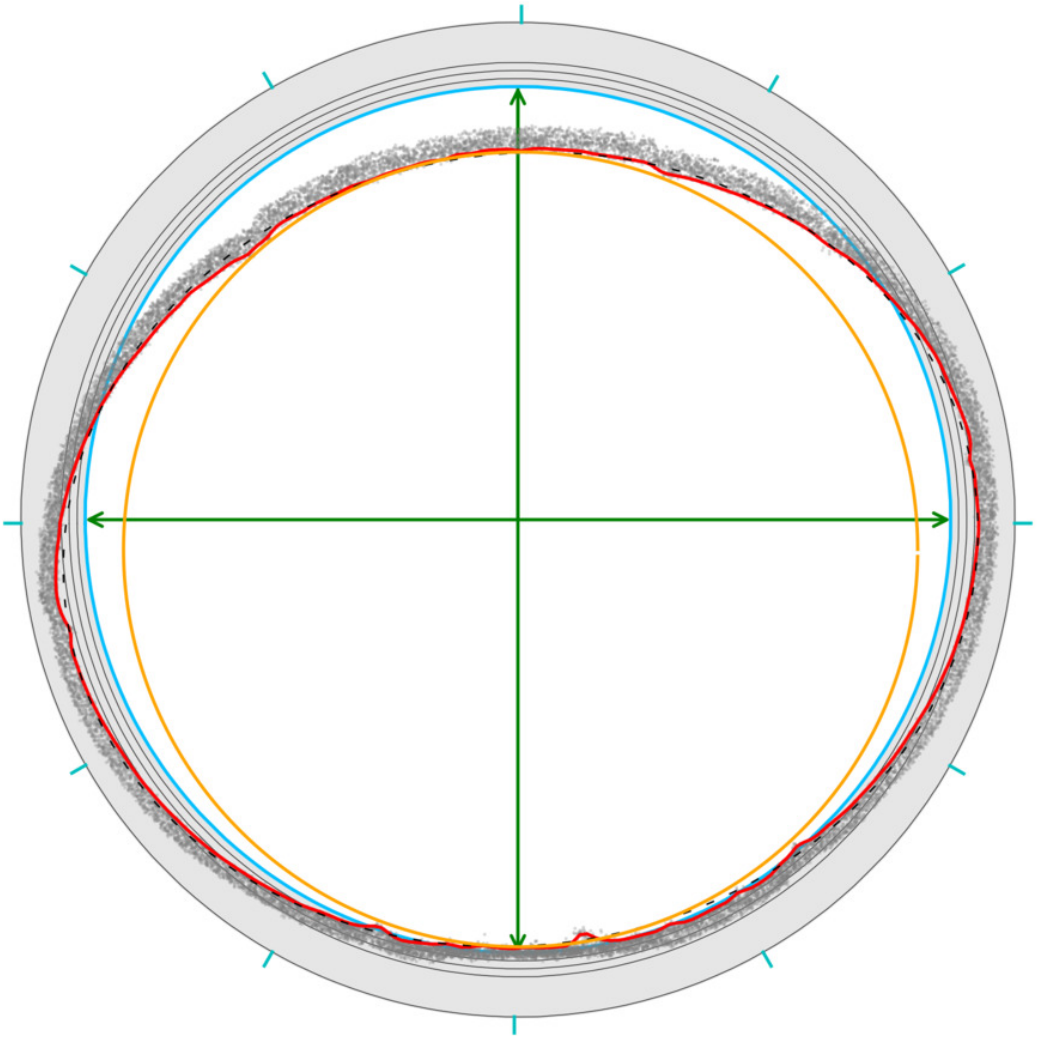
```
Footage   :  521 ft
Width     :  115.0" | 108.0"
Height    :  100.4" | 108.0"

Area      :  8874 sq in
Perimeter :  338.2 in
Ovality   :  7.2%

Interior Diameter : 99.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 522.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



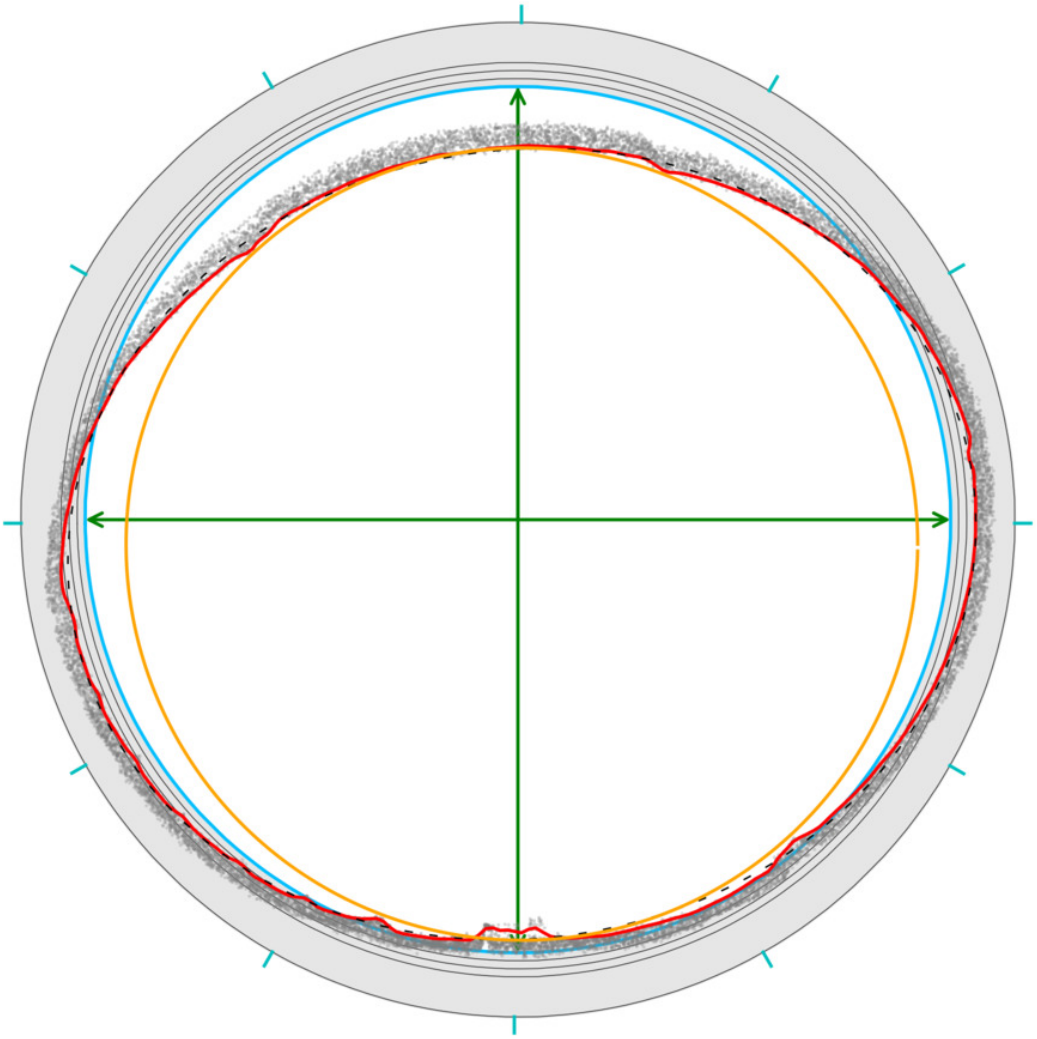
```
Footage   :  522 ft
Width     :  115.2" | 108.0"
Height    :  100.1" | 108.0"

Area      :  8861 sq in
Perimeter :  337.5 in
Ovality   :  7.3%

Interior Diameter : 99.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 523.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



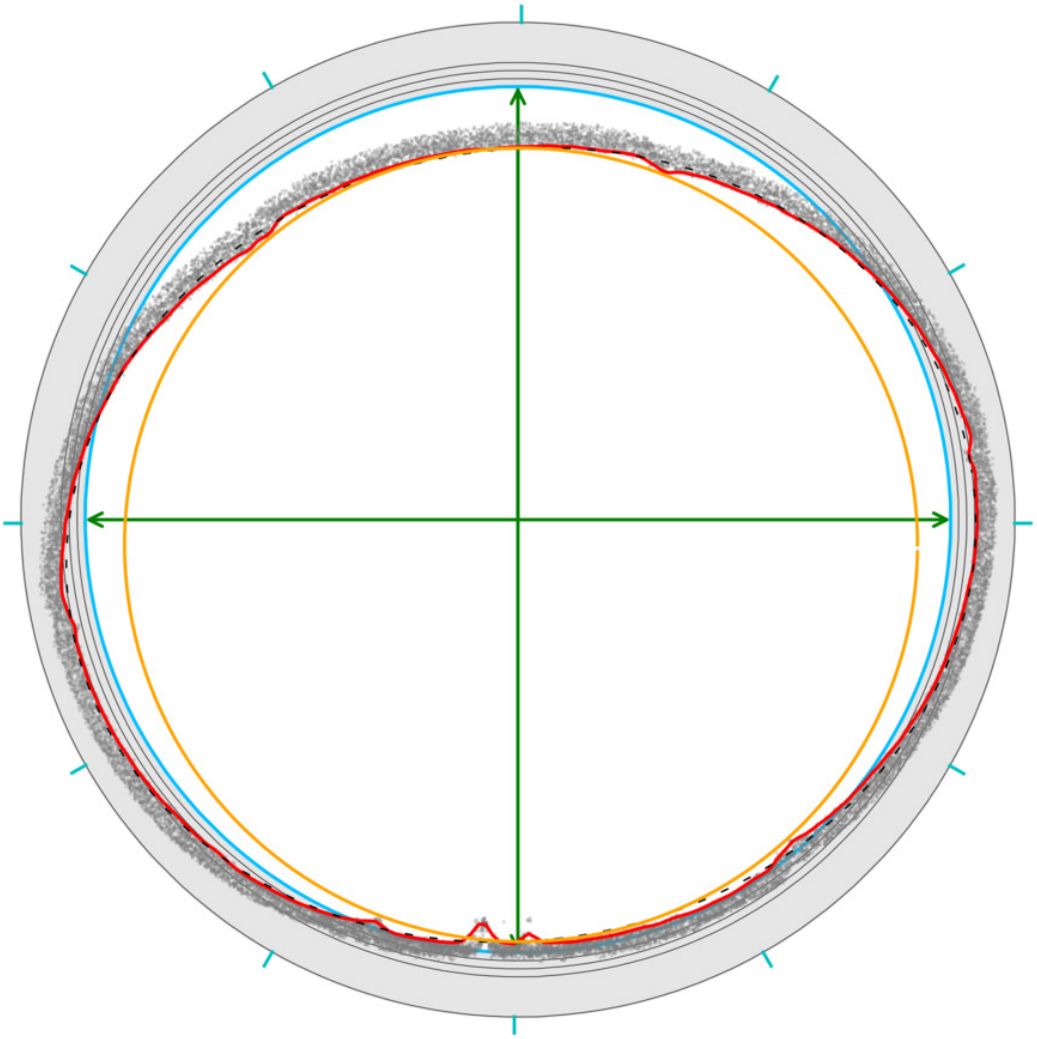
```
Footage   :  523 ft
Width     :  114.1" | 108.0"
Height    :  100.6" | 108.0"

Area      :  8765 sq in
Perimeter :  336.4 in
Ovality   :  7.2%

Interior Diameter : 98.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 524.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



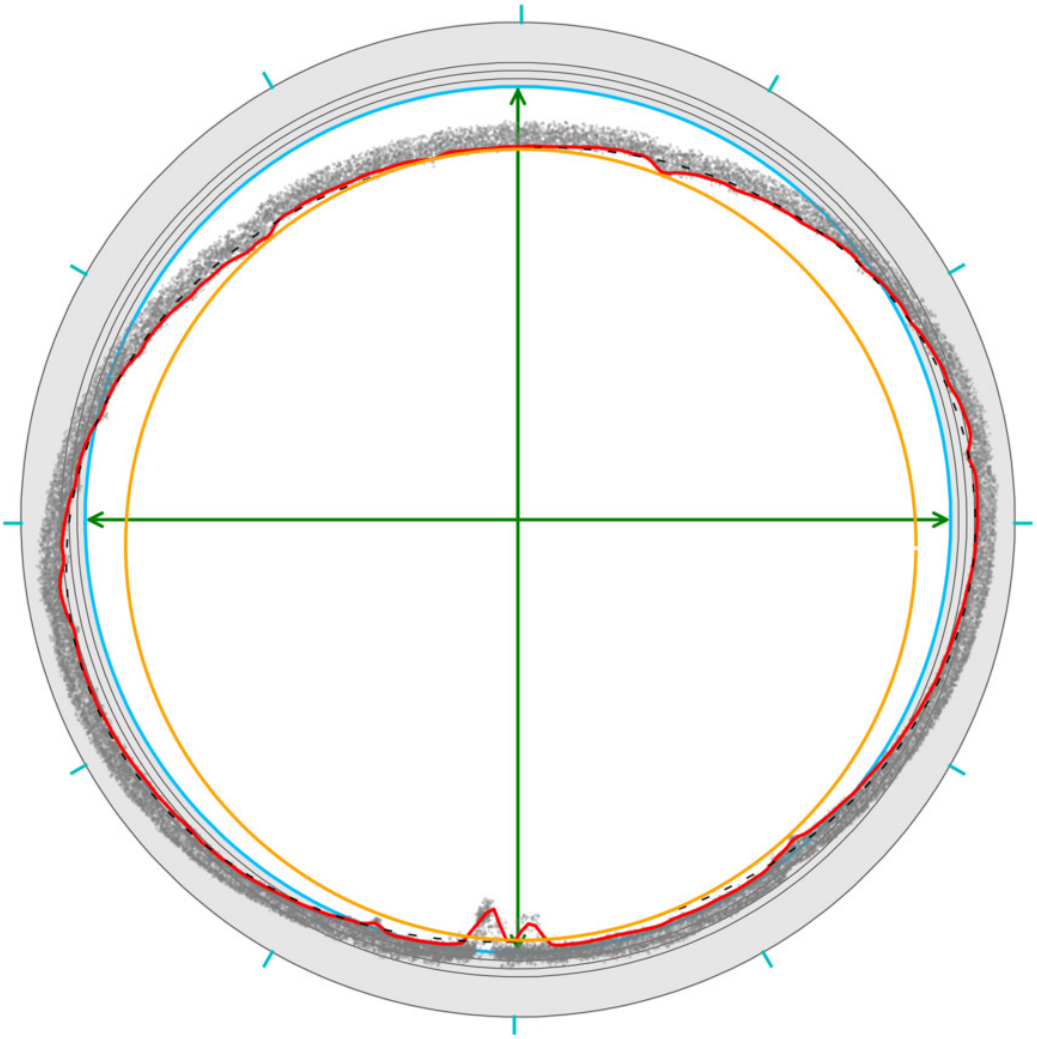
```
Footage   :  524 ft
Width     :  114.3" | 108.0"
Height    :  100.5" | 108.0"

Area      :  8813 sq in
Perimeter :  338.6 in
Ovality   :  7.1%

Interior Diameter : 99.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 525.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



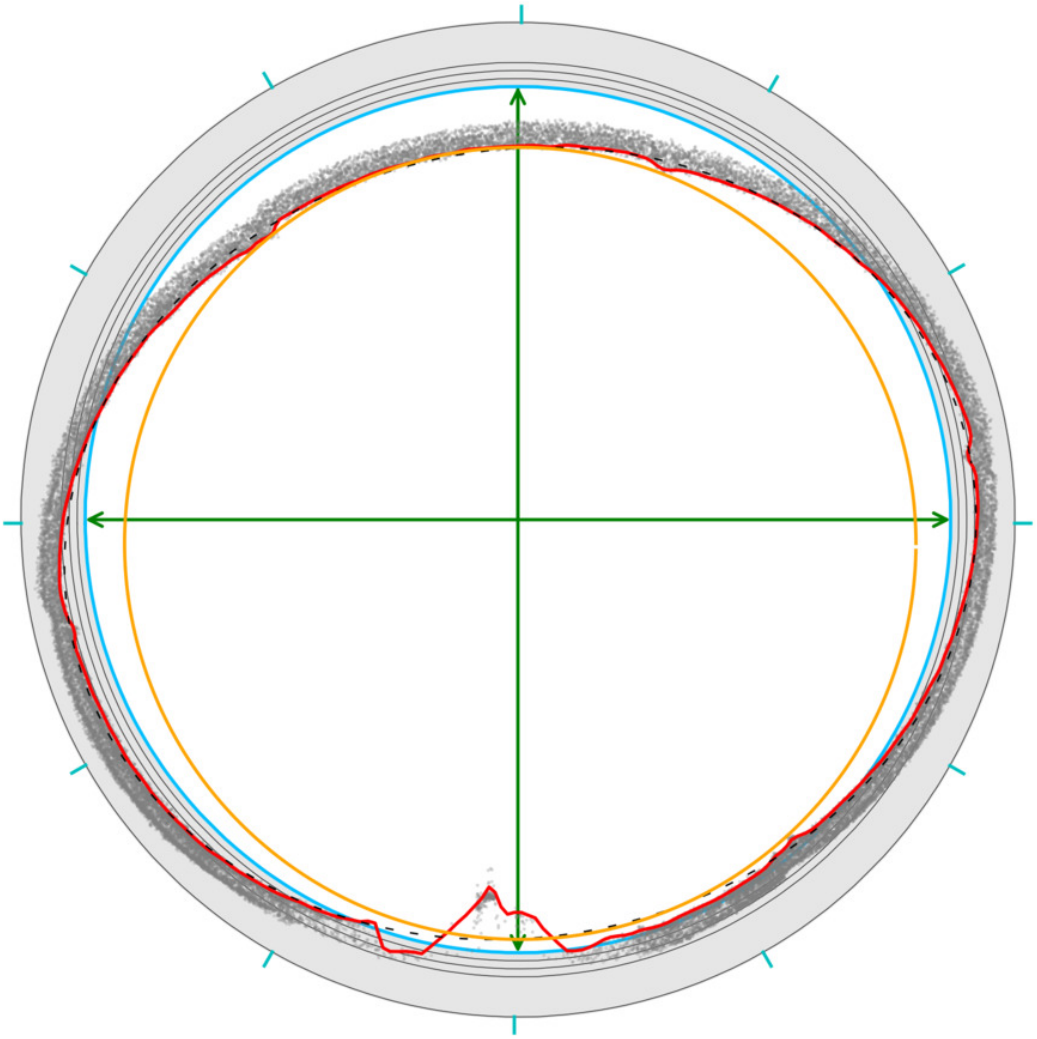
```
Footage    :  525 ft
Width      :  114.5" | 108.0"
Height     :  100.5" | 108.0"

Area       :  8805 sq in
Perimeter  :  343.6 in
Ovality    :  7.1%

Interior Diameter : 98.6"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 526.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



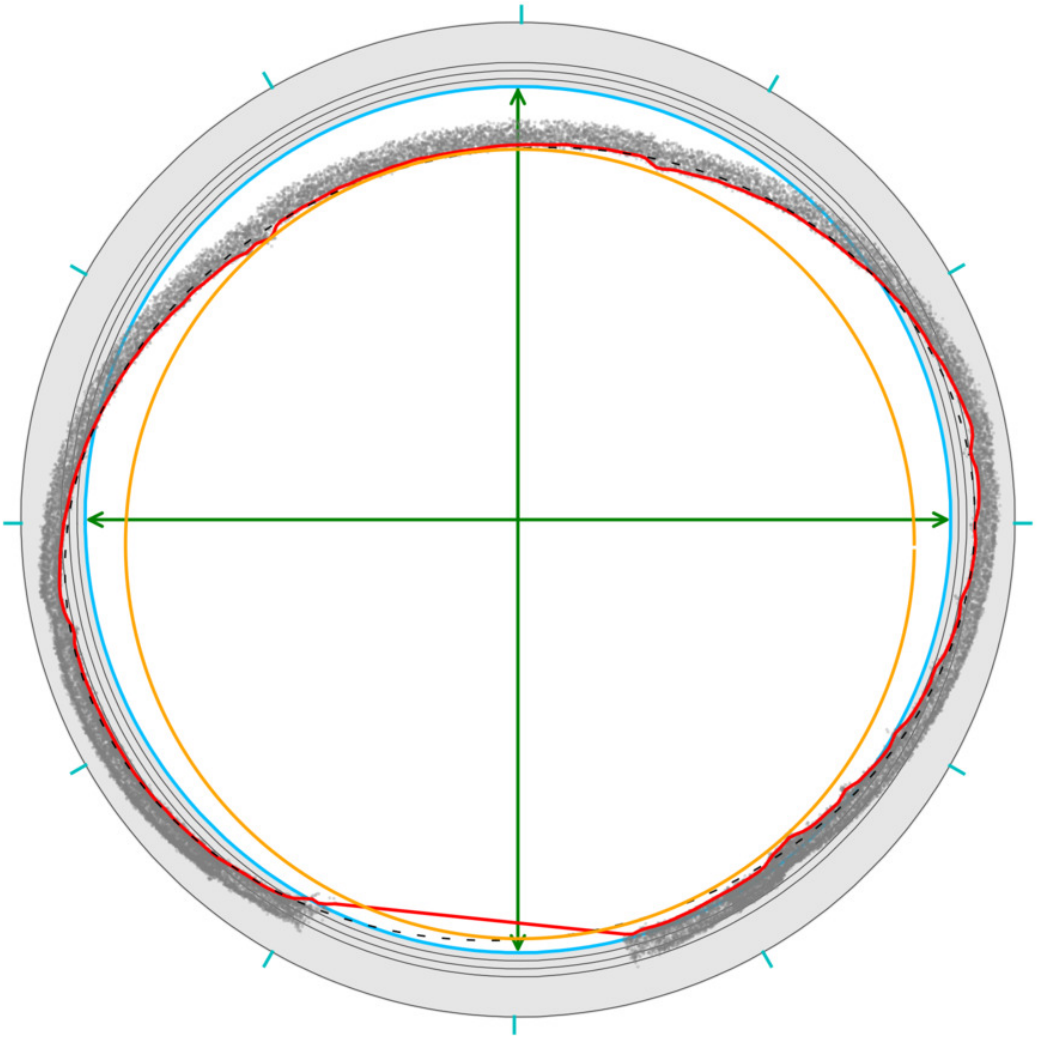
```
Footage    :  526 ft
Width      :  114.6" | 108.0"
Height     :  100.6" | 108.0"

Area       :  8804 sq in
Perimeter  :  346.0 in
Ovality    :  7.5%

Interior Diameter : 98.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 527.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 527 ft
Width : 114.7" | 108.0"
Height : 100.7" | 108.0"

Area : 8729 sq in
Perimeter : 335.9 in
Ovality : 7.4%

Interior Diameter : 98.4"

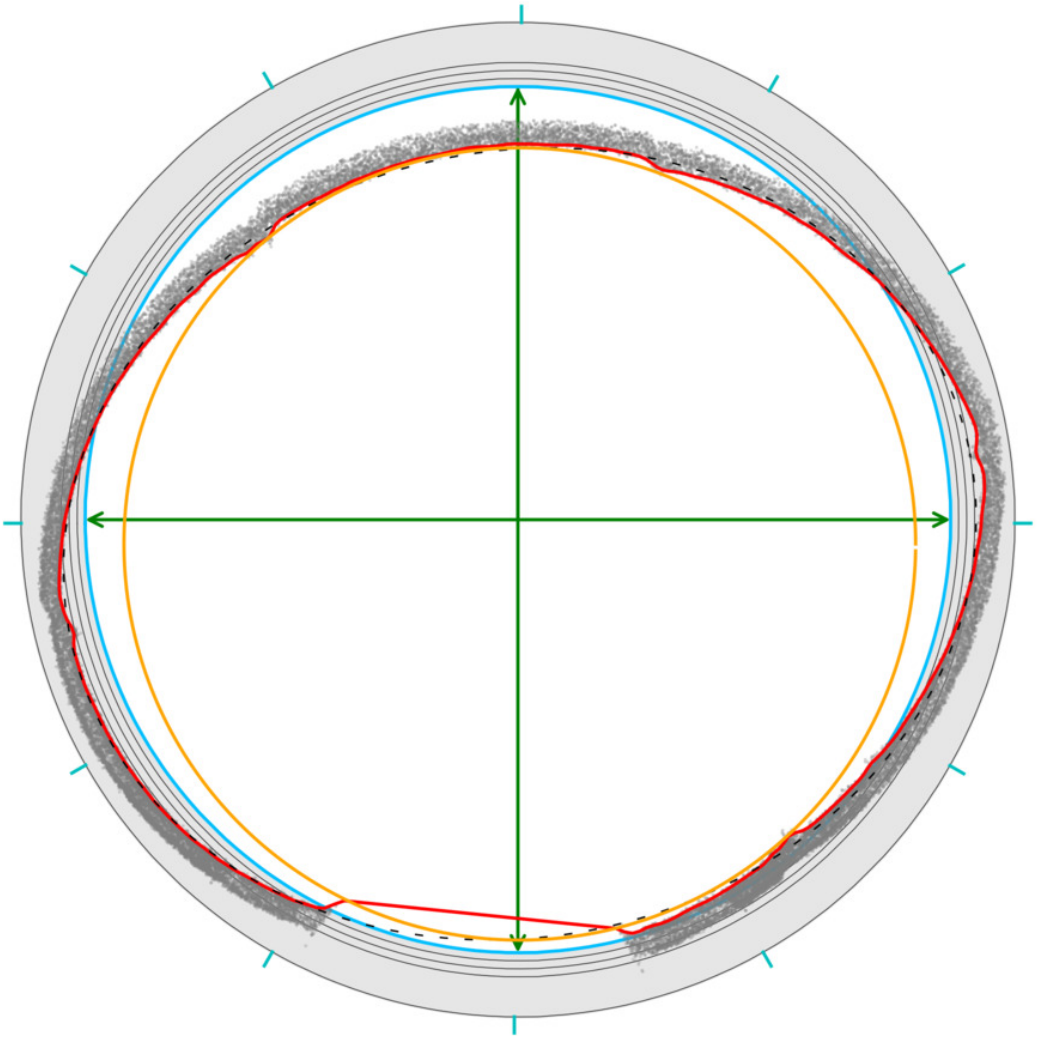
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 528.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



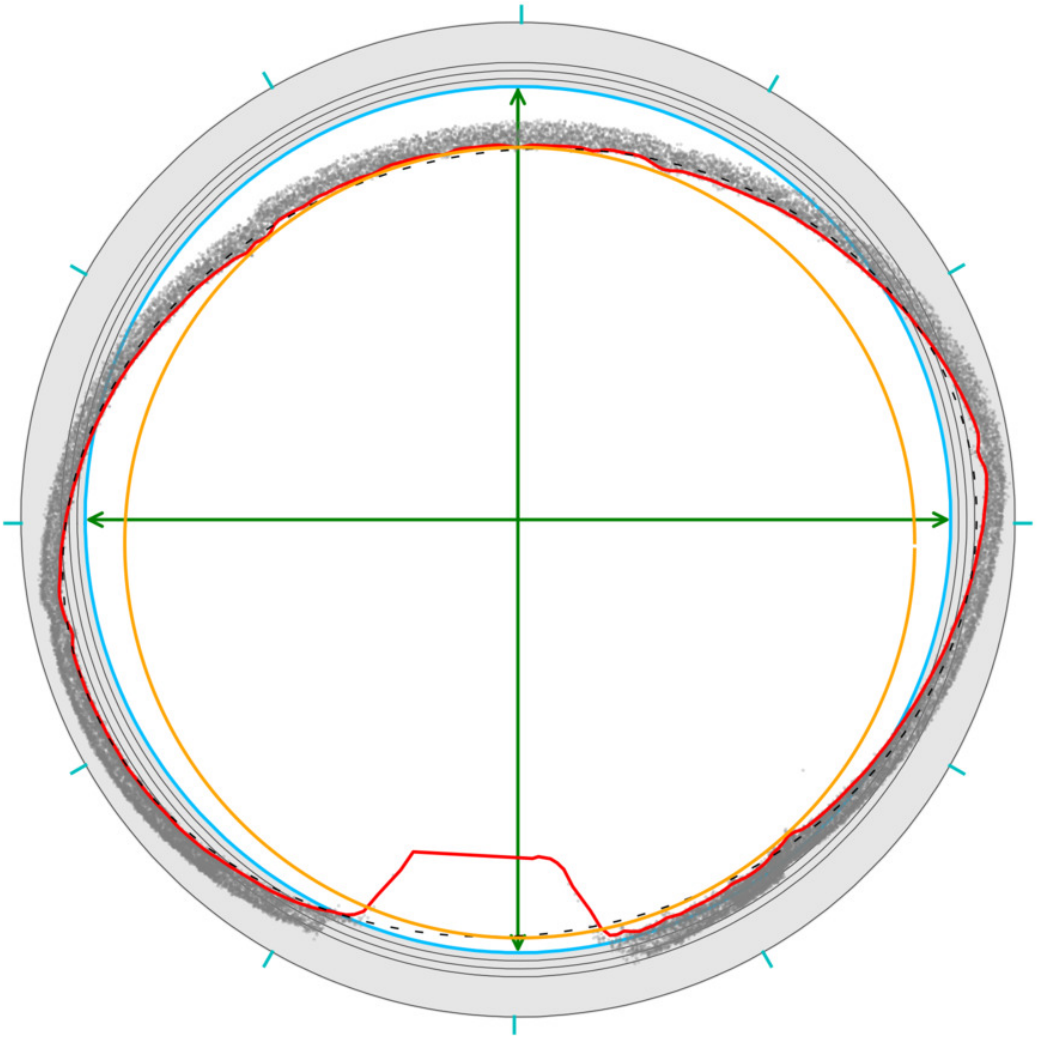
```
Footage    :  528 ft
Width      :  115.5" | 108.0"
Height     :  100.8" | 108.0"

Area       :  8725 sq in
Perimeter  :  336.1 in
Ovality    :  7.7%

Interior Diameter : 98.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 529.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



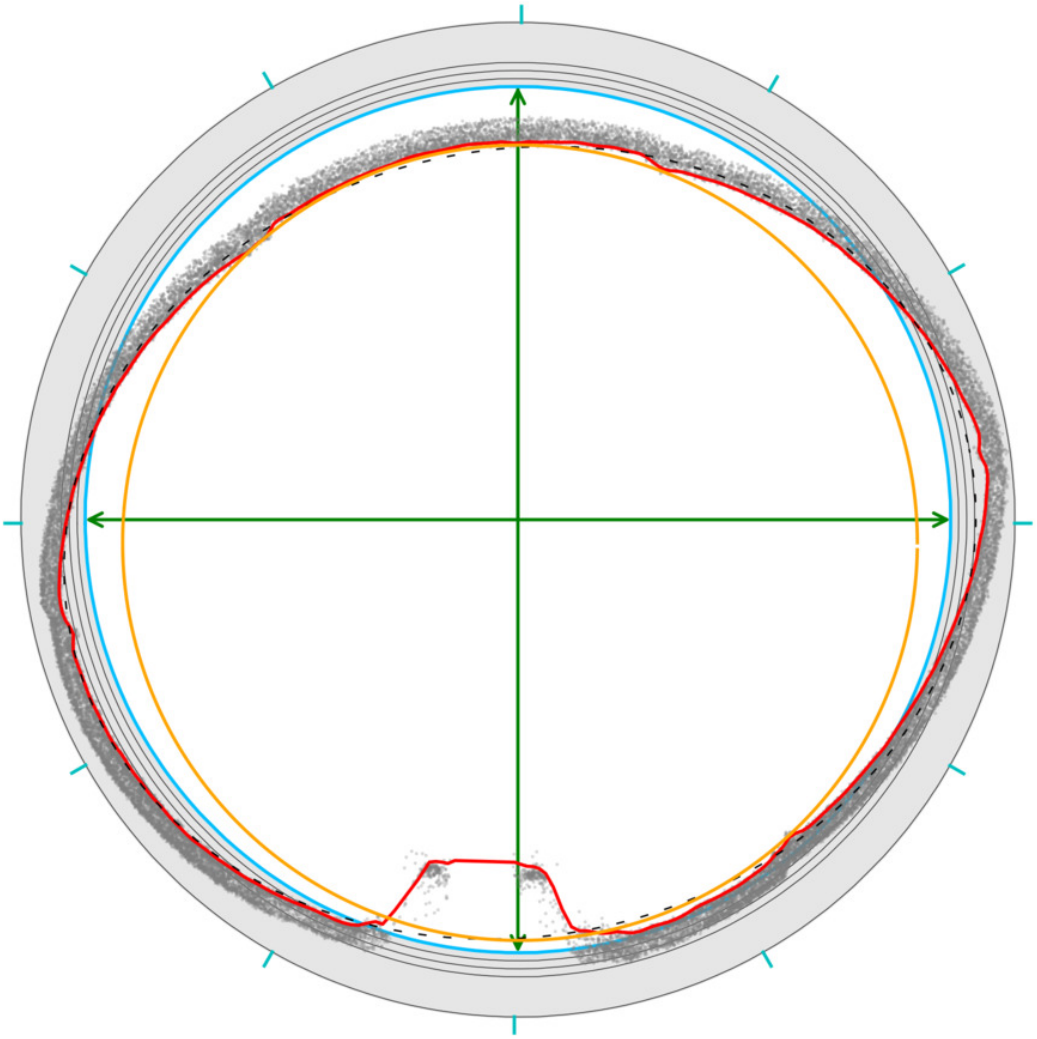
```
Footage   :  529 ft
Width     :  115.7" | 108.0"
Height    :  100.5" | 108.0"

Area      :  8559 sq in
Perimeter :  344.5 in
Ovality   :  7.9%

Interior Diameter : 98.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 530.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



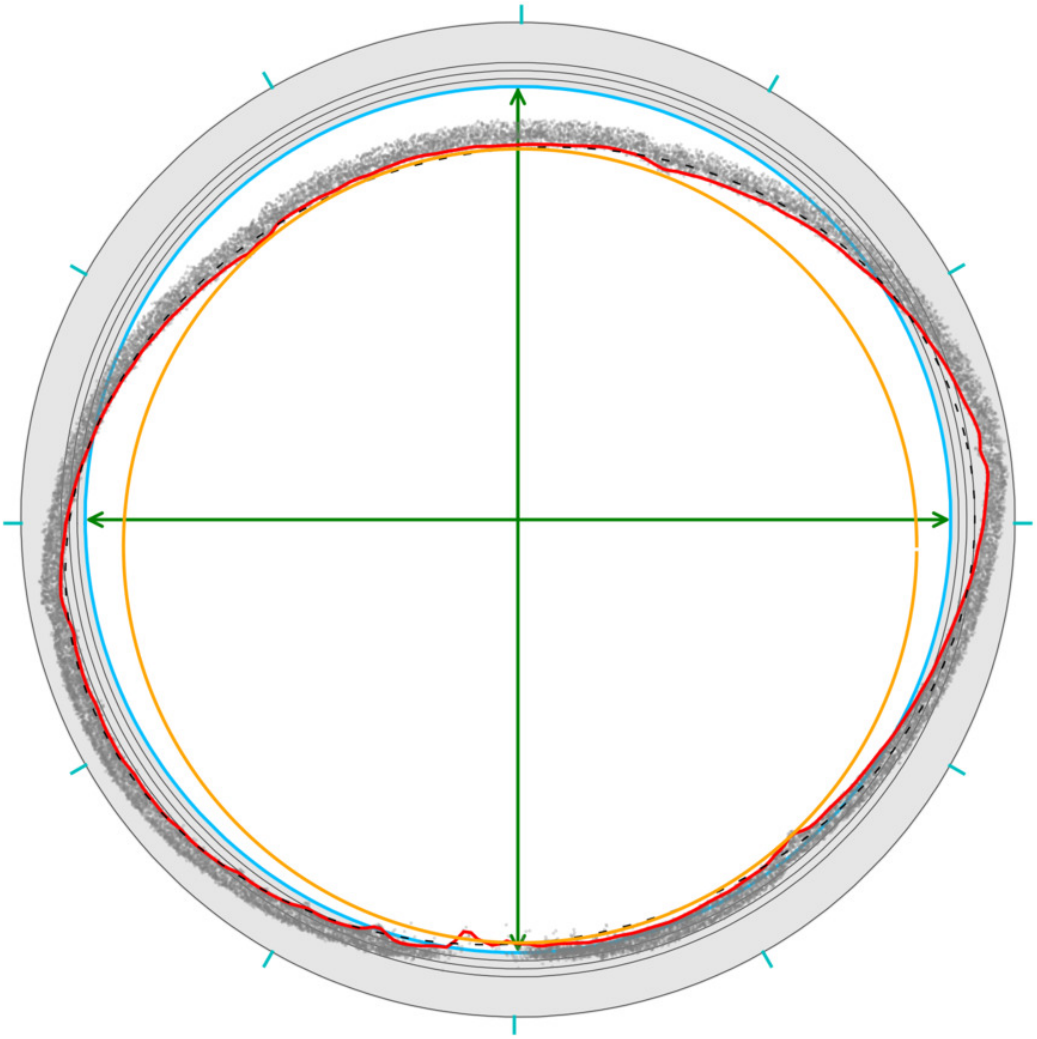
```
Footage   :  530 ft
Width     :  115.9" | 108.0"
Height    :  101.0" | 108.0"

Area      :  8649 sq in
Perimeter :  345.2 in
Ovality   :  7.6%

Interior Diameter : 99.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 531.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



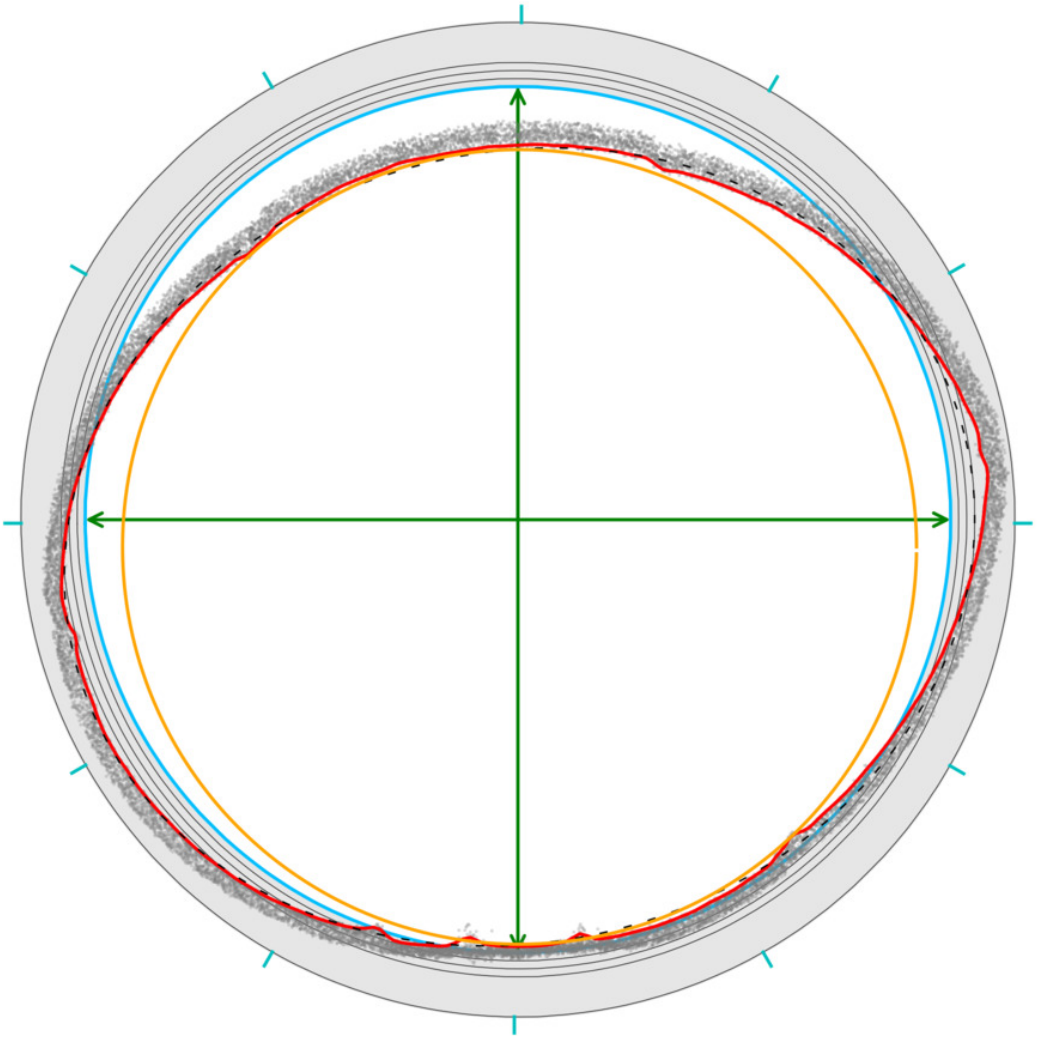
```
Footage   :  531 ft
Width     :  115.7" | 108.0"
Height    :  100.7" | 108.0"

Area      :  8836 sq in
Perimeter :  338.3 in
Ovality   :  7.3%

Interior Diameter : 99.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 532.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



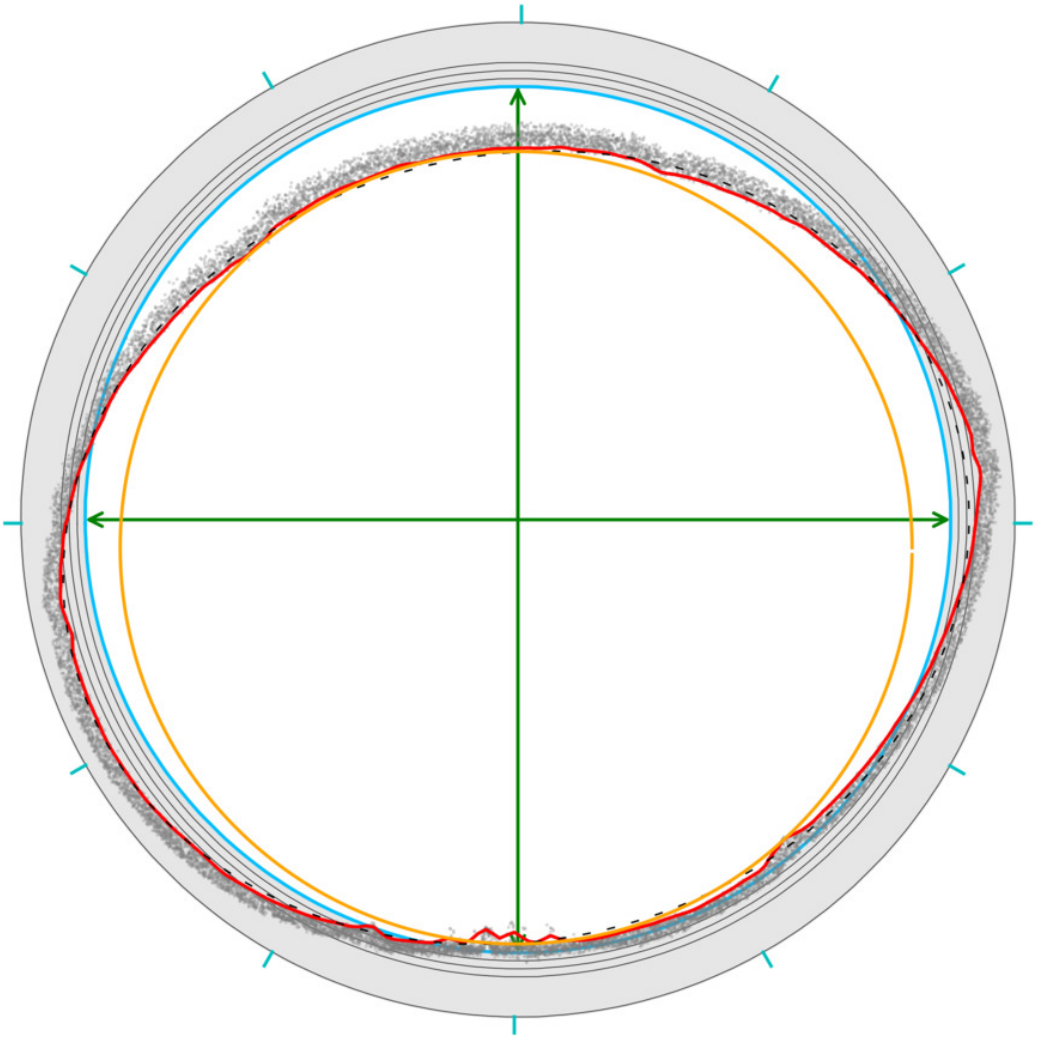
```
Footage   :  532 ft
Width     :  115.6" | 108.0"
Height    :  100.7" | 108.0"

Area      :  8848 sq in
Perimeter :  337.7 in
Ovality   :  7.4%

Interior Diameter : 99.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 533.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



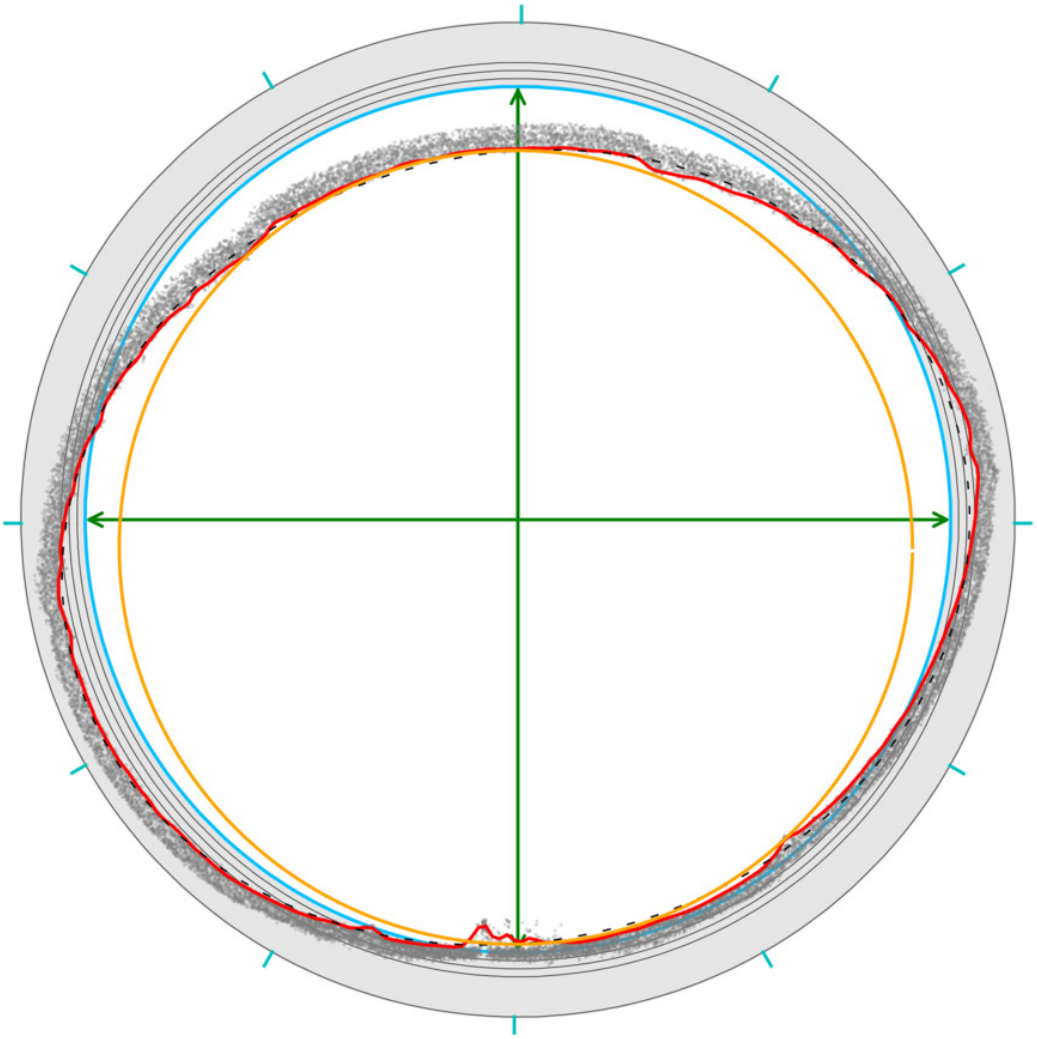
```
Footage   :  533 ft
Width     :  114.9" | 108.0"
Height    :  100.3" | 108.0"

Area      :  8752 sq in
Perimeter :  336.9 in
Ovality   :  7.5%

Interior Diameter : 98.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 534.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



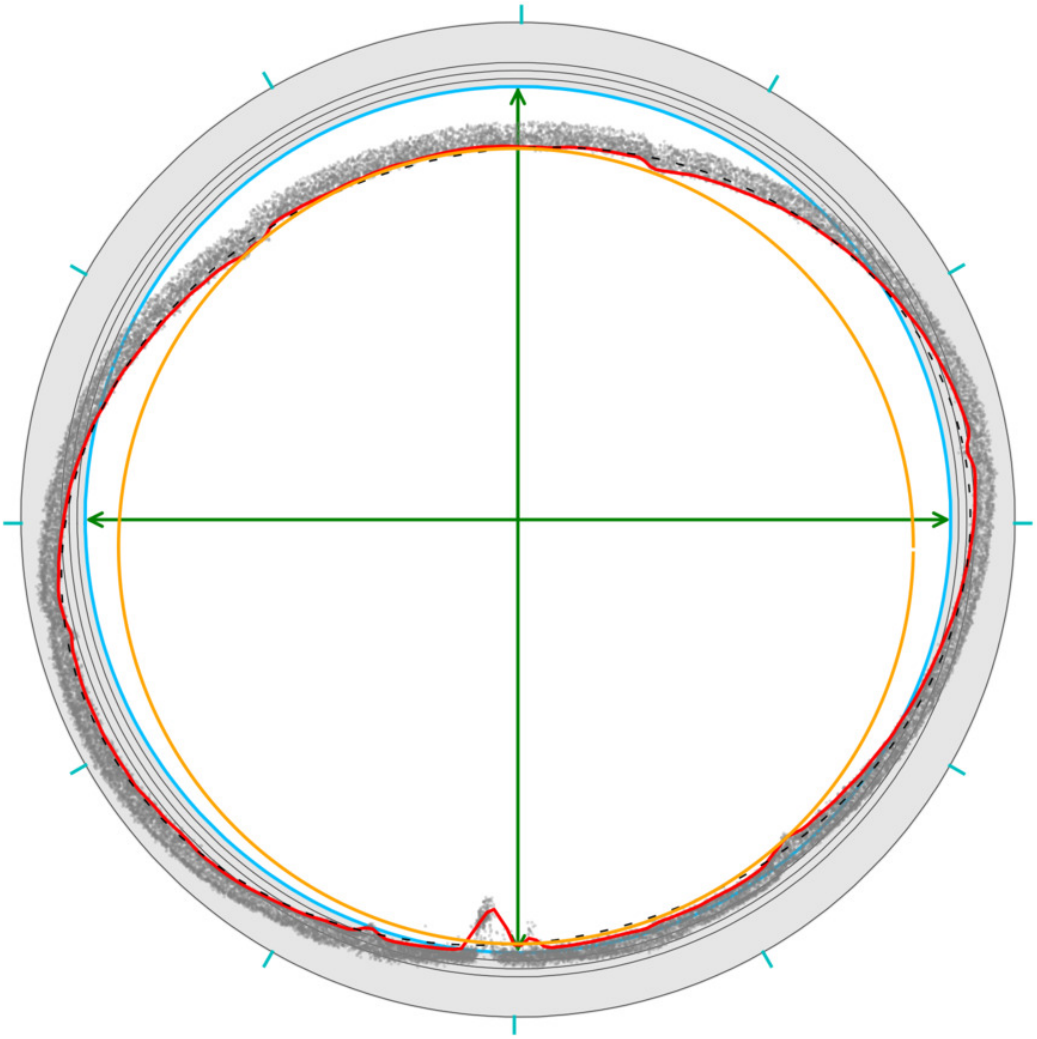
```
Footage   :  534 ft
Width     :  114.8" | 108.0"
Height    :  100.3" | 108.0"

Area      :  8790 sq in
Perimeter :  338.9 in
Ovality   :  7.4%

Interior Diameter : 99.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 535.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



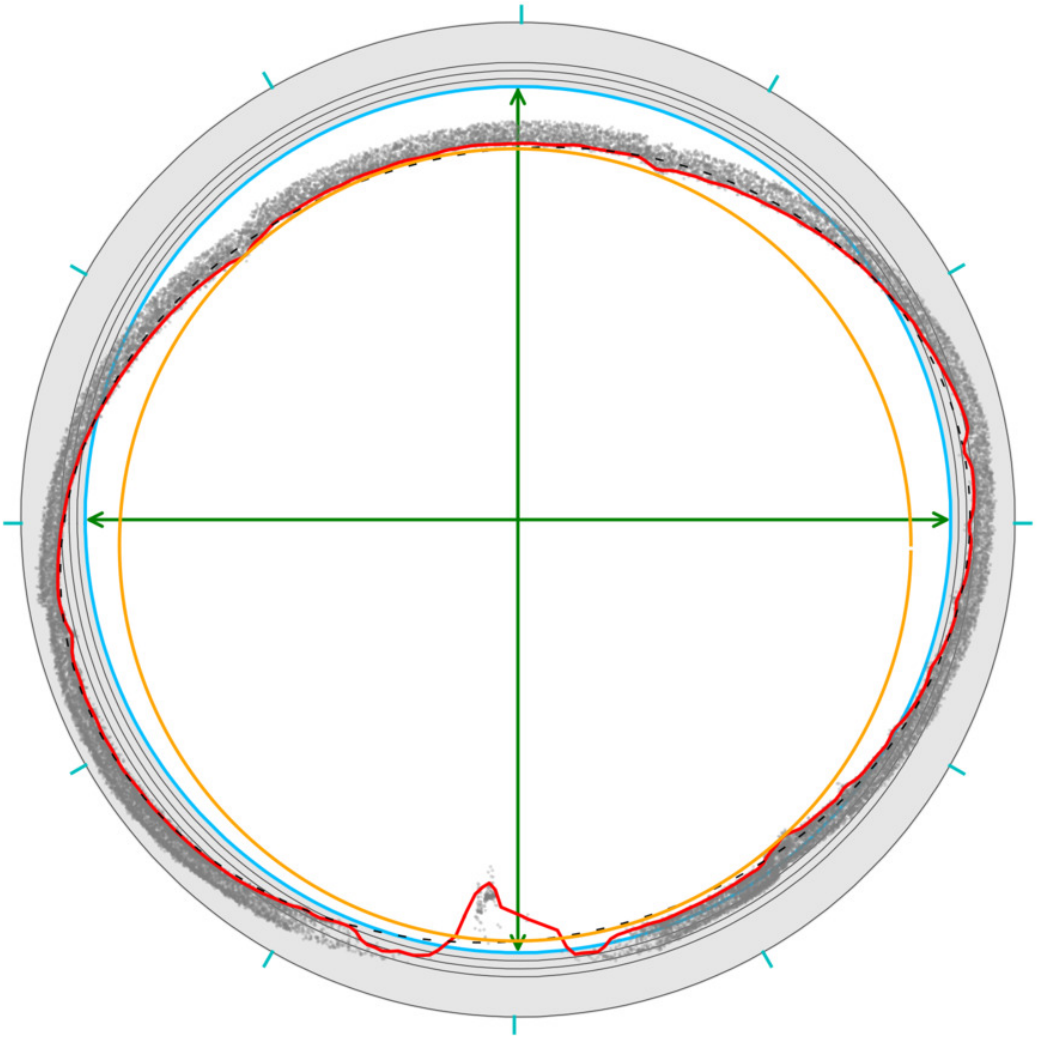
```
Footage   :  535 ft
Width     :  114.4" | 108.0"
Height    :  100.5" | 108.0"

Area      :  8830 sq in
Perimeter :  342.6 in
Ovality   :  7.4%

Interior Diameter : 99.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 536.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



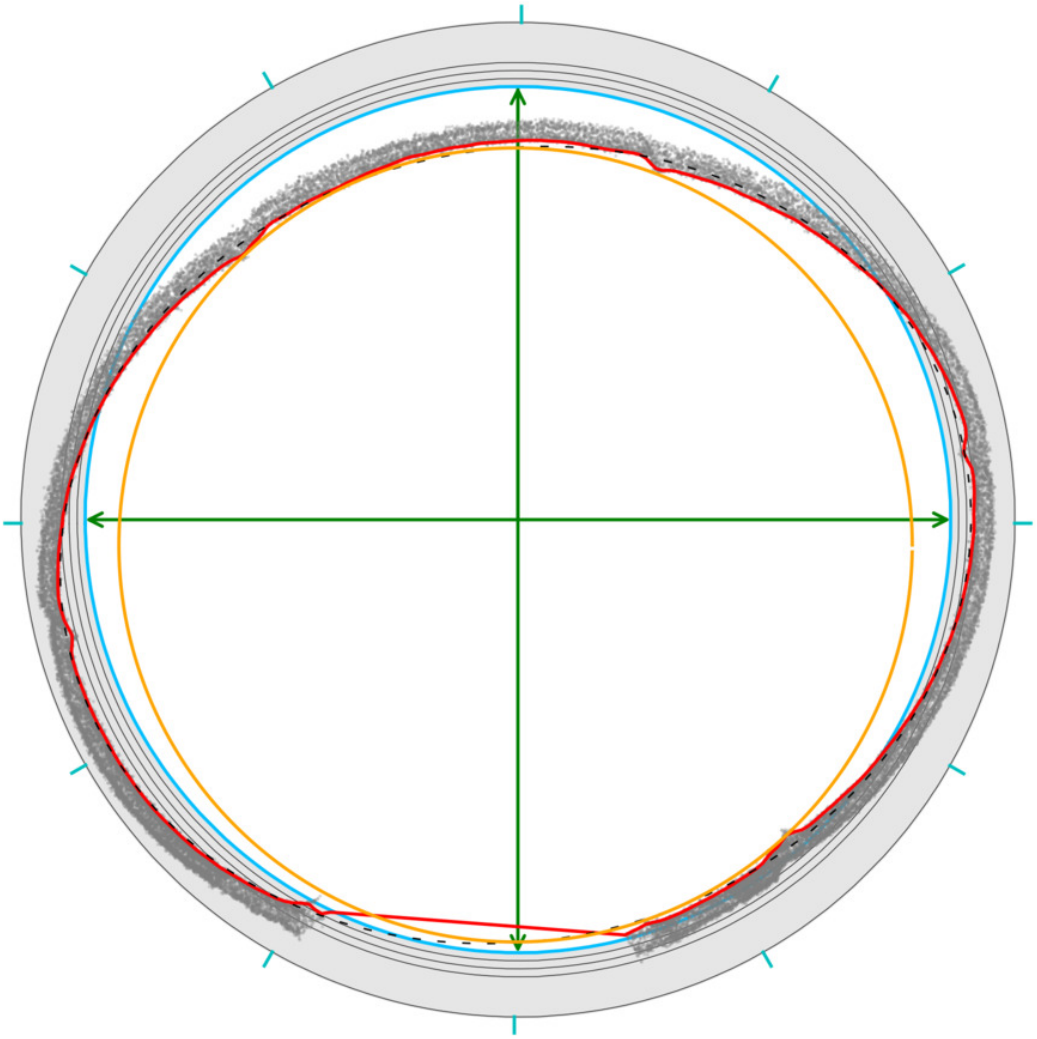
```
Footage    :  536 ft
Width      :  114.3" | 108.0"
Height     :  100.9" | 108.0"

Area       :  8803 sq in
Perimeter  :  347.3 in
Ovality    :  7.5%

Interior Diameter : 98.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 537.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



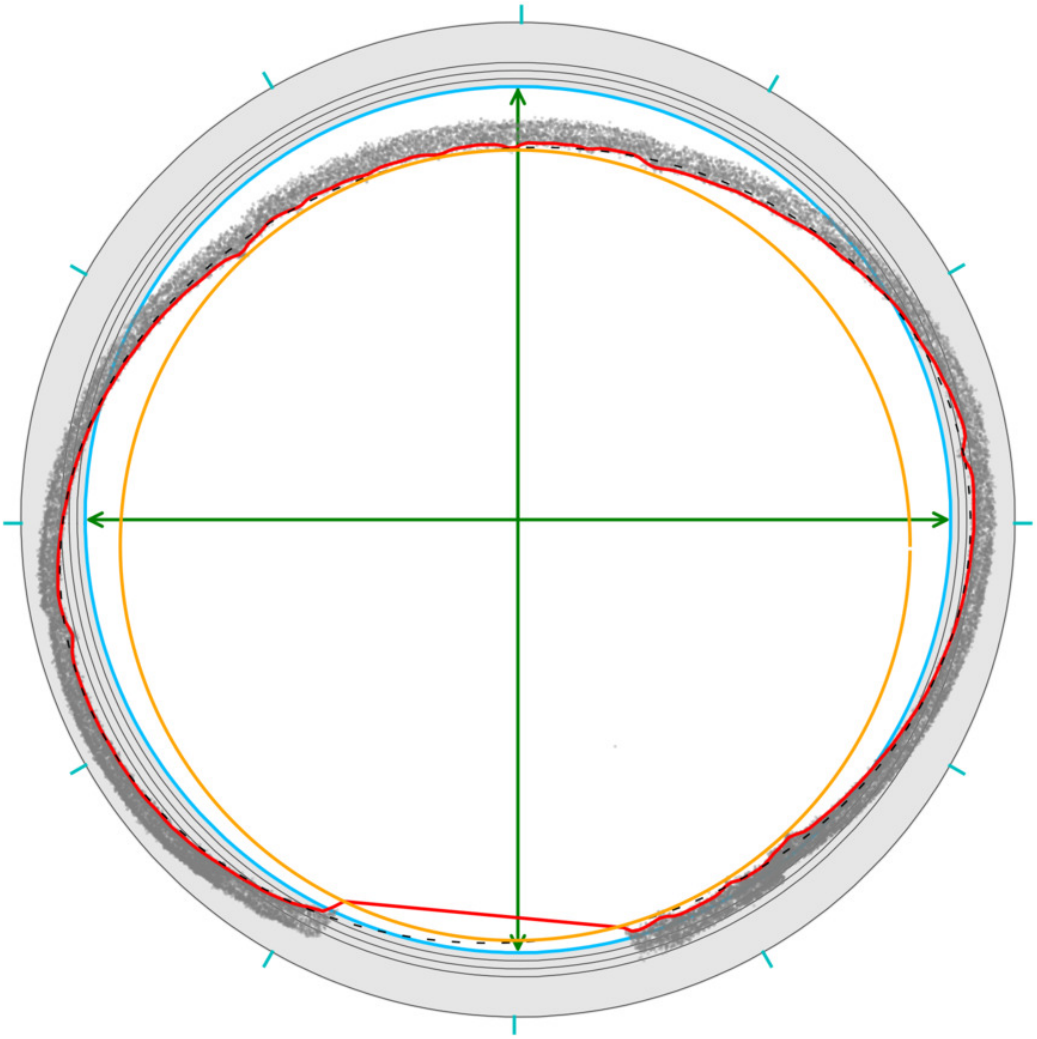
```
Footage   :  537 ft
Width     :  114.4" | 108.0"
Height    :  101.3" | 108.0"

Area      :  8787 sq in
Perimeter :  336.7 in
Ovality   :  7.3%

Interior Diameter : 99.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 538.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



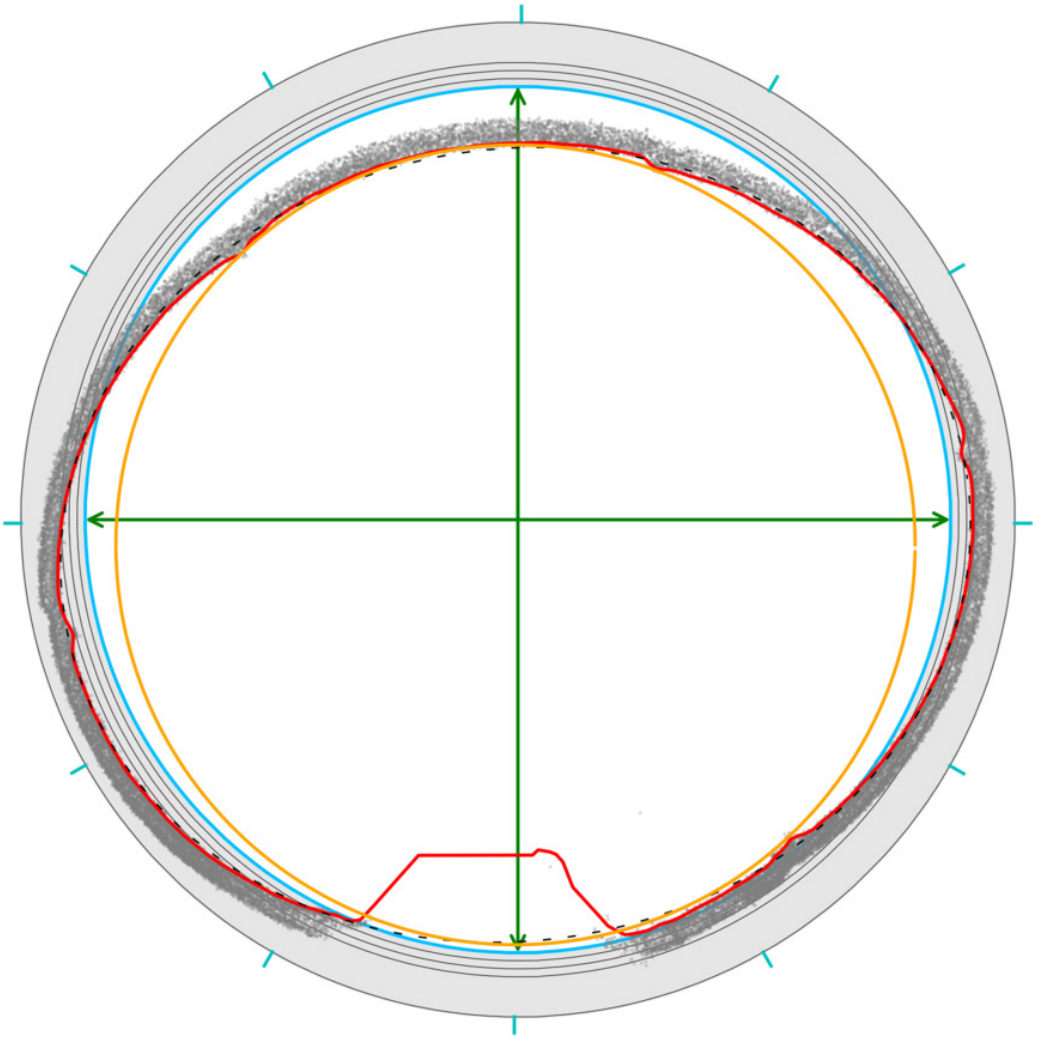
```
Footage   :  538 ft
Width     :  114.3" | 108.0"
Height    :  100.6" | 108.0"

Area      :  8738 sq in
Perimeter :  336.8 in
Ovality   :  7.2%

Interior Diameter : 98.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 539.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



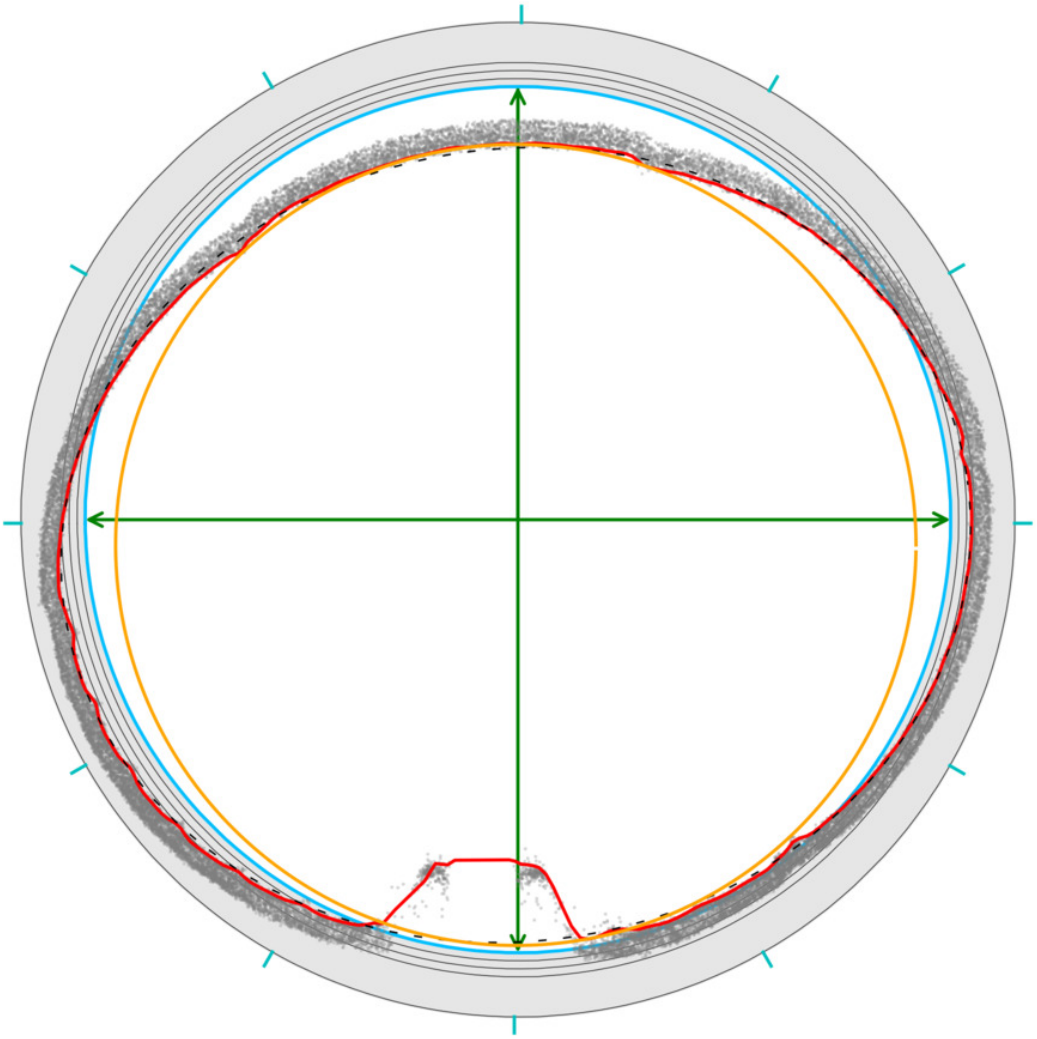
```
Footage    :  539 ft
Width      :  114.2" | 108.0"
Height     :  101.0" | 108.0"

Area       :  8584 sq in
Perimeter  :  345.0 in
Ovality    :  7.0%

Interior Diameter : 99.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 540.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



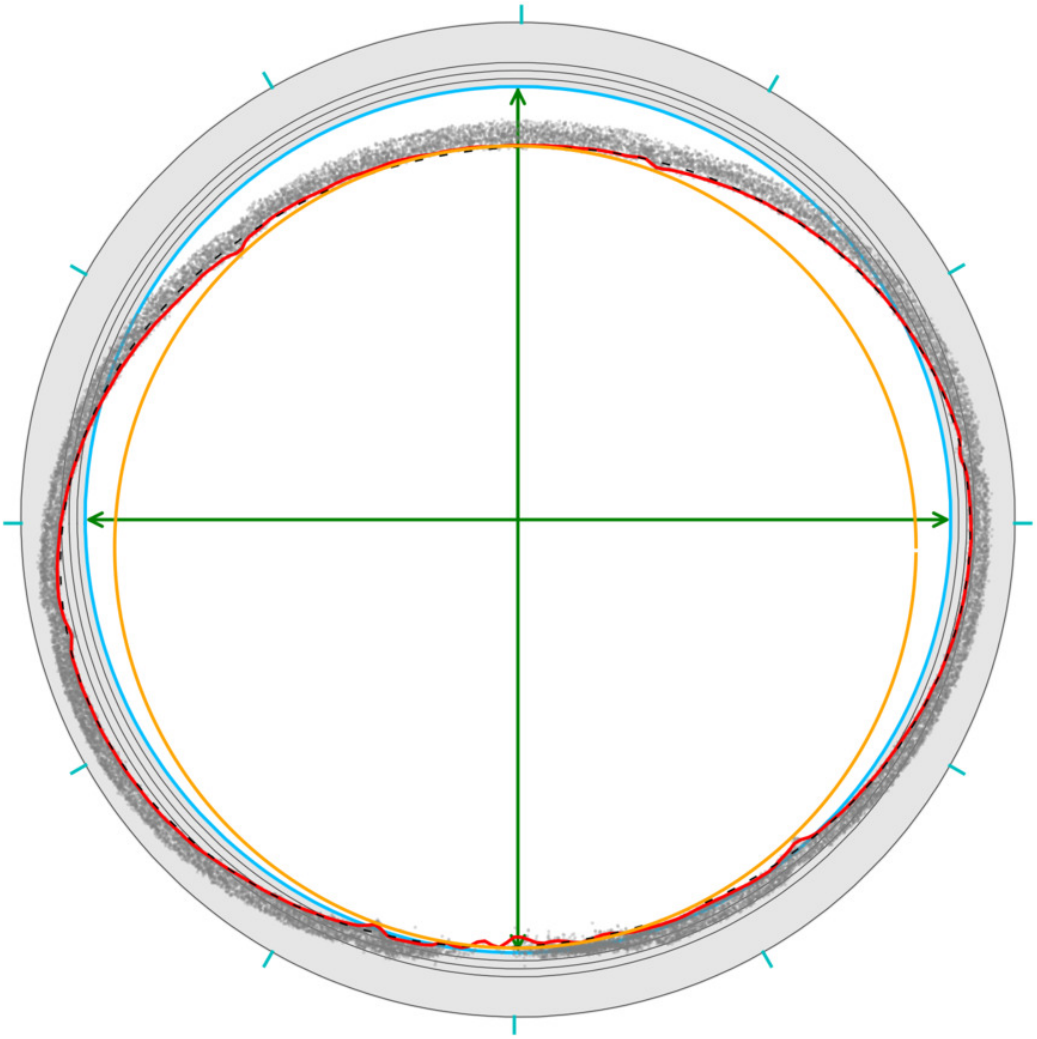
```
Footage   :  540 ft
Width     :  114.0" | 108.0"
Height    :  100.9" | 108.0"

Area      :  8659 sq in
Perimeter :  345.3 in
Ovality   :  7.0%

Interior Diameter : 99.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 541.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



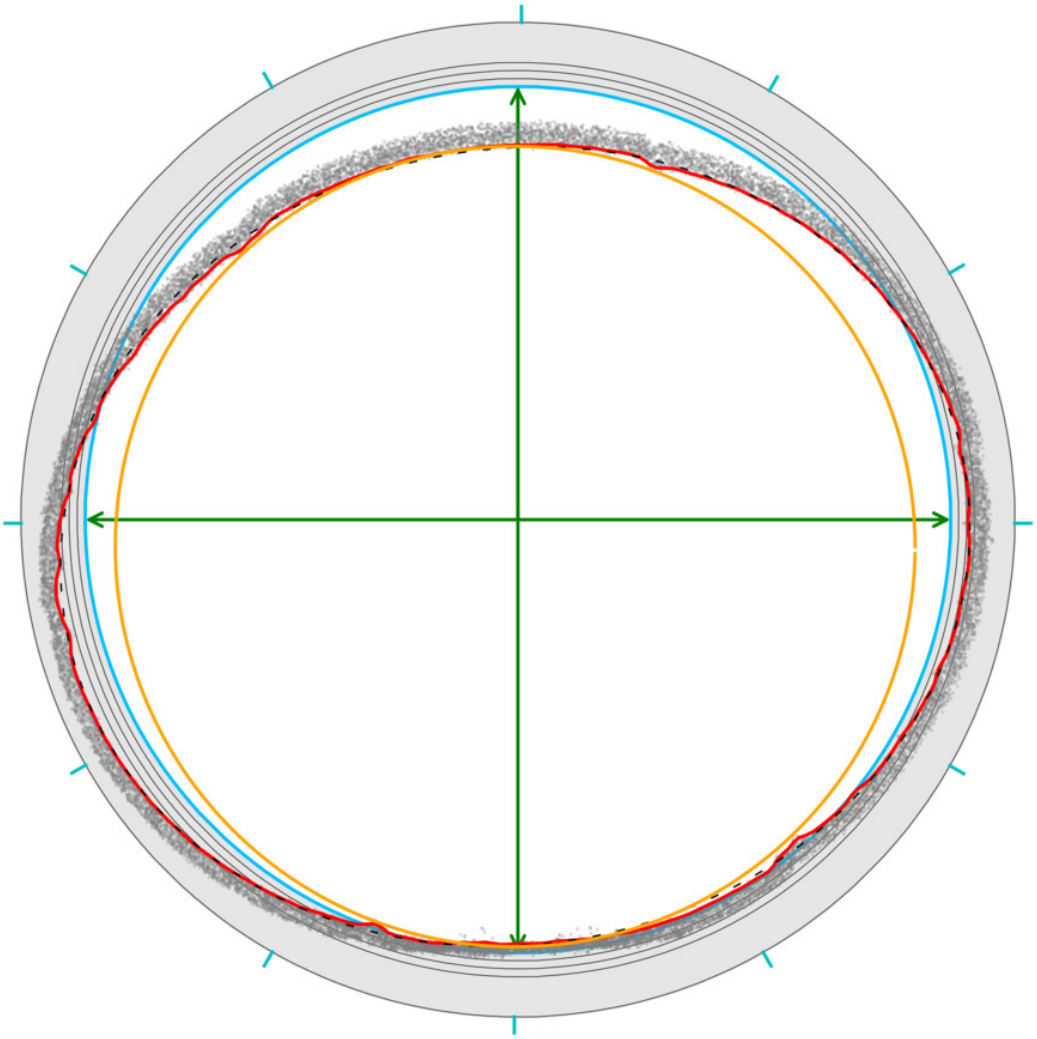
```
Footage   :  541 ft
Width     :  114.0" | 108.0"
Height    :  100.7" | 108.0"

Area      :  8881 sq in
Perimeter :  338.1 in
Ovality   :  6.7%

Interior Diameter : 100.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 542.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



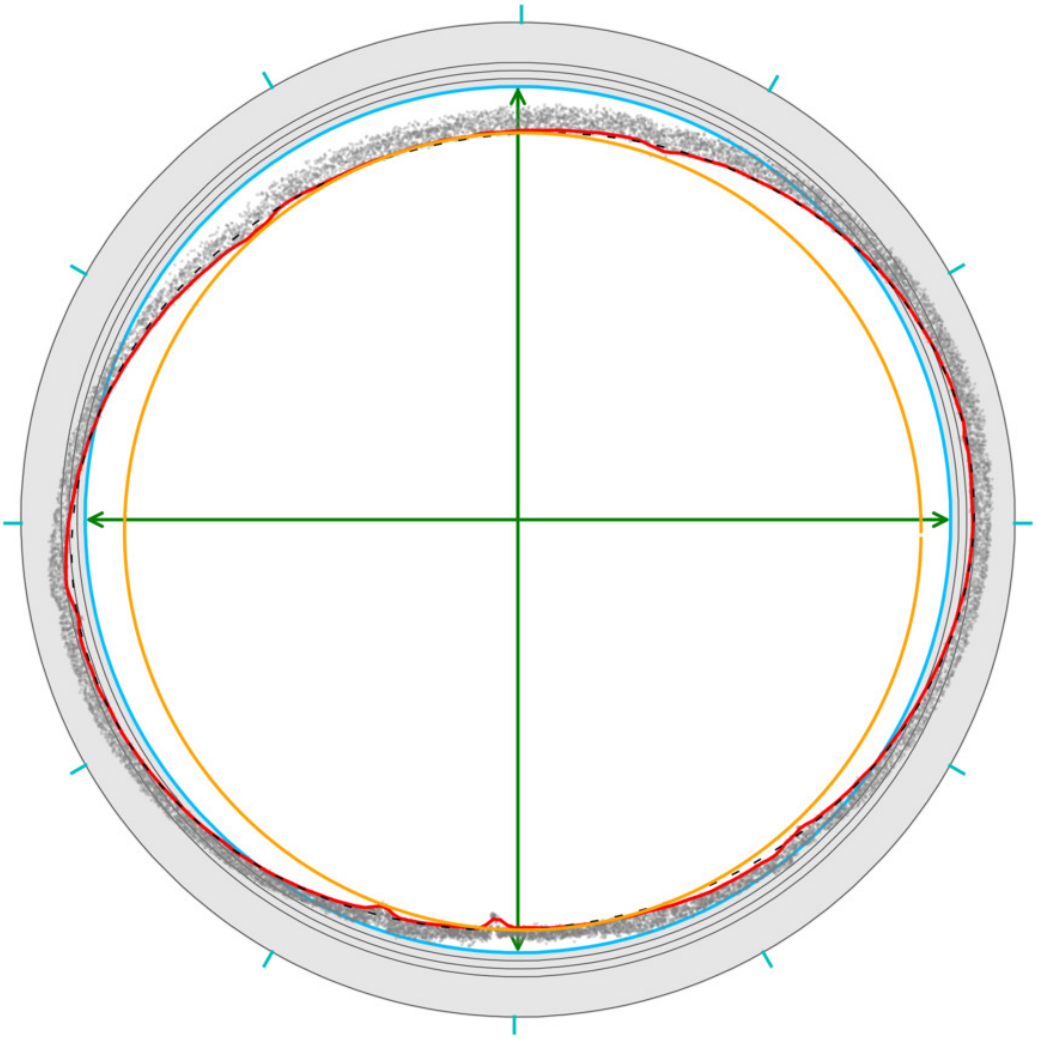
```
Footage   :  542 ft
Width     :  114.0" | 108.0"
Height    :  100.7" | 108.0"

Area      :  8865 sq in
Perimeter :  337.0 in
Ovality   :  6.8%

Interior Diameter : 99.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 543.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



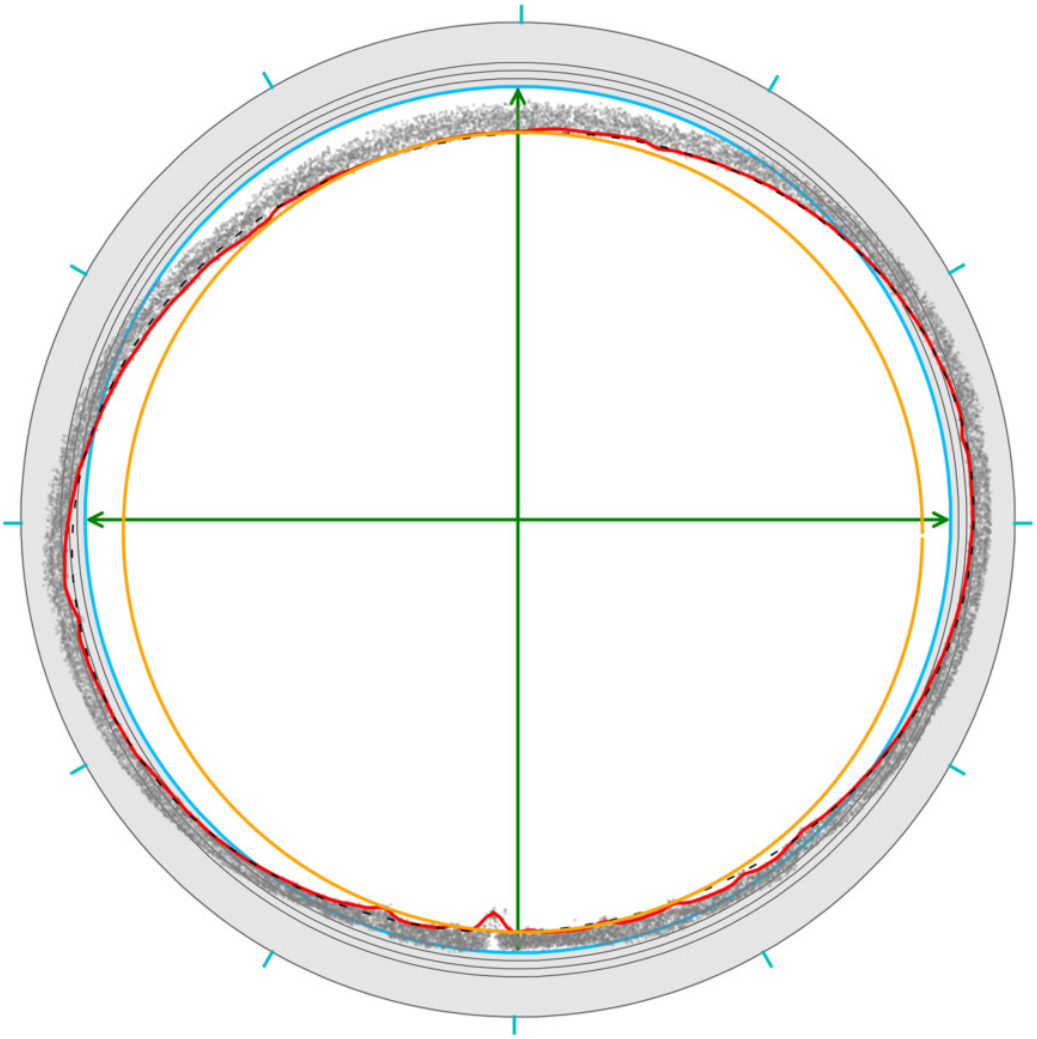
```
Footage   :  543 ft
Width     :  113.2" | 108.0"
Height    :  102.5" | 108.0"

Area      :  8773 sq in
Perimeter :  335.1 in
Ovality   :  6.6%

Interior Diameter : 99.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 544.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



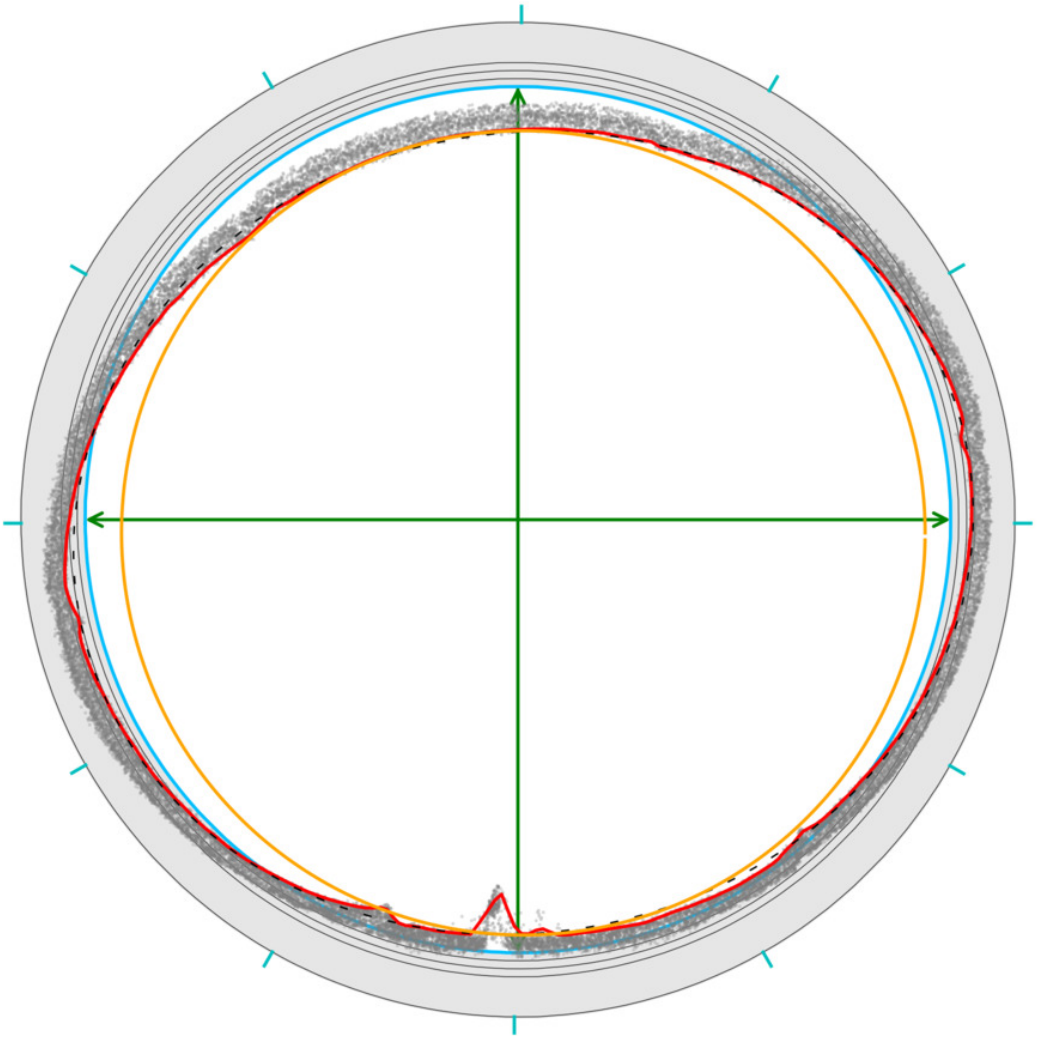
```
Footage   :  544 ft
Width     :  113.3" | 108.0"
Height    :  102.4" | 108.0"

Area      :  8793 sq in
Perimeter :  337.2 in
Ovality   :  6.4%

Interior Diameter : 99.7"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 545.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



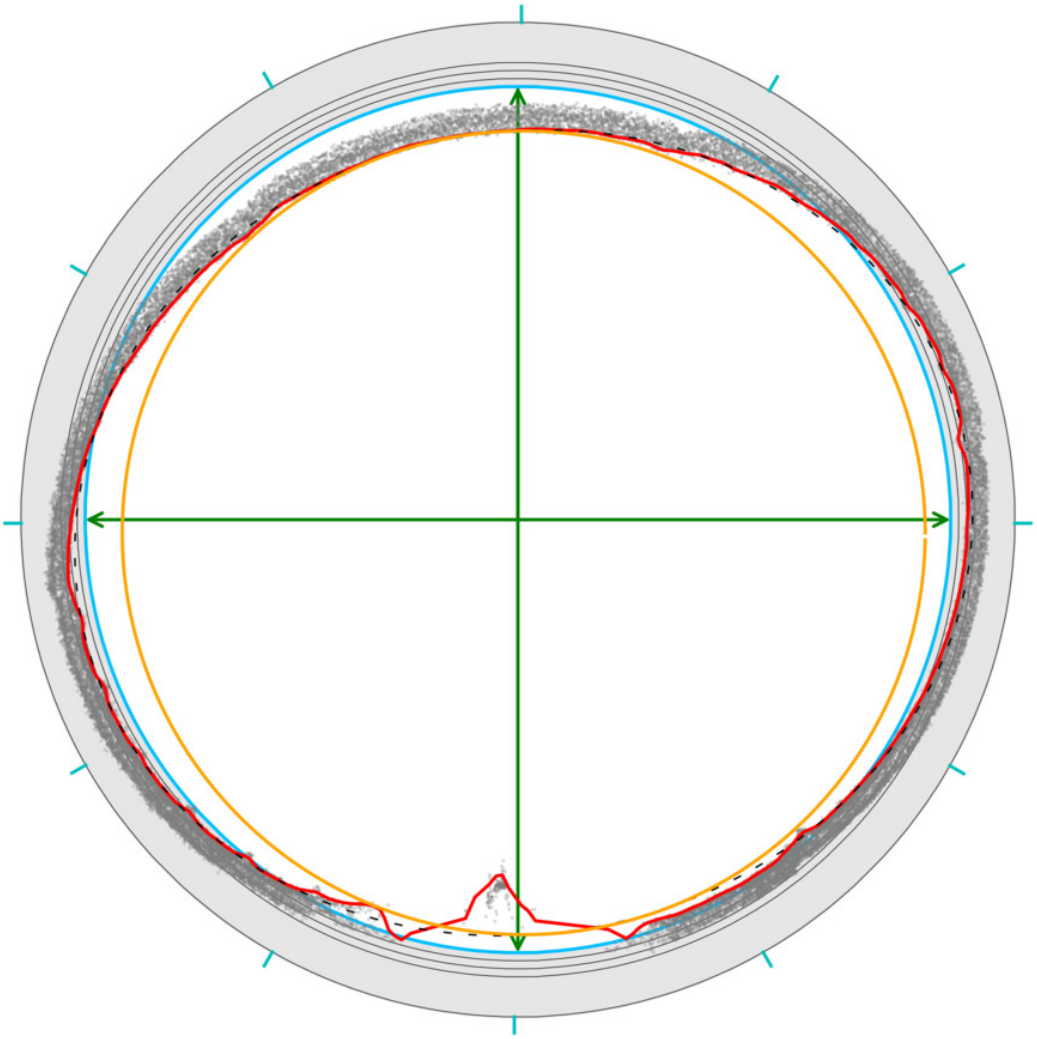
```
Footage    :  545 ft
Width      :  113.2" | 108.0"
Height     :  102.6" | 108.0"

Area       :  8809 sq in
Perimeter  :  341.4 in
Ovality    :  6.0%

Interior Diameter : 100.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 546.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



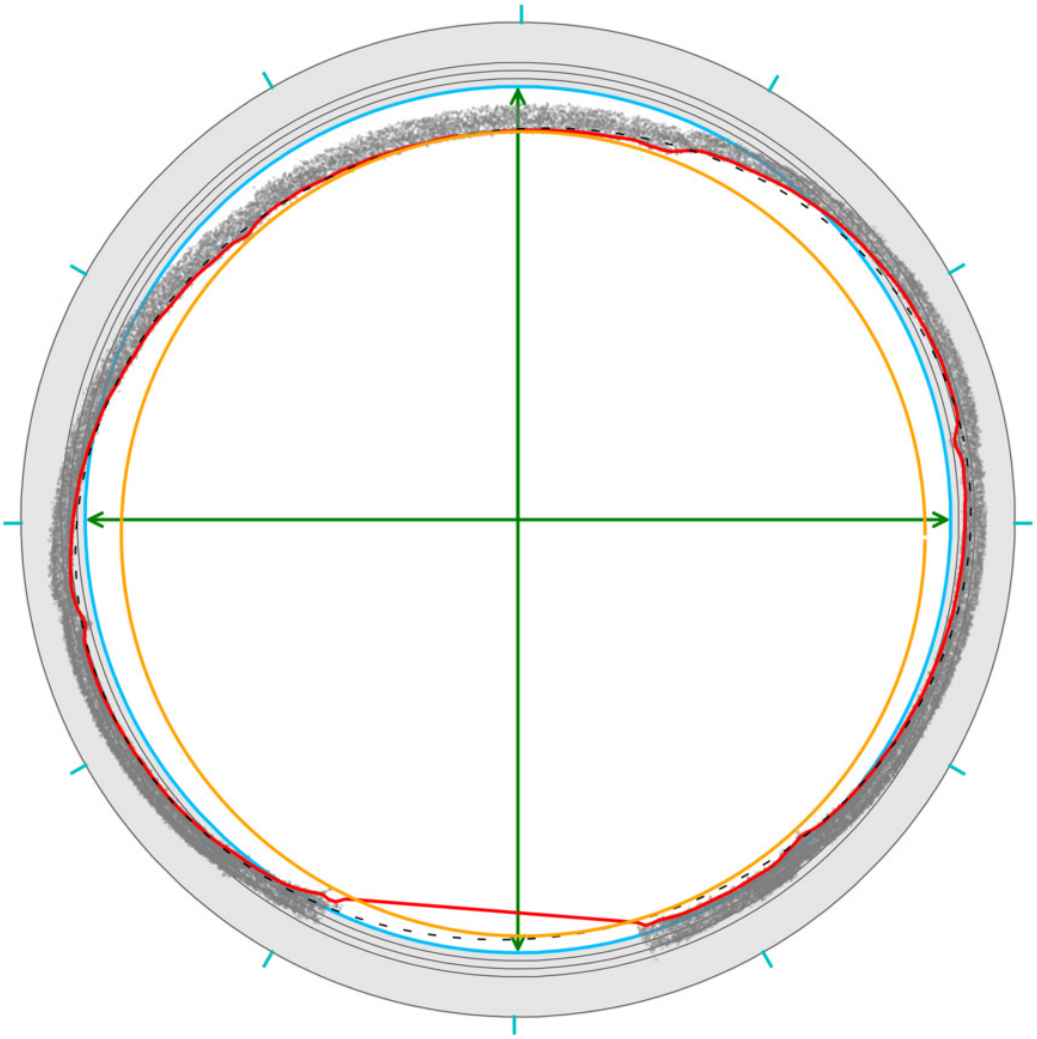
```
Footage   :  546 ft
Width     :  112.4" | 108.0"
Height    :  102.6" | 108.0"

Area      :  8784 sq in
Perimeter :  344.7 in
Ovality   :  5.8%

Interior Diameter : 100.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 547.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



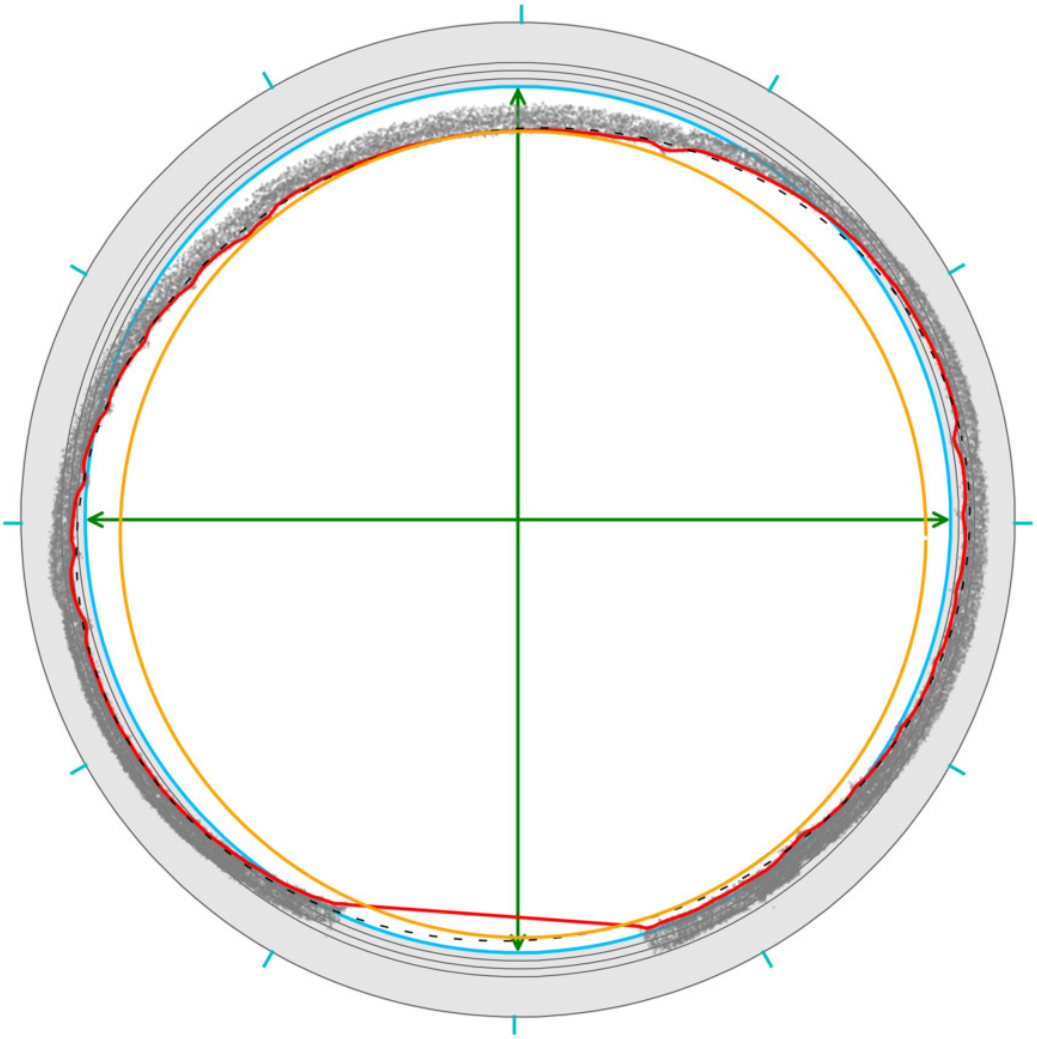
```
Footage   :  547 ft
Width     :  111.7" | 108.0"
Height    :  102.5" | 108.0"

Area      :  8769 sq in
Perimeter :  335.4 in
Ovality   :  5.5%

Interior Diameter : 100.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 548.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



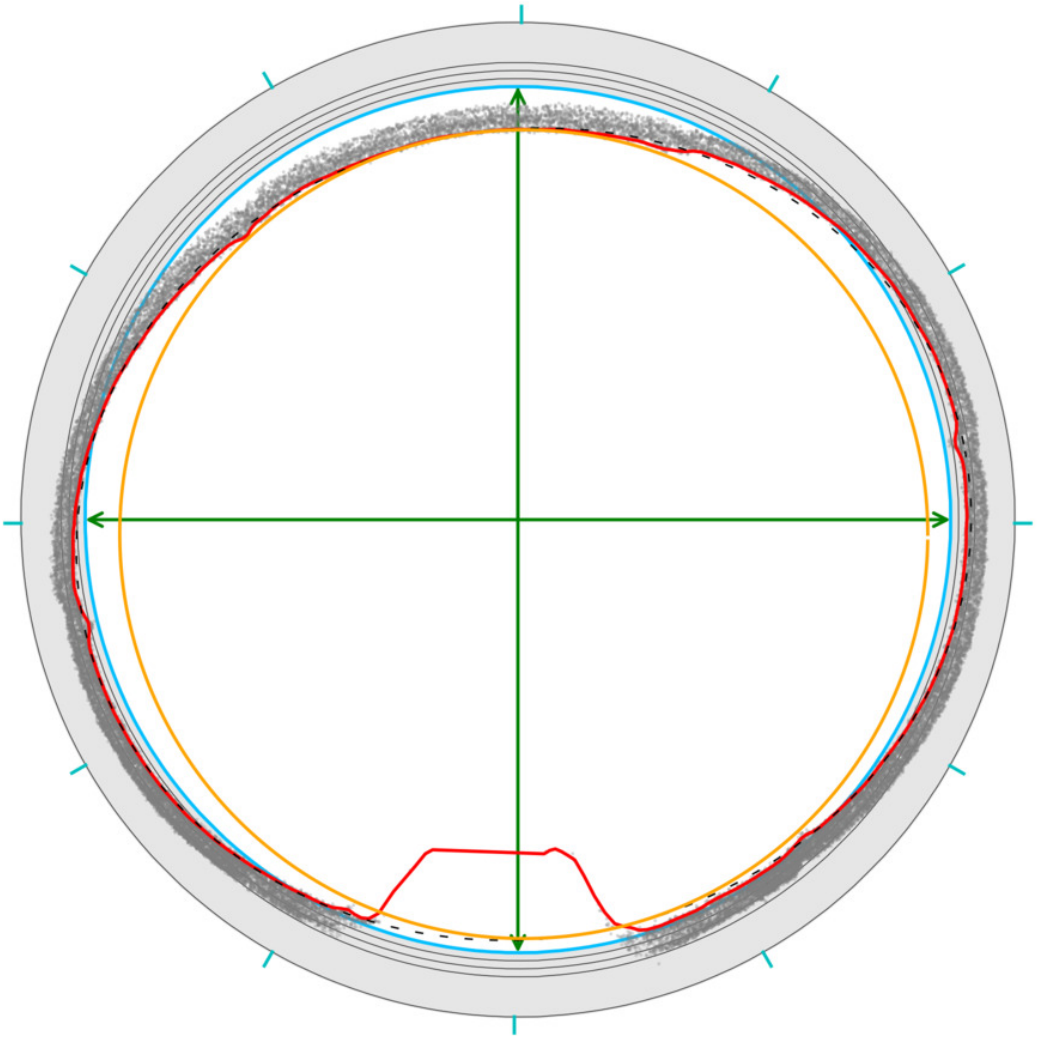
```
Footage   :  548 ft
Width     :  111.6" | 108.0"
Height    :  102.5" | 108.0"

Area      :  8779 sq in
Perimeter :  335.9 in
Ovality   :  5.3%

Interior Diameter : 100.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 549.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



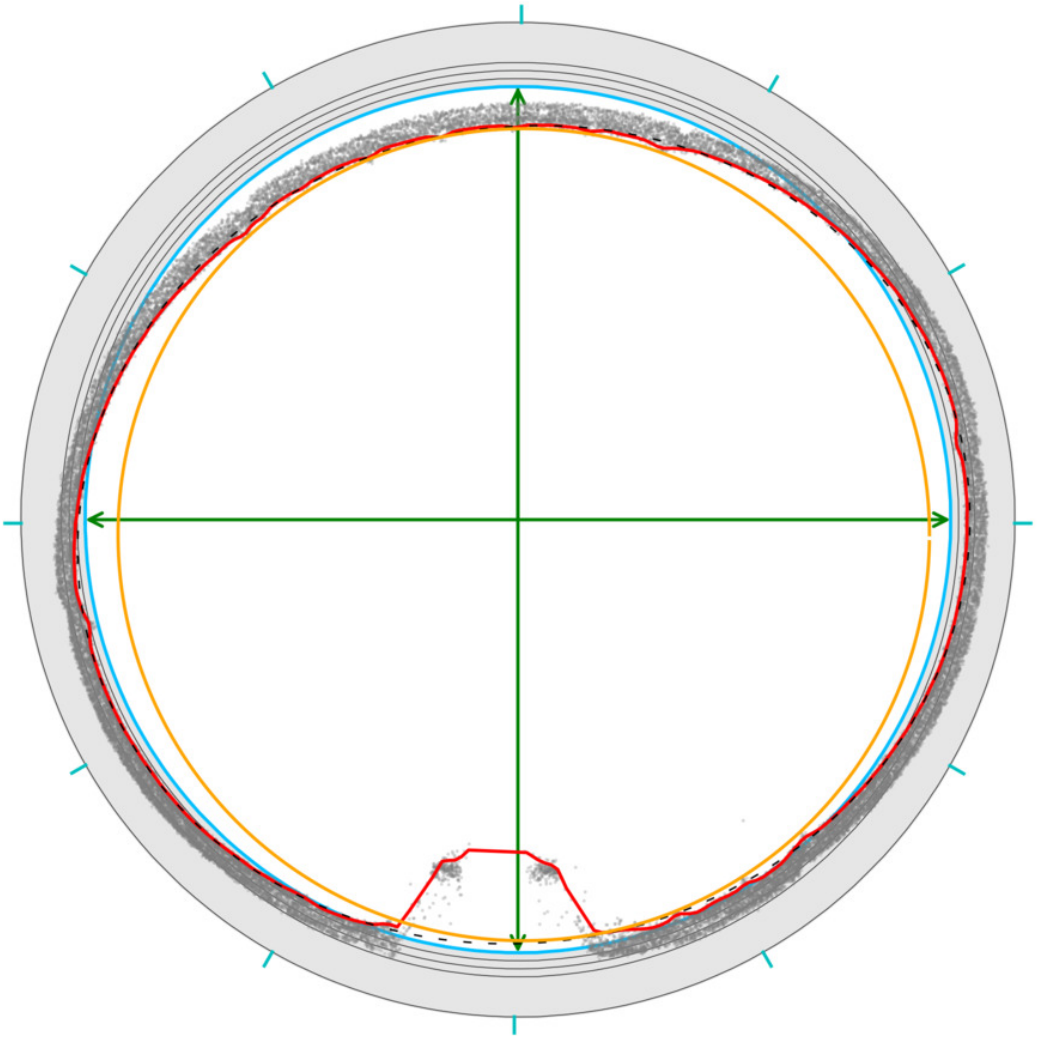
```
Footage   :  549 ft
Width     :  111.6" | 108.0"
Height    :  102.7" | 108.0"

Area      :  8621 sq in
Perimeter :  344.7 in
Ovality   :  5.2%

Interior Diameter : 100.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 550.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



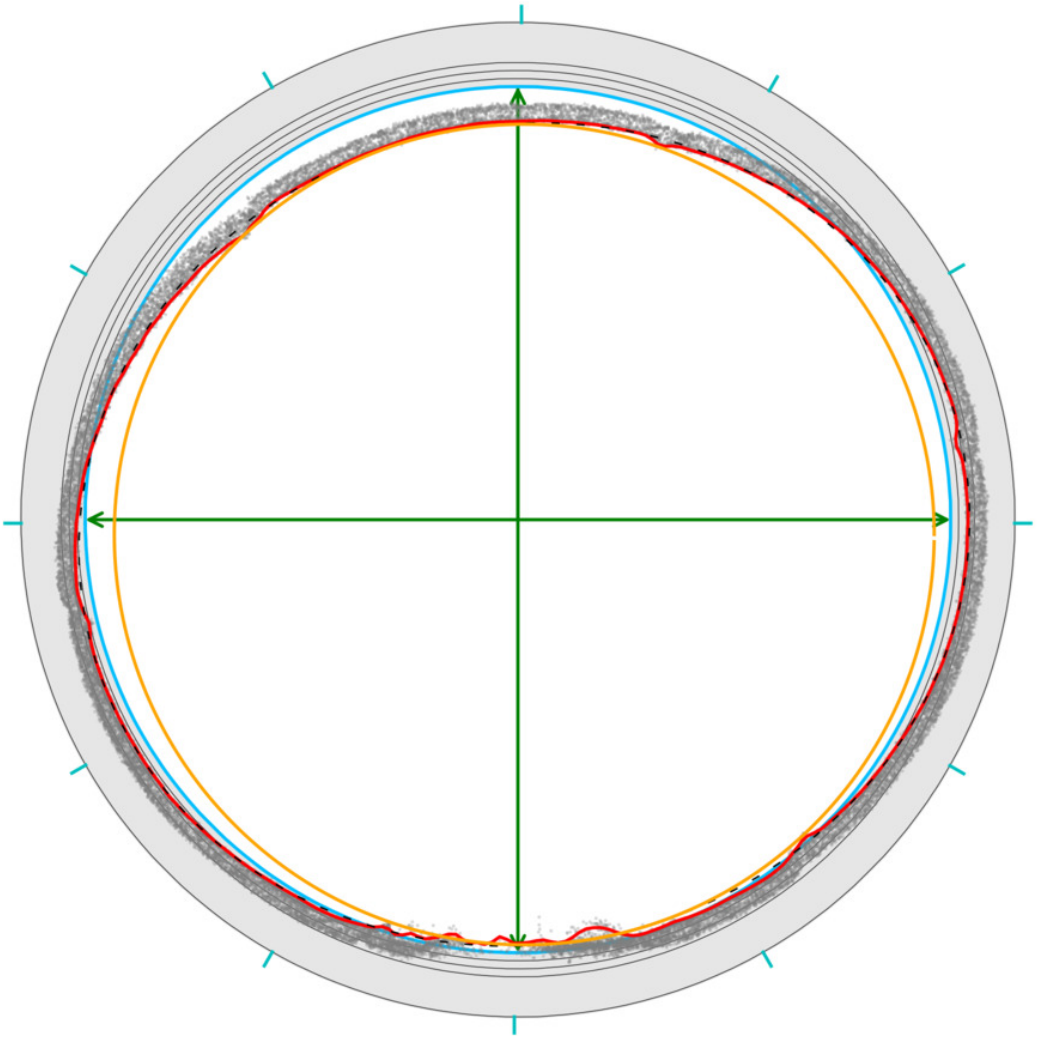
```
Footage   :  550 ft
Width     :  111.5" | 108.0"
Height    :  103.0" | 108.0"

Area      :  8712 sq in
Perimeter :  346.3 in
Ovality   :  4.7%

Interior Diameter : 101.3"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 551.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



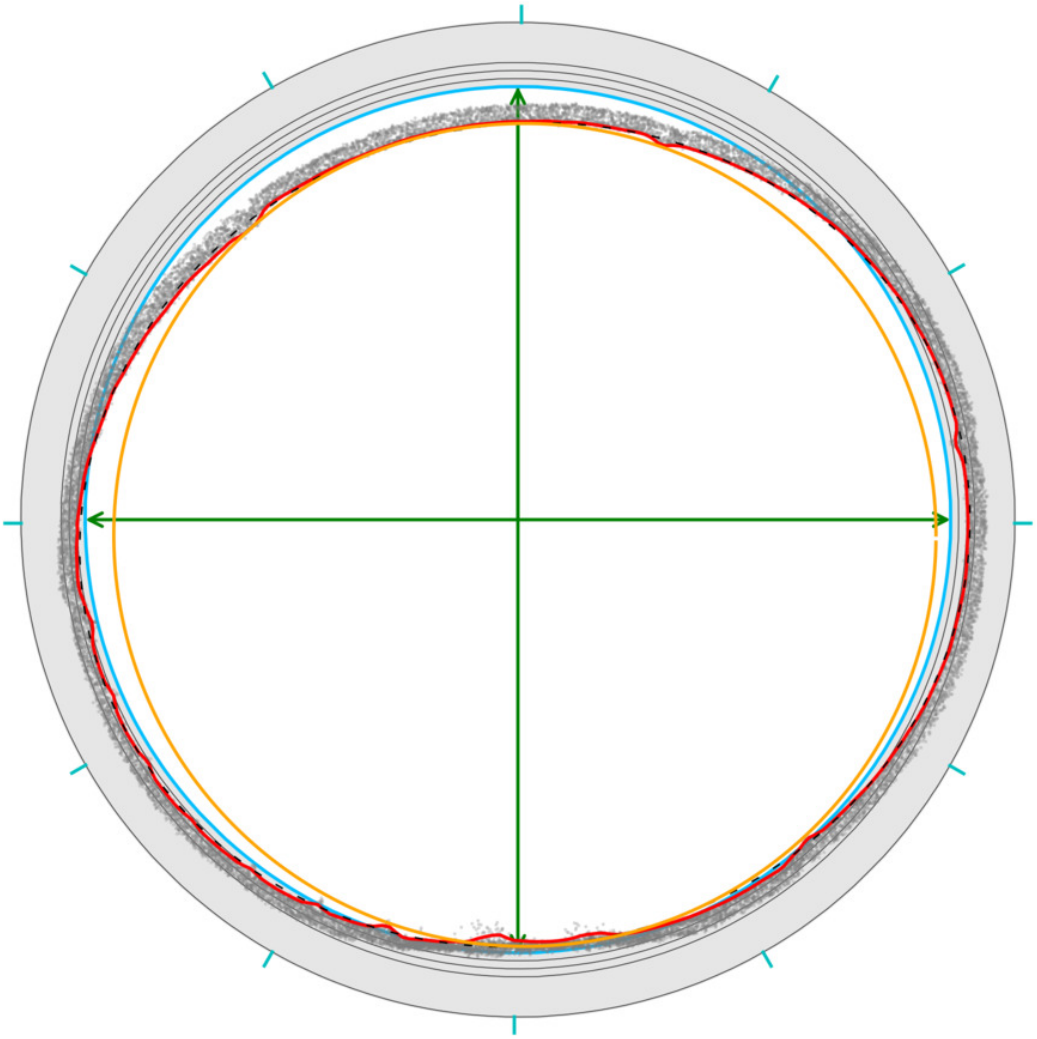
```
Footage   :  551 ft
Width     :  111.4" | 108.0"
Height    :  103.7" | 108.0"

Area      :  8947 sq in
Perimeter :  338.9 in
Ovality   :  4.3%

Interior Diameter : 102.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 552.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



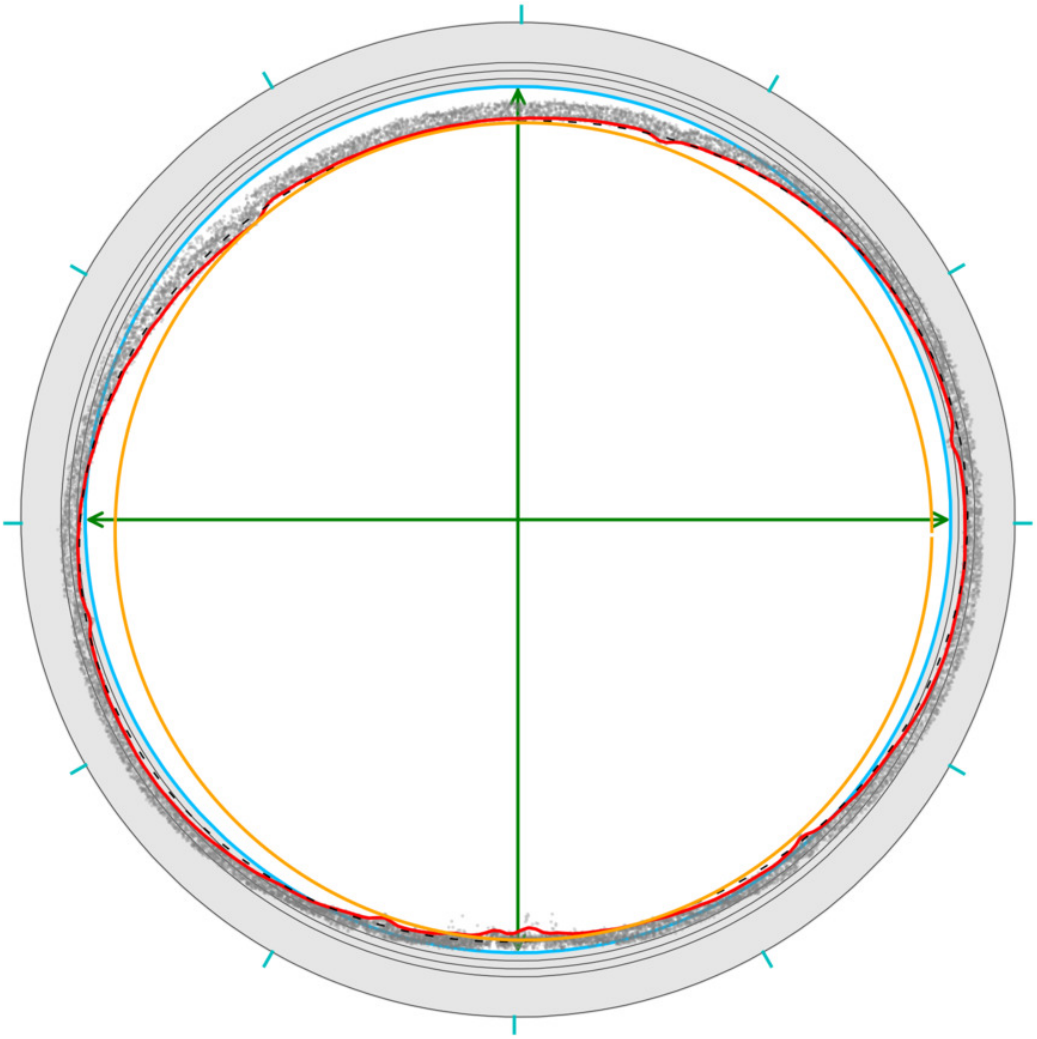
```
Footage   :  552 ft
Width     :  111.2" | 108.0"
Height    :  103.6" | 108.0"

Area      :  8955 sq in
Perimeter :  338.2 in
Ovality   :  4.2%

Interior Diameter : 102.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 553.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



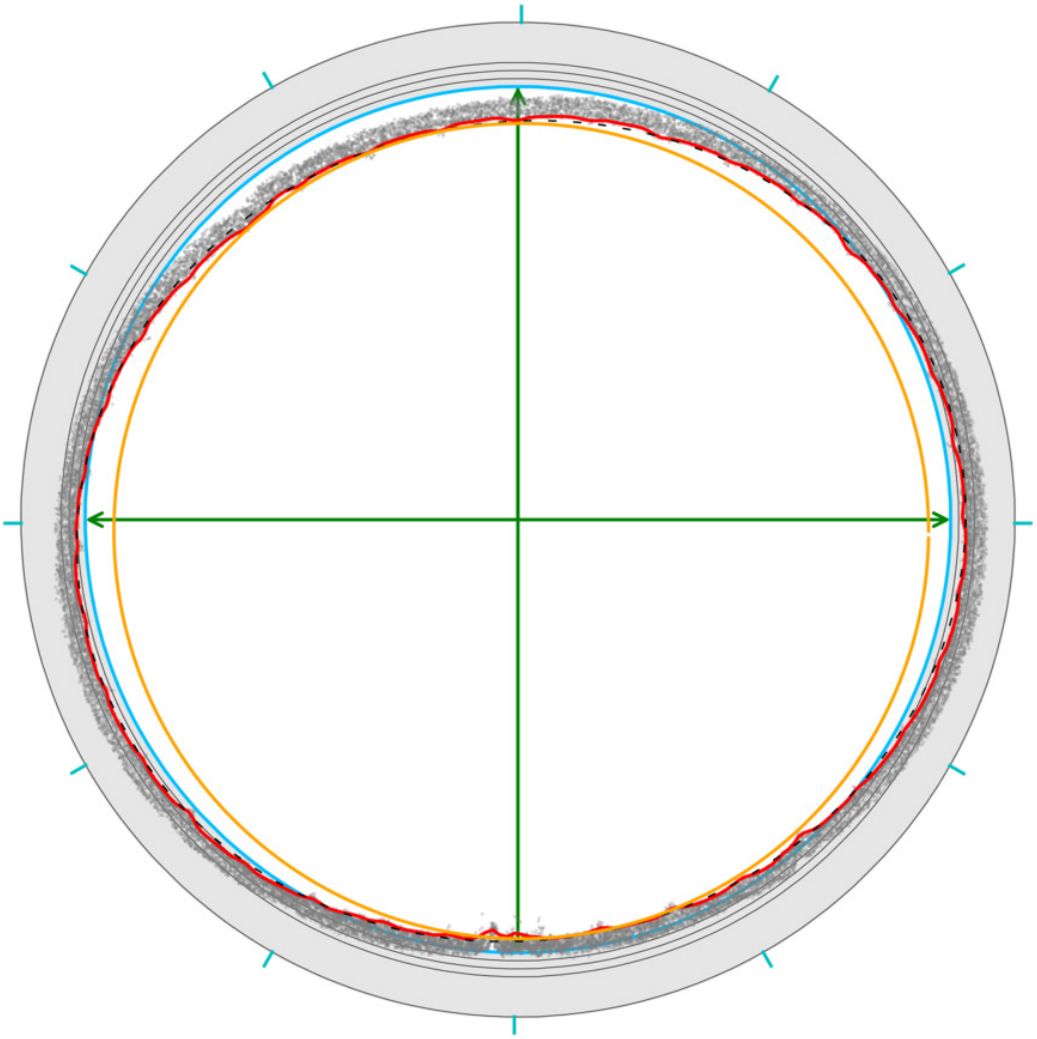
```
Footage   :  553 ft
Width     :  110.7" | 108.0"
Height    :  104.0" | 108.0"

Area      :  8899 sq in
Perimeter :  336.8 in
Ovality   :  4.4%

Interior Diameter : 101.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 554.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



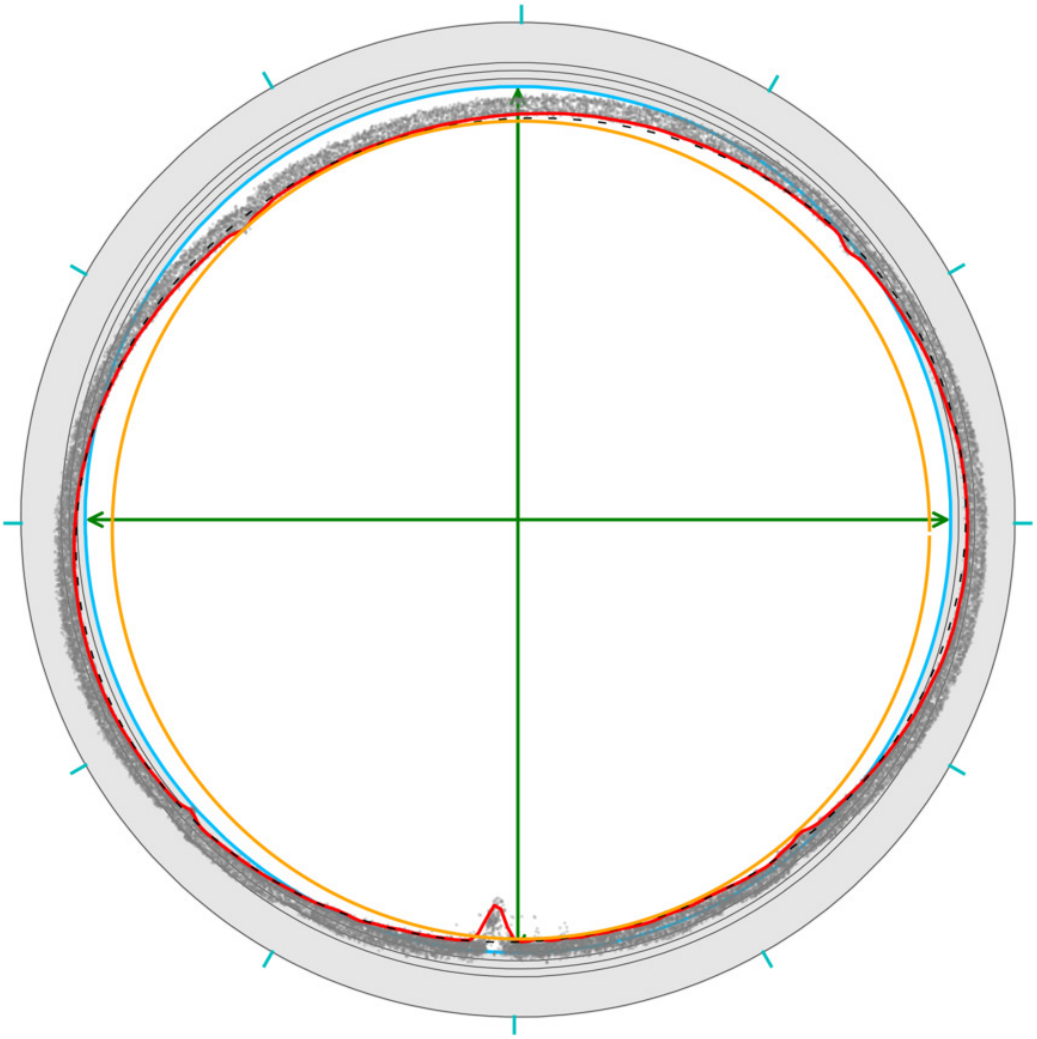
```
Footage   :  554 ft
Width     :  111.1" | 108.0"
Height    :  103.9" | 108.0"

Area      :  8904 sq in
Perimeter :  338.2 in
Ovality   :  4.3%

Interior Diameter : 101.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 555.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



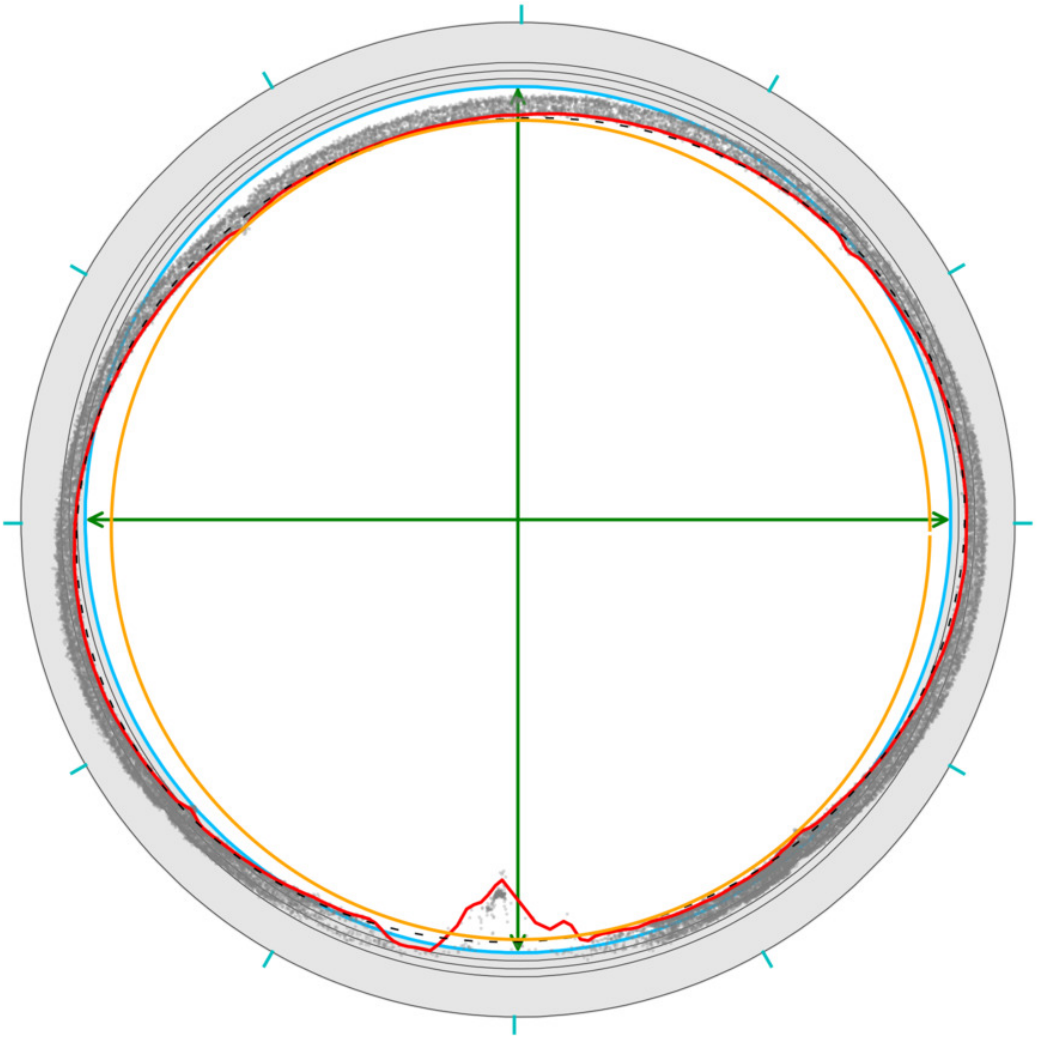
```
Footage   :  555 ft
Width     :  111.5" | 108.0"
Height    :  104.6" | 108.0"

Area      :  8942 sq in
Perimeter :  341.9 in
Ovality   :  4.2%

Interior Diameter : 102.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 556.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



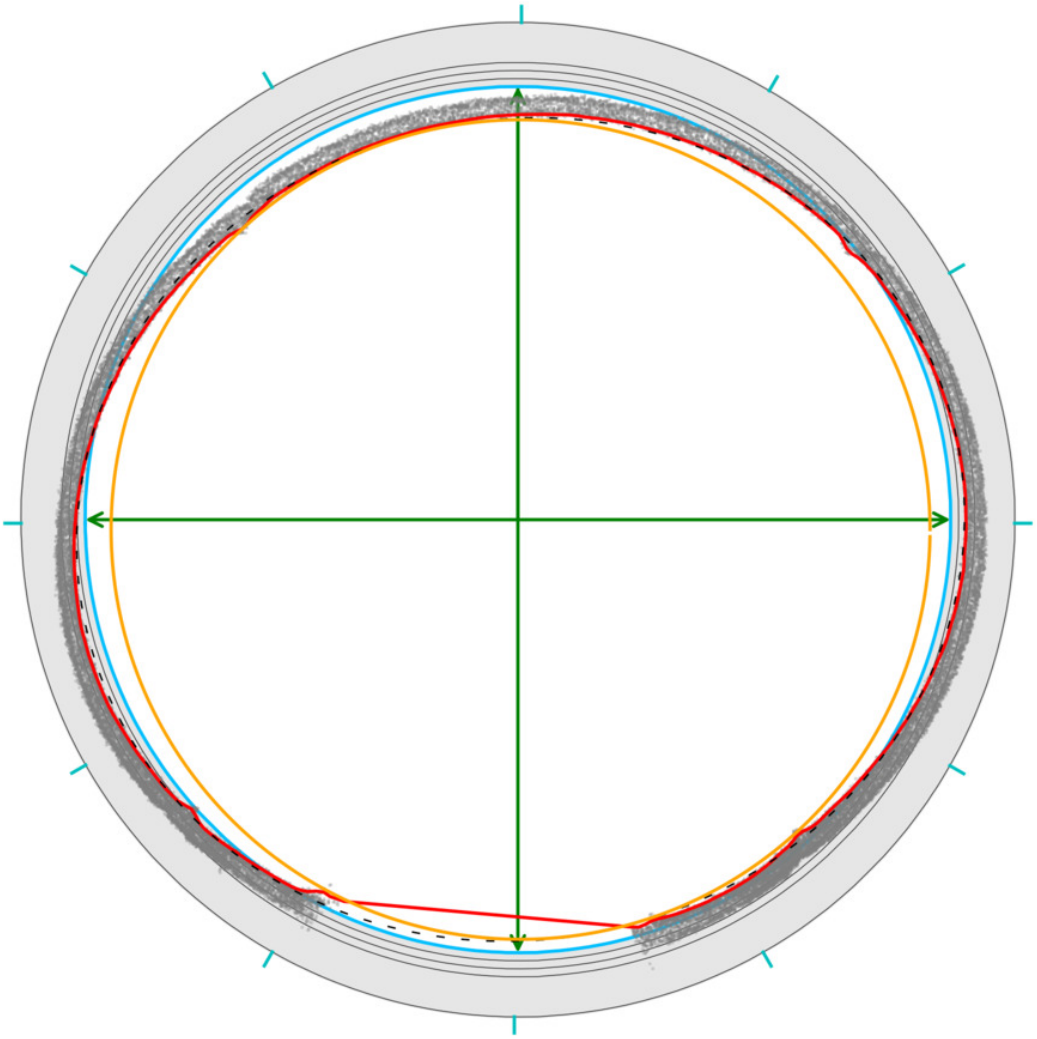
```
Footage   :  556 ft
Width     :  111.4" | 108.0"
Height    :  104.5" | 108.0"

Area      :  8894 sq in
Perimeter :  345.5 in
Ovality   :  4.1%

Interior Diameter : 102.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 557.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



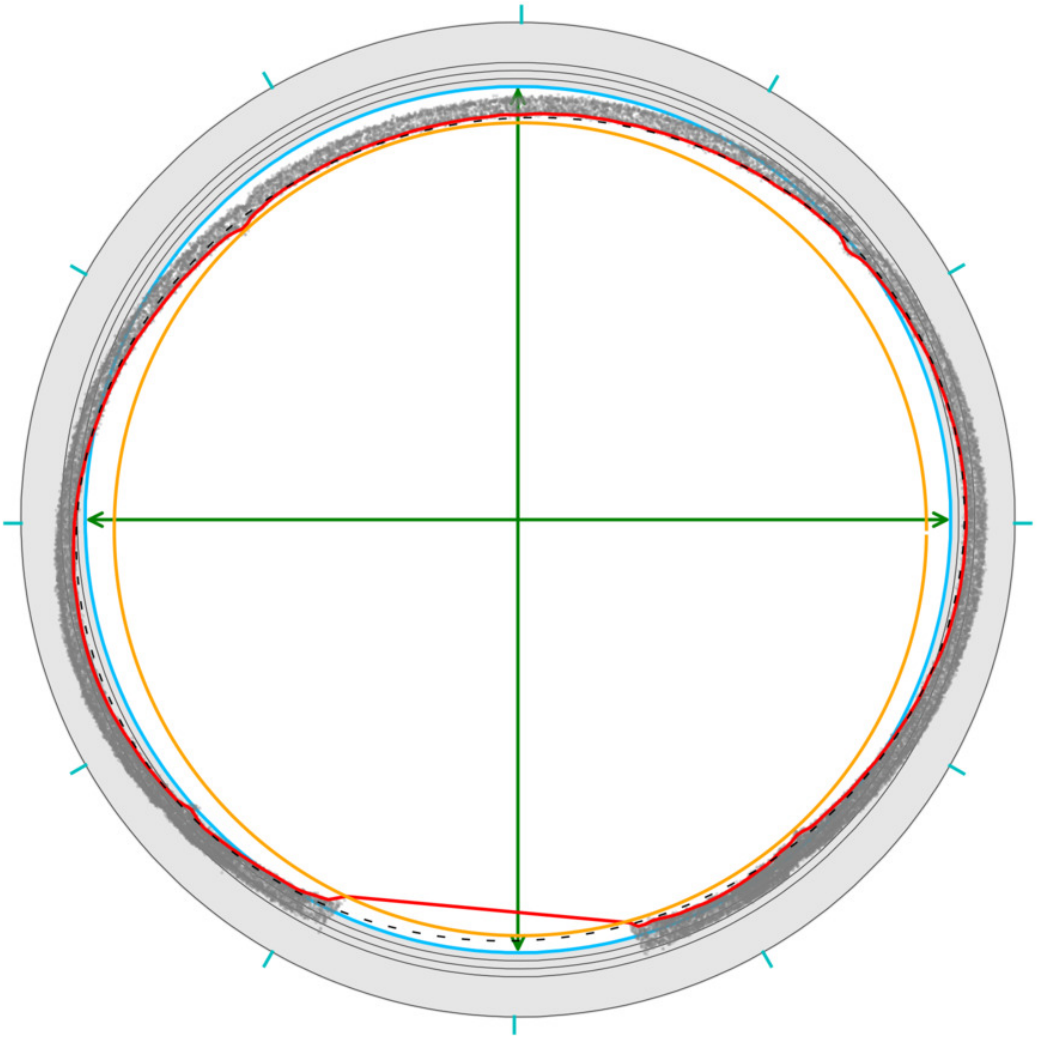
```
Footage   :  557 ft
Width     :  111.3" | 108.0"
Height    :  104.5" | 108.0"

Area      :  8837 sq in
Perimeter :  335.6 in
Ovality   :  4.1%

Interior Diameter : 102.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 558.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



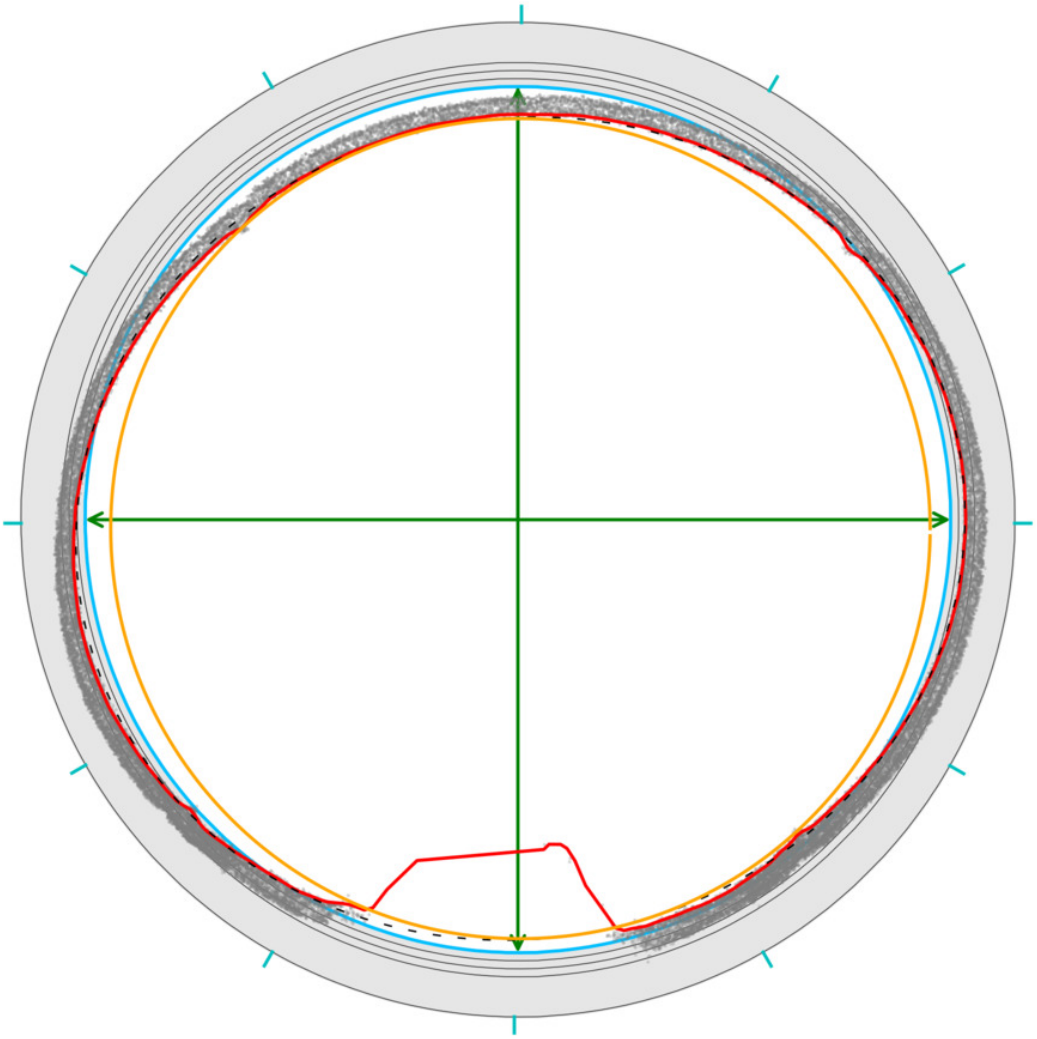
```
Footage   :  558 ft
Width     :  111.4" | 108.0"
Height    :  104.5" | 108.0"

Area      :  8821 sq in
Perimeter :  335.7 in
Ovality   :  4.2%

Interior Diameter : 101.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 559.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



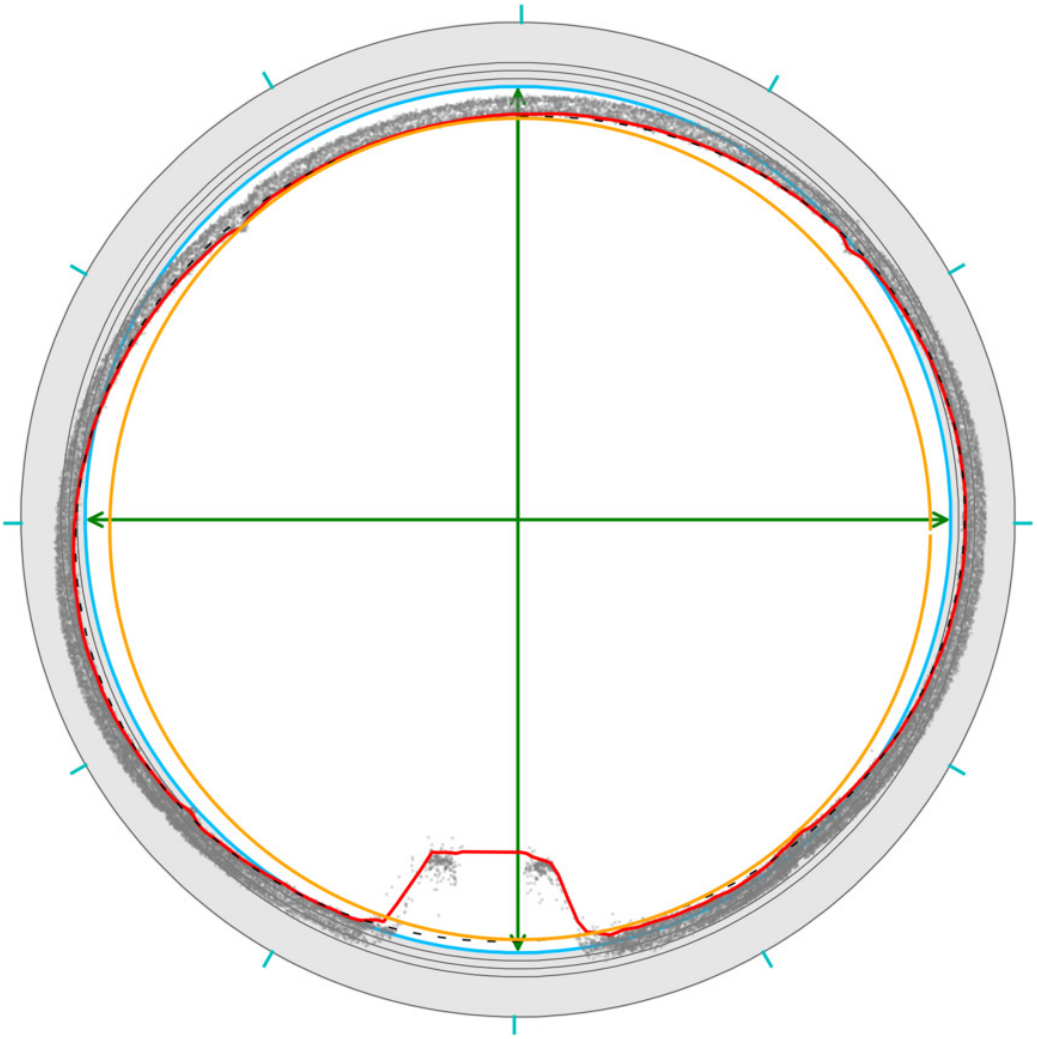
```
Footage   :  559 ft
Width     :  111.4" | 108.0"
Height    :  104.5" | 108.0"

Area      :  8680 sq in
Perimeter :  344.6 in
Ovality   :  4.2%

Interior Diameter : 102.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 560.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



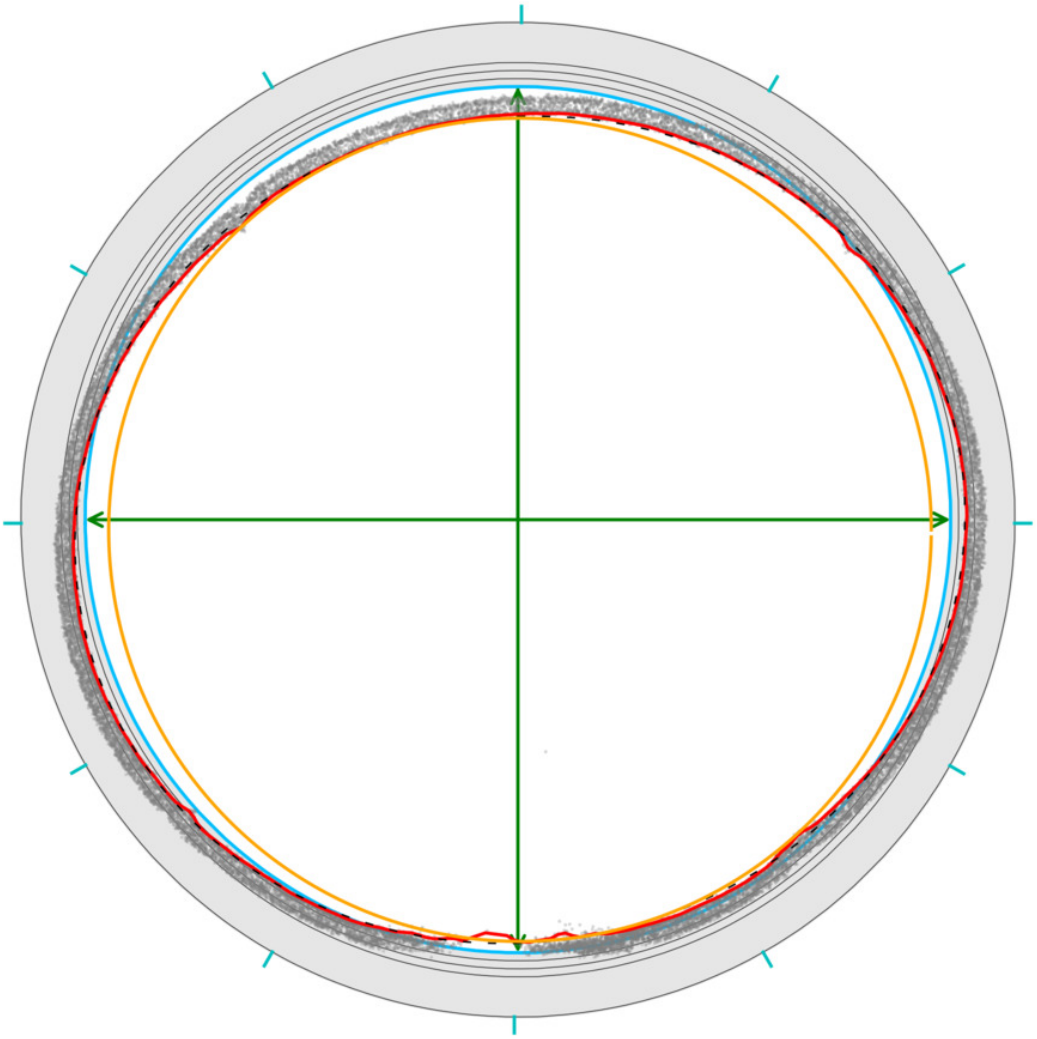
```
Footage   :  560 ft
Width     :  111.3" | 108.0"
Height    :  104.6" | 108.0"

Area      :  8752 sq in
Perimeter :  346.9 in
Ovality   :  4.1%

Interior Diameter : 102.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 561.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



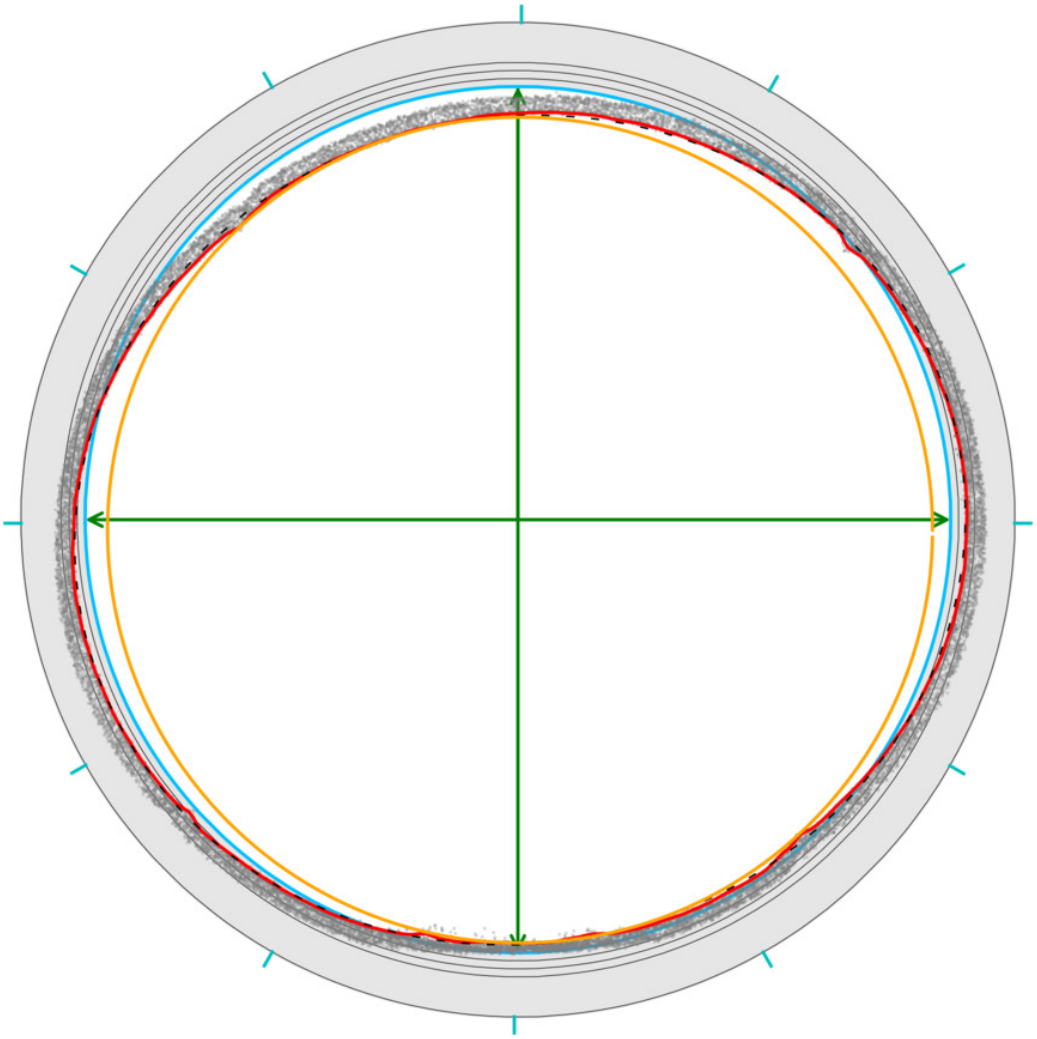
```
Footage   :  561 ft
Width     :  111.5" | 108.0"
Height    :  104.6" | 108.0"

Area      :  8982 sq in
Perimeter :  338.0 in
Ovality   :  4.1%

Interior Diameter : 102.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 562.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



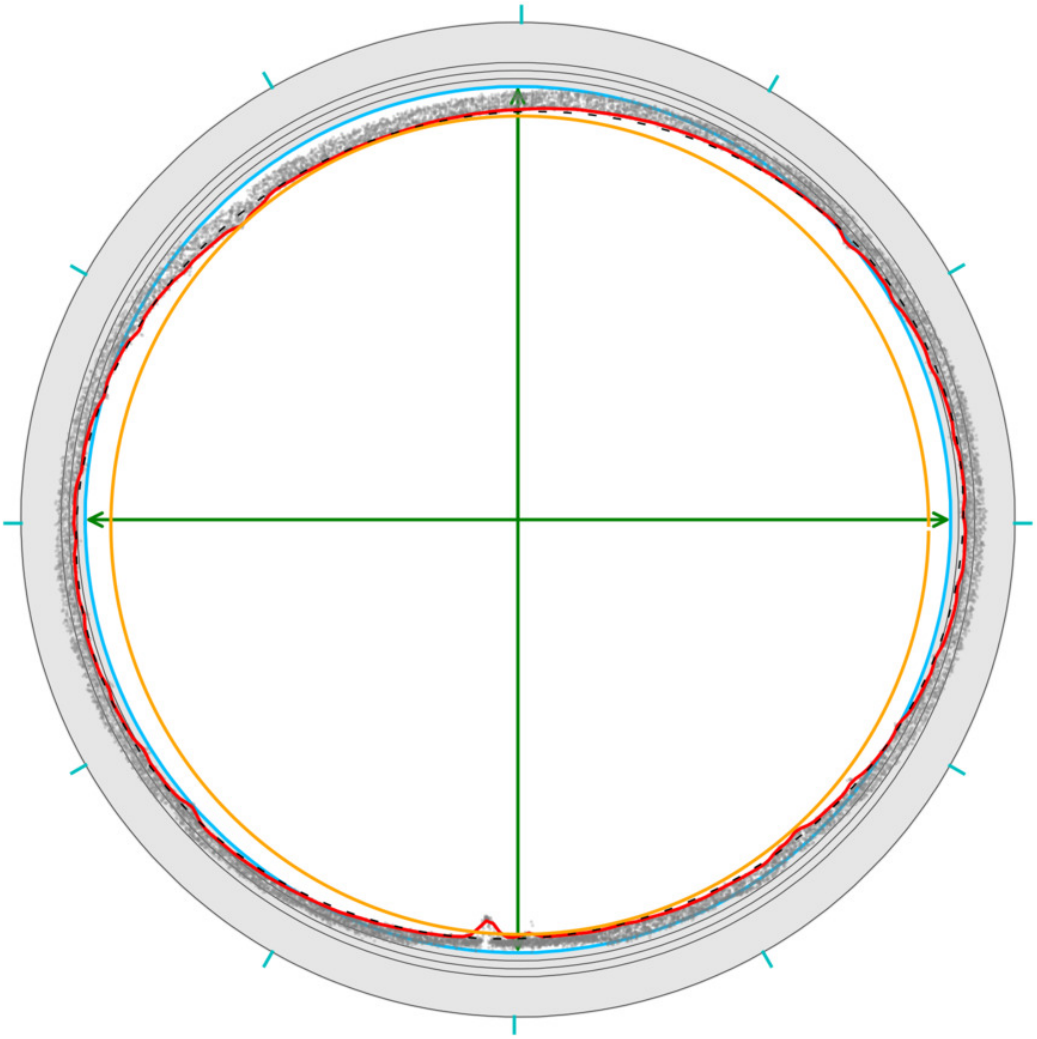
```
Footage   :  562 ft
Width     :  111.6" | 108.0"
Height    :  104.7" | 108.0"

Area      :  9016 sq in
Perimeter :  338.0 in
Ovality   :  4.0%

Interior Diameter : 103.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 563.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



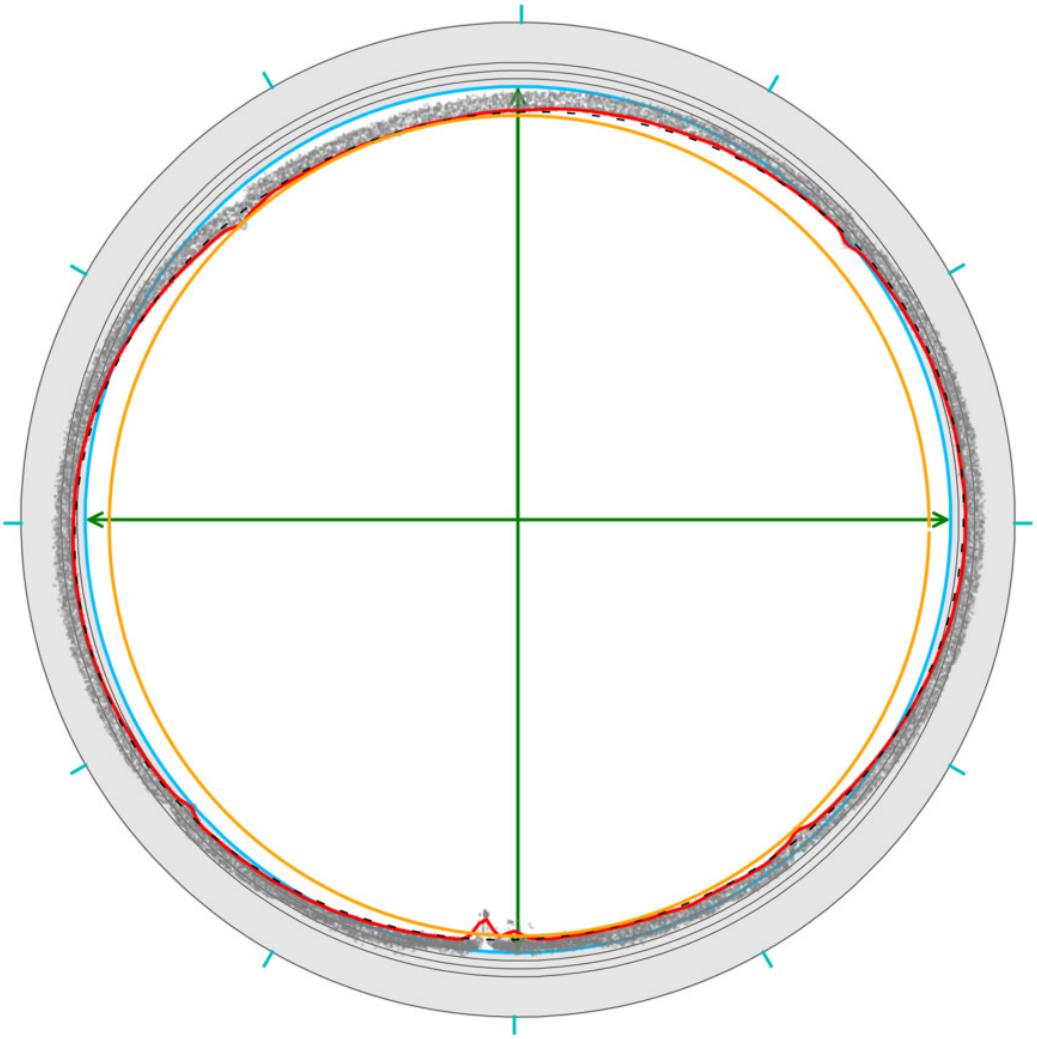
```
Footage   :  563 ft
Width     :  111.2" | 108.0"
Height    :  105.1" | 108.0"

Area      :  8958 sq in
Perimeter :  339.3 in
Ovality   :  3.9%

Interior Diameter : 102.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 564.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



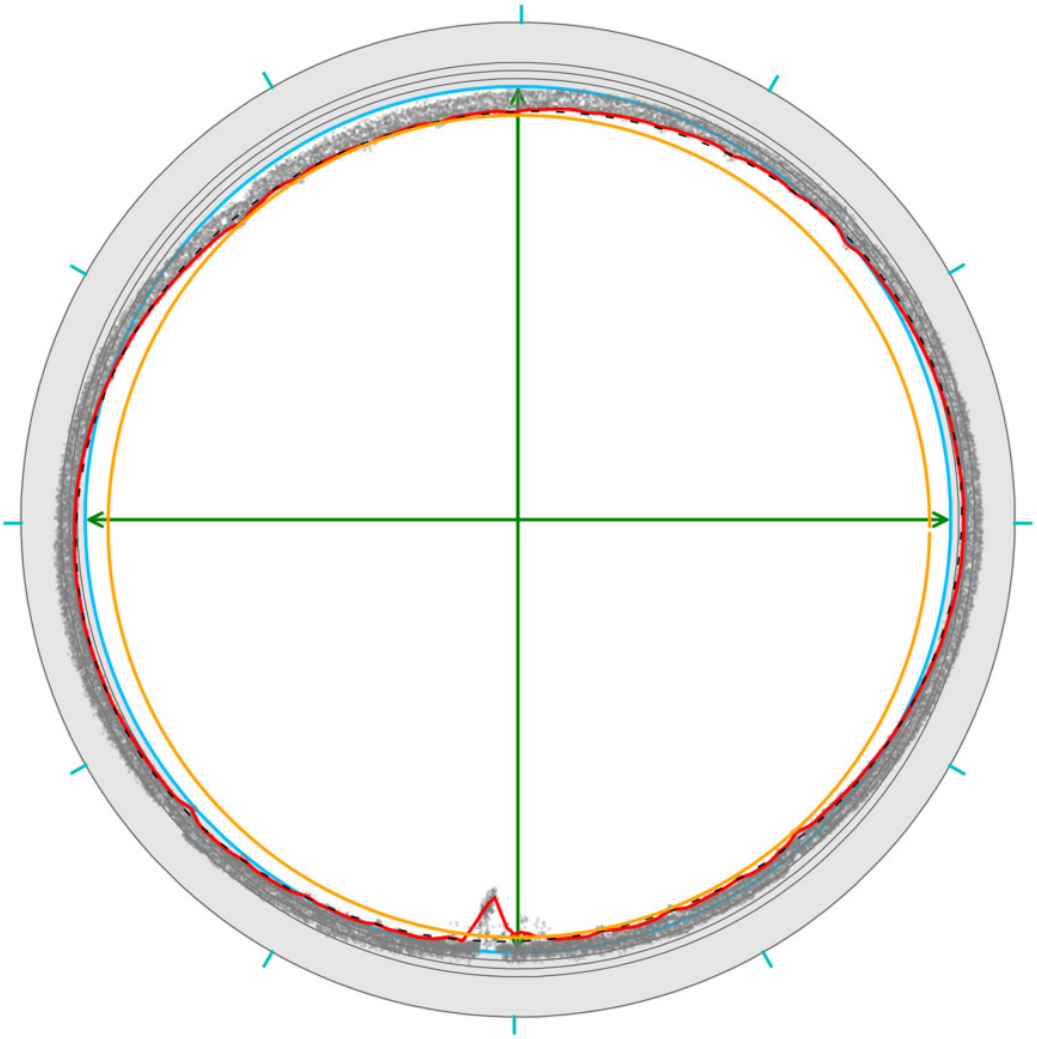
```
Footage    :  564 ft
Width      :  111.4" | 108.0"
Height     :  105.0" | 108.0"

Area       :  8984 sq in
Perimeter  :  339.9 in
Ovality    :  4.0%

Interior Diameter : 102.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 565.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



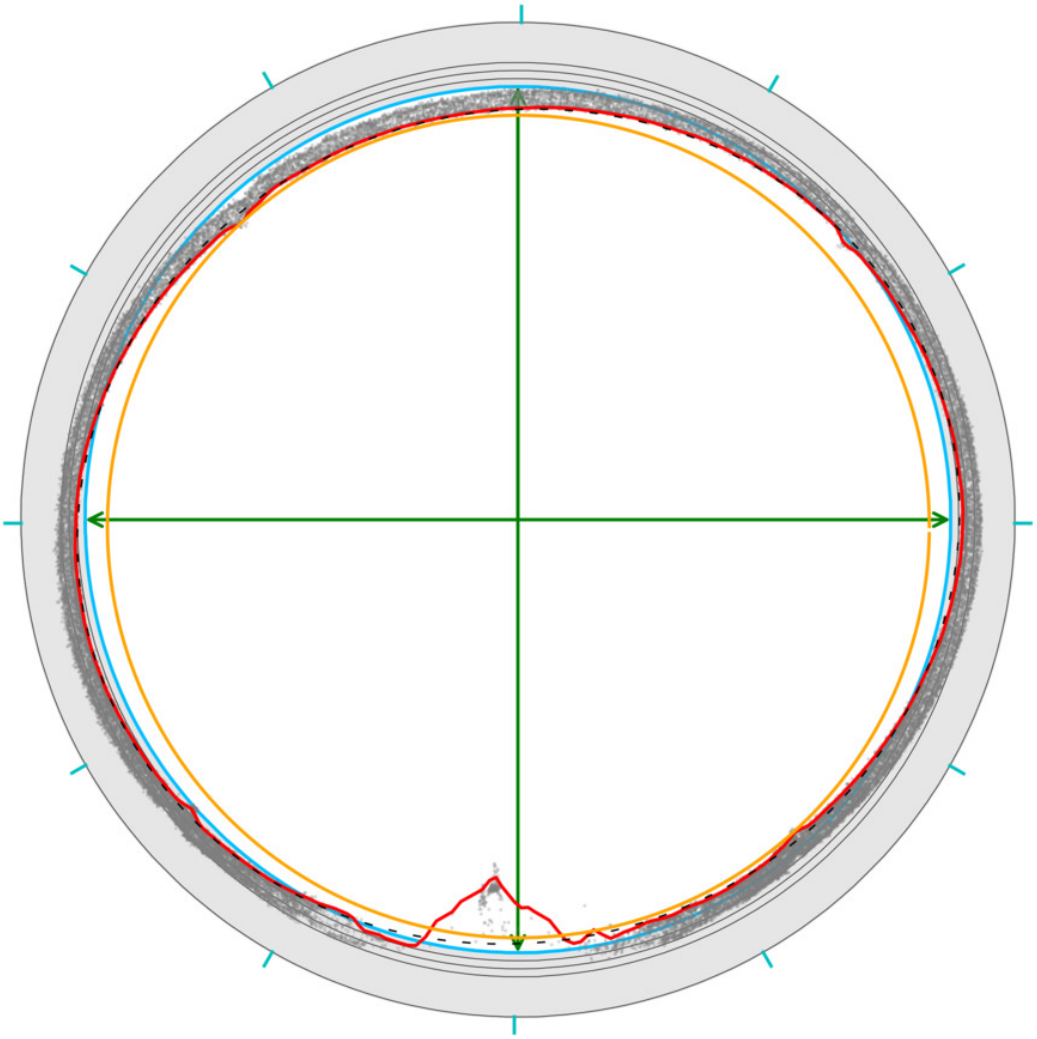
```
Footage    :  565 ft
Width      :  111.0" | 108.0"
Height     :  104.9" | 108.0"

Area       :  8959 sq in
Perimeter  :  343.6 in
Ovality    :  3.7%

Interior Diameter : 102.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 566.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



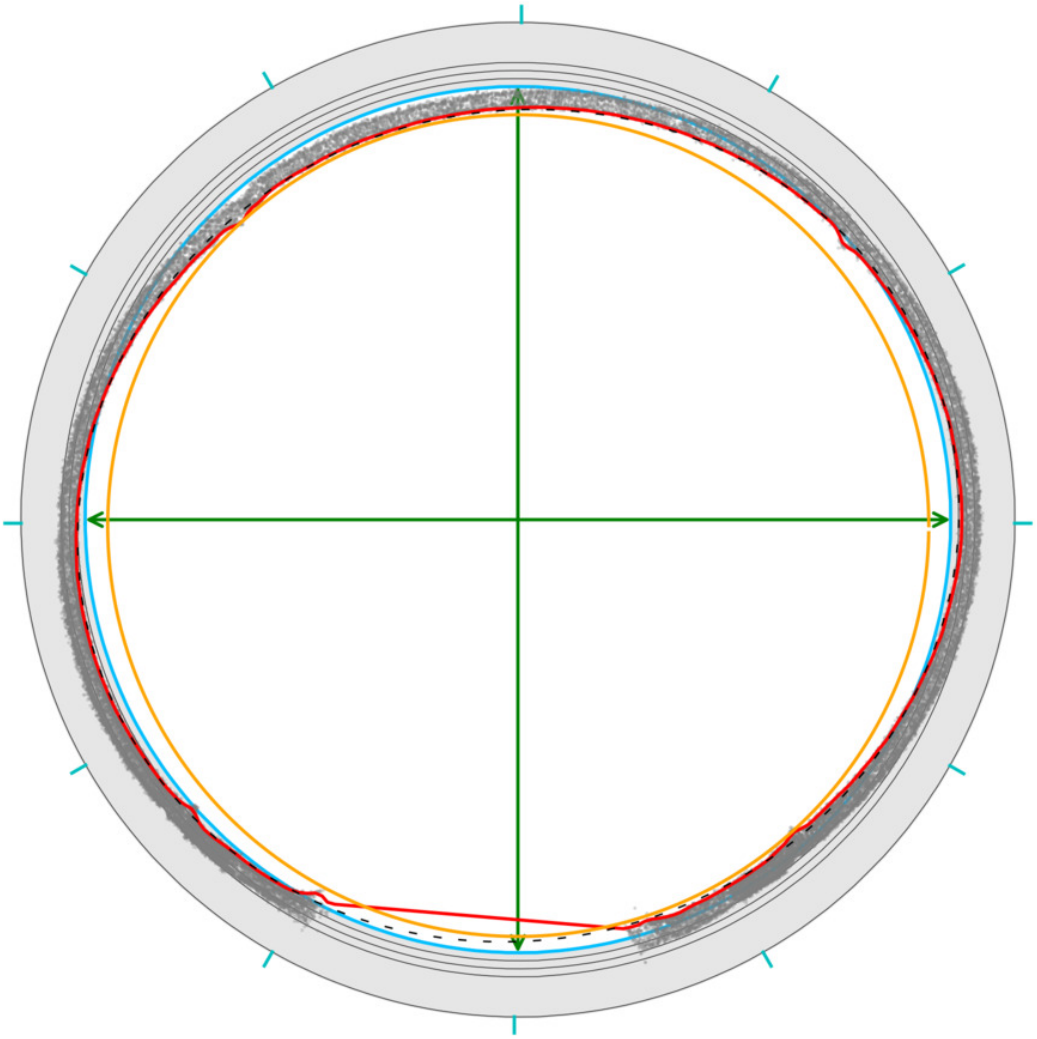
```
Footage   :  566 ft
Width     :  110.8" | 108.0"
Height    :  105.3" | 108.0"

Area      :  8918 sq in
Perimeter :  345.8 in
Ovality   :  3.3%

Interior Diameter : 102.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 567.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



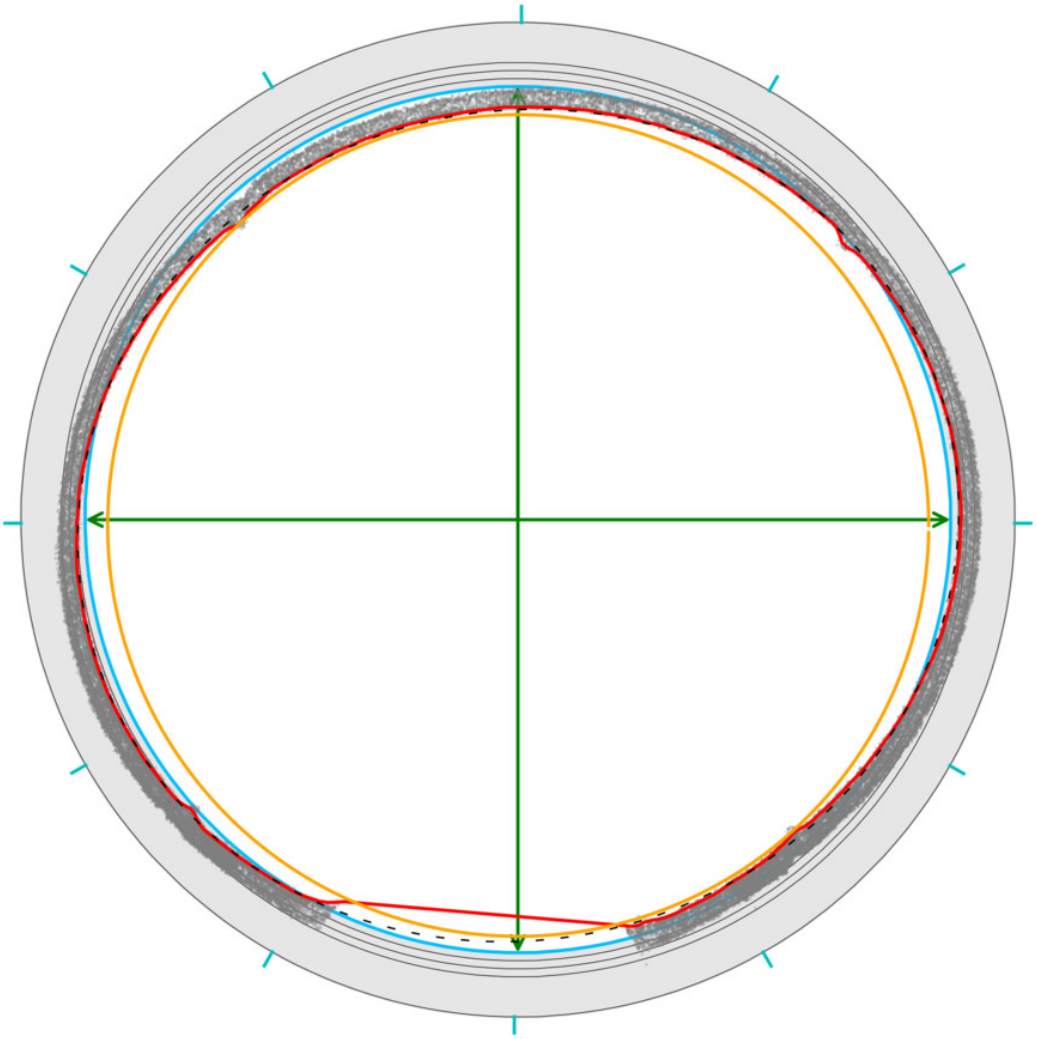
```
Footage   :  567 ft
Width     :  110.5" | 108.0"
Height    :  105.4" | 108.0"

Area      :  8877 sq in
Perimeter :  336.3 in
Ovality   :  3.4%

Interior Diameter : 102.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 568.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



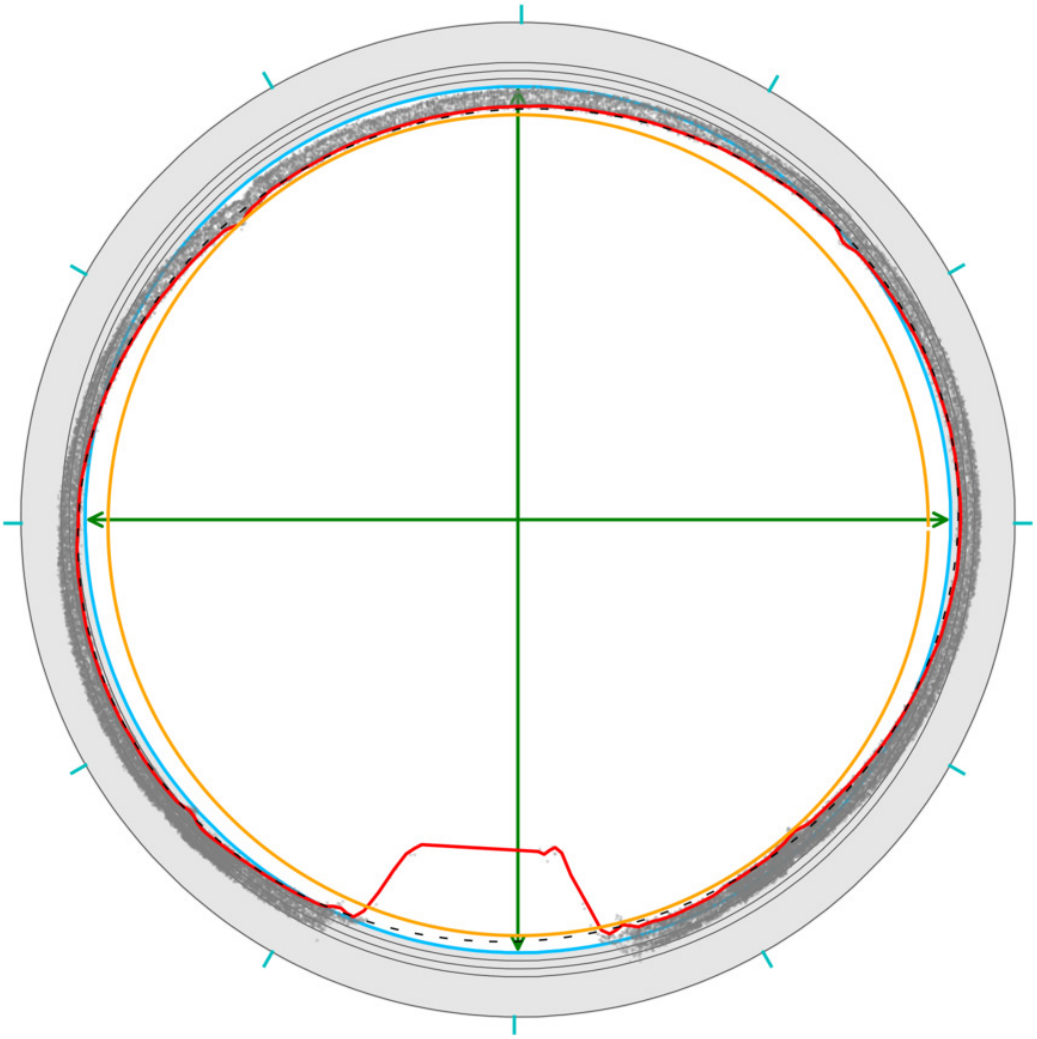
```
Footage   :  568 ft
Width     :  110.4" | 108.0"
Height    :  105.4" | 108.0"

Area      :  8860 sq in
Perimeter :  336.0 in
Ovality   :  3.4%

Interior Diameter : 102.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 569.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



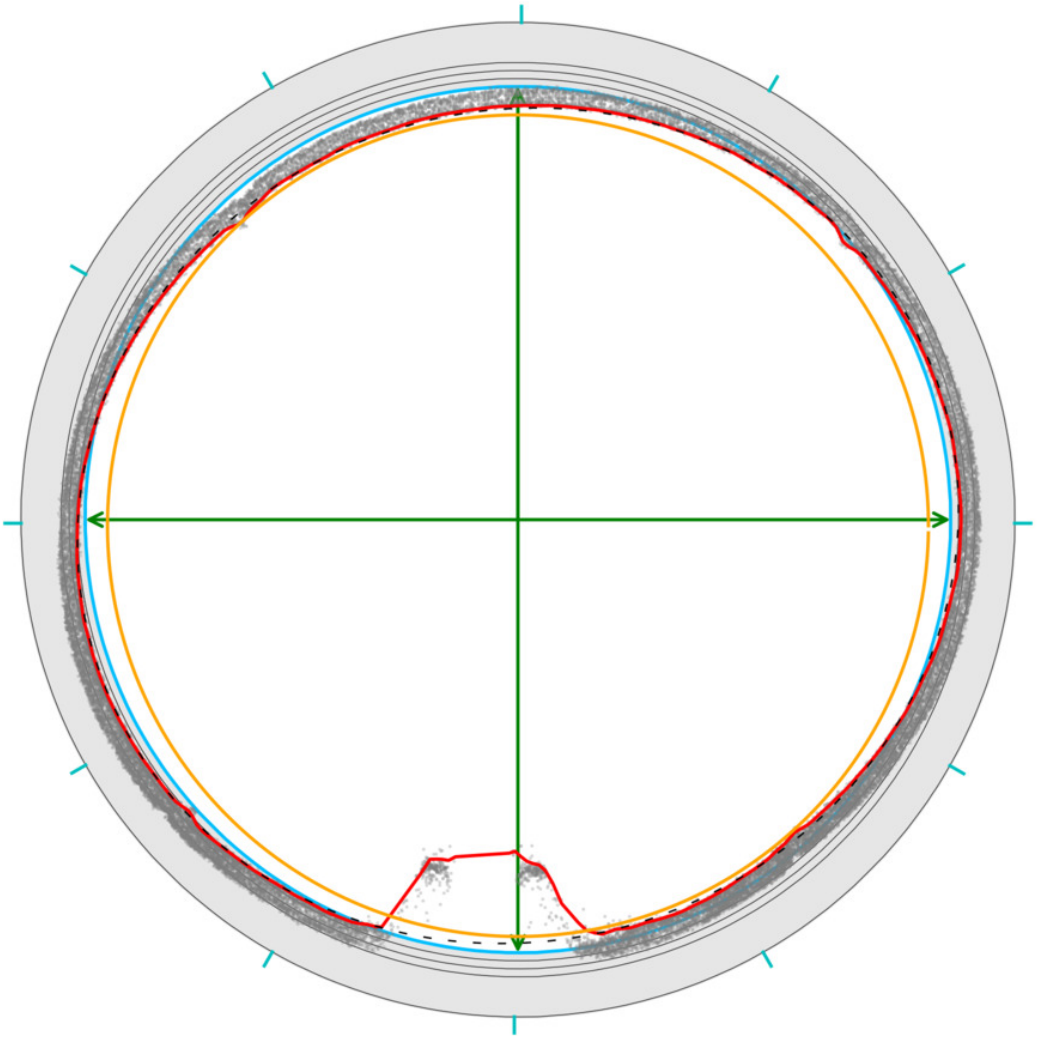
```
Footage   :  569 ft
Width     :  110.3" | 108.0"
Height    :  105.5" | 108.0"

Area      :  8686 sq in
Perimeter :  347.5 in
Ovality   :  3.3%

Interior Diameter : 102.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 570.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



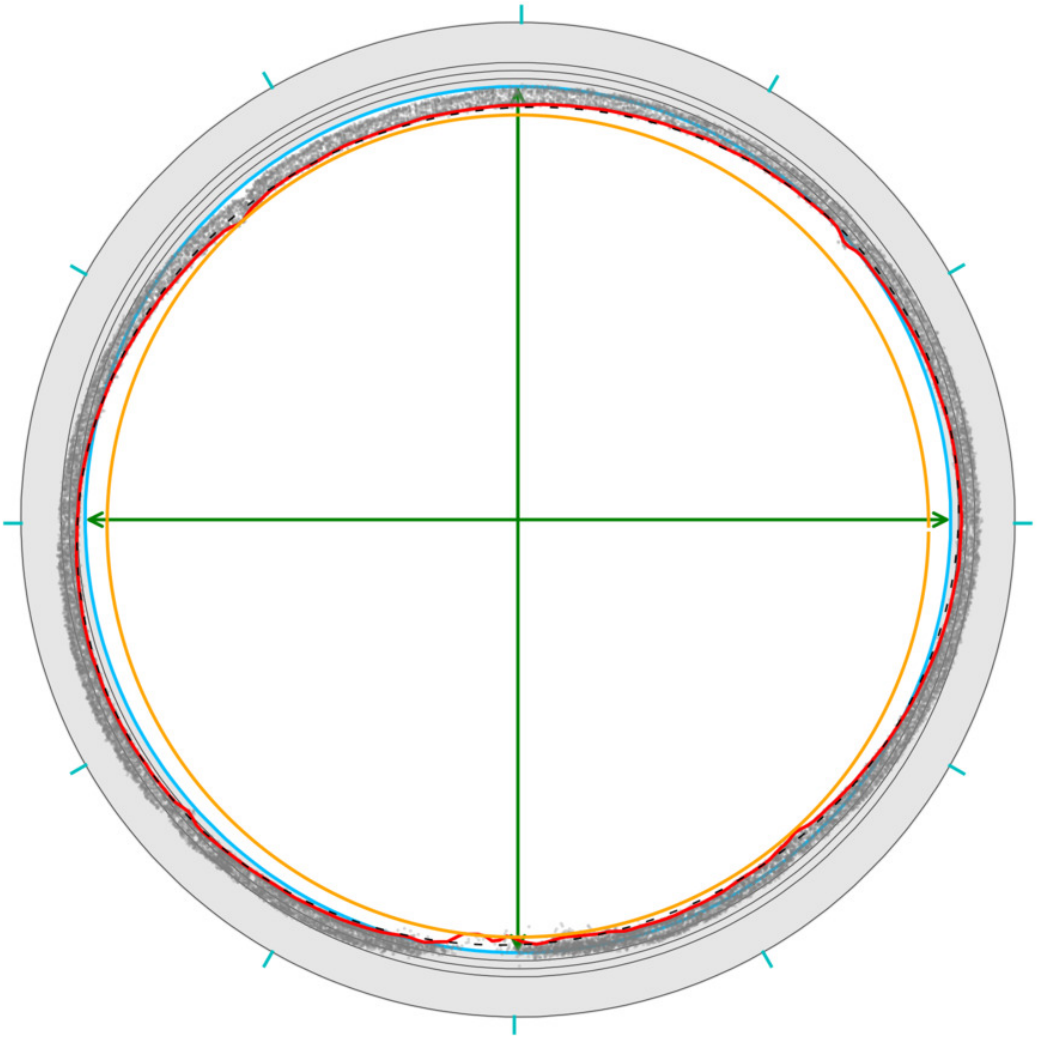
```
Footage   :  570 ft
Width     :  110.3" | 108.0"
Height    :  105.6" | 108.0"

Area      :  8788 sq in
Perimeter :  346.5 in
Ovality   :  3.3%

Interior Diameter : 102.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 571.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



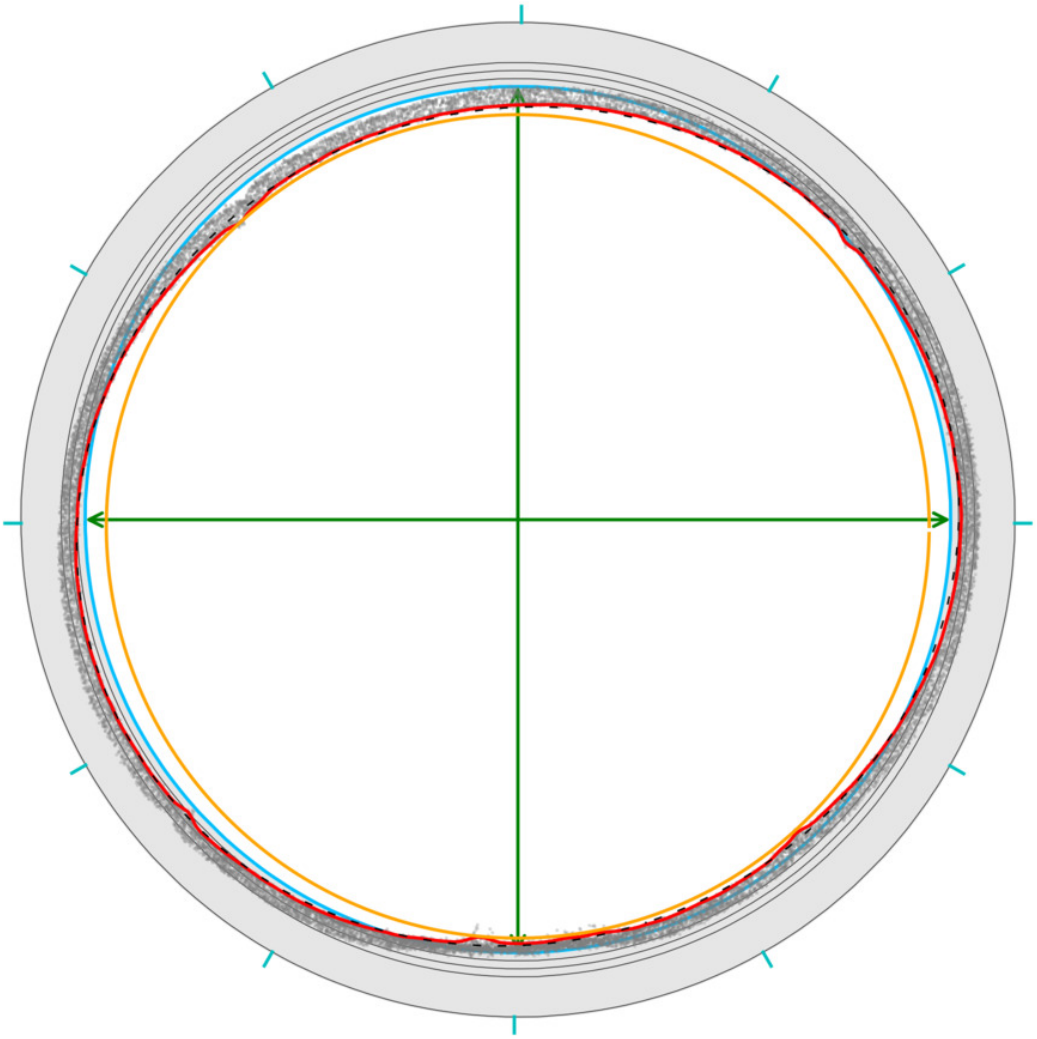
```
Footage   :  571 ft
Width     :  110.4" | 108.0"
Height    :  105.7" | 108.0"

Area      :  9013 sq in
Perimeter :  338.7 in
Ovality   :  3.2%

Interior Diameter : 102.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 572.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 572 ft
Width : 110.5" | 108.0"
Height : 105.7" | 108.0"

Area : 9031 sq in
Perimeter : 338.2 in
Ovality : 3.2%

Interior Diameter : 102.7"

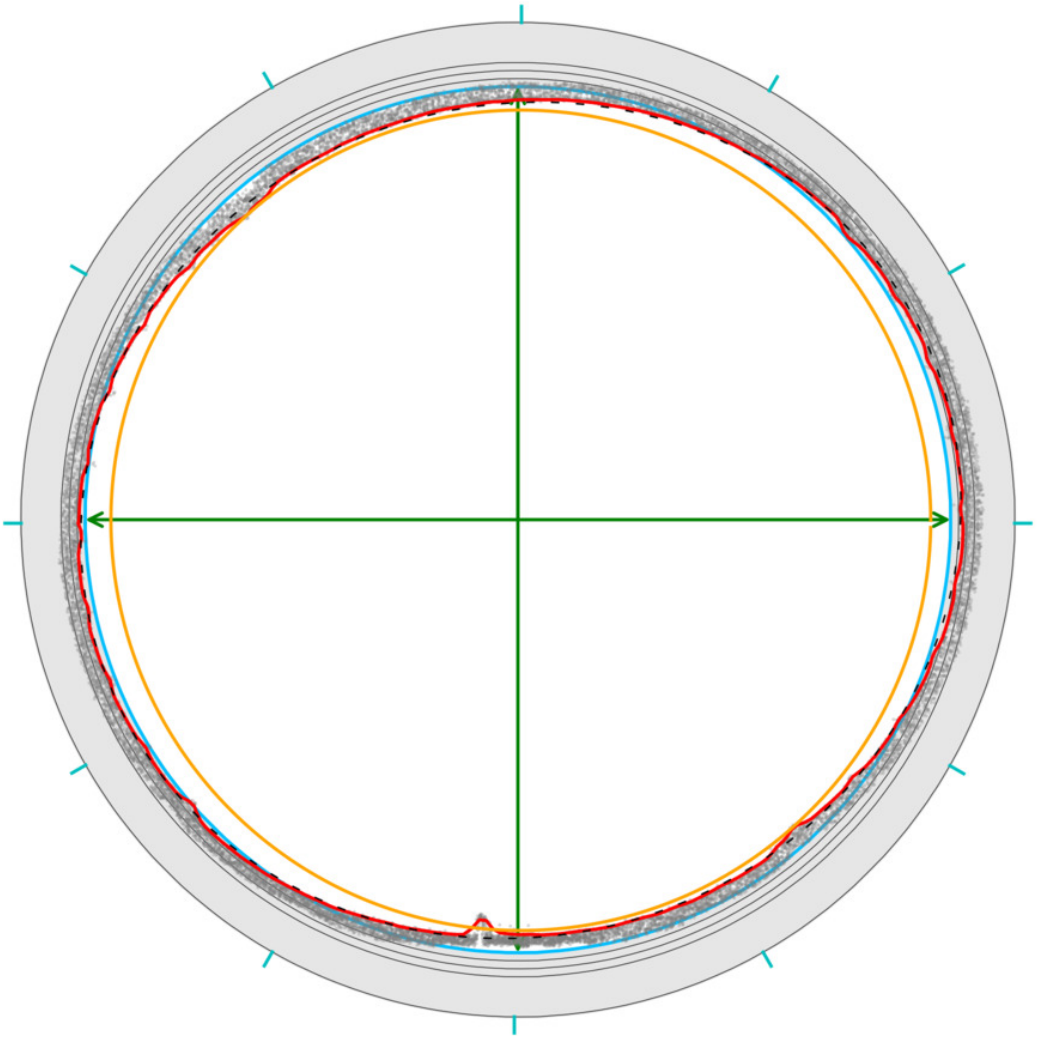
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 573.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 573 ft
Width : 110.4" | 108.0"
Height : 106.3" | 108.0"

Area : 8978 sq in
Perimeter : 339.5 in
Ovality : 3.2%

Interior Diameter : 102.3"

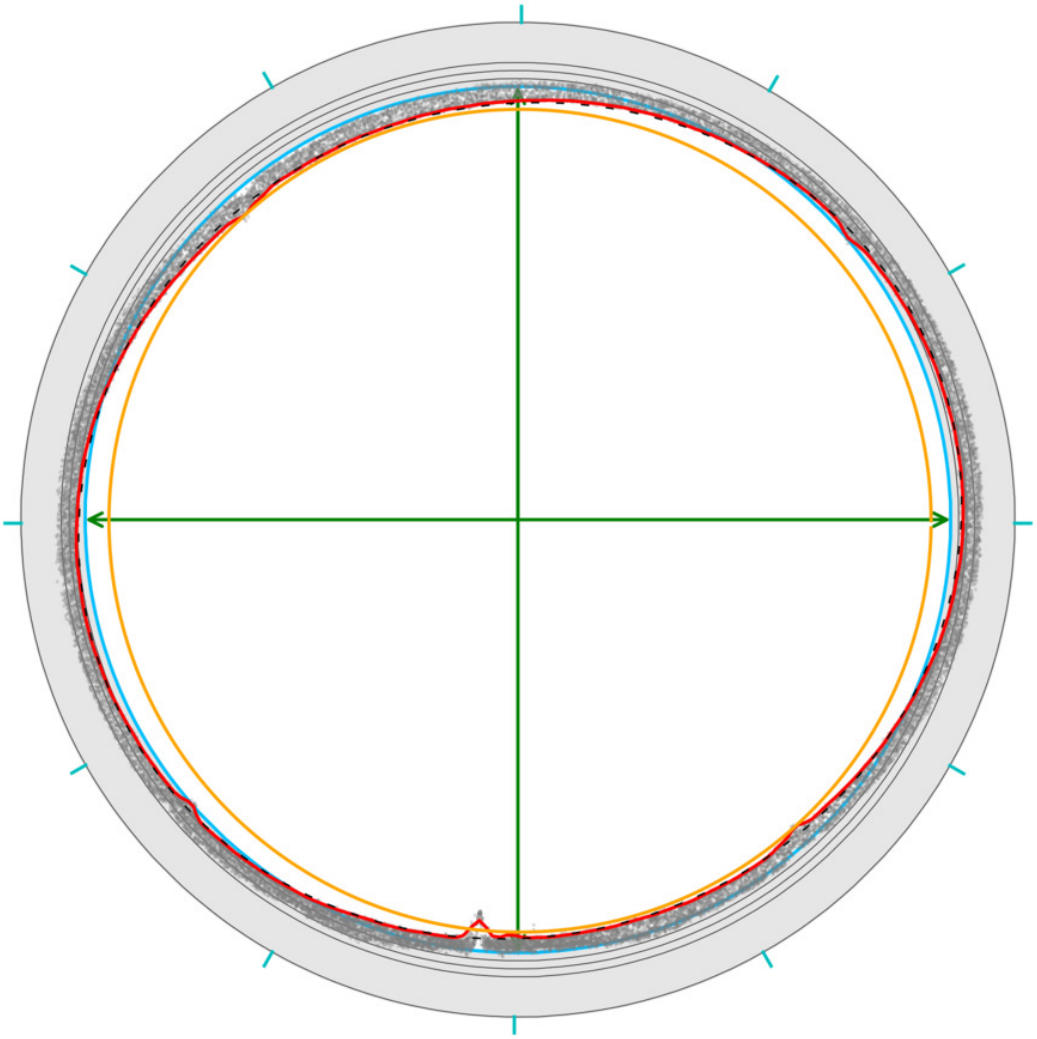
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 574.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



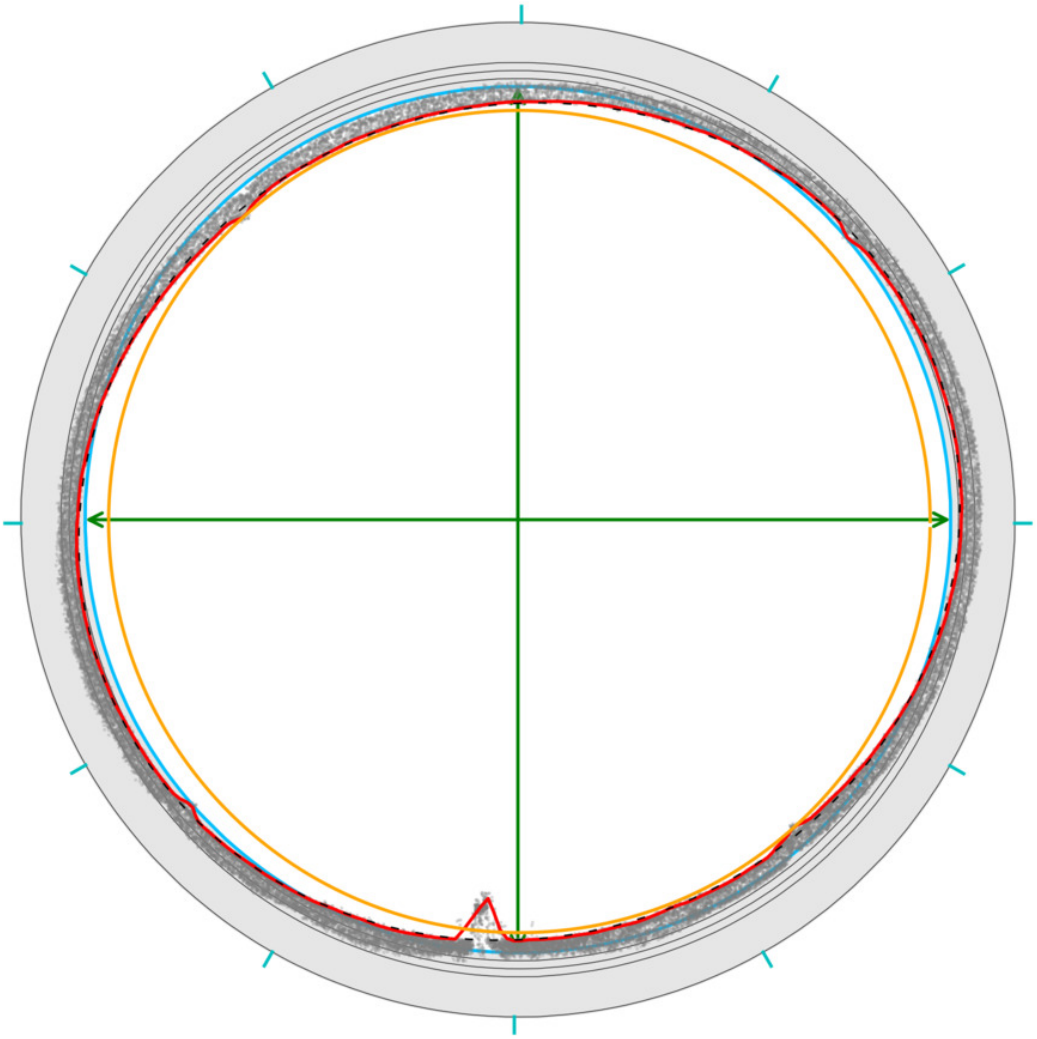
```
Footage   :  574 ft
Width     :  110.7" | 108.0"
Height    :  106.2" | 108.0"

Area      :  9009 sq in
Perimeter :  339.6 in
Ovality   :  3.4%

Interior Diameter : 102.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 575.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



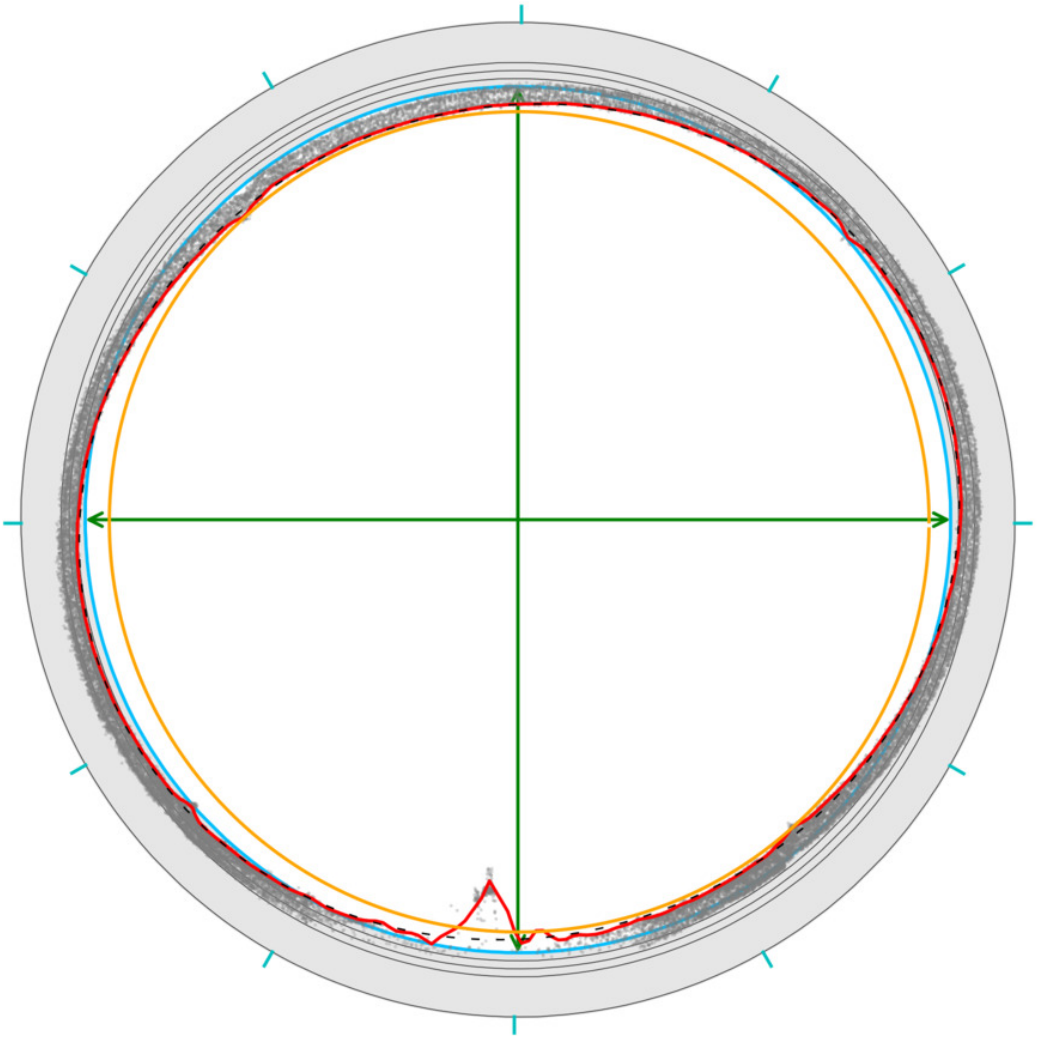
```
Footage   :  575 ft
Width     :  110.5" | 108.0"
Height    :  106.1" | 108.0"

Area      :  8989 sq in
Perimeter :  343.4 in
Ovality   :  3.4%

Interior Diameter : 102.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 576.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



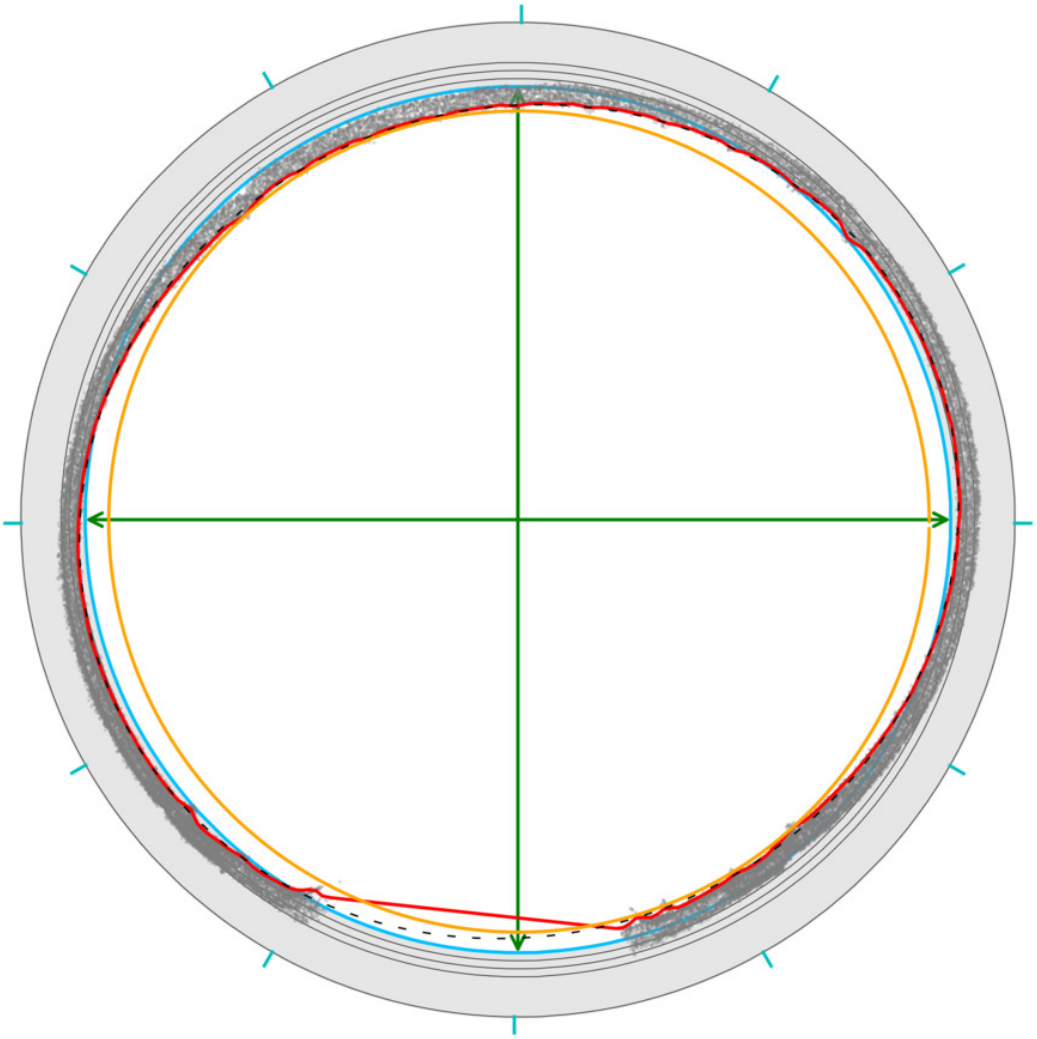
```
Footage   :  576 ft
Width     :  110.3" | 108.0"
Height    :  105.8" | 108.0"

Area      :  8944 sq in
Perimeter :  347.2 in
Ovality   :  3.5%

Interior Diameter : 102.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 577.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



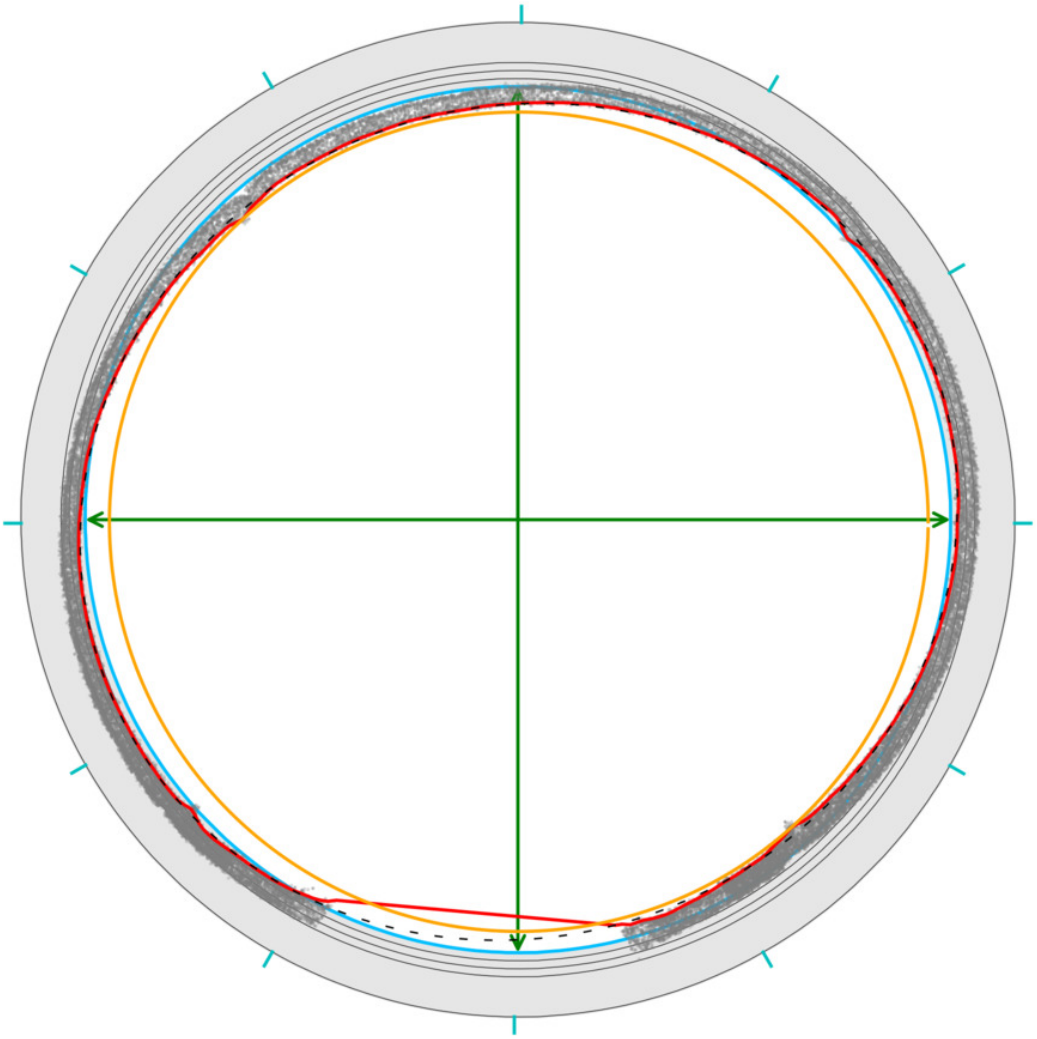
```
Footage   :  577 ft
Width     :  110.1" | 108.0"
Height    :  105.7" | 108.0"

Area      :  8870 sq in
Perimeter :  336.7 in
Ovality   :  3.5%

Interior Diameter : 102.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 578.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



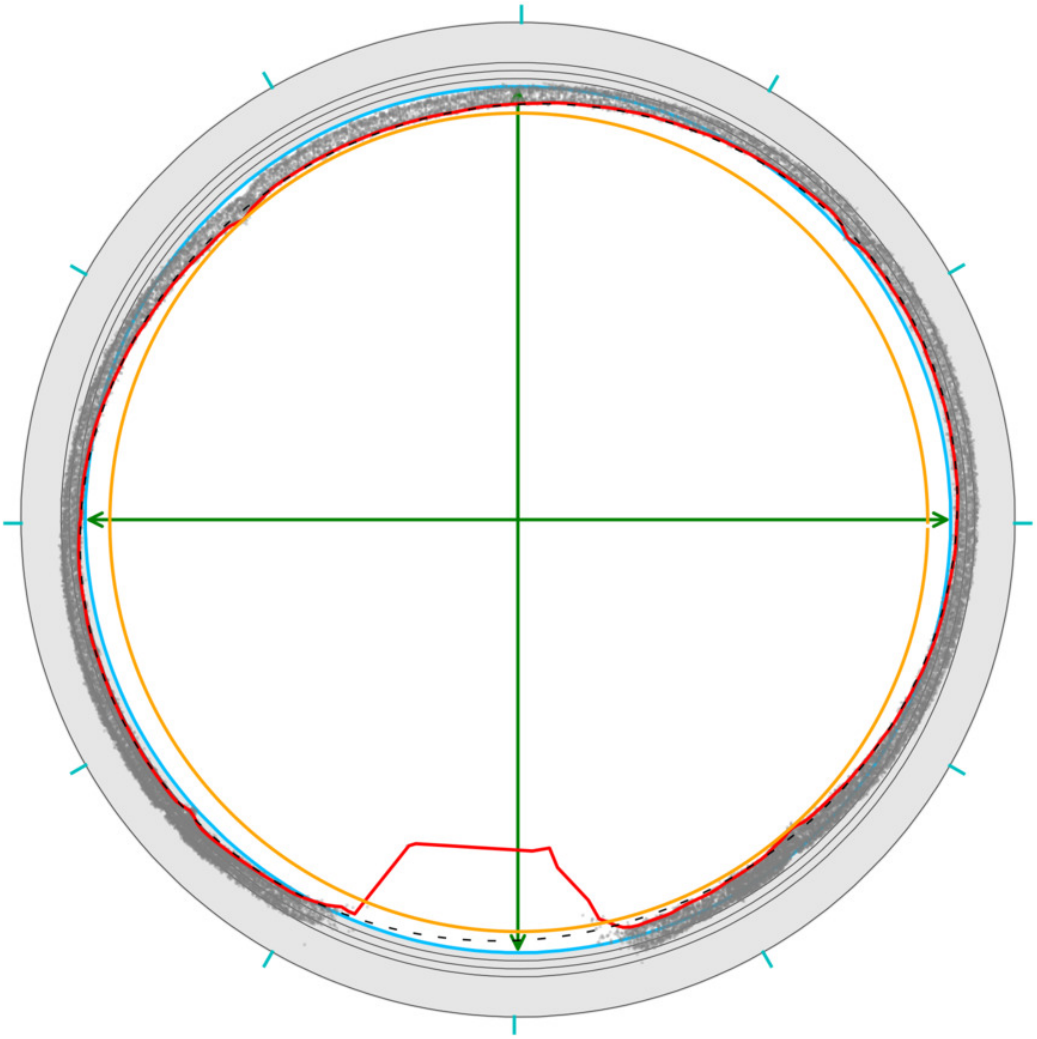
```
Footage   :  578 ft
Width     :  109.8" | 108.0"
Height    :  105.9" | 108.0"

Area      :  8872 sq in
Perimeter :  336.0 in
Ovality   :  3.4%

Interior Diameter : 102.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 579.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



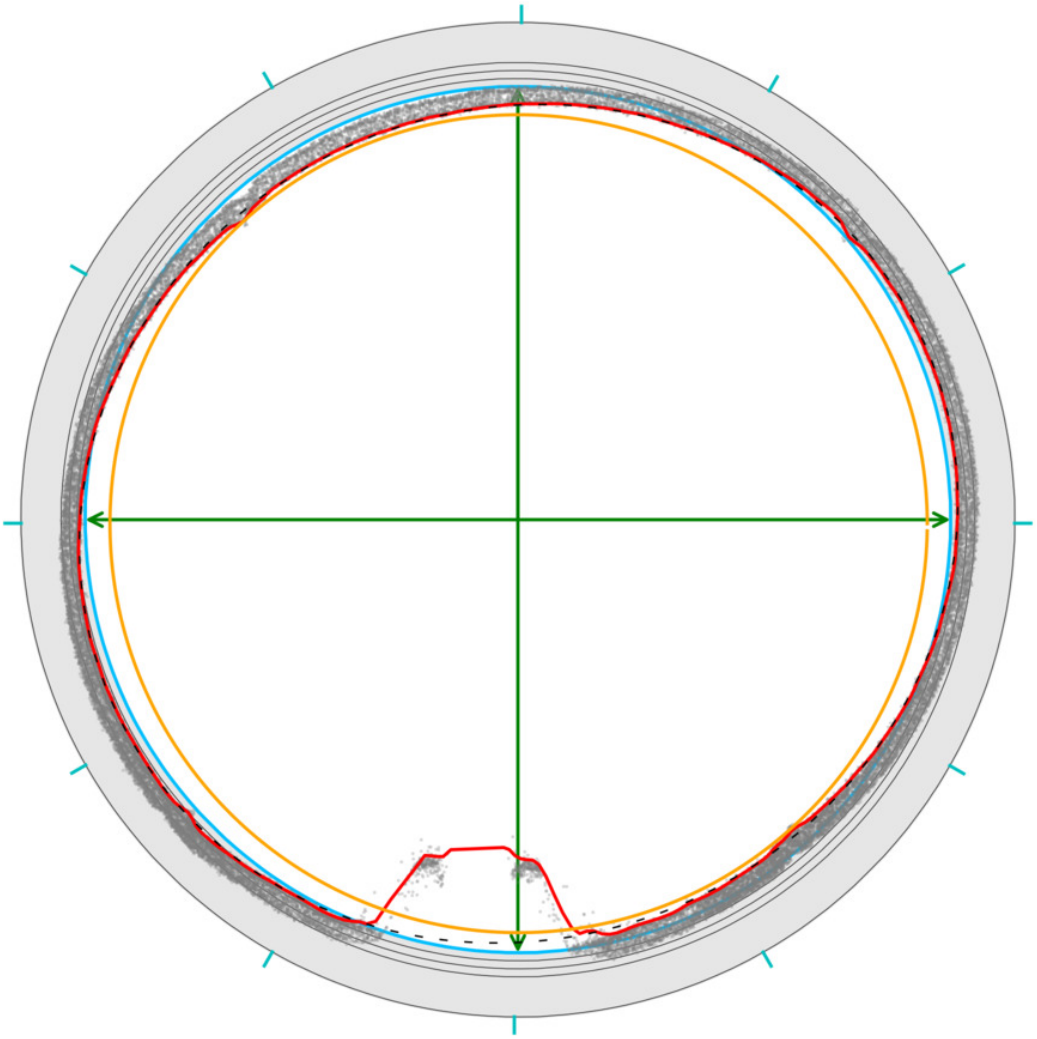
```
Footage   :  579 ft
Width     :  109.7" | 108.0"
Height    :  105.8" | 108.0"

Area      :  8685 sq in
Perimeter :  345.4 in
Ovality   :  3.4%

Interior Diameter : 102.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 580.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



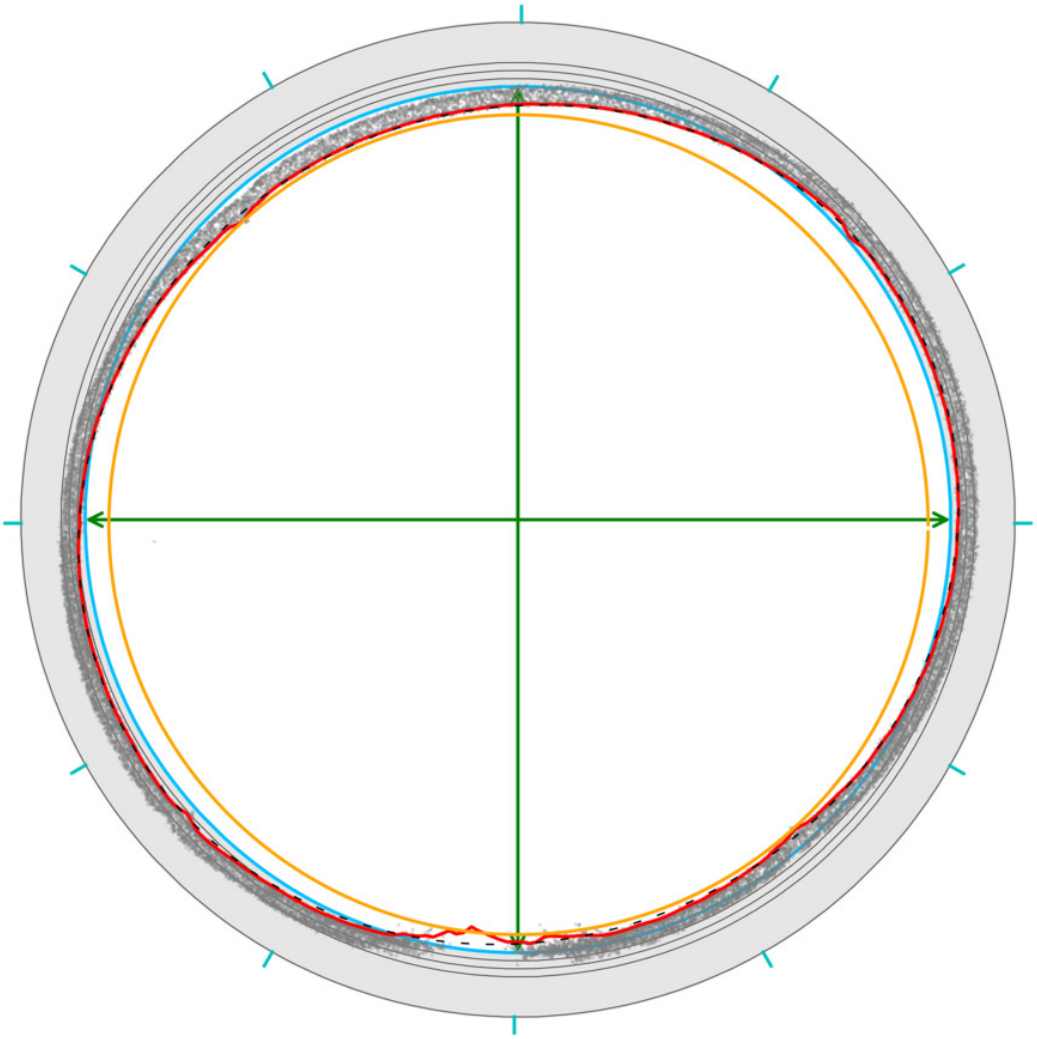
```
Footage   :  580 ft
Width     :  109.7" | 108.0"
Height    :  105.8" | 108.0"

Area      :  8778 sq in
Perimeter :  347.4 in
Ovality   :  3.5%

Interior Diameter : 102.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 581.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



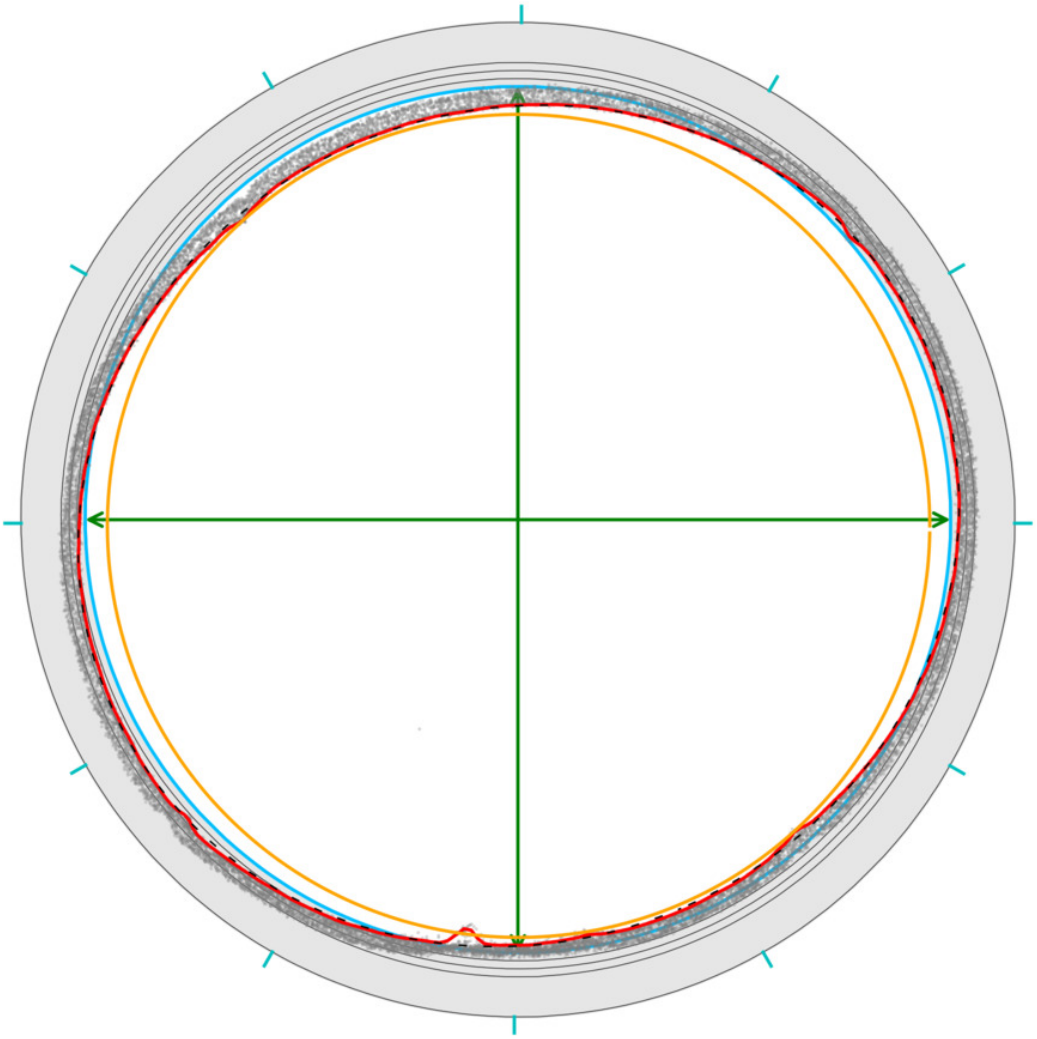
```
Footage   :  581 ft
Width     :  109.8" | 108.0"
Height    :  105.8" | 108.0"

Area      :  9006 sq in
Perimeter :  338.9 in
Ovality   :  3.5%

Interior Diameter : 102.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 582.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



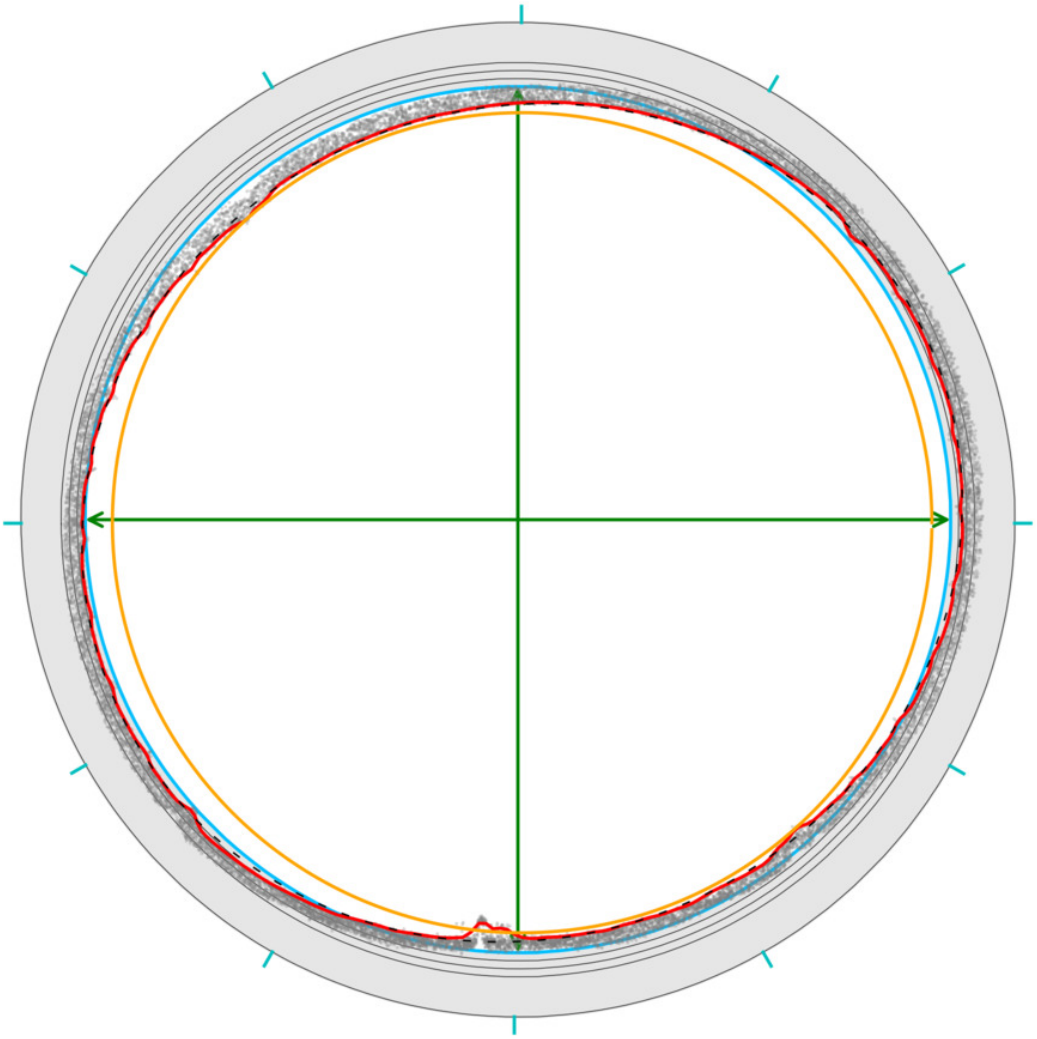
```
Footage   :  582 ft
Width     :  109.9" | 108.0"
Height    :  105.7" | 108.0"

Area      :  9040 sq in
Perimeter :  339.5 in
Ovality   :  3.5%

Interior Diameter : 102.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 583.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



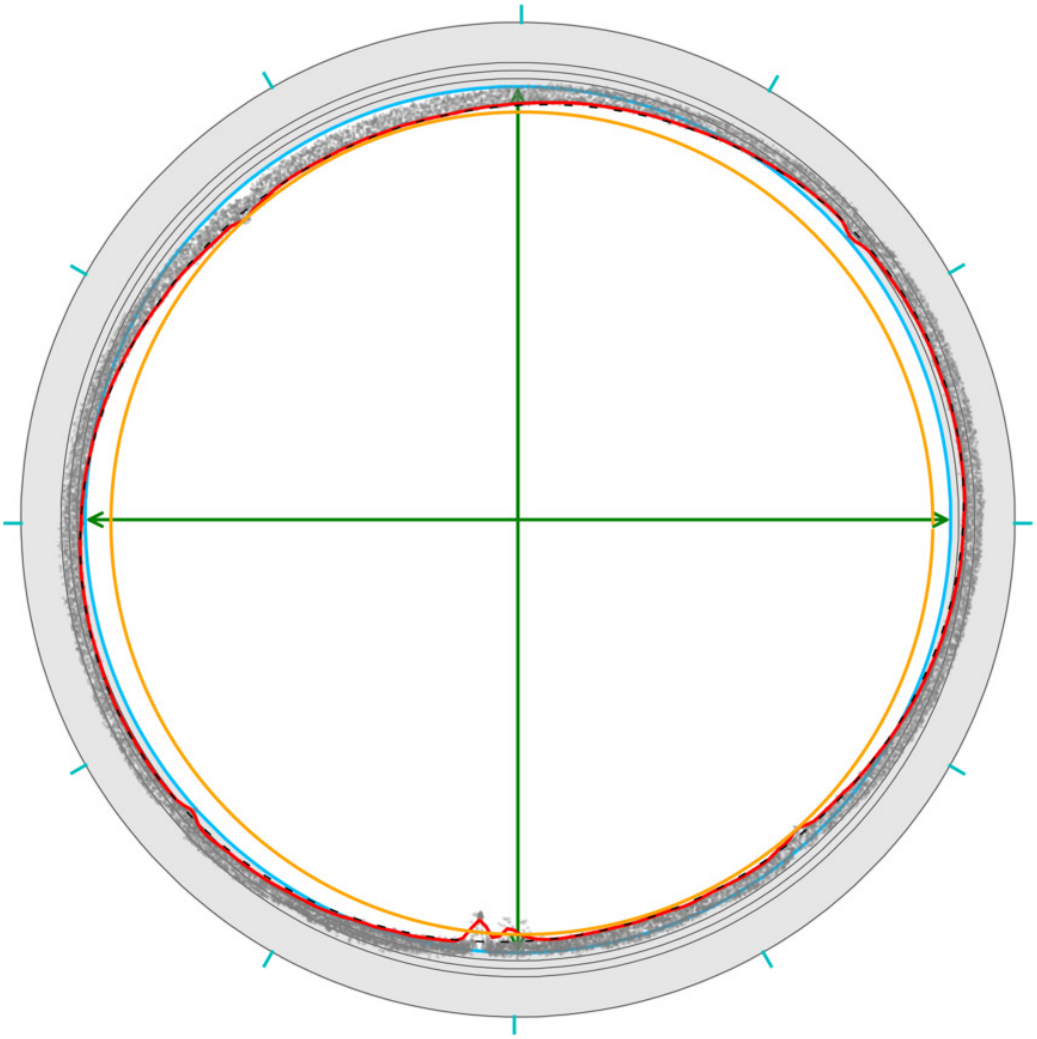
```
Footage   :  583 ft
Width     :  109.9" | 108.0"
Height    :  106.0" | 108.0"

Area      :  8997 sq in
Perimeter :  339.8 in
Ovality   :  3.5%

Interior Diameter : 102.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 584.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



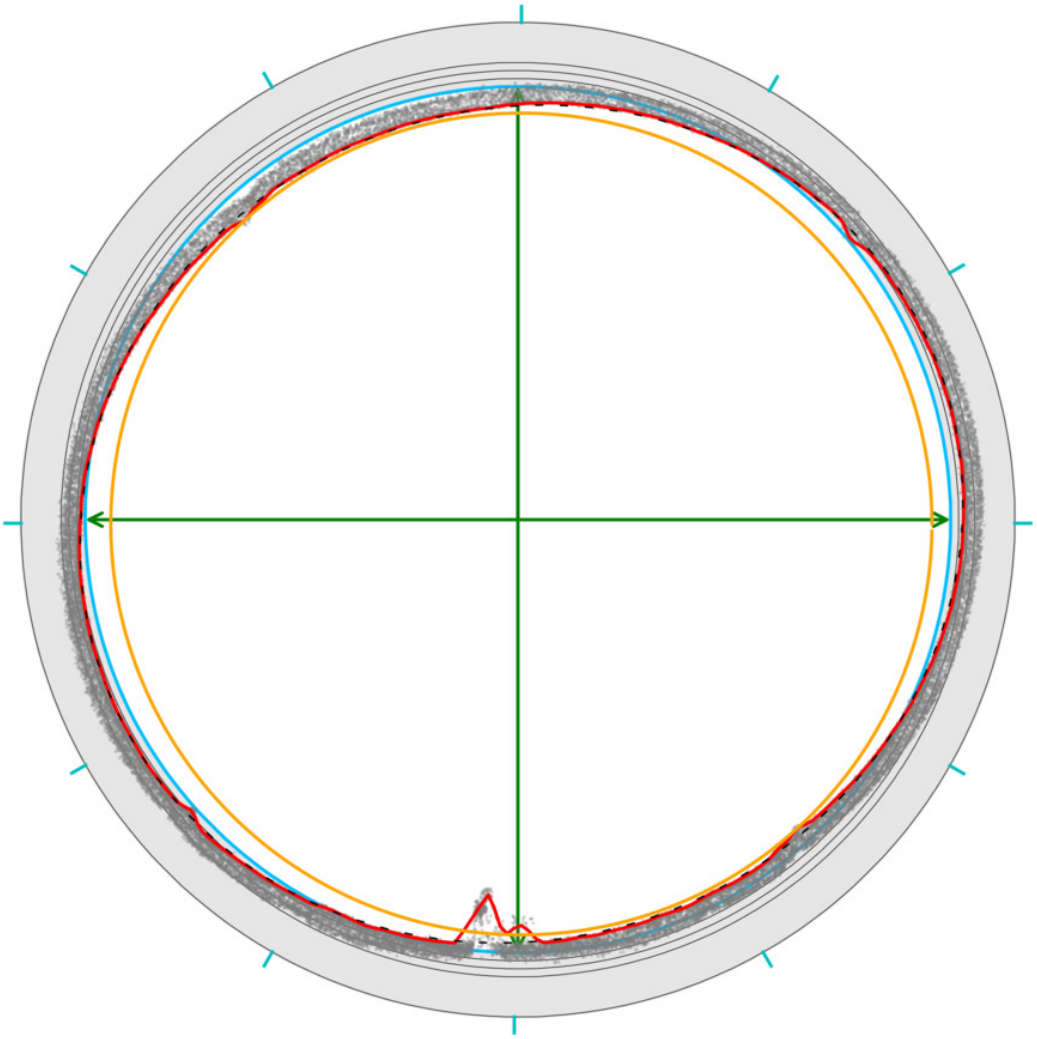
```
Footage   :  584 ft
Width     :  110.4" | 108.0"
Height    :  105.9" | 108.0"

Area      :  9021 sq in
Perimeter :  341.1 in
Ovality   :  3.7%

Interior Diameter : 102.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 585.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



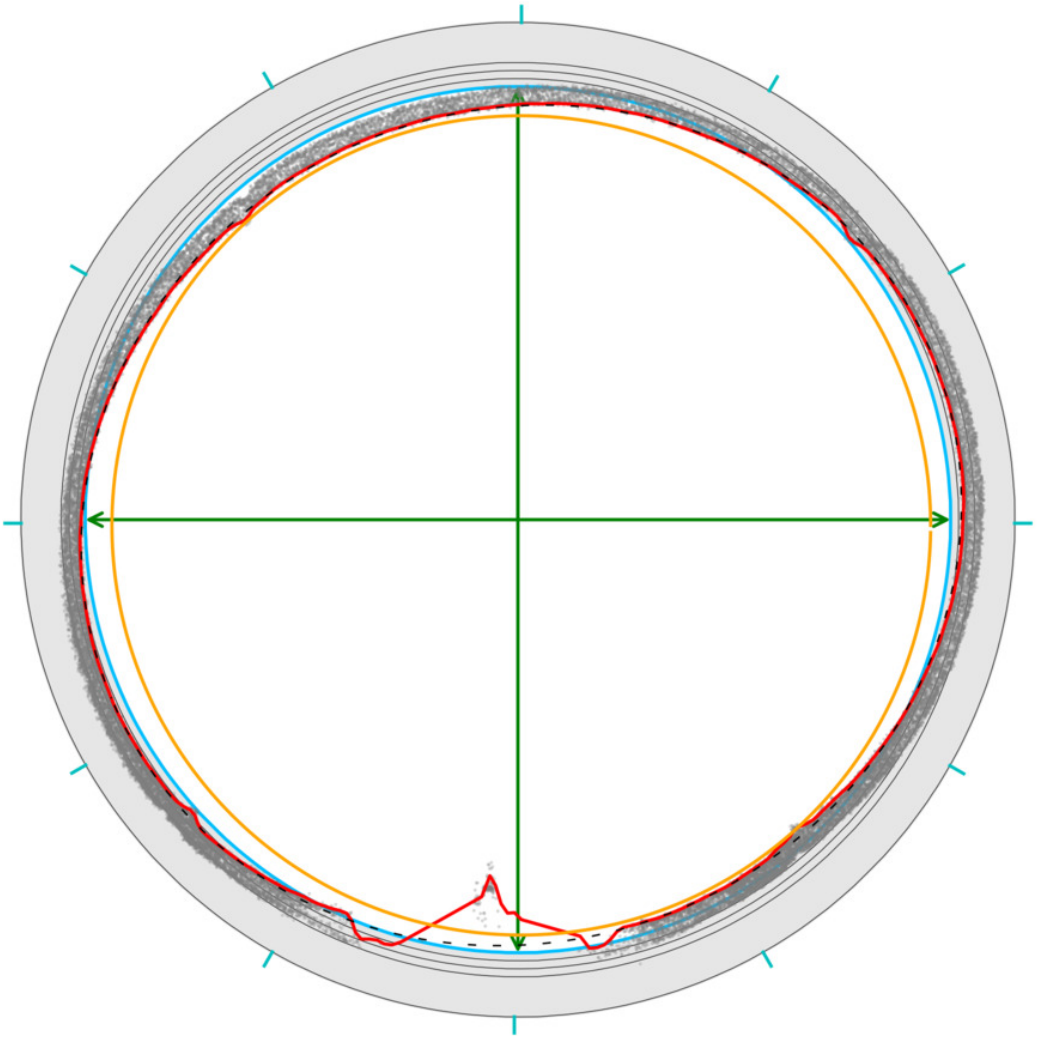
```
Footage   :  585 ft
Width     :  110.4" | 108.0"
Height    :  105.8" | 108.0"

Area      :  9004 sq in
Perimeter :  345.5 in
Ovality   :  3.6%

Interior Diameter : 102.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 586.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



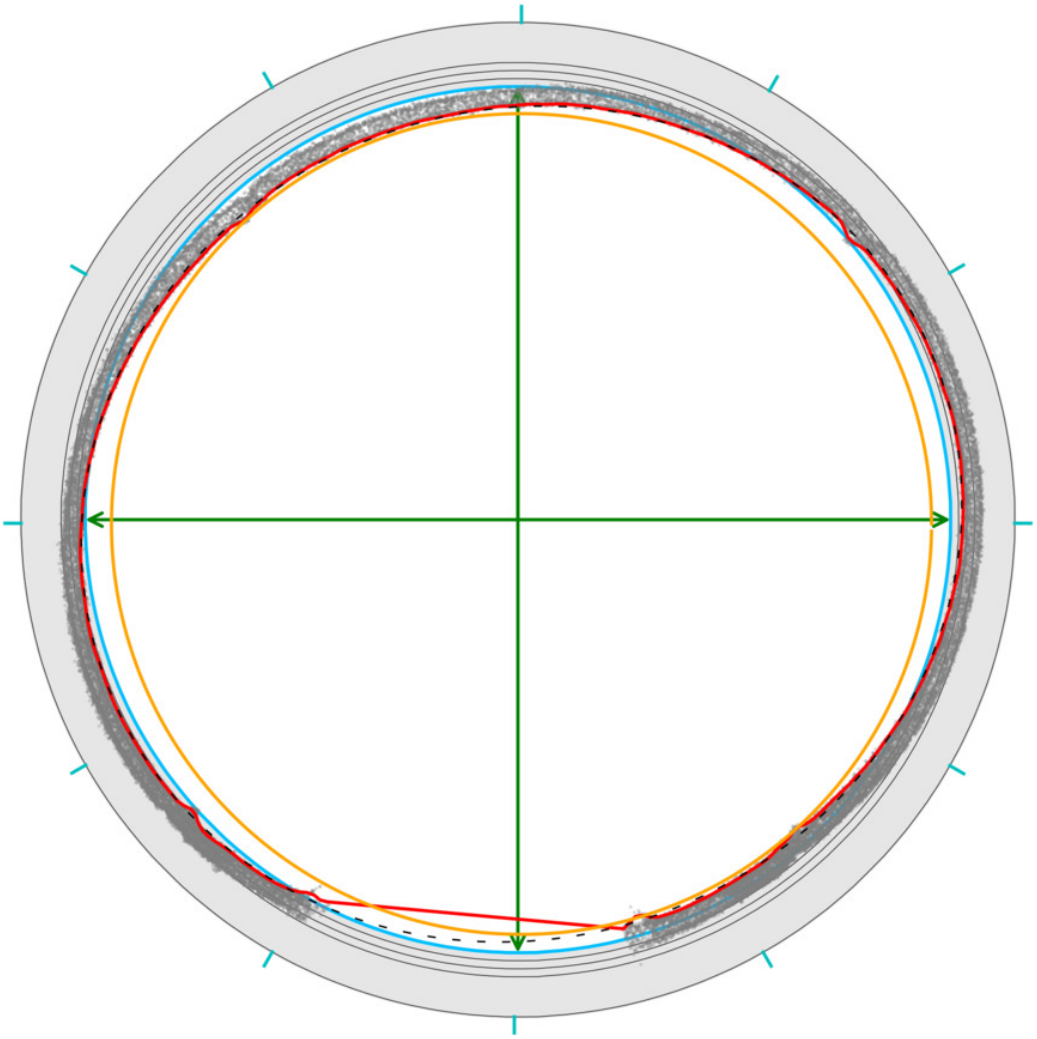
```
Footage   :  586 ft
Width     :  110.3" | 108.0"
Height    :  105.8" | 108.0"

Area      :  8957 sq in
Perimeter :  347.6 in
Ovality   :  3.4%

Interior Diameter : 102.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 587.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



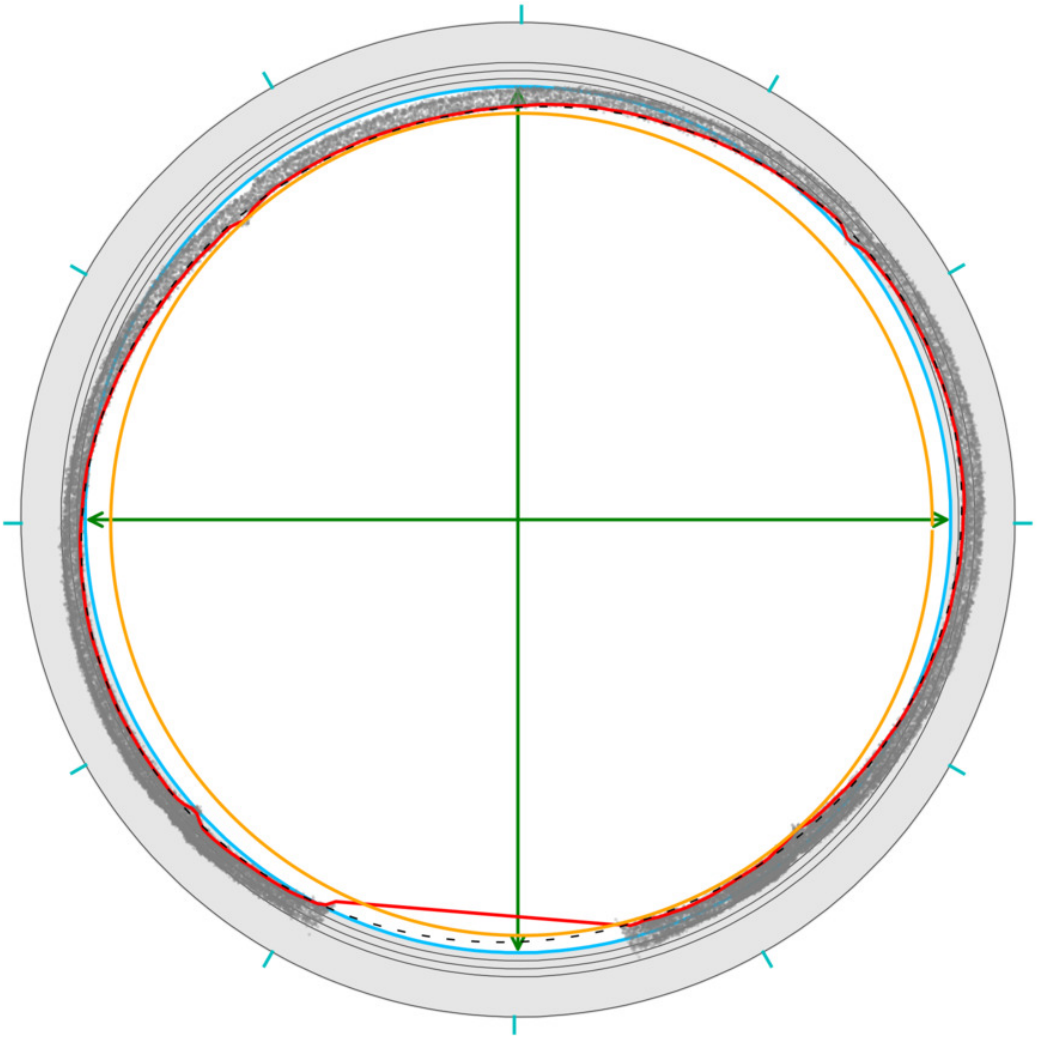
```
Footage   :  587 ft
Width     :  110.2" | 108.0"
Height    :  105.7" | 108.0"

Area      :  8897 sq in
Perimeter :  337.1 in
Ovality   :  3.6%

Interior Diameter : 102.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 588.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 588 ft
Width : 110.3" | 108.0"
Height : 105.6" | 108.0"

Area : 8885 sq in
Perimeter : 336.6 in
Ovality : 3.5%

Interior Diameter : 102.5"

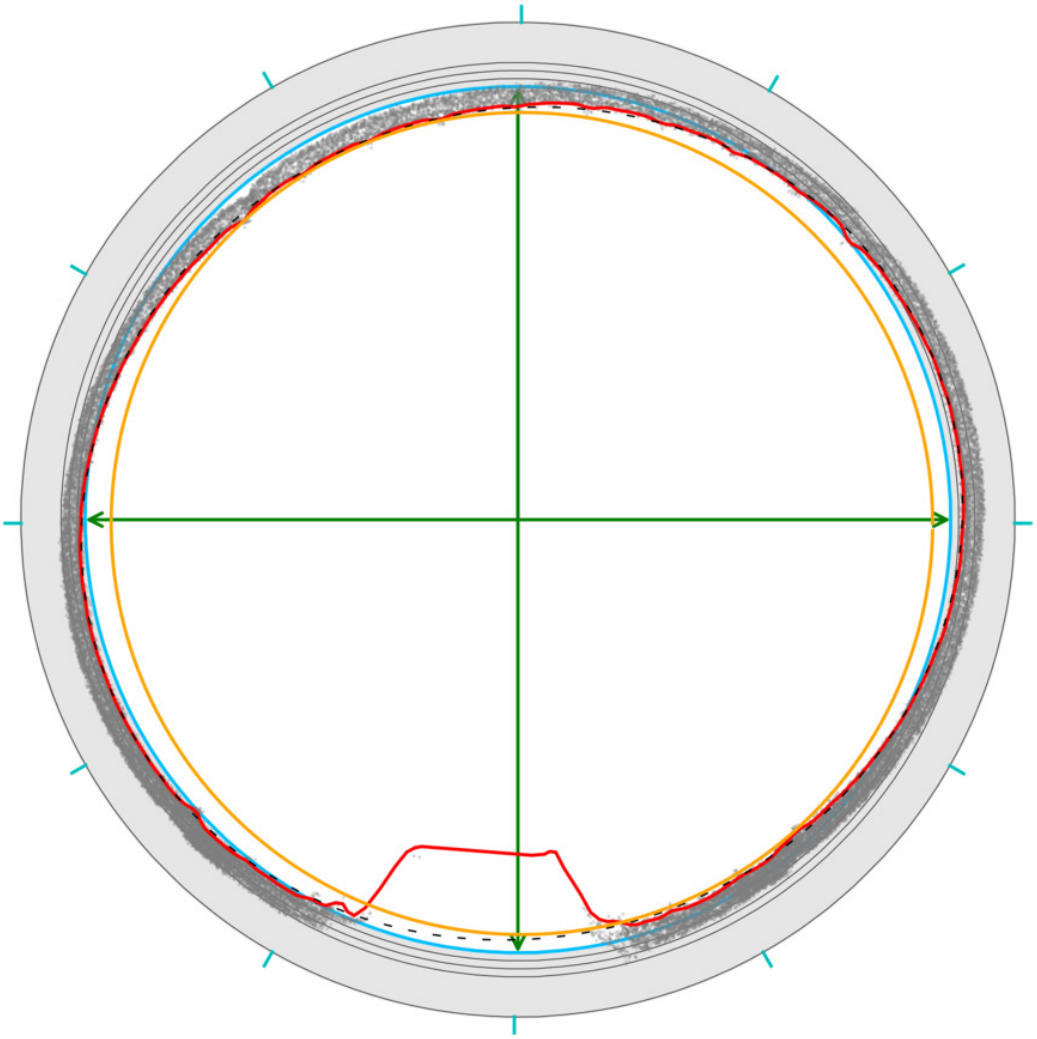
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 589.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 589 ft
Width : 110.3" | 108.0"
Height : 105.6" | 108.0"

Area : 8702 sq in
Perimeter : 346.3 in
Ovality : 3.6%

Interior Diameter : 102.5"

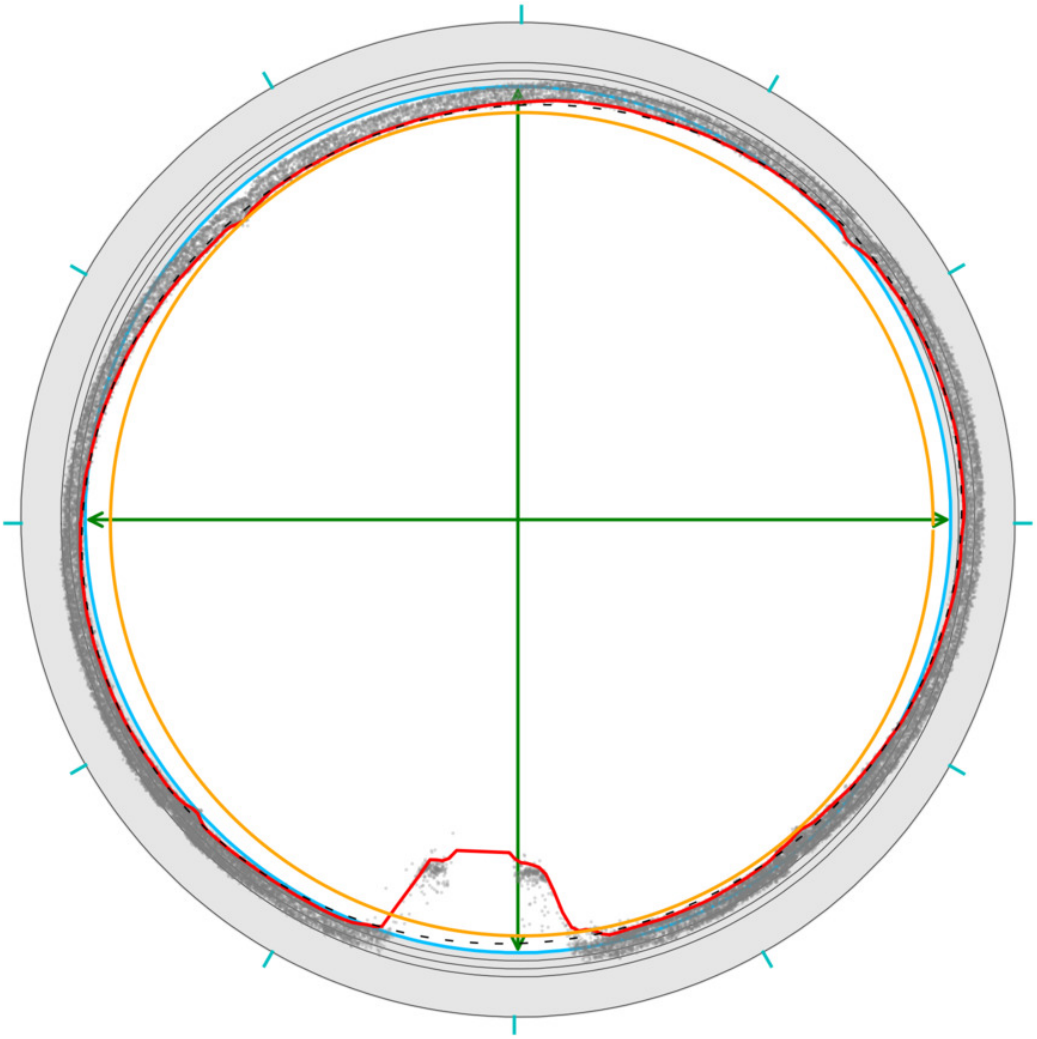
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 590.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



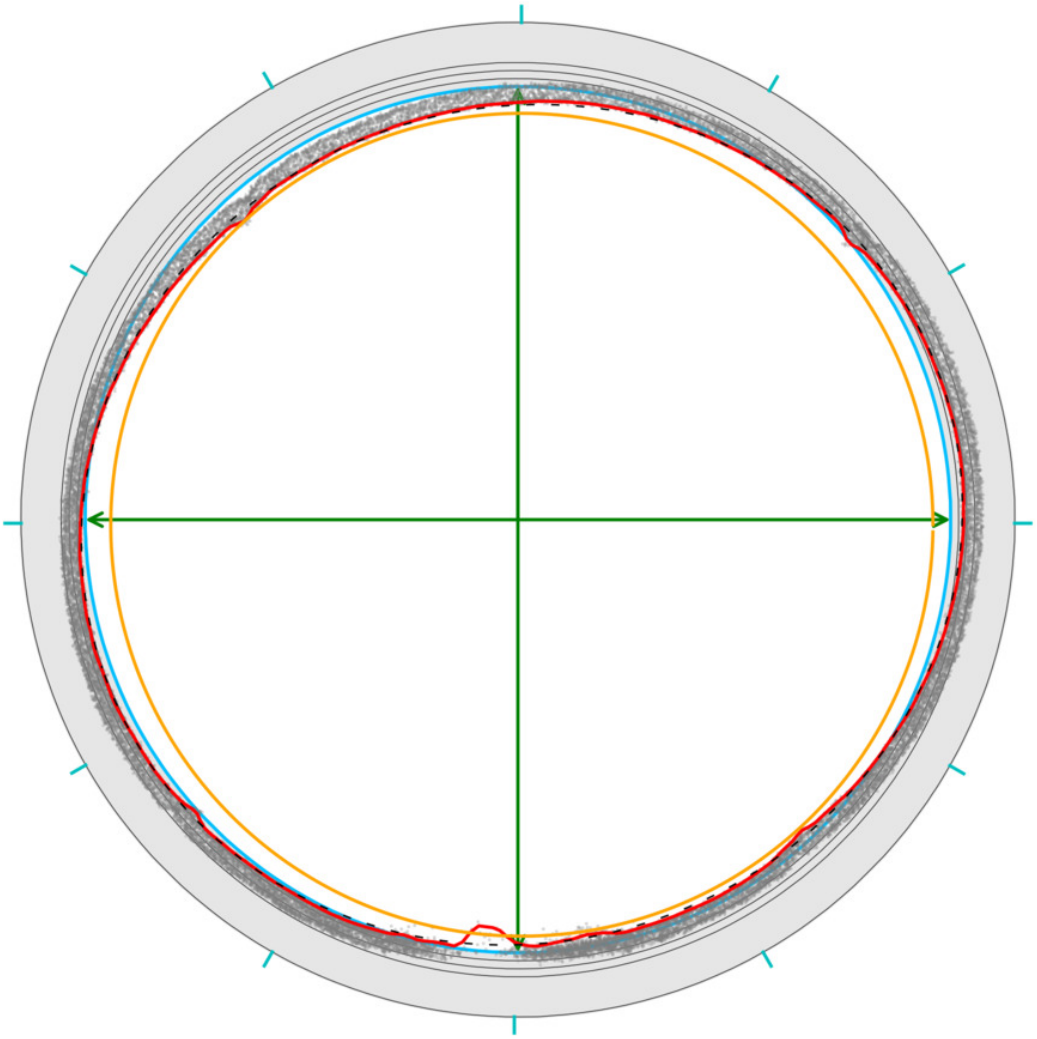
```
Footage   :  590 ft
Width     :  110.3" | 108.0"
Height    :  106.0" | 108.0"

Area      :  8815 sq in
Perimeter :  347.6 in
Ovality   :  3.2%

Interior Diameter : 102.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 591.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



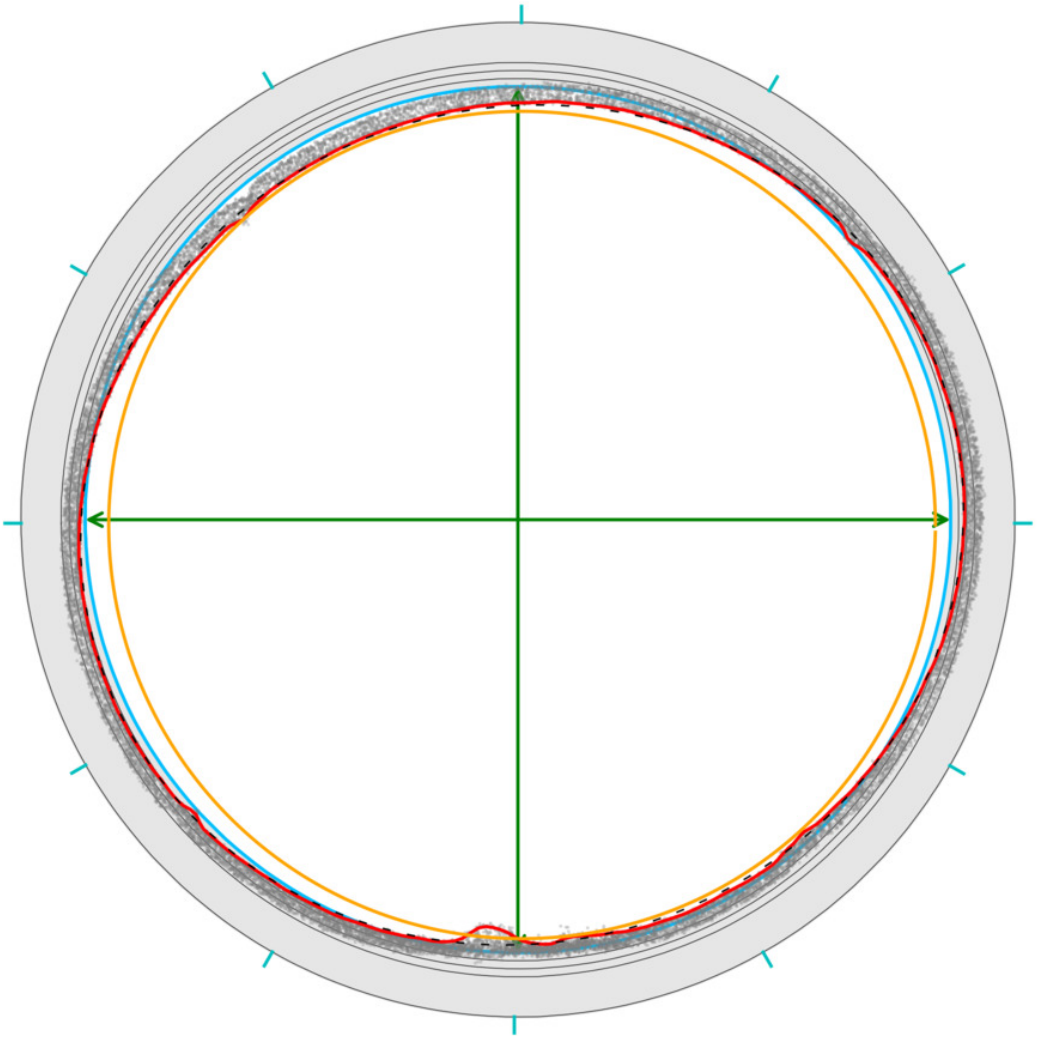
```
Footage   :  591 ft
Width     :  110.3" | 108.0"
Height    :  106.0" | 108.0"

Area      :  9034 sq in
Perimeter :  340.1 in
Ovality   :  3.1%

Interior Diameter : 102.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 592.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



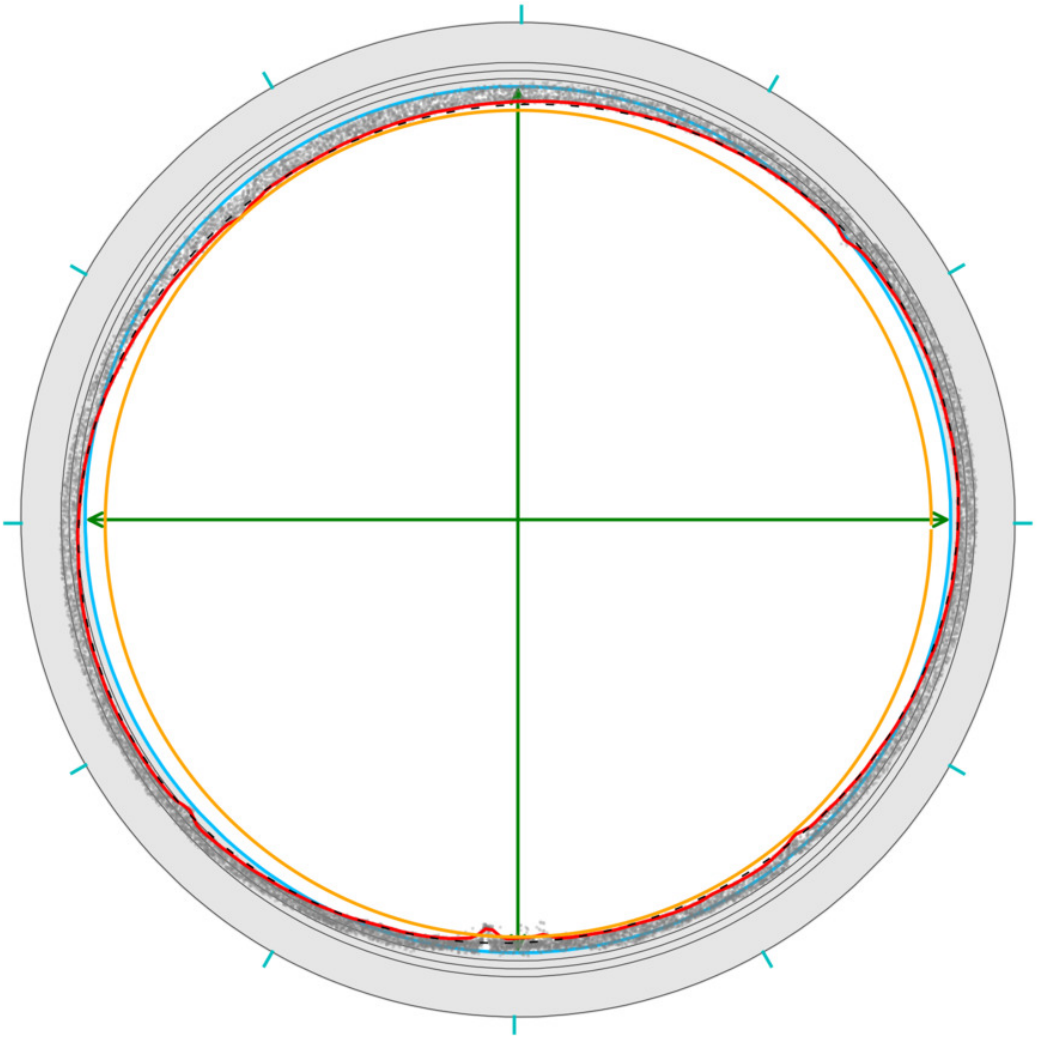
```
Footage   :  592 ft
Width     :  110.5" | 108.0"
Height    :  106.0" | 108.0"

Area      :  9049 sq in
Perimeter :  339.5 in
Ovality   :  3.2%

Interior Diameter : 103.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 593.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



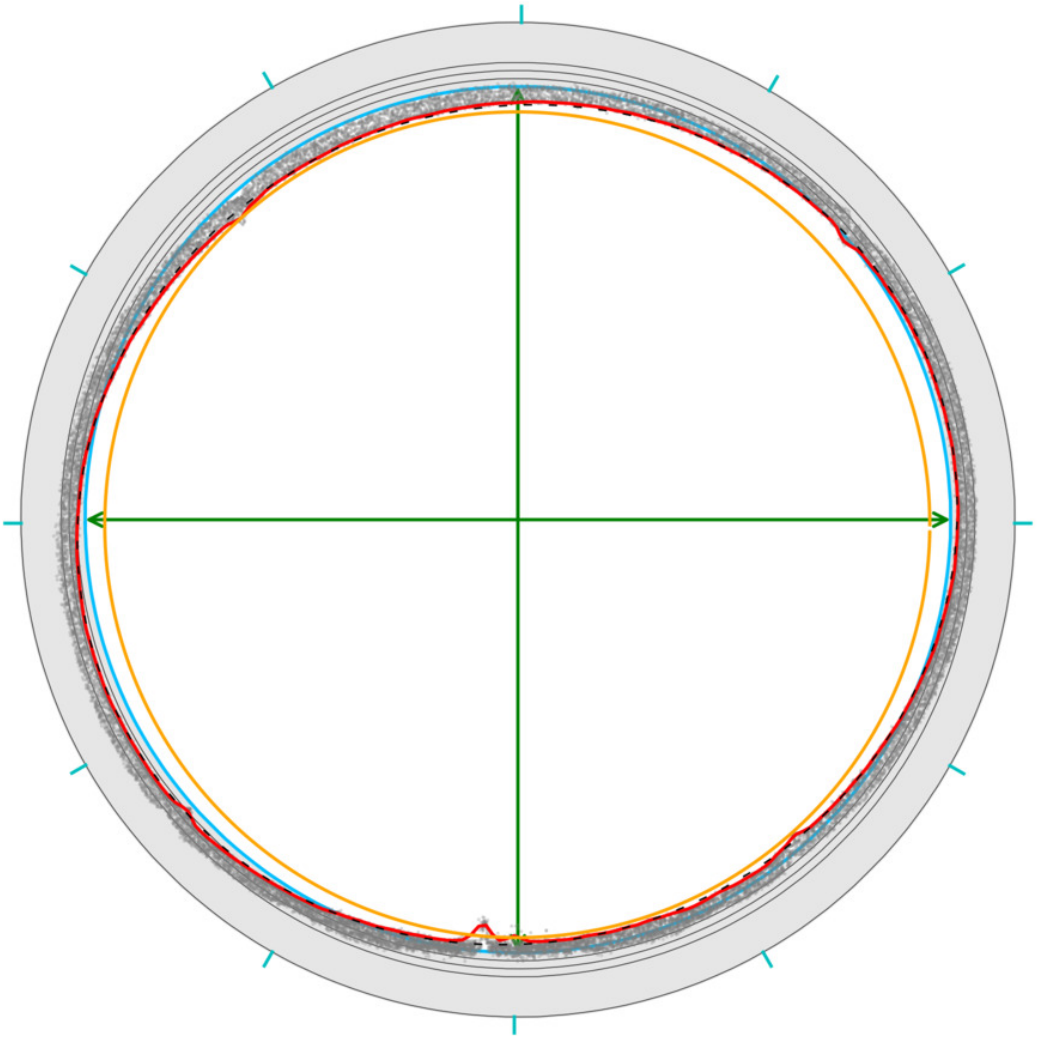
```
Footage   :  593 ft
Width     :  109.9" | 108.0"
Height    :  106.1" | 108.0"

Area      :  9007 sq in
Perimeter :  338.4 in
Ovality   :  3.1%

Interior Diameter : 103.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 594.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



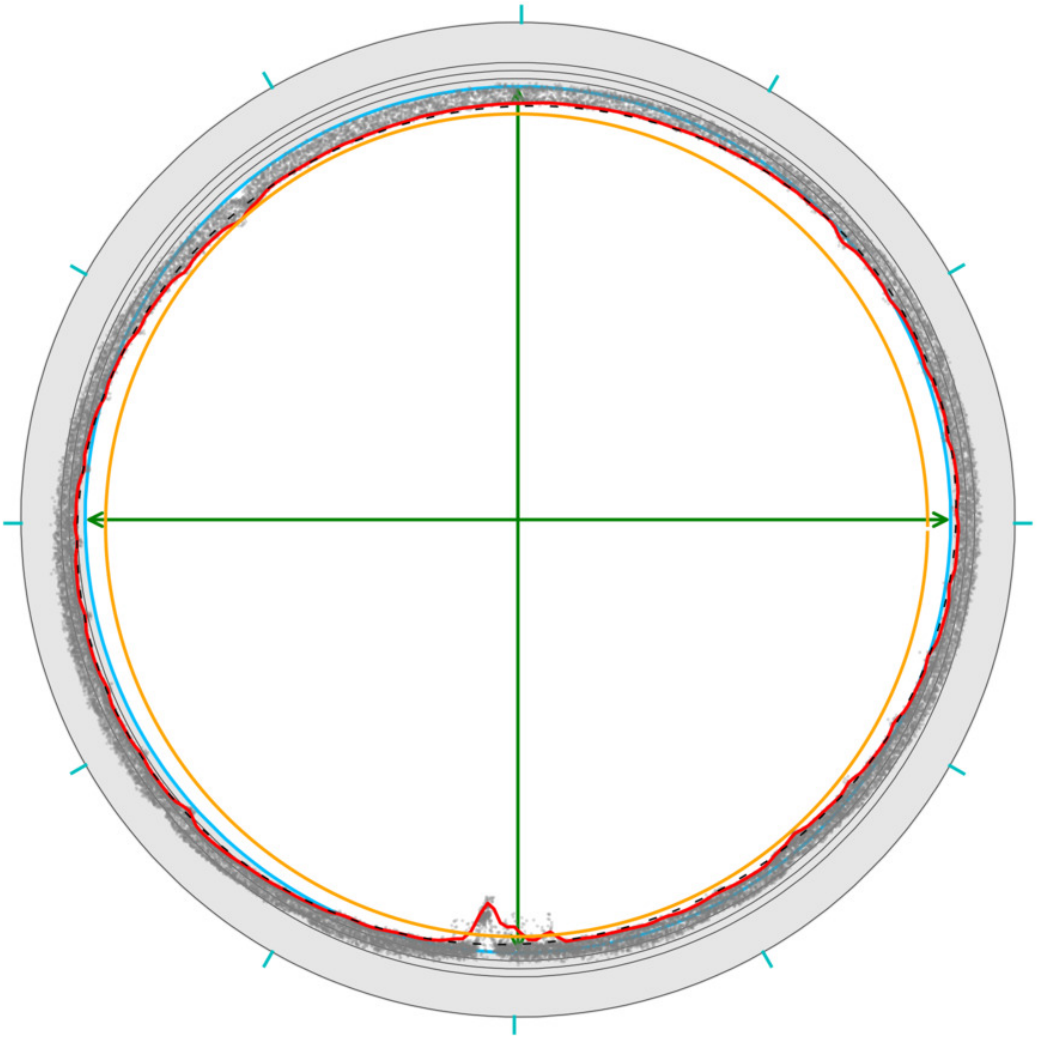
```
Footage   :  594 ft
Width     :  110.0" | 108.0"
Height    :  106.0" | 108.0"

Area      :  9015 sq in
Perimeter :  339.6 in
Ovality   :  3.0%

Interior Diameter : 103.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 595.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 595 ft
Width : 110.2" | 108.0"
Height : 105.9" | 108.0"

Area : 8983 sq in
Perimeter : 343.5 in
Ovality : 3.0%

Interior Diameter : 102.6"

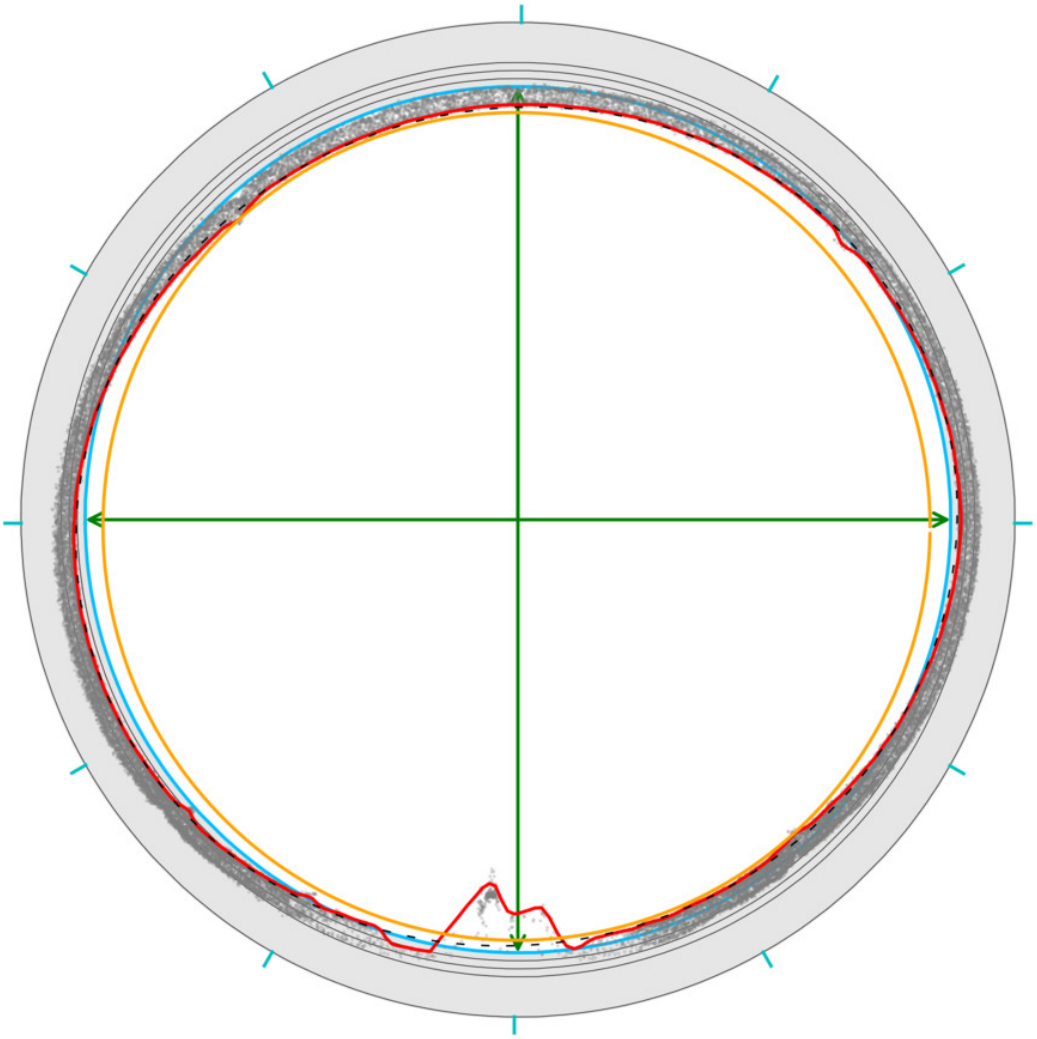
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 596.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



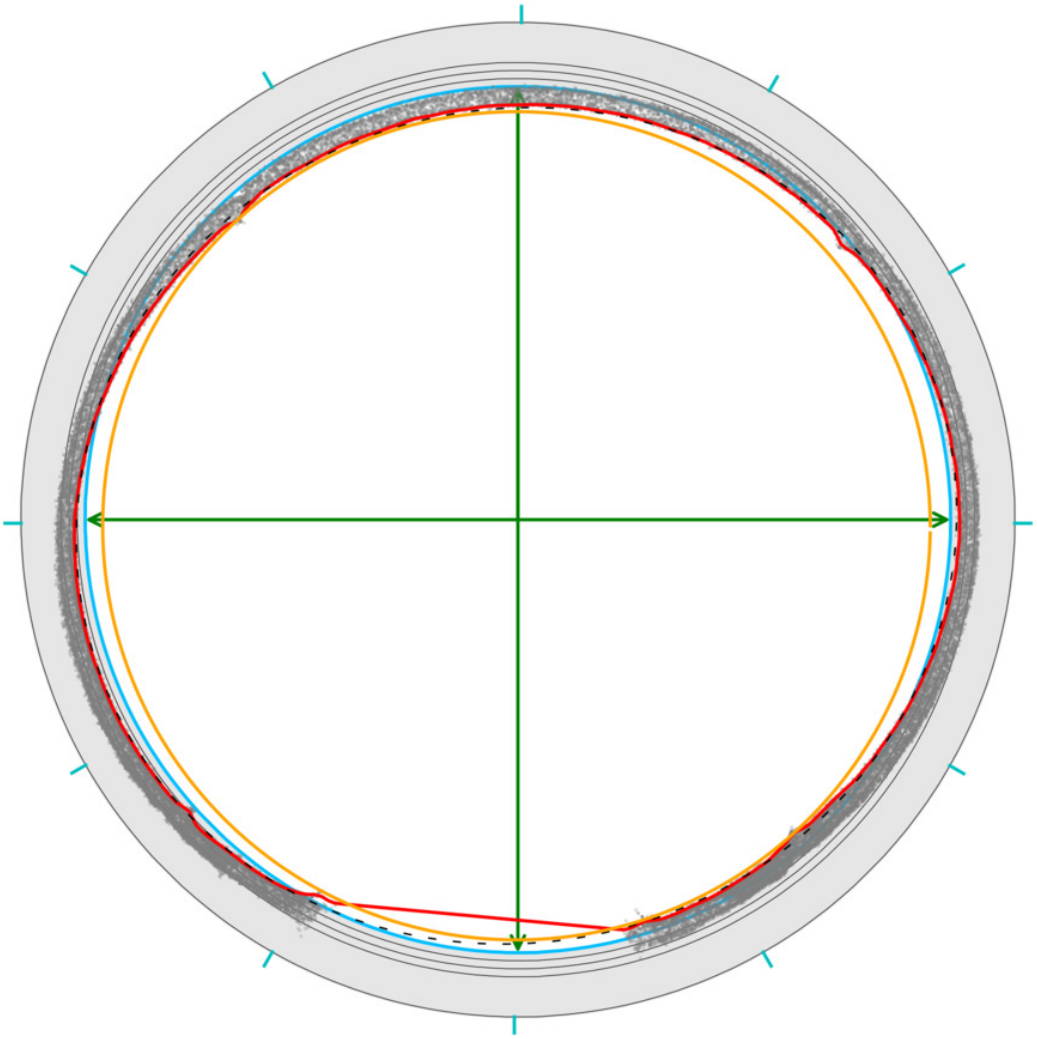
```
Footage    :  596 ft
Width      :  110.7" | 108.0"
Height     :  105.7" | 108.0"

Area       :  8964 sq in
Perimeter  :  347.8 in
Ovality    :  3.0%

Interior Diameter : 103.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 597.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



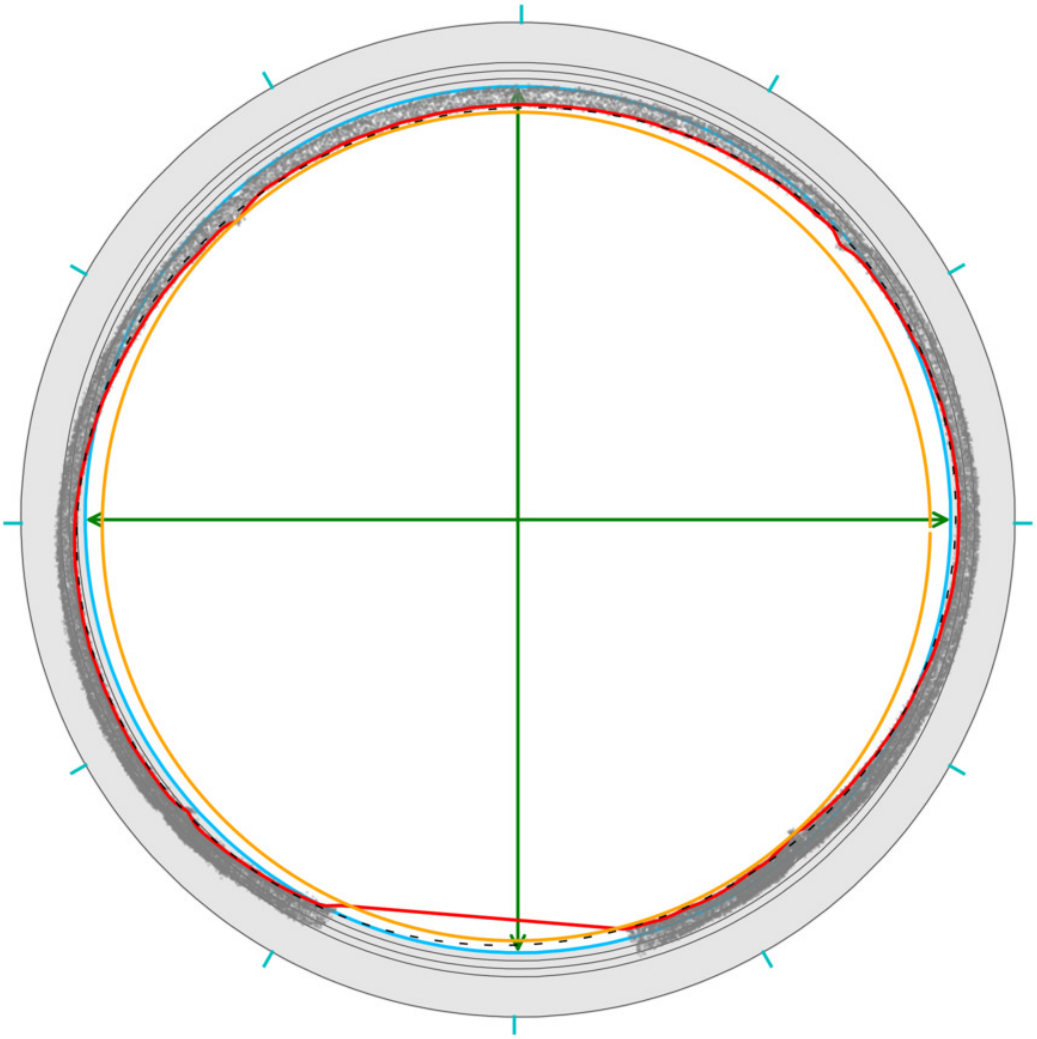
```
Footage   :  597 ft
Width     :  110.5" | 108.0"
Height    :  105.7" | 108.0"

Area      :  8904 sq in
Perimeter :  336.5 in
Ovality   :  3.0%

Interior Diameter : 103.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 598.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



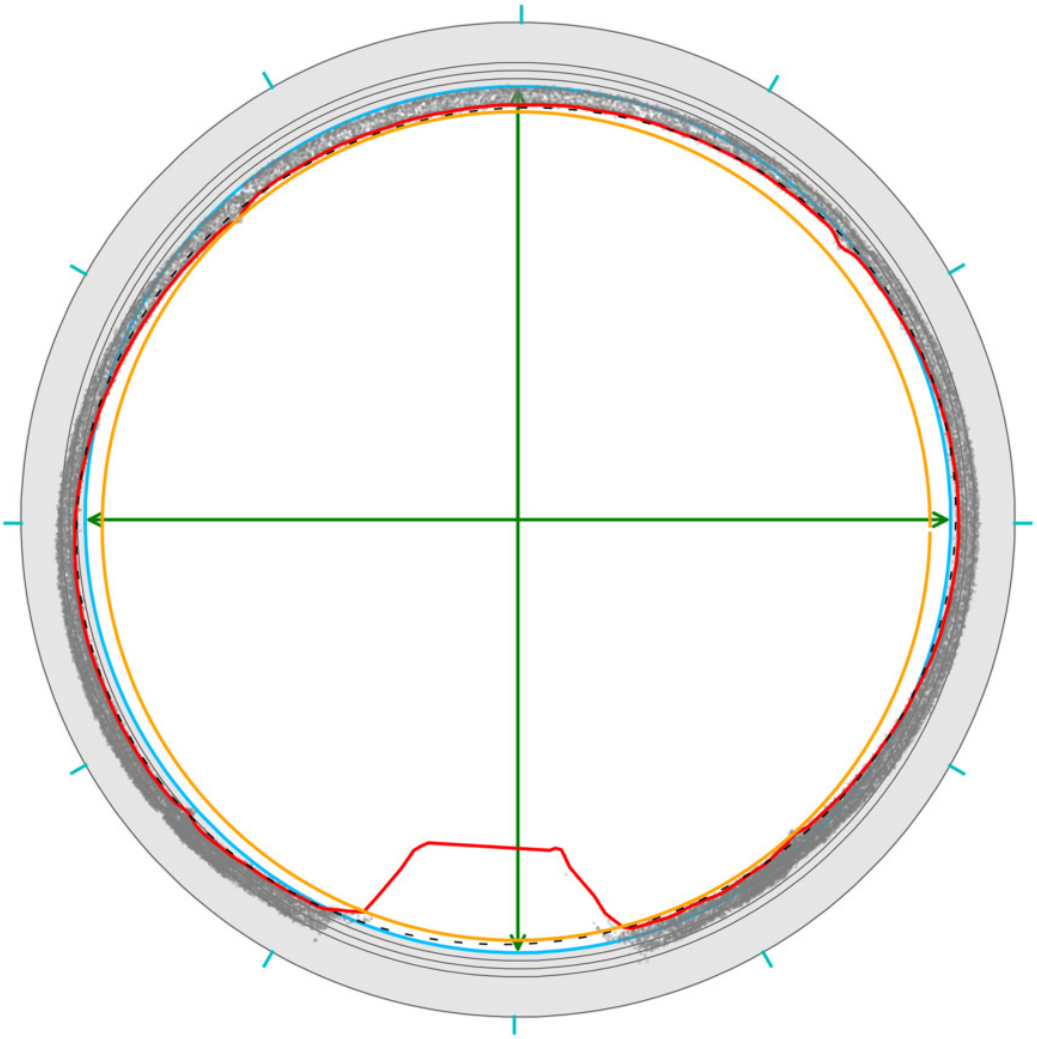
```
Footage   :  598 ft
Width     :  110.4" | 108.0"
Height    :  105.7" | 108.0"

Area      :  8904 sq in
Perimeter :  336.4 in
Ovality   :  2.9%

Interior Diameter : 103.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 599.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



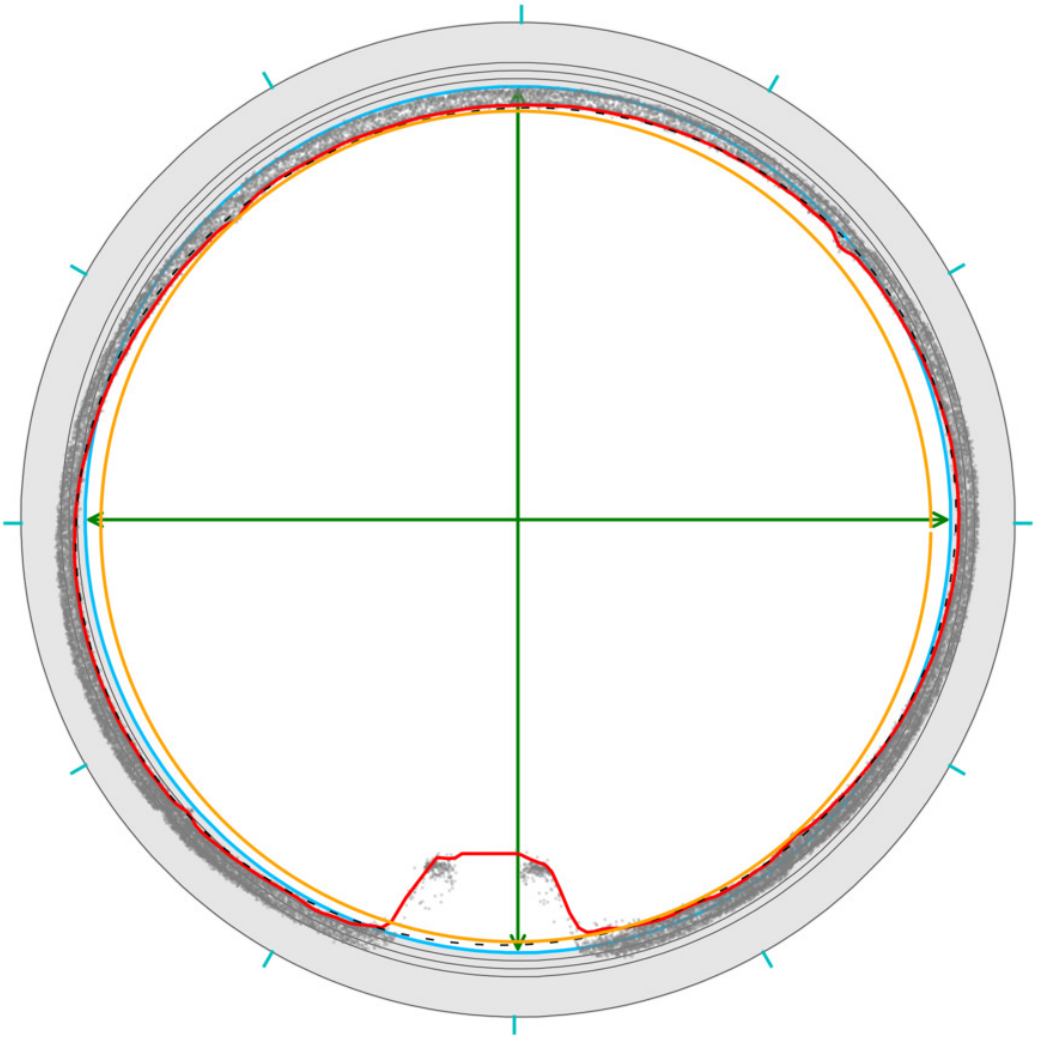
```
Footage   :  599 ft
Width     :  110.3" | 108.0"
Height    :  105.7" | 108.0"

Area      :  8695 sq in
Perimeter :  345.4 in
Ovality   :  2.9%

Interior Diameter : 103.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 600.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



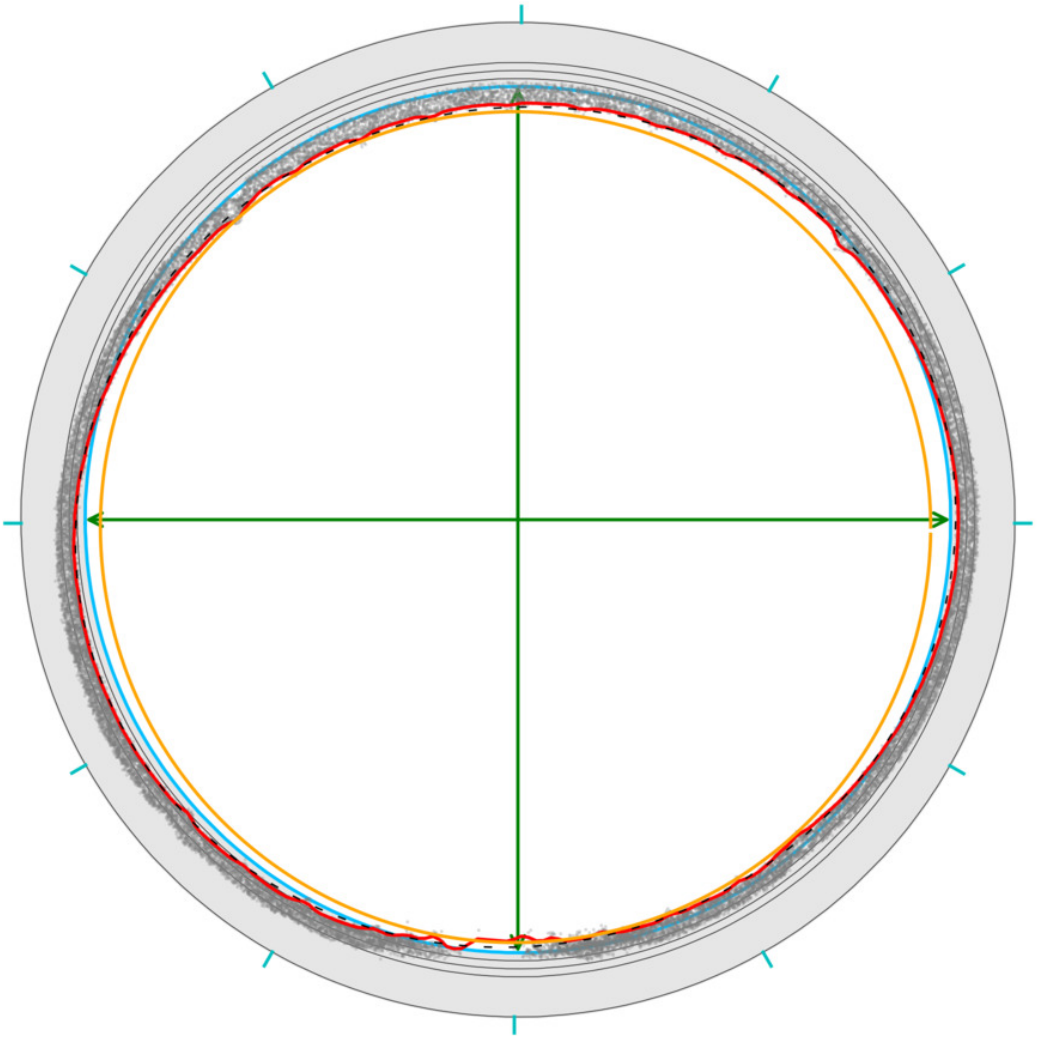
```
Footage   :  600 ft
Width     :  110.4" | 108.0"
Height    :  105.7" | 108.0"

Area      :  8802 sq in
Perimeter :  347.0 in
Ovality   :  3.0%

Interior Diameter : 103.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 601.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



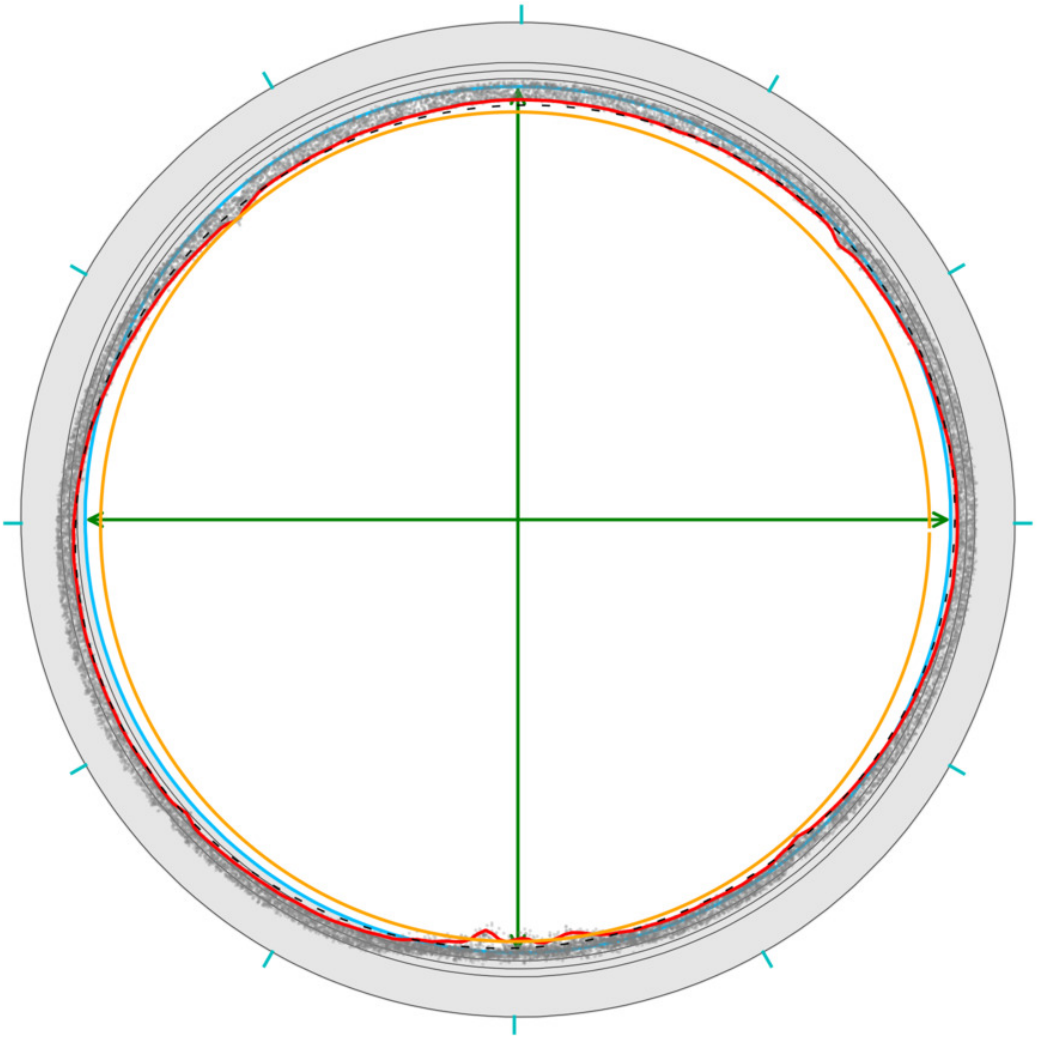
```
Footage   :  601 ft
Width     :  110.4" | 108.0"
Height    :  105.8" | 108.0"

Area      :  9028 sq in
Perimeter :  340.0 in
Ovality   :  2.8%

Interior Diameter : 103.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 602.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



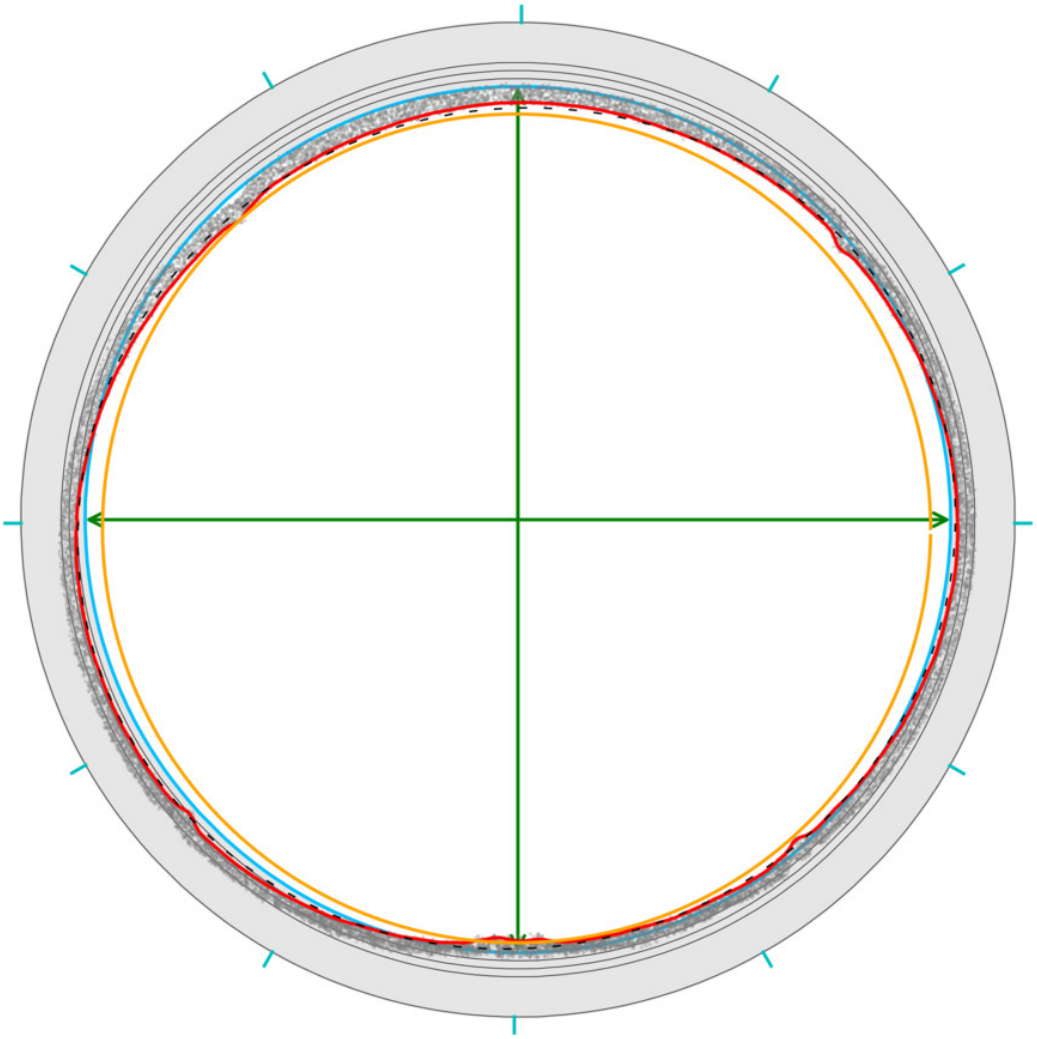
```
Footage   :  602 ft
Width     :  110.3" | 108.0"
Height    :  106.4" | 108.0"

Area      :  9055 sq in
Perimeter :  339.7 in
Ovality   :  2.6%

Interior Diameter : 103.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 603.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



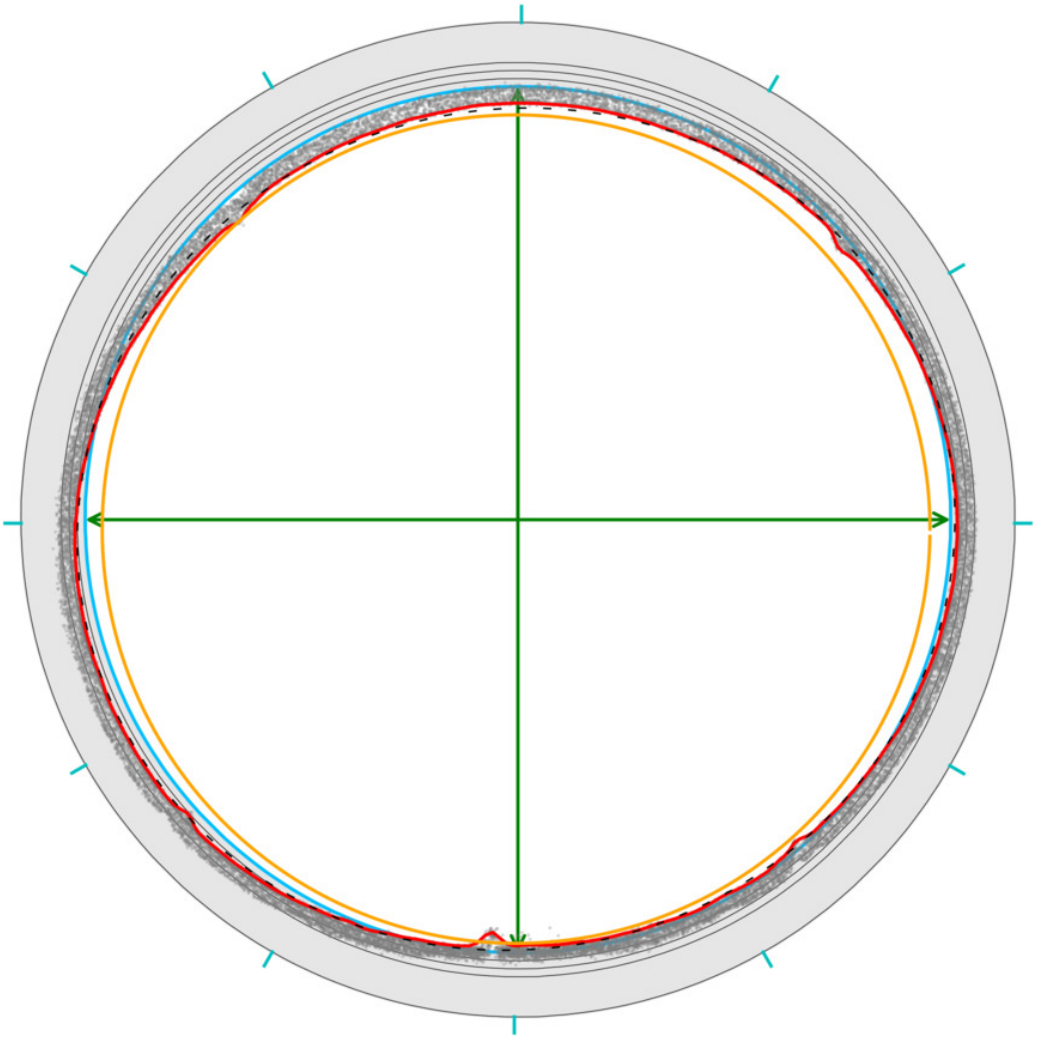
```
Footage   :  603 ft
Width     :  110.0" | 108.0"
Height    :  106.0" | 108.0"

Area      :  9013 sq in
Perimeter :  338.0 in
Ovality   :  2.5%

Interior Diameter : 103.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 604.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 604 ft
Width : 110.1" | 108.0"
Height : 105.9" | 108.0"

Area : 9024 sq in
Perimeter : 339.1 in
Ovality : 2.5%

Interior Diameter : 103.3"

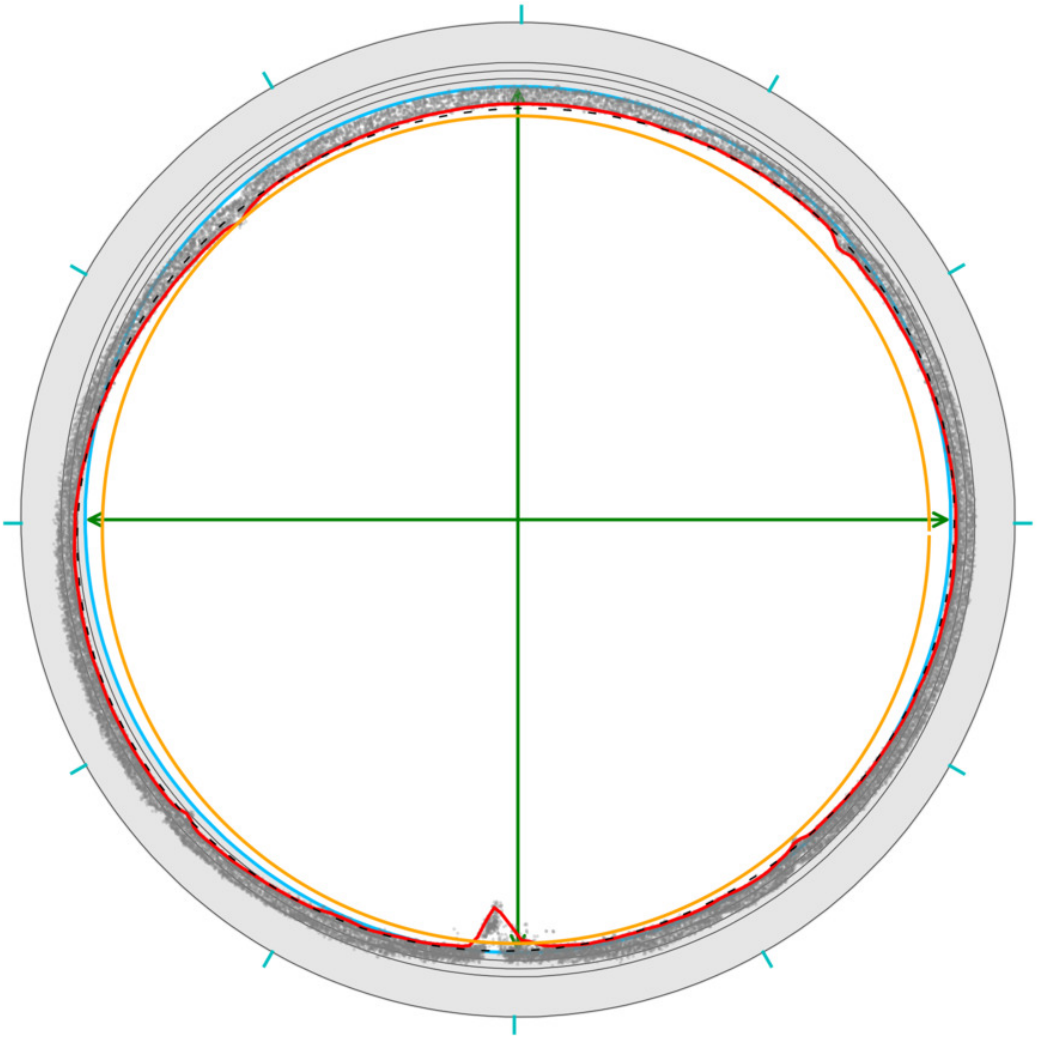
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 605.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



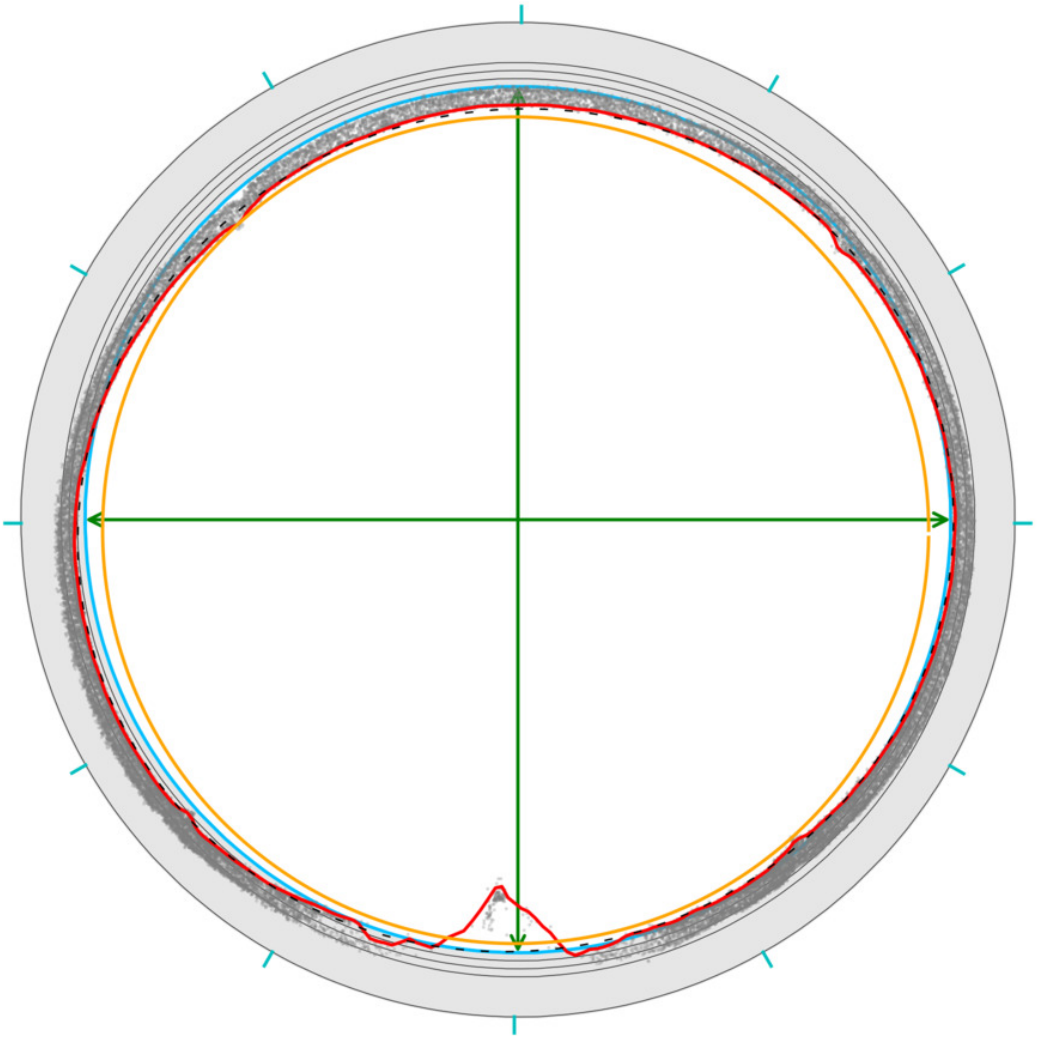
```
Footage   :  605 ft
Width     :  110.0" | 108.0"
Height    :  105.8" | 108.0"

Area      :  9008 sq in
Perimeter :  342.6 in
Ovality   :  2.4%

Interior Diameter : 103.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 606.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 606 ft
Width : 109.9" | 108.0"
Height : 105.7" | 108.0"

Area : 8962 sq in
Perimeter : 345.9 in
Ovality : 2.3%

Interior Diameter : 103.1"

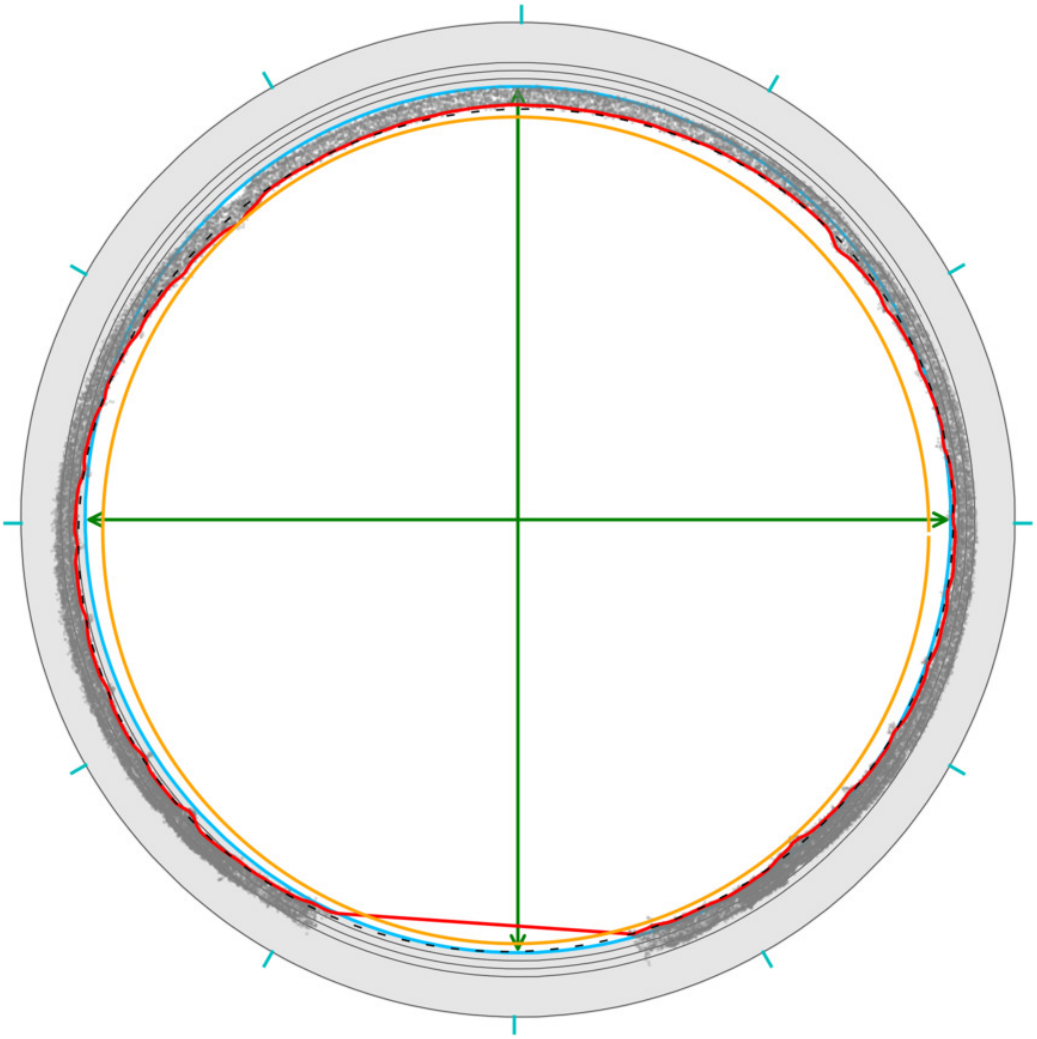
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 607.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



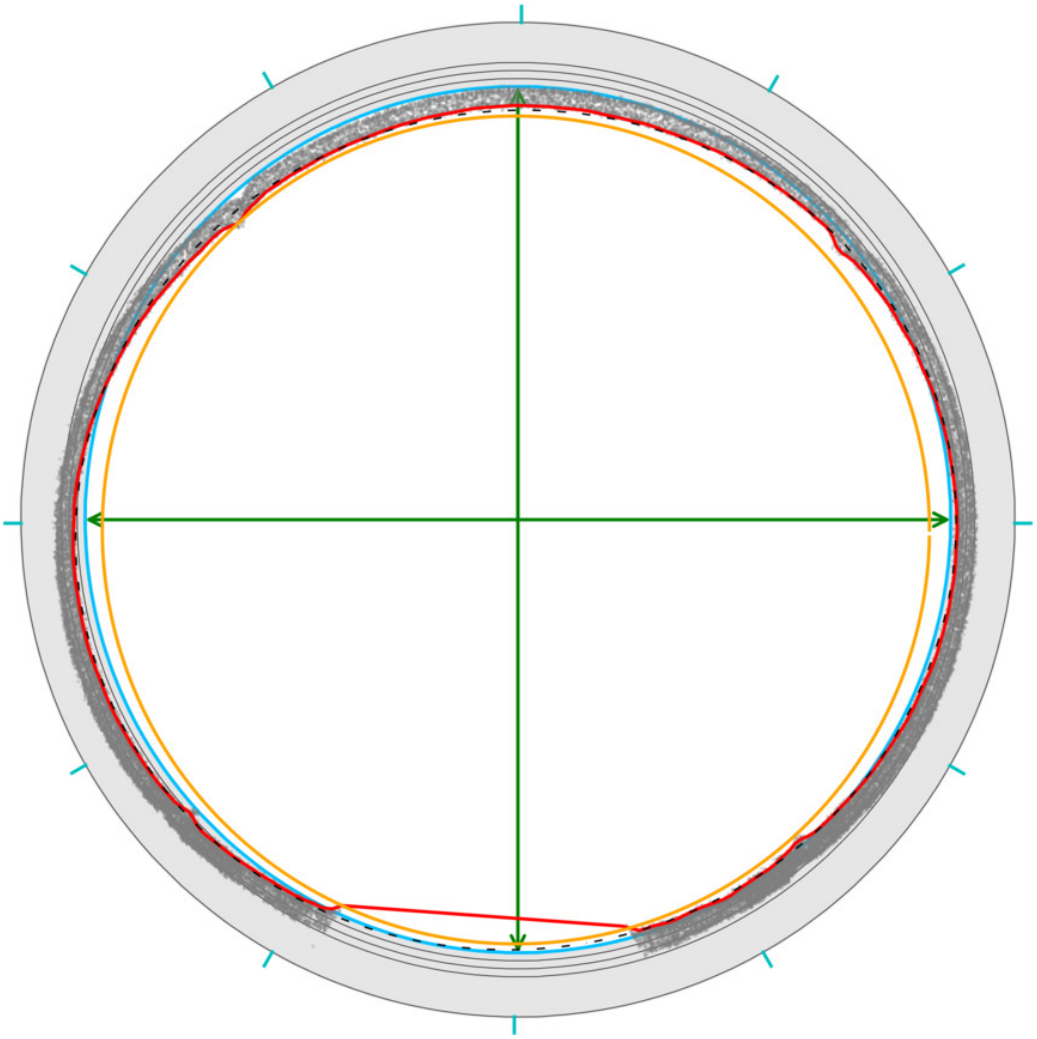
```
Footage   :  607 ft
Width     :  109.9" | 108.0"
Height    :  105.7" | 108.0"

Area      :  8913 sq in
Perimeter :  337.4 in
Ovality   :  2.2%

Interior Diameter : 103.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 608.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 608 ft
Width : 110.3" | 108.0"
Height : 105.6" | 108.0"

Area : 8916 sq in
Perimeter : 337.2 in
Ovality : 2.6%

Interior Diameter : 103.2"

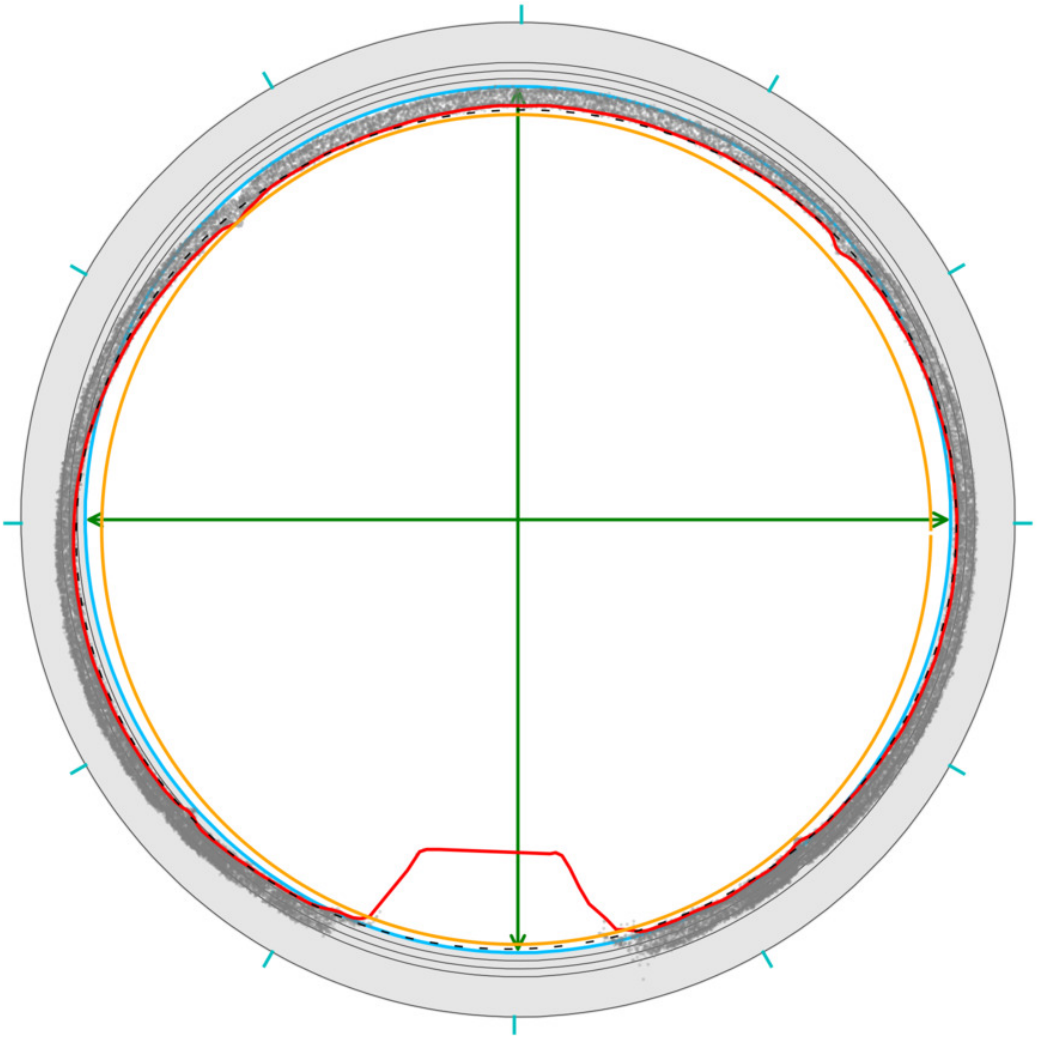
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 609.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 609 ft
Width : 110.2" | 108.0"
Height : 105.6" | 108.0"

Area : 8743 sq in
Perimeter : 346.2 in
Ovality : 2.6%

Interior Diameter : 103.5"

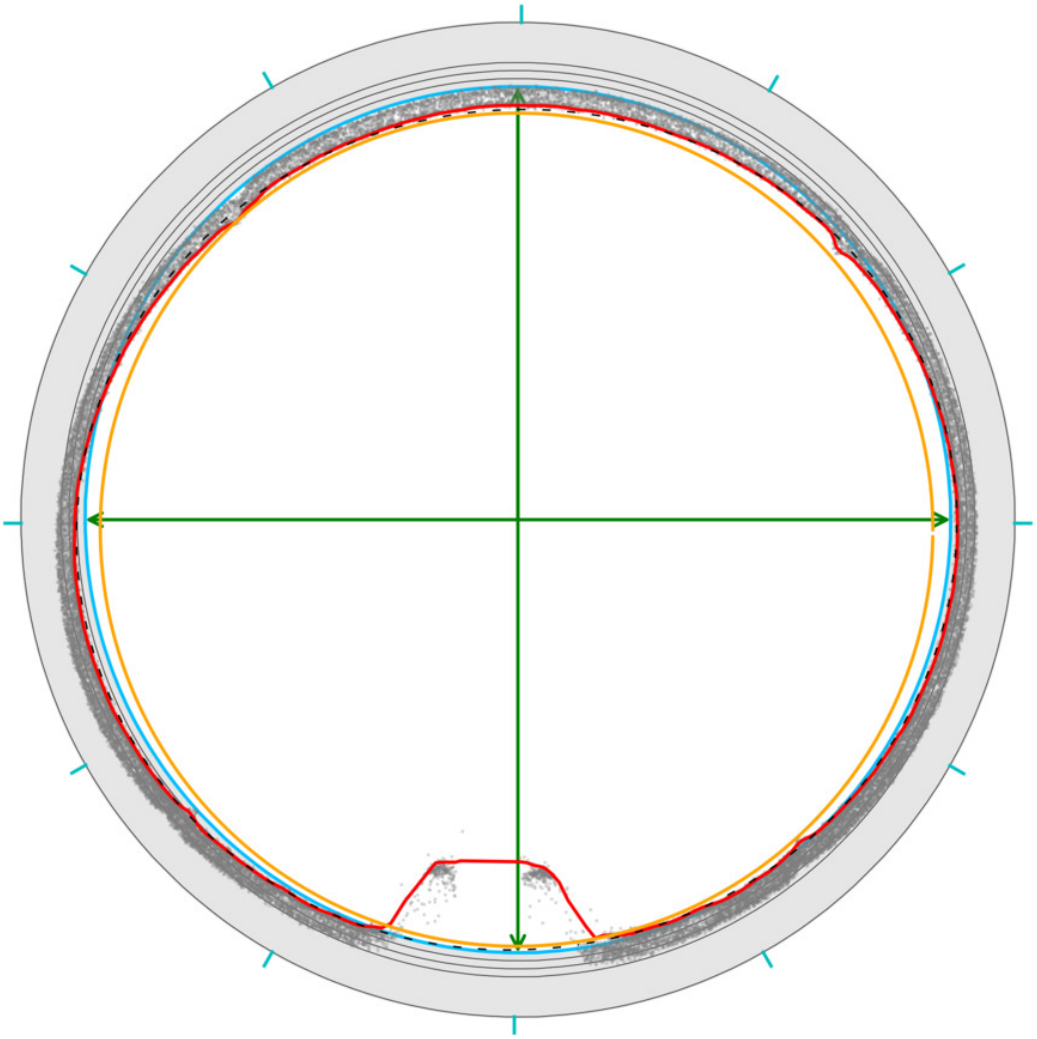
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 610.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



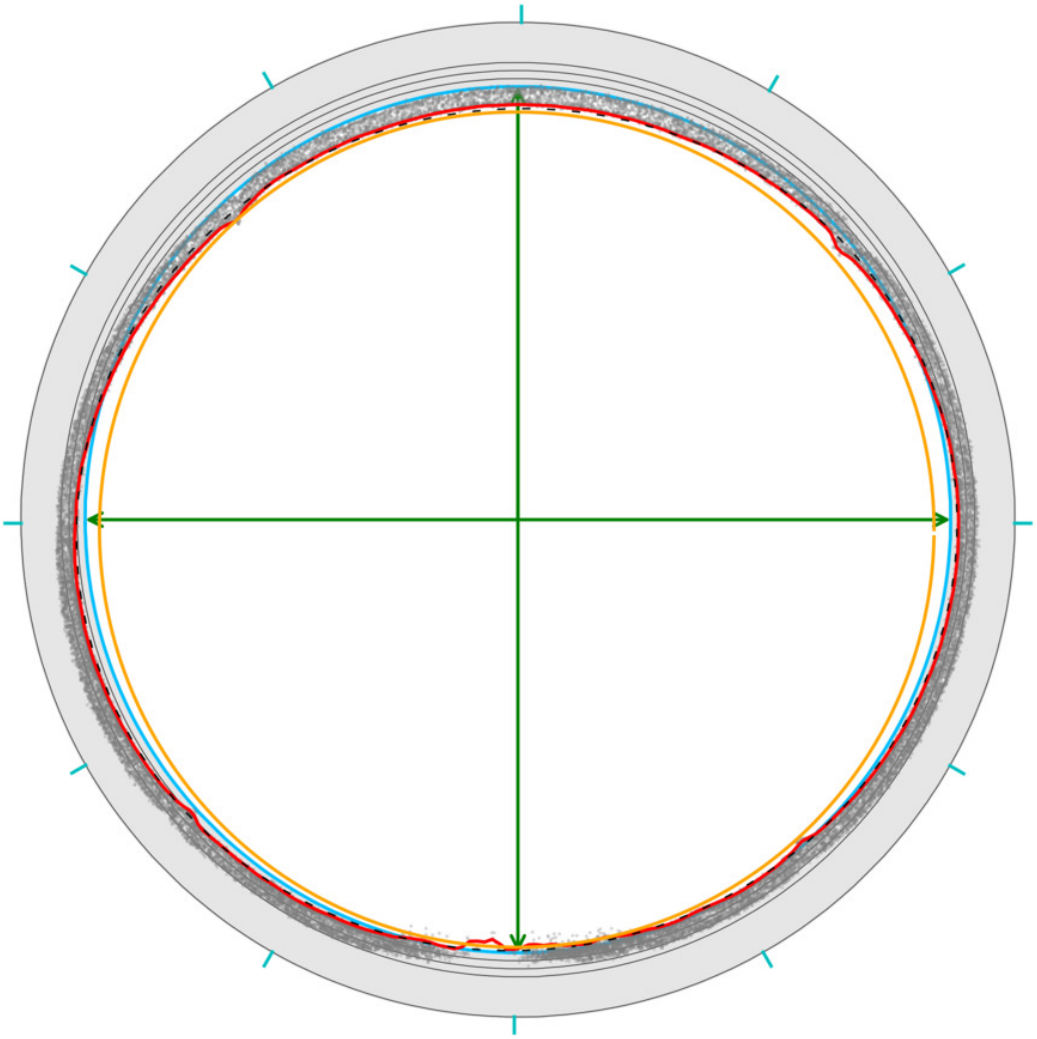
```
Footage   :  610 ft
Width     :  110.2" | 108.0"
Height    :  105.6" | 108.0"

Area      :  8831 sq in
Perimeter :  346.5 in
Ovality   :  2.5%

Interior Diameter : 103.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 611.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



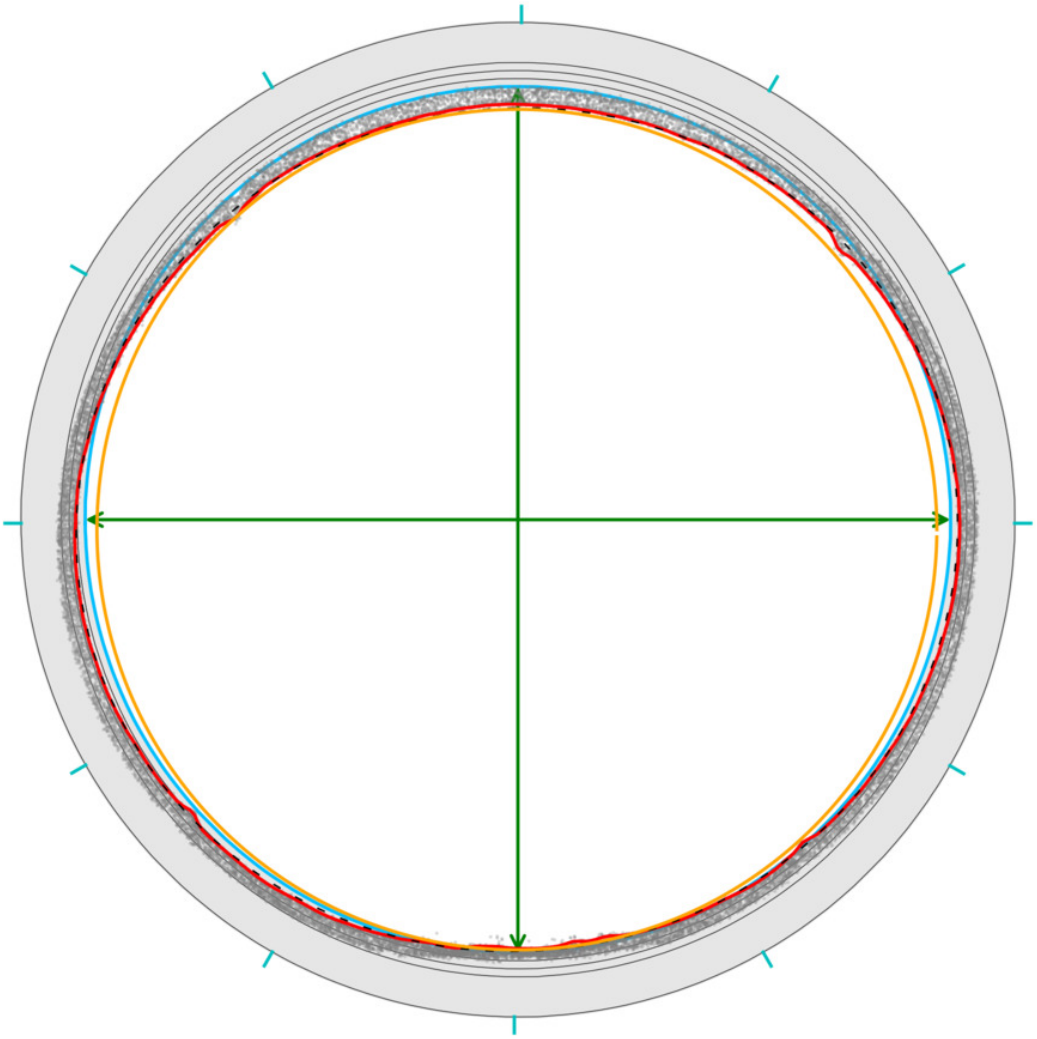
```
Footage   :  611 ft
Width     :  110.3" | 108.0"
Height    :  105.7" | 108.0"

Area      :  9056 sq in
Perimeter :  339.5 in
Ovality   :  2.4%

Interior Diameter : 104.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 612.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



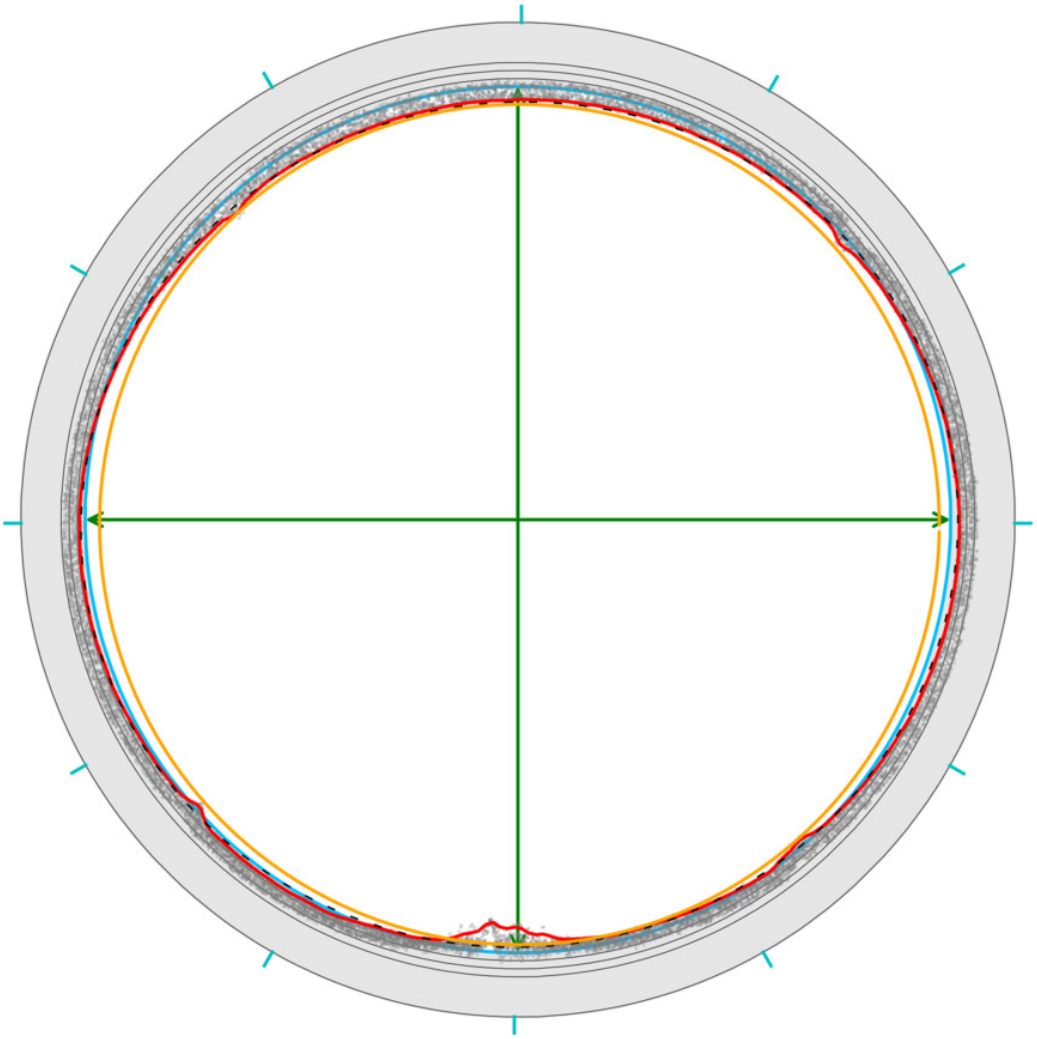
```
Footage   :  612 ft
Width     :  110.4" | 108.0"
Height    :  105.8" | 108.0"

Area      :  9079 sq in
Perimeter :  338.9 in
Ovality   :  2.3%

Interior Diameter : 104.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 613.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



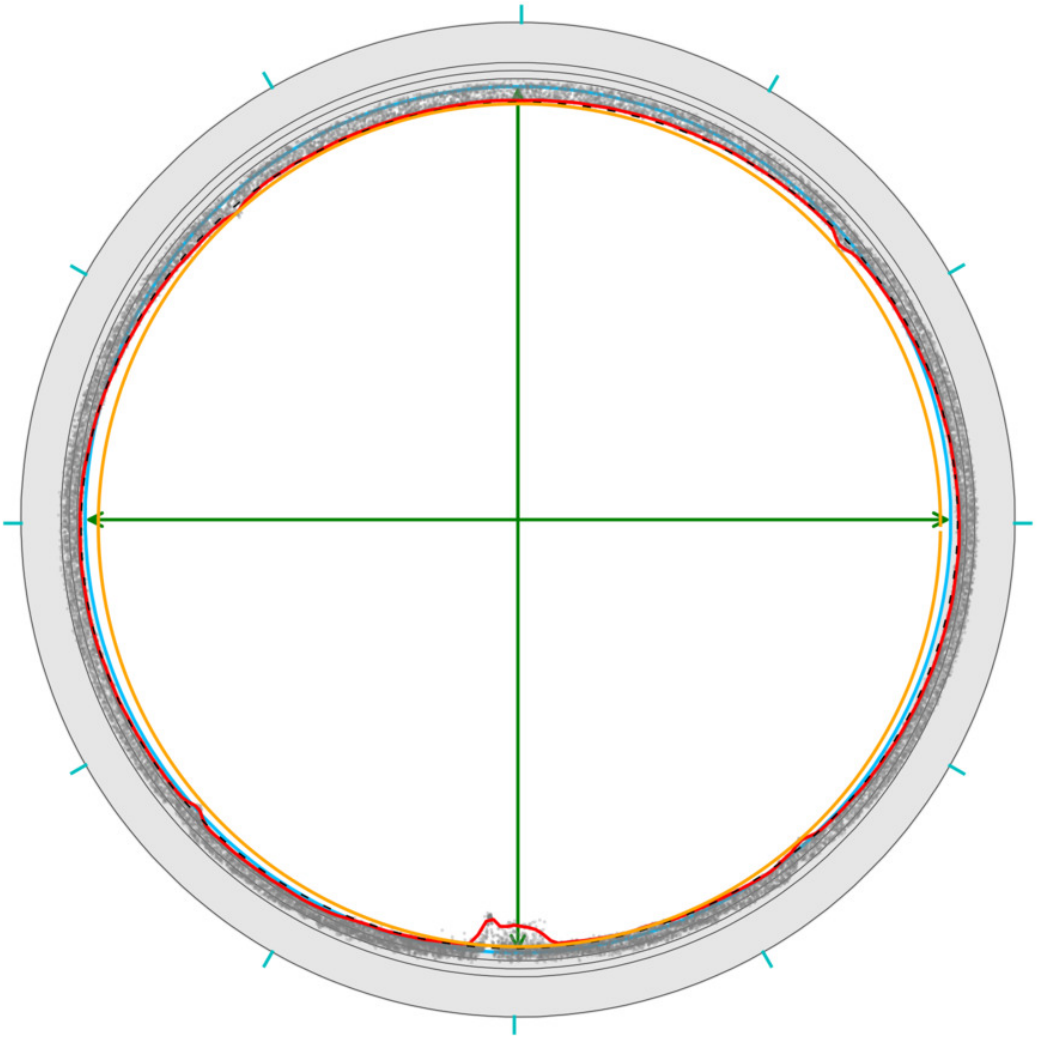
```
Footage   :  613 ft
Width     :  109.8" | 108.0"
Height    :  106.4" | 108.0"

Area      :  9035 sq in
Perimeter :  339.5 in
Ovality   :  1.9%

Interior Diameter : 104.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 614.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 614 ft
Width : 109.7" | 108.0"
Height : 106.3" | 108.0"

Area : 9039 sq in
Perimeter : 340.9 in
Ovality : 1.9%

Interior Diameter : 105.1"

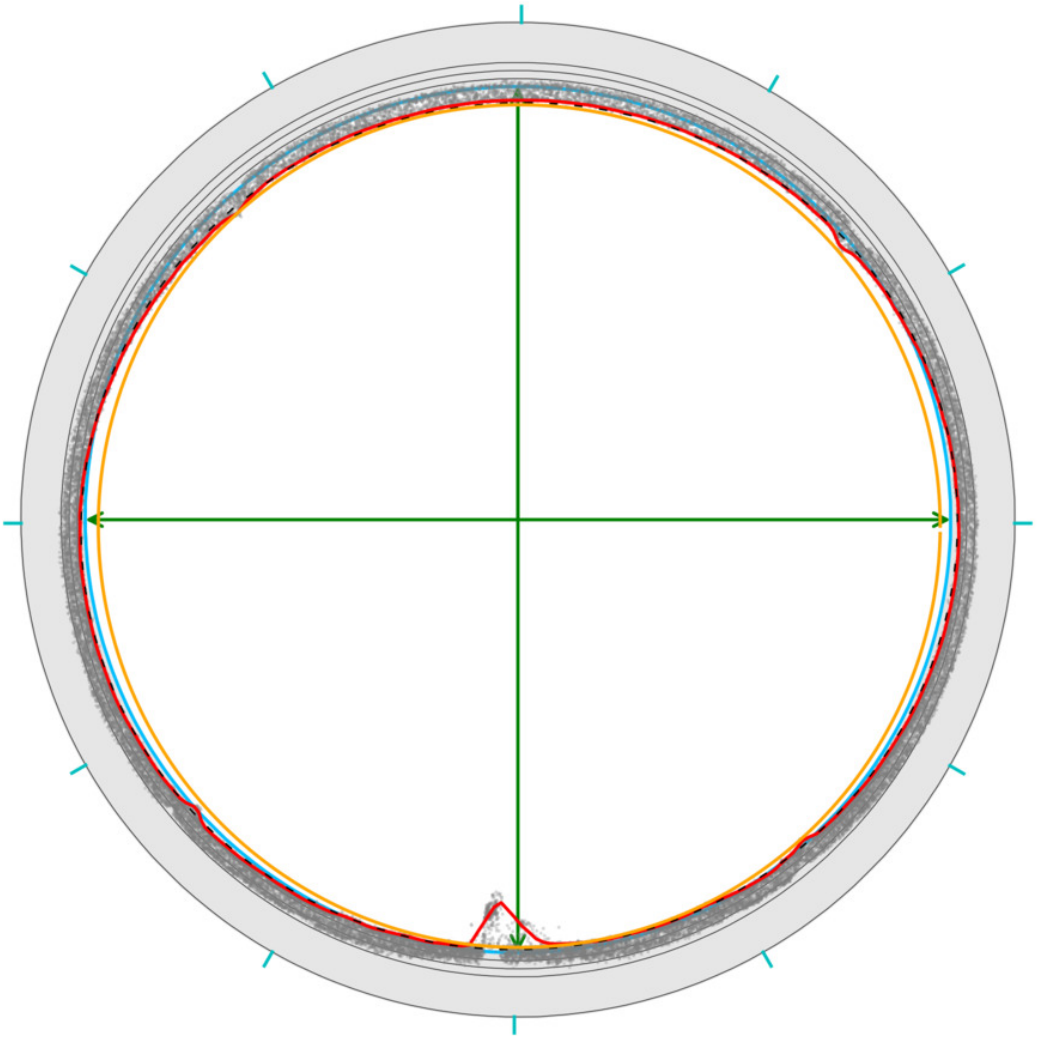
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 615.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



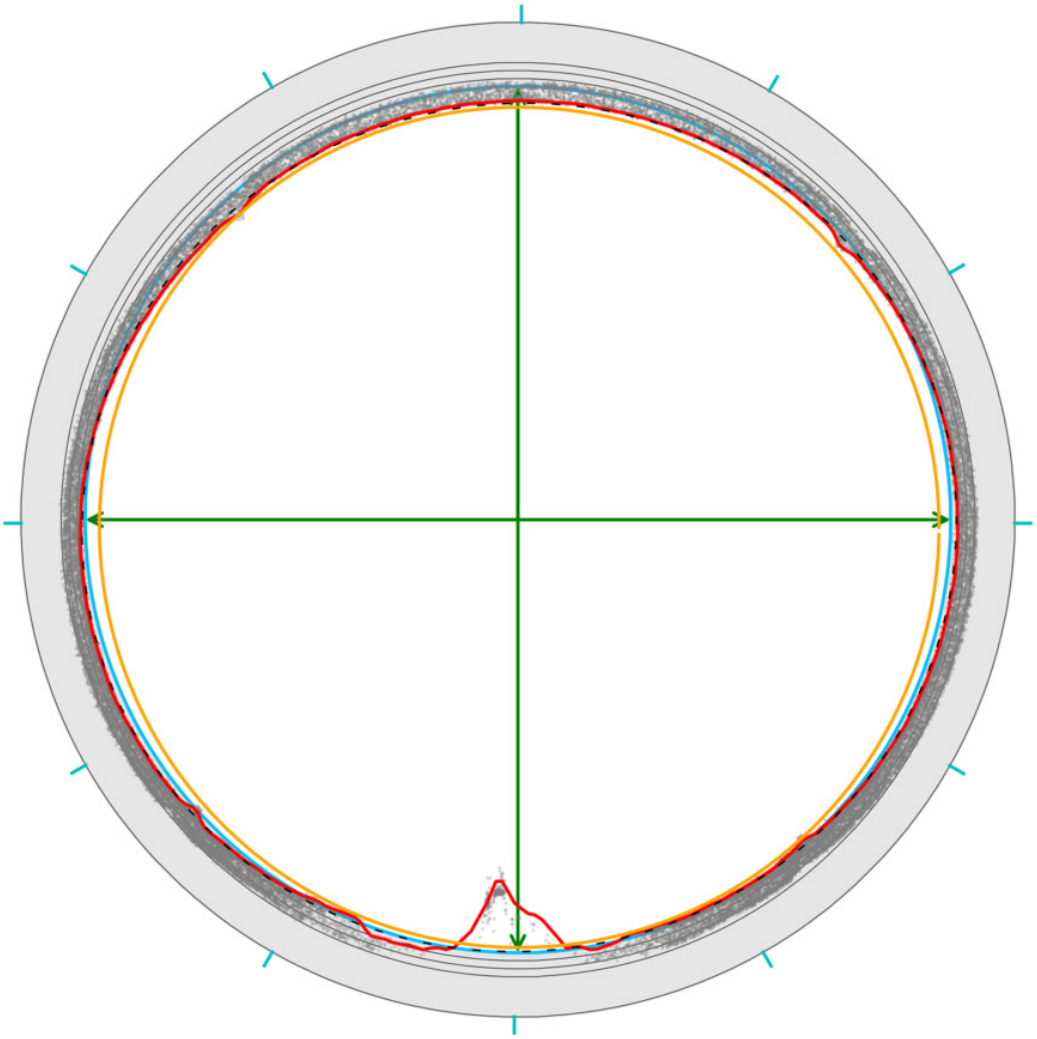
```
Footage   :  615 ft
Width     :  109.7" | 108.0"
Height    :  106.3" | 108.0"

Area      :  9039 sq in
Perimeter :  343.3 in
Ovality   :  1.8%

Interior Diameter : 105.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 616.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 616 ft
Width : 109.5" | 108.0"
Height : 106.2" | 108.0"

Area : 9003 sq in
Perimeter : 347.8 in
Ovality : 1.7%

Interior Diameter : 104.8"

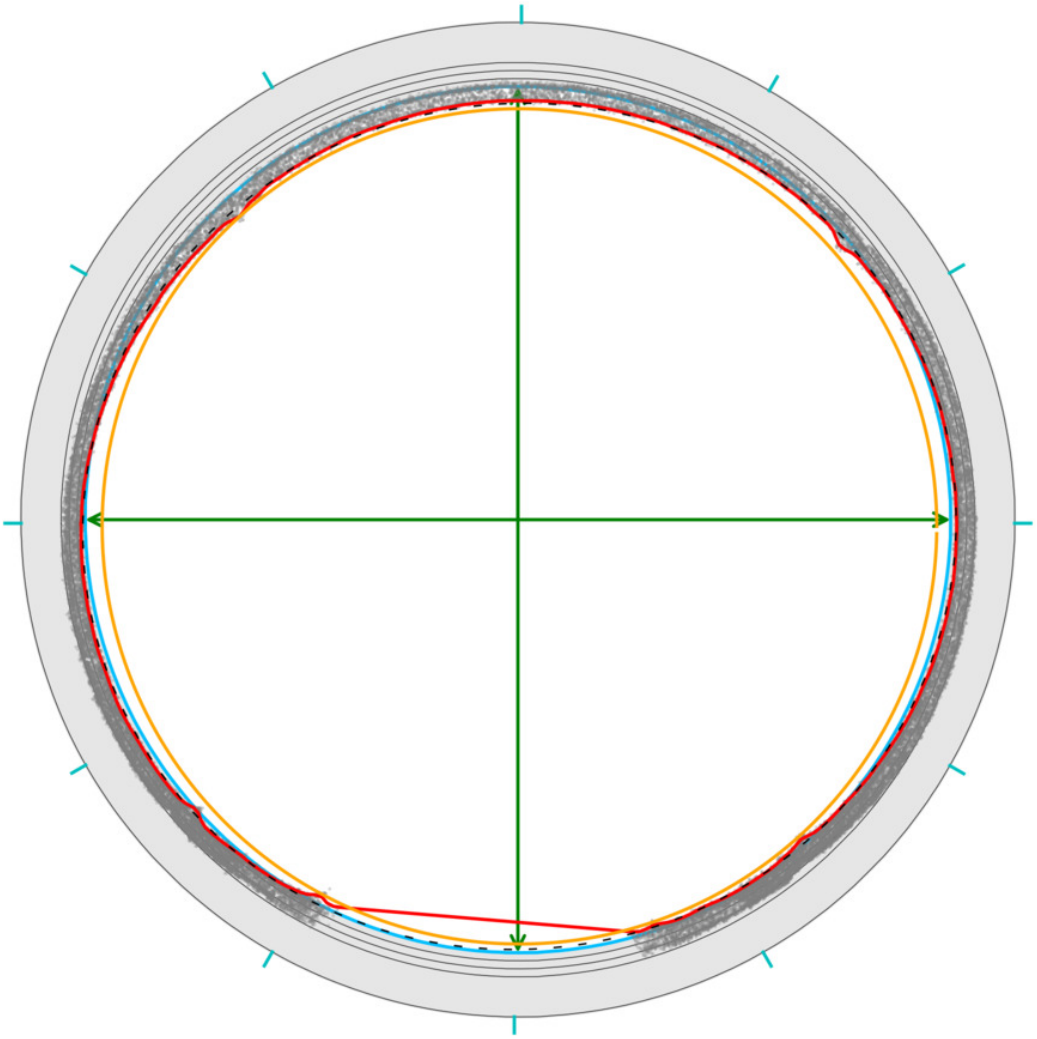
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 617.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



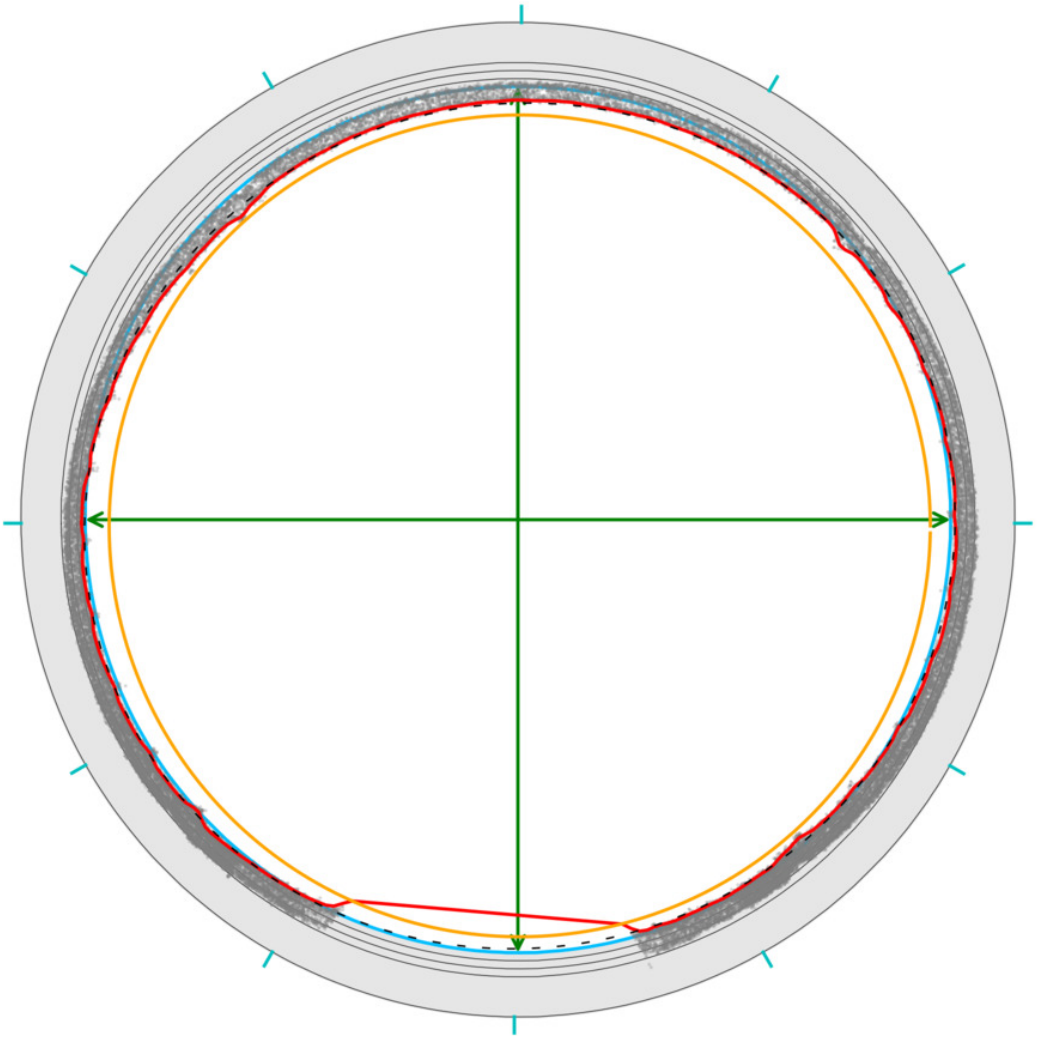
```
Footage   :  617 ft
Width     :  109.3" | 108.0"
Height    :  106.2" | 108.0"

Area      :  8928 sq in
Perimeter :  337.0 in
Ovality   :  1.8%

Interior Diameter : 104.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 618.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



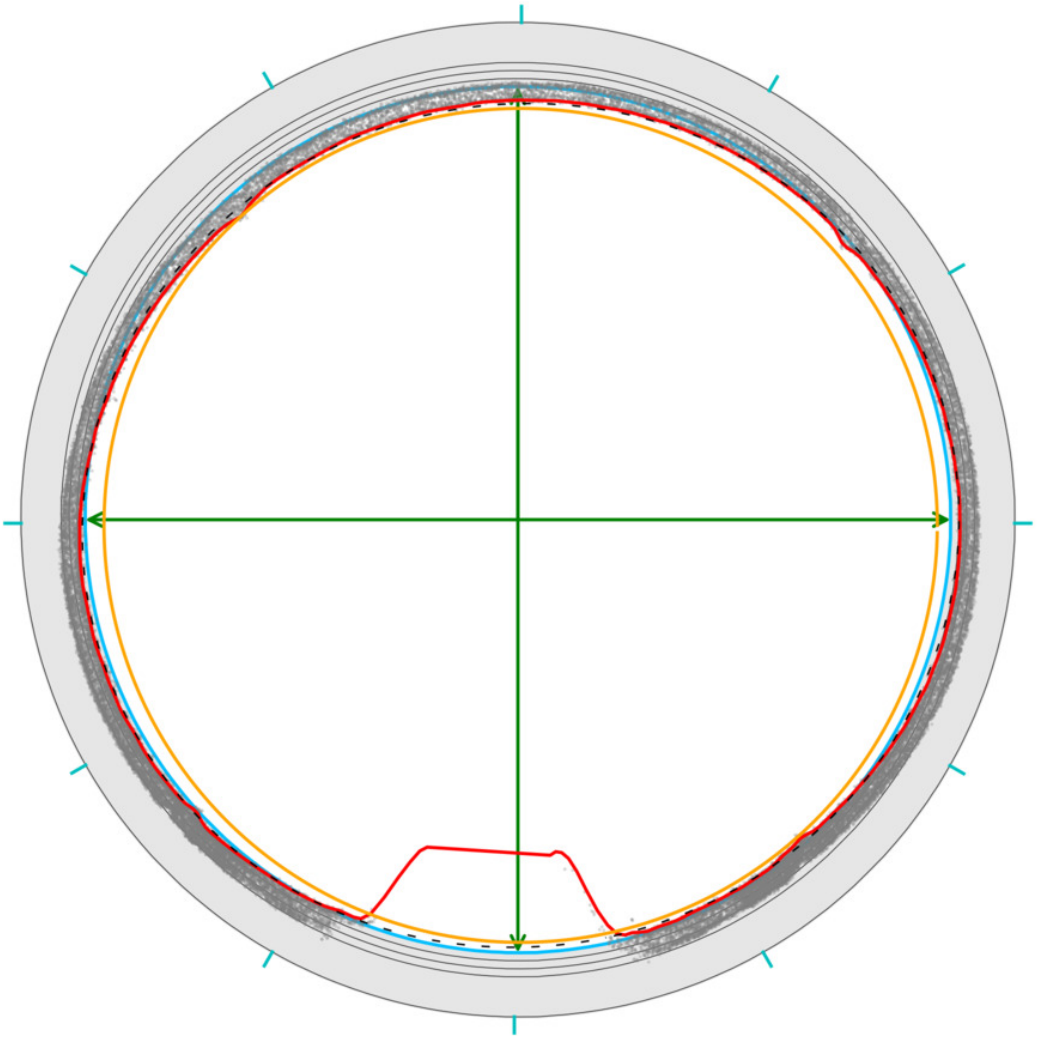
```
Footage   :  618 ft
Width     :  109.2" | 108.0"
Height    :  106.3" | 108.0"

Area      :  8869 sq in
Perimeter :  337.0 in
Ovality   :  1.7%

Interior Diameter : 102.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 619.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 619 ft
Width : 109.9" | 108.0"
Height : 106.3" | 108.0"

Area : 8758 sq in
Perimeter : 347.2 in
Ovality : 2.2%

Interior Diameter : 104.0"

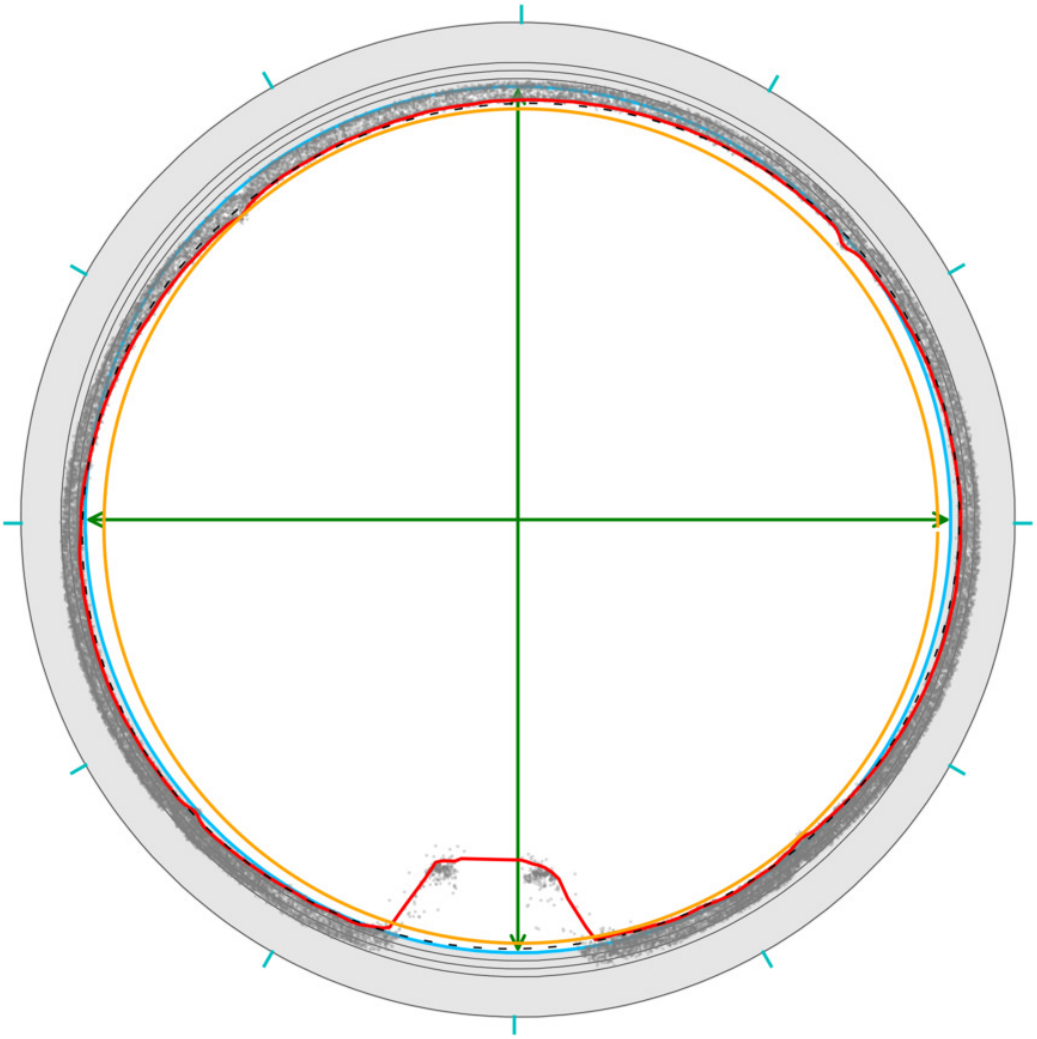
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 620.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



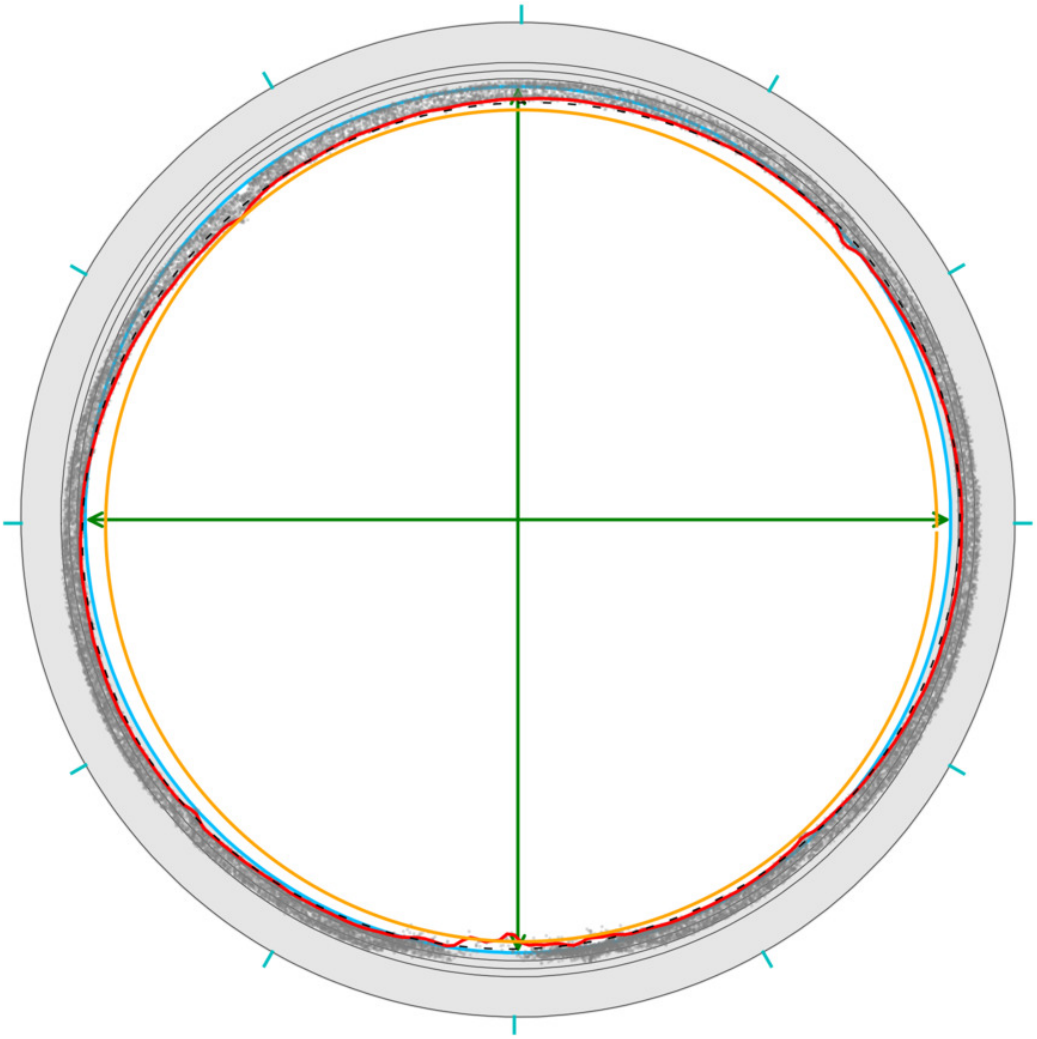
```
Footage   :  620 ft
Width     :  109.9" | 108.0"
Height    :  106.3" | 108.0"

Area      :  8851 sq in
Perimeter :  347.4 in
Ovality   :  2.2%

Interior Diameter : 104.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 621.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



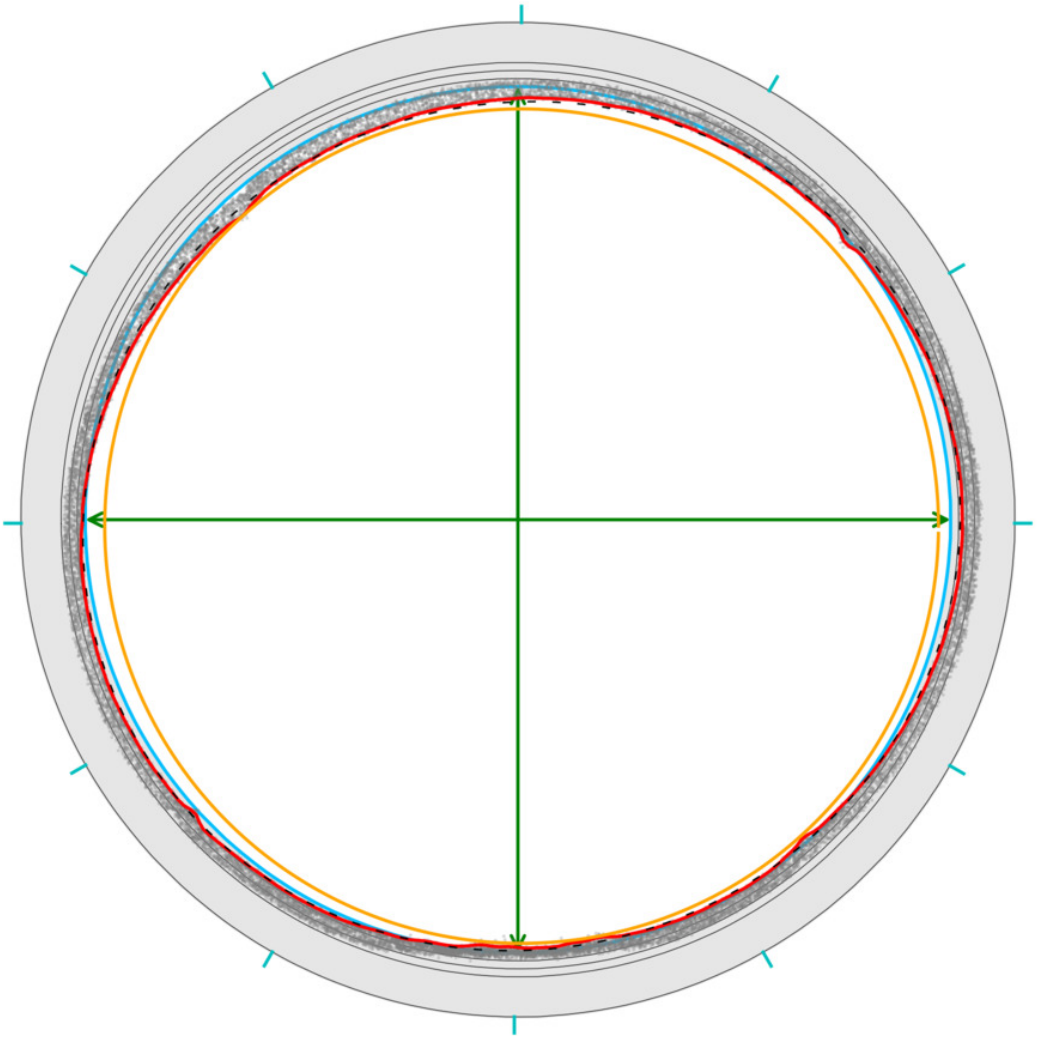
```
Footage   :  621 ft
Width     :  110.0" | 108.0"
Height    :  106.5" | 108.0"

Area      :  9068 sq in
Perimeter :  340.1 in
Ovality   :  2.2%

Interior Diameter : 103.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 622.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



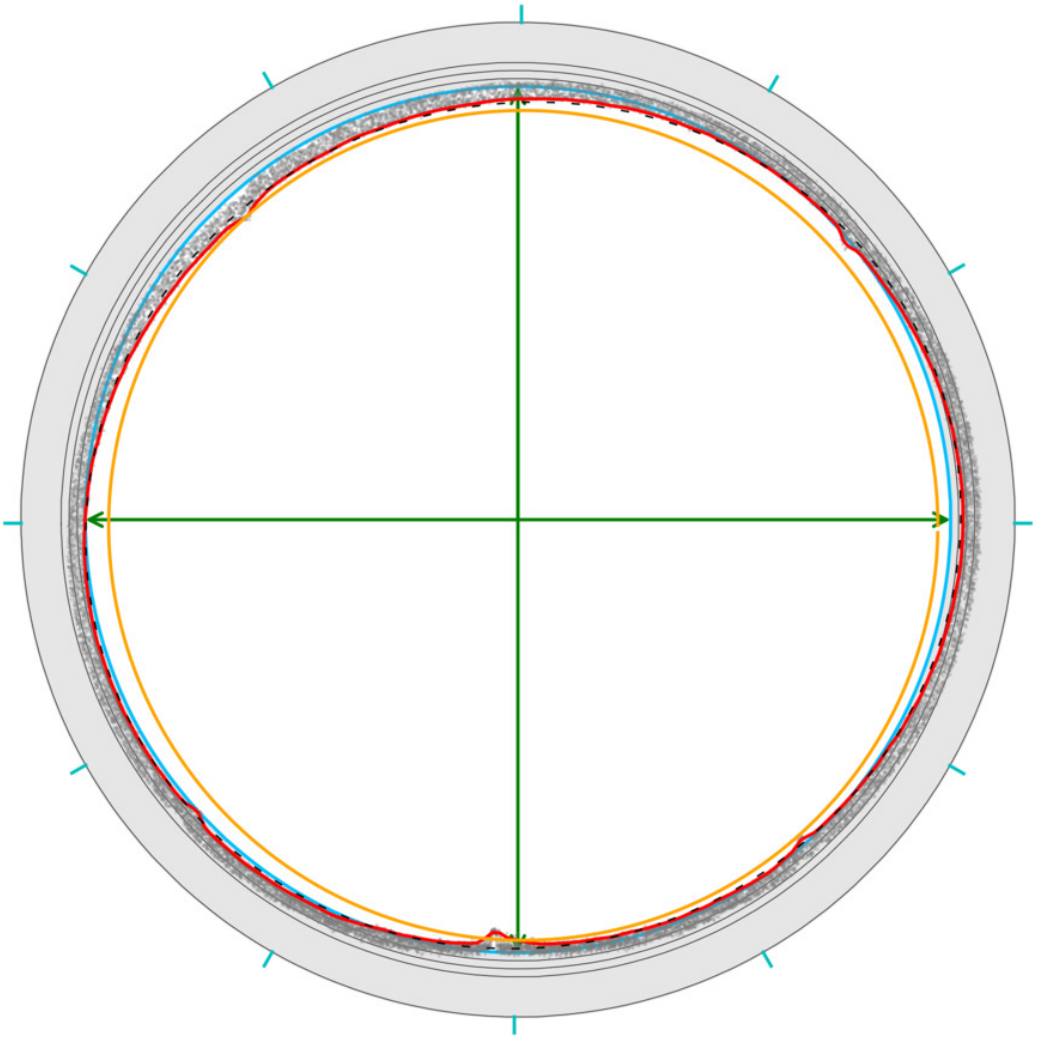
```
Footage   :  622 ft
Width     :  110.0" | 108.0"
Height    :  106.6" | 108.0"

Area      :  9090 sq in
Perimeter :  339.0 in
Ovality   :  2.2%

Interior Diameter : 104.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 623.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



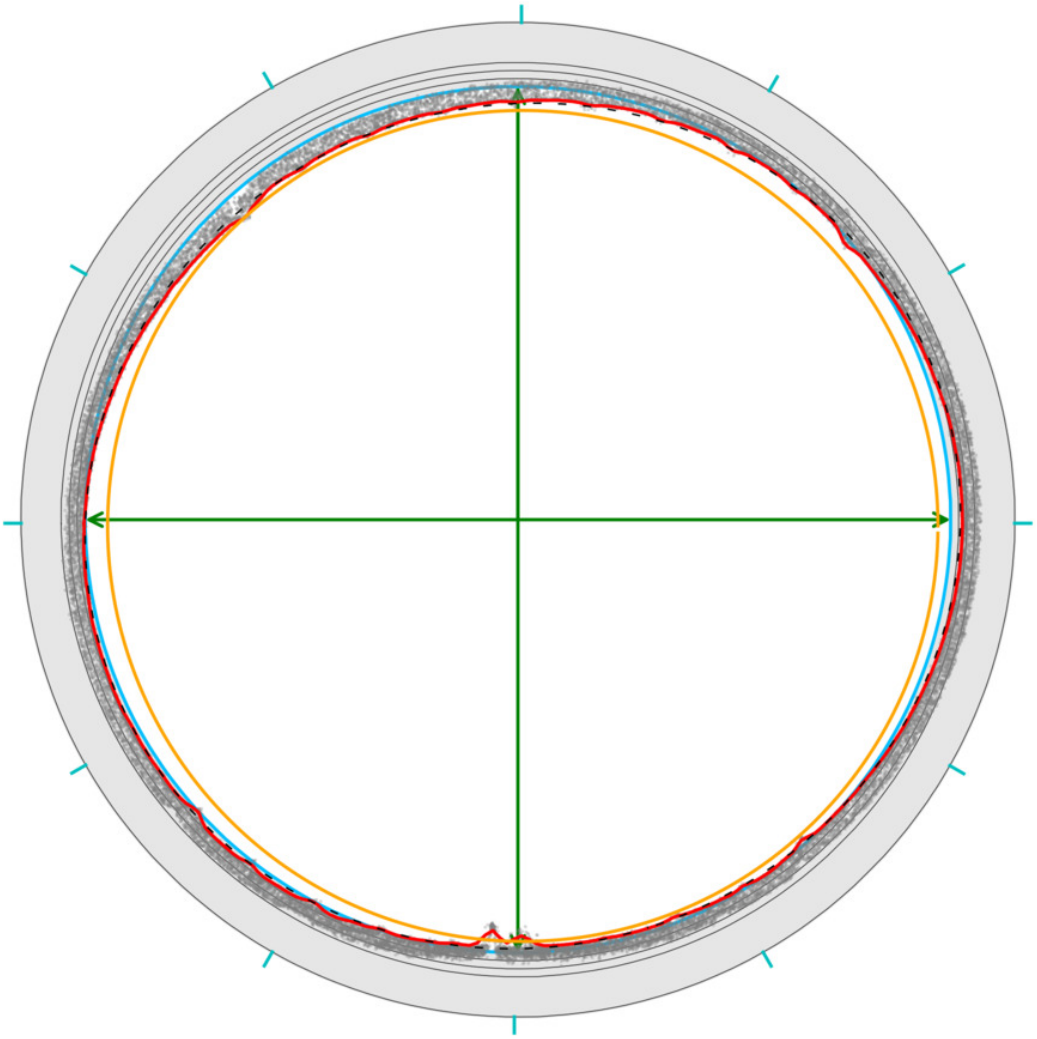
```
Footage   :  623 ft
Width     :  109.7" | 108.0"
Height    :  106.4" | 108.0"

Area      :  9040 sq in
Perimeter :  338.9 in
Ovality   :  2.2%

Interior Diameter : 103.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 624.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



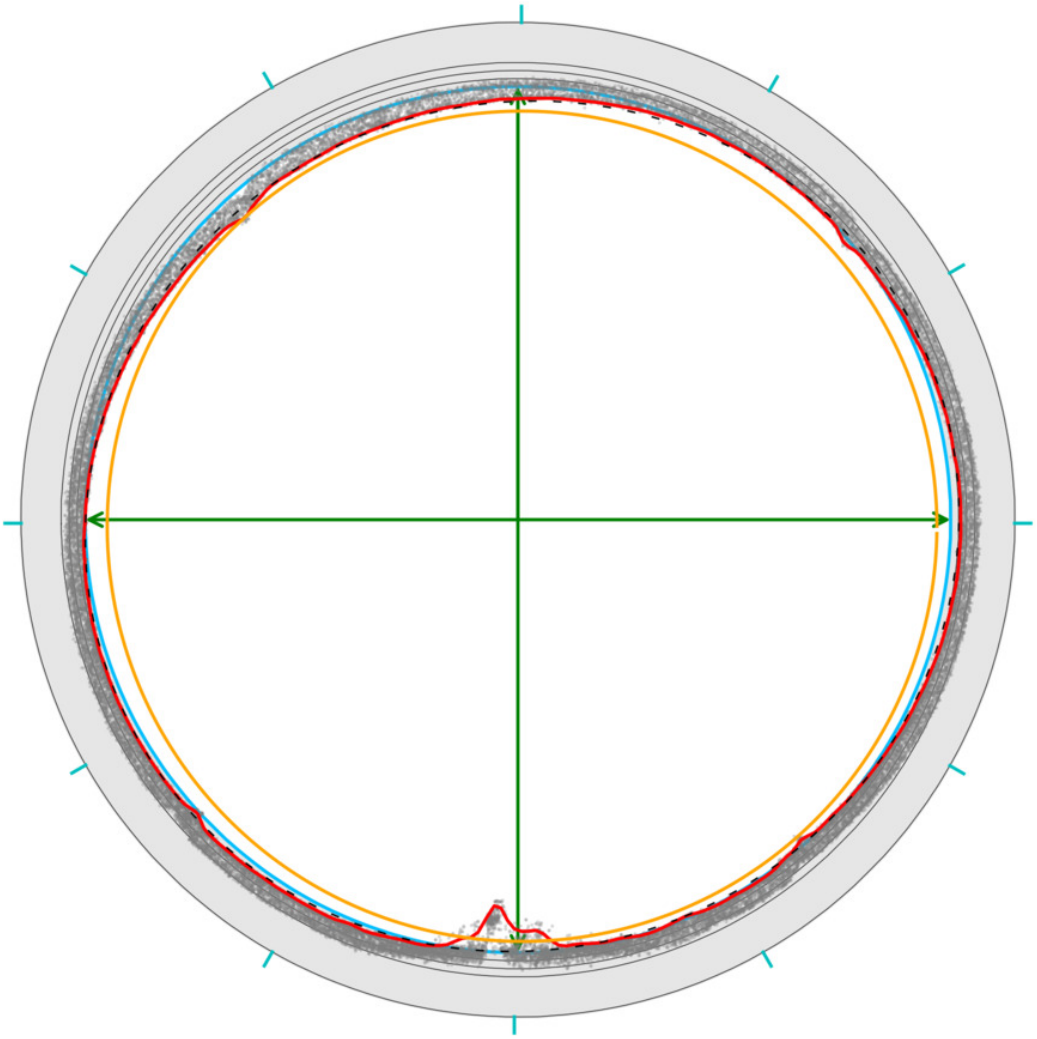
```
Footage   :  624 ft
Width     :  109.7" | 108.0"
Height    :  106.2" | 108.0"

Area      :  9035 sq in
Perimeter :  340.4 in
Ovality   :  2.2%

Interior Diameter : 103.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 625.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



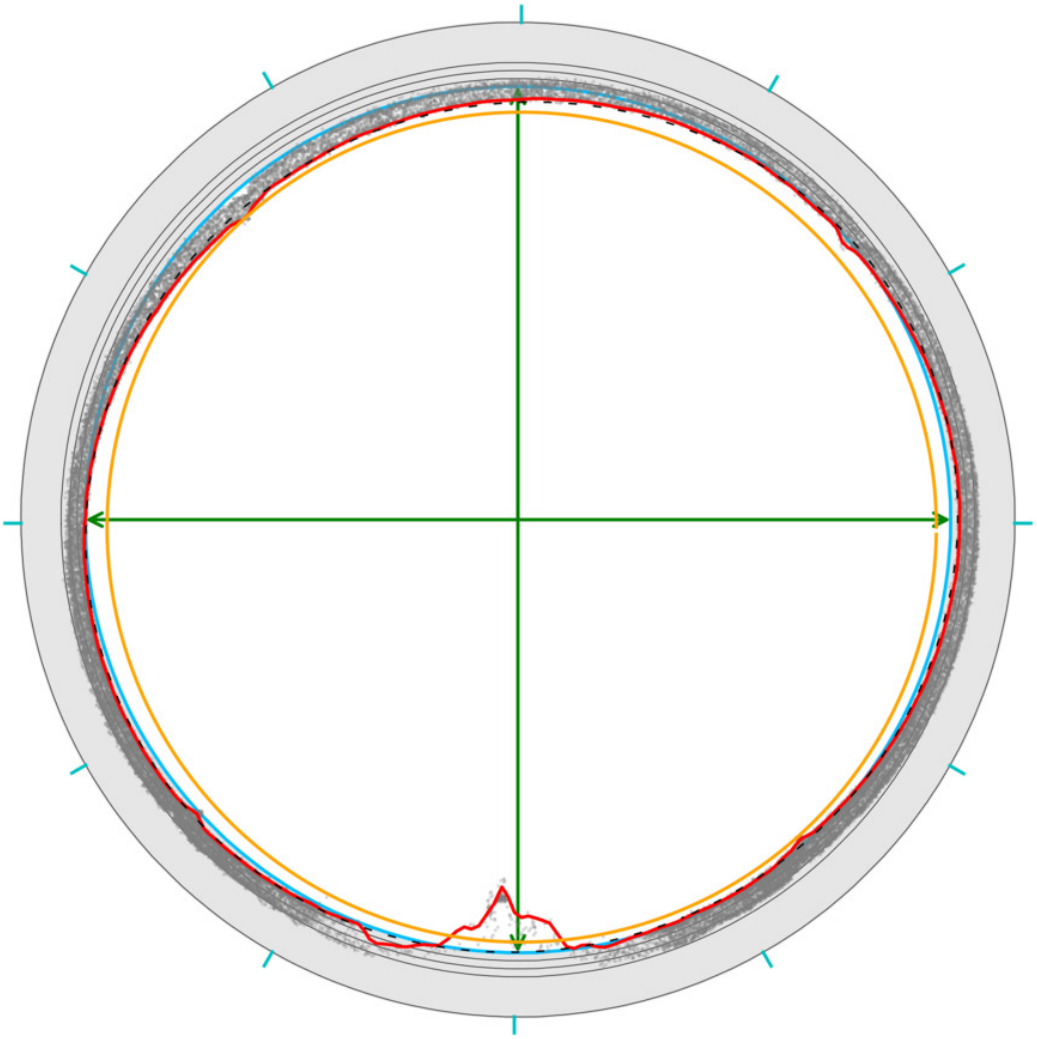
```
Footage   :  625 ft
Width     :  109.4" | 108.0"
Height    :  106.5" | 108.0"

Area      :  9049 sq in
Perimeter :  343.3 in
Ovality   :  2.0%

Interior Diameter : 103.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 626.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 626 ft
Width : 109.3" | 108.0"
Height : 106.4" | 108.0"

Area : 9006 sq in
Perimeter : 346.8 in
Ovality : 1.9%

Interior Diameter : 103.5"

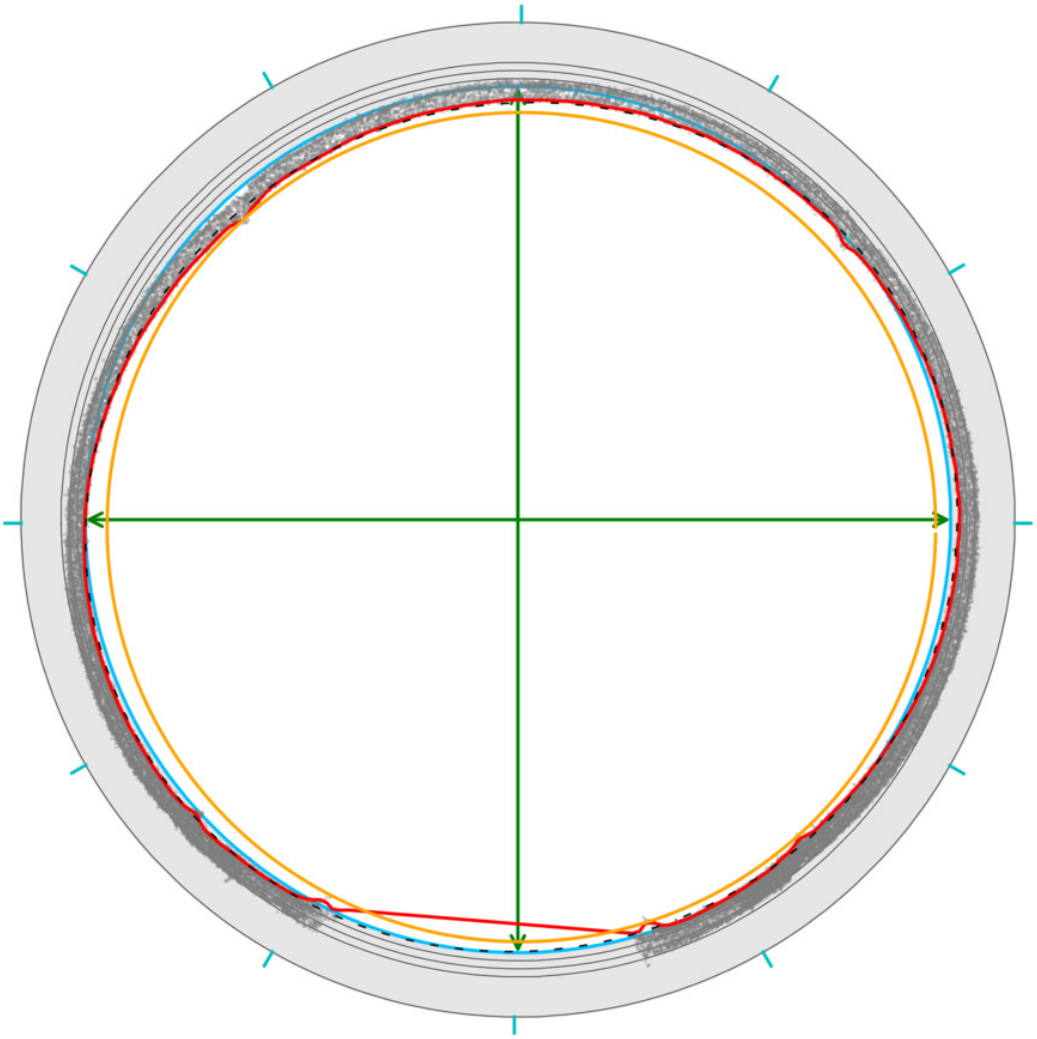
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 627.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



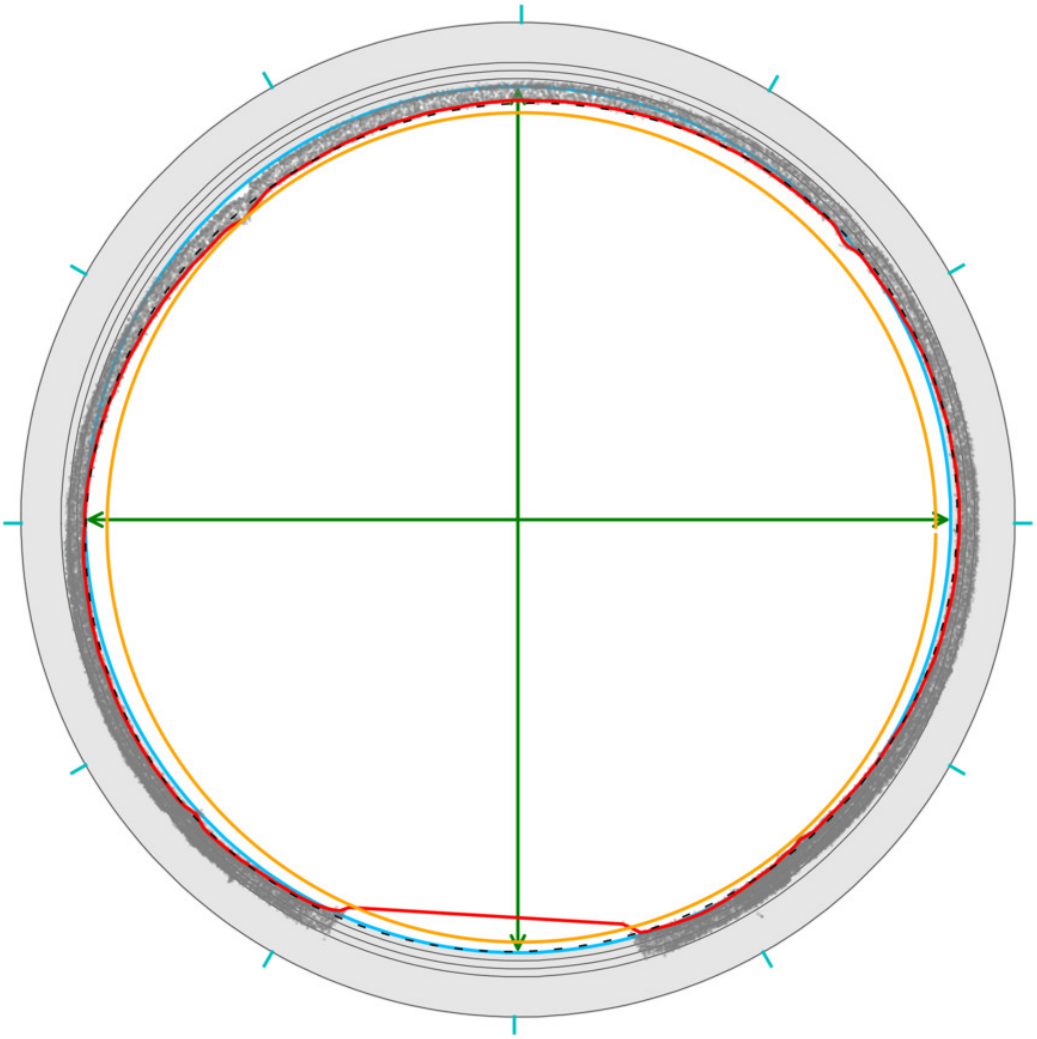
```
Footage   :  627 ft
Width     :  109.2" | 108.0"
Height    :  106.3" | 108.0"

Area      :  8935 sq in
Perimeter :  337.6 in
Ovality   :  1.9%

Interior Diameter : 103.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 628.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 628 ft
Width : 109.3" | 108.0"
Height : 106.3" | 108.0"

Area : 8909 sq in
Perimeter : 337.1 in
Ovality : 2.0%

Interior Diameter : 103.4"

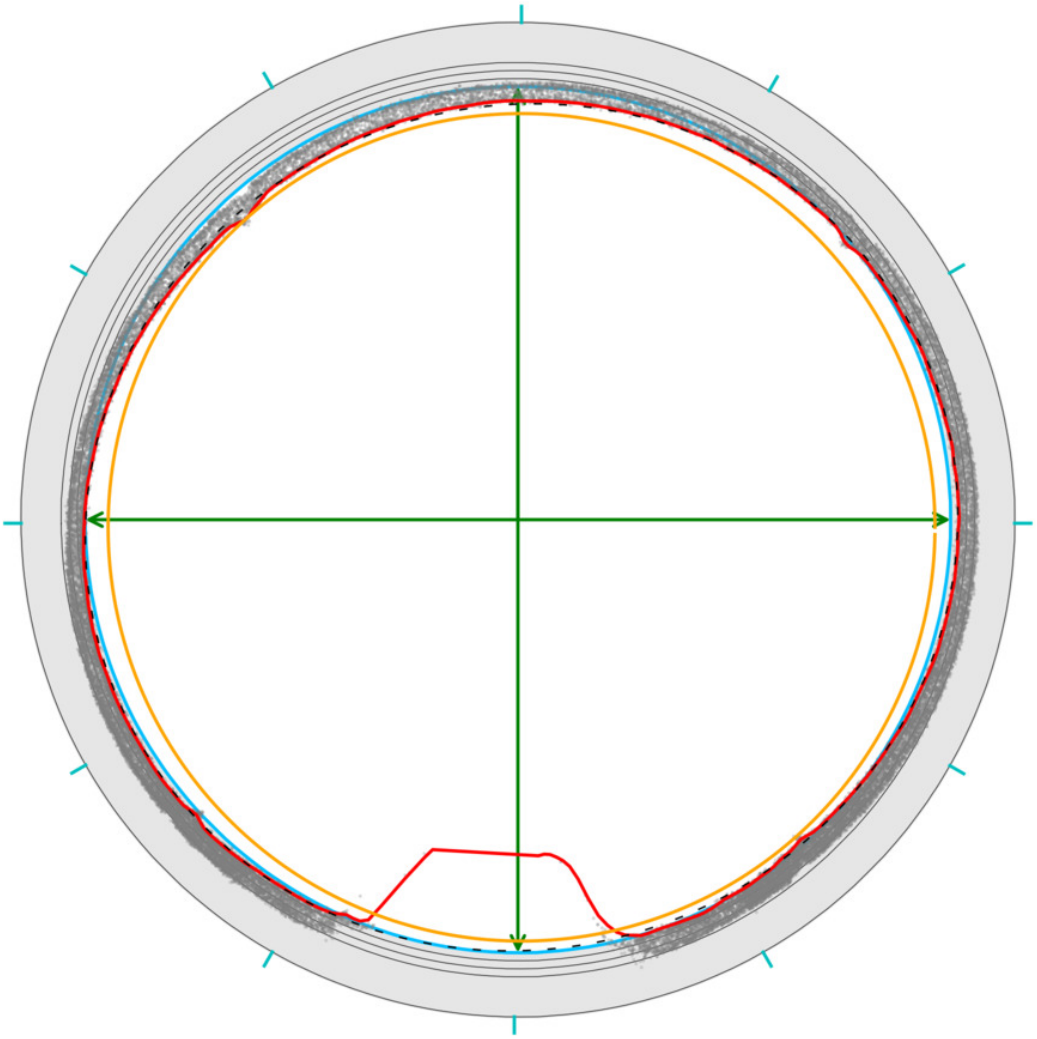
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 629.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 629 ft
Width : 109.3" | 108.0"
Height : 106.2" | 108.0"

Area : 8749 sq in
Perimeter : 346.0 in
Ovality : 2.1%

Interior Diameter : 103.2"

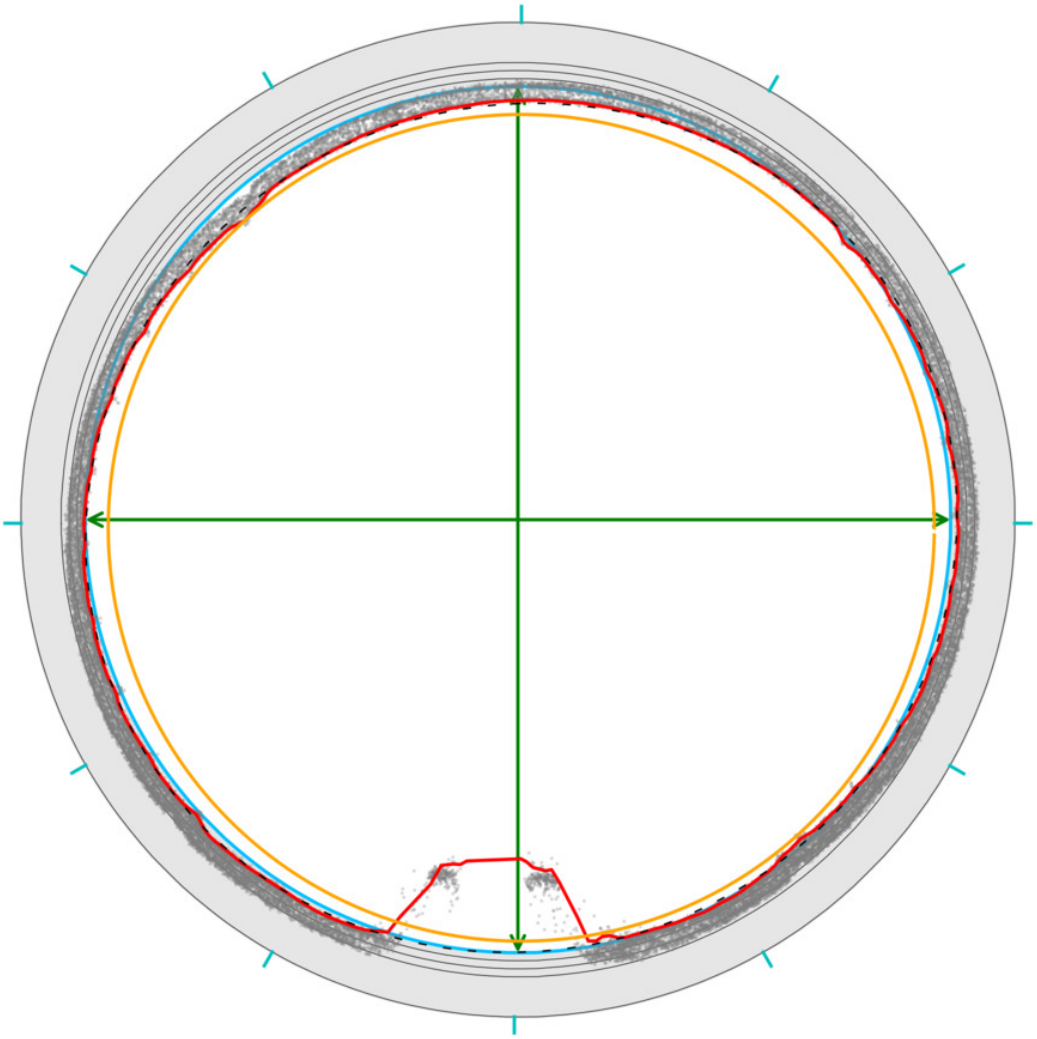
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 630.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



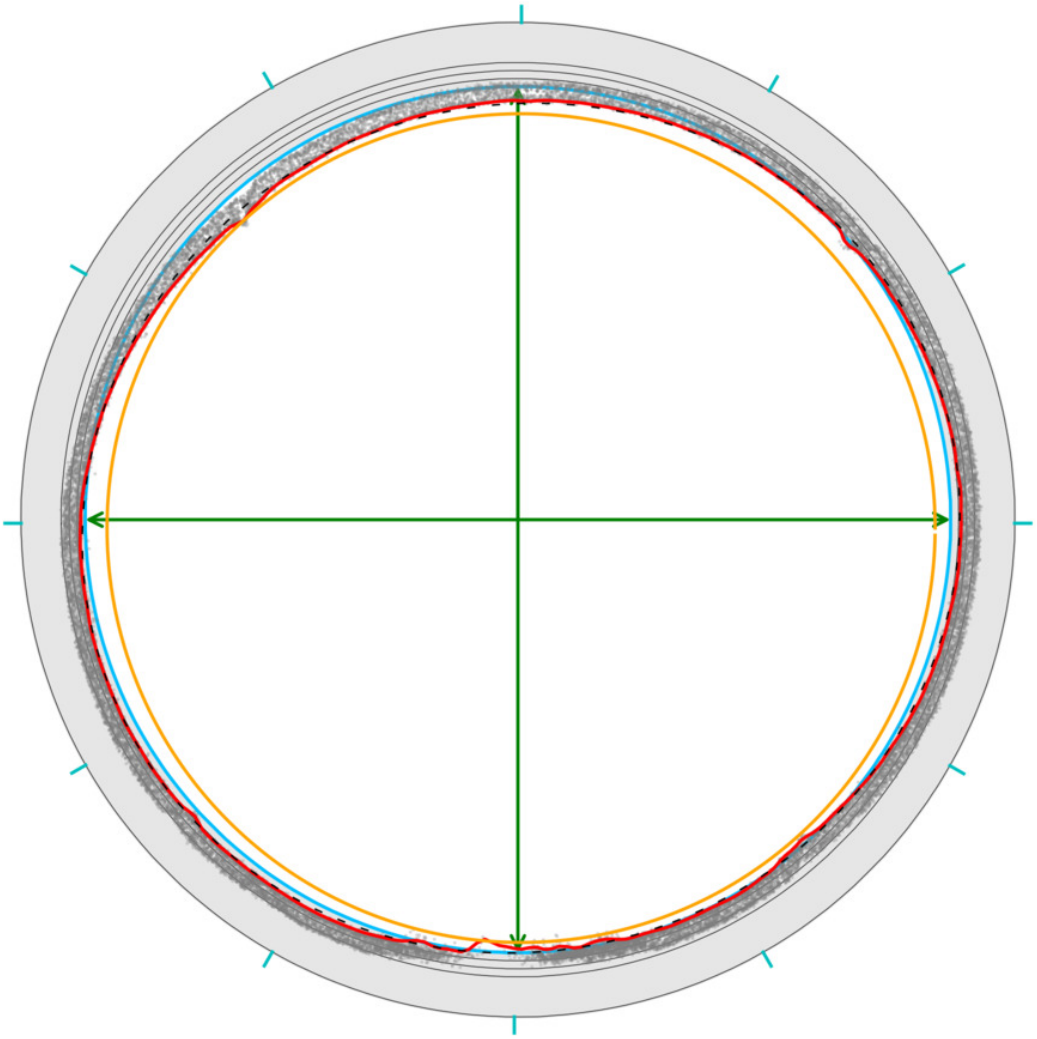
```
Footage   :  630 ft
Width     :  109.2" | 108.0"
Height    :  106.3" | 108.0"

Area      :  8828 sq in
Perimeter :  348.3 in
Ovality   :  2.0%

Interior Diameter : 103.1"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 631.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



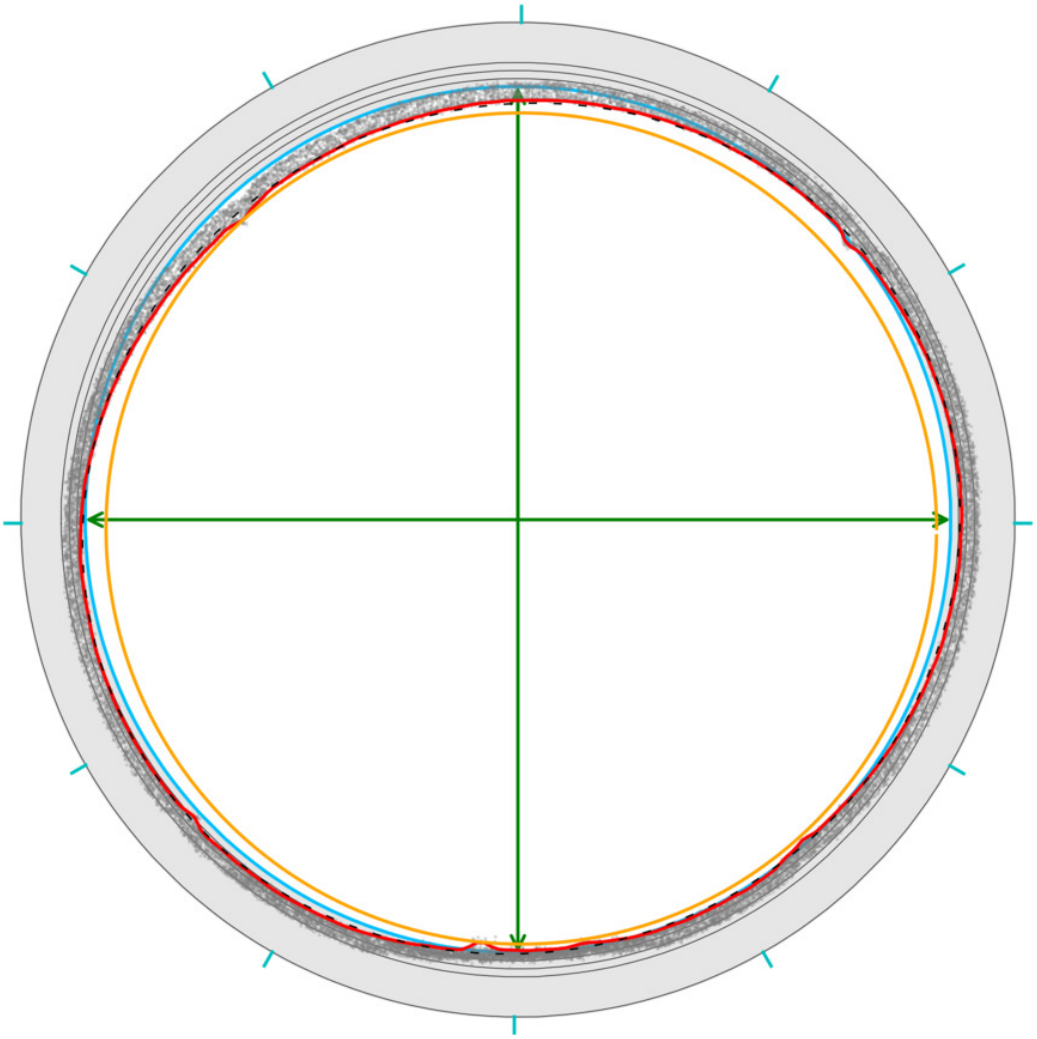
```
Footage   :  631 ft
Width     :  109.9" | 108.0"
Height    :  106.2" | 108.0"

Area      :  9096 sq in
Perimeter :  340.2 in
Ovality   :  2.2%

Interior Diameter : 103.3"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 632.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



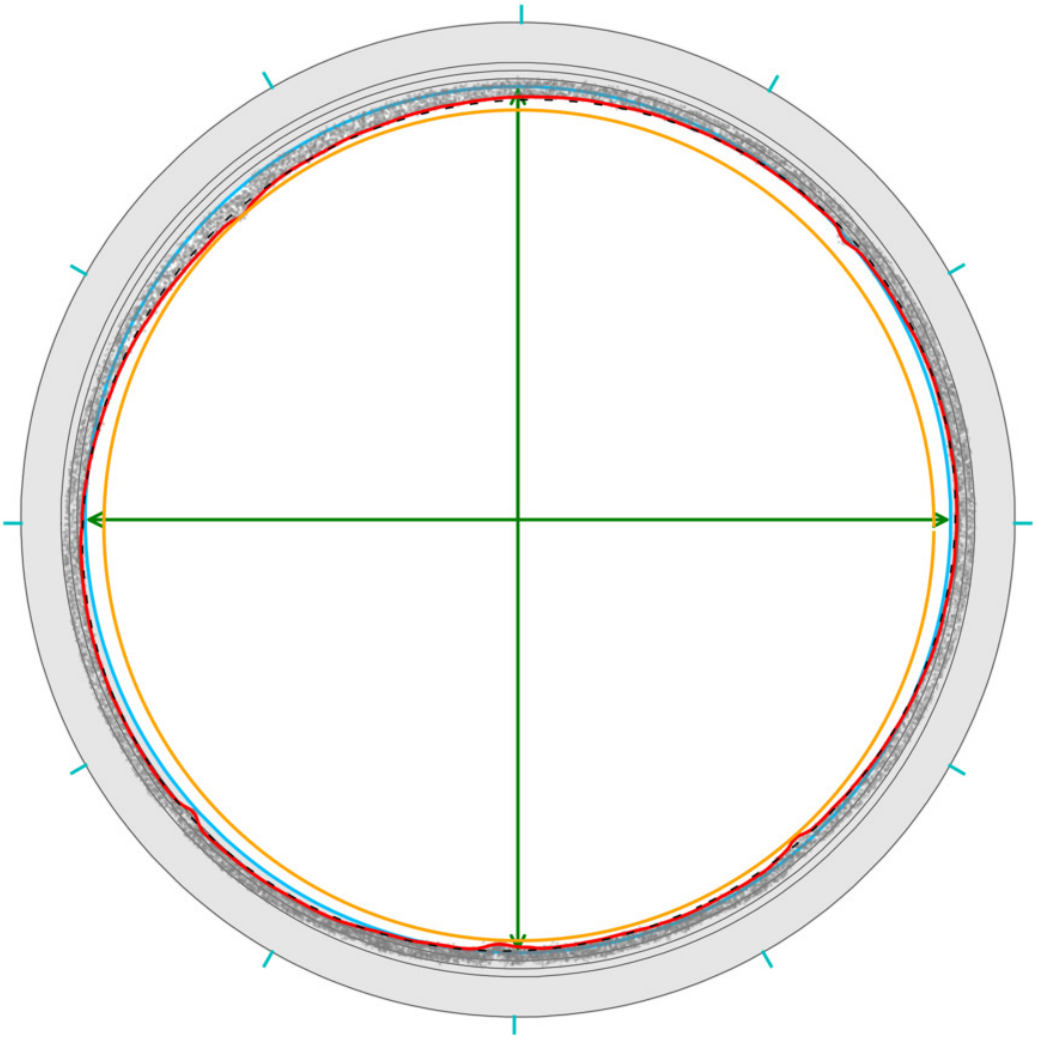
```
Footage   :  632 ft
Width     :  110.0" | 108.0"
Height    :  106.3" | 108.0"

Area      :  9109 sq in
Perimeter :  339.8 in
Ovality   :  2.3%

Interior Diameter : 103.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 633.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



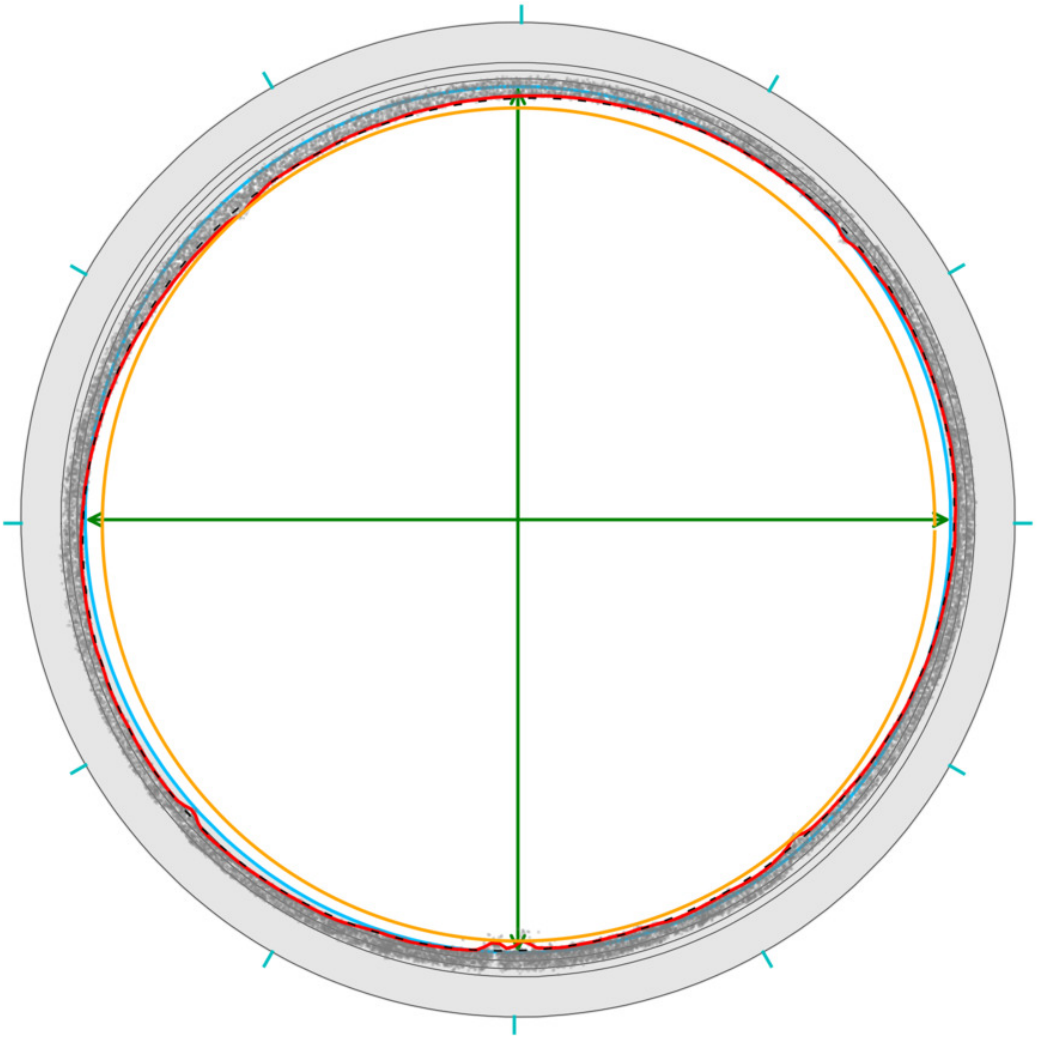
```
Footage   :  633 ft
Width     :  109.3" | 108.0"
Height    :  106.7" | 108.0"

Area      :  9065 sq in
Perimeter :  338.7 in
Ovality   :  2.2%

Interior Diameter : 103.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 634.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  634 ft
Width     :  109.1" | 108.0"
Height    :  106.8" | 108.0"

Area      :  9067 sq in
Perimeter :  339.5 in
Ovality   :  2.1%

Interior Diameter : 103.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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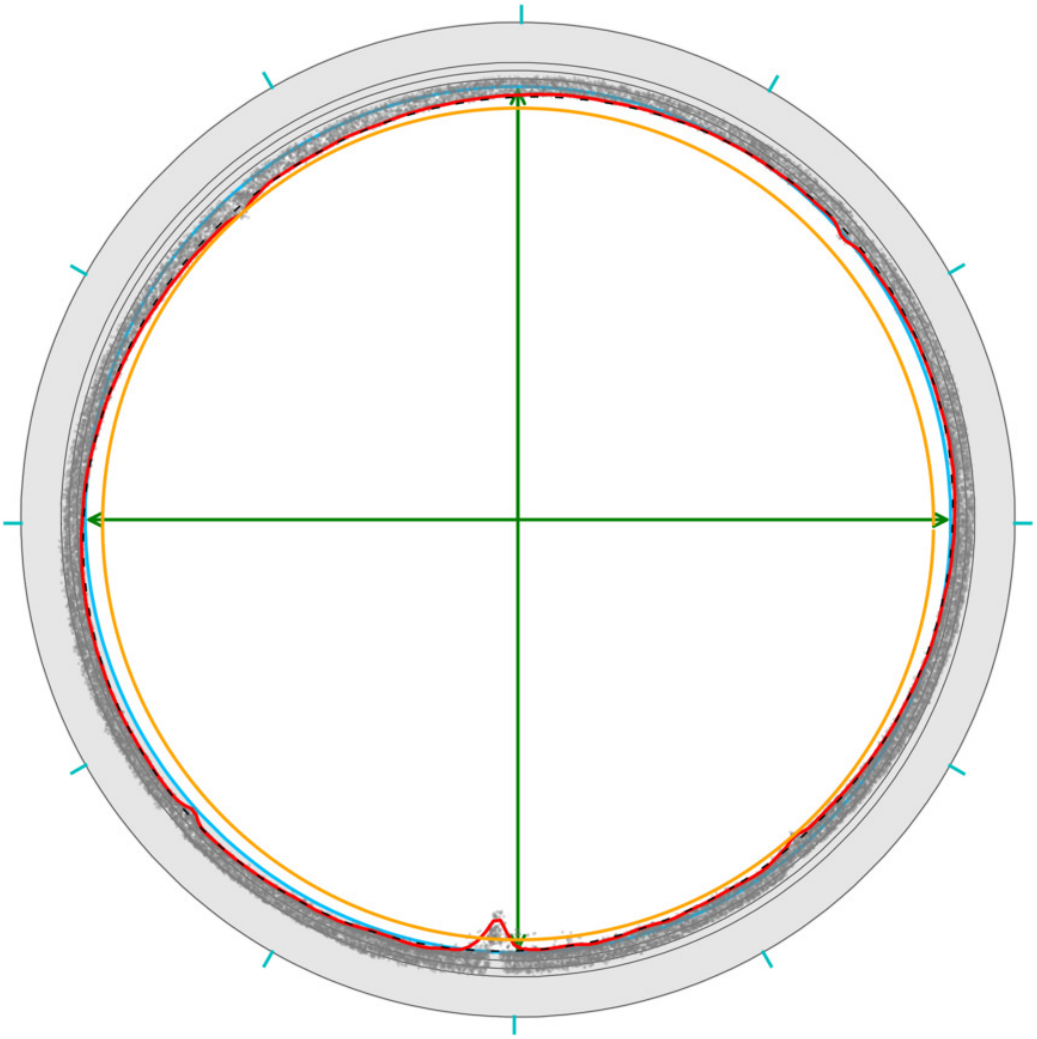
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 635.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  635 ft
Width     :  109.0" | 108.0"
Height    :  106.9" | 108.0"

Area      :  9054 sq in
Perimeter :  342.1 in
Ovality   :  2.1%

Interior Diameter : 103.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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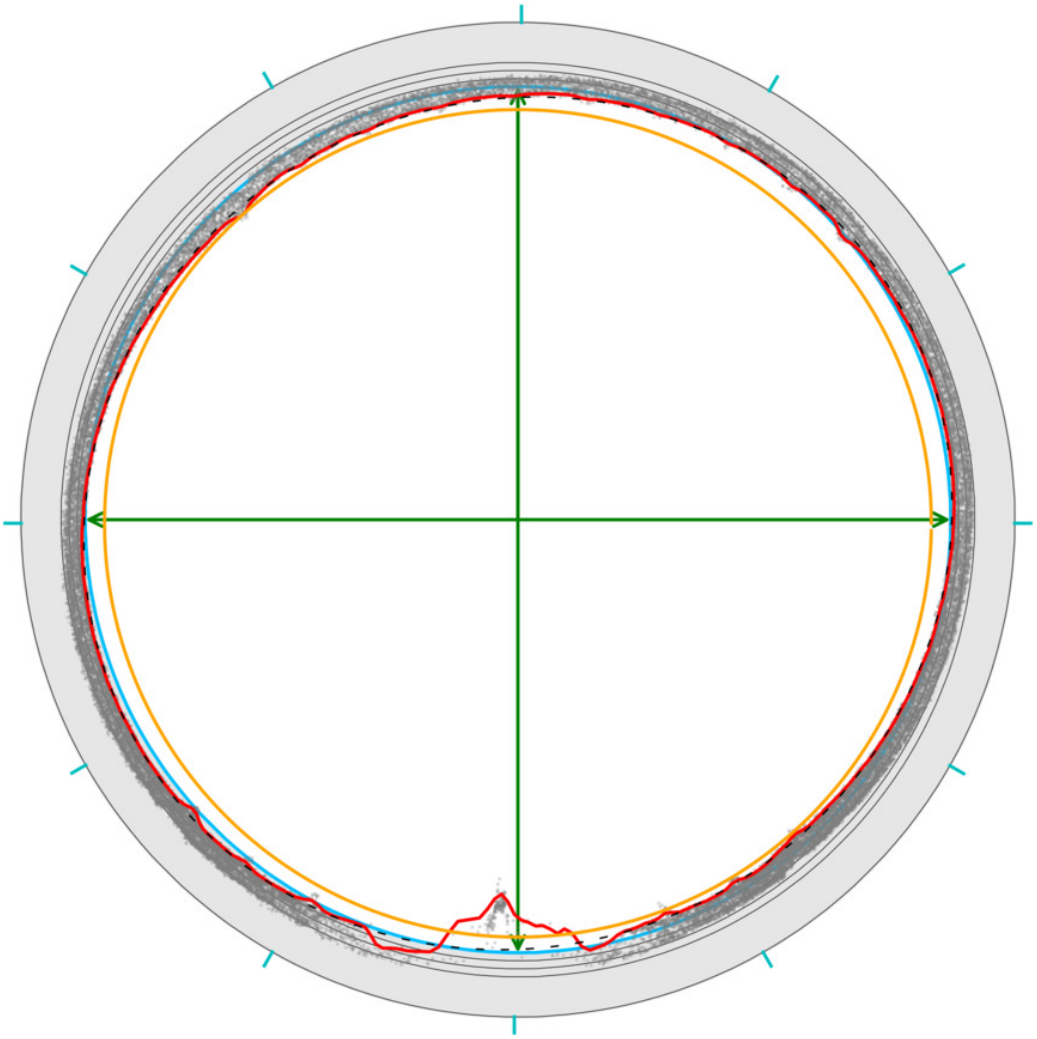
SFX-3D Cross Section Report
Inspection #1 : / , 636.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 636 ft
Width : 108.8" | 108.0"
Height : 106.9" | 108.0"

Area : 8987 sq in
Perimeter : 346.5 in
Ovality : 2.3%

Interior Diameter : 103.2"

Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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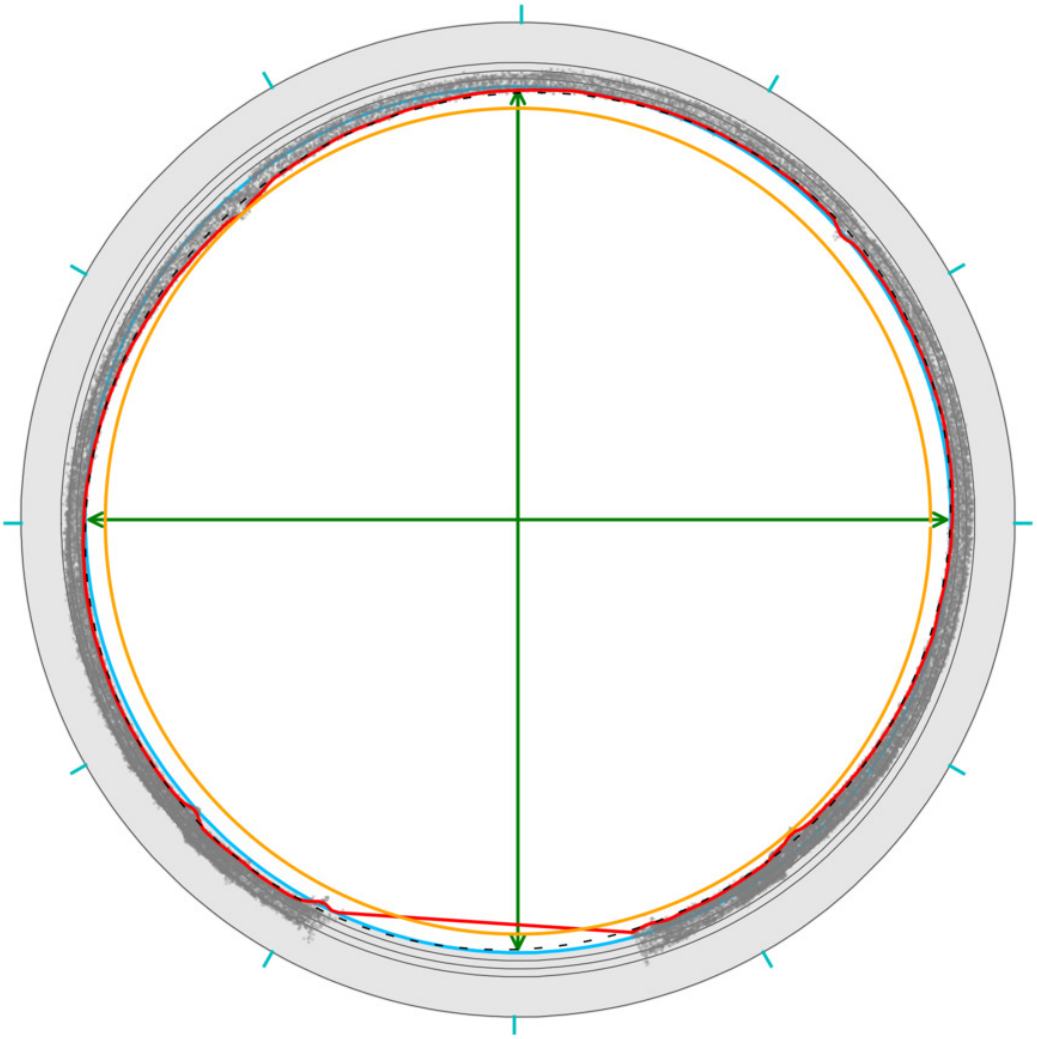
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 637.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  637 ft
Width     :  108.5" | 108.0"
Height    :  107.5" | 108.0"

Area      :  8963 sq in
Perimeter :  337.8 in
Ovality   :  2.0%

Interior Diameter : 103.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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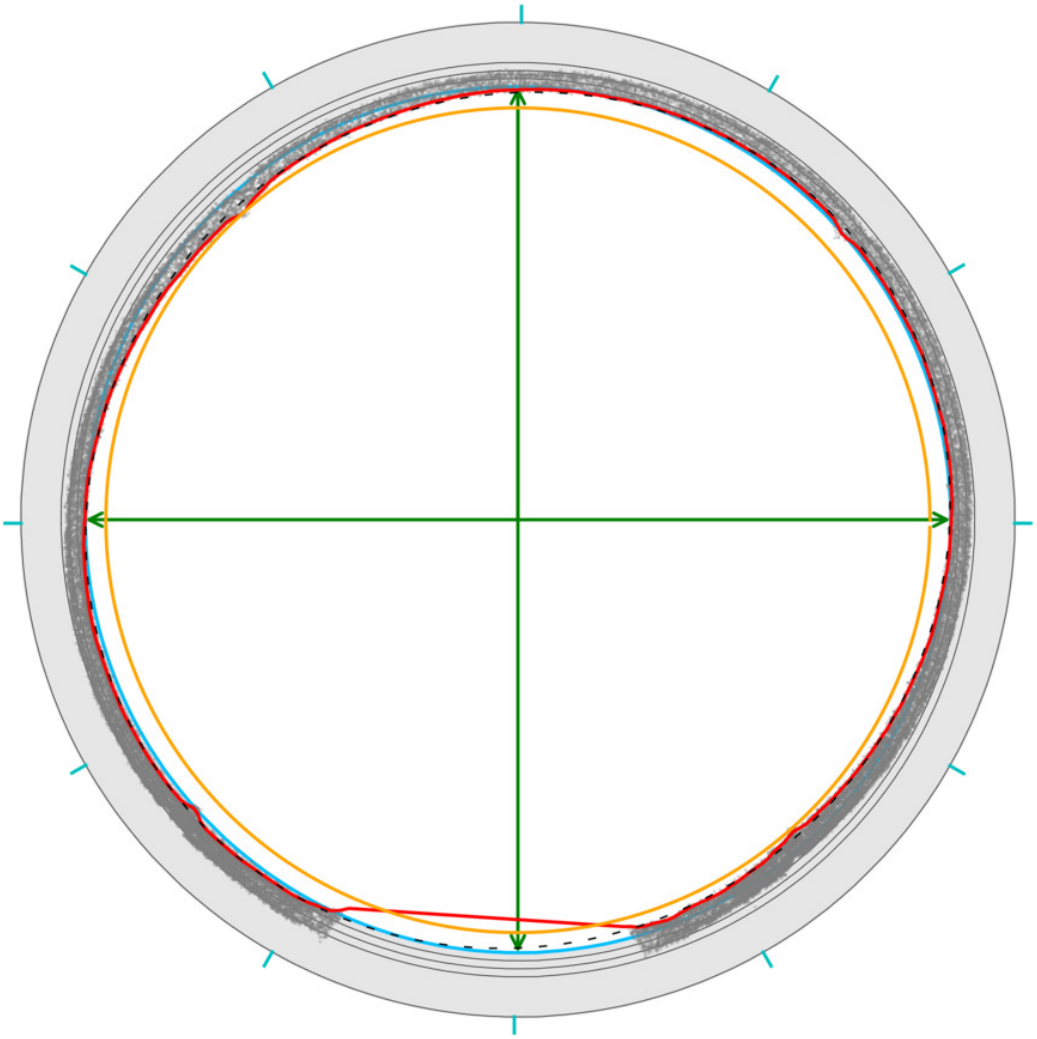
SFX-3D Cross Section Report
Inspection #1 : / , 638.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  638 ft
Width     :  108.4" | 108.0"
Height    :  107.6" | 108.0"

Area      :  8928 sq in
Perimeter :  337.0 in
Ovality   :  2.0%

Interior Diameter : 102.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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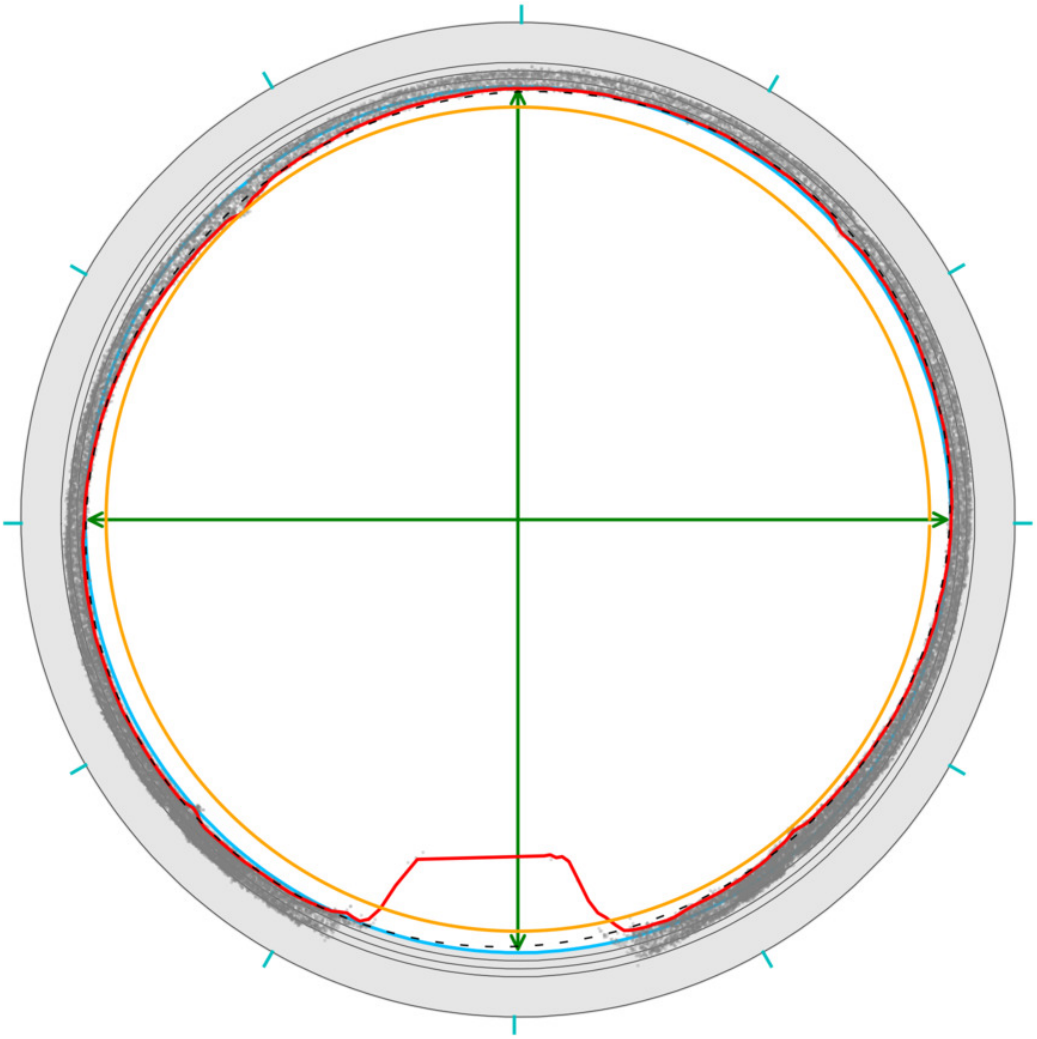
SFX-3D Cross Section Report
Inspection #1 : / , 639.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  639 ft
Width     :  108.4" | 108.0"
Height    :  107.7" | 108.0"

Area      :  8765 sq in
Perimeter :  345.7 in
Ovality   :  2.1%

Interior Diameter : 102.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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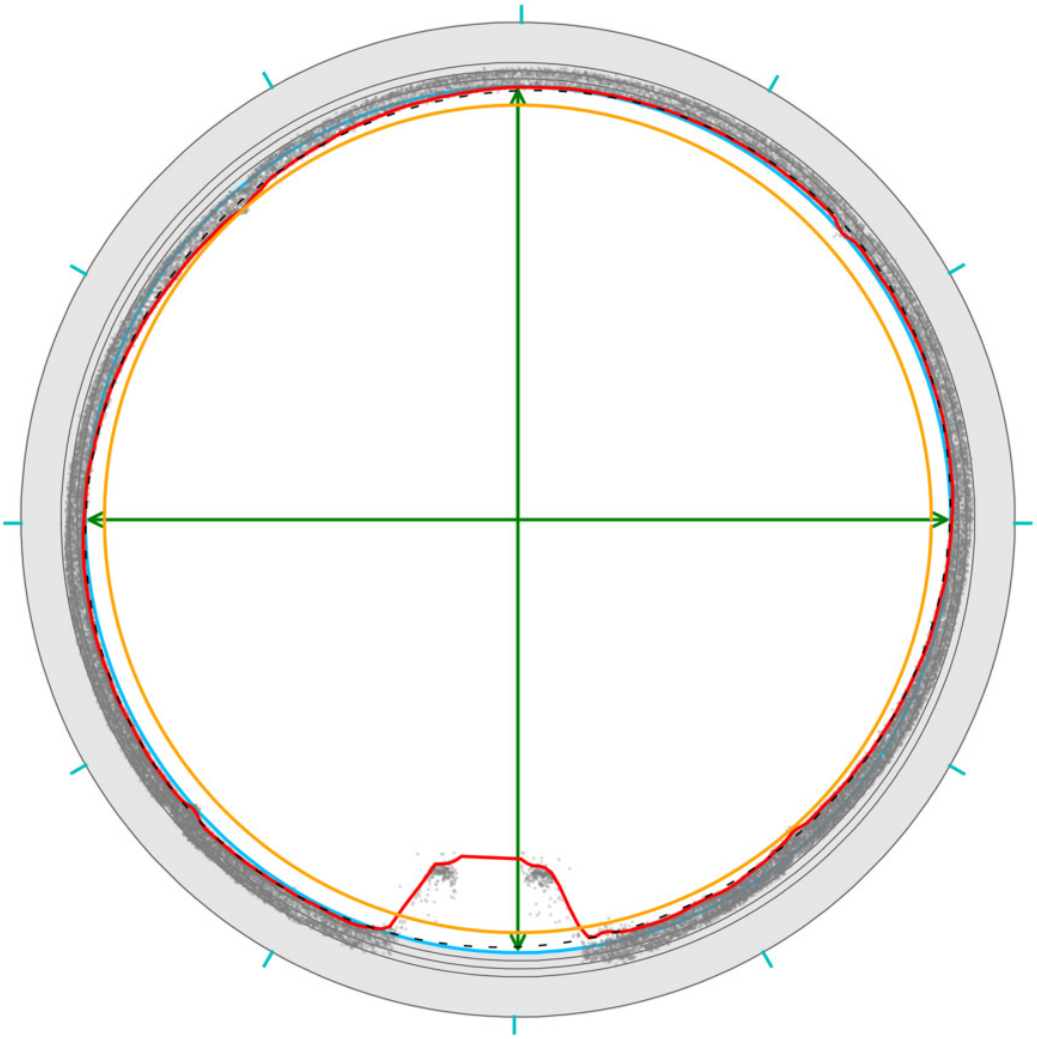
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 640.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage    :  640 ft
Width      :  108.5" | 108.0"
Height     :  107.9" | 108.0"

Area       :  8846 sq in
Perimeter  :  347.3 in
Ovality    :  2.0%

Interior Diameter : 103.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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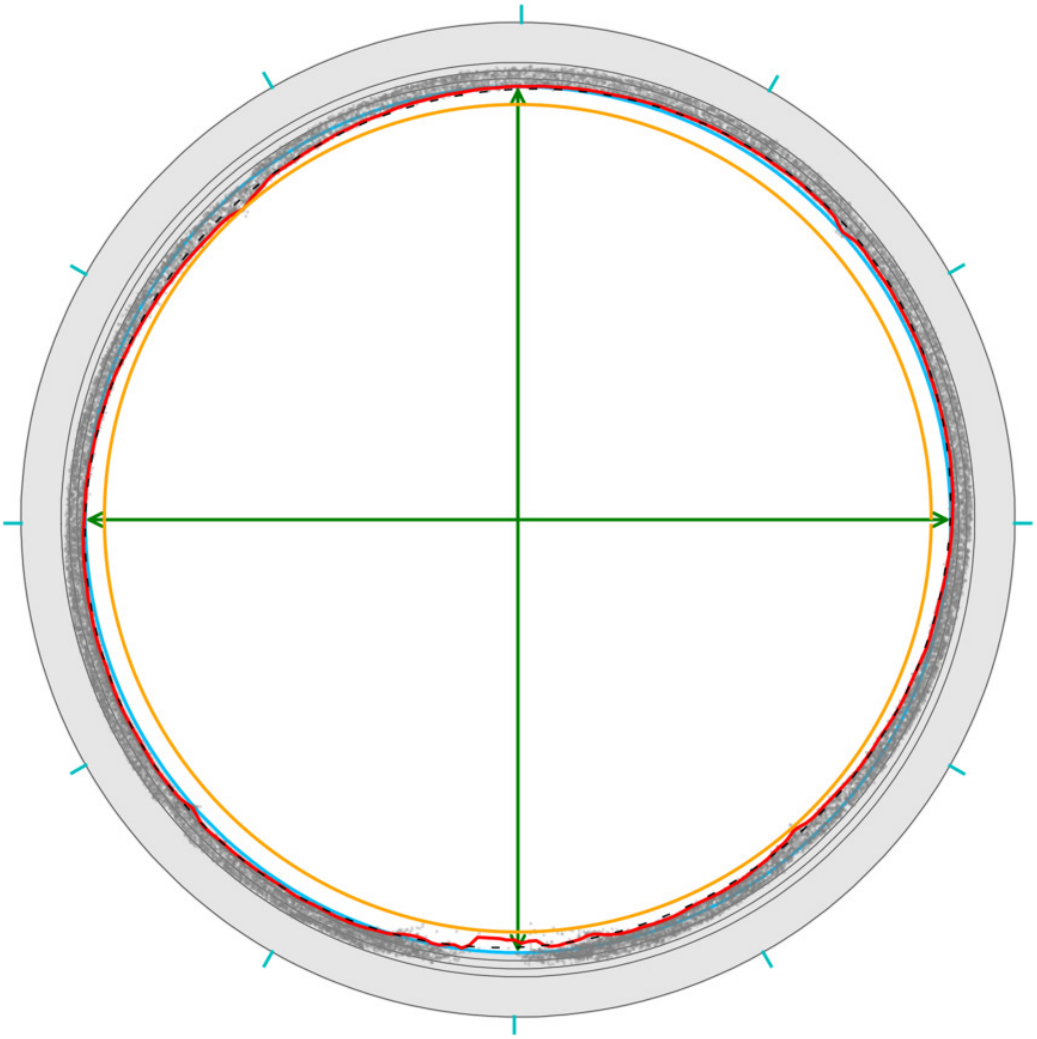
SFX-3D Cross Section Report
Inspection #1 : / , 641.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  641 ft
Width     :  108.5" | 108.0"
Height    :  108.0" | 108.0"

Area      :  9063 sq in
Perimeter :  339.6 in
Ovality   :  2.0%

Interior Diameter : 103.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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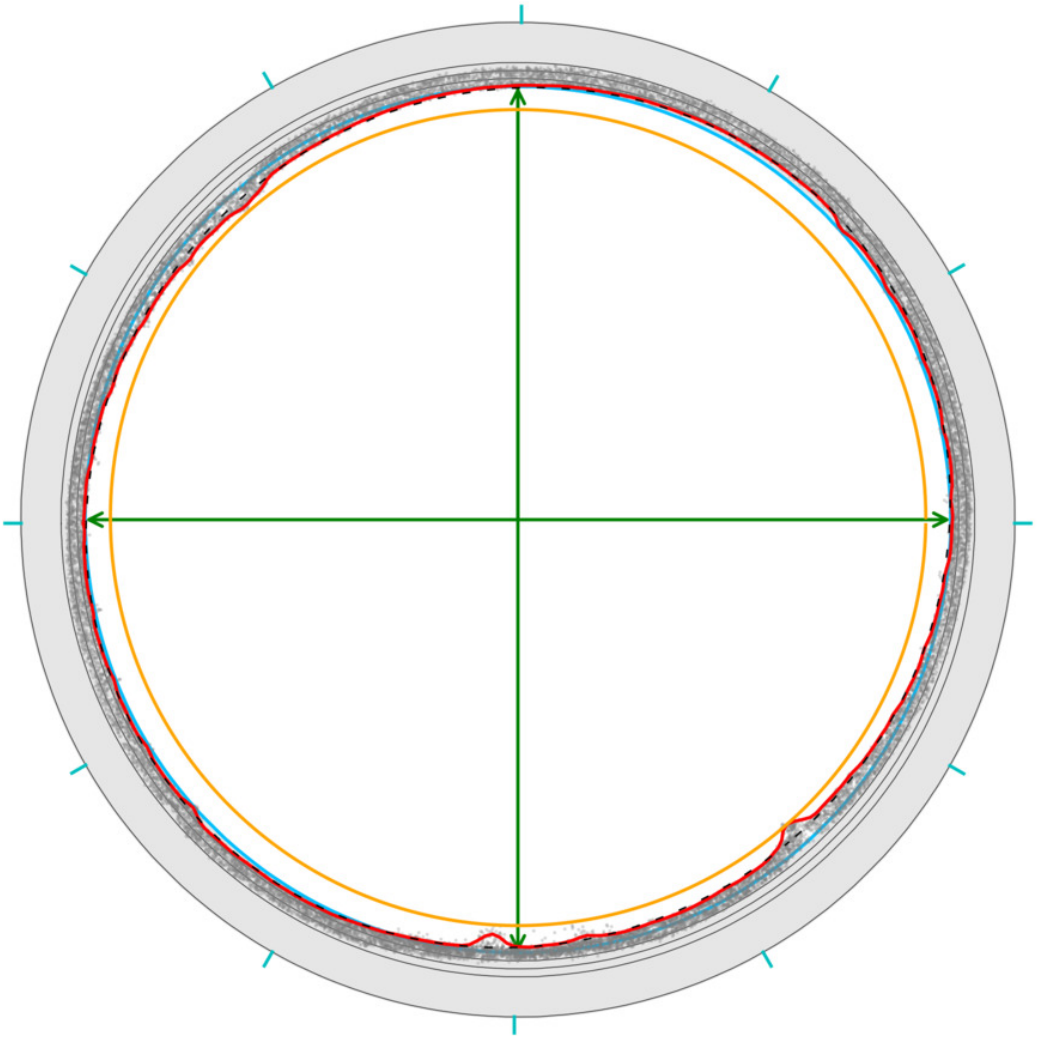
SFX-3D Cross Section Report
Inspection #1 : / , 642.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage    :  642 ft
Width      :  108.5" | 108.0"
Height     :  108.1" | 108.0"

Area       :  9060 sq in
Perimeter  :  340.3 in
Ovality    :  1.9%

Interior Diameter : 101.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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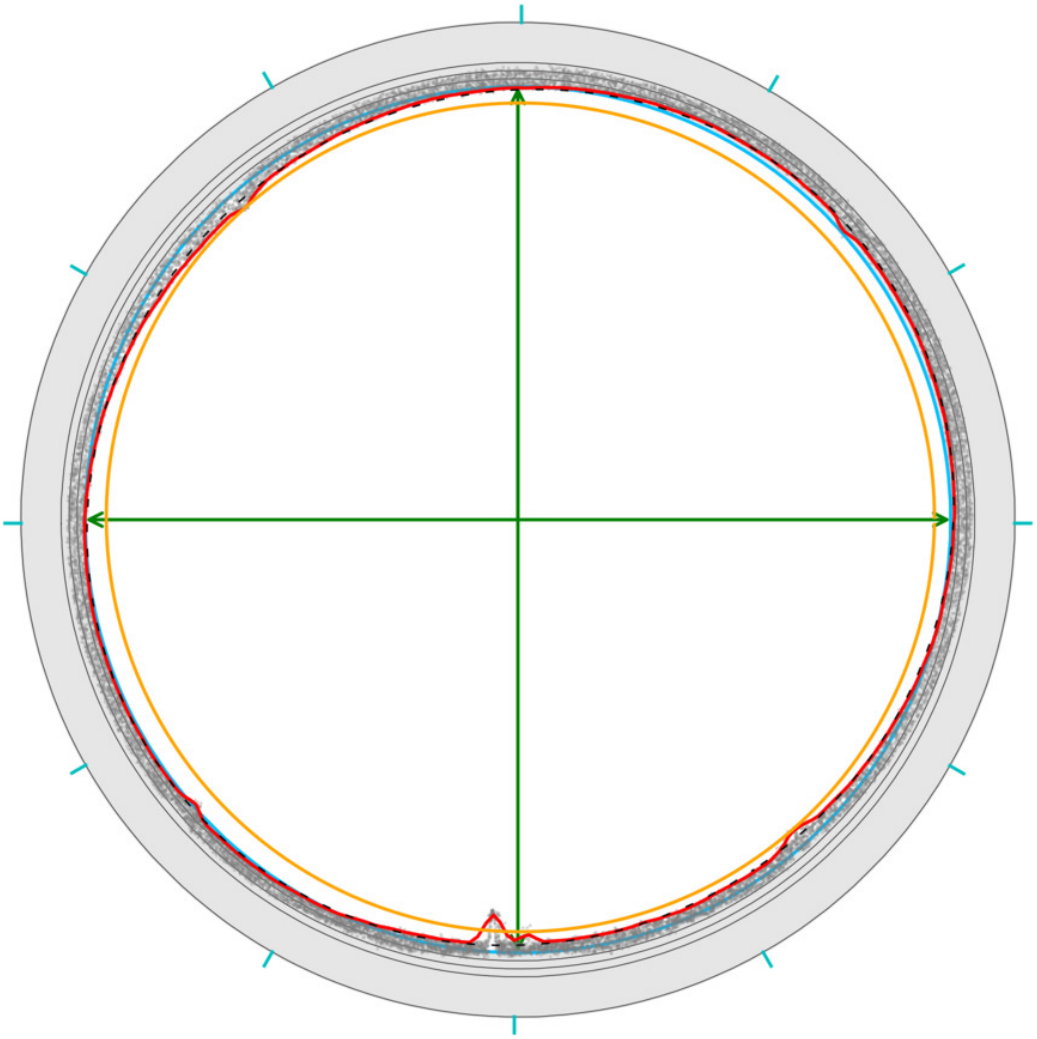
SFX-3D Cross Section Report
Inspection #1 : / , 643.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  643 ft
Width     :  108.5" | 108.0"
Height    :  107.8" | 108.0"

Area      :  9041 sq in
Perimeter :  341.9 in
Ovality   :  1.9%

Interior Diameter : 103.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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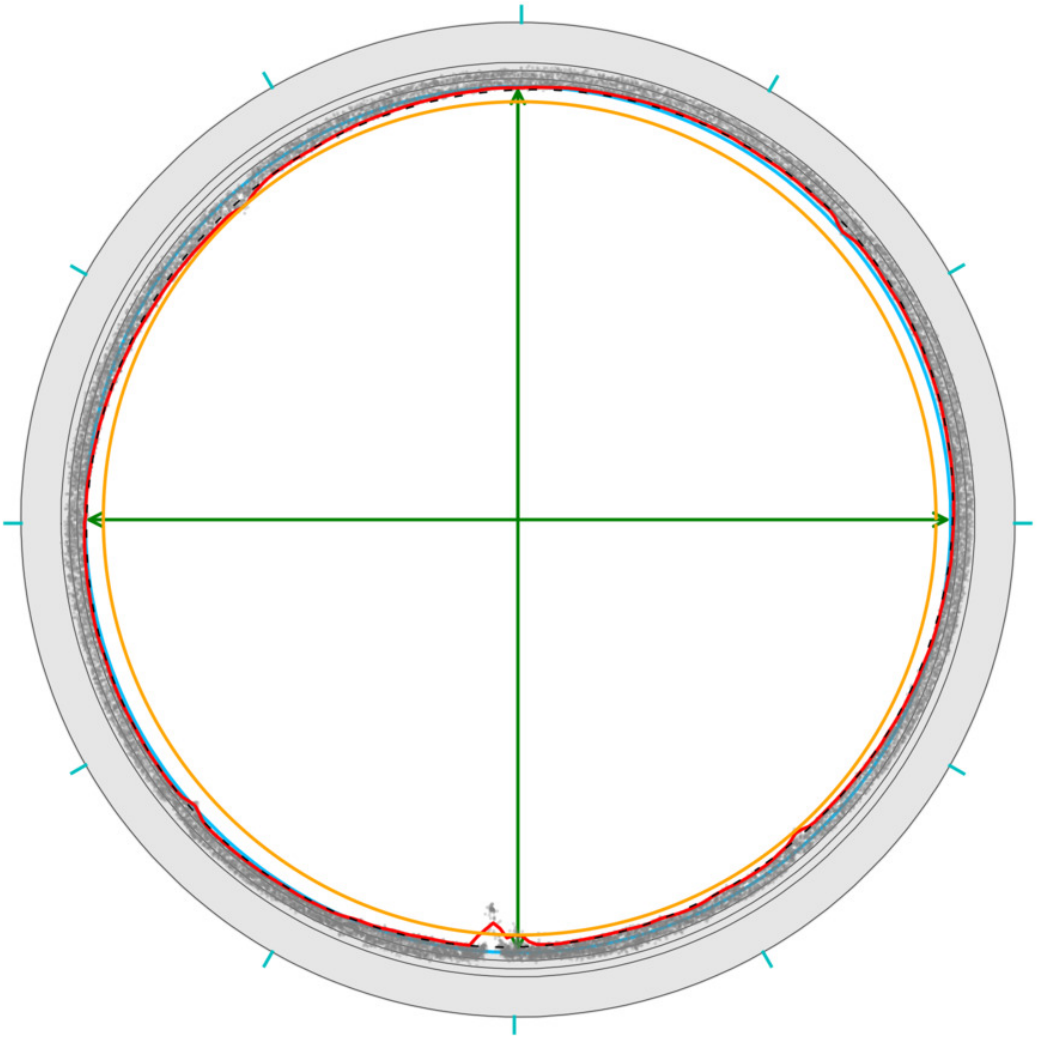
SFX-3D Cross Section Report
Inspection #1 : / , 644.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  644 ft
Width     :  108.5" | 108.0"
Height    :  107.9" | 108.0"

Area      :  9059 sq in
Perimeter :  340.9 in
Ovality   :  1.7%

Interior Diameter : 103.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

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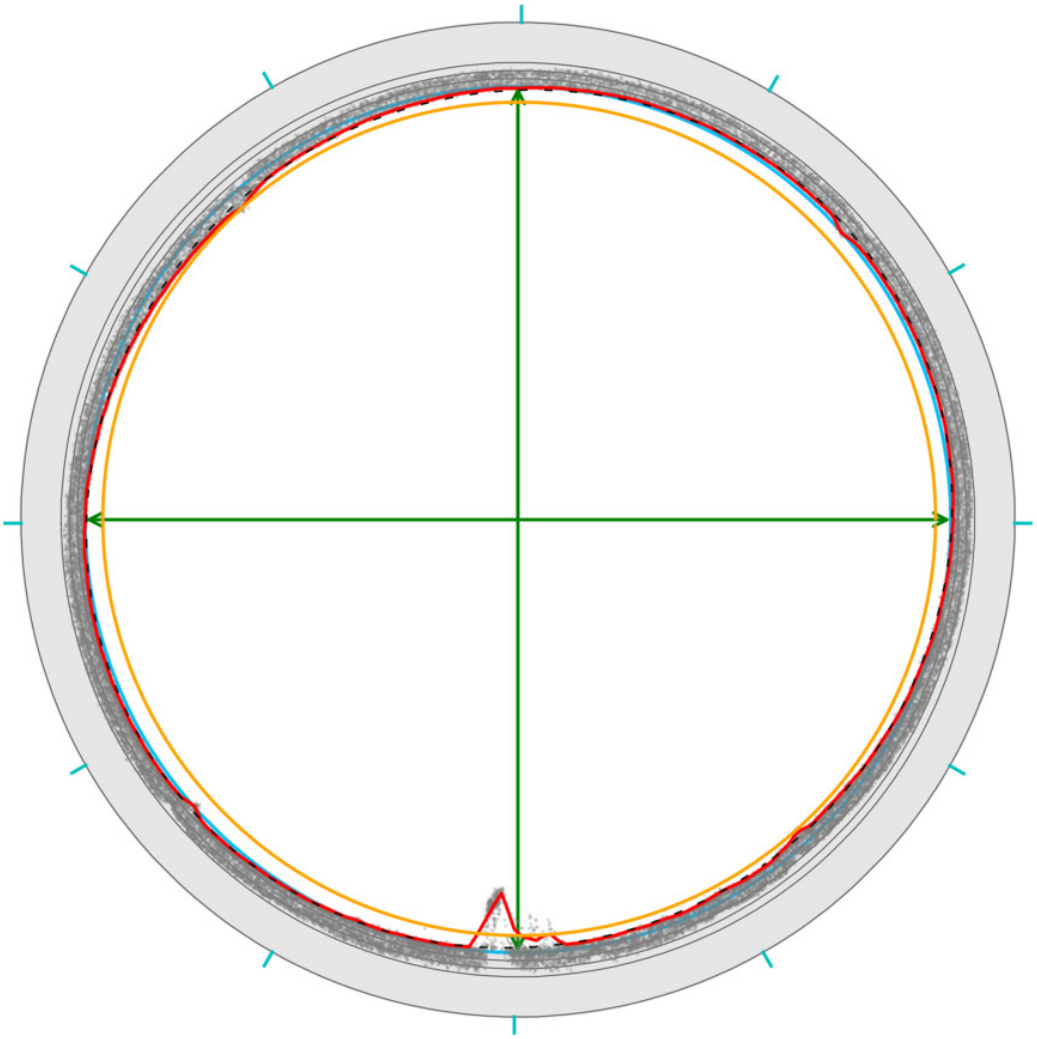
SFX-3D Cross Section Report
Inspection #1 : / , 645.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 645 ft
Width : 108.4" | 108.0"
Height : 107.8" | 108.0"

Area : 9042 sq in
Perimeter : 346.4 in
Ovality : 1.7%

Interior Diameter : 103.9"

Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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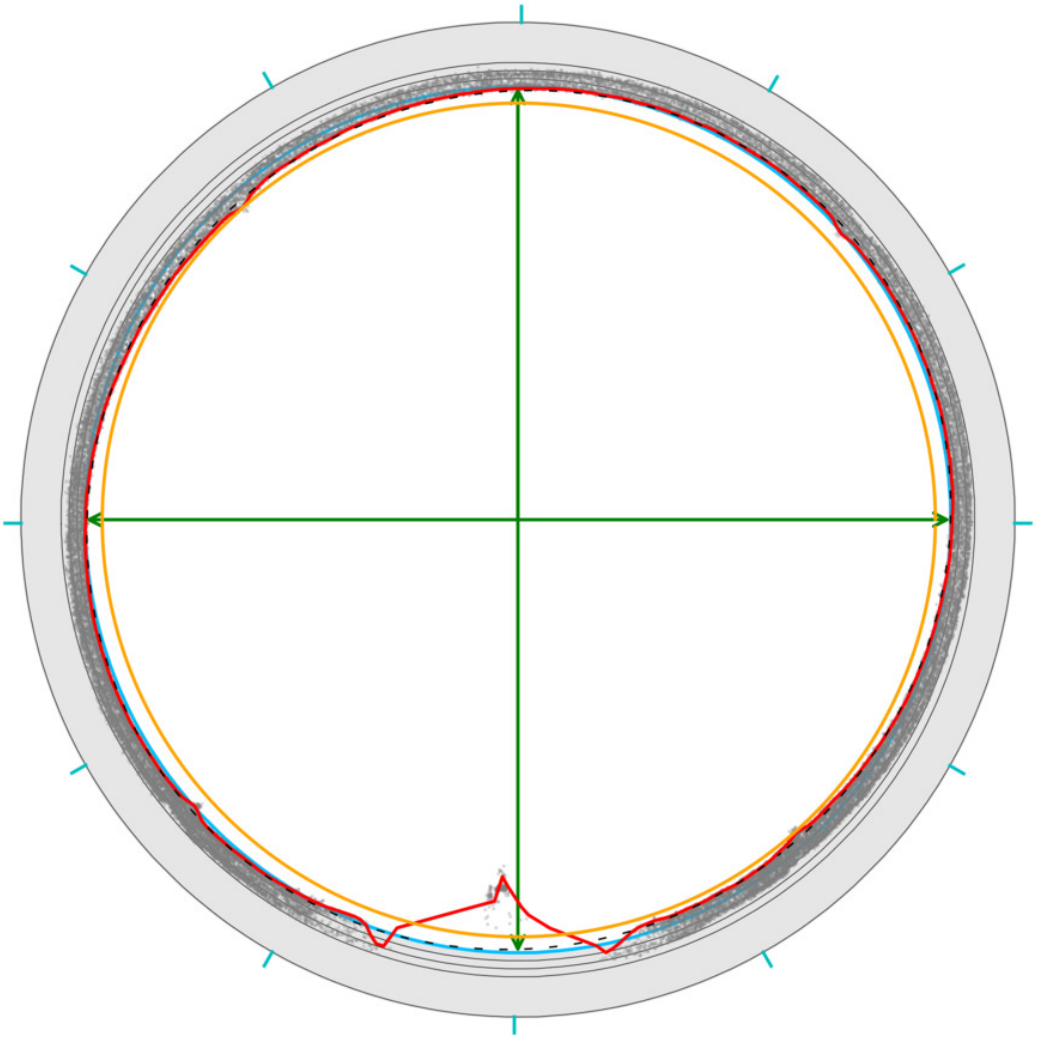
SFX-3D Cross Section Report
Inspection #1 : / , 646.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 646 ft
Width : 108.3" | 108.0"
Height : 107.8" | 108.0"

Area : 8973 sq in
Perimeter : 347.6 in
Ovality : 1.6%

Interior Diameter : 104.0"

Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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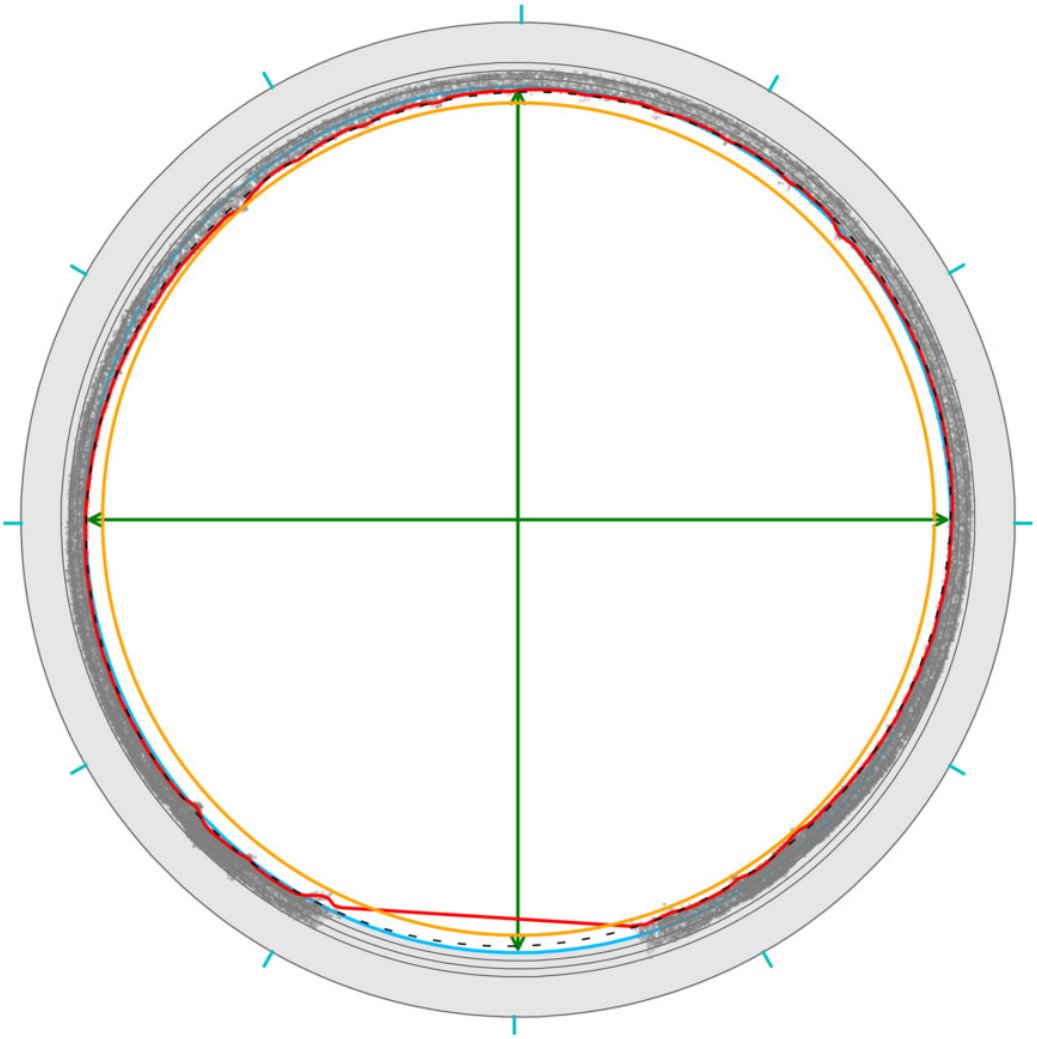
SFX-3D Cross Section Report
Inspection #1 : / , 647.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  647 ft
Width     :  108.2" | 108.0"
Height    :  107.5" | 108.0"

Area      :  8922 sq in
Perimeter :  337.3 in
Ovality   :  1.6%

Interior Diameter : 103.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

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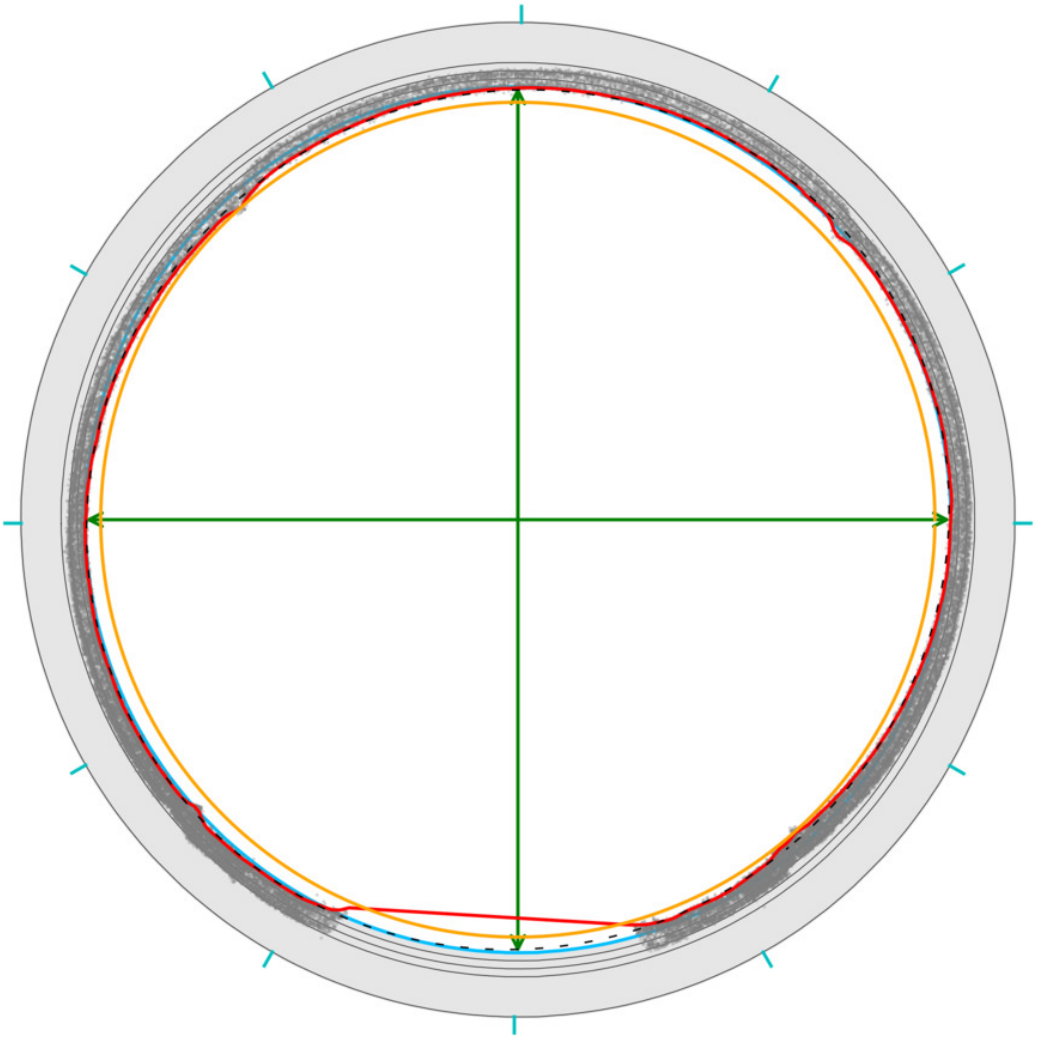
SFX-3D Cross Section Report
Inspection #1 : / , 648.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  648 ft
Width     :  108.1" | 108.0"
Height    :  107.8" | 108.0"

Area      :  8938 sq in
Perimeter :  337.2 in
Ovality   :  1.3%

Interior Diameter : 104.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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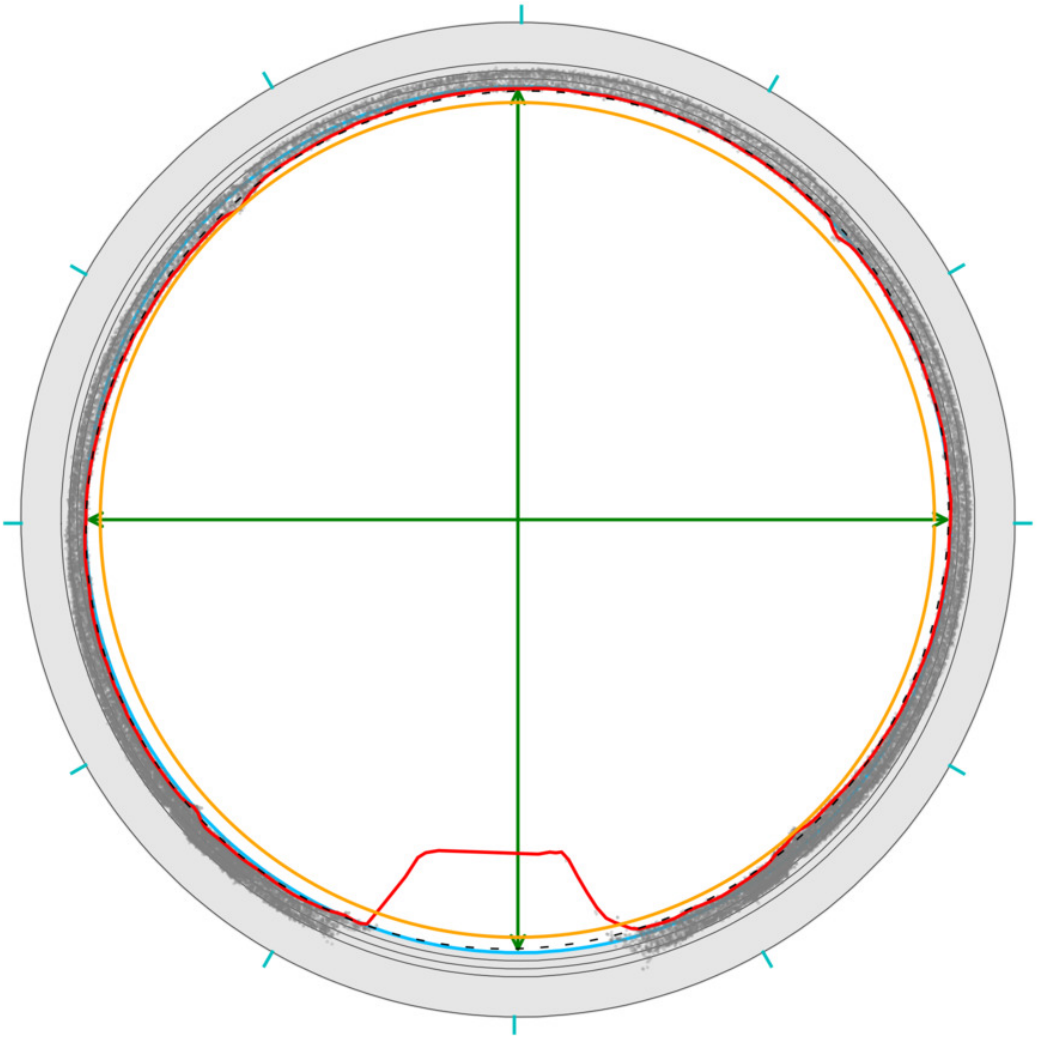
SFX-3D Cross Section Report
Inspection #1 : / , 649.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  649 ft
Width     :  108.1" | 108.0"
Height    :  107.7" | 108.0"

Area      :  8761 sq in
Perimeter :  346.6 in
Ovality   :  1.3%

Interior Diameter : 104.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

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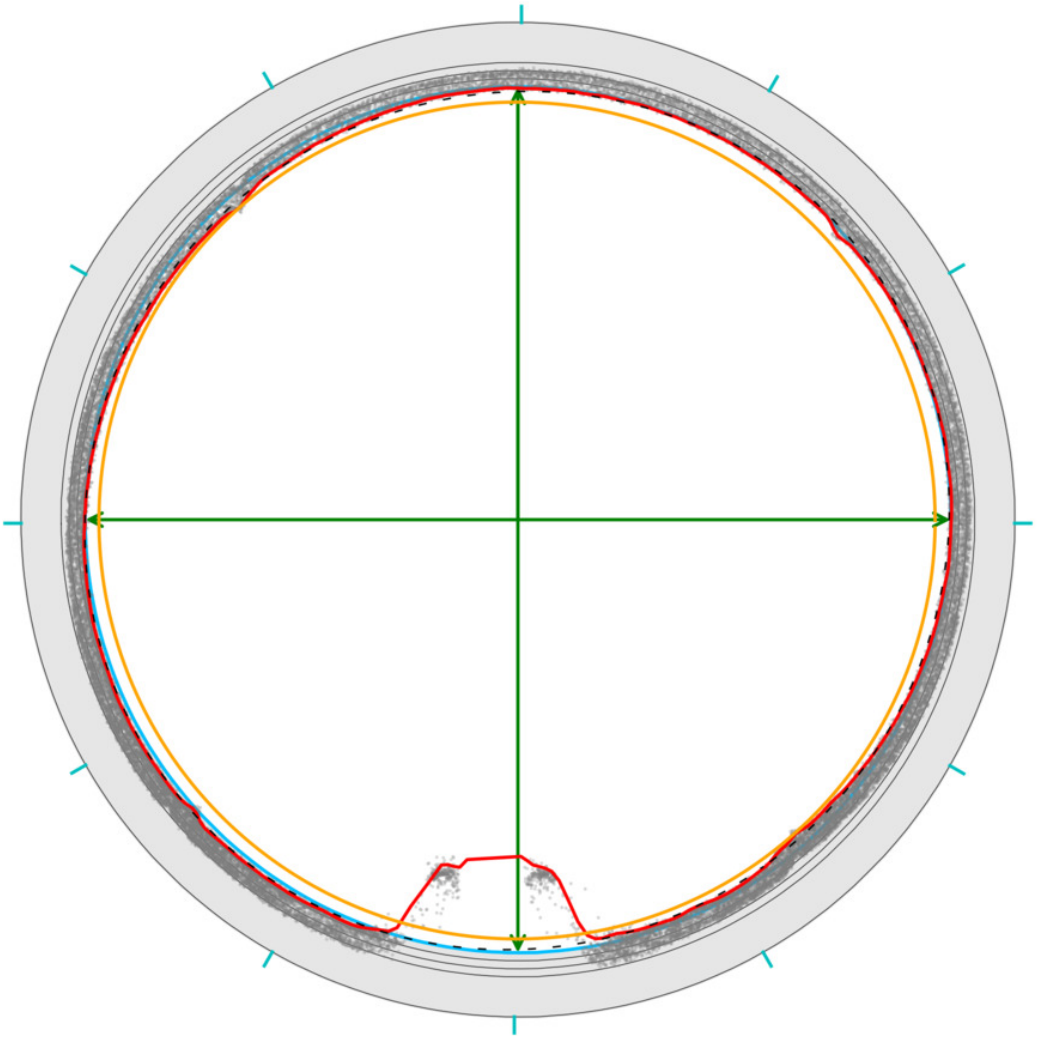
SFX-3D Cross Section Report
Inspection #1 : / , 650.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 650 ft
Width : 108.3" | 108.0"
Height : 107.8" | 108.0"

Area : 8863 sq in
Perimeter : 348.0 in
Ovality : 1.3%

Interior Diameter : 104.4"

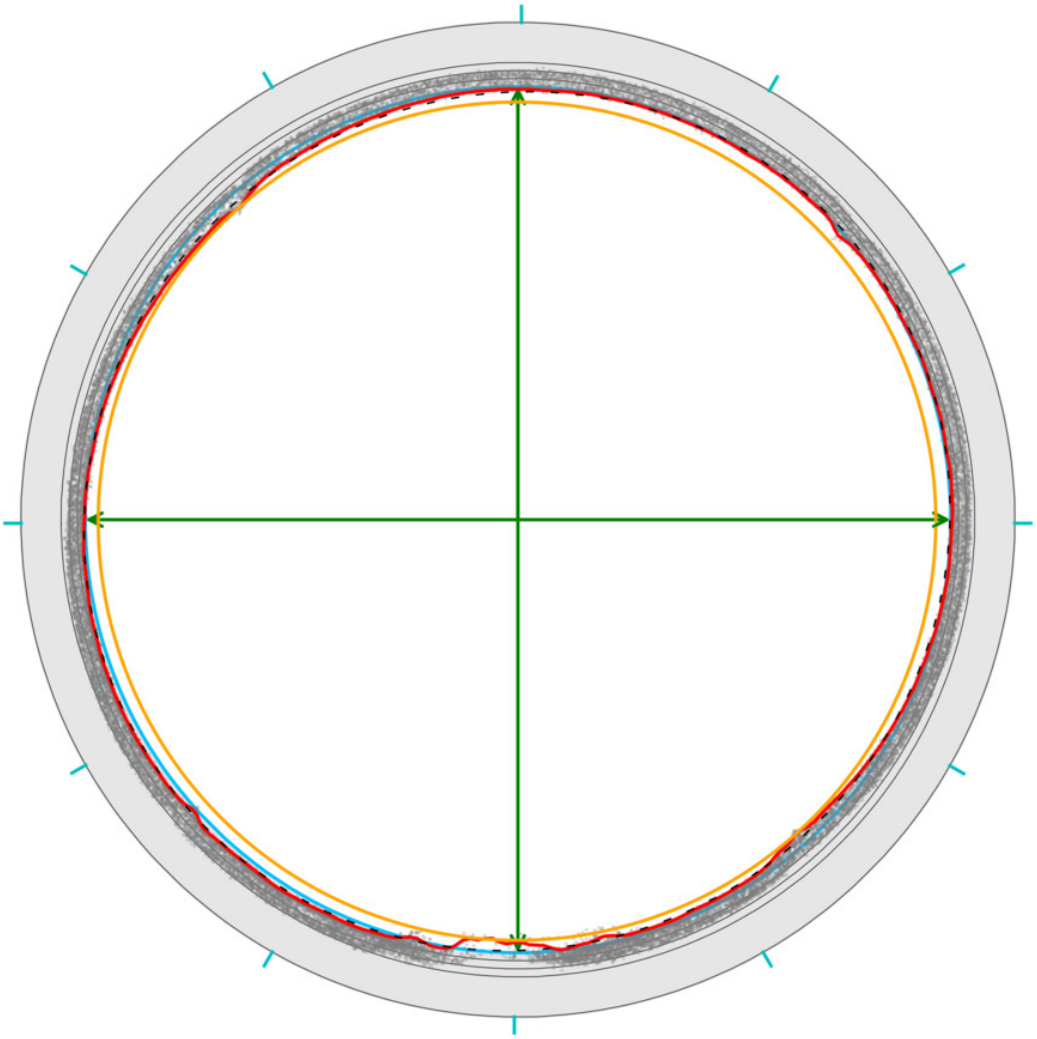
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 651.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



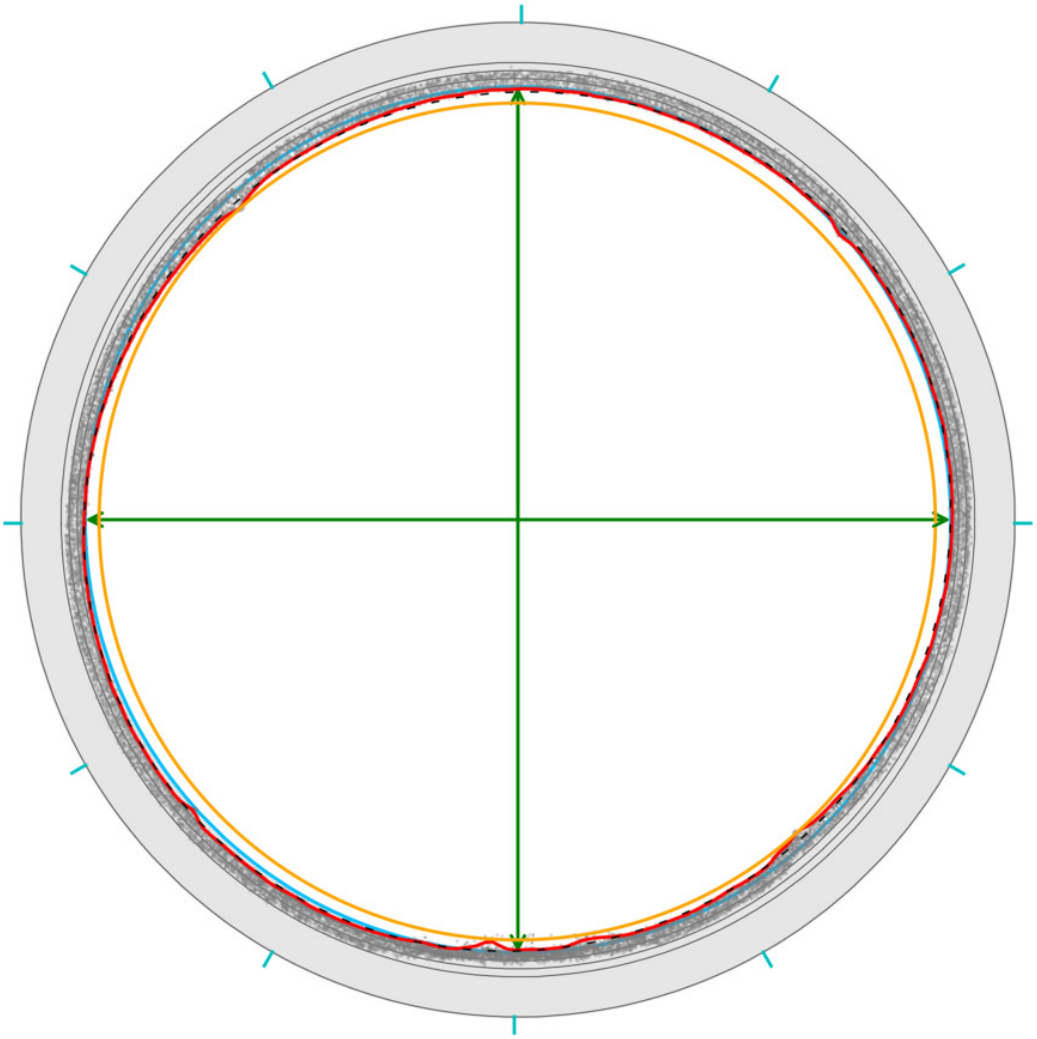
```
Footage   :  651 ft
Width     :  108.4" | 108.0"
Height    :  107.7" | 108.0"

Area      :  9075 sq in
Perimeter :  339.7 in
Ovality   :  1.4%

Interior Diameter : 104.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 652.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 652 ft
Width : 108.4" | 108.0"
Height : 107.7" | 108.0"

Area : 9088 sq in
Perimeter : 339.3 in
Ovality : 1.4%

Interior Diameter : 104.4"

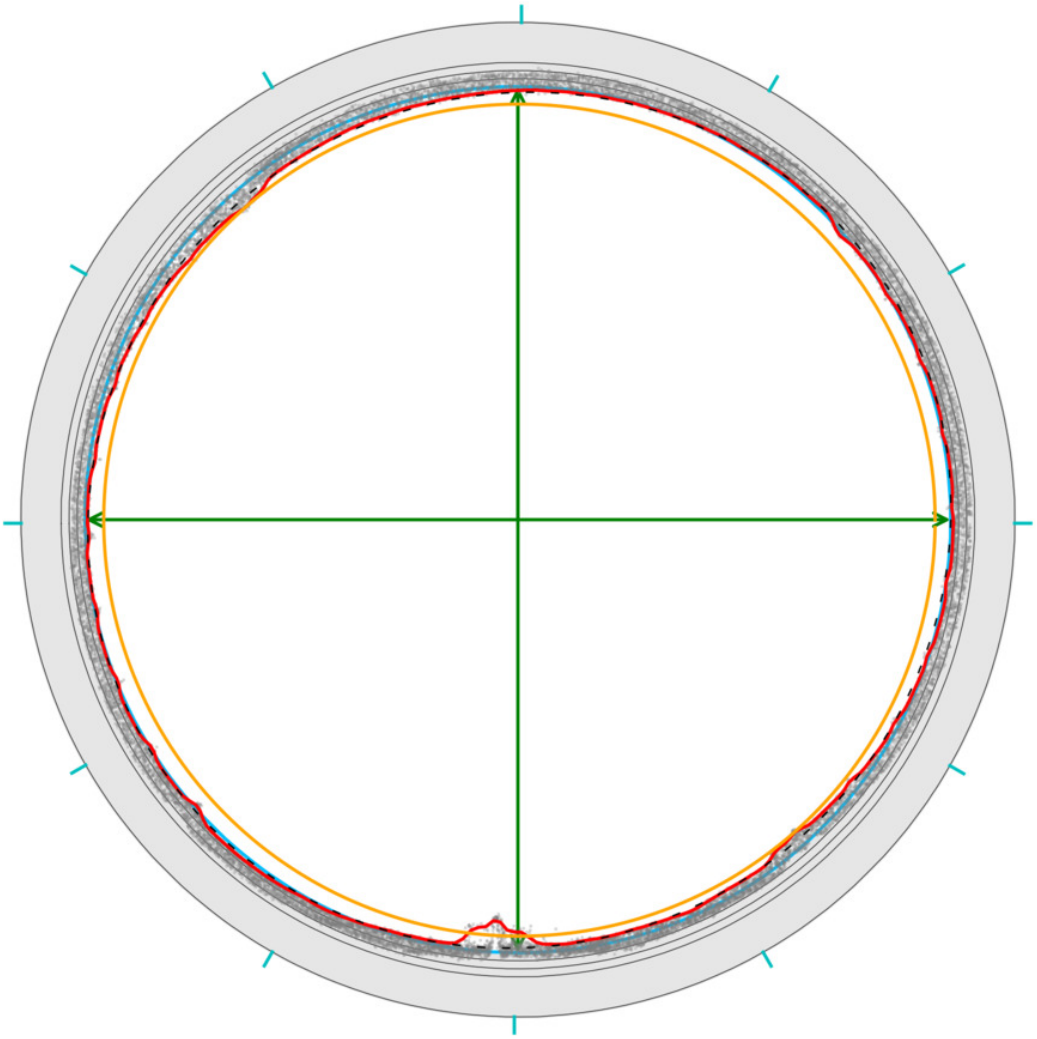
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 653.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



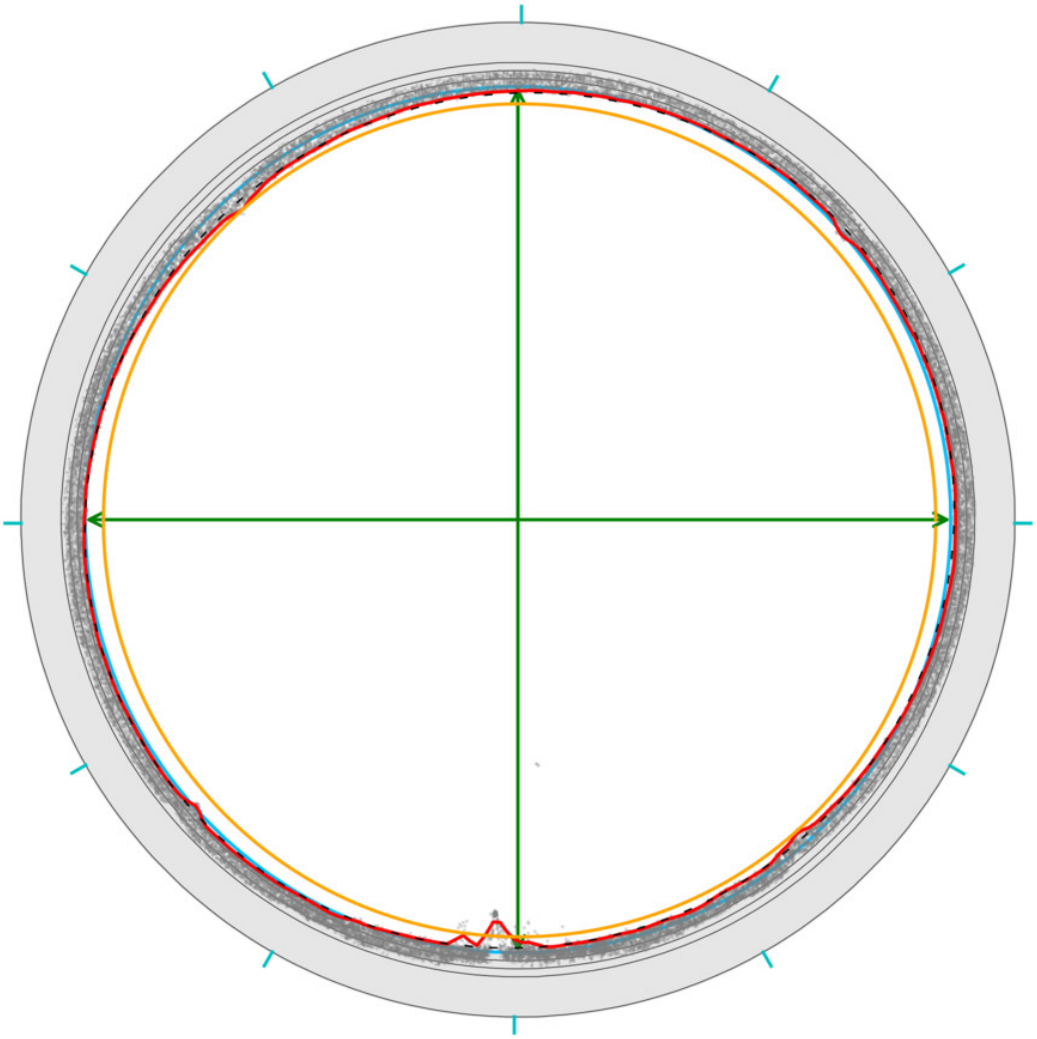
```
Footage   :  653 ft
Width     :  108.1" | 108.0"
Height    :  107.5" | 108.0"

Area      :  8996 sq in
Perimeter :  340.0 in
Ovality   :  1.4%

Interior Diameter : 103.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 654.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



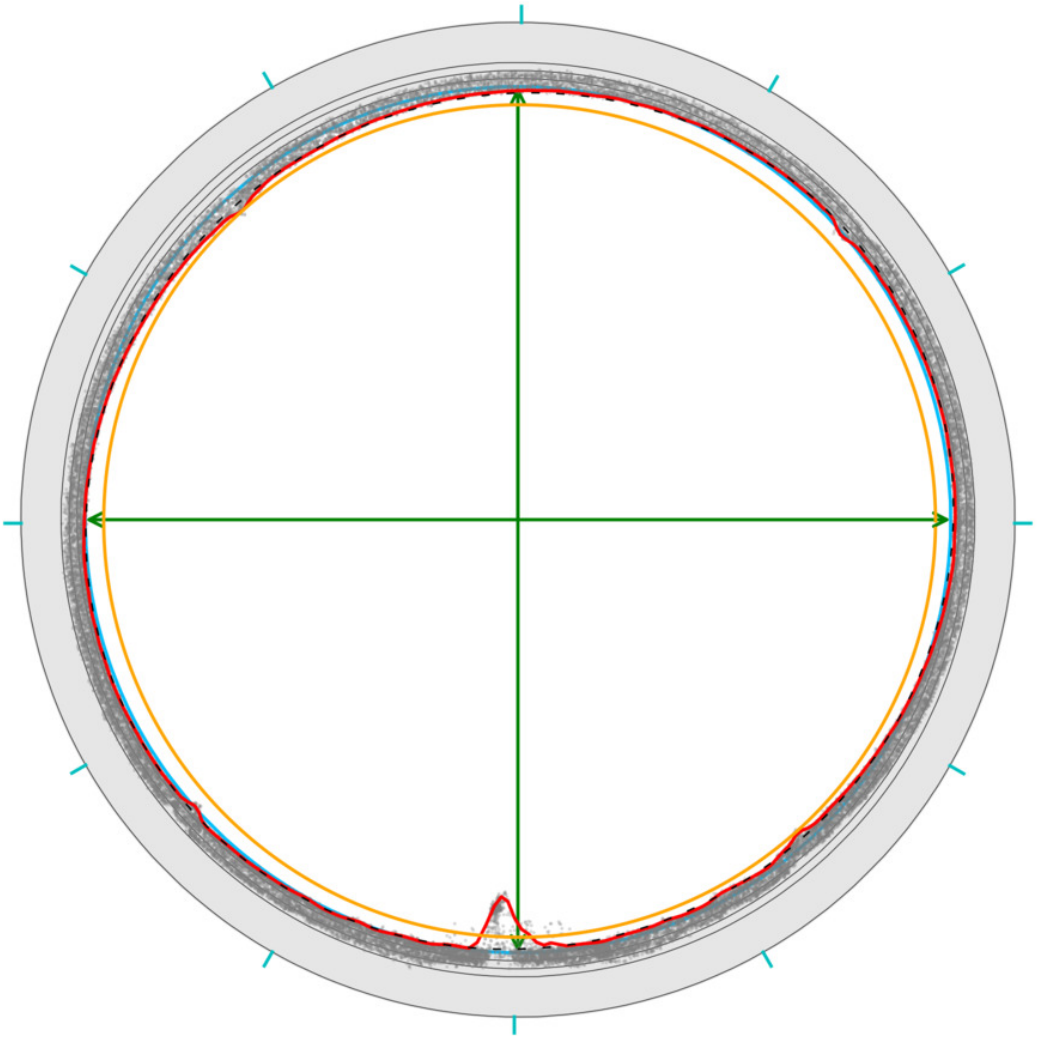
```
Footage   :  654 ft
Width     :  108.8" | 108.0"
Height    :  107.5" | 108.0"

Area      :  9063 sq in
Perimeter :  342.1 in
Ovality   :  1.5%

Interior Diameter : 103.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 655.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 655 ft
Width : 108.7" | 108.0"
Height : 107.5" | 108.0"

Area : 9044 sq in
Perimeter : 345.6 in
Ovality : 1.6%

Interior Diameter : 103.8"

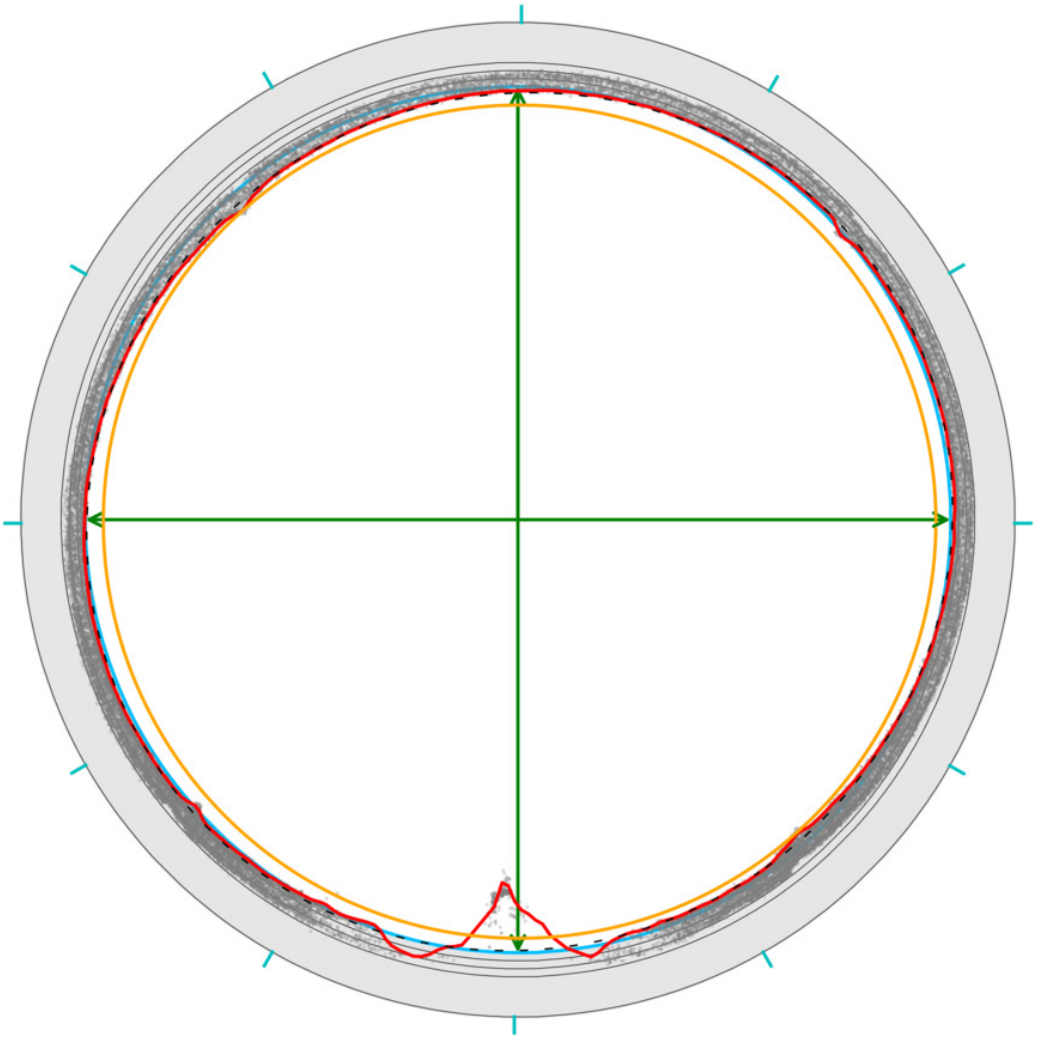
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 656.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



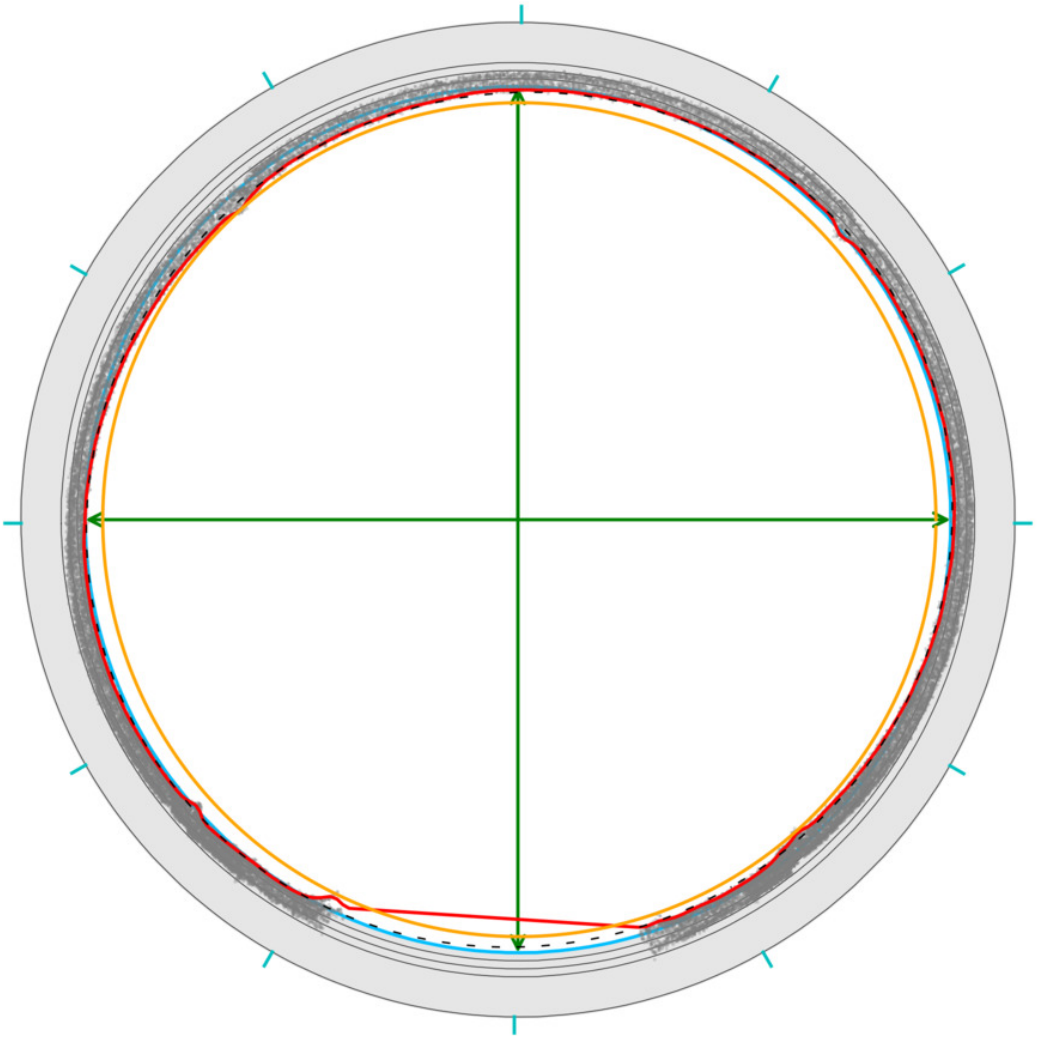
```
Footage   :  656 ft
Width     :  108.7" | 108.0"
Height    :  107.5" | 108.0"

Area      :  9028 sq in
Perimeter :  348.9 in
Ovality   :  1.5%

Interior Diameter : 103.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 657.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 657 ft
Width : 108.6" | 108.0"
Height : 107.6" | 108.0"

Area : 8941 sq in
Perimeter : 337.3 in
Ovality : 1.5%

Interior Diameter : 104.0"

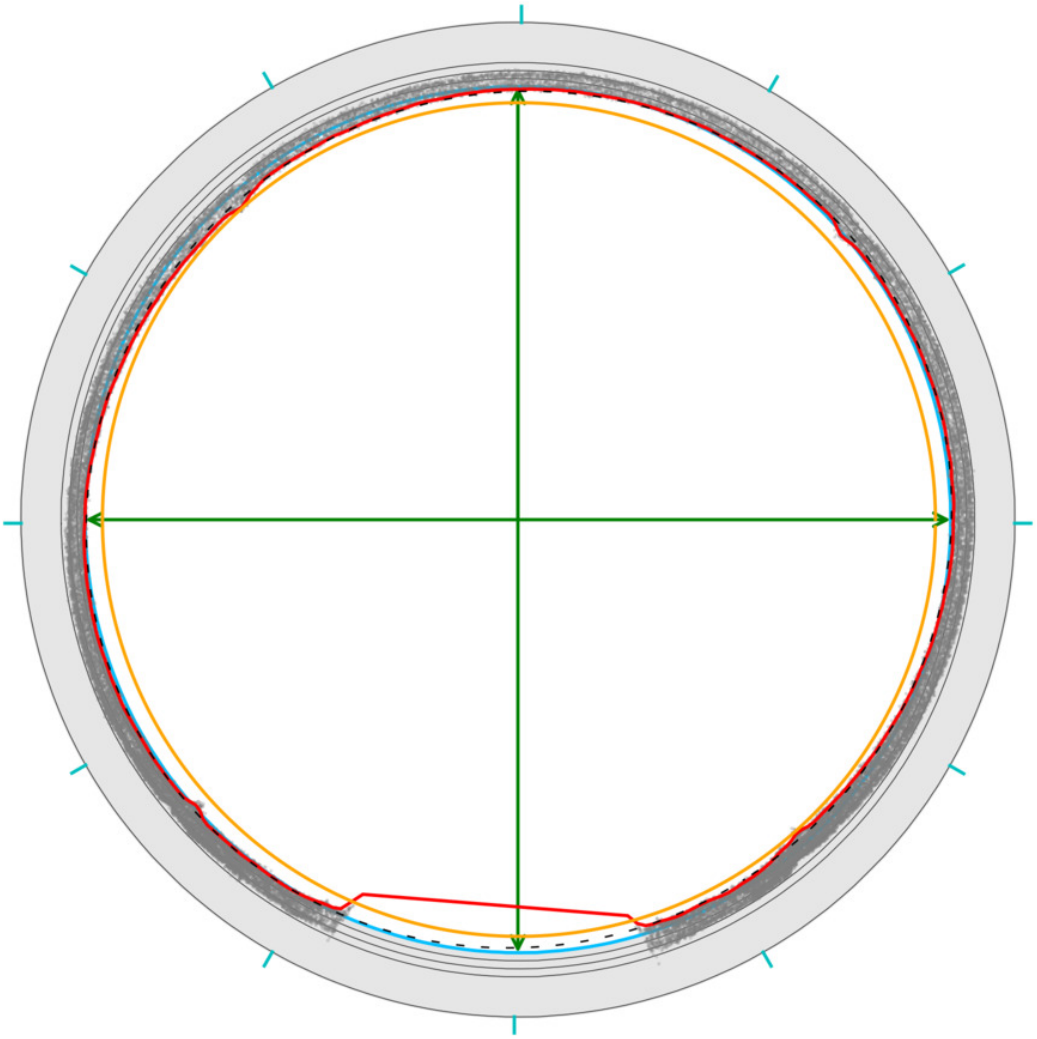
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 658.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



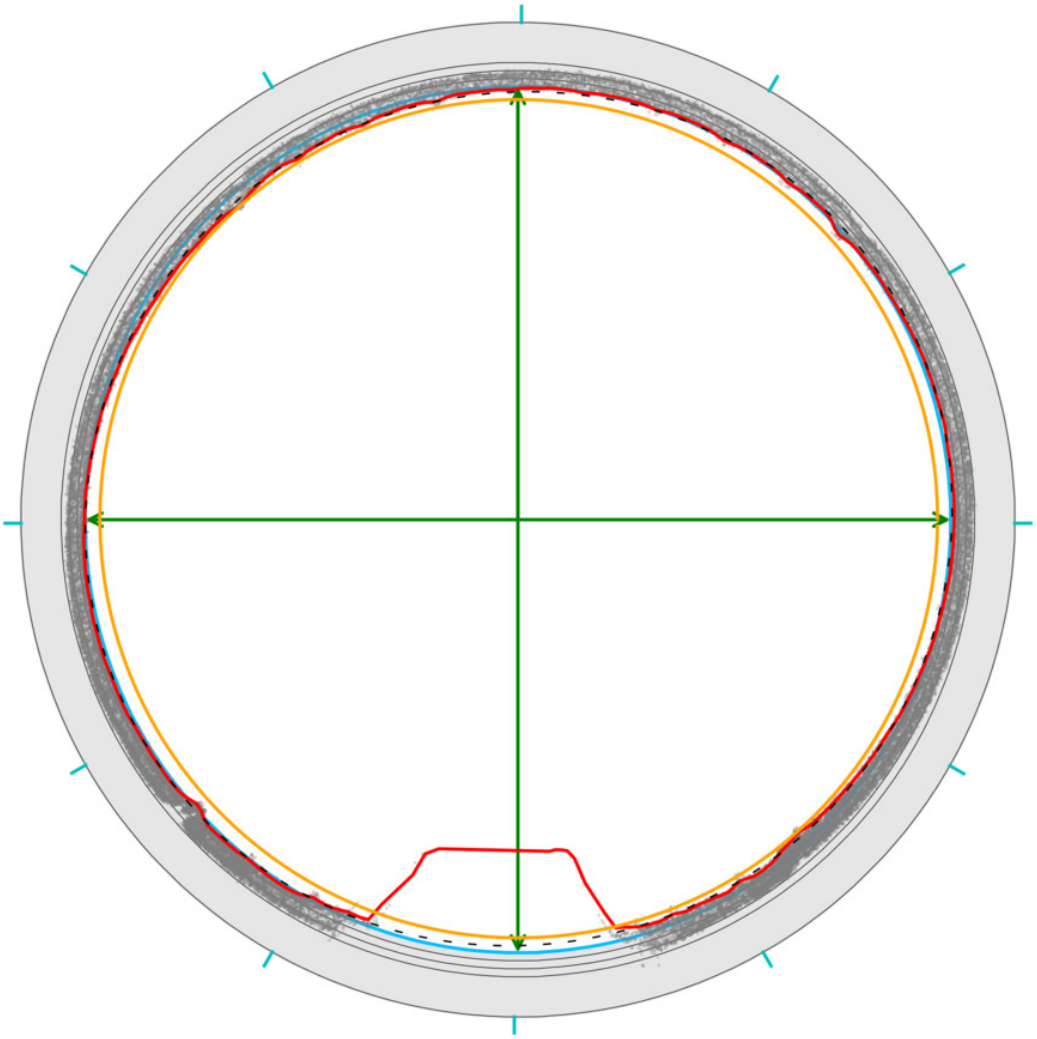
```
Footage   :  658 ft
Width     :  108.5" | 108.0"
Height    :  107.7" | 108.0"

Area      :  8893 sq in
Perimeter :  338.1 in
Ovality   :  1.4%

Interior Diameter : 104.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 659.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



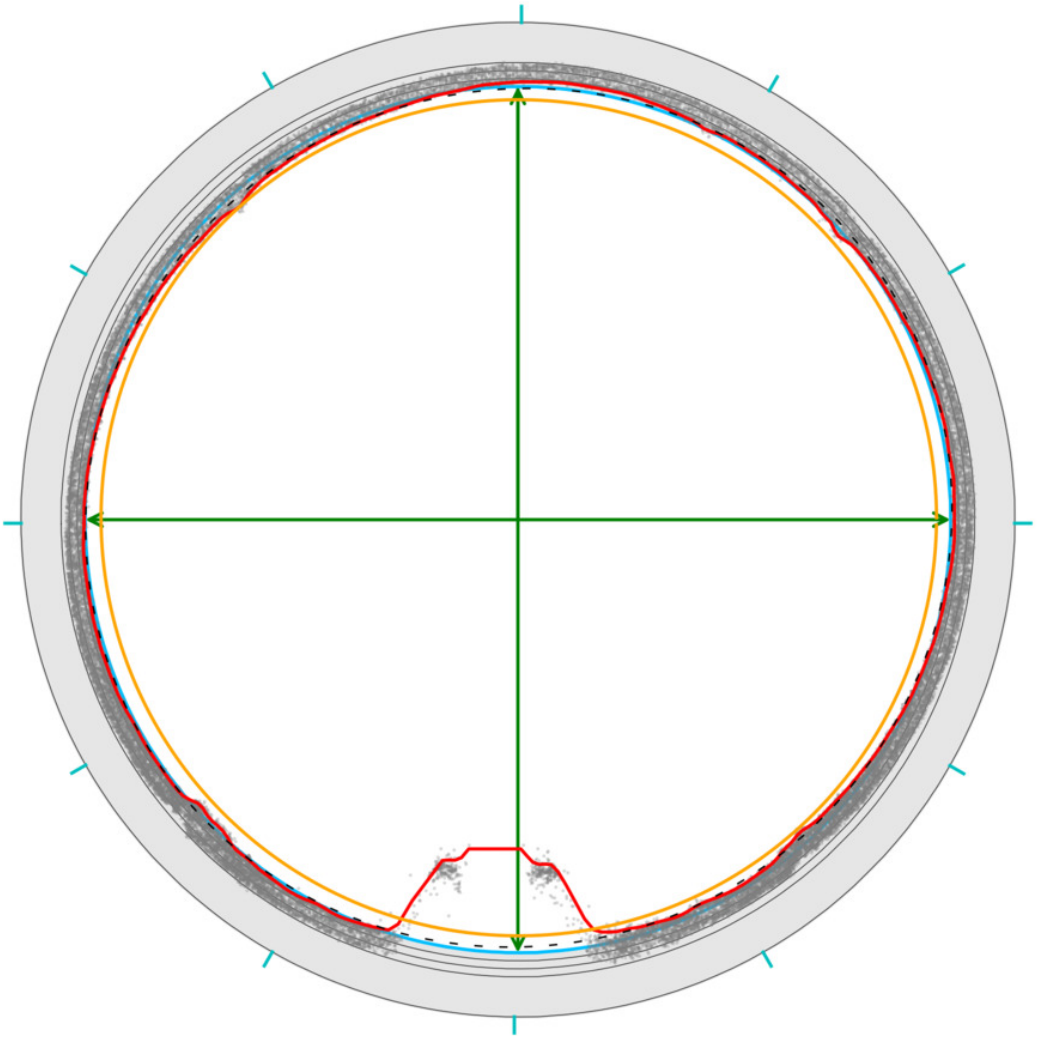
```
Footage   :  659 ft
Width     :  108.6" | 108.0"
Height    :  107.7" | 108.0"

Area      :  8768 sq in
Perimeter :  347.3 in
Ovality   :  1.4%

Interior Diameter : 104.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 660.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



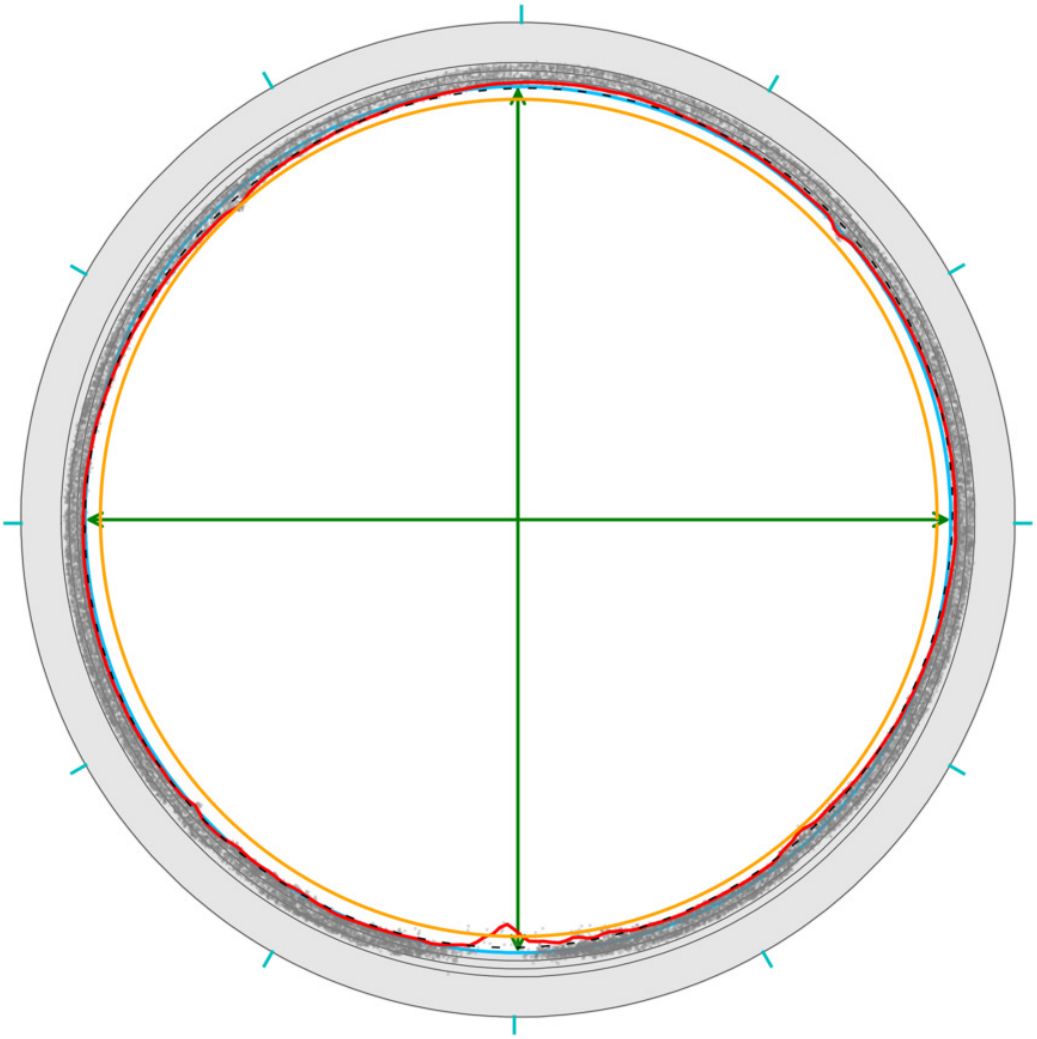
```
Footage   :  660 ft
Width     :  108.7" | 108.0"
Height    :  108.6" | 108.0"

Area      :  8876 sq in
Perimeter :  349.1 in
Ovality   :  1.1%

Interior Diameter : 104.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 661.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 661 ft
Width : 108.8" | 108.0"
Height : 108.5" | 108.0"

Area : 9093 sq in
Perimeter : 340.9 in
Ovality : 1.2%

Interior Diameter : 104.4"

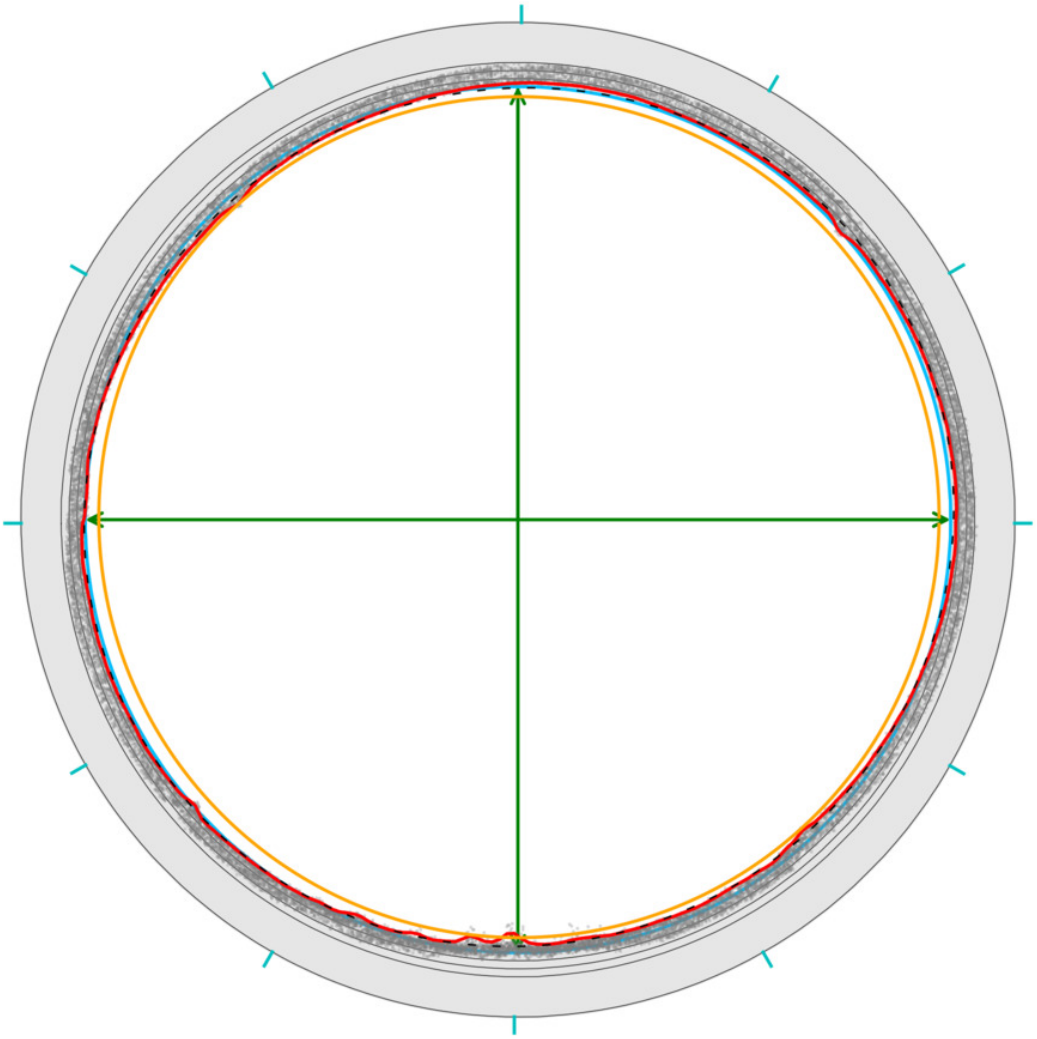
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 662.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



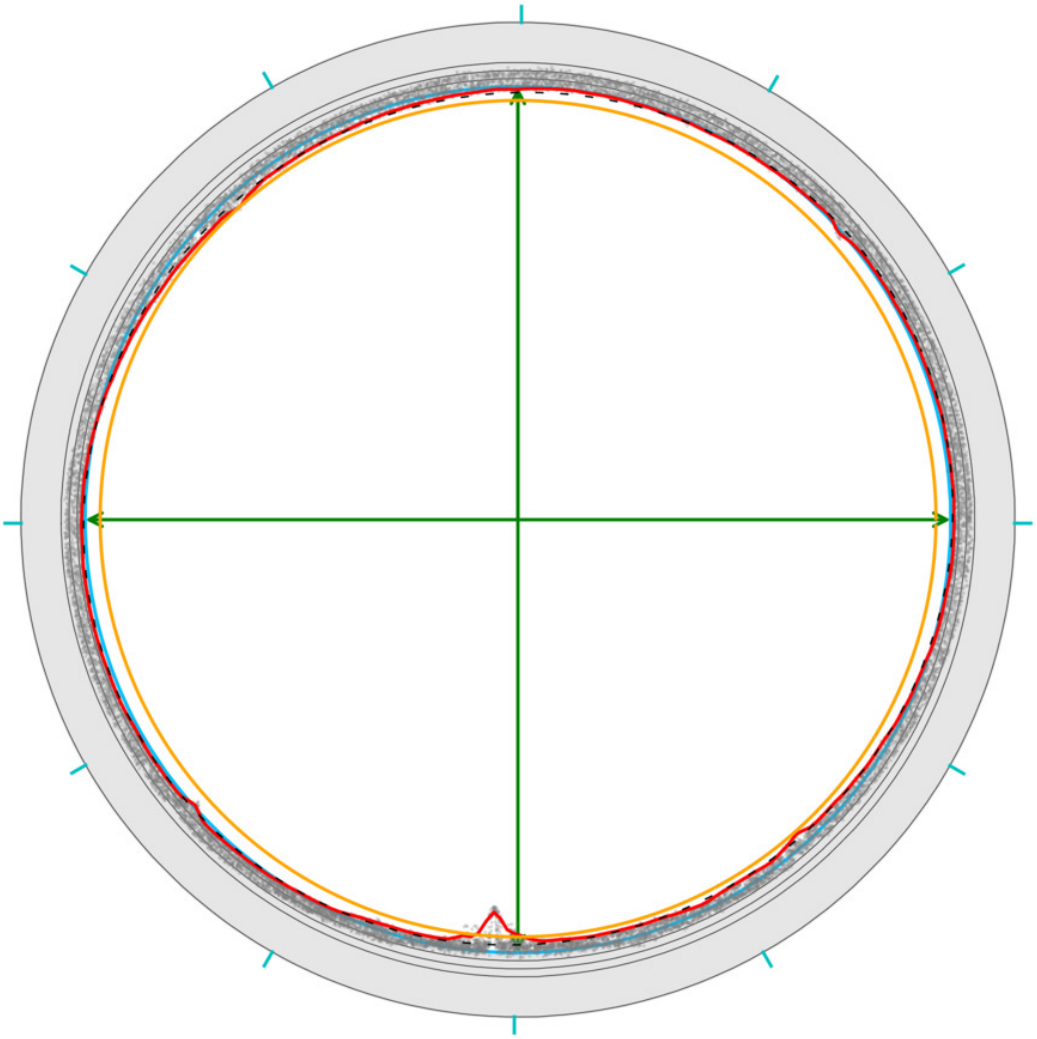
```
Footage   :  662 ft
Width     :  109.2" | 108.0"
Height    :  108.4" | 108.0"

Area      :  9110 sq in
Perimeter :  340.4 in
Ovality   :  1.2%

Interior Diameter : 104.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 663.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



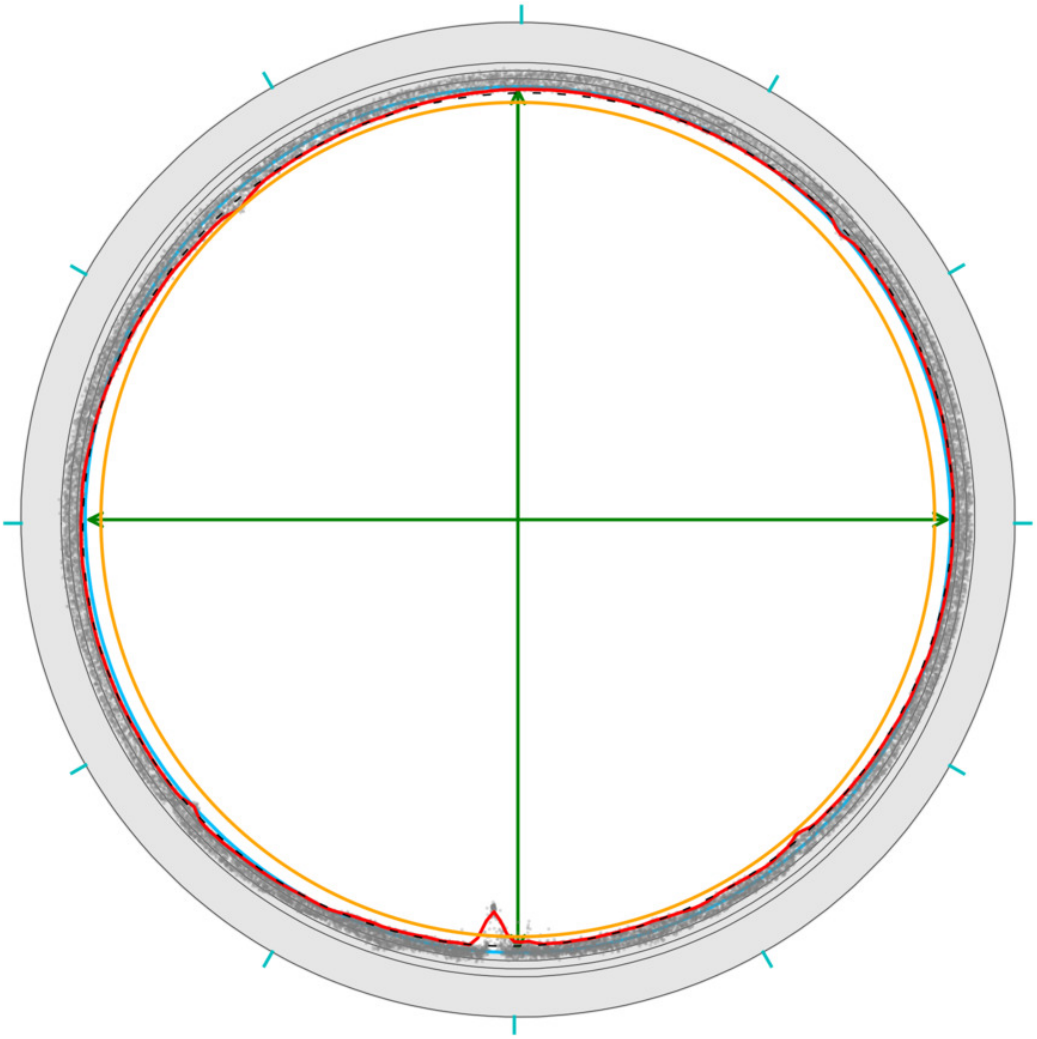
```
Footage   :  663 ft
Width     :  108.9" | 108.0"
Height    :  107.7" | 108.0"

Area      :  9034 sq in
Perimeter :  341.0 in
Ovality   :  1.5%

Interior Diameter : 104.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 664.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



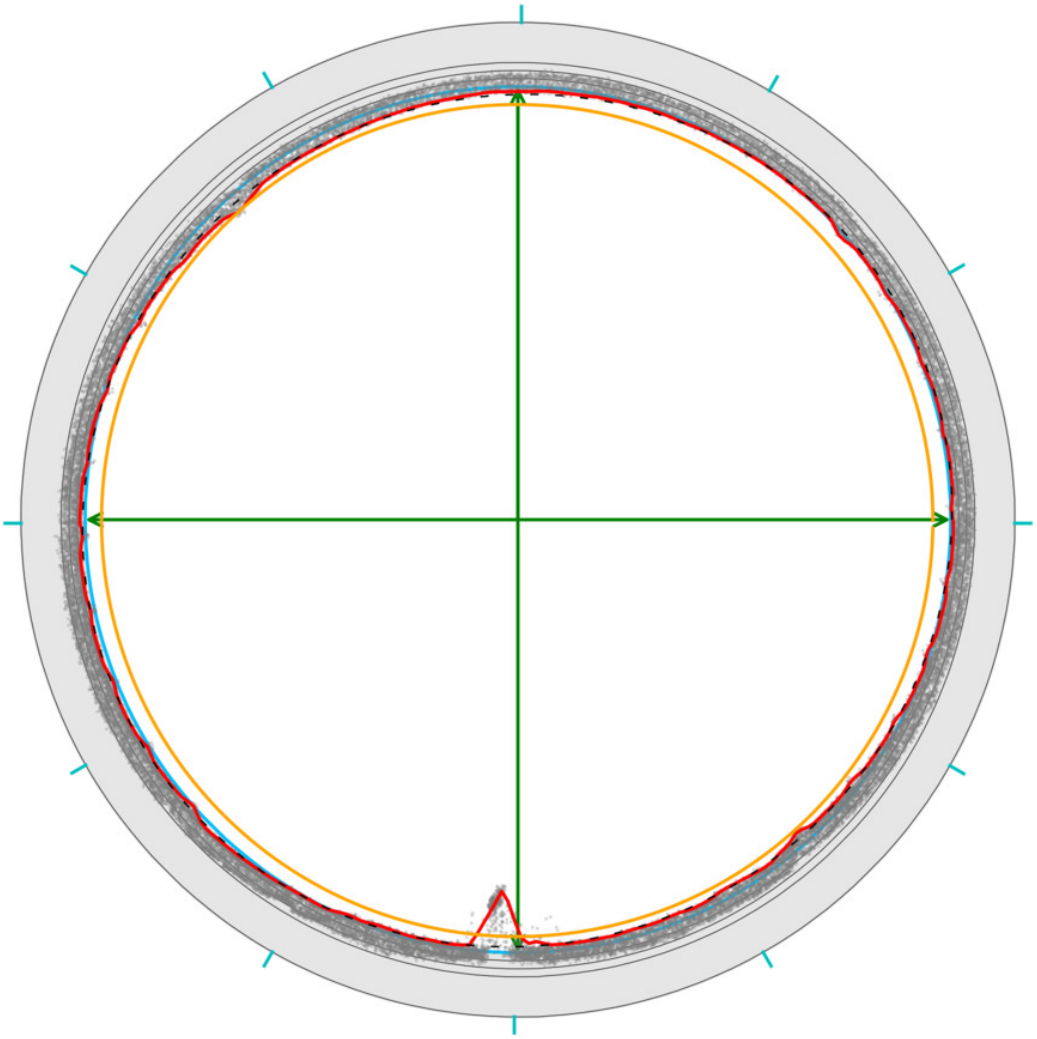
```
Footage   :  664 ft
Width     :  108.9" | 108.0"
Height    :  107.6" | 108.0"

Area      :  9051 sq in
Perimeter :  342.7 in
Ovality   :  1.5%

Interior Diameter : 104.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 665.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



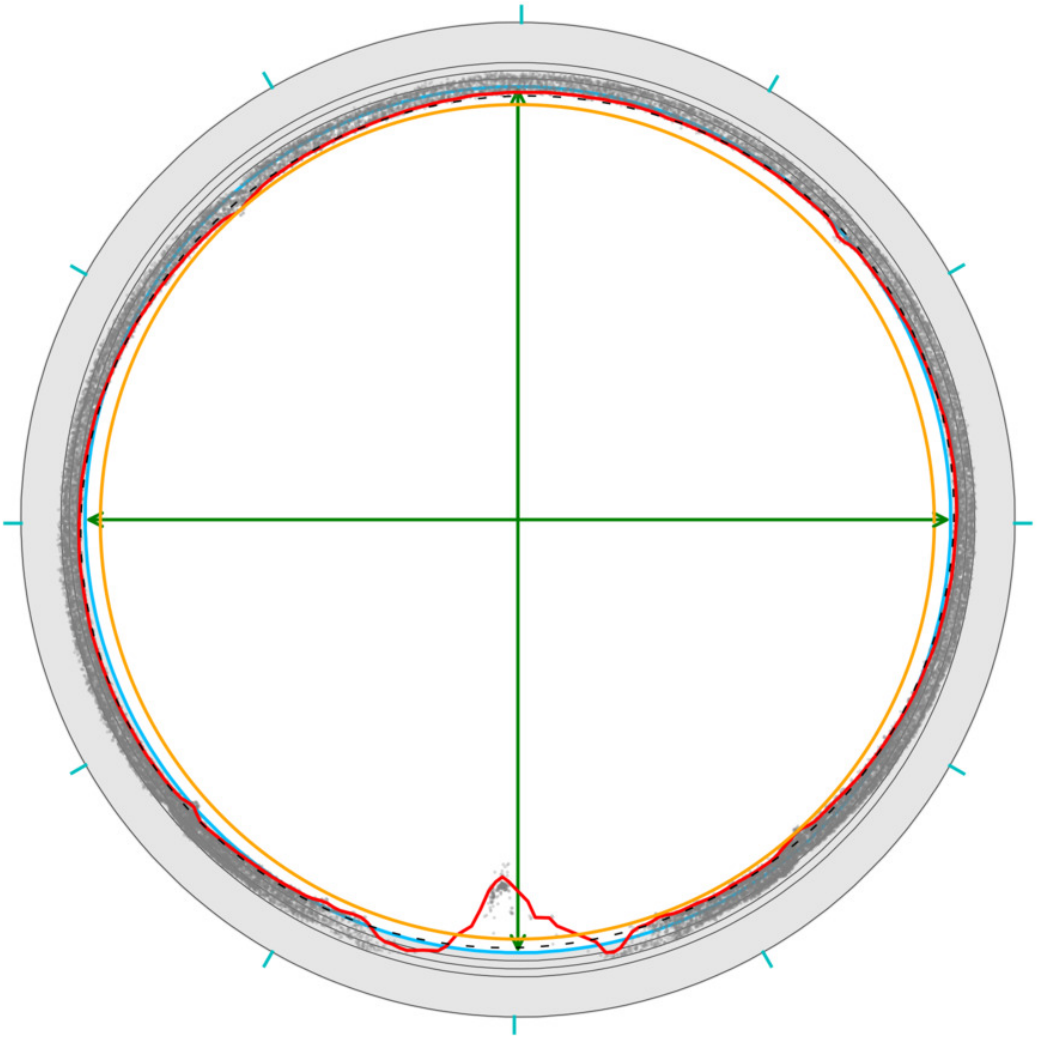
```
Footage   :  665 ft
Width     :  109.0" | 108.0"
Height    :  107.4" | 108.0"

Area      :  9026 sq in
Perimeter :  346.9 in
Ovality   :  1.5%

Interior Diameter : 103.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 666.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



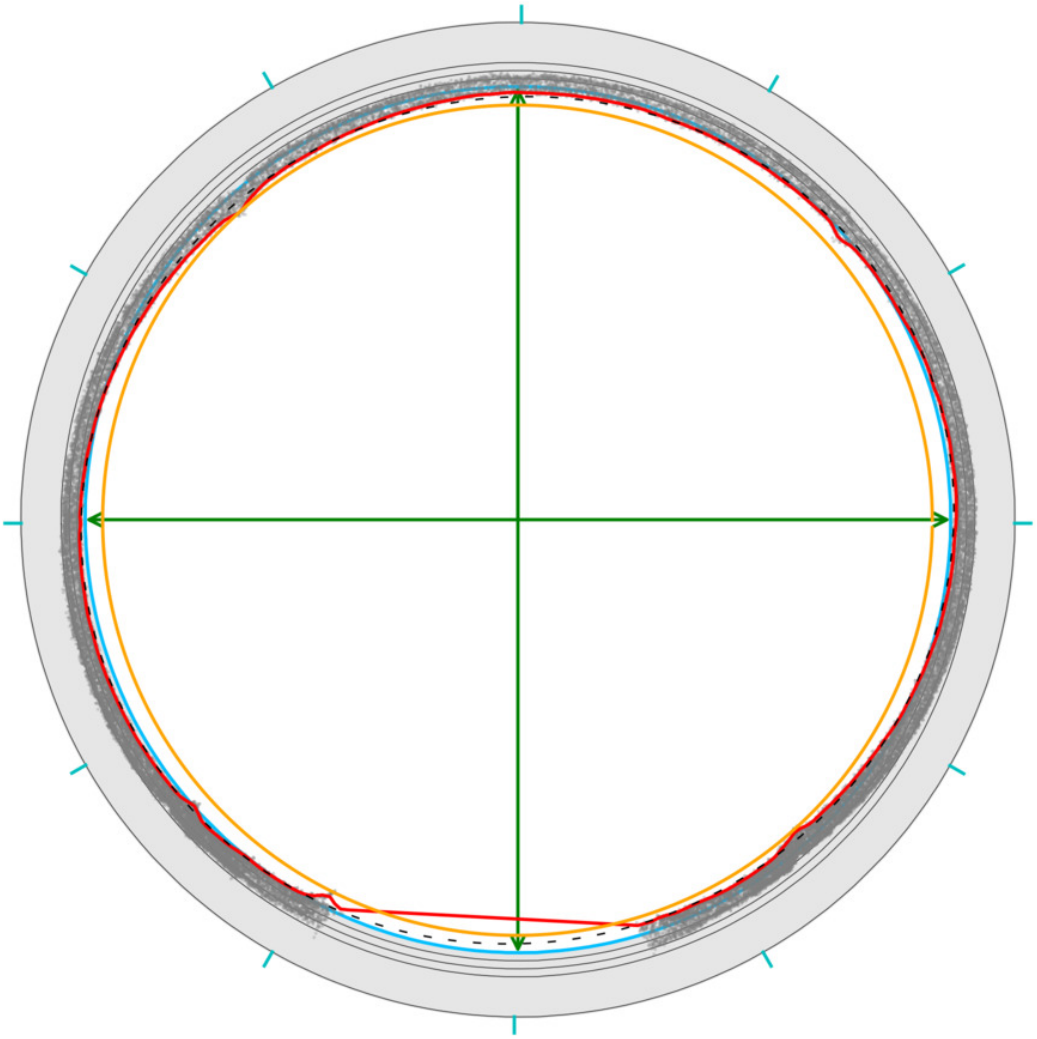
```
Footage   :  666 ft
Width     :  109.5" | 108.0"
Height    :  107.3" | 108.0"

Area      :  9016 sq in
Perimeter :  349.1 in
Ovality   :  1.7%

Interior Diameter : 104.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 667.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 667 ft
Width : 109.4" | 108.0"
Height : 107.3" | 108.0"

Area : 8944 sq in
Perimeter : 337.5 in
Ovality : 1.9%

Interior Diameter : 103.5"

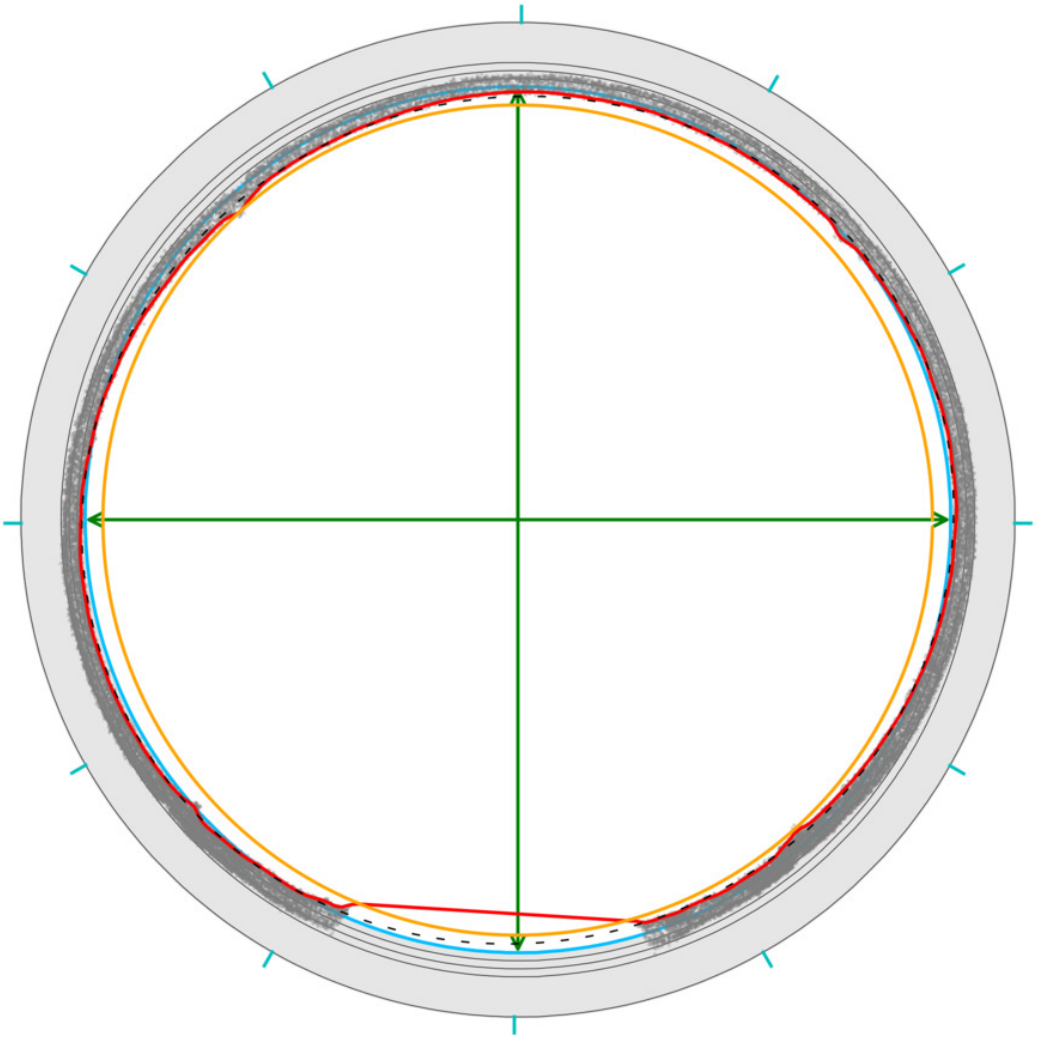
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 668.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



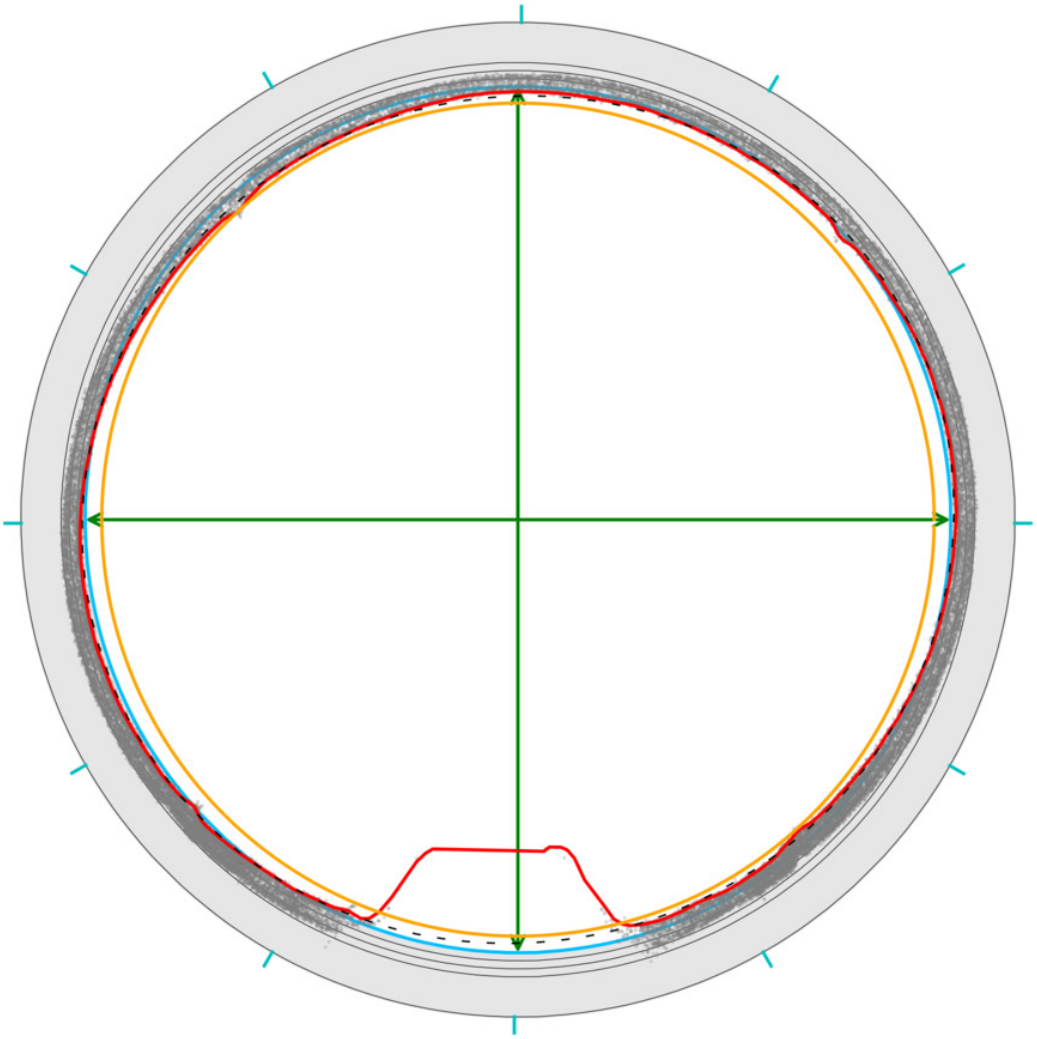
```
Footage   :  668 ft
Width     :  109.4" | 108.0"
Height    :  107.3" | 108.0"

Area      :  8916 sq in
Perimeter :  336.8 in
Ovality   :  1.9%

Interior Diameter : 103.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 669.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 669 ft
Width : 109.3" | 108.0"
Height : 107.4" | 108.0"

Area : 8754 sq in
Perimeter : 346.3 in
Ovality : 1.9%

Interior Diameter : 103.9"

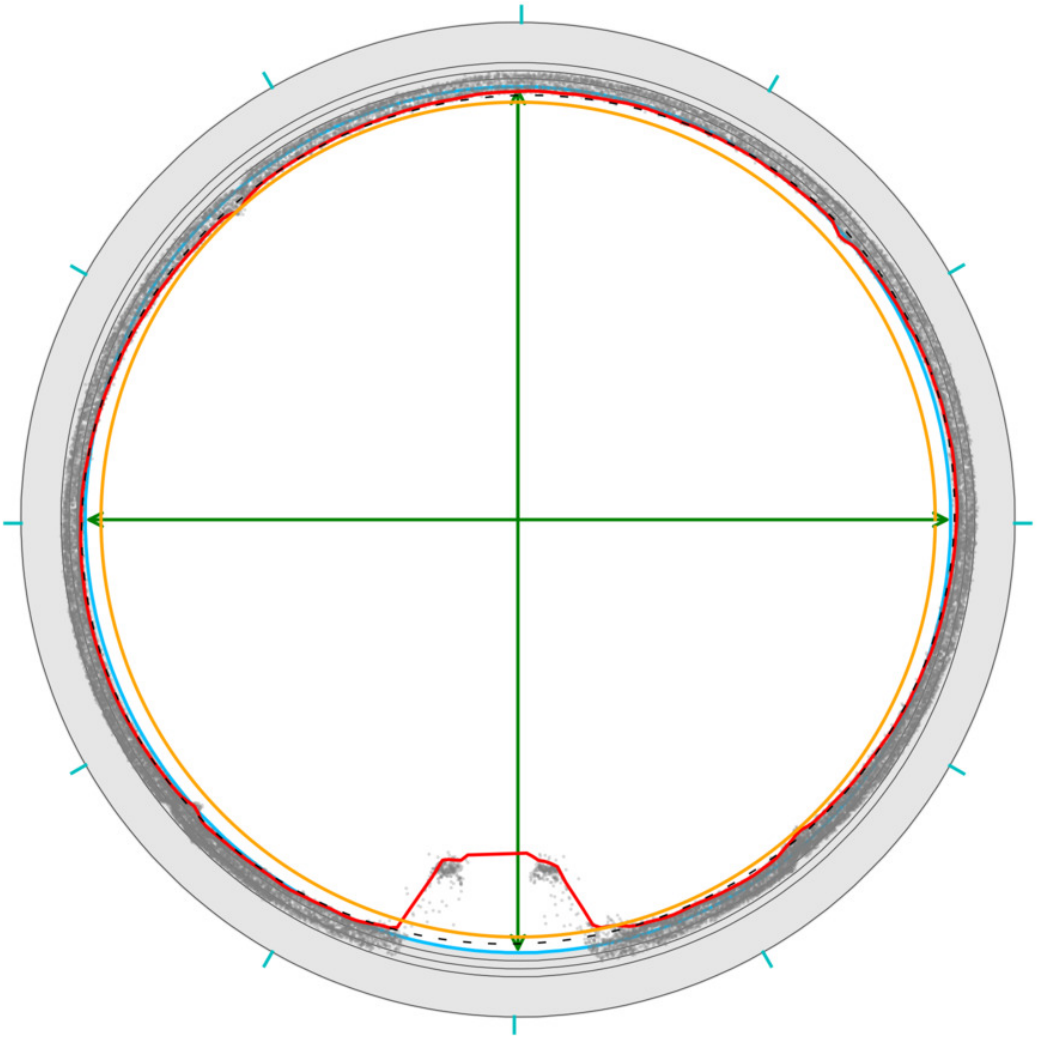
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 670.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 670 ft
Width : 109.4" | 108.0"
Height : 107.4" | 108.0"

Area : 8848 sq in
Perimeter : 347.2 in
Ovality : 1.9%

Interior Diameter : 104.1"

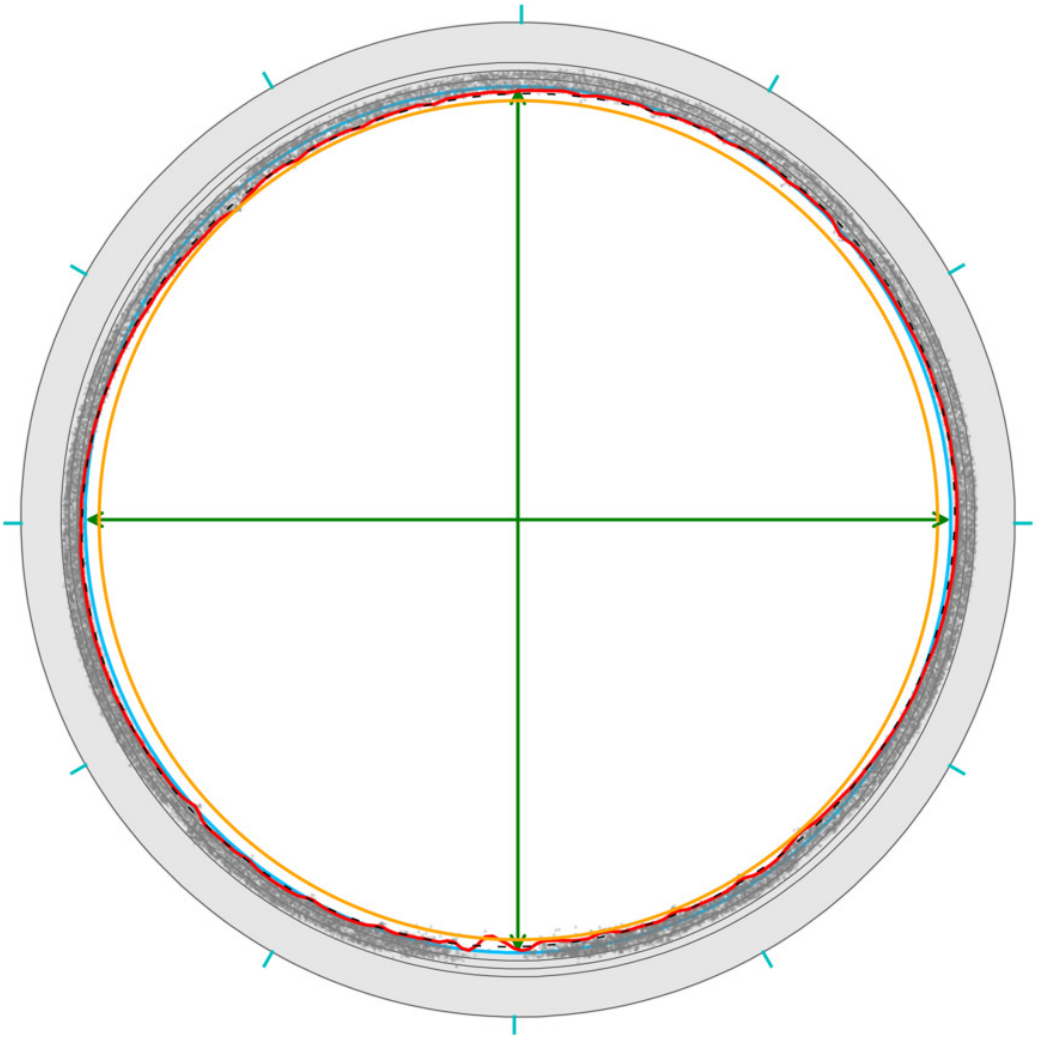
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 671.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



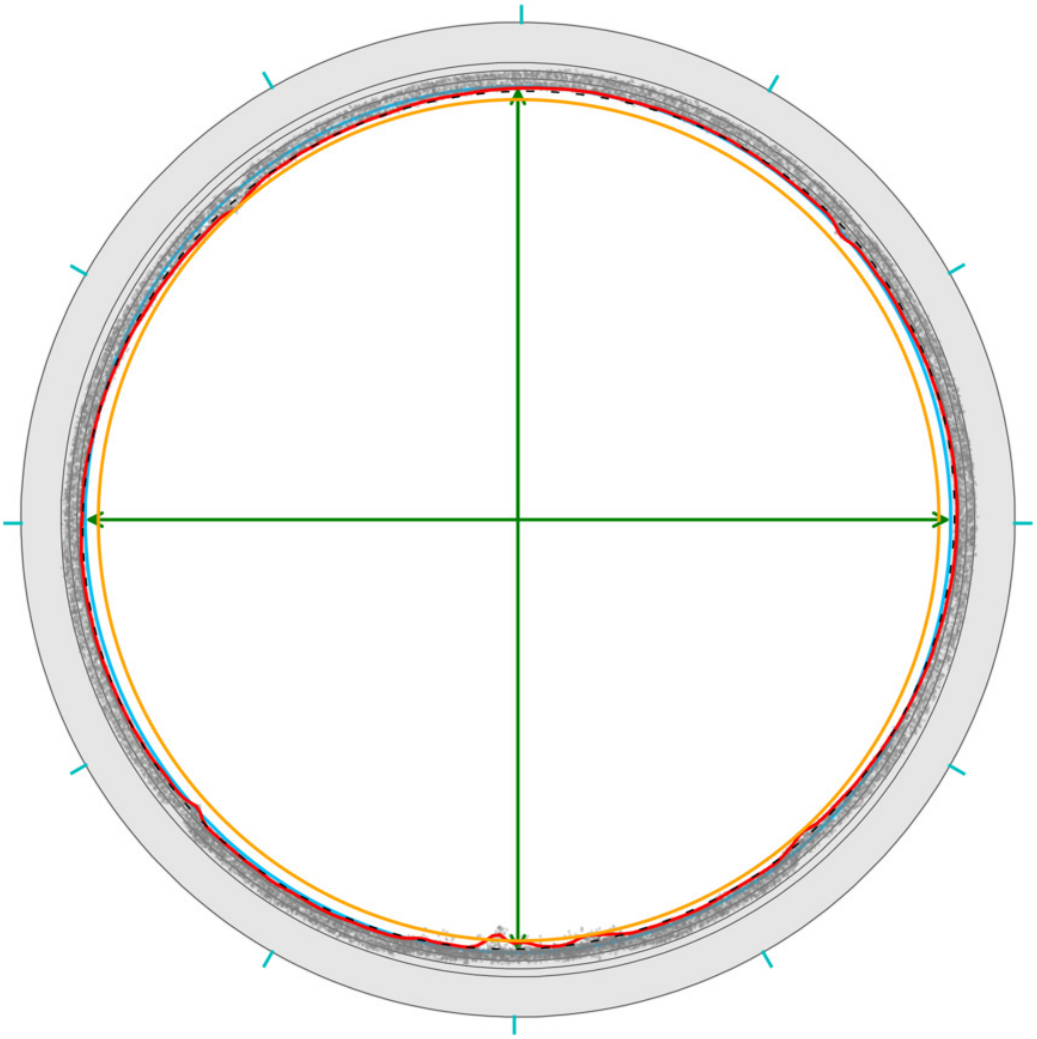
```
Footage   :  671 ft
Width     :  109.4" | 108.0"
Height    :  107.4" | 108.0"

Area      :  9088 sq in
Perimeter :  341.4 in
Ovality   :  1.7%

Interior Diameter : 104.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 672.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



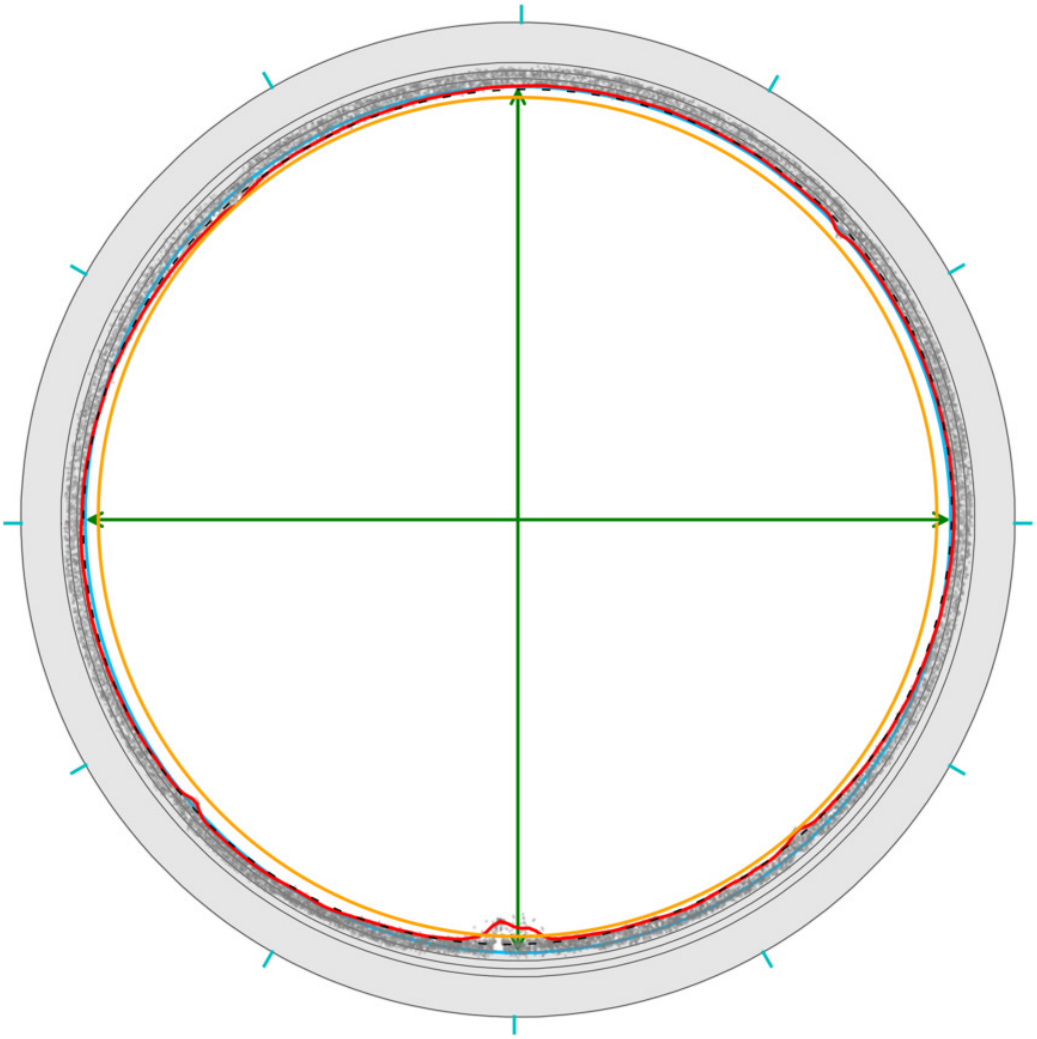
```
Footage    :  672 ft
Width      :  109.3" | 108.0"
Height     :  107.8" | 108.0"

Area       :  9124 sq in
Perimeter  :  340.7 in
Ovality    :  1.3%

Interior Diameter : 104.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 673.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



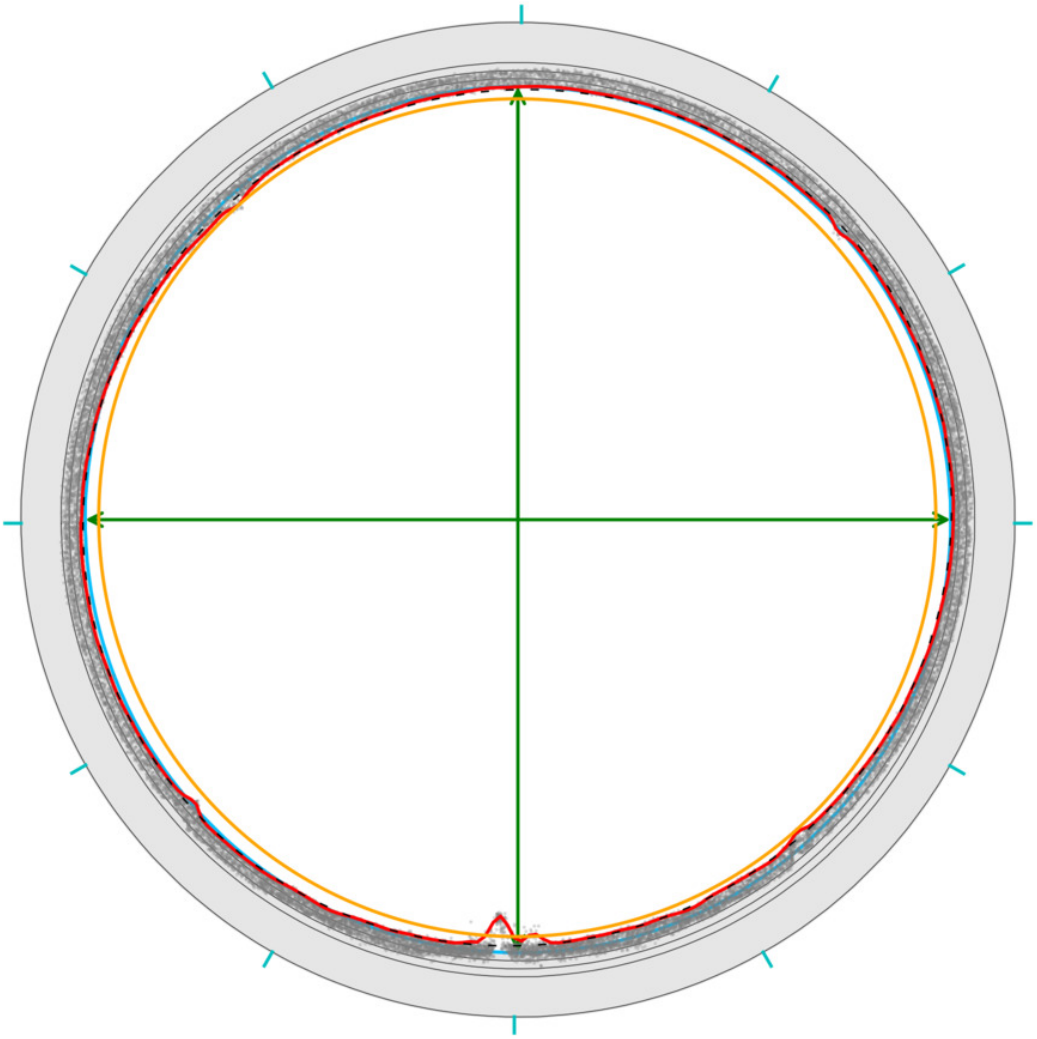
```
Footage   :  673 ft
Width     :  108.9" | 108.0"
Height    :  108.1" | 108.0"

Area      :  9050 sq in
Perimeter :  339.6 in
Ovality   :  1.3%

Interior Diameter : 104.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 674.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 674 ft
Width : 108.9" | 108.0"
Height : 108.0" | 108.0"

Area : 9069 sq in
Perimeter : 342.4 in
Ovality : 1.3%

Interior Diameter : 104.5"

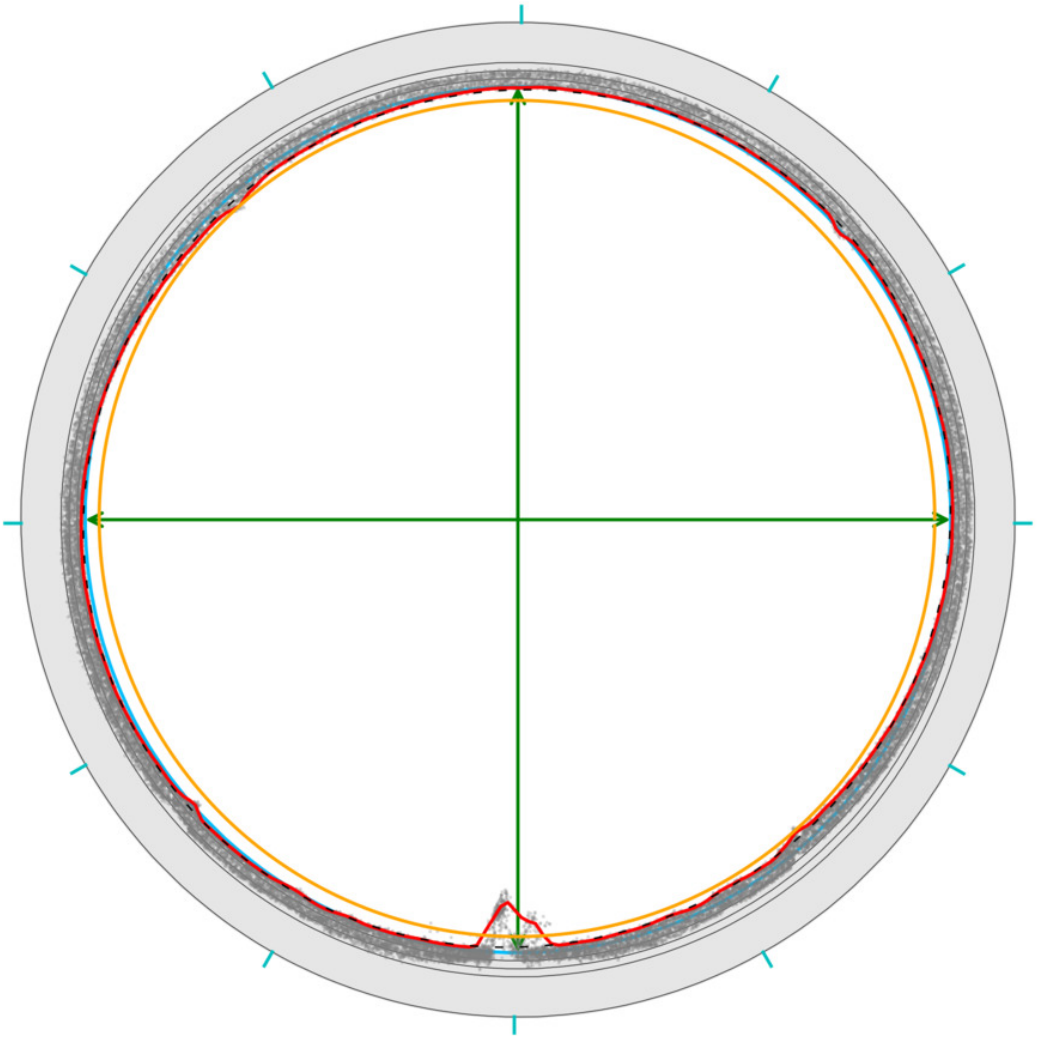
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 675.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



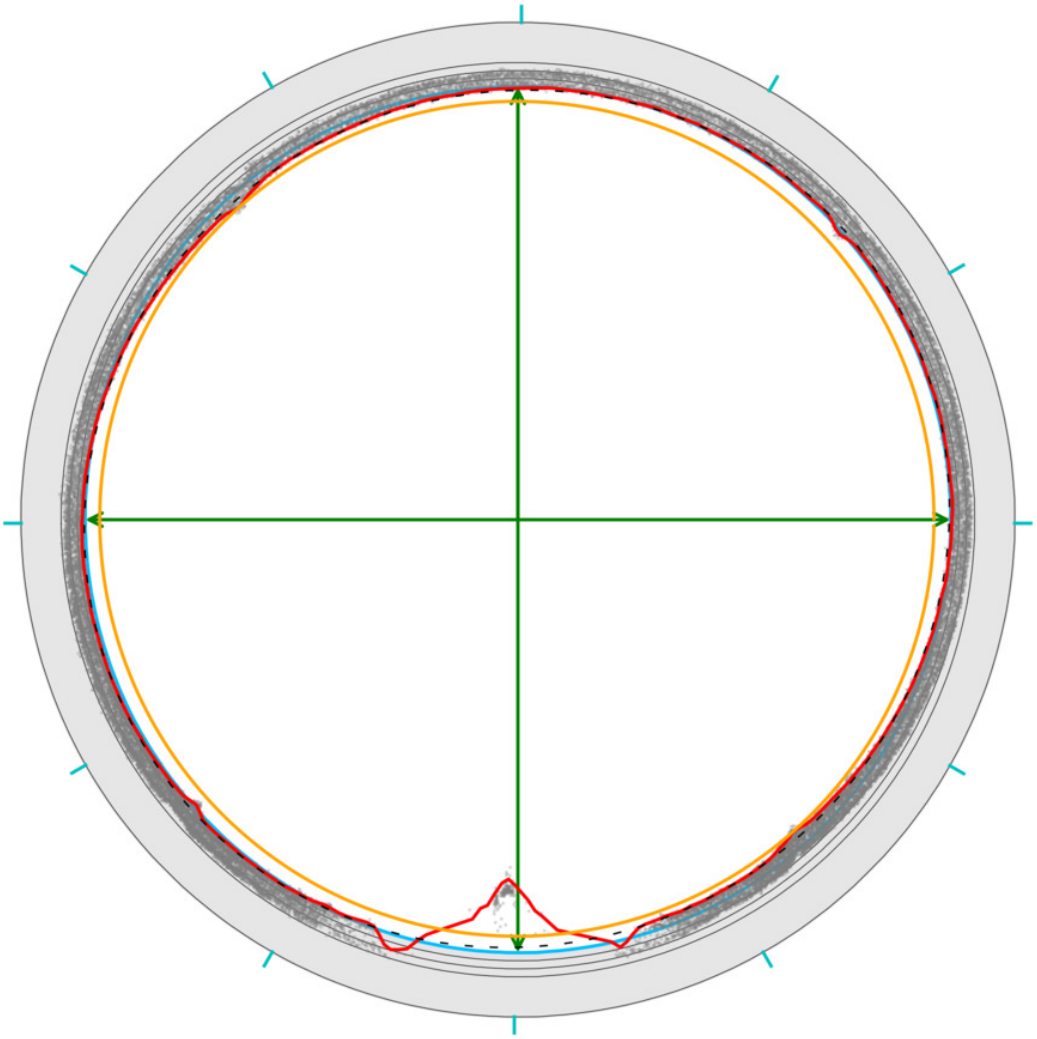
```
Footage   :  675 ft
Width     :  108.7" | 108.0"
Height    :  107.9" | 108.0"

Area      :  9052 sq in
Perimeter :  343.9 in
Ovality   :  1.4%

Interior Diameter : 104.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 676.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 676 ft
Width : 108.6" | 108.0"
Height : 107.8" | 108.0"

Area : 8985 sq in
Perimeter : 346.6 in
Ovality : 1.4%

Interior Diameter : 104.1"

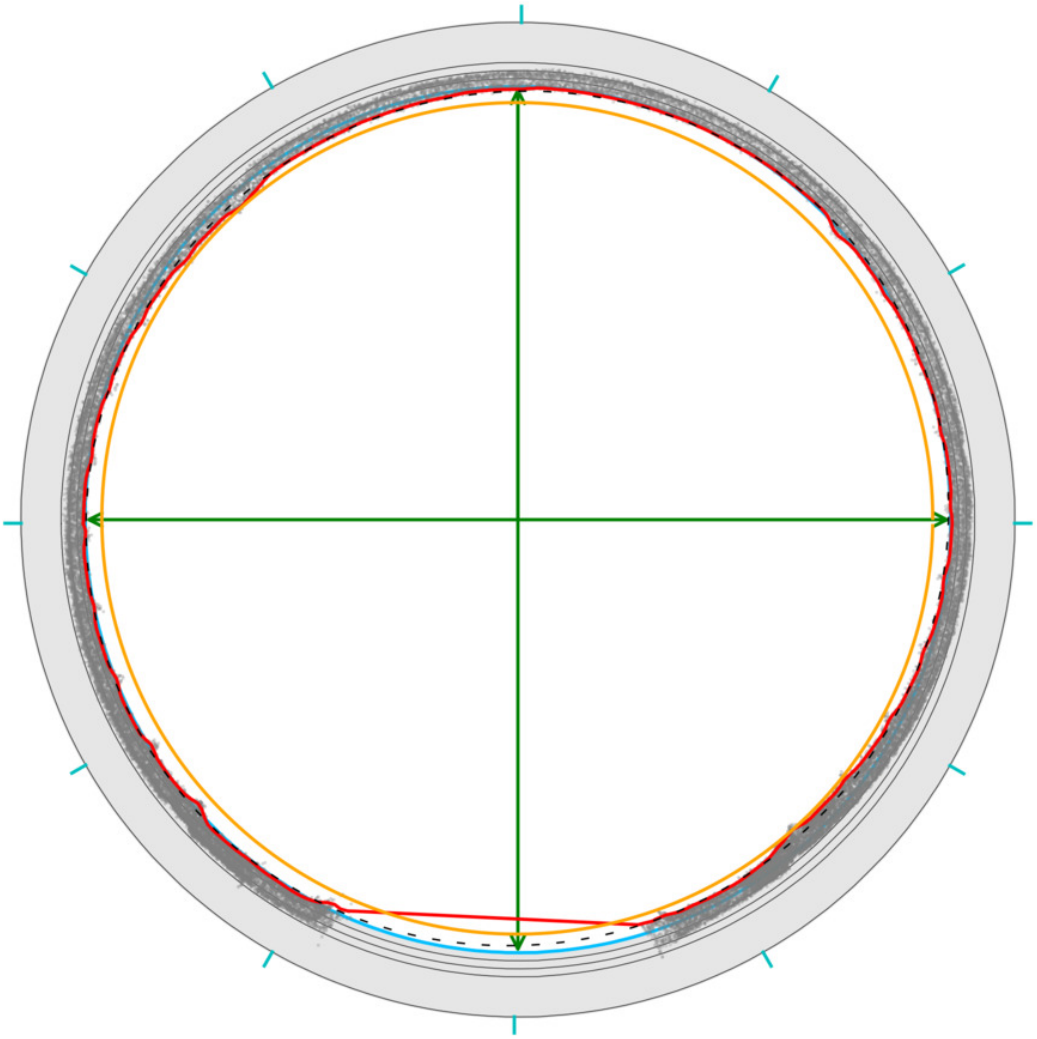
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 677.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



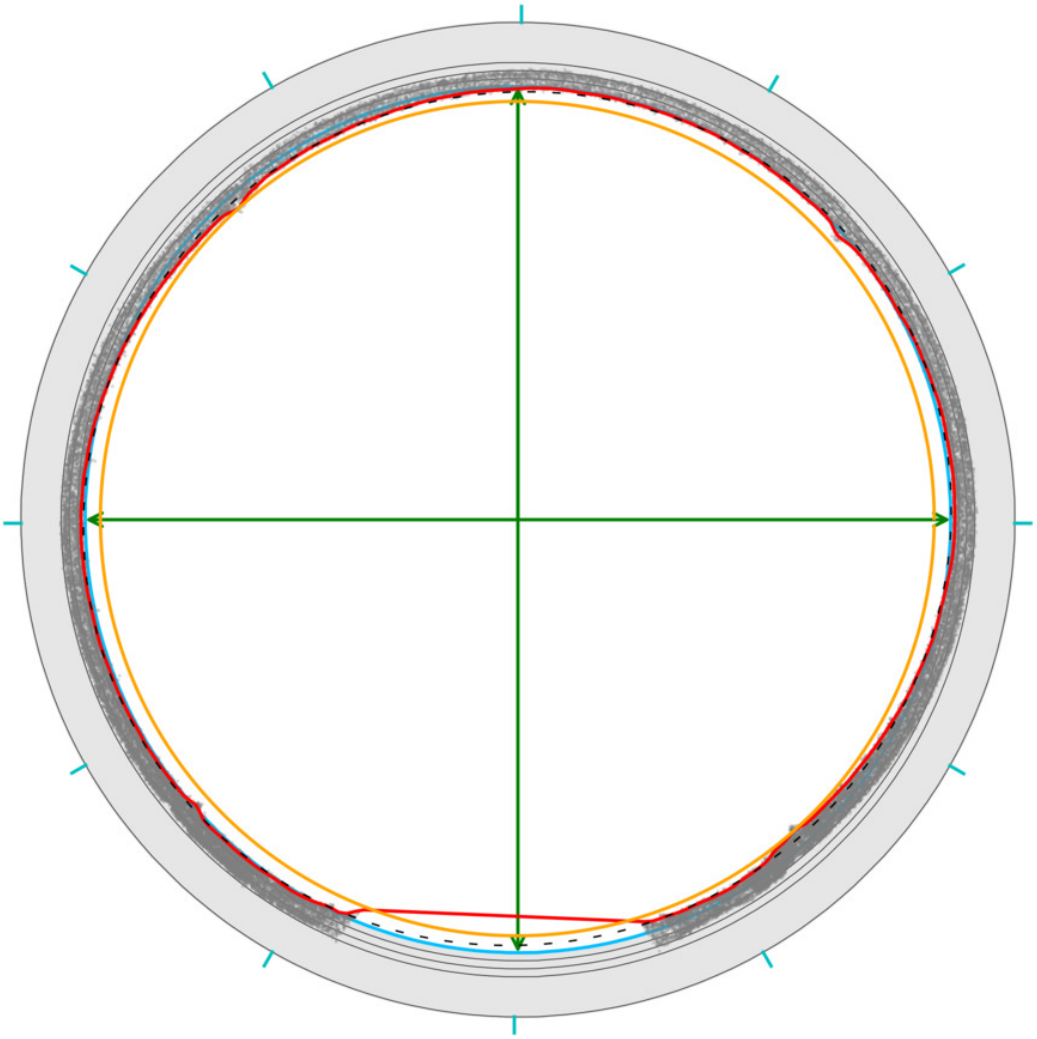
```
Footage   :  677 ft
Width     :  108.4" | 108.0"
Height    :  107.7" | 108.0"

Area      :  8903 sq in
Perimeter :  337.0 in
Ovality   :  1.2%

Interior Diameter : 103.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 678.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



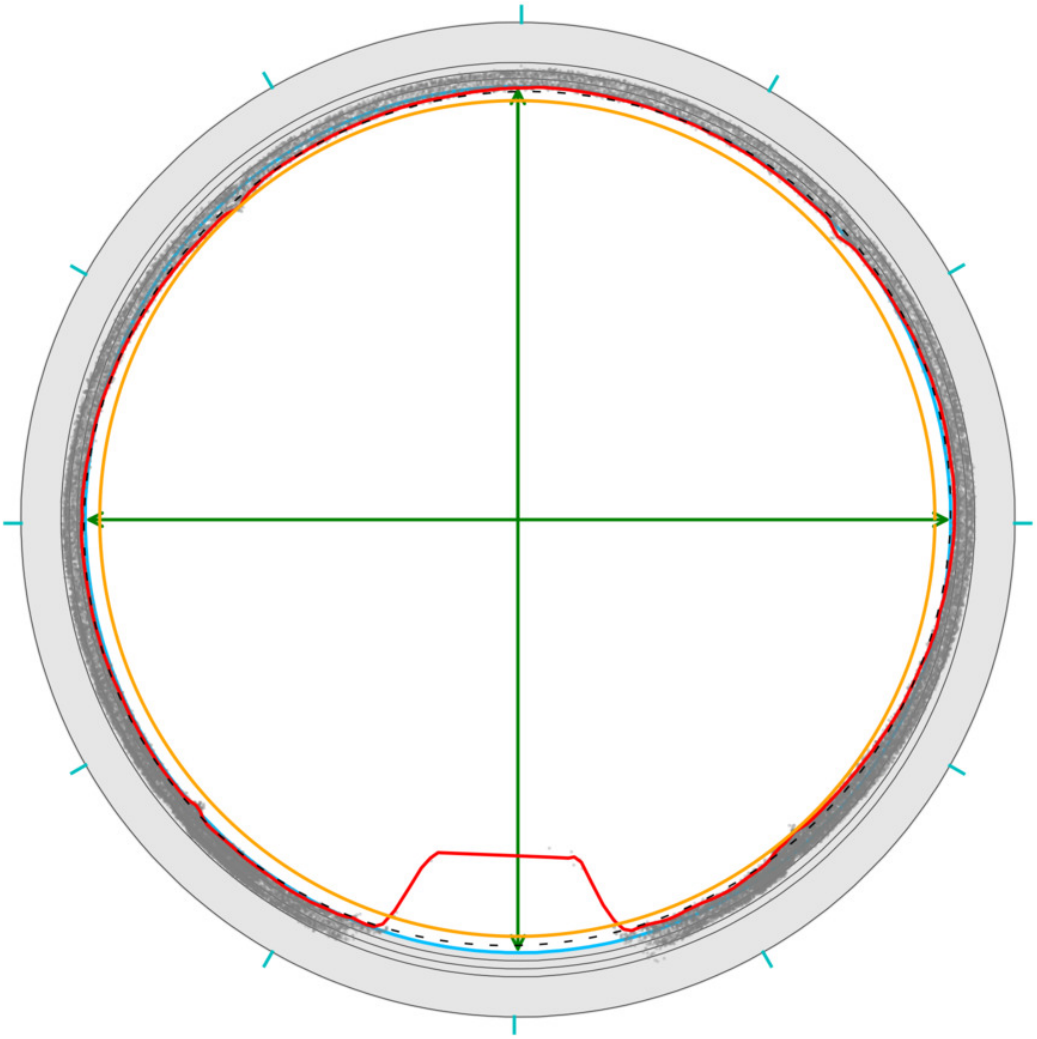
```
Footage   :  678 ft
Width     :  109.1" | 108.0"
Height    :  107.7" | 108.0"

Area      :  8939 sq in
Perimeter :  337.2 in
Ovality   :  1.3%

Interior Diameter : 104.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 679.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



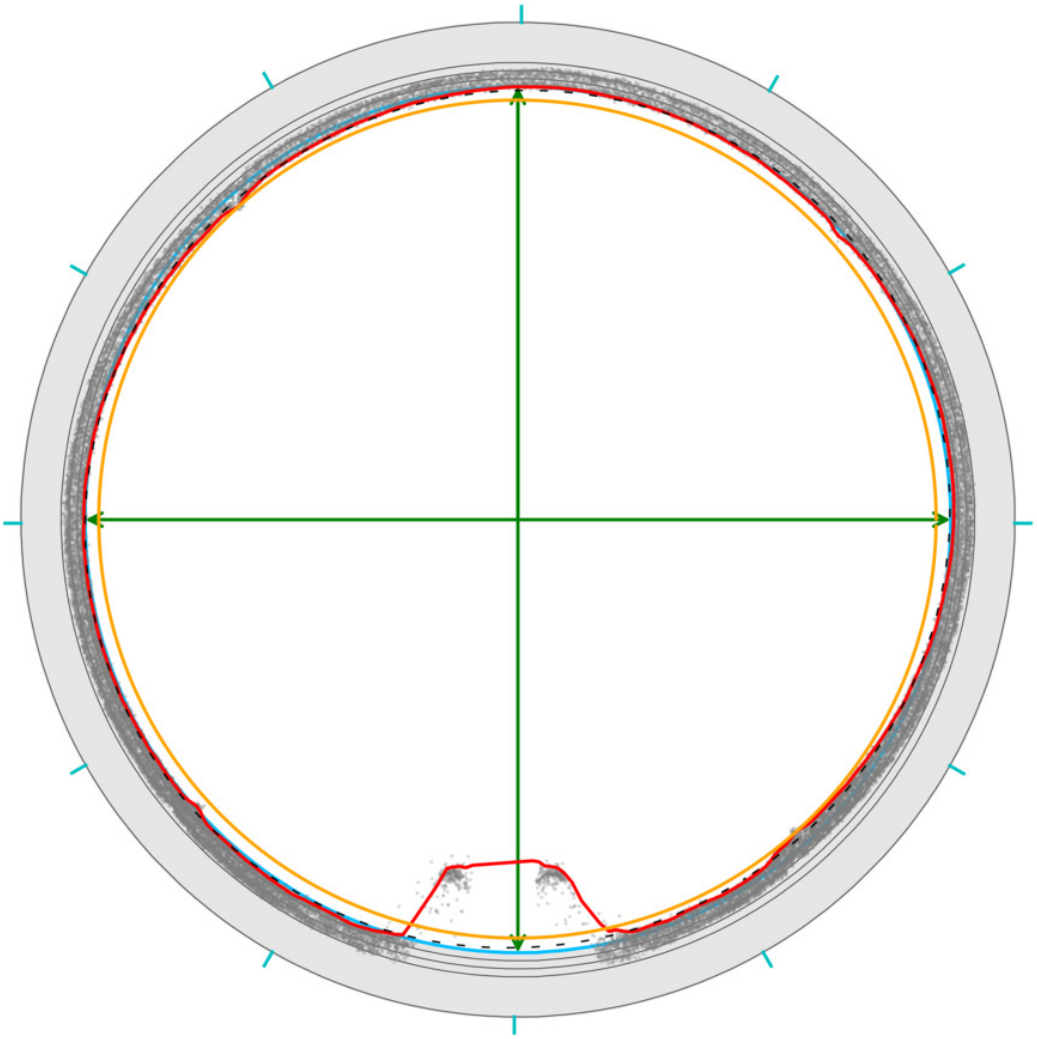
```
Footage   :  679 ft
Width     :  108.9" | 108.0"
Height    :  107.8" | 108.0"

Area      :  8782 sq in
Perimeter :  347.2 in
Ovality   :  1.3%

Interior Diameter : 104.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 680.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



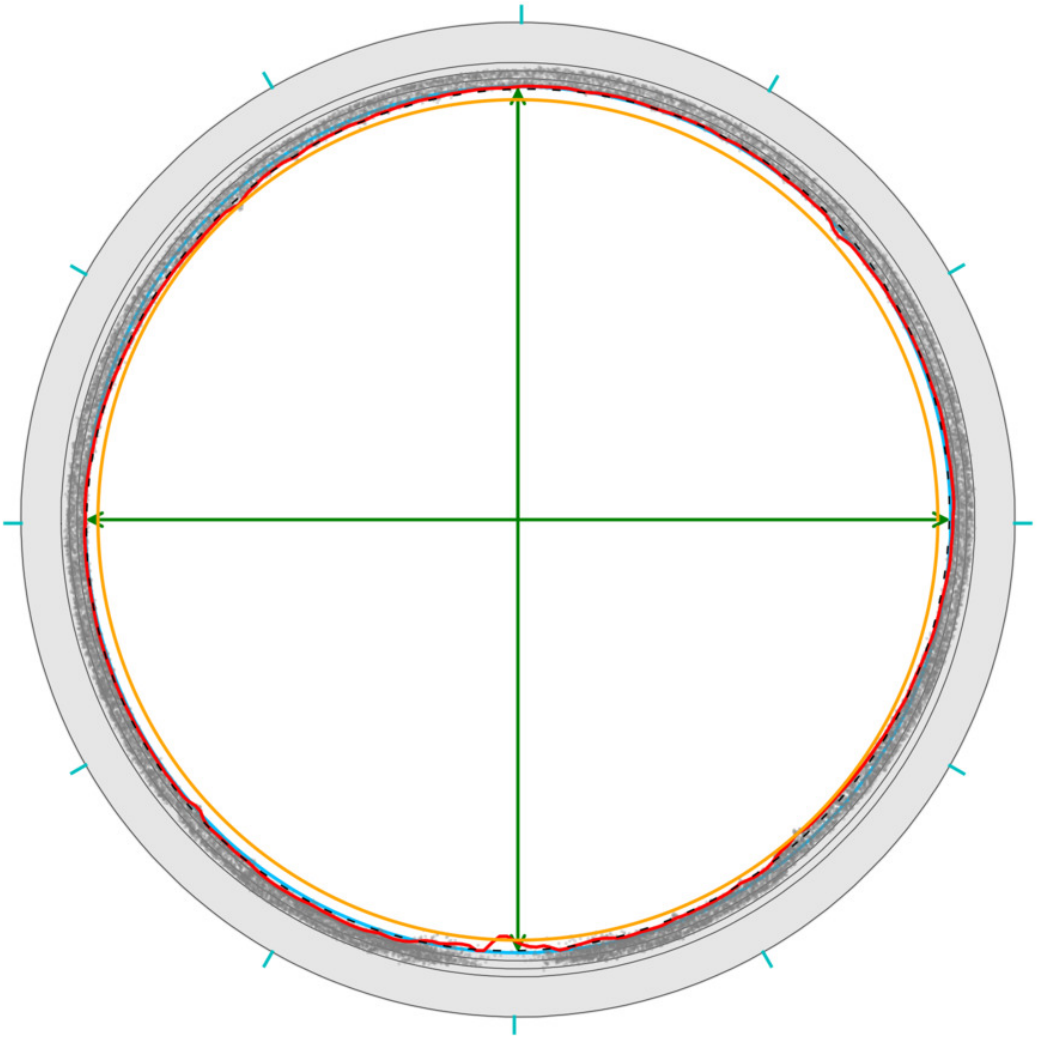
```
Footage   :  680 ft
Width     :  108.6" | 108.0"
Height    :  108.0" | 108.0"

Area      :  8860 sq in
Perimeter :  346.7 in
Ovality   :  1.2%

Interior Diameter : 104.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 681.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 681 ft
Width : 108.4" | 108.0"
Height : 108.0" | 108.0"

Area : 9072 sq in
Perimeter : 340.2 in
Ovality : 1.1%

Interior Diameter : 104.8"

Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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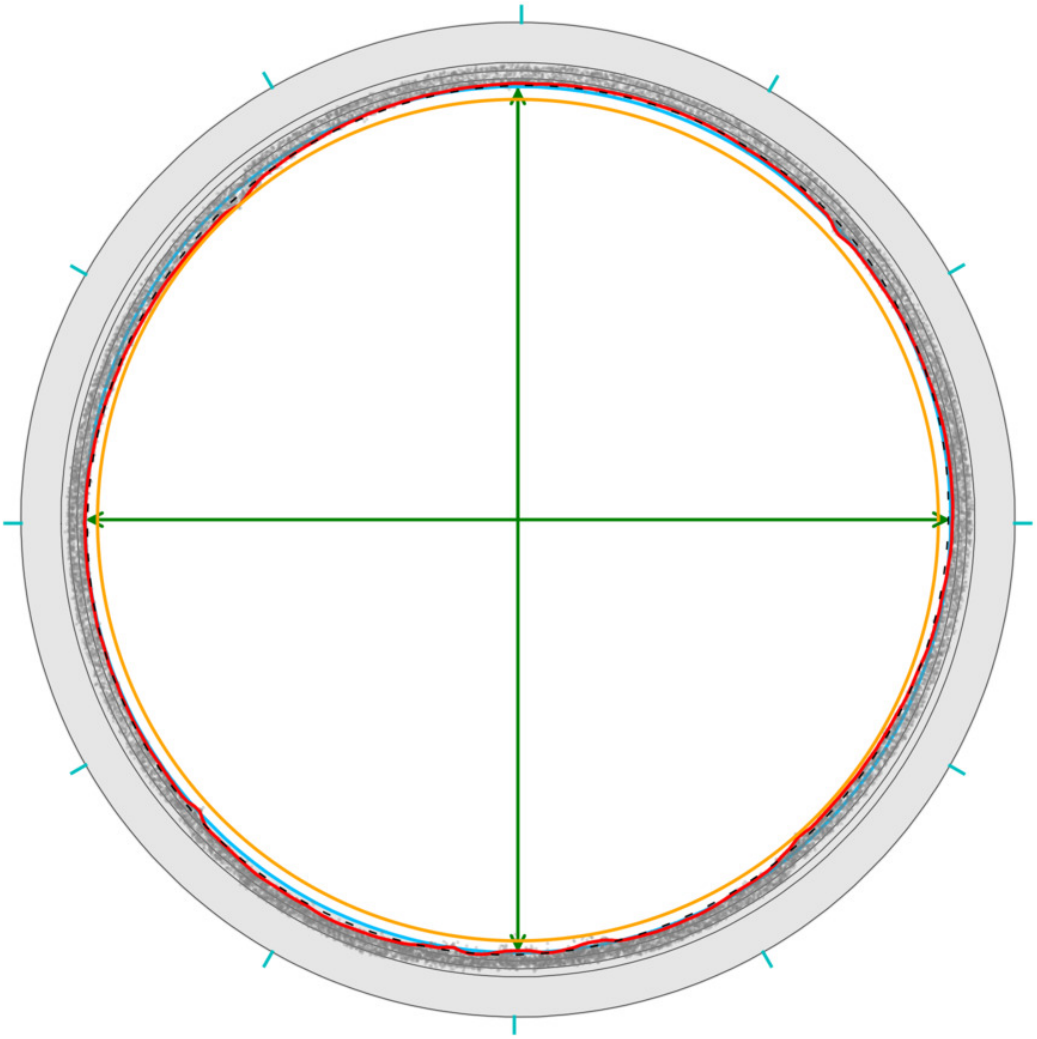
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 682.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 682 ft
Width : 108.3" | 108.0"
Height : 108.4" | 108.0"

Area : 9136 sq in
Perimeter : 340.0 in
Ovality : 1.2%

Interior Diameter : 104.9"

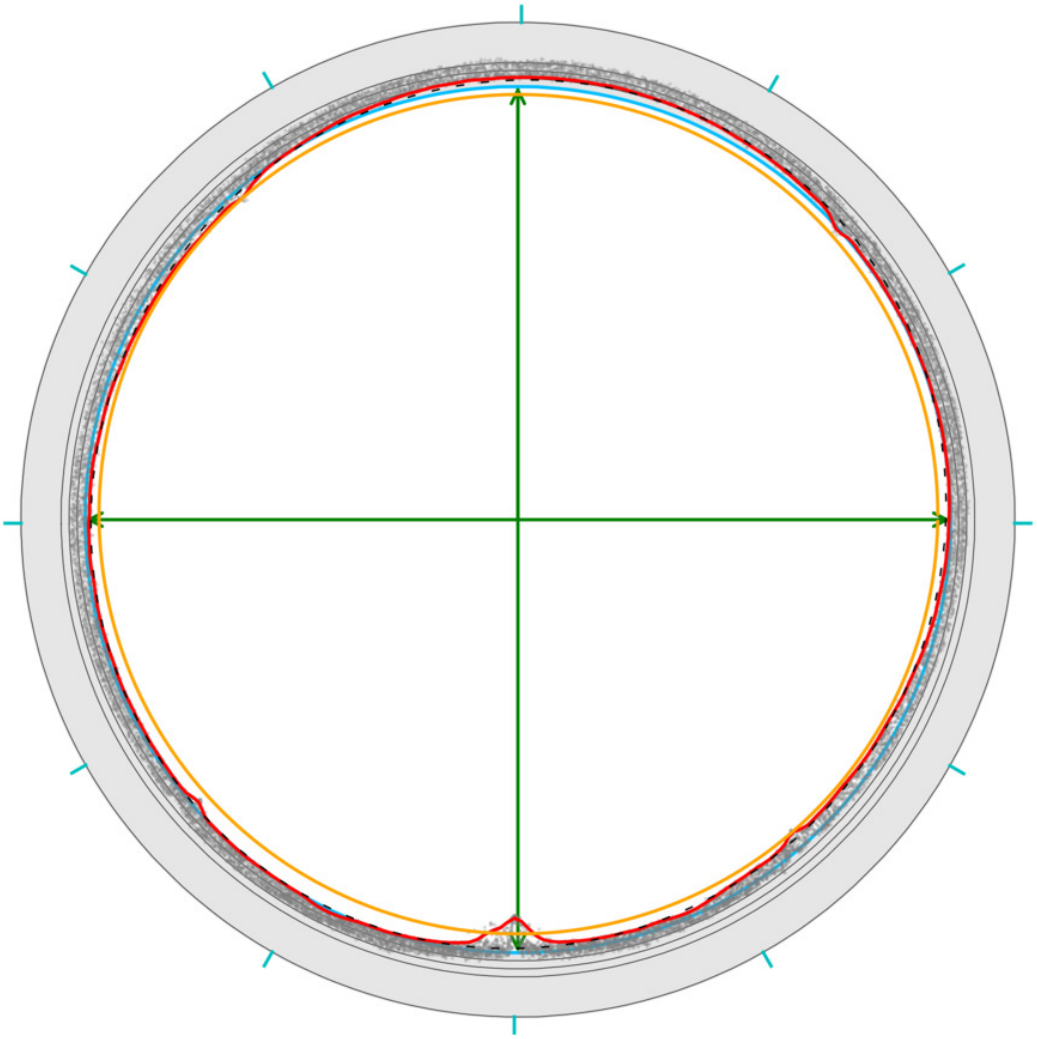
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 683.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 683 ft
Width : 107.4" | 108.0"
Height : 109.1" | 108.0"

Area : 9052 sq in
Perimeter : 340.4 in
Ovality : 1.3%

Interior Diameter : 104.7"

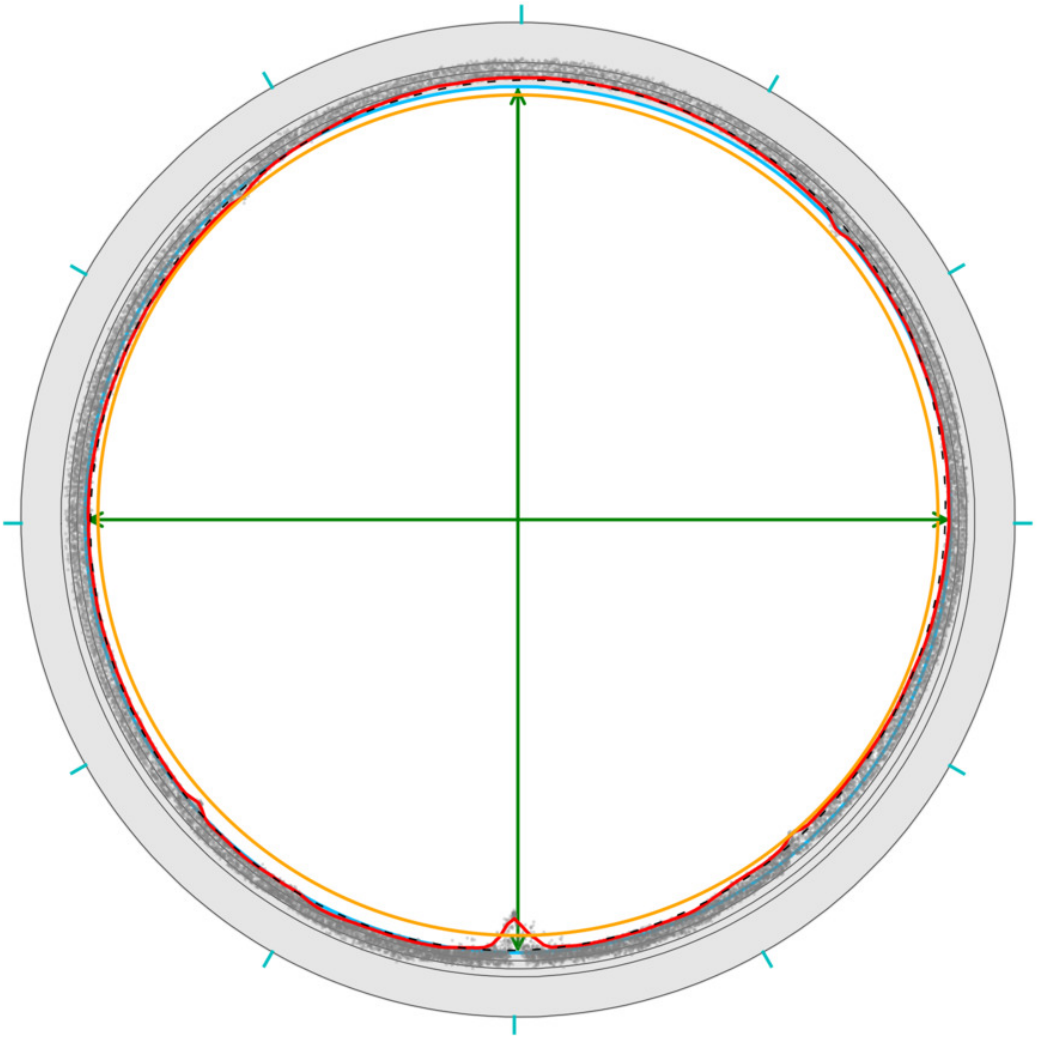
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 684.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



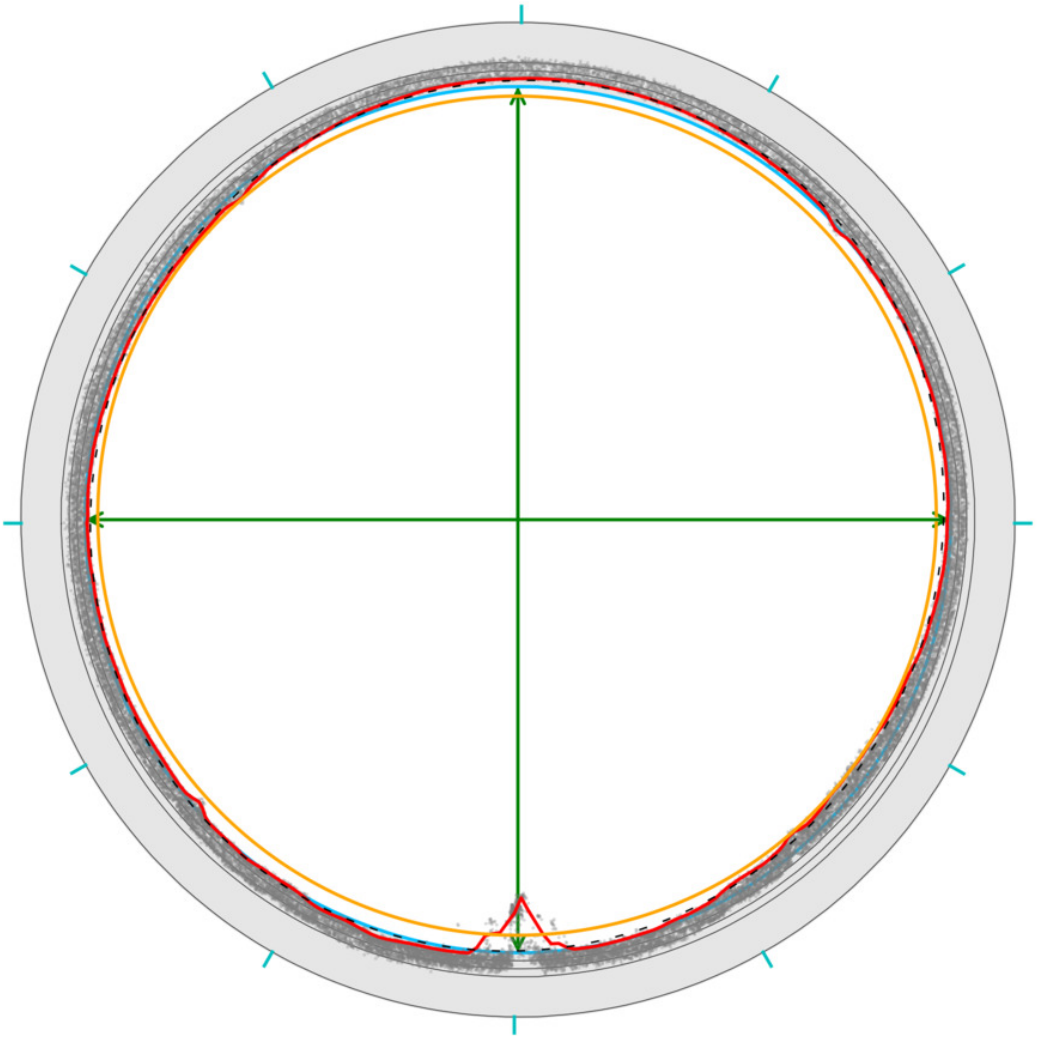
```
Footage   :  684 ft
Width     :  107.4" | 108.0"
Height    :  109.1" | 108.0"

Area      :  9073 sq in
Perimeter :  341.8 in
Ovality   :  1.4%

Interior Diameter : 104.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 685.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



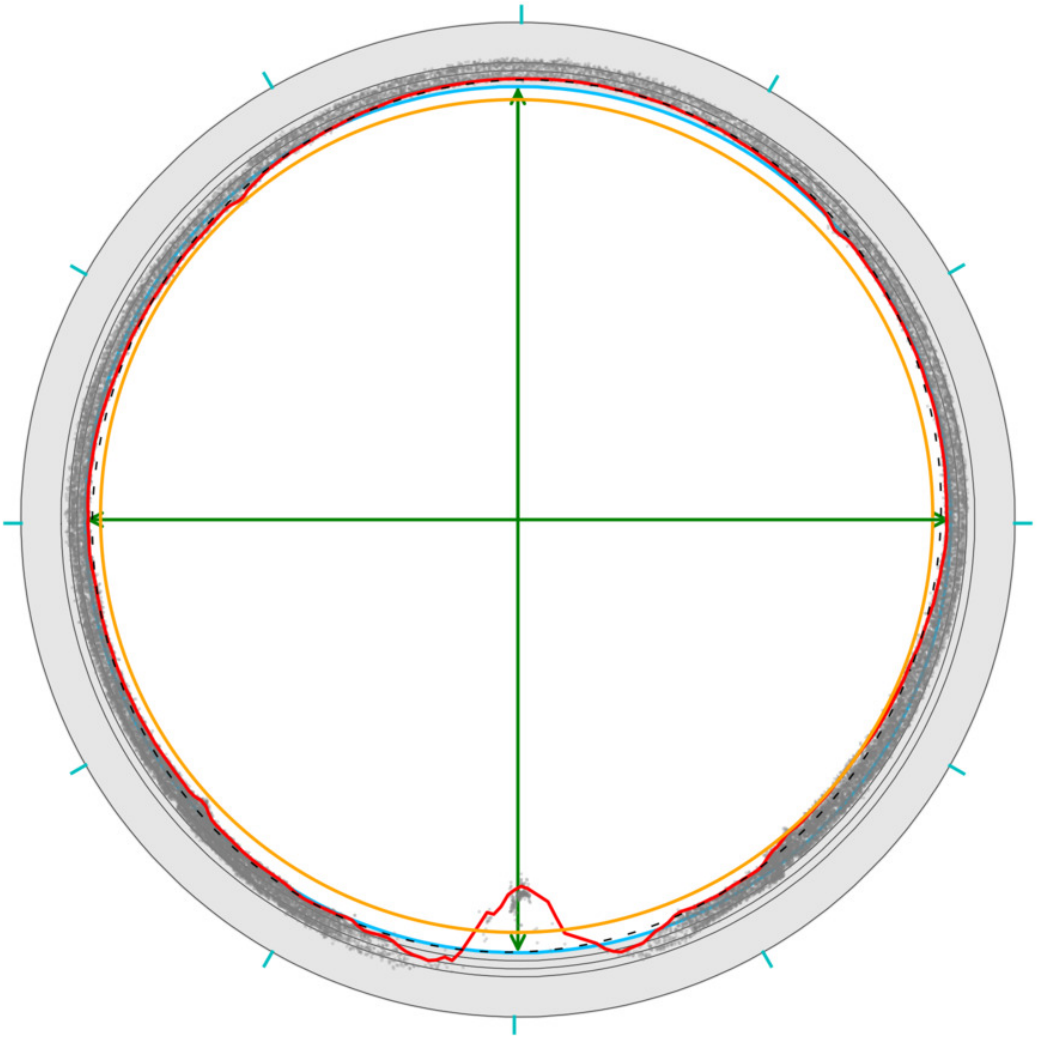
```
Footage   :  685 ft
Width     :  107.4" | 108.0"
Height    :  109.0" | 108.0"

Area      :  9050 sq in
Perimeter :  345.7 in
Ovality   :  1.5%

Interior Diameter : 104.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 686.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 686 ft
Width : 107.2" | 108.0"
Height : 109.0" | 108.0"

Area : 8975 sq in
Perimeter : 347.5 in
Ovality : 1.7%

Interior Diameter : 103.9"

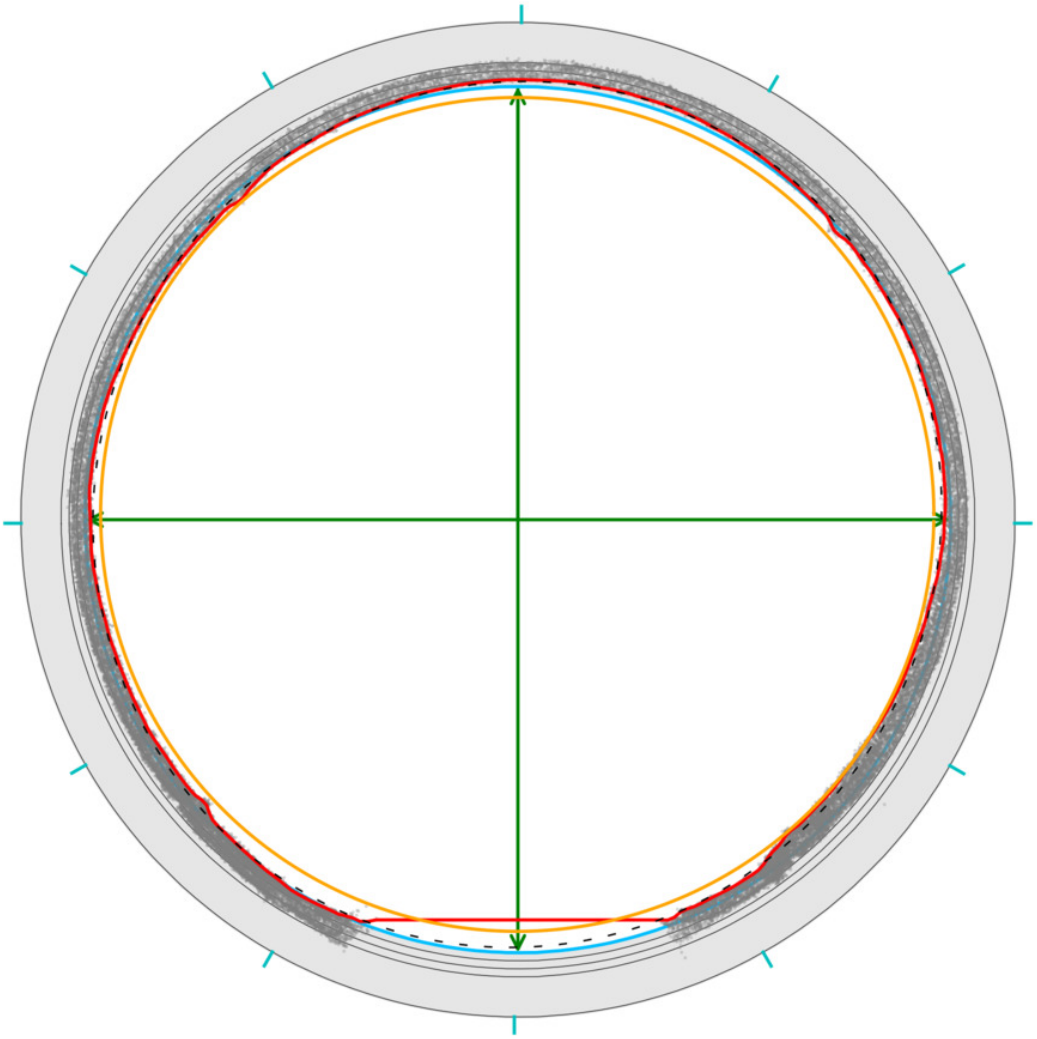
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 687.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



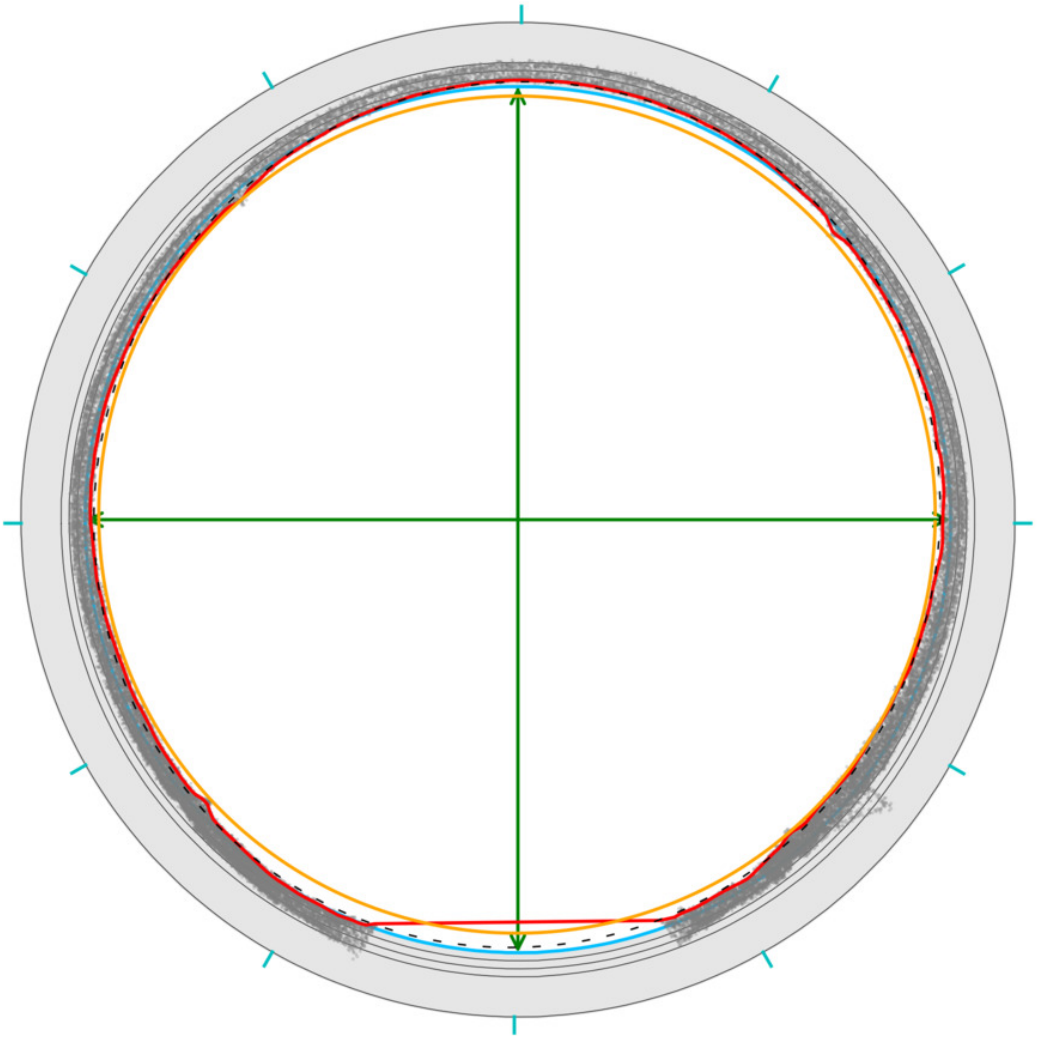
```
Footage   :  687 ft
Width     :  106.8" | 108.0"
Height    :  108.9" | 108.0"

Area      :  8877 sq in
Perimeter :  335.9 in
Ovality   :  1.3%

Interior Diameter : 104.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 688.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



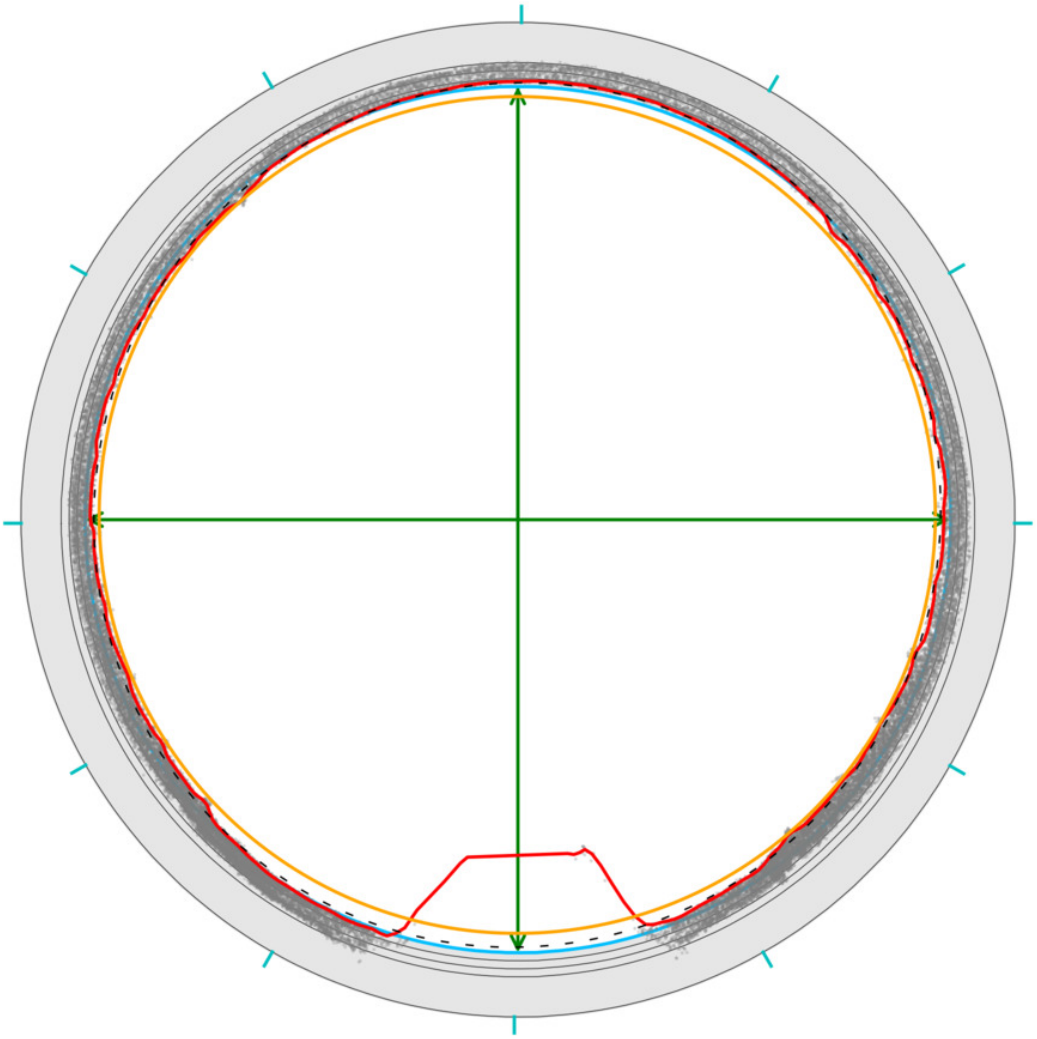
```
Footage   :  688 ft
Width     :  106.5" | 108.0"
Height    :  108.8" | 108.0"

Area      :  8868 sq in
Perimeter :  335.8 in
Ovality   :  1.4%

Interior Diameter : 104.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 689.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 689 ft
Width : 106.7" | 108.0"
Height : 108.7" | 108.0"

Area : 8692 sq in
Perimeter : 345.8 in
Ovality : 1.2%

Interior Diameter : 104.3"

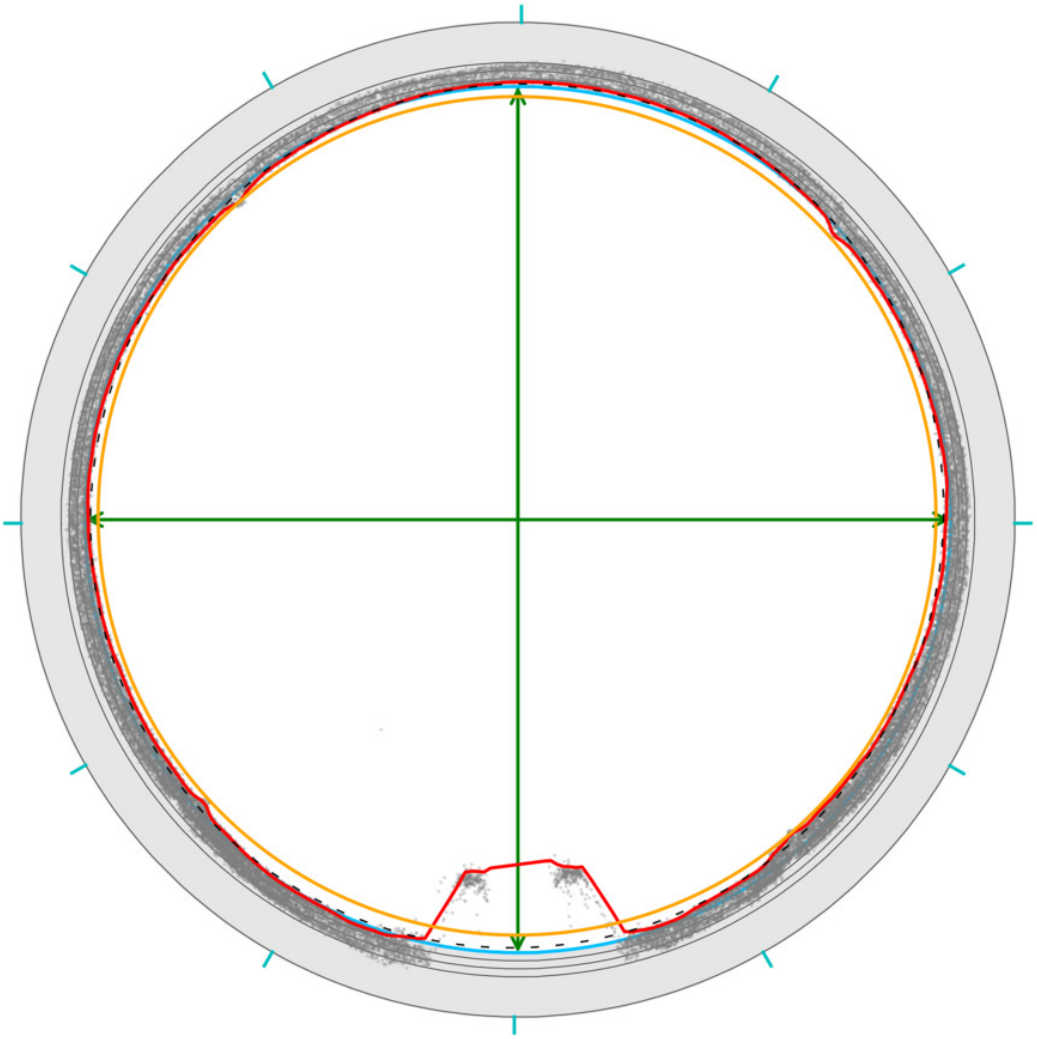
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 690.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



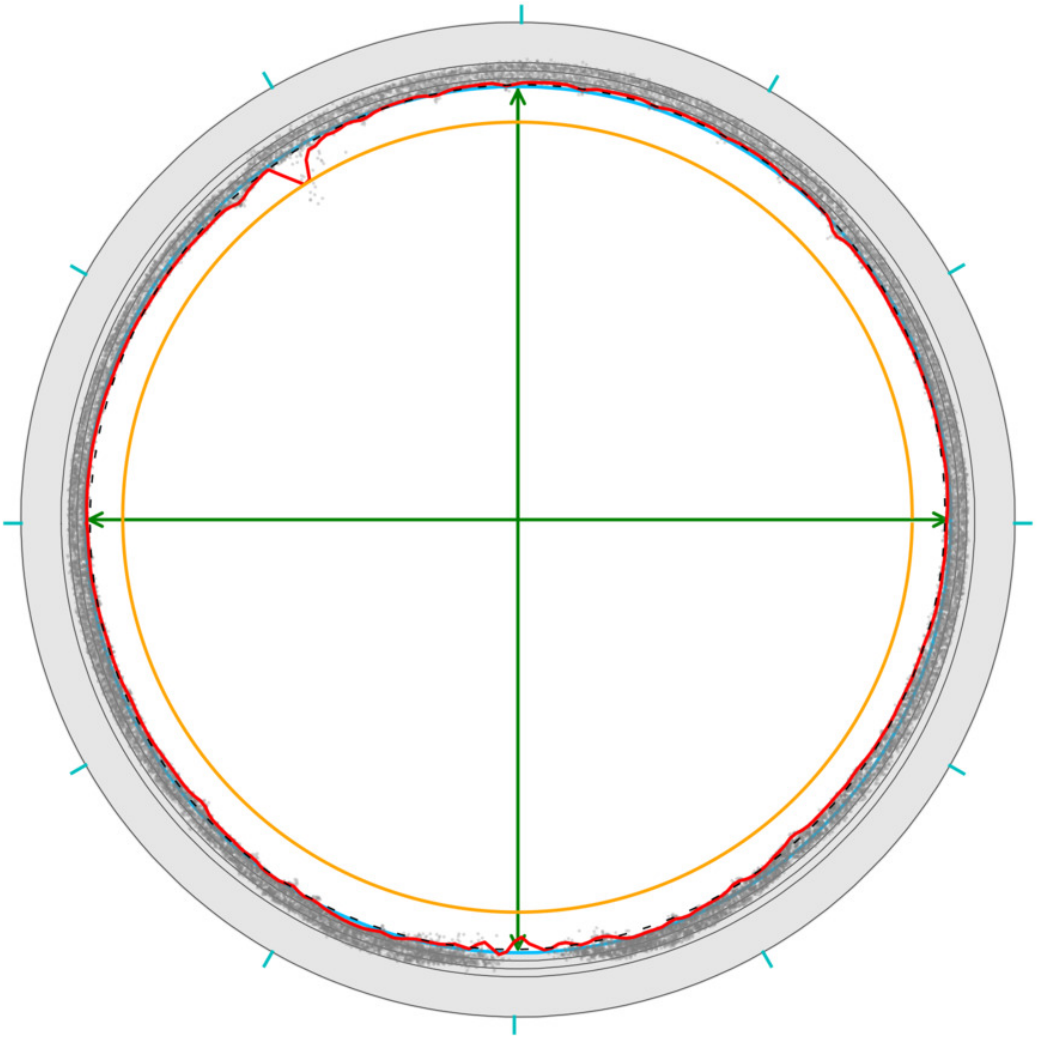
```
Footage   :  690 ft
Width     :  107.2" | 108.0"
Height    :  108.6" | 108.0"

Area      :  8813 sq in
Perimeter :  346.7 in
Ovality   :  0.9%

Interior Diameter : 104.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 691.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



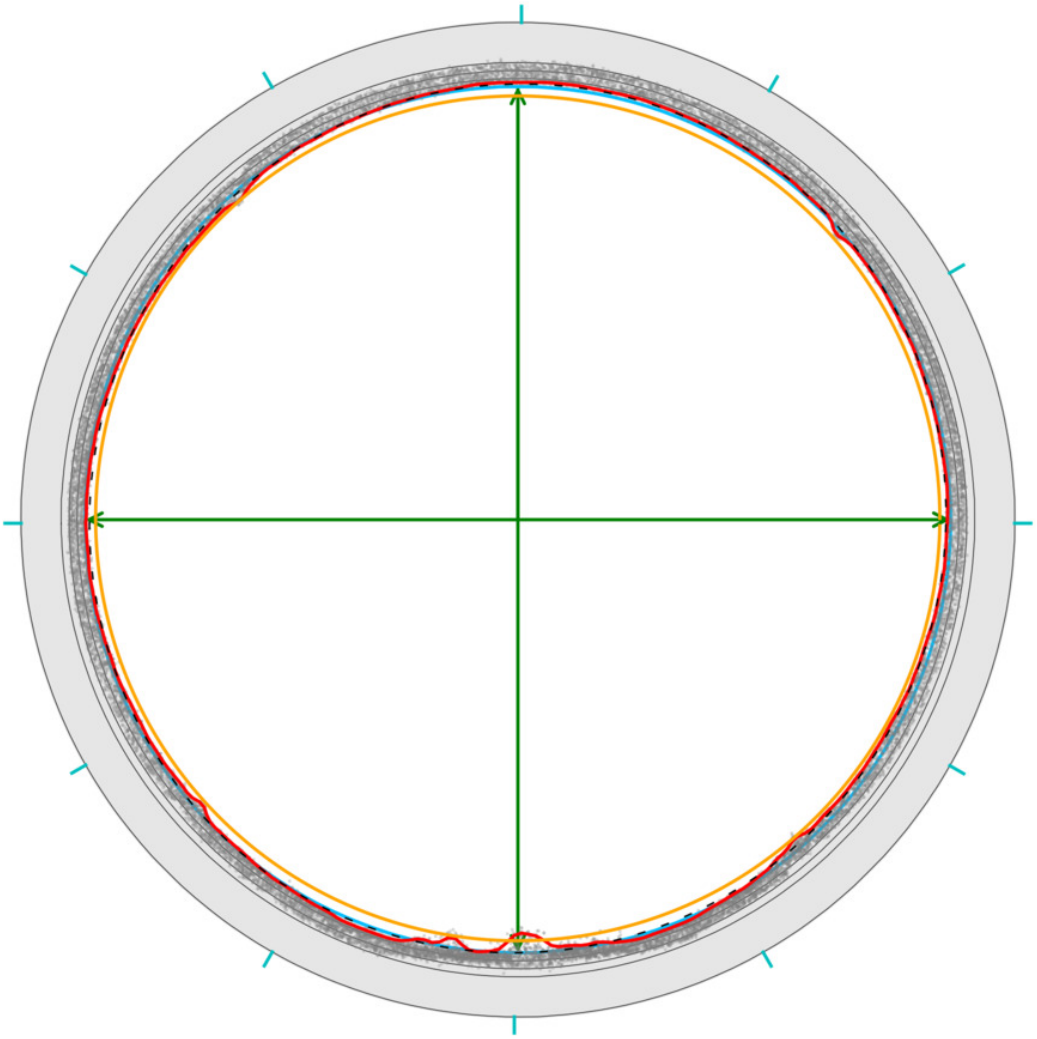
```
Footage    :  691 ft
Width      :  107.4" | 108.0"
Height     :  108.3" | 108.0"

Area       :  9012 sq in
Perimeter  :  345.2 in
Ovality    :  0.8%

Interior Diameter : 98.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 692.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 692 ft
Width : 107.6" | 108.0"
Height : 108.5" | 108.0"

Area : 9077 sq in
Perimeter : 341.0 in
Ovality : 0.8%

Interior Diameter : 105.4"

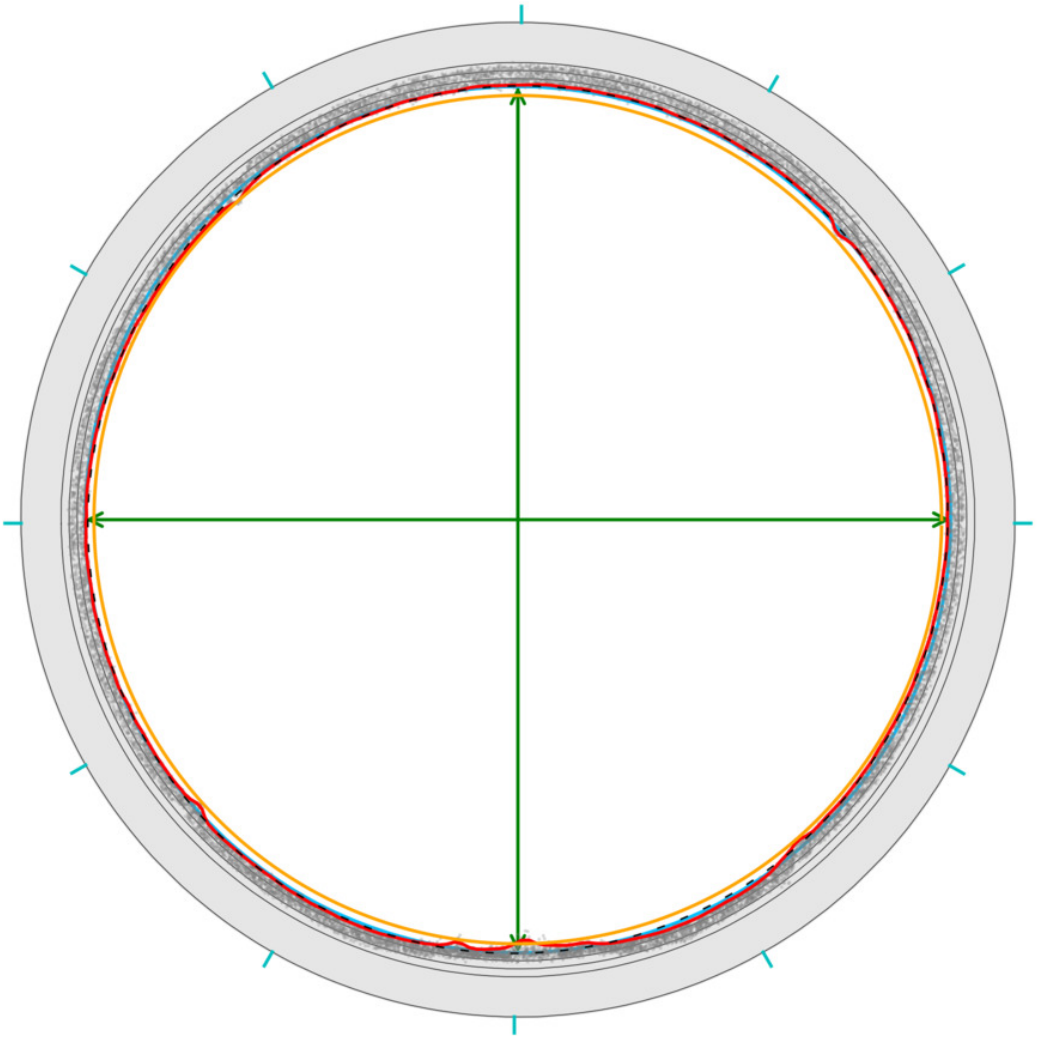
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 693.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



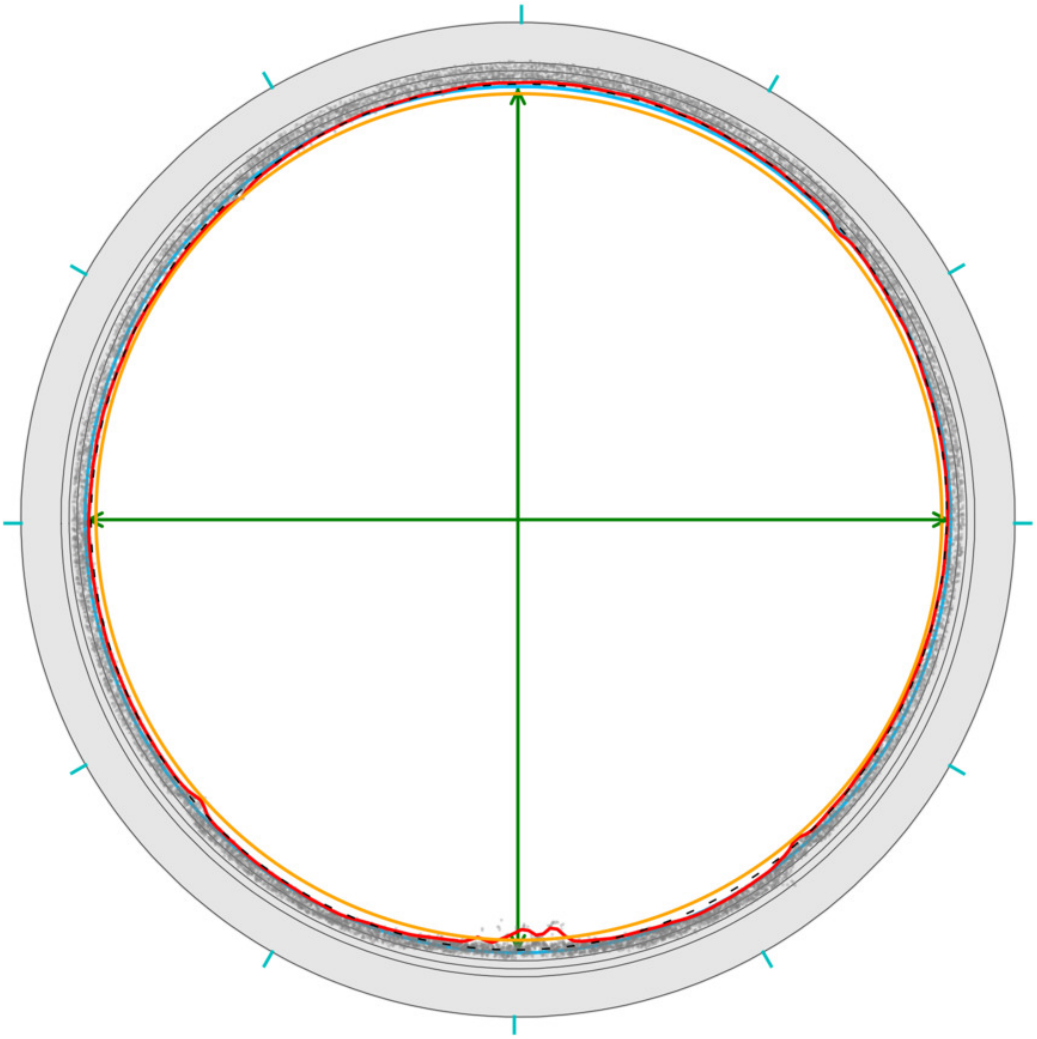
```
Footage   :  693 ft
Width     :  107.6" | 108.0"
Height    :  108.2" | 108.0"

Area      :  9102 sq in
Perimeter :  339.8 in
Ovality   :  0.6%

Interior Diameter : 105.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 694.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 694 ft
Width : 107.2" | 108.0"
Height : 108.5" | 108.0"

Area : 9029 sq in
Perimeter : 339.5 in
Ovality : 0.7%

Interior Diameter : 105.6"

Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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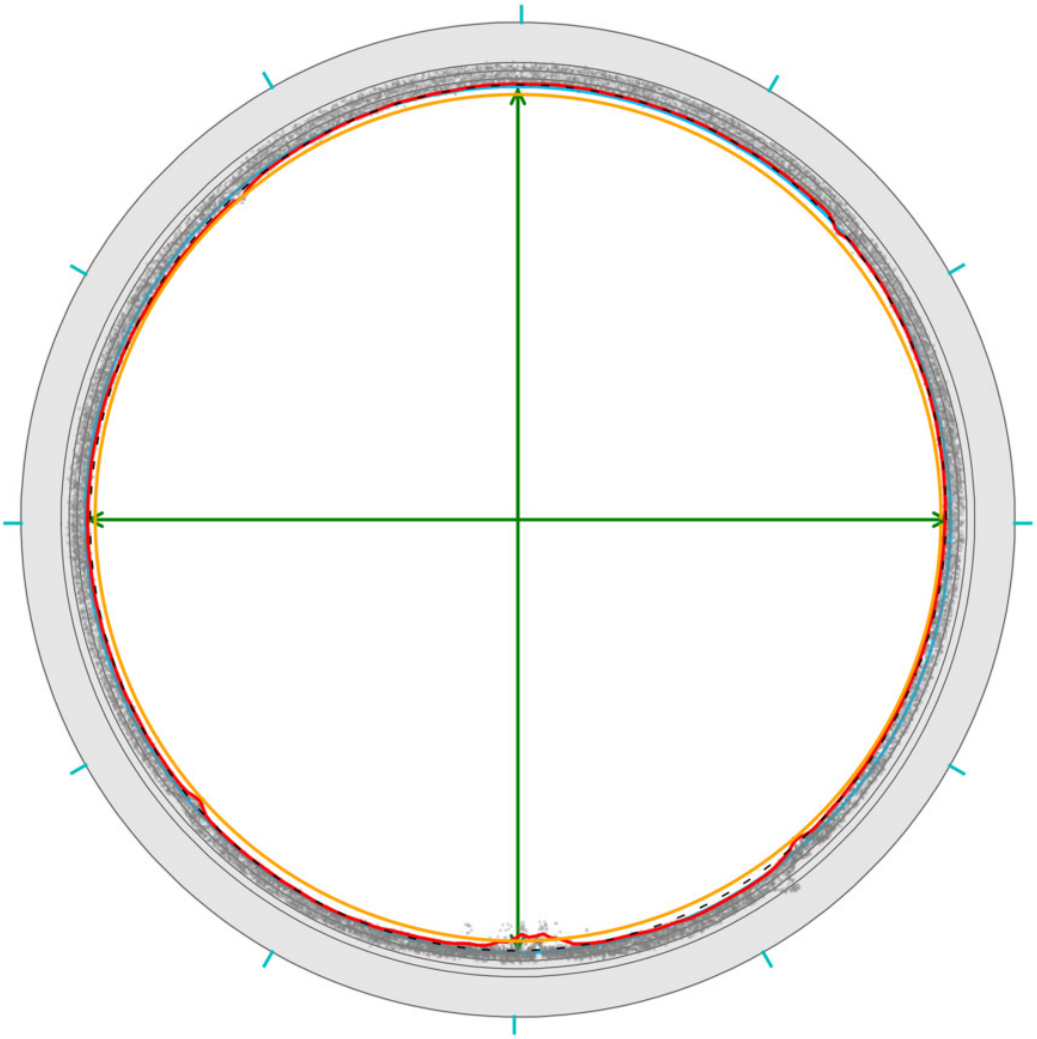
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 695.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 695 ft
Width : 107.0" | 108.0"
Height : 108.3" | 108.0"

Area : 9037 sq in
Perimeter : 338.8 in
Ovality : 0.7%

Interior Diameter : 105.6"

Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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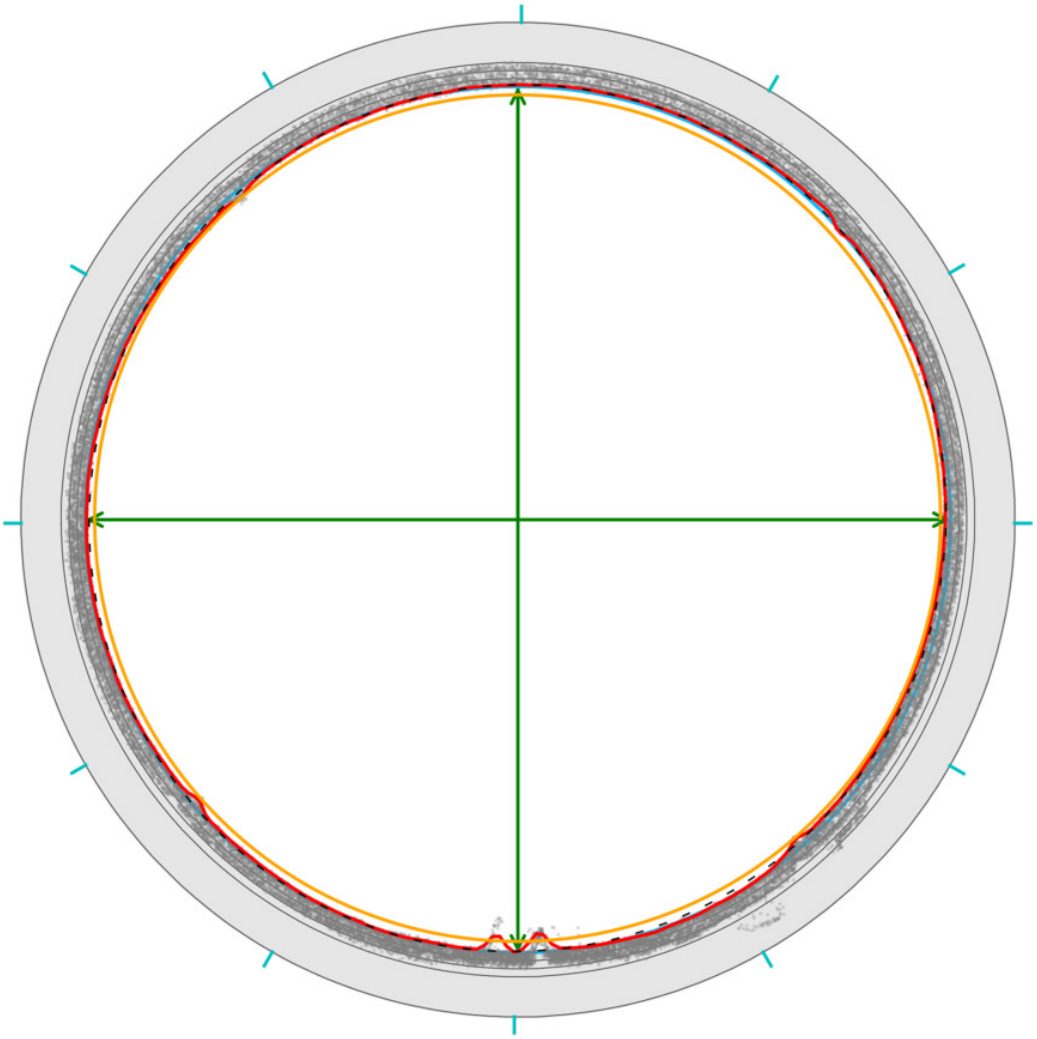
SFX-3D Cross Section Report
Inspection #1 : / , 696.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 696 ft
Width : 107.2" | 108.0"
Height : 108.2" | 108.0"

Area : 9060 sq in
Perimeter : 341.5 in
Ovality : 0.7%

Interior Diameter : 105.6"

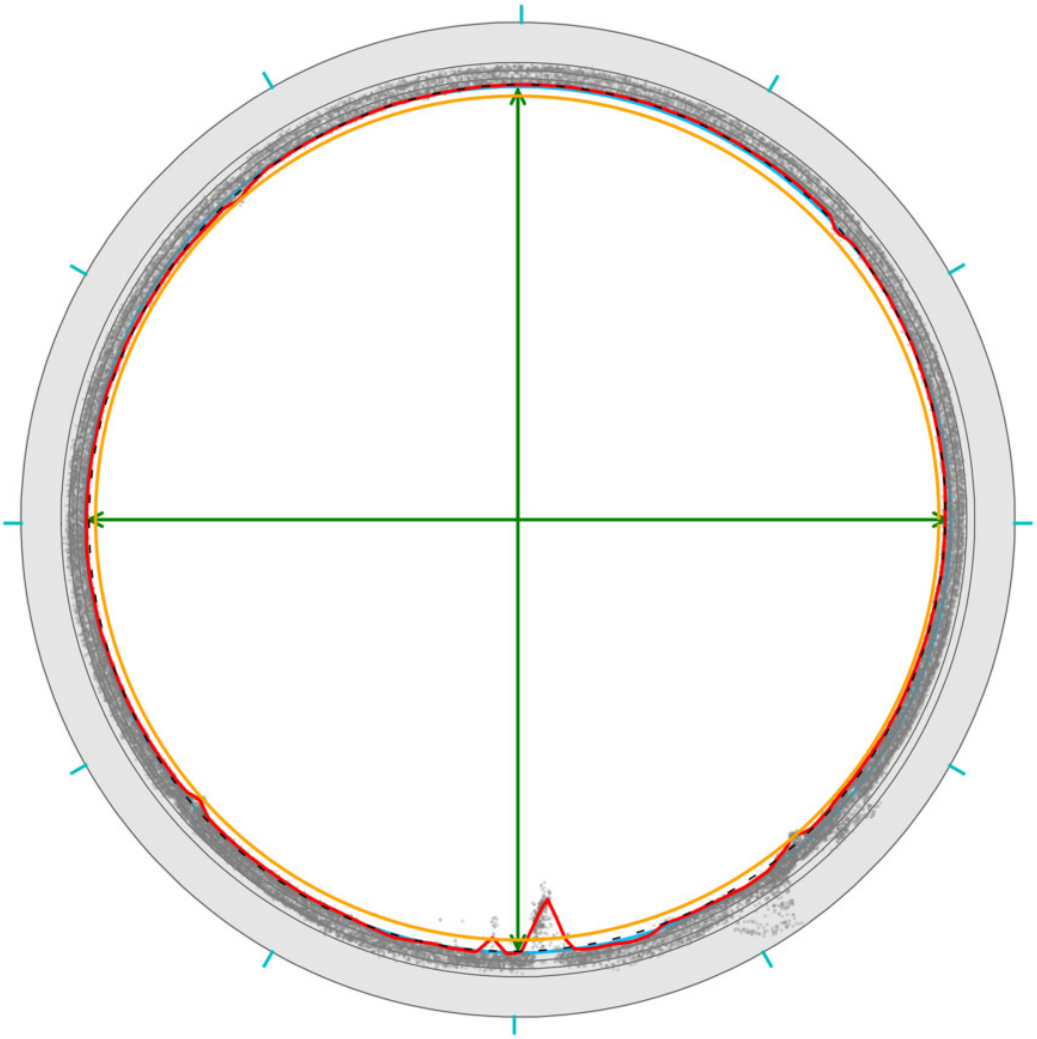
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 697.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 697 ft
Width : 107.2" | 108.0"
Height : 108.2" | 108.0"

Area : 9042 sq in
Perimeter : 348.2 in
Ovality : 0.8%

Interior Diameter : 105.2"

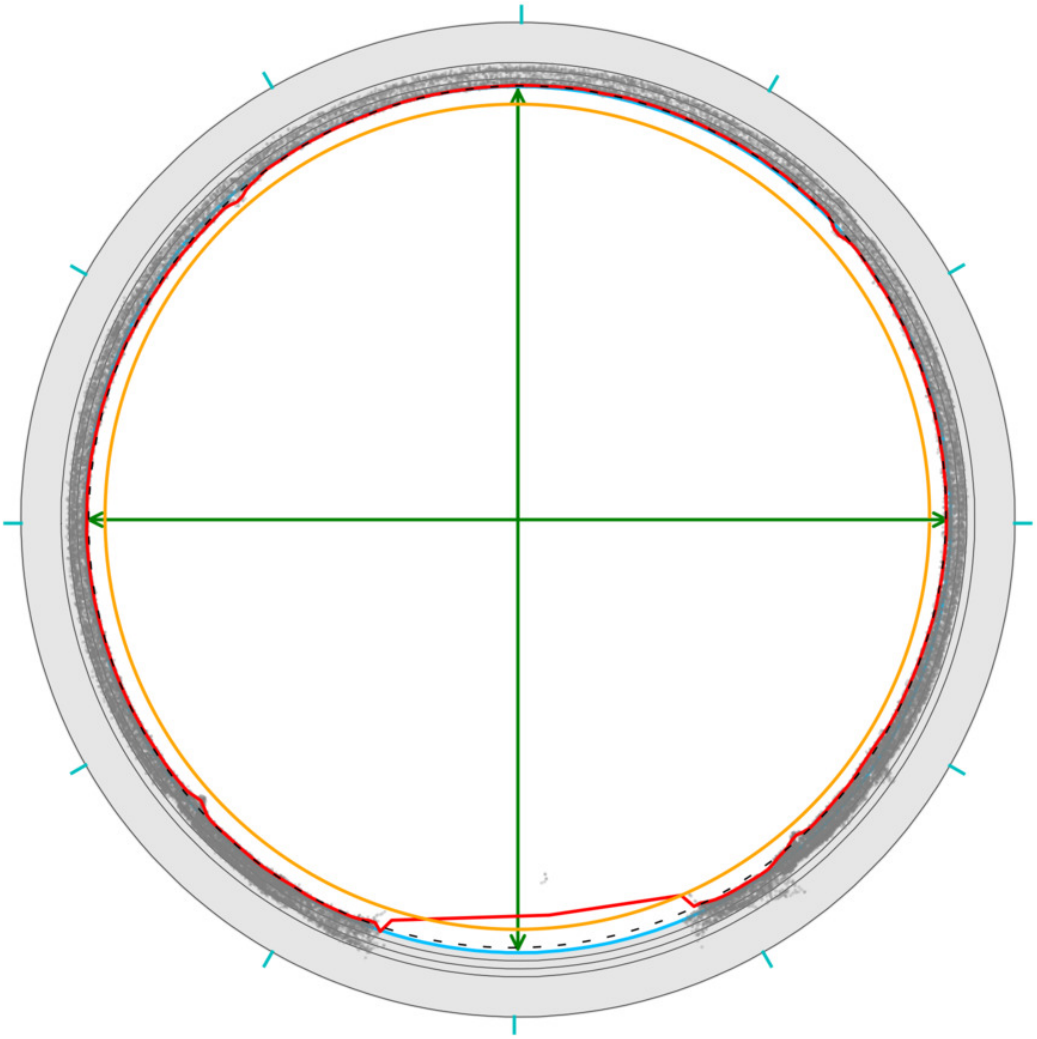
Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 698.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 698 ft
Width : 107.3" | 108.0"
Height : 108.1" | 108.0"

Area : 8902 sq in
Perimeter : 338.5 in
Ovality : 0.6%

Interior Diameter : 102.9"

Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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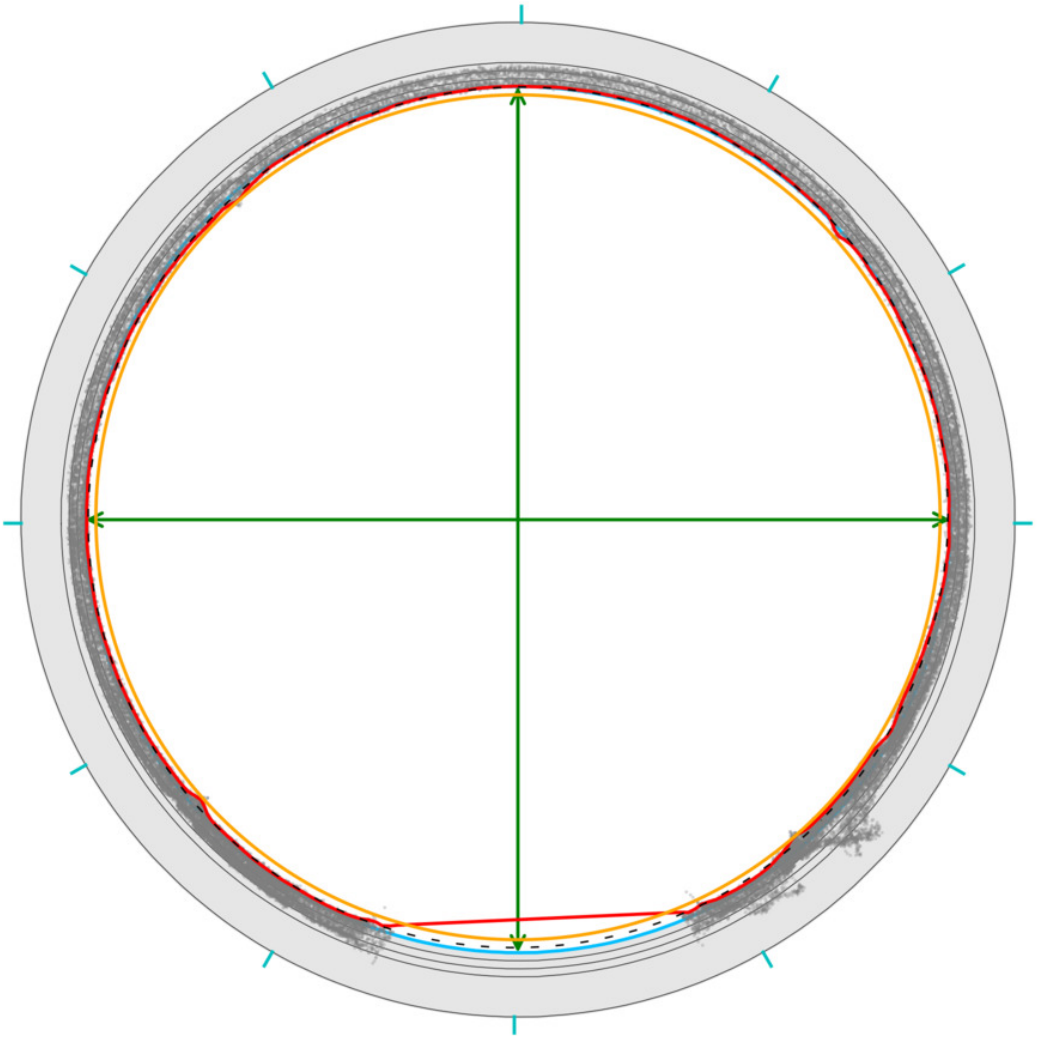
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 699.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 699 ft
Width : 107.6" | 108.0"
Height : 108.0" | 108.0"

Area : 8939 sq in
Perimeter : 337.1 in
Ovality : 0.4%

Interior Diameter : 105.4"

Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

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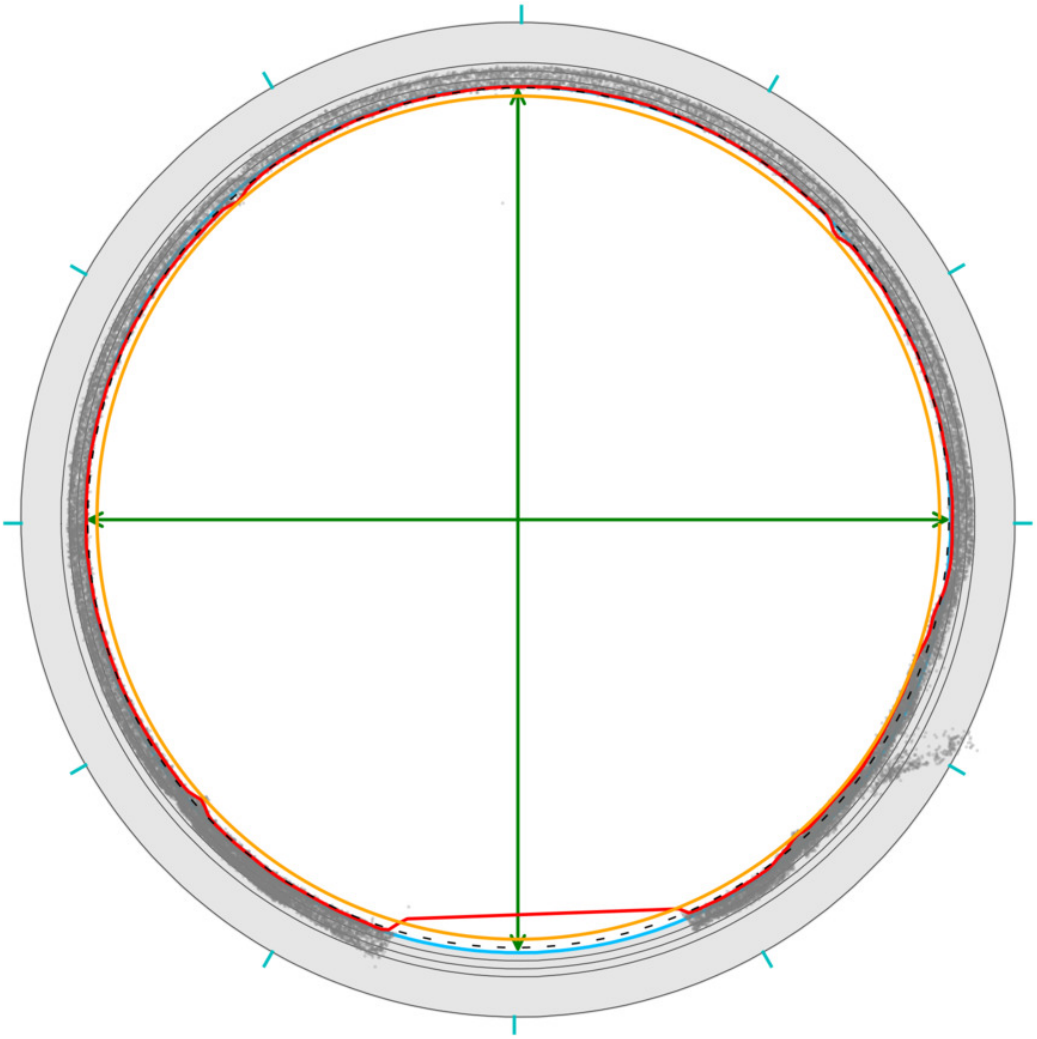
SFX-3D Cross Section Report
Inspection #1 : / , 700.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 700 ft
Width : 108.1" | 108.0"
Height : 108.0" | 108.0"

Area : 8917 sq in
Perimeter : 337.6 in
Ovality : 0.3%

Interior Diameter : 105.2"

Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

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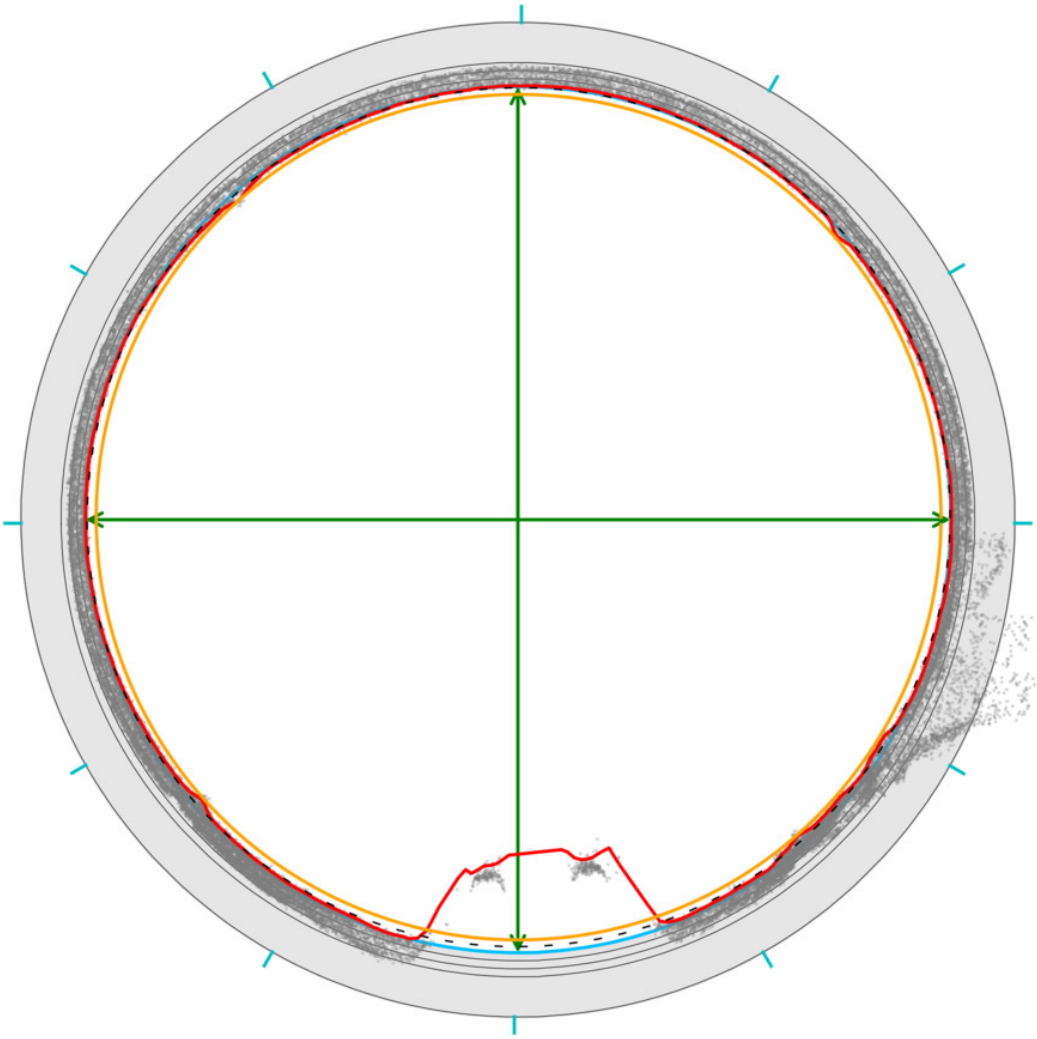
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 701.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  701 ft
Width     :  108.1" | 108.0"
Height    :  108.1" | 108.0"

Area      :  8806 sq in
Perimeter :  349.1 in
Ovality   :  0.3%

Interior Diameter : 105.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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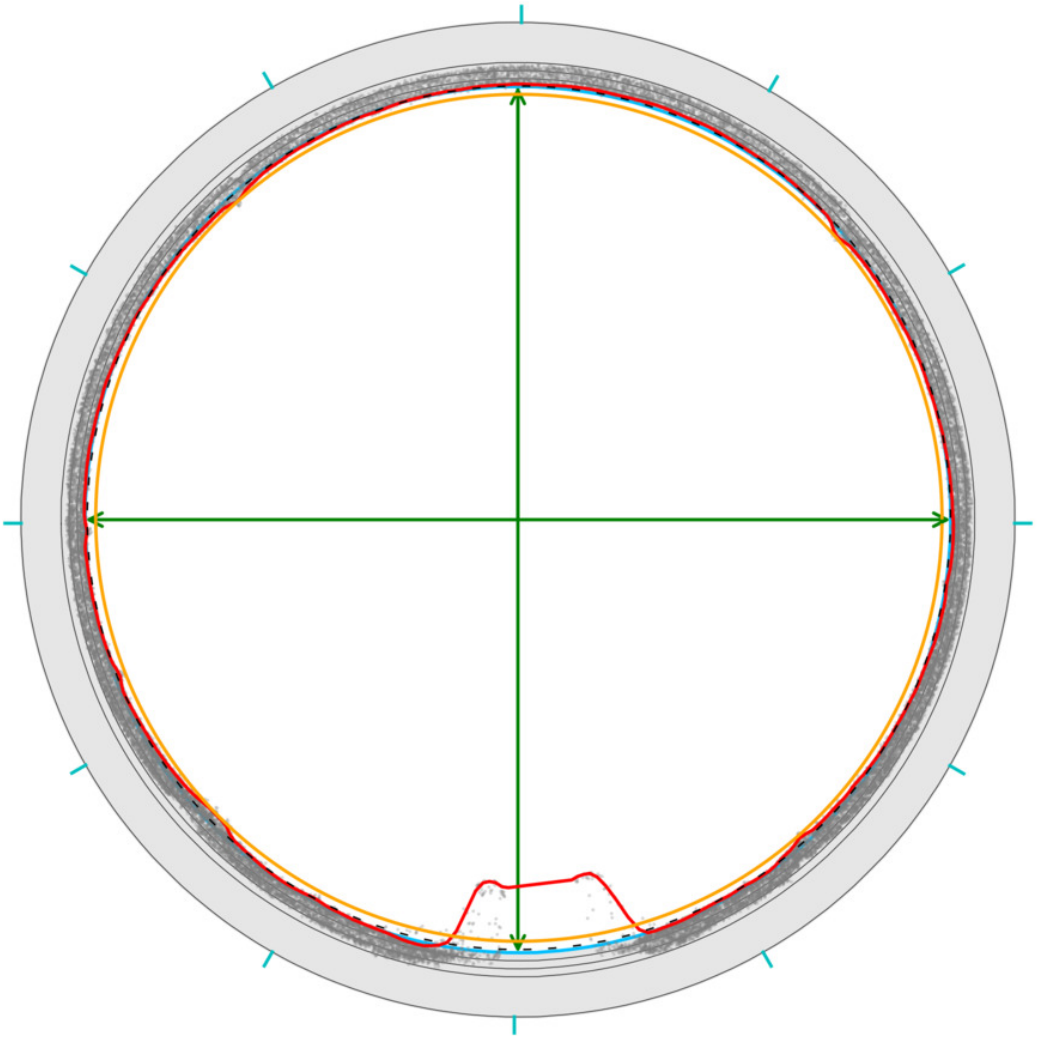
SFX-3D Cross Section Report
Inspection #1 : / , 702.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



Footage : 702 ft
Width : 108.4" | 108.0"
Height : 108.3" | 108.0"

Area : 8951 sq in
Perimeter : 347.4 in
Ovality : 0.1%

Interior Diameter : 105.6"

Profile Offsets : 1.0"

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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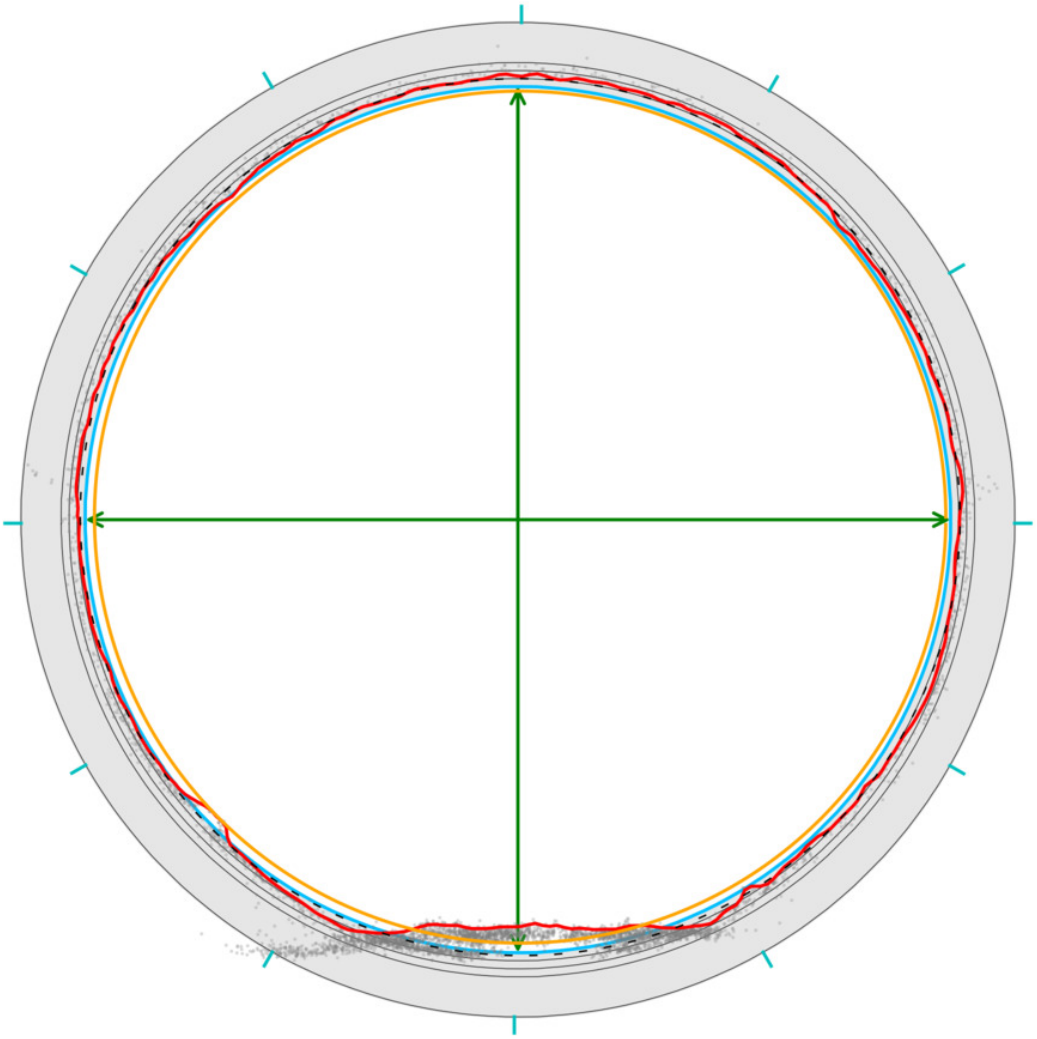
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 703.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  703 ft
Width     :  110.6" | 108.0"
Height    :  109.4" | 108.0"

Area      :  9344 sq in
Perimeter :  347.4 in
Ovality   :  0.3%

Interior Diameter : 106.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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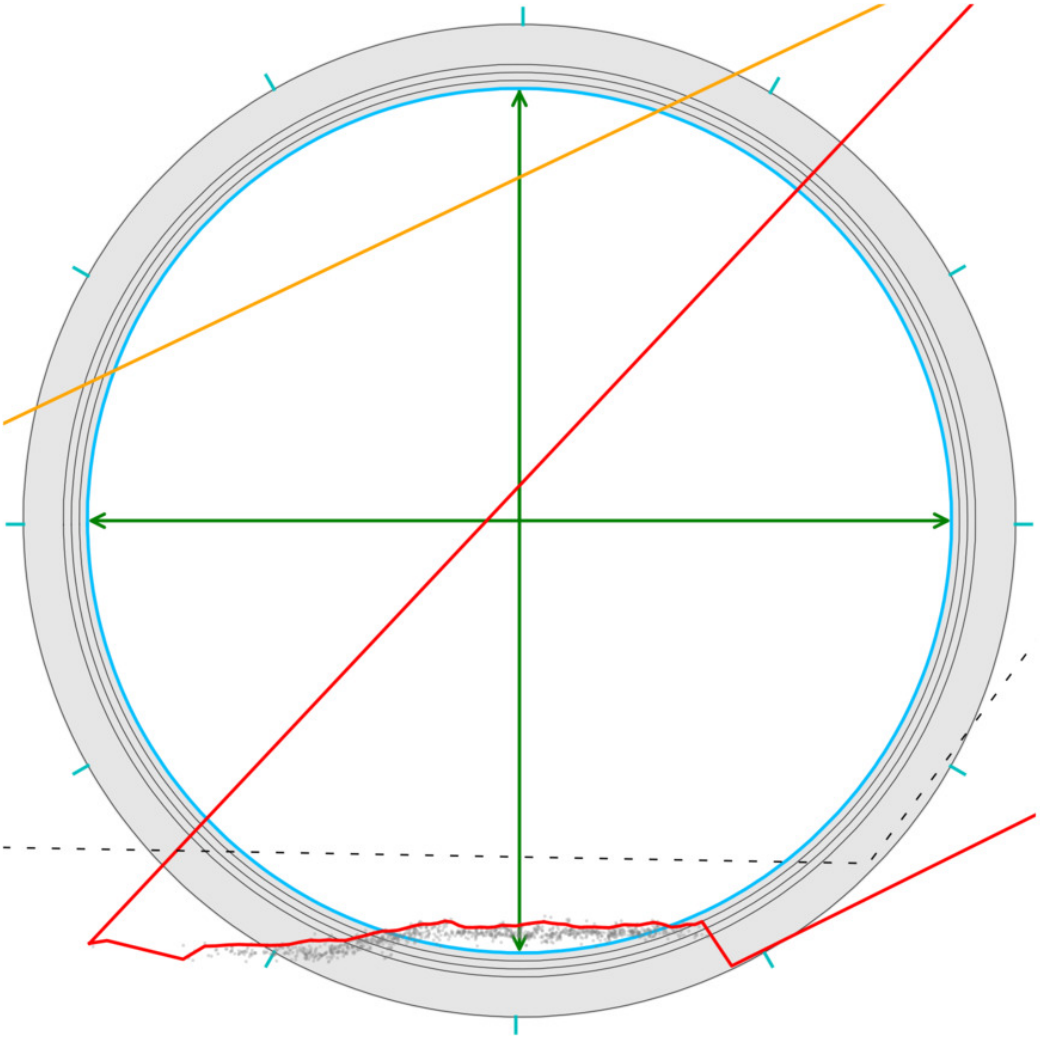
SFX-3D Cross Section Report
Inspection #1 : / , 704.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  704 ft
Width     :  137.2" | 108.0"
Height    :  128.4" | 108.0"

Area      :  8393 sq in
Perimeter :  437.7 in
Ovality   :  57.1%

Interior Diameter : 657100.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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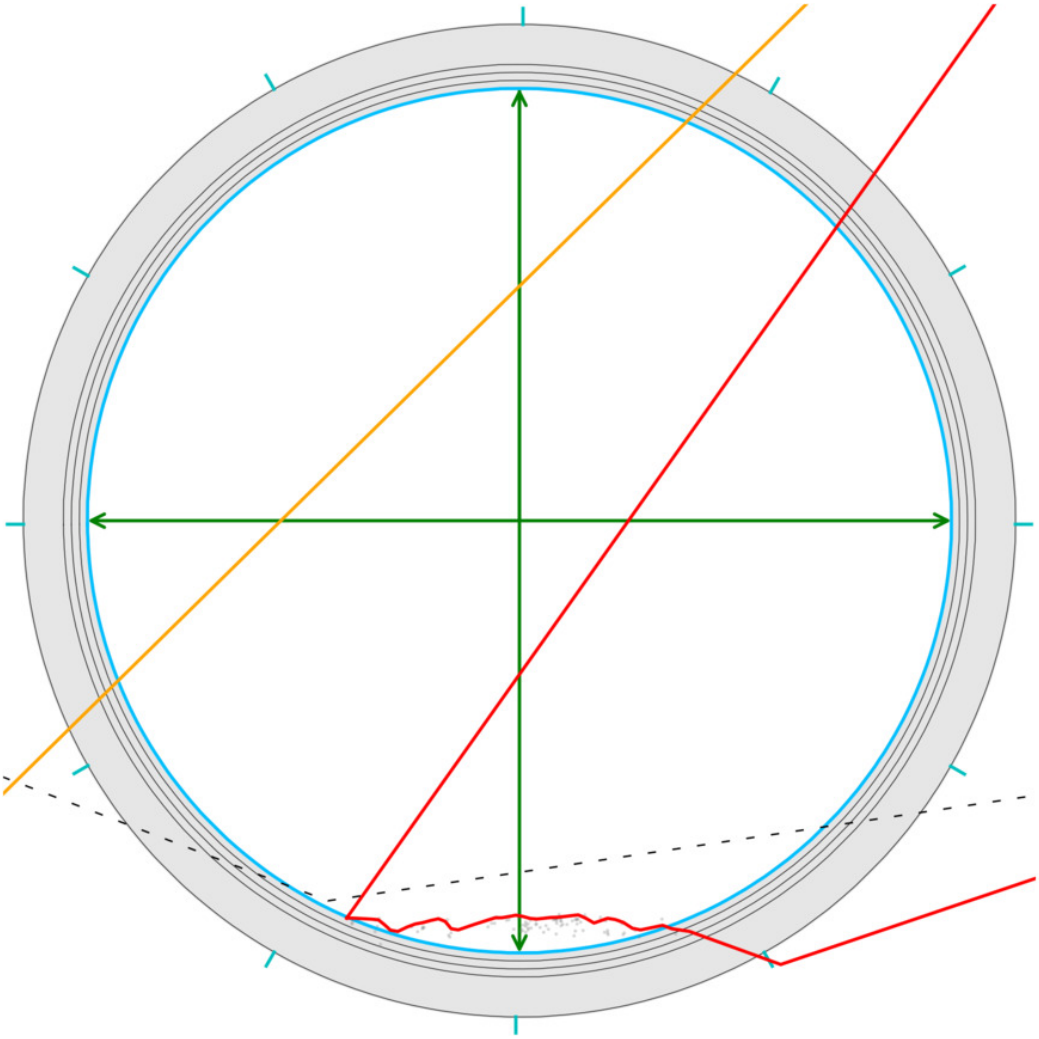
SFX-3D Cross Section Report
Inspection #1 : / , 705.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  705 ft
Width     :  127.1" | 108.0"
Height    :  131.7" | 108.0"

Area      :  18477 sq in
Perimeter :  438.8 in
Ovality   :  57.2%

Interior Diameter : 766420.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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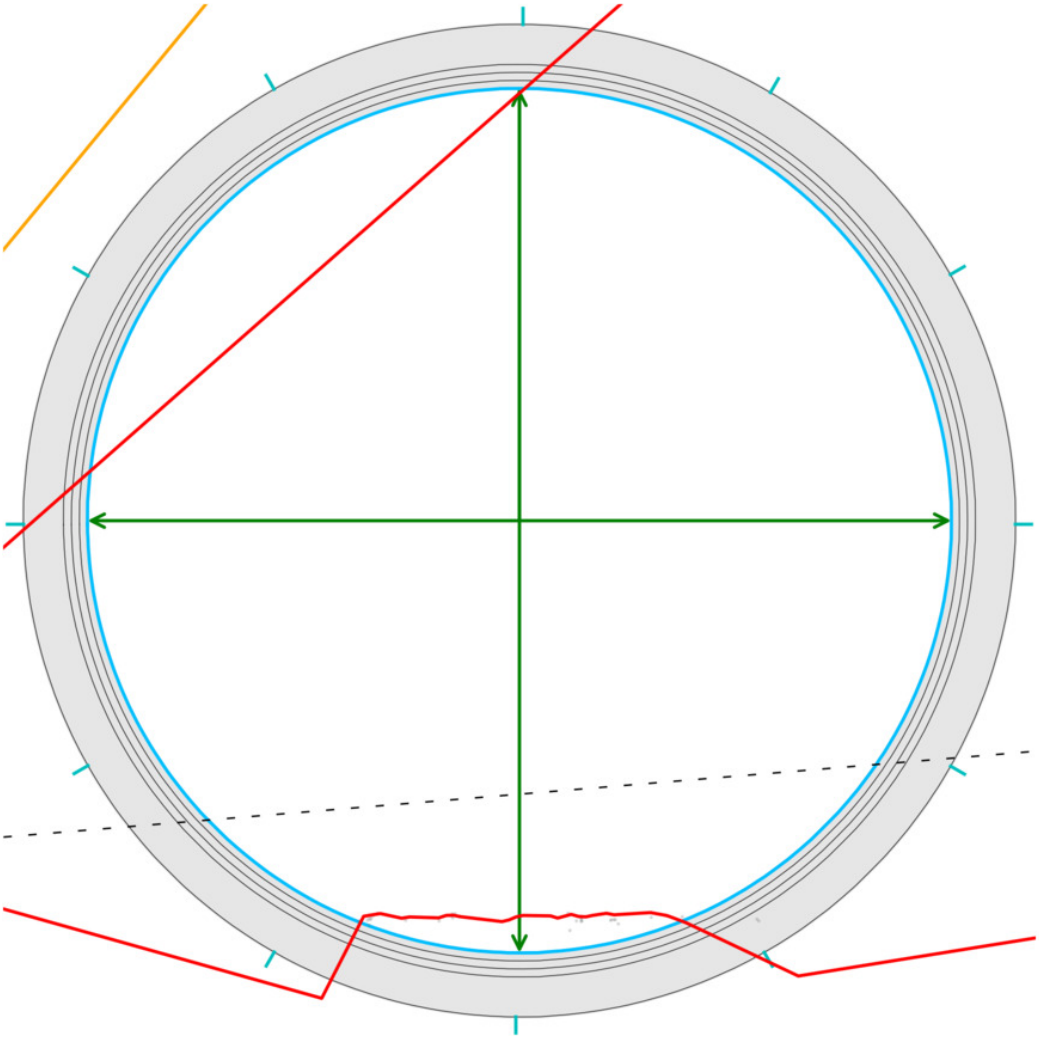
SFX-3D Cross Section Report
Inspection #1 : / , 706.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  706 ft
Width     :  211.8" | 108.0"
Height    :  169.9" | 108.0"

Area      :  19378 sq in
Perimeter :  658.6 in
Ovality   :  57.2%

Interior Diameter : 1663985.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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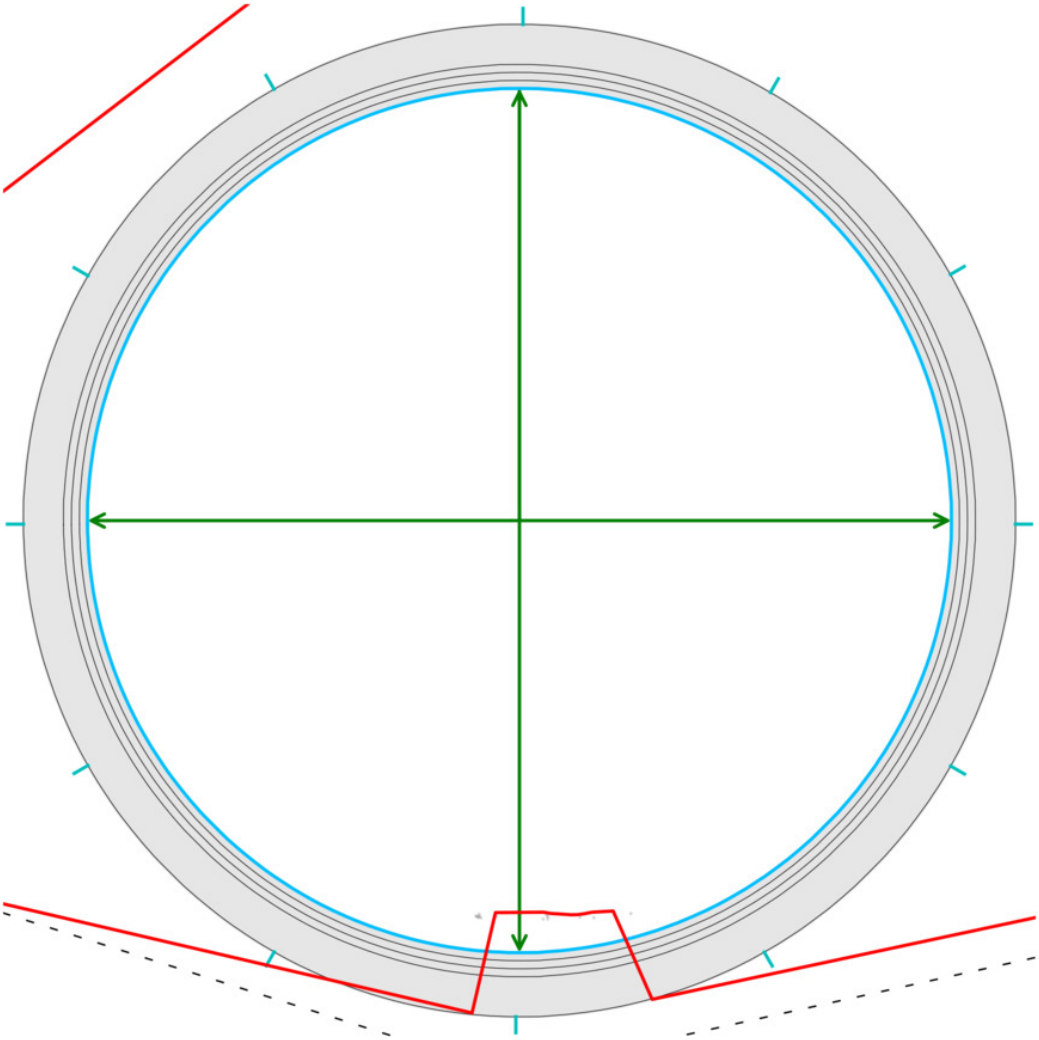
SFX-3D Cross Section Report
Inspection #1 : / , 707.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  707 ft
Width     :  245.1" | 108.0"
Height    :  208.9" | 108.0"

Area      :  28140 sq in
Perimeter :  769.5 in
Ovality   :  57.1%

Interior Diameter : 520967.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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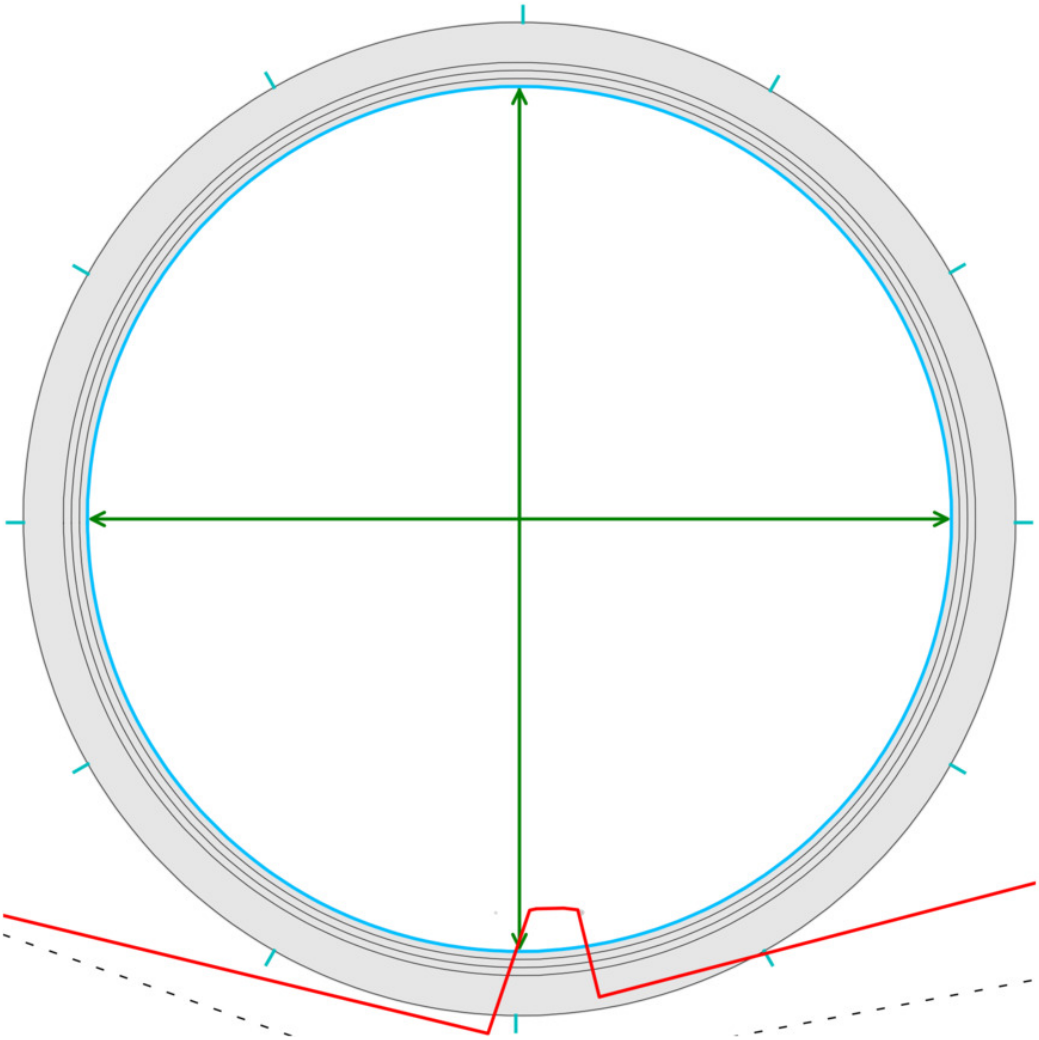
SFX-3D Cross Section Report
Inspection #1 : / , 708.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  708 ft
Width     :  263.9" | 108.0"
Height    :  232.9" | 108.0"

Area      :  34673 sq in
Perimeter :  868.1 in
Ovality   :  57.1%

Interior Diameter : 521581.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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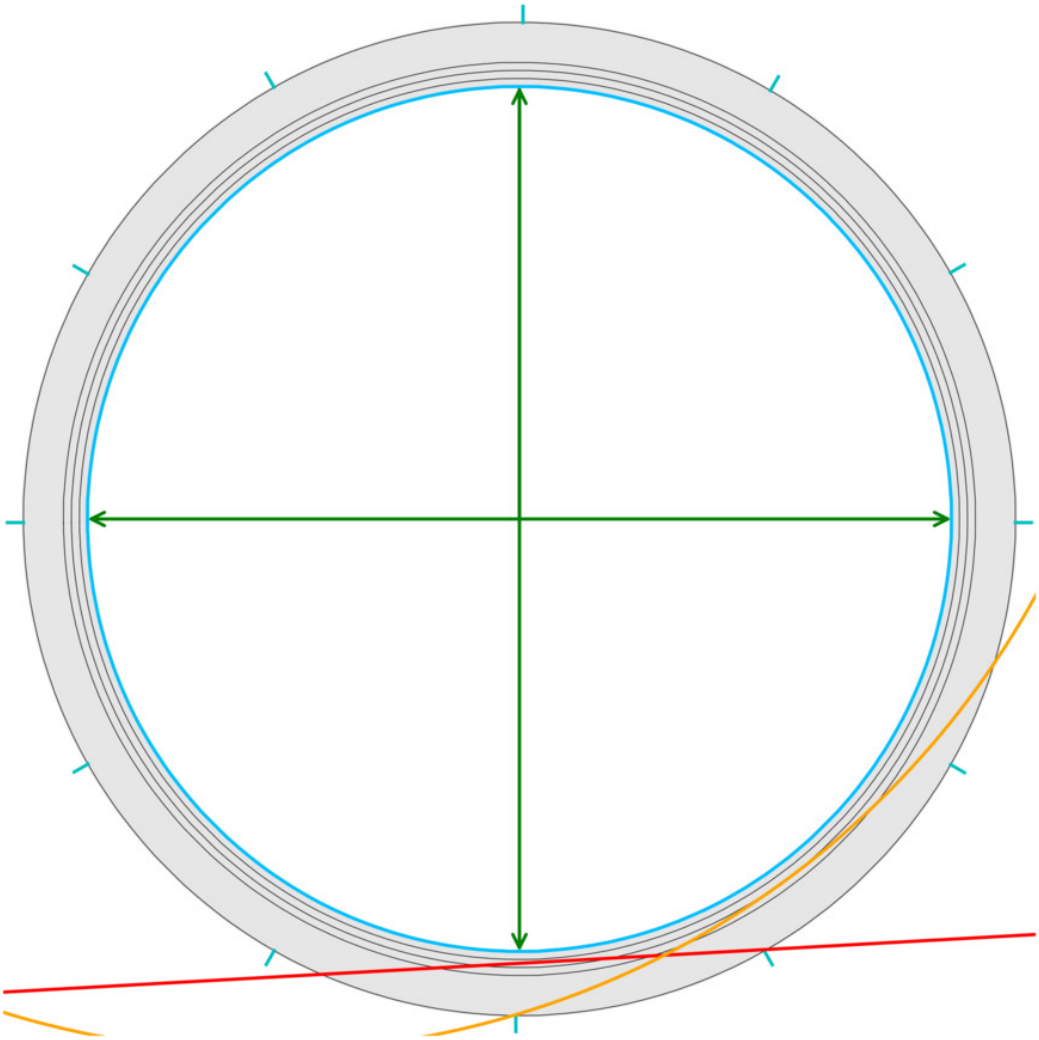
SFX-3D Cross Section Report
Inspection #1 : / , 709.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  709 ft
Width     :  299.3" | 108.0"
Height    :  242.7" | 108.0"

Area      :  53901 sq in
Perimeter :  994.1 in
Ovality   :  18.4%

Interior Diameter : 220.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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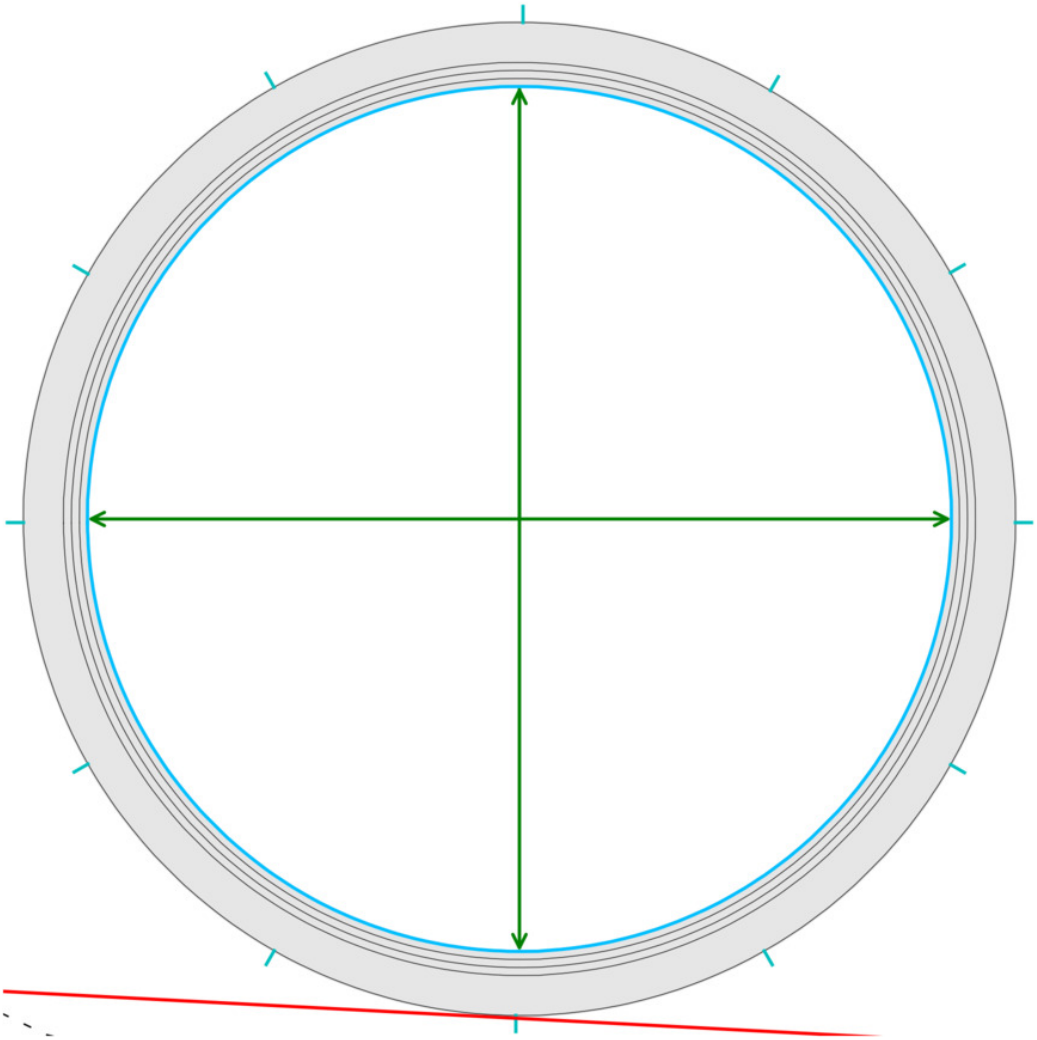
SFX-3D Cross Section Report
Inspection #1 : / , 710.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



```
Footage   :  710 ft
Width     :  323.4" | 108.0"
Height    :  278.4" | 108.0"

Area      :  62821 sq in
Perimeter :  1061.0 in
Ovality   :  57.1%

Interior Diameter : 346086.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
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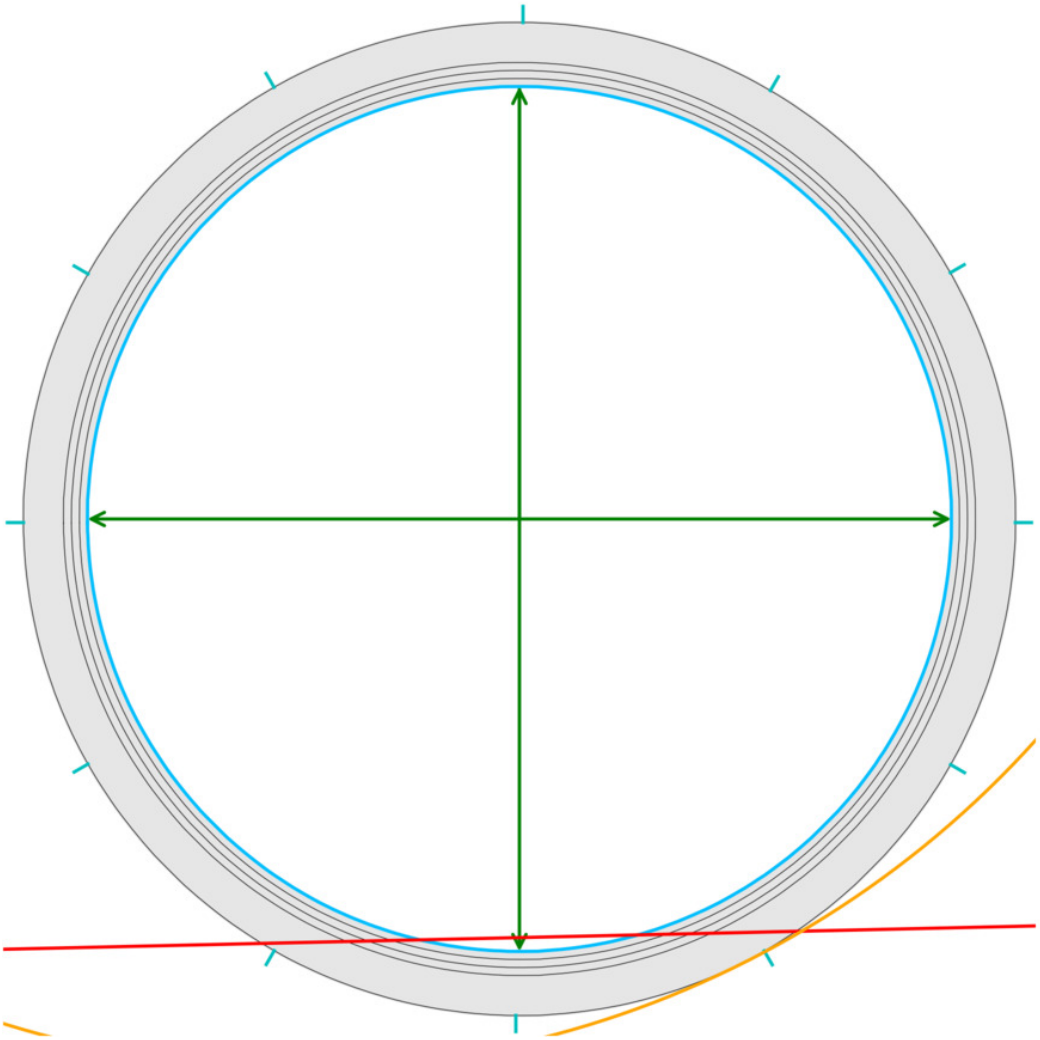
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 711.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



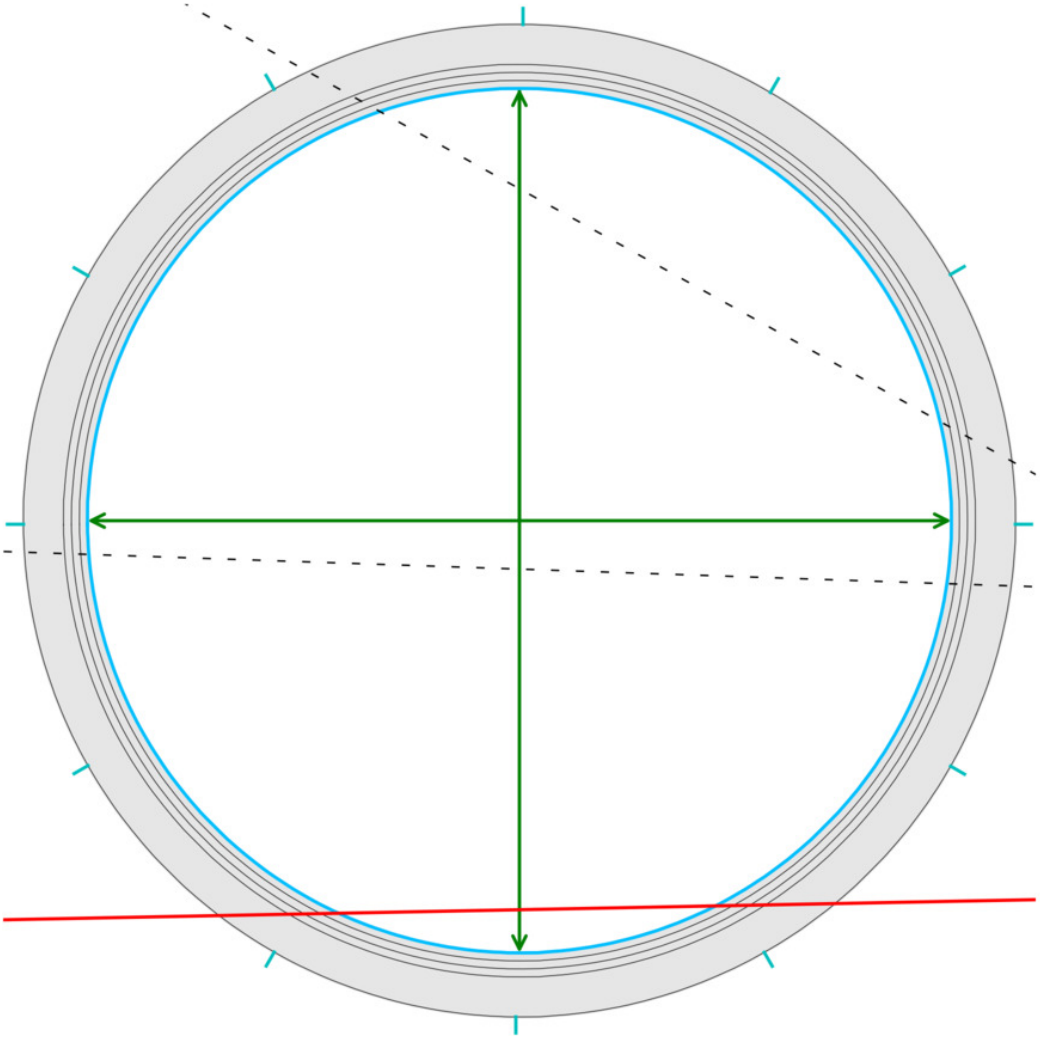
```
Footage   :  711 ft
Width     :  335.5" | 108.0"
Height    :  275.1" | 108.0"

Area      :  66374 sq in
Perimeter :  1087.9 in
Ovality   :  8.0%

Interior Diameter : 248.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 712.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



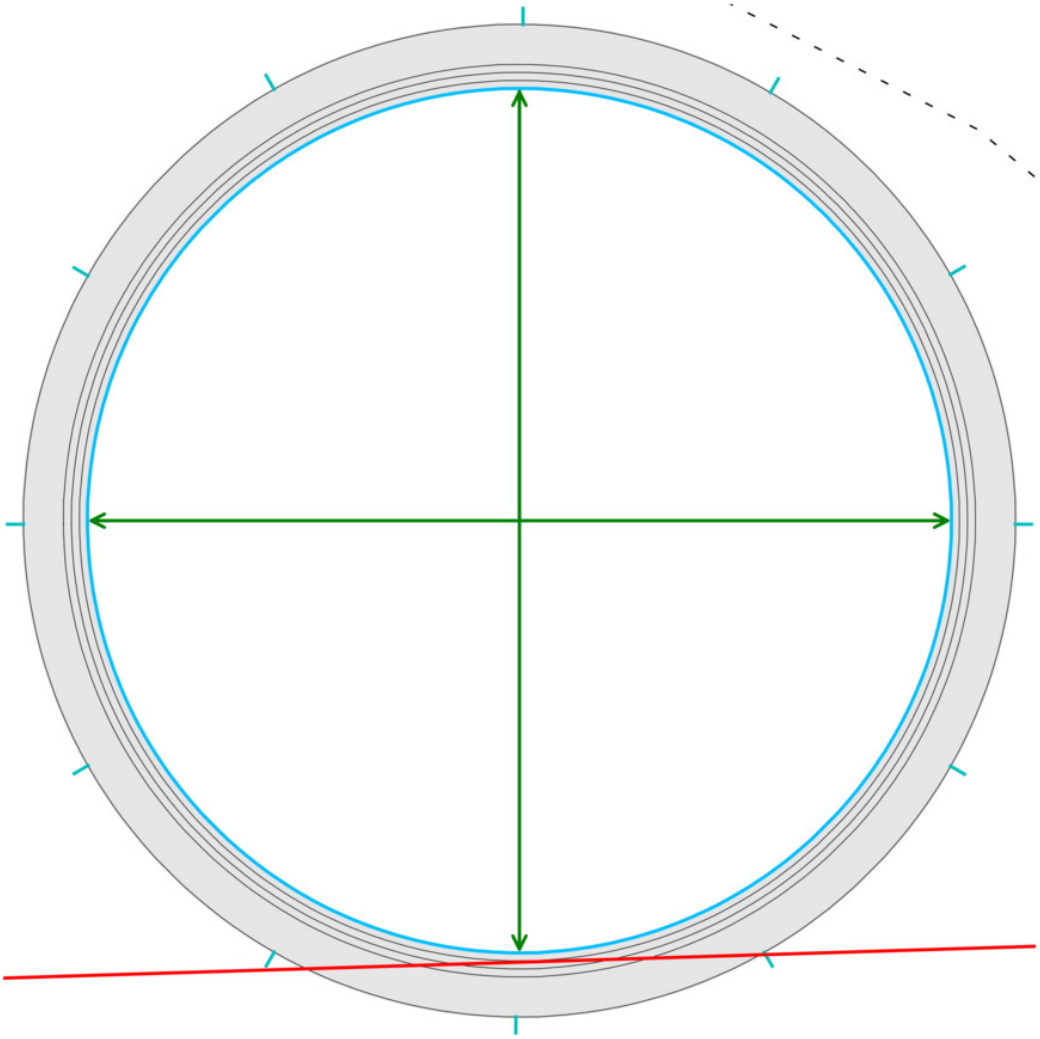
```
Footage   :  712 ft
Width     :  415.1" | 108.0"
Height    :  198.1" | 108.0"

Area      :  44984 sq in
Perimeter :  1152.4 in
Ovality   :  57.2%

Interior Diameter : 7482584.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 713.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



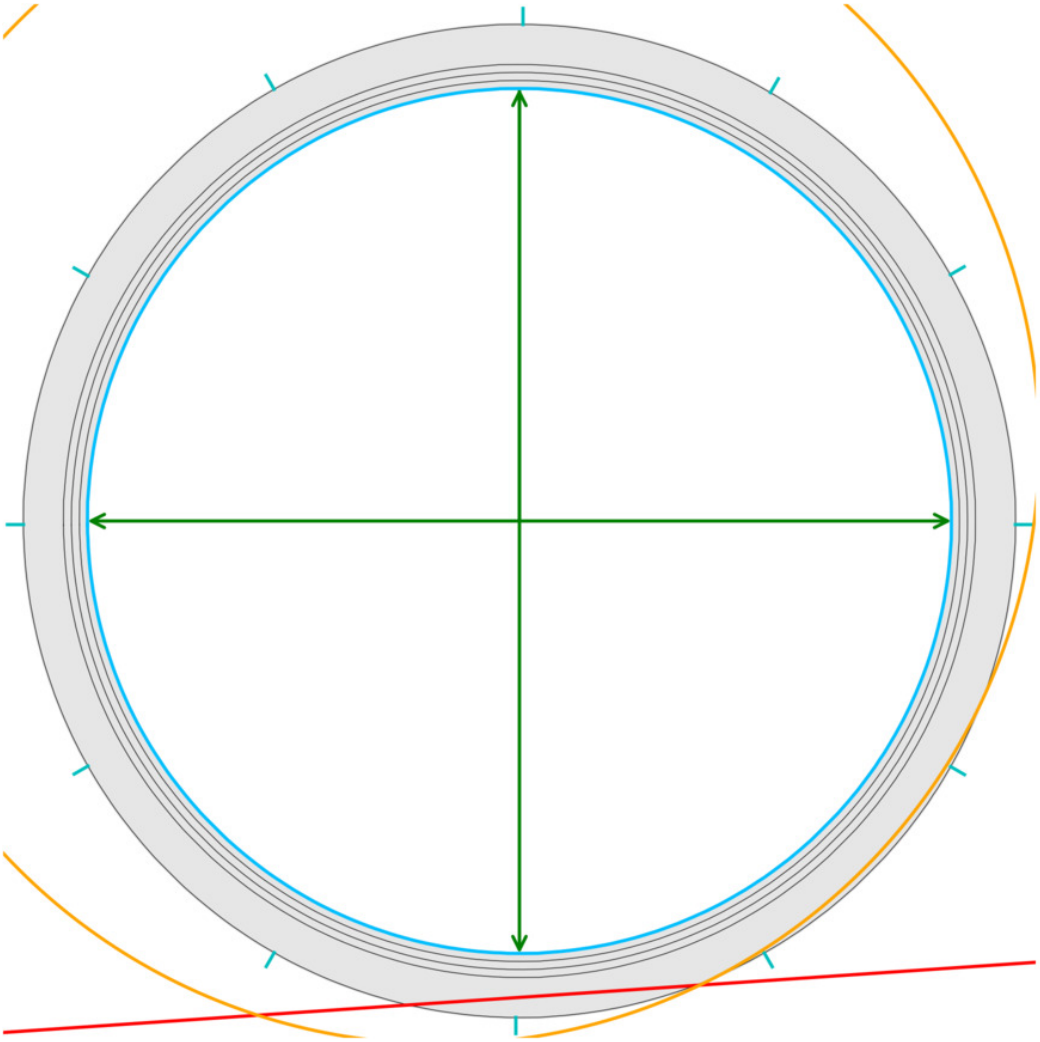
```
Footage   :  713 ft
Width     :  456.8" | 108.0"
Height    :  202.2" | 108.0"

Area      :  46841 sq in
Perimeter :  1264.4 in
Ovality   :  57.1%

Interior Diameter : 320117.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 714.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



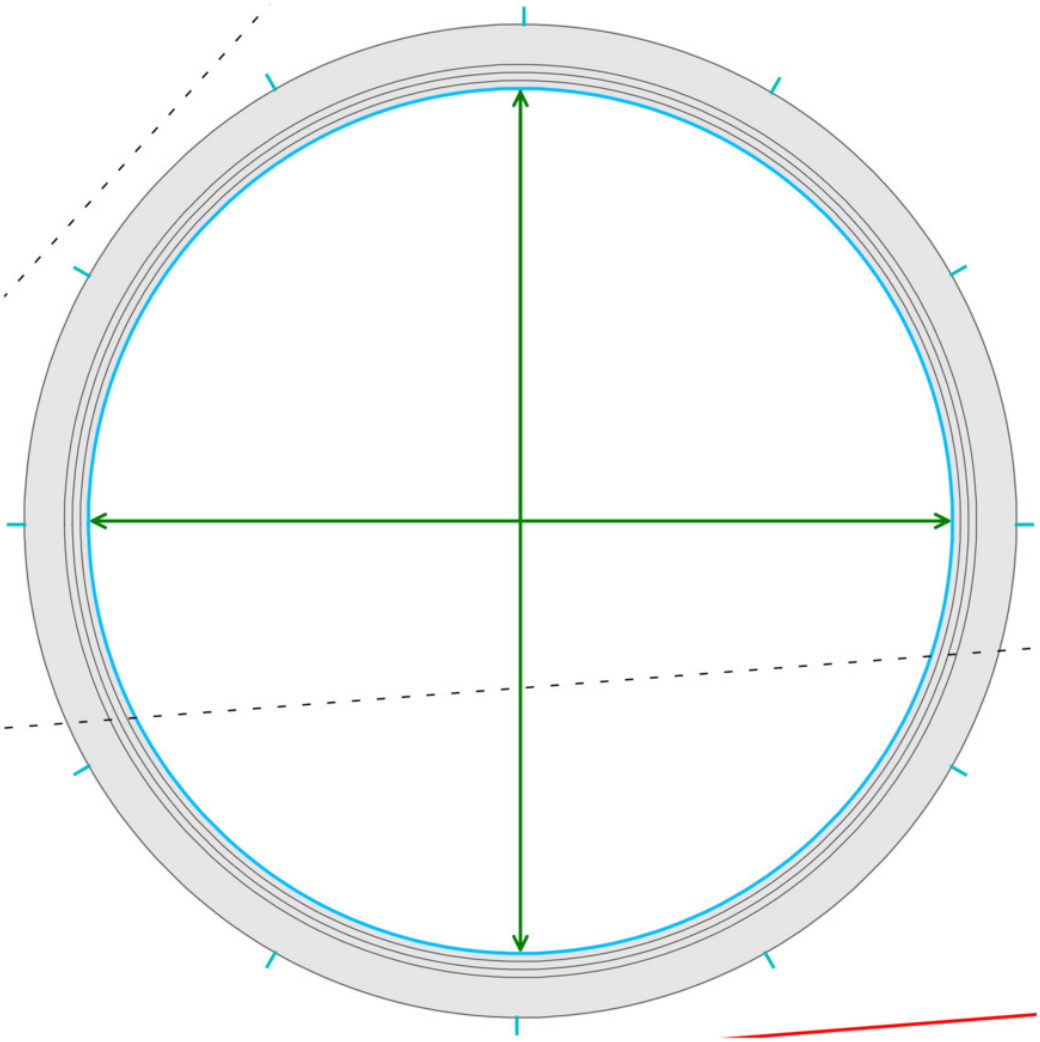
```
Footage   :  714 ft
Width     :  330.1" | 108.0"
Height    :  198.4" | 108.0"

Area      :  42671 sq in
Perimeter :  978.8 in
Ovality   :  12.5%

Interior Diameter : 149.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 715.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



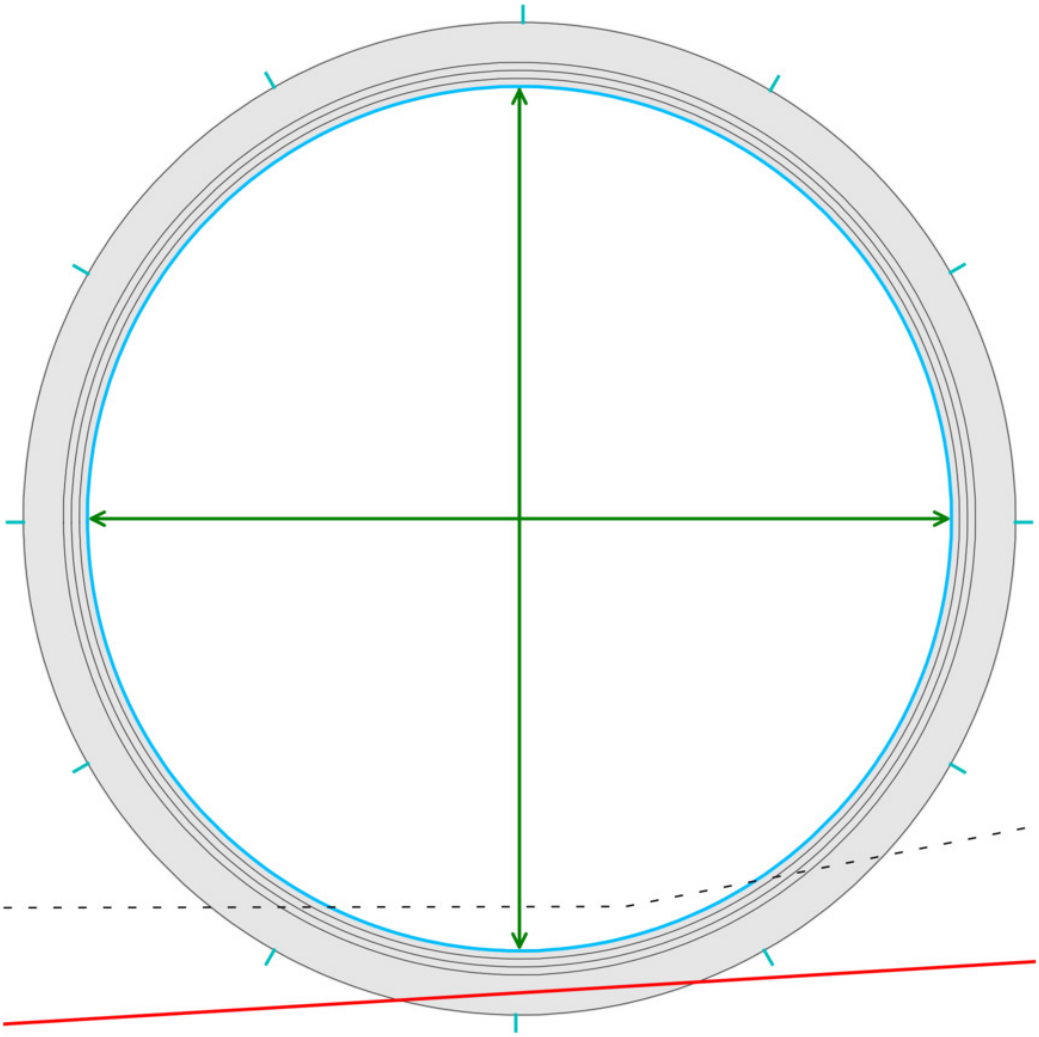
```
Footage   :  715 ft
Width     :  411.8" | 108.0"
Height    :  219.1" | 108.0"

Area      :  52863 sq in
Perimeter :  1172.0 in
Ovality   :  57.2%

Interior Diameter : 4921410.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 716.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



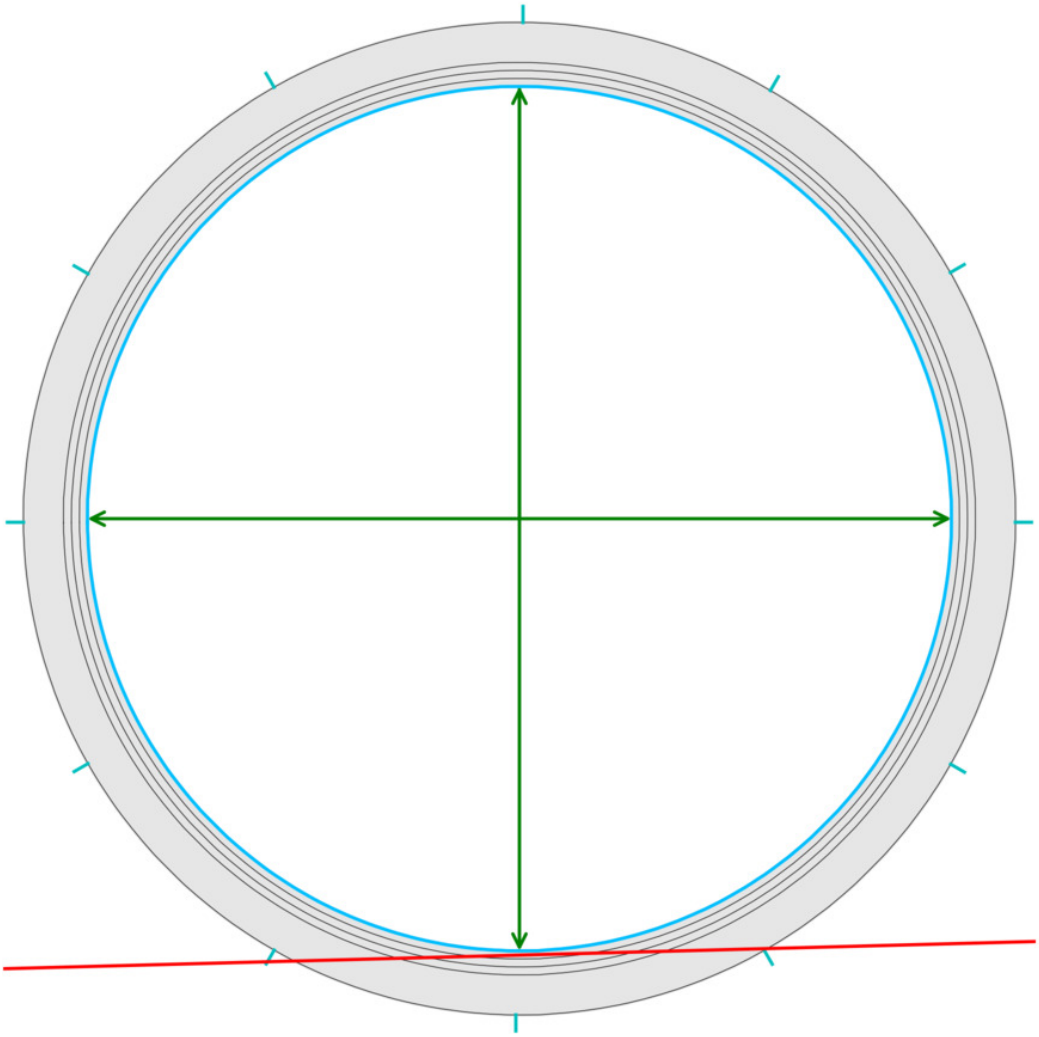
```
Footage   :  716 ft
Width     :  447.5" | 108.0"
Height    :  202.5" | 108.0"

Area      :  51346 sq in
Perimeter :  1195.4 in
Ovality   :  57.1%

Interior Diameter : 339611.6"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 717.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



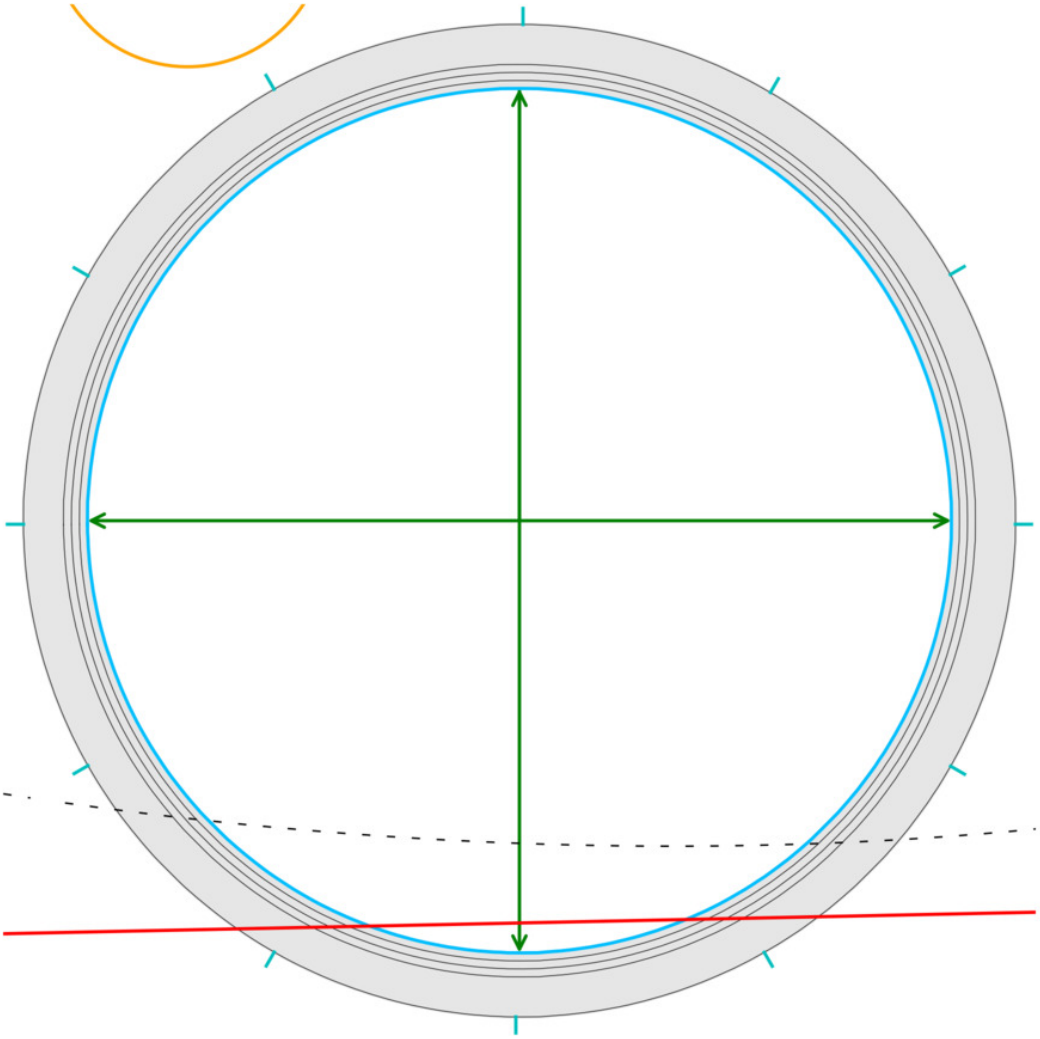
```
Footage   :  717 ft
Width     :  486.3" | 108.0"
Height    :  265.8" | 108.0"

Area      :  81003 sq in
Perimeter :  1470.6 in
Ovality   :  56.9%

Interior Diameter : 1458573.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 718.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



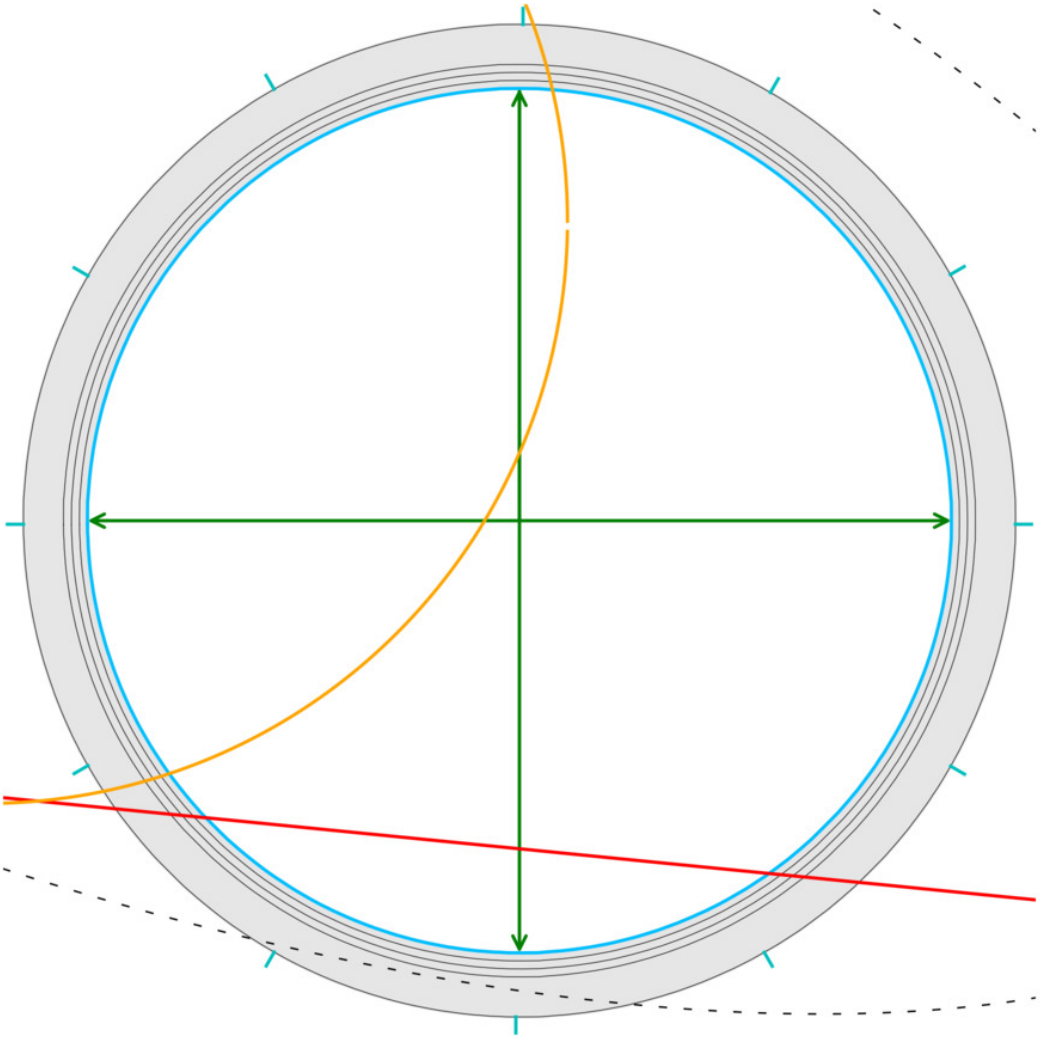
```
Footage   :  718 ft
Width     :  526.7" | 108.0"
Height    :  140.1" | 108.0"

Area      :  90009 sq in
Perimeter :  1850.9 in
Ovality   :  33.8%

Interior Diameter : 34.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 719.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



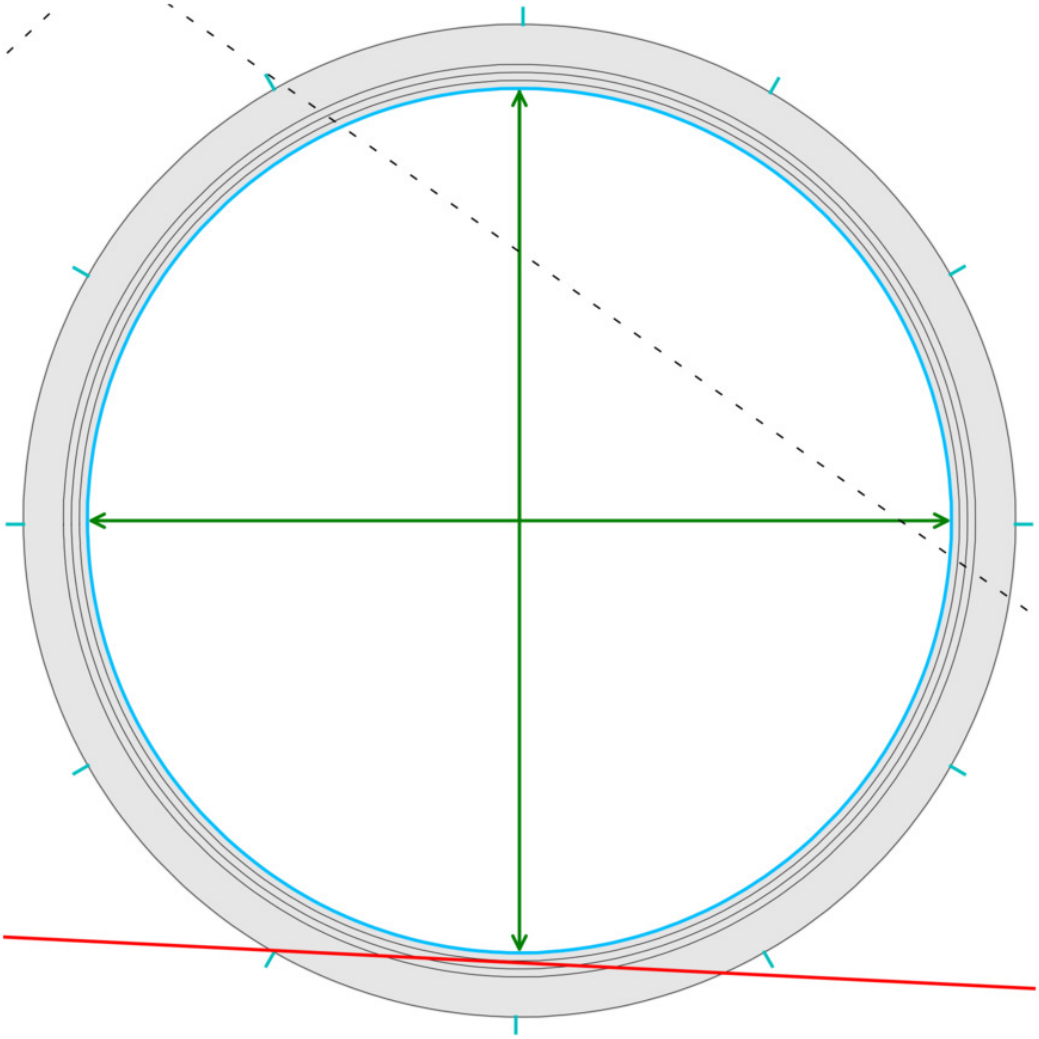
```
Footage   :  719 ft
Width     :  538.3" | 108.0"
Height    :  132.6" | 108.0"

Area      :  62123 sq in
Perimeter :  1669.3 in
Ovality   :  36.7%

Interior Diameter : 145.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 720.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



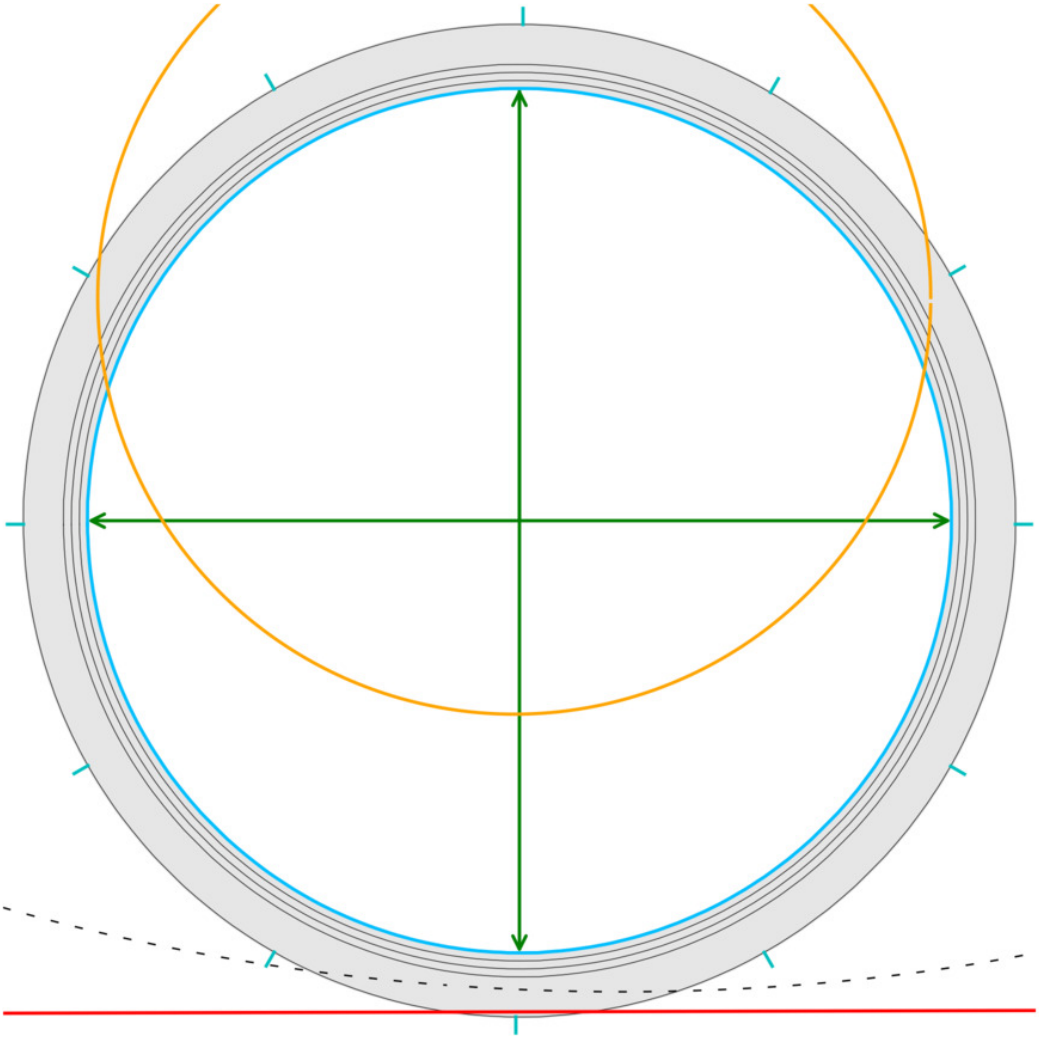
```
Footage   :  720 ft
Width     :  491.8" | 108.0"
Height    :  315.6" | 108.0"

Area      :  56947 sq in
Perimeter :  1956.5 in
Ovality   :  57.2%

Interior Diameter : 7024737.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 721.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



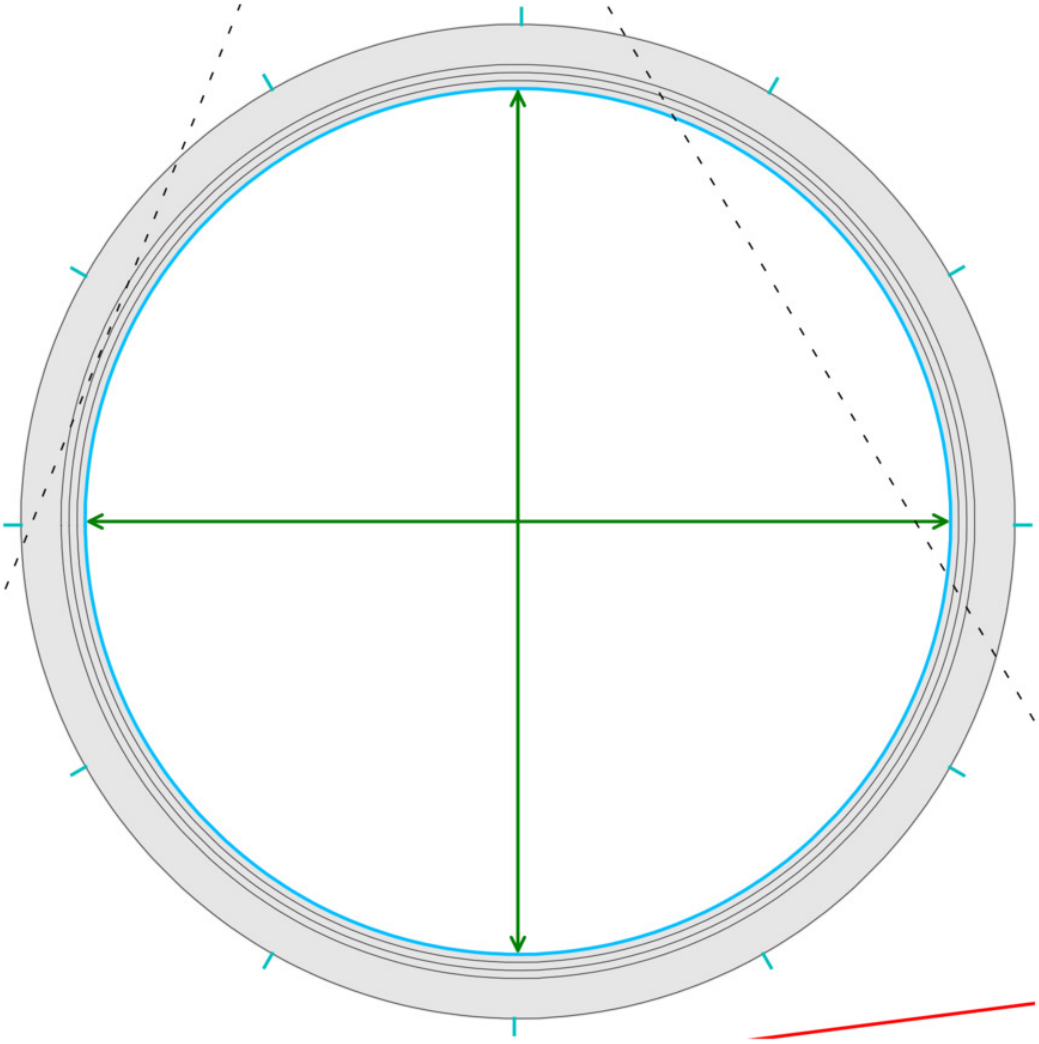
```
Footage   :  721 ft
Width     :  344.7" | 108.0"
Height    :  272.2" | 108.0"

Area      :  52886 sq in
Perimeter :  1328.0 in
Ovality   :  27.0%

Interior Diameter : 104.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 722.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



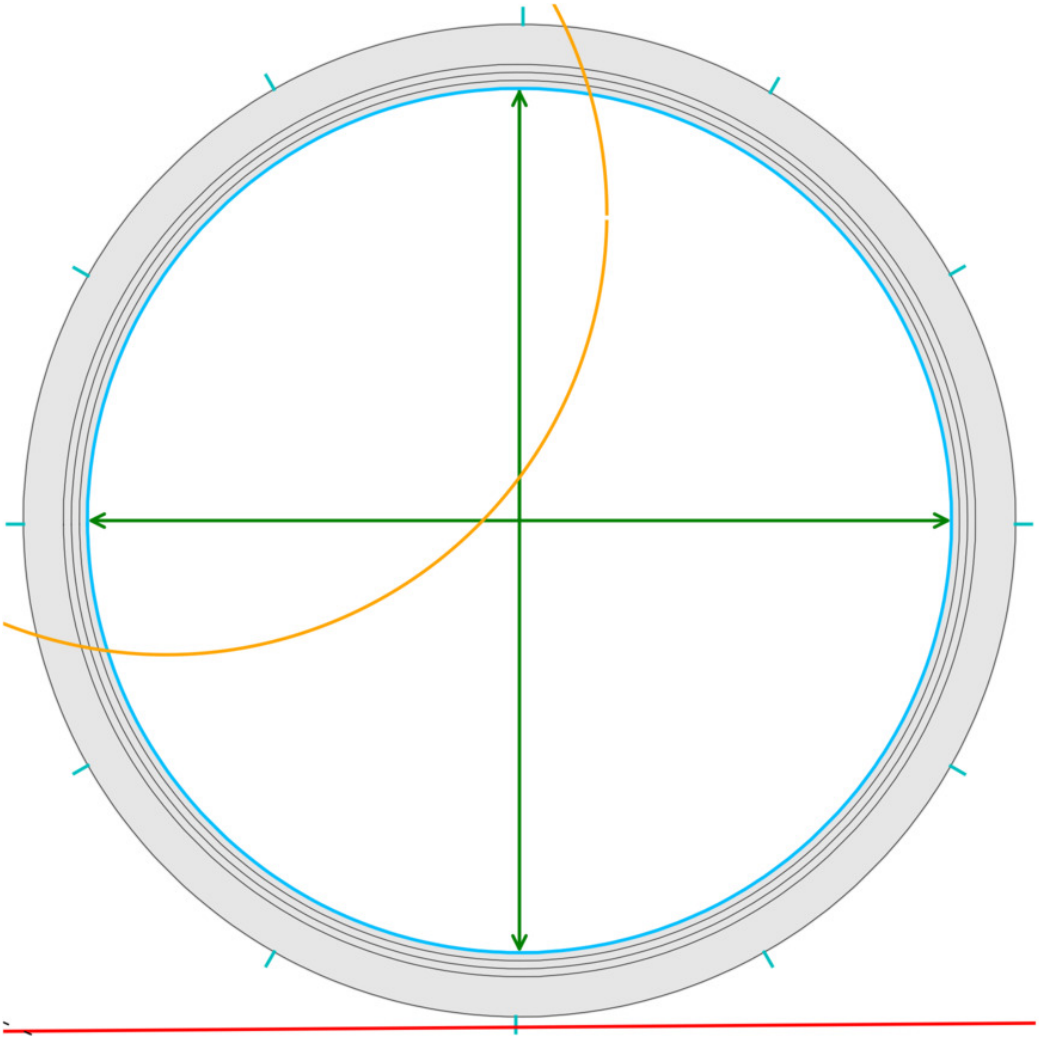
```
Footage   :  722 ft
Width     :  396.0" | 108.0"
Height    :  149.6" | 108.0"

Area      :  52179 sq in
Perimeter :  1964.2 in
Ovality   :  57.2%

Interior Diameter : 9879281.5"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 723.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



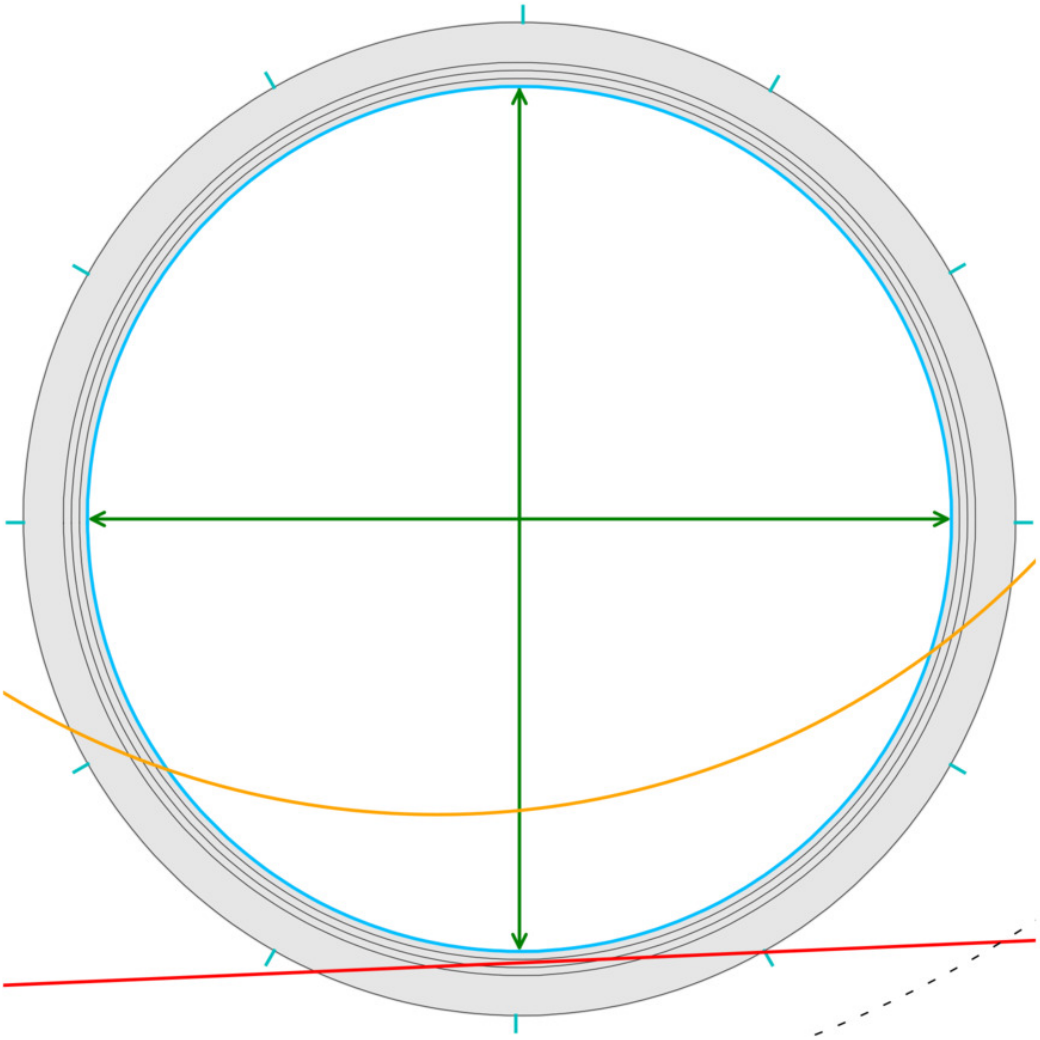
```
Footage    :  723 ft
Width      :  349.6" | 108.0"
Height     :  136.6" | 108.0"

Area       :  51438 sq in
Perimeter  :  1530.0 in
Ovality    :  25.1%

Interior Diameter : 110.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 724.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



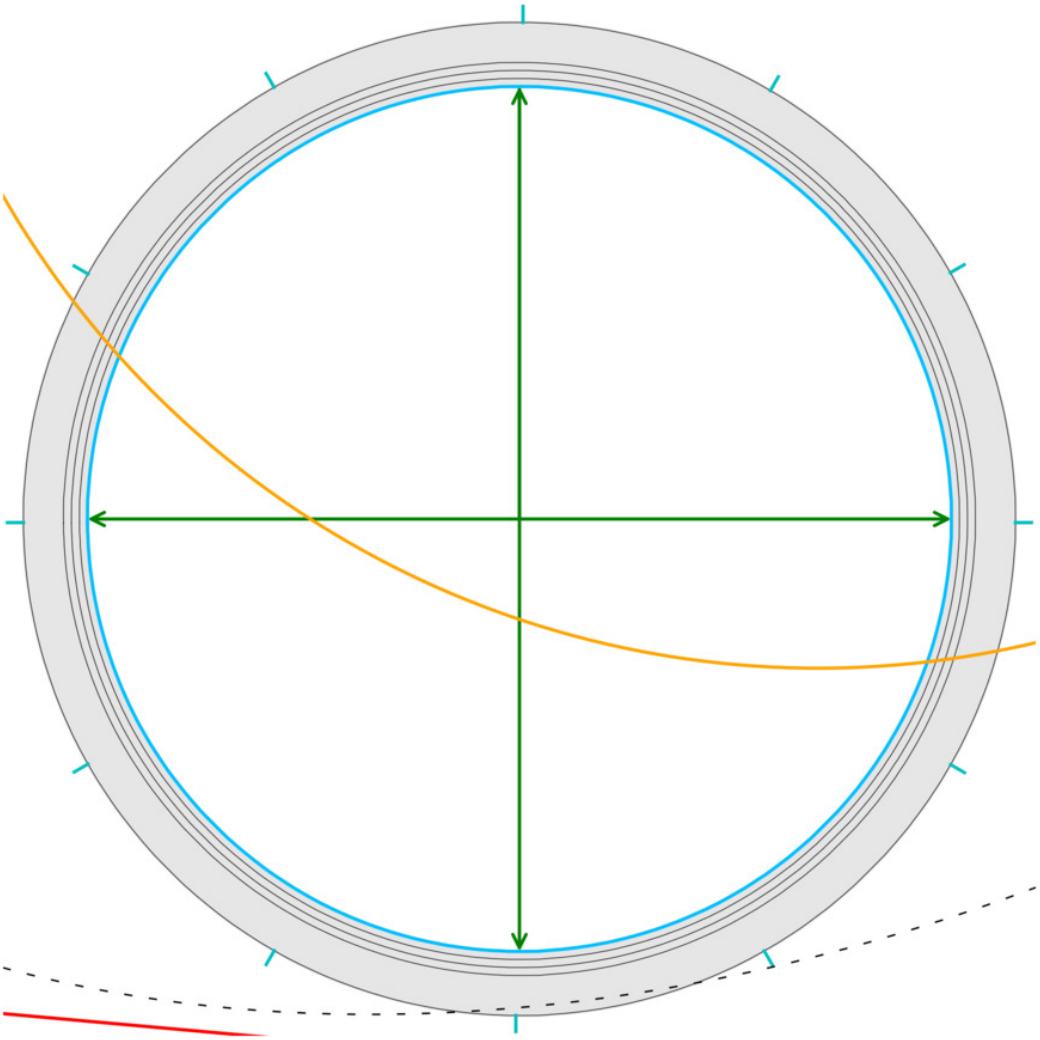
```
Footage   :  724 ft
Width     :  516.5" | 108.0"
Height    :  306.8" | 108.0"

Area      :  88284 sq in
Perimeter :  1540.5 in
Ovality   :  2.8%

Interior Diameter : 208.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 725.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



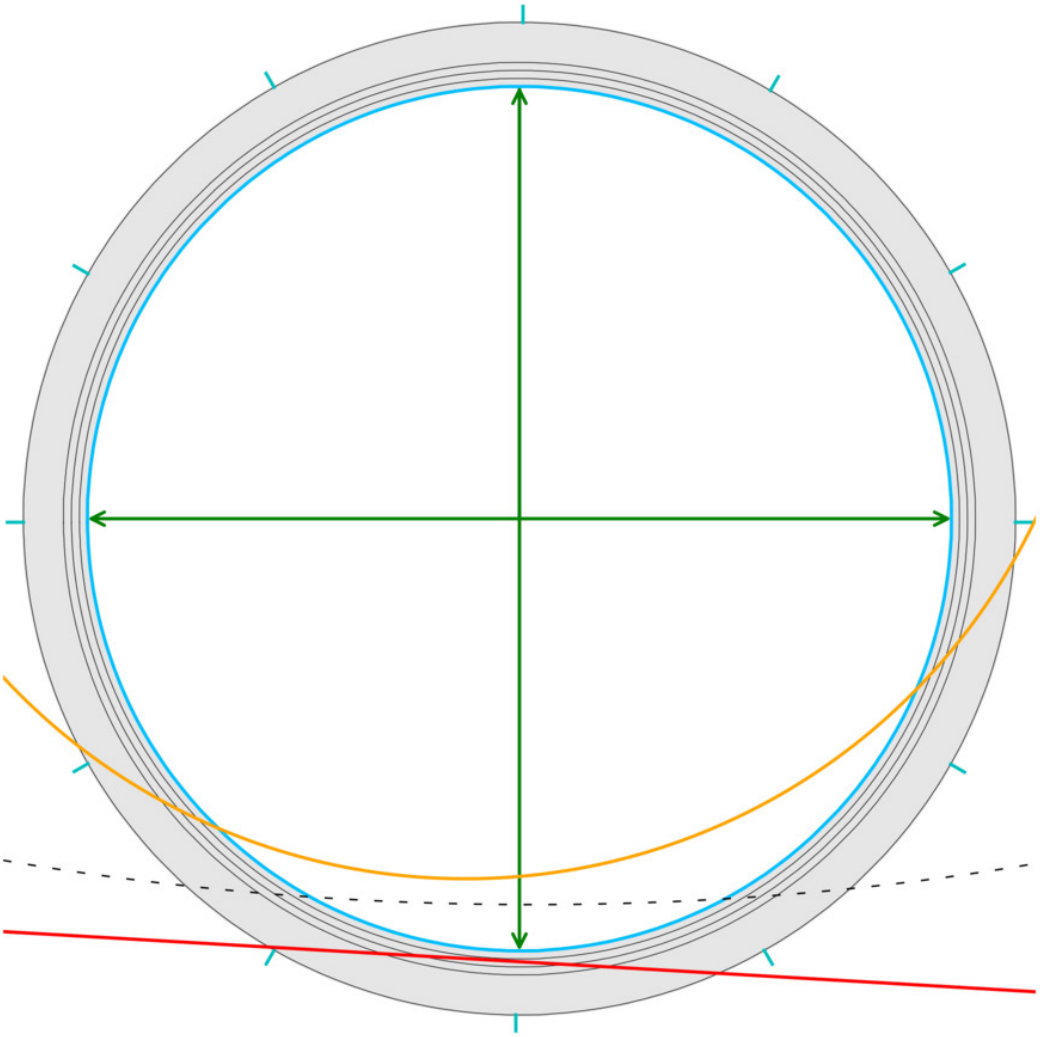
```
Footage   :  725 ft
Width     :  460.0" | 108.0"
Height    :  275.2" | 108.0"

Area      :  76778 sq in
Perimeter :  1441.5 in
Ovality   :  16.3%

Interior Diameter : 235.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 726.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



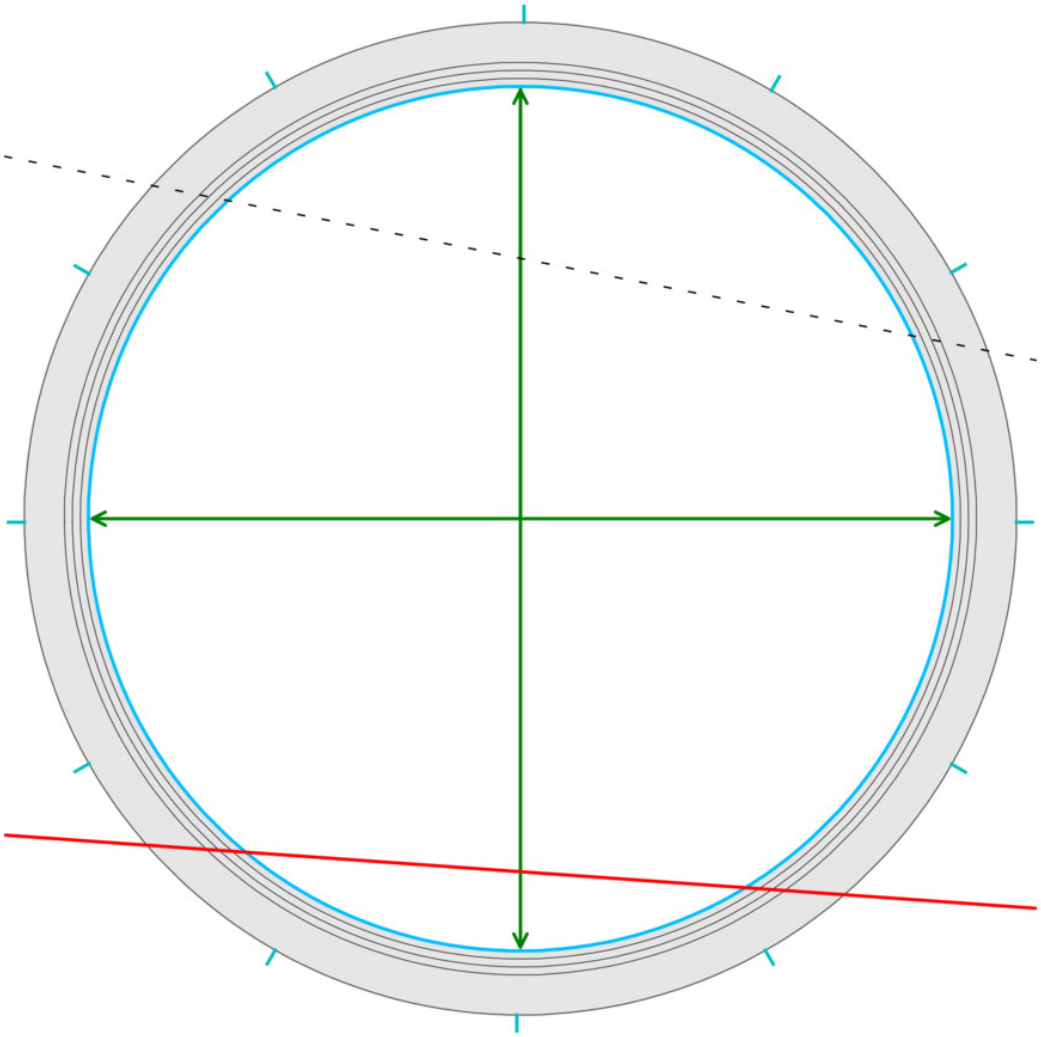
```
Footage   :  726 ft
Width     :  453.4" | 108.0"
Height    :  185.7" | 108.0"

Area      :  50373 sq in
Perimeter :  1114.4 in
Ovality   :  33.0%

Interior Diameter : 157.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 727.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



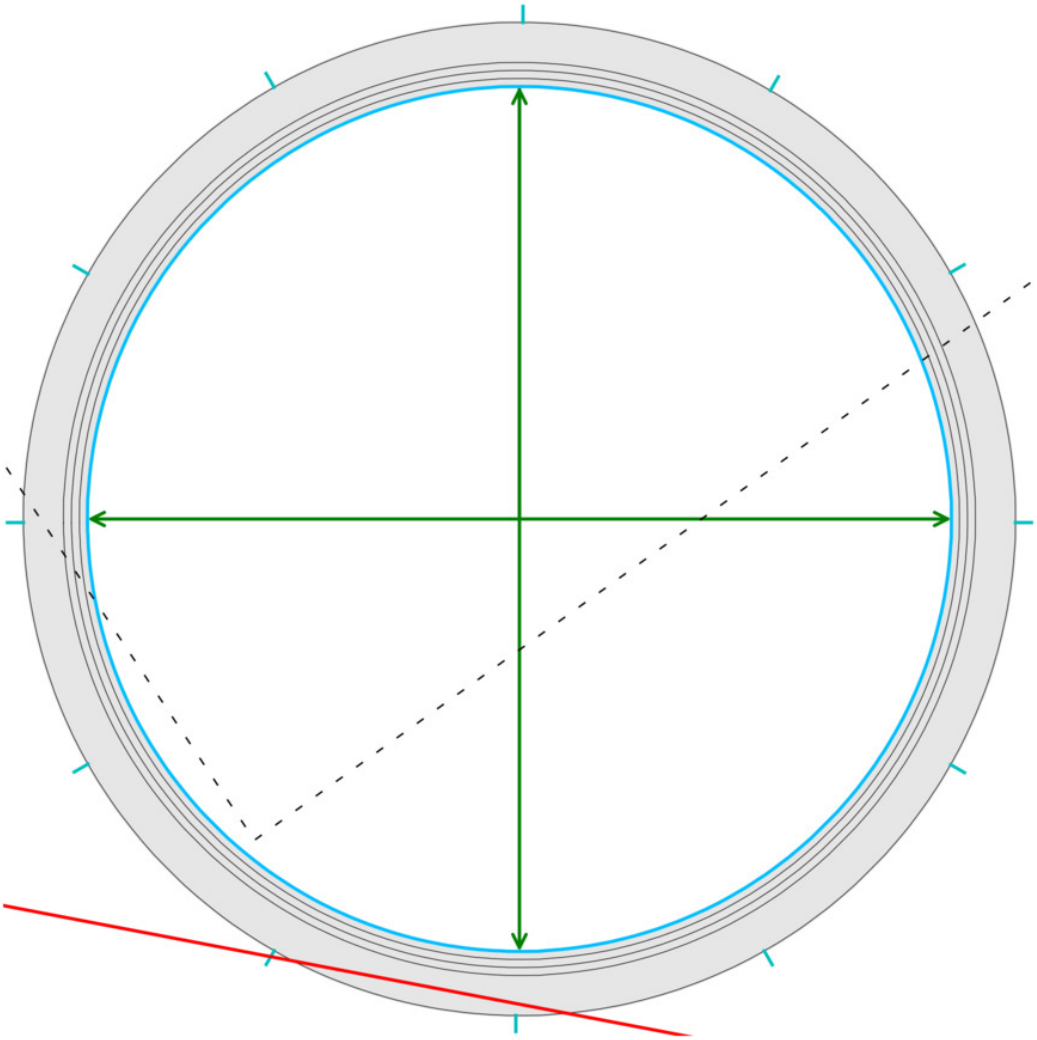
```
Footage   :  727 ft
Width     :  546.1" | 108.0"
Height    :  243.7" | 108.0"

Area      :  75202 sq in
Perimeter :  1501.5 in
Ovality   :  56.0%

Interior Diameter : 457828.4"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 728.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



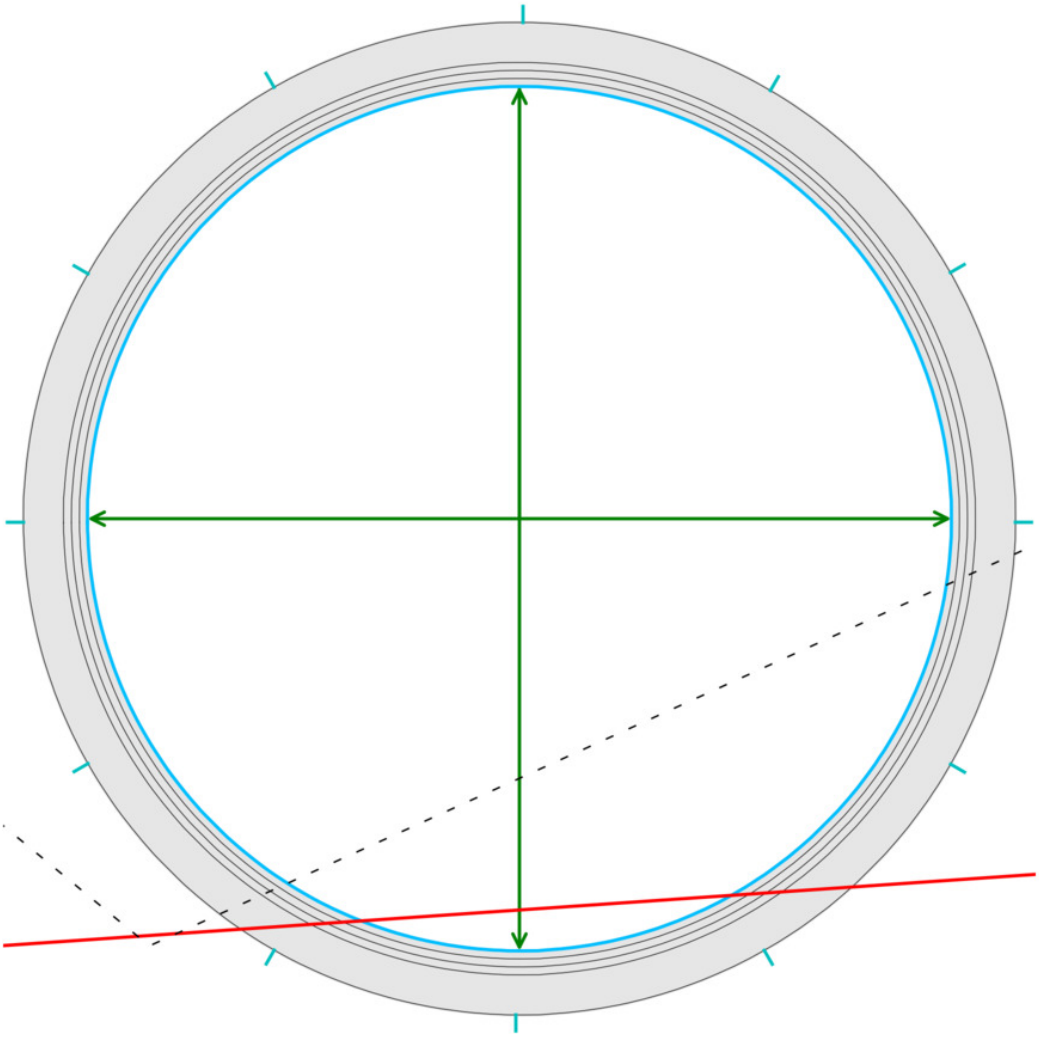
```
Footage   :  728 ft
Width     :  730.6" | 108.0"
Height    :  279.9" | 108.0"

Area      :  125874 sq in
Perimeter :  1958.7 in
Ovality   :  57.2%

Interior Diameter : 5650622.7"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 729.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



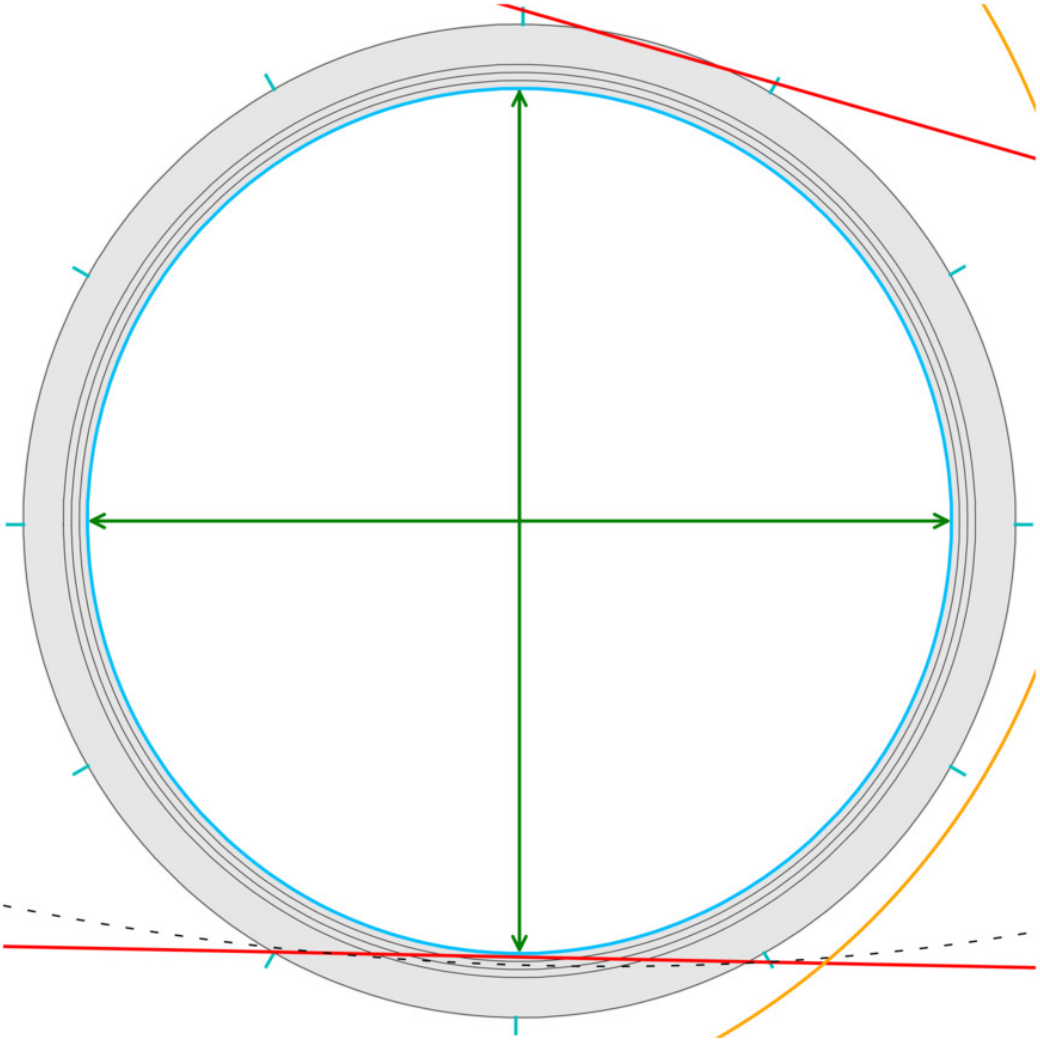
```
Footage   :  729 ft
Width     :  576.3" | 108.0"
Height    :  306.7" | 108.0"

Area      :  85027 sq in
Perimeter :  1568.0 in
Ovality   :  57.2%

Interior Diameter : 2537066.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 730.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



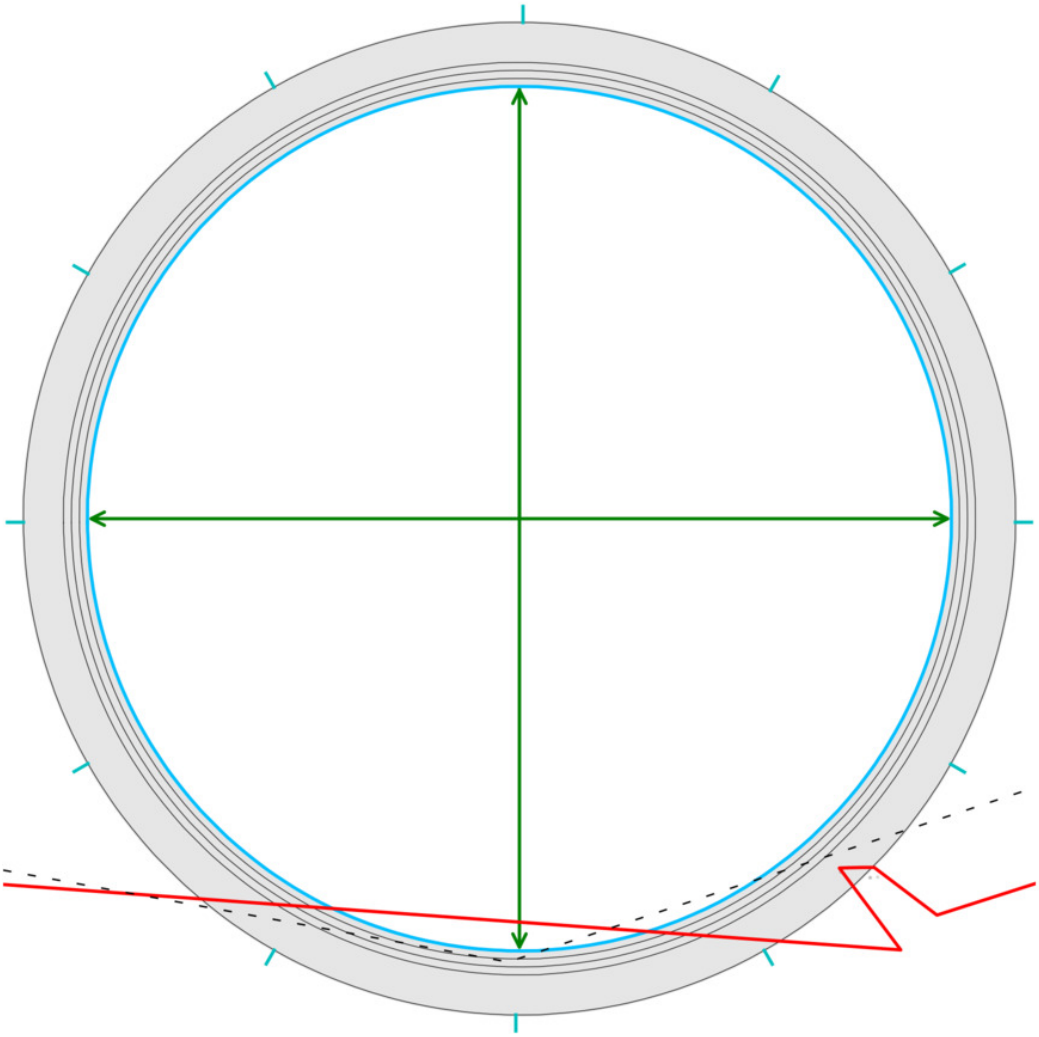
```
Footage   :  730 ft
Width     :  385.9" | 108.0"
Height    :  143.9" | 108.0"

Area      :  35313 sq in
Perimeter :  979.1 in
Ovality   :  34.9%

Interior Diameter : 186.8"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 731.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



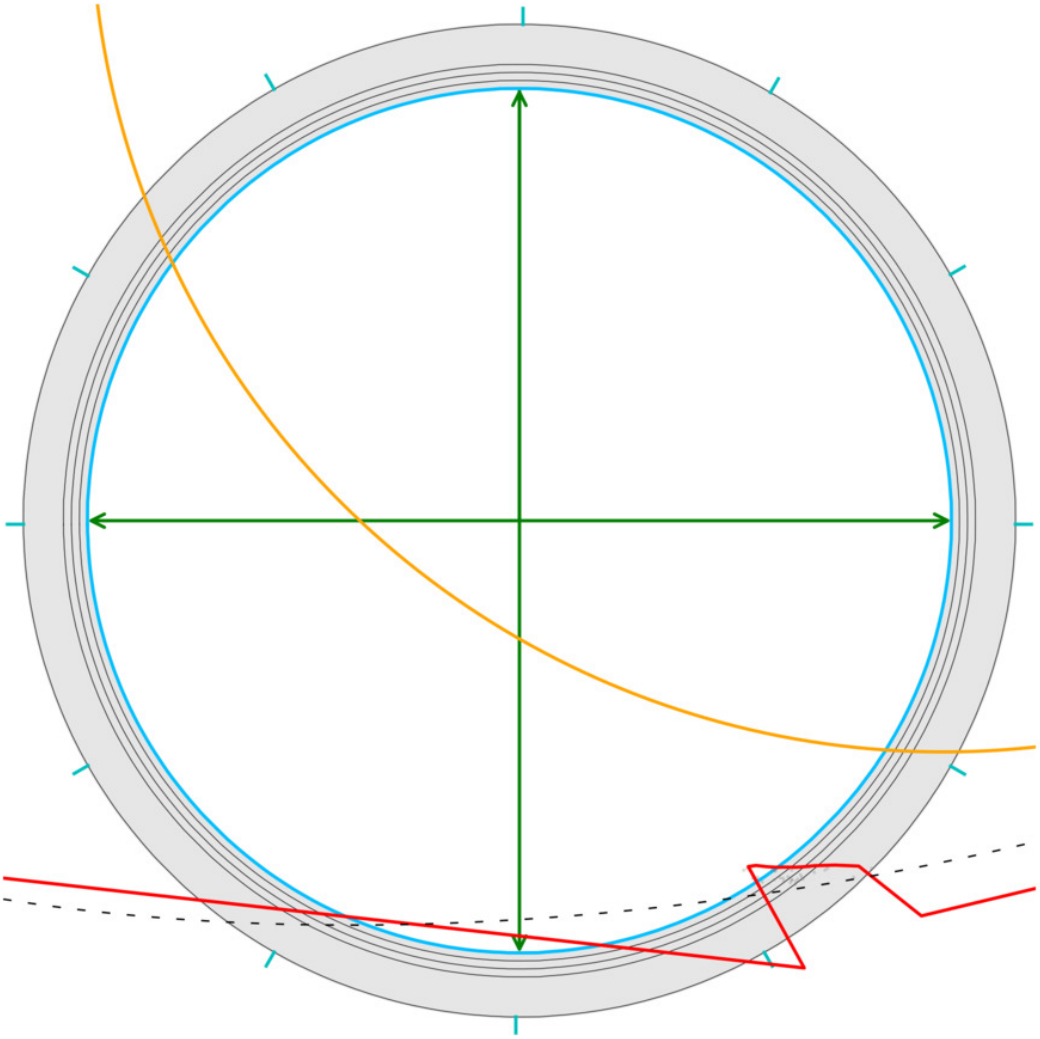
```
Footage   :  731 ft
Width     :  357.0" | 108.0"
Height    :  224.0" | 108.0"

Area      :  55452 sq in
Perimeter :  1086.3 in
Ovality   :  57.2%

Interior Diameter : 972757.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 732.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



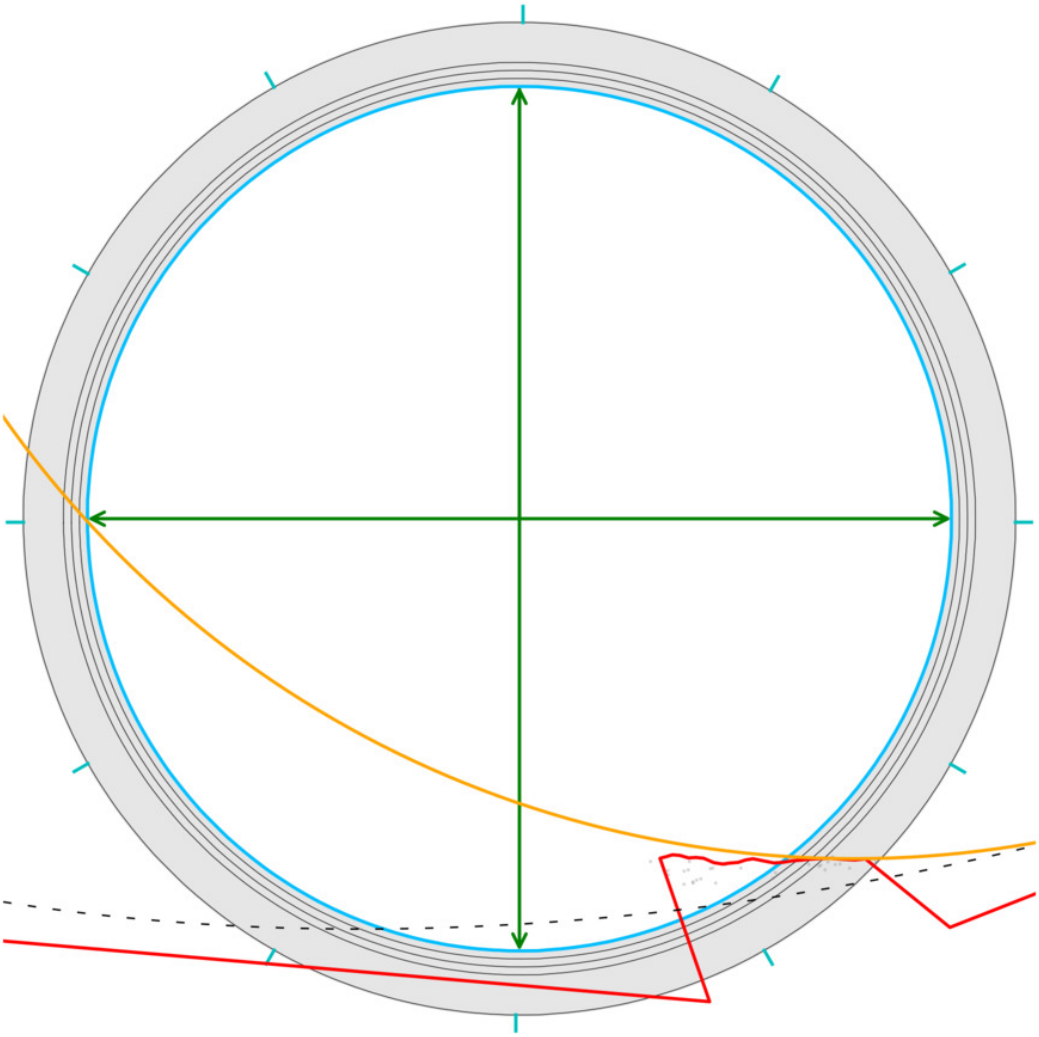
```
Footage   :  732 ft
Width     :  456.2" | 108.0"
Height    :  262.2" | 108.0"

Area      :  69809 sq in
Perimeter :  1340.6 in
Ovality   :  27.8%

Interior Diameter : 213.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 733.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



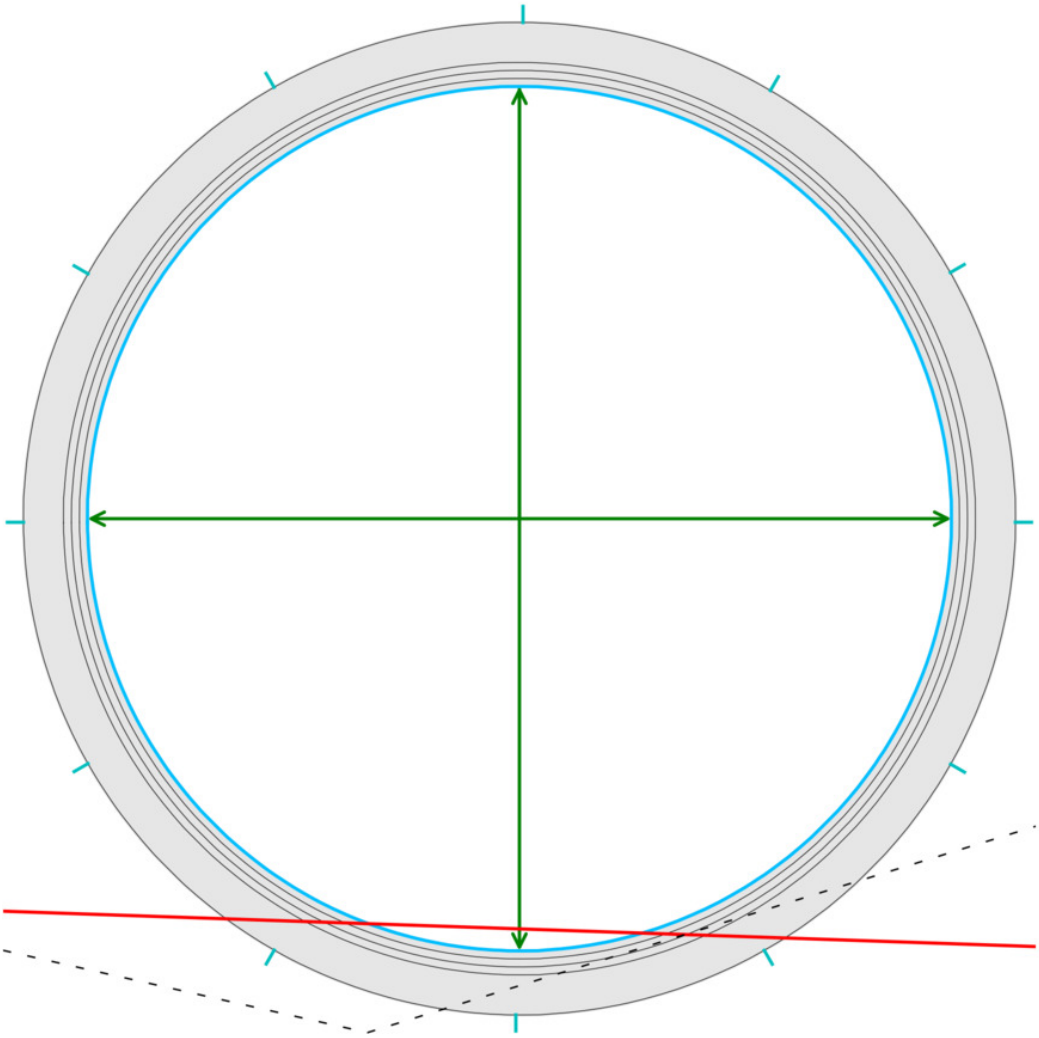
```
Footage   :  733 ft
Width     :  453.3" | 108.0"
Height    :  286.3" | 108.0"

Area      :  88090 sq in
Perimeter :  1359.2 in
Ovality   :  24.4%

Interior Diameter : 259.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 735.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



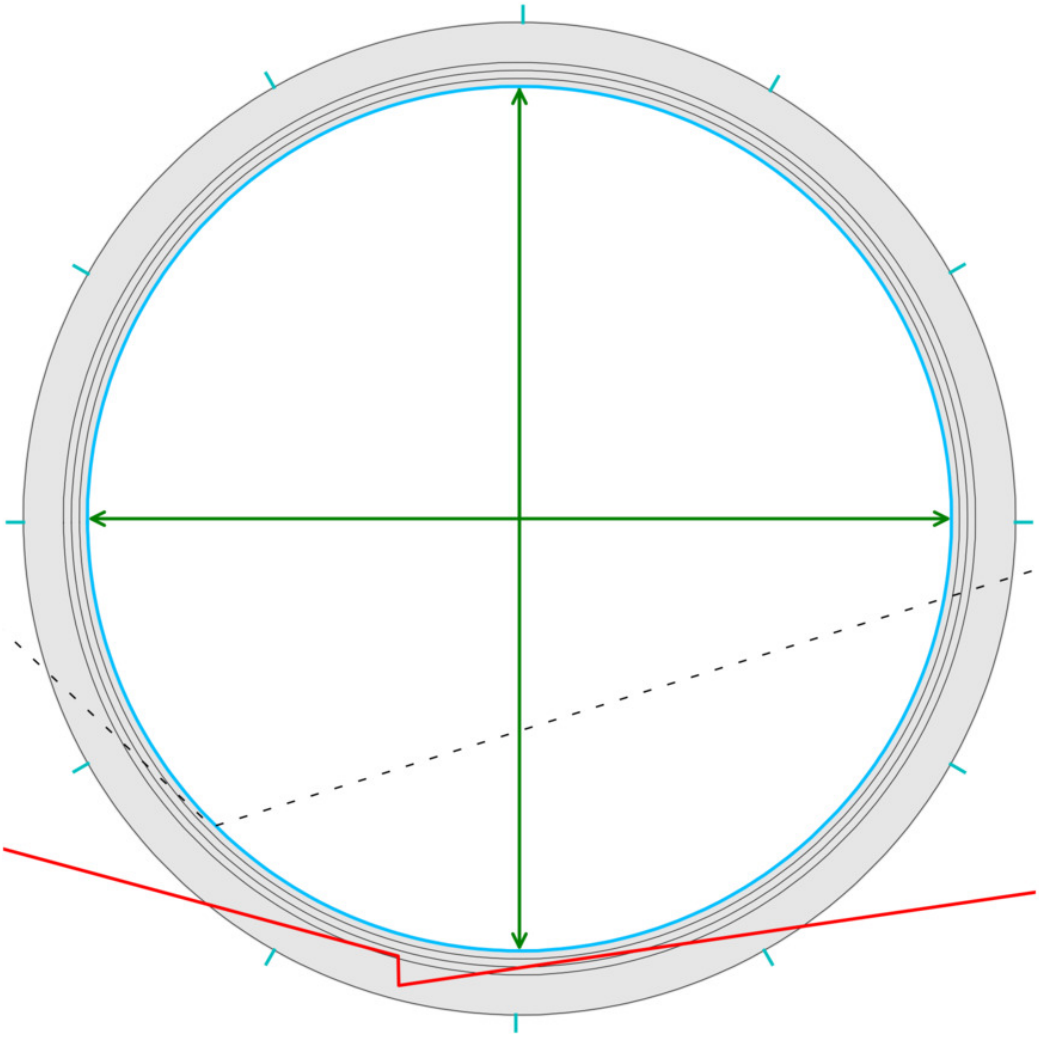
```
Footage   :  735 ft
Width     :  401.2" | 108.0"
Height    :  252.6" | 108.0"

Area      :  53818 sq in
Perimeter :  1058.8 in
Ovality   :  57.1%

Interior Diameter : 646783.1"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 736.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



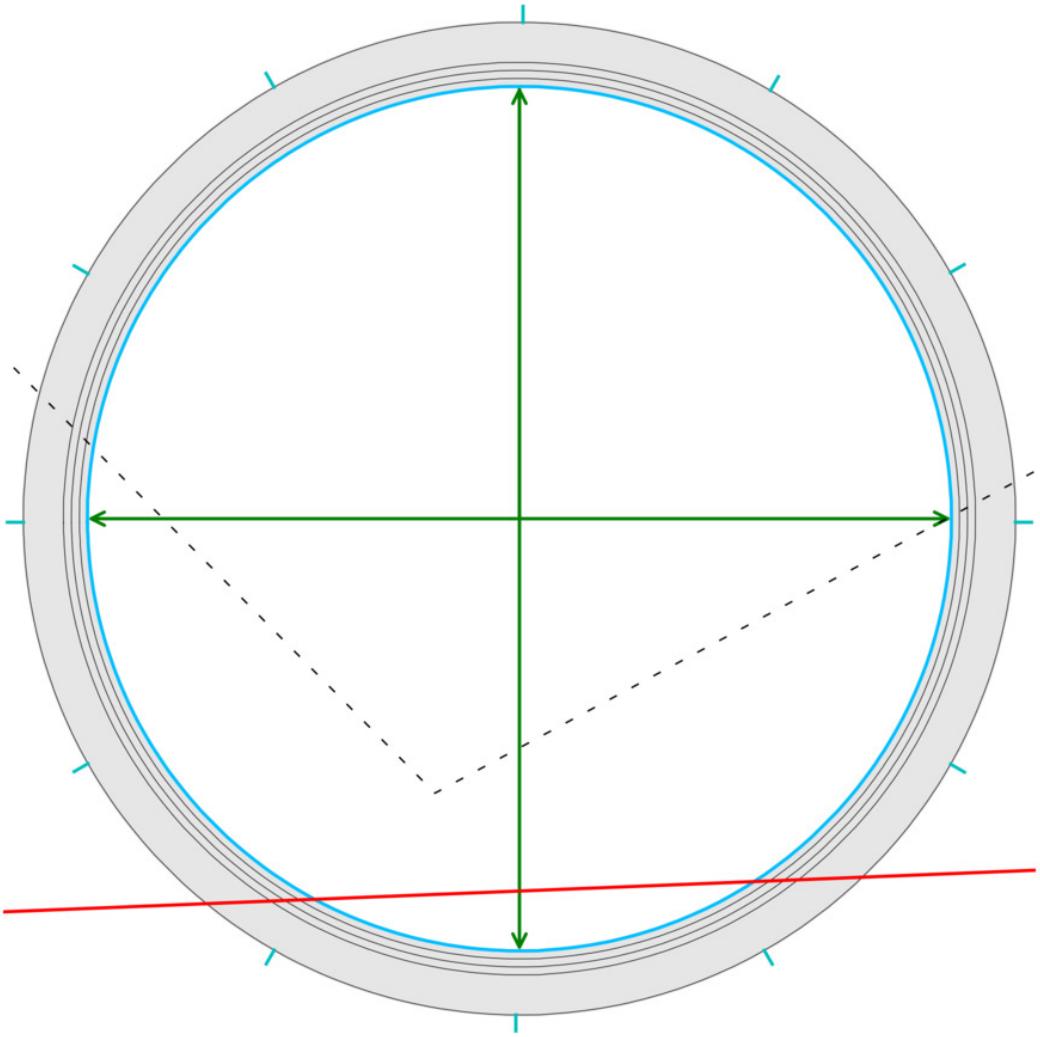
```
Footage   :  736 ft
Width     :  898.1" | 108.0"
Height    :  299.5" | 108.0"

Area      :  142435 sq in
Perimeter :  2048.7 in
Ovality   :  57.1%

Interior Diameter : 2394205.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 737.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



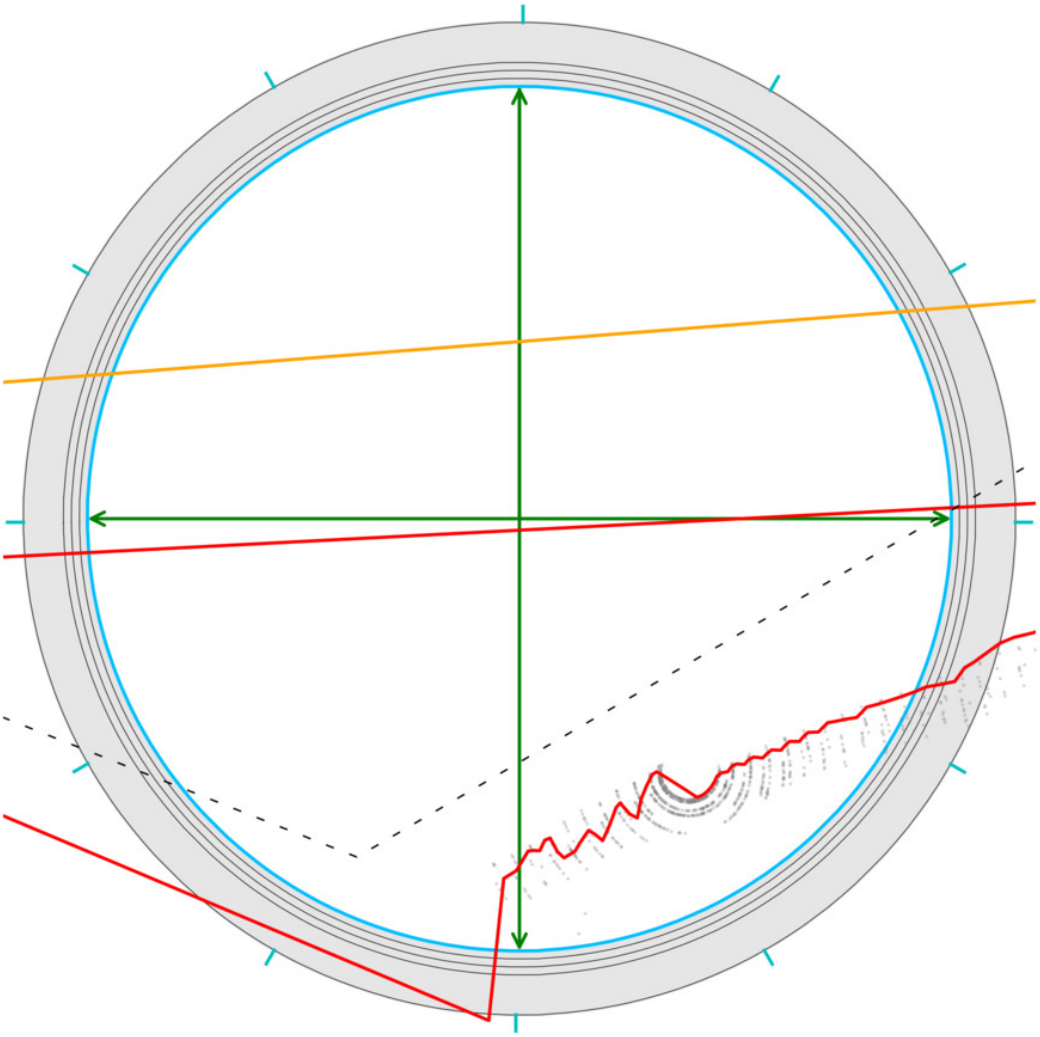
```
Footage   :  737 ft
Width     :  1020.5" | 108.0"
Height    :  300.2" | 108.0"

Area      :  140756 sq in
Perimeter :  2319.6 in
Ovality   :  57.2%

Interior Diameter : 7573533.9"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 738.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



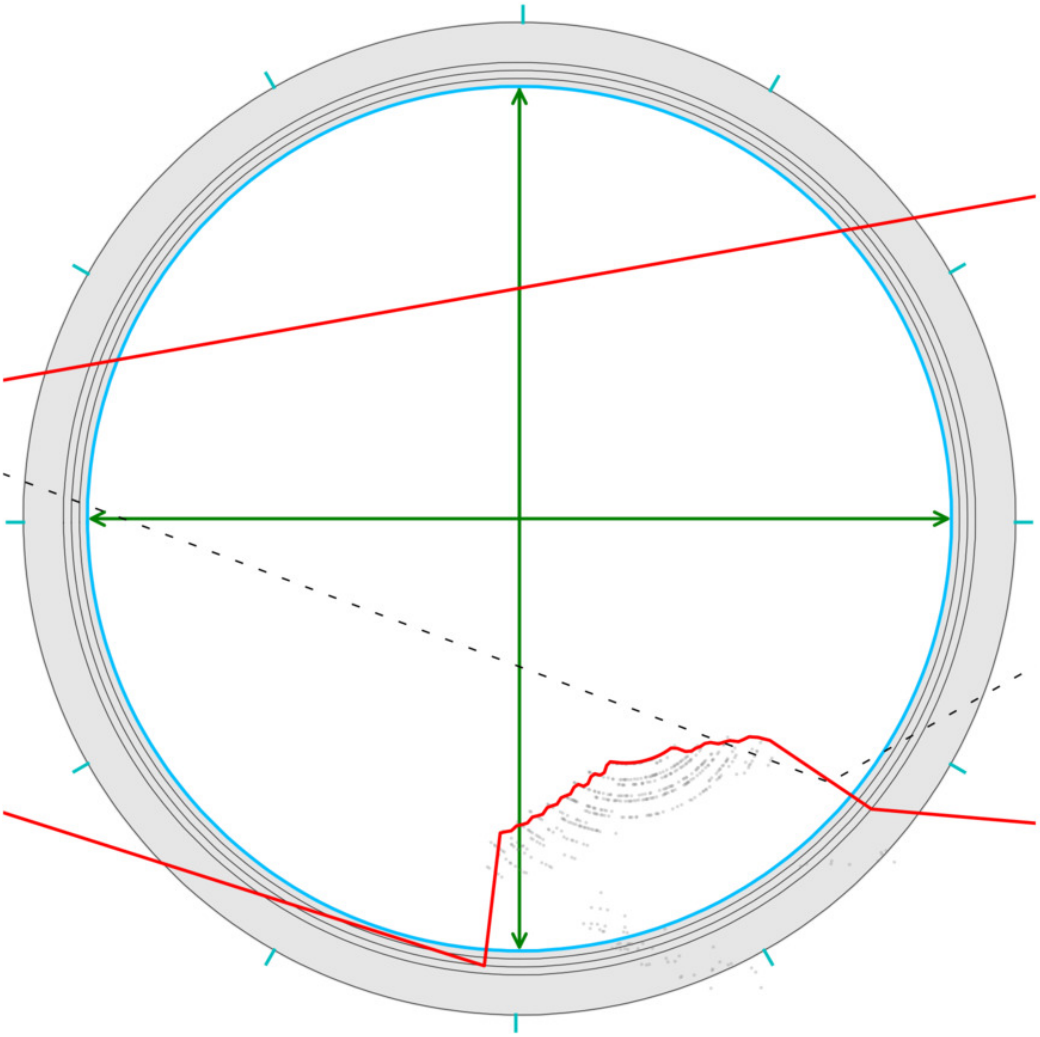
```
Footage   :  738 ft
Width     :  329.1" | 108.0"
Height    :  61.5" | 108.0"

Area      :  148182 sq in
Perimeter :  718.6 in
Ovality   :  57.1%

Interior Diameter : 1117259.1"

Profile Offsets : 1.0"
```

As Built Inner Surface
As Built Shape & Thickness
As Built Width & Height
Calculated Pipe Profile
Clocking Positions
Fitted Ovality
Grid System
Interior Diameter
LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 739.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



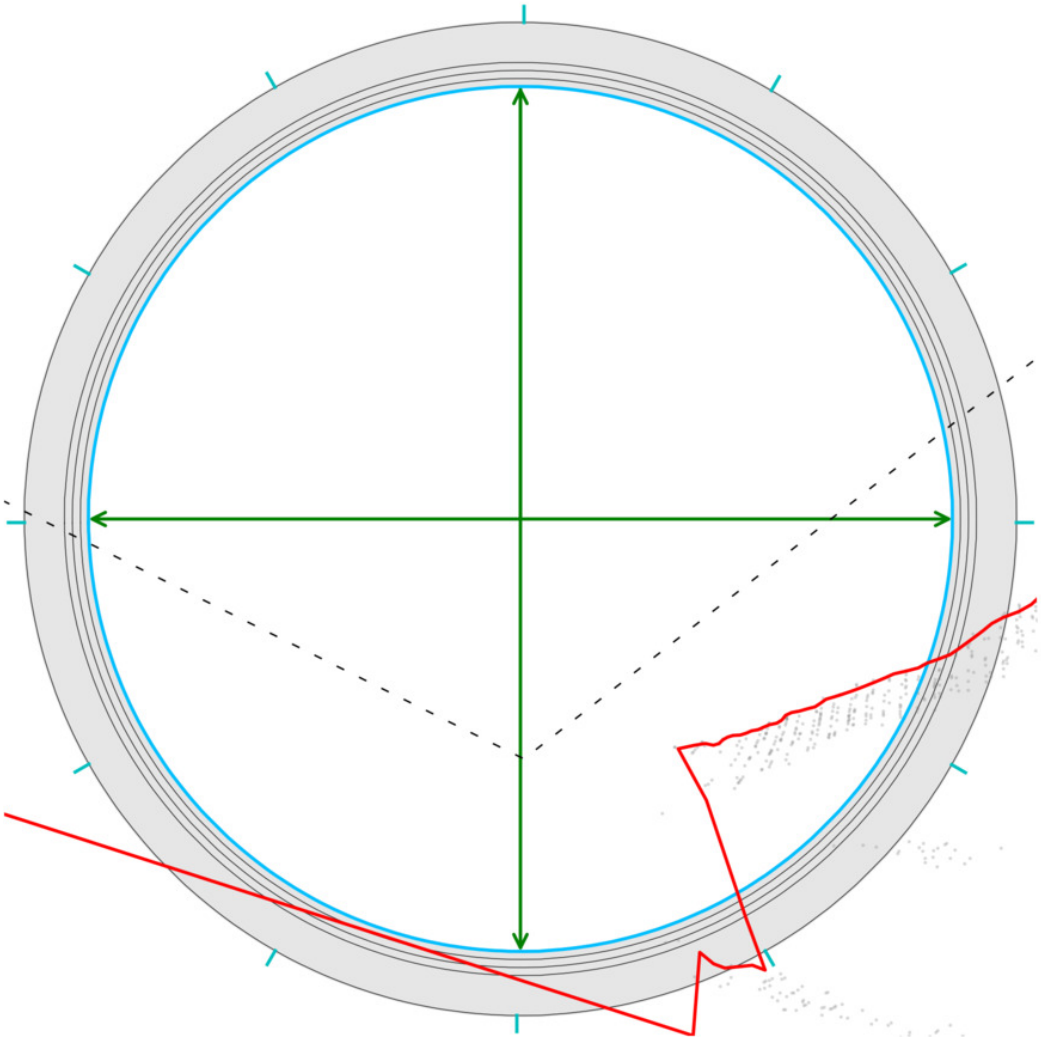
```
Footage   :  739 ft
Width     :  418.3" | 108.0"
Height    :  126.2" | 108.0"

Area      :  22240 sq in
Perimeter :  926.0 in
Ovality   :  57.1%

Interior Diameter : 2494911.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 740.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



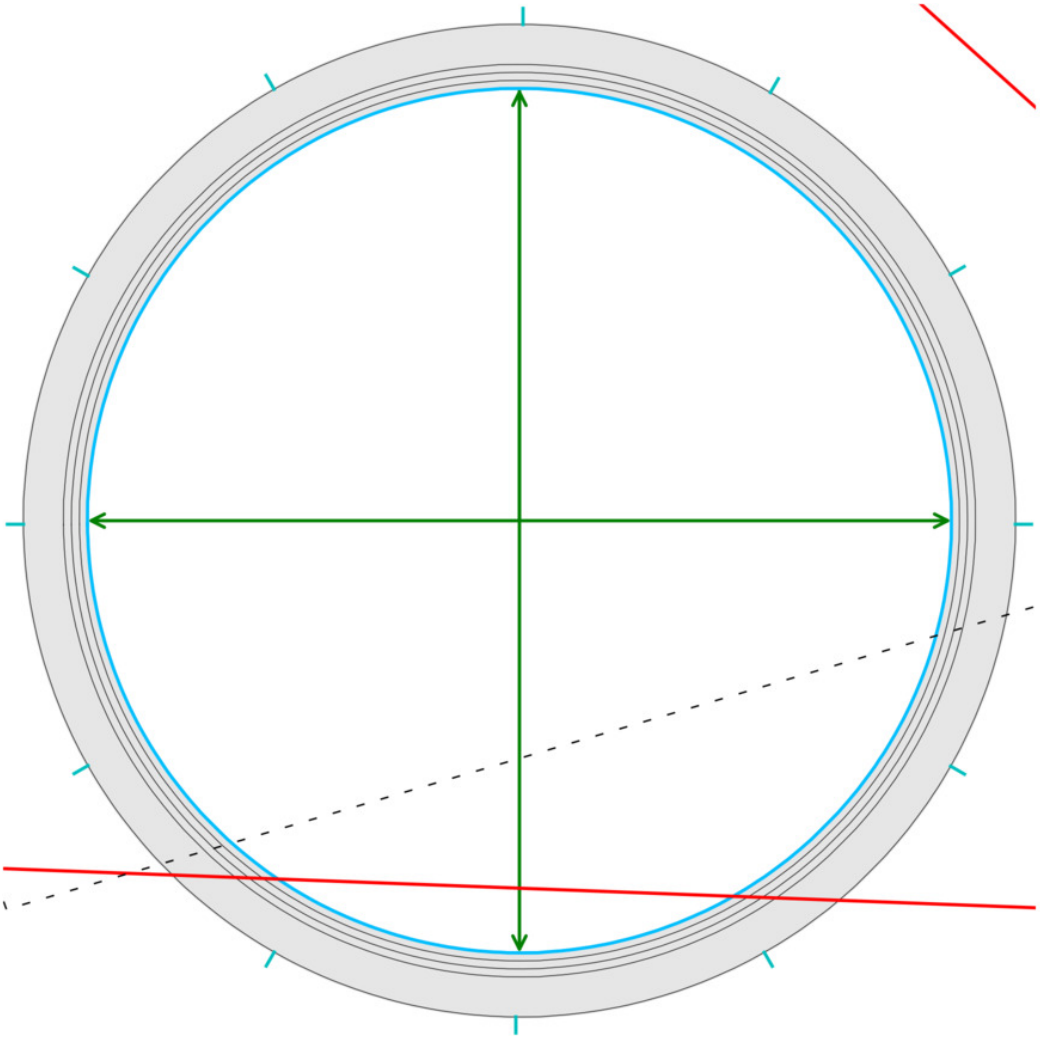
```
Footage   :  740 ft
Width     :  489.8" | 108.0"
Height    :  289.0" | 108.0"

Area      :  60058 sq in
Perimeter :  1258.4 in
Ovality   :  57.2%

Interior Diameter : 3754795.2"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 756.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



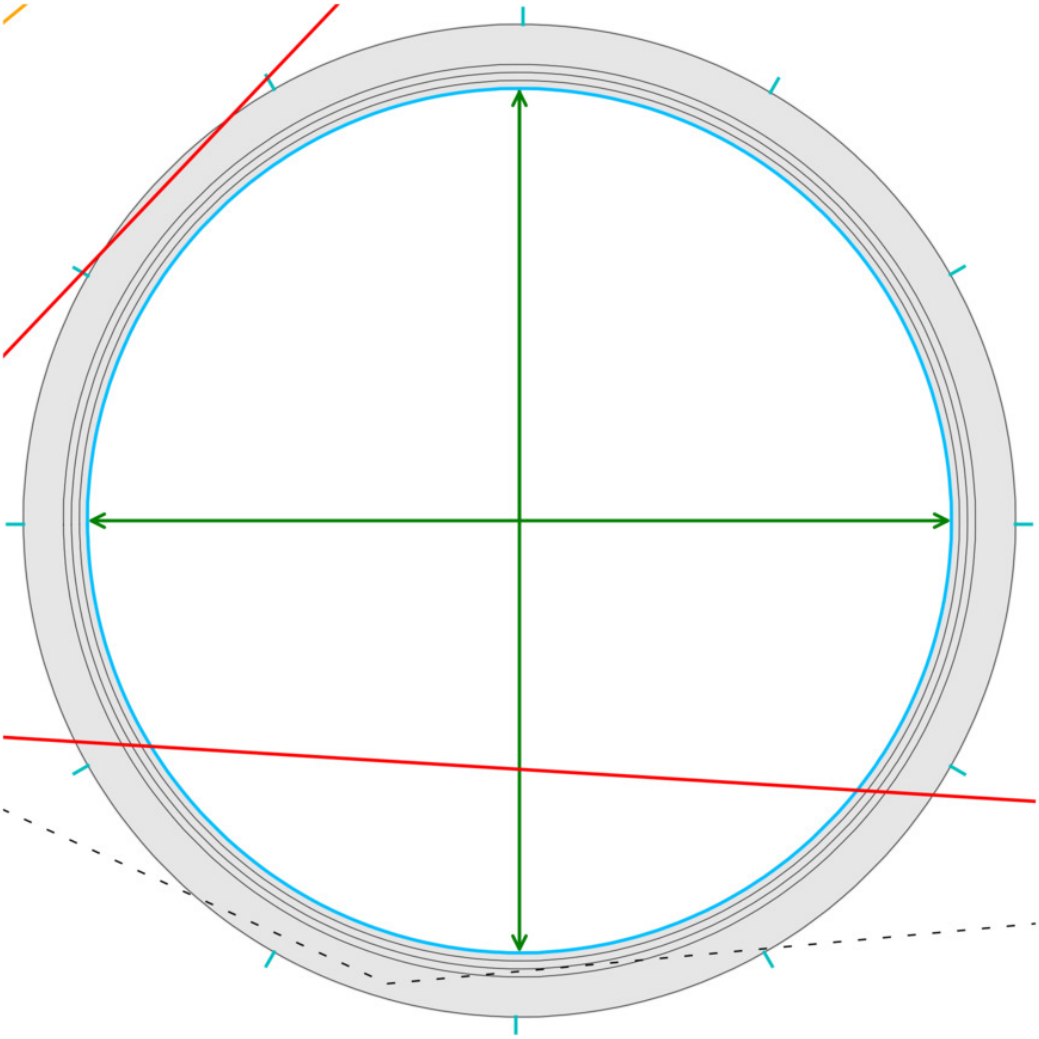
```
Footage   :  756 ft
Width     :  336.3" | 108.0"
Height    :  334.8" | 108.0"

Area      :  42195 sq in
Perimeter :  1107.5 in
Ovality   :  57.2%

Interior Diameter : 2731789.0"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

CUES Inc
3600 Rio Vista Avenue
Orlando, Florida 32805

SFX-3D Cross Section Report
Inspection #1 : / , 759.0 ft

Prepared Date	May 9, 2024	Shape	Circular
Inspection Date	April 9, 2024	Size	108 in
Inspection Platform	Mudmaster	Area	9,161 in²
Inspection Start / End	/	Perimeter	339 in



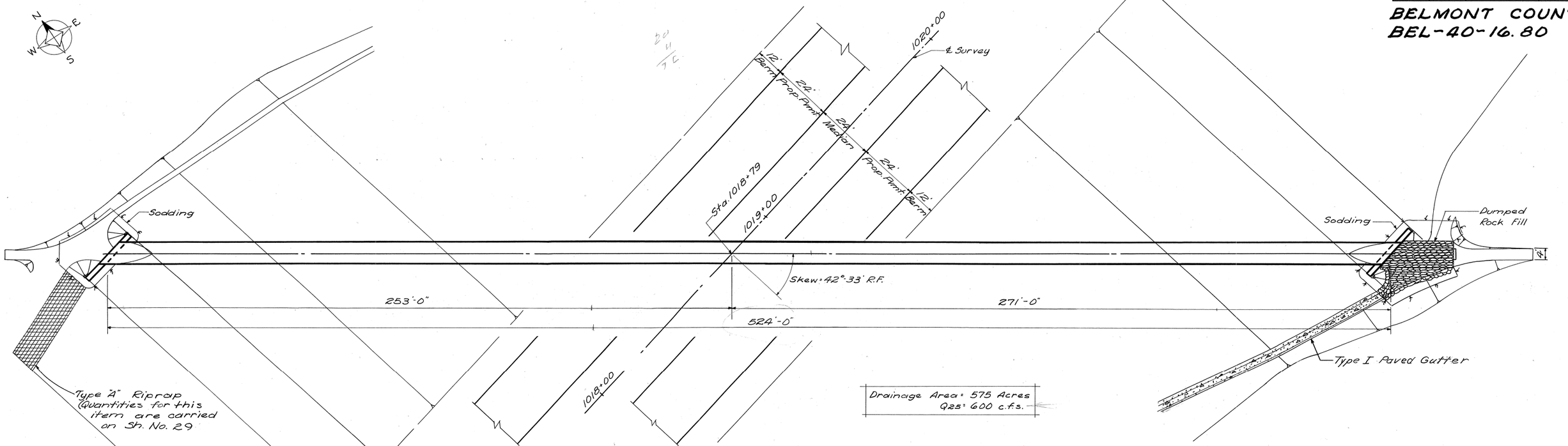
```
Footage   :  759 ft
Width     :  212.4" | 108.0"
Height    :  217.0" | 108.0"

Area      :  19887 sq in
Perimeter :  676.0 in
Ovality   :  57.2%

Interior Diameter : 638555.3"

Profile Offsets : 1.0"
```

- As Built Inner Surface
- As Built Shape & Thickness
- As Built Width & Height
- Calculated Pipe Profile
- Clocking Positions
- Fitted Ovality
- Grid System
- Interior Diameter
- LIDAR Points

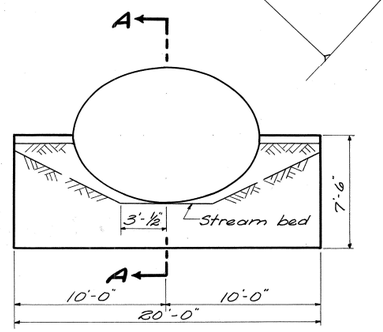
ATTACHMENT B – RECORD DOCUMENTS

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

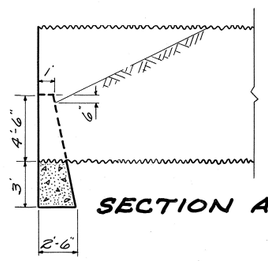
BELMONT COUNTY
BEL-40-16.80



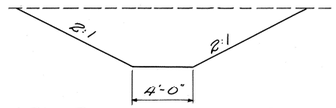
PLAN
STATION 1018+79
Scale-1" = 20'



END WALL DETAIL
Scale-1"=5'



SECTION A-A



TYPICAL SECTION OF CHANNEL EXCAVATION
Scale-1"=5'

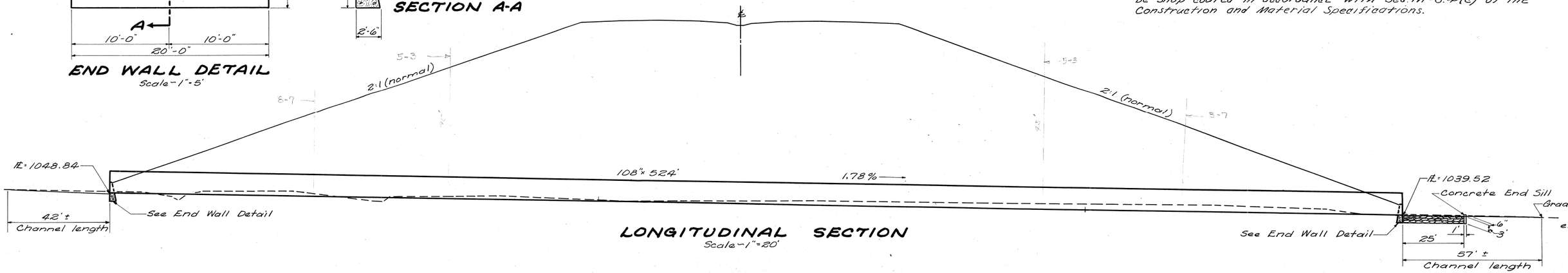
CULVERT DATA

TYPE: Pipe Culvert S-28 SP-53
SIZE: 108" x 524'
WORK REQUIRED: Build a 108" x 524' Pipe Culvert with concrete end walls as detailed. Excavate channel Lt. & Rt. to obtain proper drainage. Place Dumped Rock Fill at outlet and sod ends as shown. Construct concrete end sill at outlet end.

ESTIMATED QUANTITIES

Item E-2	Excavation for Structures	393 Cu
*Item E-3	Channel Excavation	47 Cu
Item I-10	Dumped Rock Fill	38 Cu
Item L-10	Sodding	120 Sq
Item S-1	Concrete for Structures, Class "B"	11.5 Cu
Item S-28	108" Sectional Corrugated Metal Structure Sec. M-6.4 (9,c) [1] gage	524 Li

*Includes excavation for Item I-10, Dumped Rock Fill
NOTE: All plates of the sectional Corrugated Metal Structure shall be shop coated in accordance with Sec. M-6.4(a) of the Construction and Material Specifications.



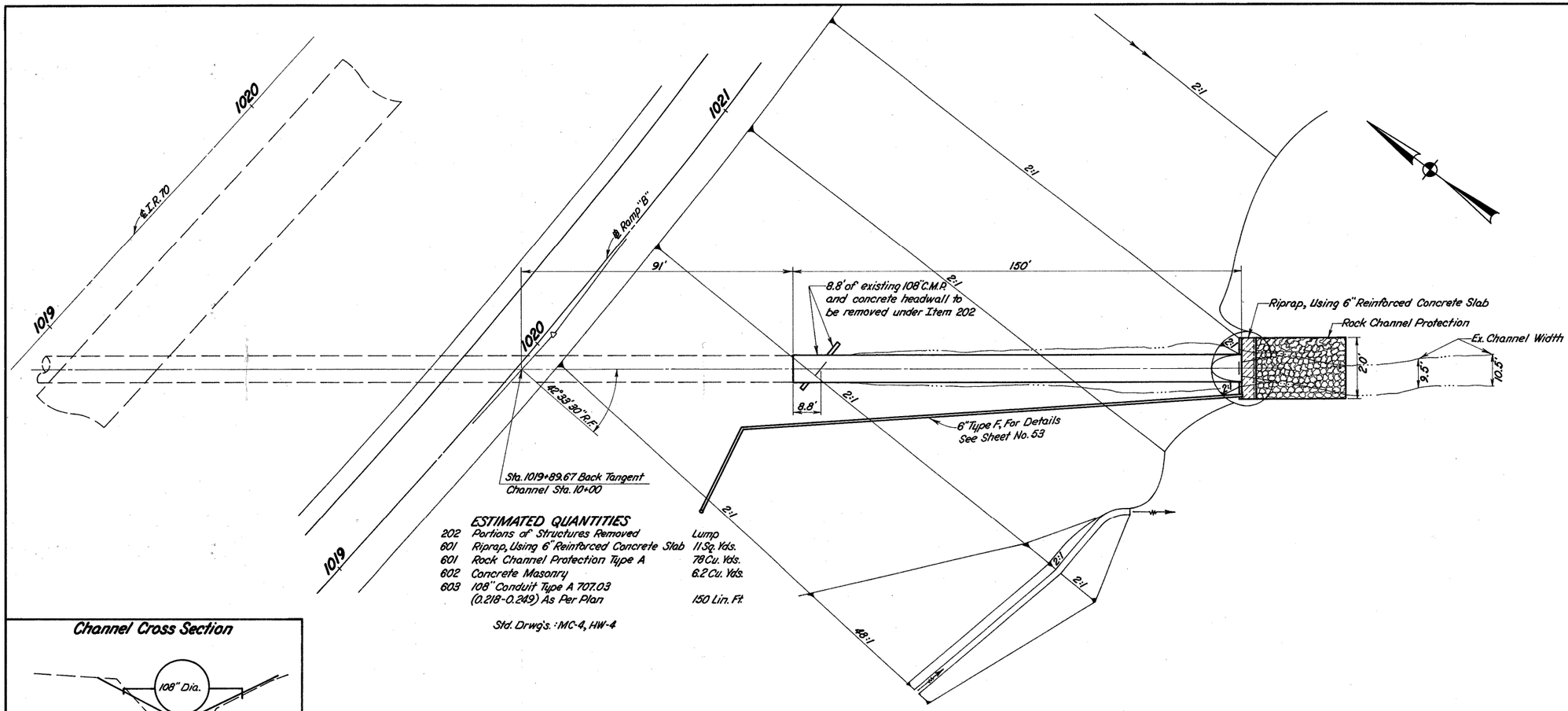
LONGITUDINAL SECTION
Scale-1"=20'

Pipe Culvert - Station 1018+79

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		

54
81

BELMONT COUNTY
BEL-70-18.87



ESTIMATED QUANTITIES

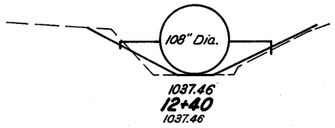
202	Portions of Structures Removed	Lump
601	Riprap, Using 6" Reinforced Concrete Slab	11 Sq. Yds.
601	Rock Channel Protection Type A	78 Cu. Yds.
602	Concrete Masonry	6.2 Cu. Yds.
603	108" Conduit Type A 707.03 (0.218-0.249) As Per Plan	150 Lin. Ft.

Std. Drwg's.: MC-4, HW-4

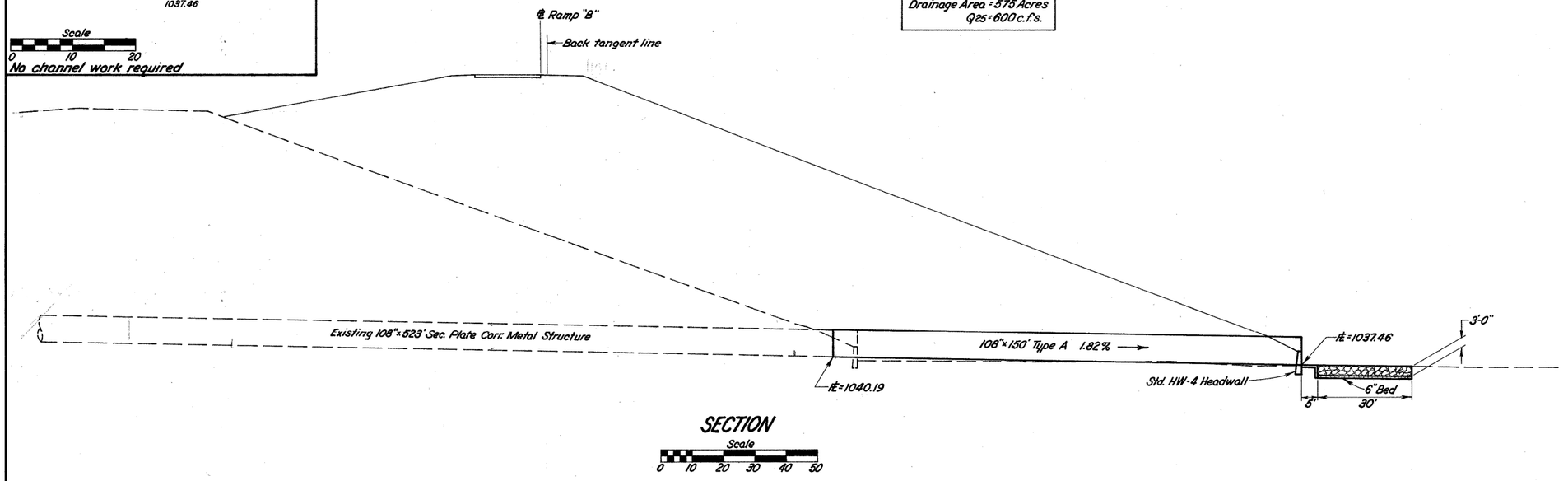
PLAN

Drainage Area = 575 Acres
Q25 = 600 c.f.s.

Channel Cross Section



Scale
0 10 20
No channel work required



SECTION

Scale
0 10 20 30 40 50

Designed	Checked	Inked
D.F.H. 4-11-73	R.D.E. 5-17-73	R.J.M. 9-25-73

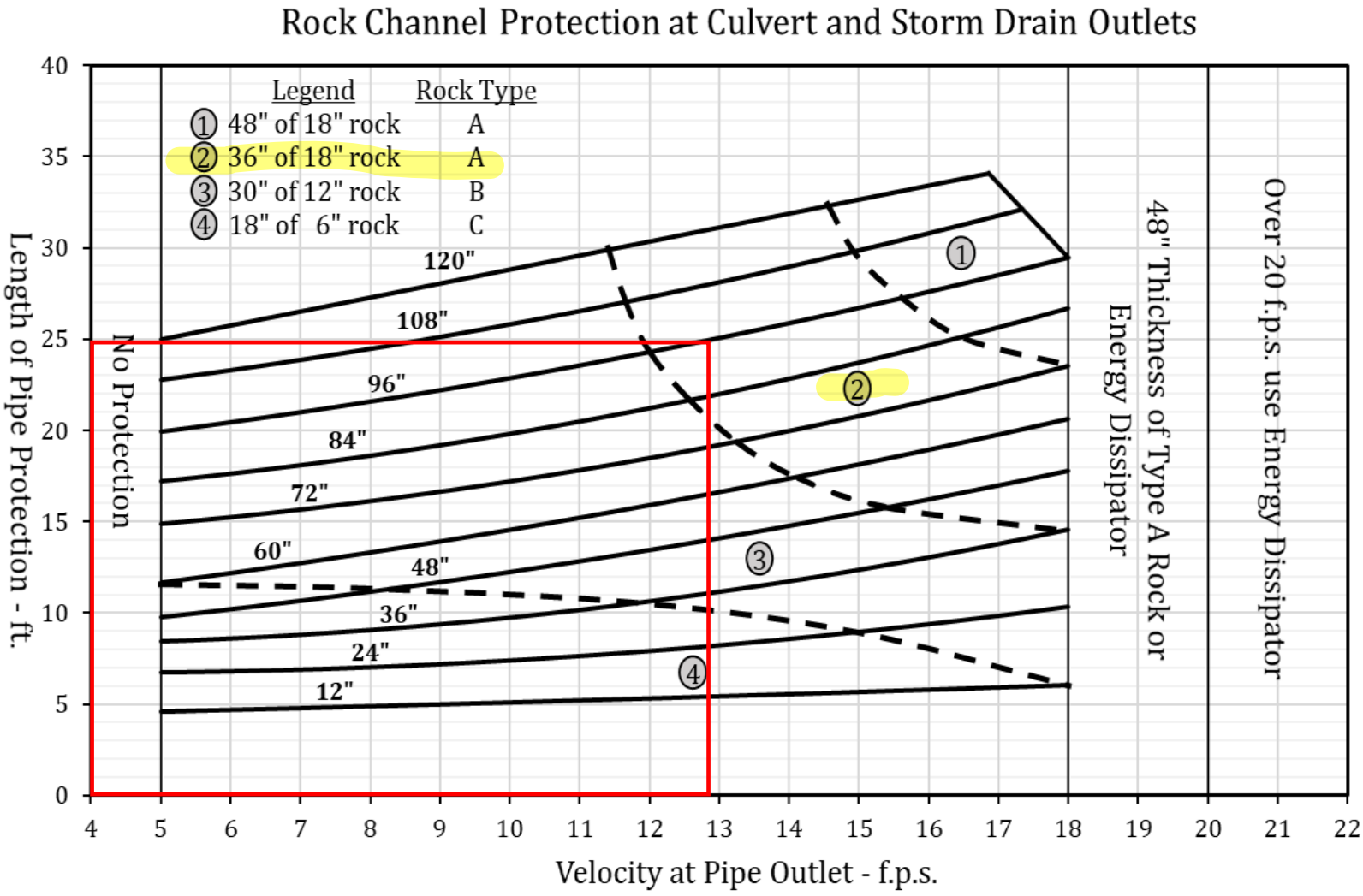
BEL-70-1929

Rev. 12-27-7

PIPE DETAIL ~ STA. 1019+89.67 RAMP "B"

APPENDIX F – ROCK CHANNEL PROTECTION AT CULVERT OUTLETS

CULVERT #1
OUTLET
25' LENGTH



12.8 fps

ROCK CHANNEL PROTECTION AT CULVERT AND STORM SEWER OUTLETS

1107-1

REFERENCE SECTION 1107.2

July 2020