



3DS Technologies Inc.

High Resolution 3D Laser Scanning

3DS Technologies Inc.

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3DS Technologies Inc

We are a 3D Laser Scanning company using the most up to date equipment and technology for 3D laser scanning.

We have a background in industrial manufacturing, construction and engineering. We are committed to providing the most detailed and accurate information available to ensure your project is a success.

- when it has to be **right**

Leica
Geosystems

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WHAT IS 3D LASER SCANNING?

- Using LIDAR technology, 3D laser scanning accurately and efficiently captures 3-dimensional data in a 360 degree rotation. 3D laser scanning records up to one million “points” per second with each point having an X, Y, and Z coordinate in space. Together, these points create a “point cloud” and exact measurements can be determined from any 2 points.
- Class 1 laser means no risk to personnel in the area
- Accuracy of 1.2 mm per single scan with a range of up to 1000 meters.

3DS TECHNOLOGIES EQUIPMENT

Leica P-30



- 1 million points per second
- 1.2 Accuracy over full range
- Ultra-high speed time-of-flight enhanced by Waveform Digitising (WFD) technology
- Range 130m (P-50 +1000m)
- 90-100 colored scans/day

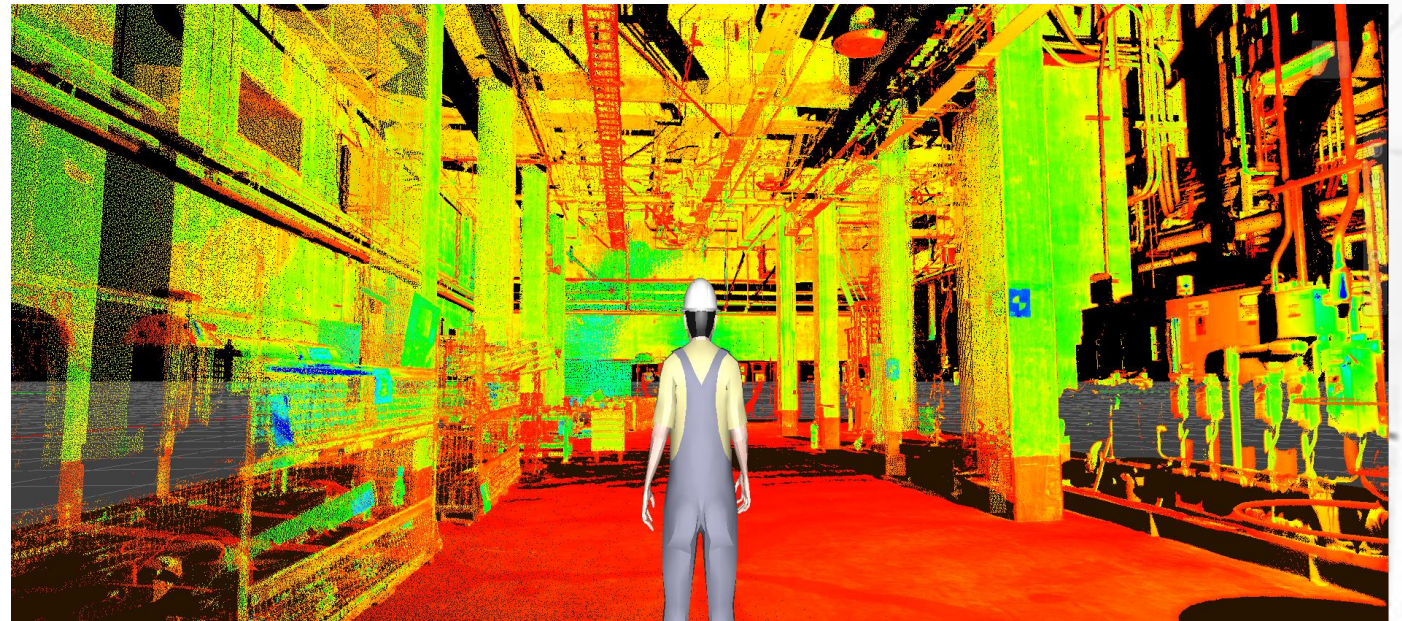
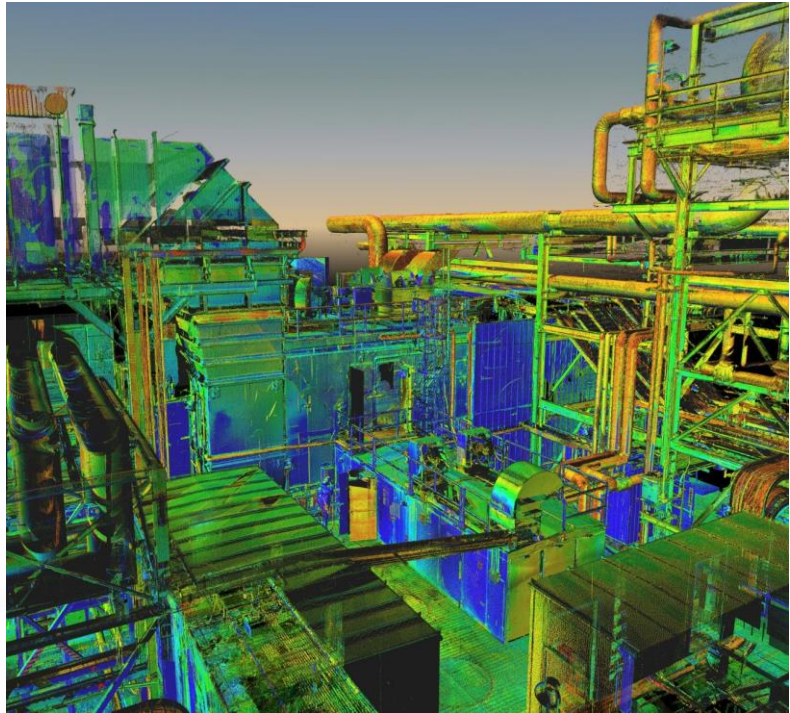
Leica RTC-360



1. 2 million points per second
2. High-speed 3D laser scanner with integrated HDR spherical imaging system and Visual Inertial System (VIS) for realtime registration
3. Range 130m
4. Ultra-high speed time-of-flight enhanced by Waveform Digitising (WFD) technology
5. 140-160 Full colored scans/day

Terrestrial Scanning

Terrestrial Scanning Creates 3D Models of Complex objects: Piping Networks, roadways, archeological sites, buildings, bridges etc, - Captures Complexity



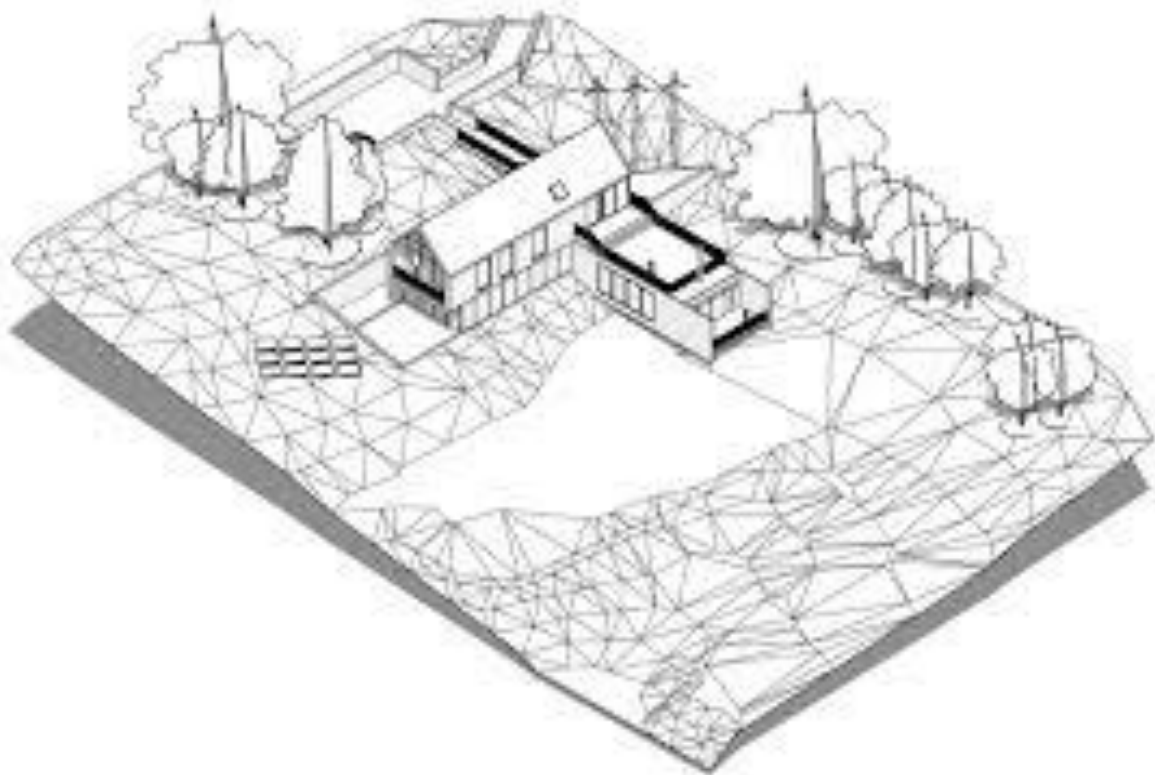
Terrestrial Lidar

One of the advantages of Terrestrial LiDAR is that objects can be measured remotely making operations such as measuring roadways under traffic much safer and easier.



Terrestrial LiDAR

- 3D Scanning can rapidly map complex sites in much more detail than is possible with conventional means – This makes a better base sheet for design or you can design in real 3D spaces.



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WHY USE 3D LASER SCANNING?

- As-built Survey, reality capture or existing condition survey
- Construction verification
- Clash detection
- Project management and pre planning
- Architectural or historical documentation
- Crime scene investigation
- Virtual design and construction
- Calculate volume, area, clearances.
- Floor flatness surveys



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What are the benefits of 3D Laser Scanning?

- **Safe** – Class 1 laser is invisible to the naked eye and of no risk to associates in the area. With a range of up to 1000m, hard to reach area's can be easily captured without the need to put personnel in harms way.
- **Accurate** – Individual measurements performed by traditional methods are prone to errors. Measuring 1 million points per second with accuracy within a couple of mm, errors are virtually eliminated as are the risk of forgotten measurements or repeated site visits.
- **Efficient** – Reduce costs and change orders. Incorporating a laser scan into the design of your project assures accurate and complete information, avoiding the cost of equipment rental, manual measurement, clashes, change orders, not to mention project delays and headaches.
- **Reliable** – Answers unanticipated questions. A 3D laser scan, captures every detail, eliminating the need to return for unanticipated measurements or questions.
- Laser scanning is fast, safe and non-intrusive and in most cases, operational shutdowns are not required.

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I have a laser scan, now what?

Before you begin with any laser scanning, it is important to define what you are looking to achieve. 3DS can help guide you and answer any questions before hand. 3DS works with several partners to provide:

- 2D CAD drawings and layouts
- 3D Revit or CAD 3D models
- Virtual walkthroughs for sharing spaces to avoid repeated site visits
- Reports on building analysis or flatness surveys

CUSTOMERS

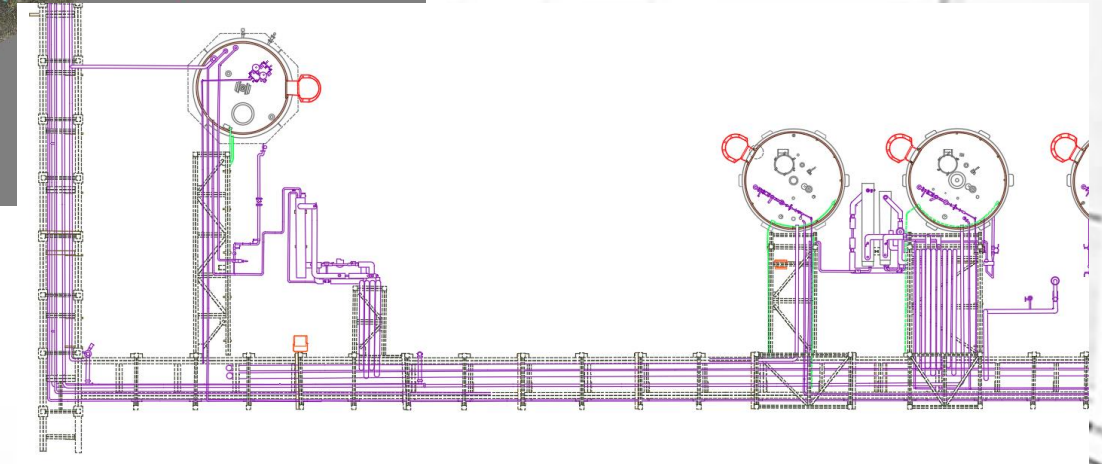
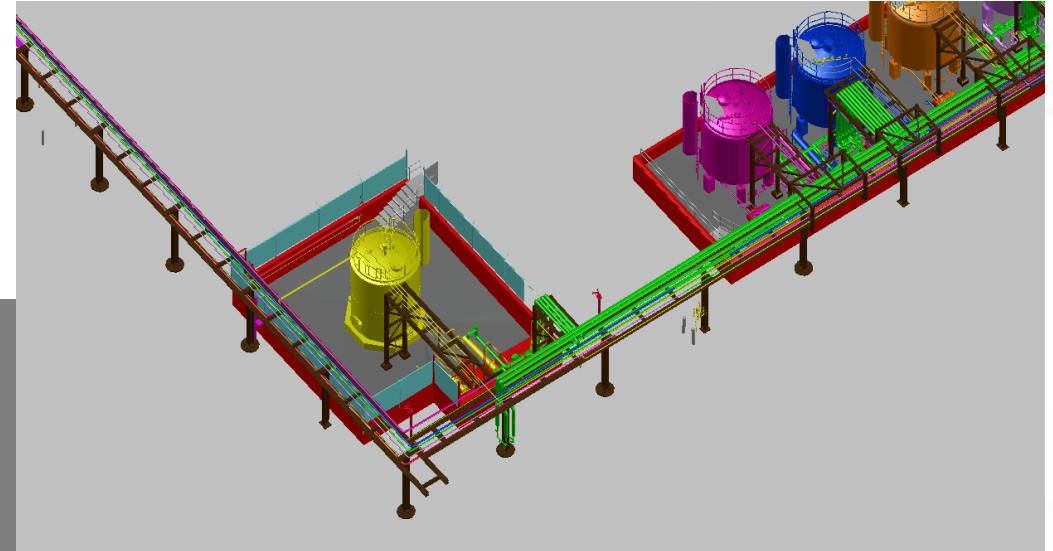
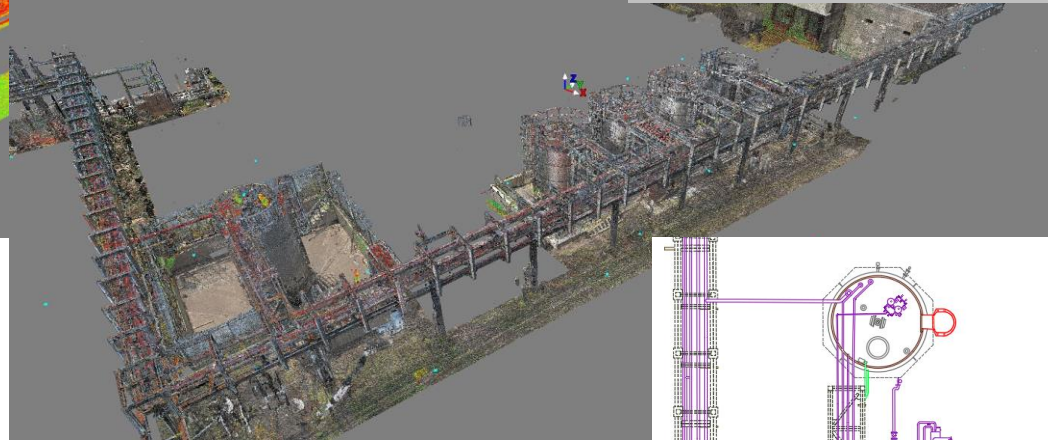
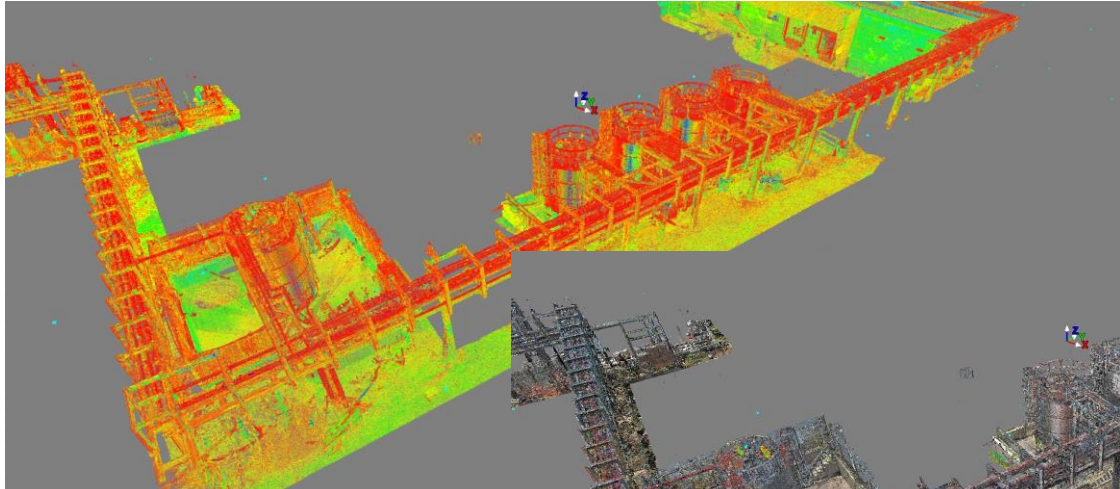


EMPOWERING EPCM

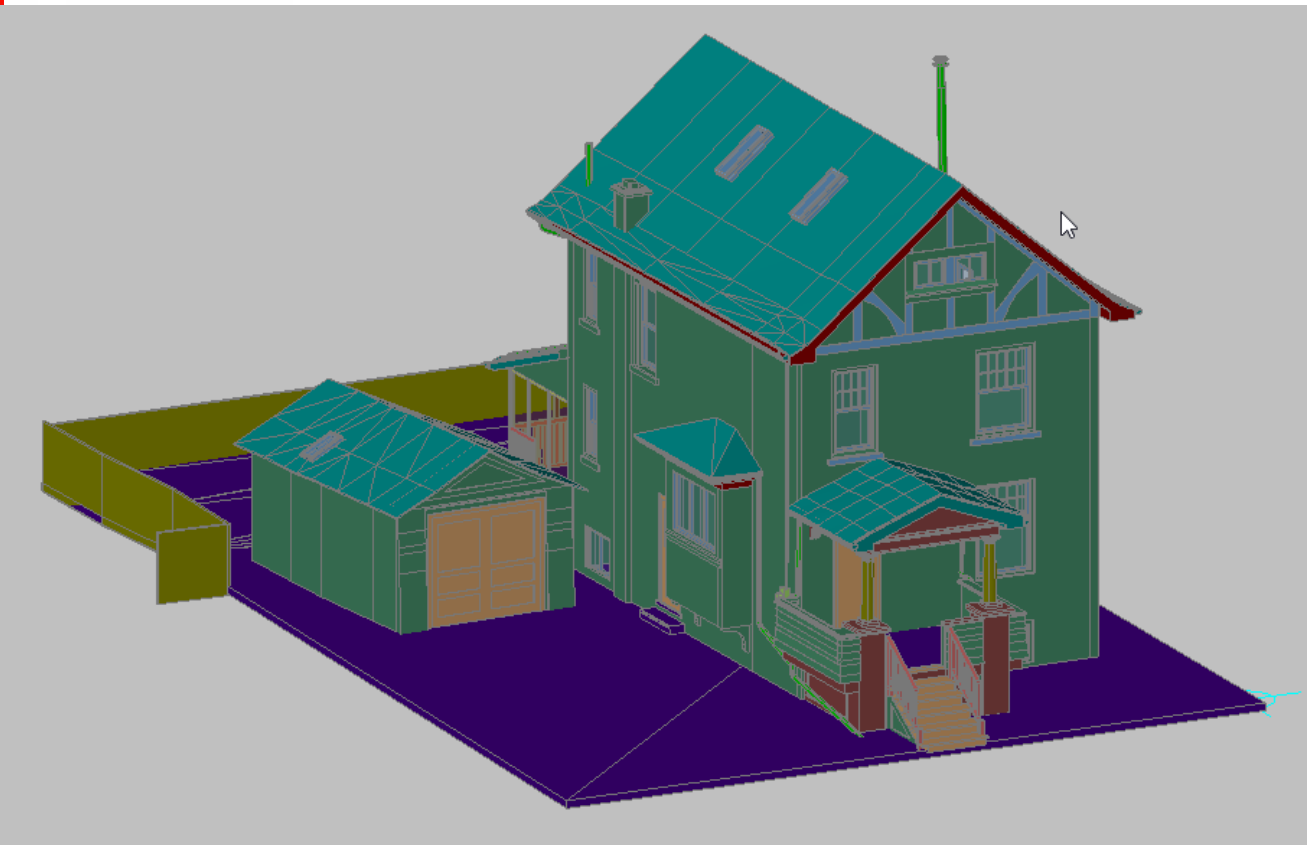
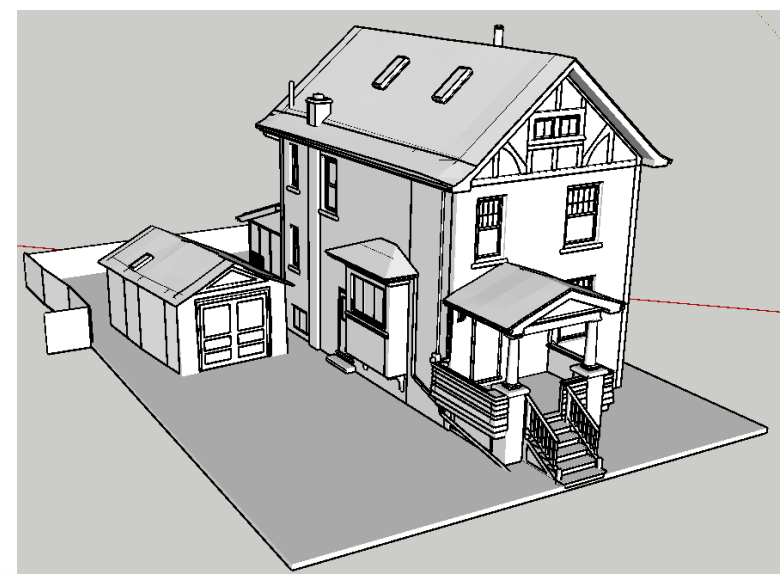
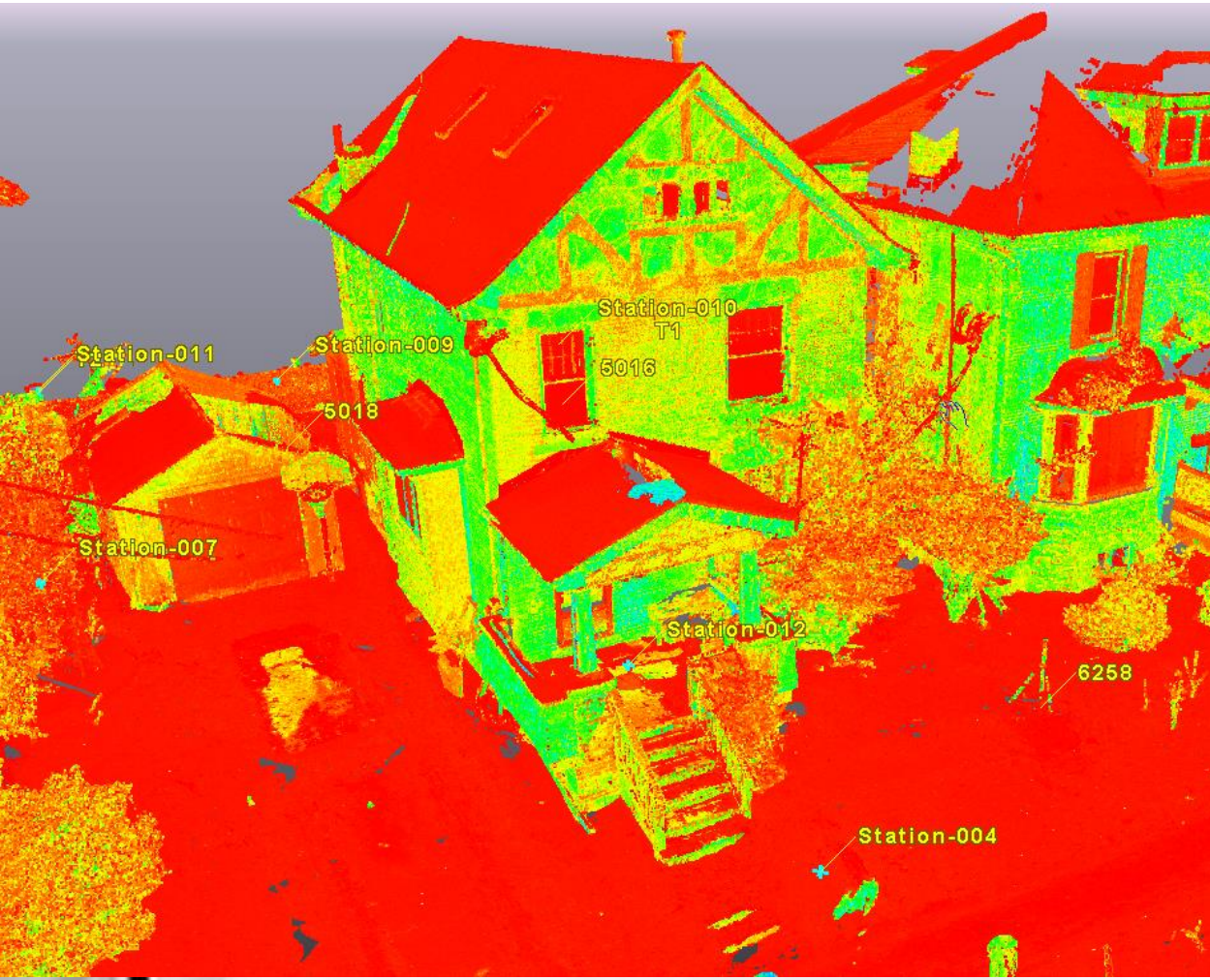




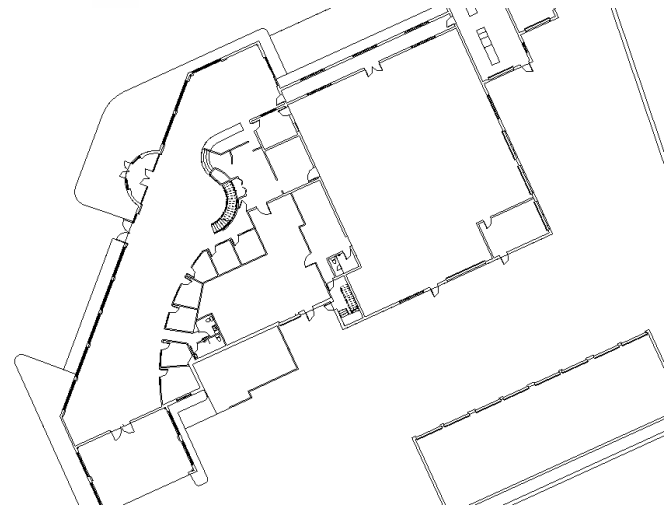
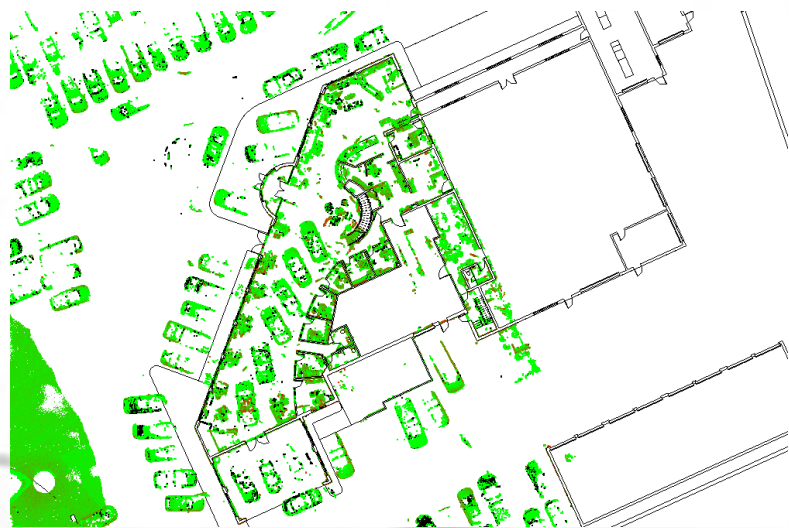
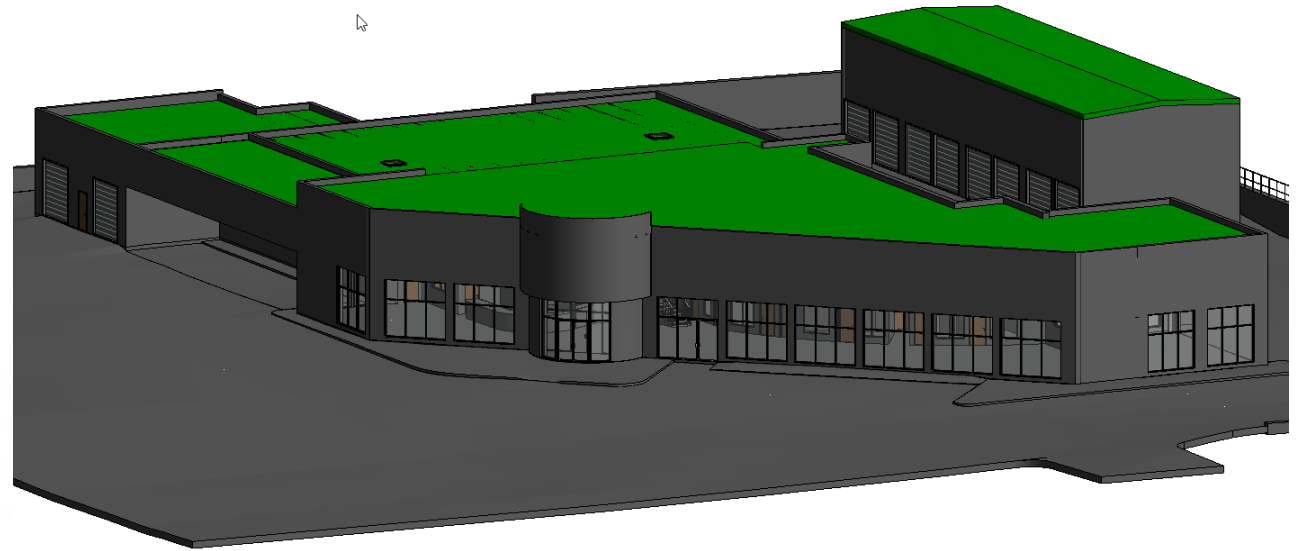
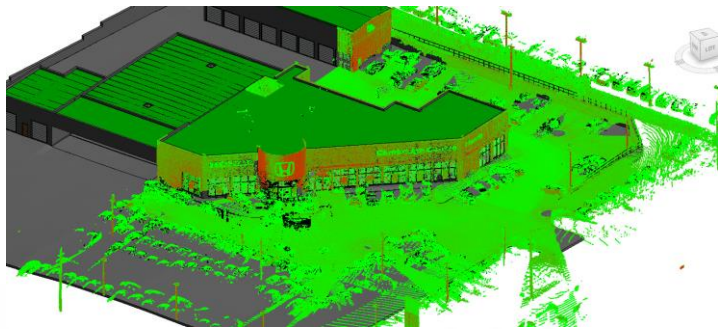
Point Cloud to Cad 2D



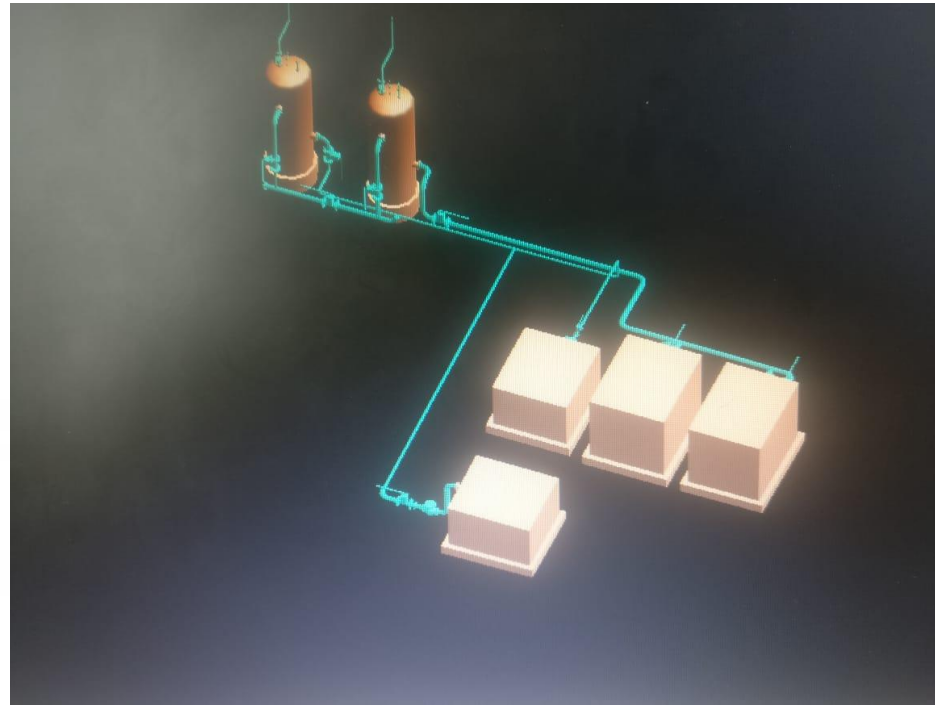
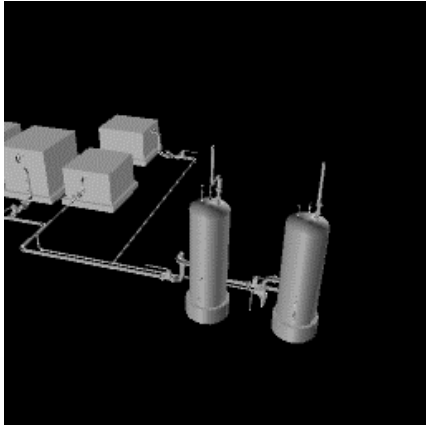
Scan to CAD and 3D Model



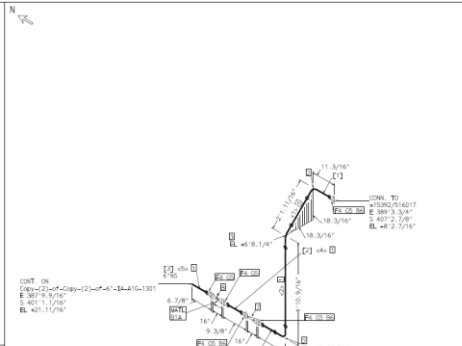
Scan to REVIT



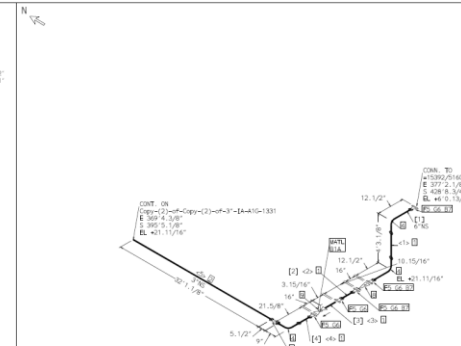
Scan to ISO Drawings



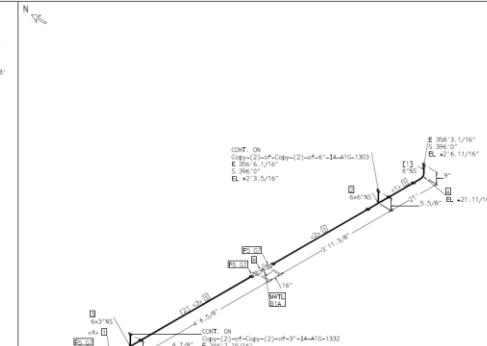
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PIPE				
1	PIPE SCH40 ANSI 806.10 APFSL GR.B	6	PA150 5.4'	
FITTINGS				
2	ELBOW LR ANSI 816.9 IN ASTM A234-MPB	6	EA150 2	
3	ELBOW KDR ANSI 816.9 IN ASTM A234-MPB	4	ET150 1	
FLANGES				
4	FLANGE IN ANSI 816.5 #150 RF ASTM A105	6	FA150 5	
ERECTOR MATERIALS				
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY	
GASKETS				
5	GASKET RF 1.5MM ANSI 816.5 #150 SS & ASB	6	GC150 5	
6	3.15/16 STD OR 2 NUTS ASTM A193-87/2H	13/16	SB803.15 24	
VALVES / IN-LINE ITEMS				
7	VALVE 2W200 CW ANSI 816.10 #150 RF ASTM A216-W200	6	V1150 1	
8	VALVE BALL A1510 #150 RF ANSI MODEL OPERATED TOP/SHOWN-BOTTOM ACTN W/3 THEM-10 316 SEAT & SEAL TYPE	6	VALV4 1	
PIPE SPECIALS				
[1] [2] [3]				
CUT PIPE LENGTH				
ITEM CODE	PIECE NO	CUT LENGTH (INS)	REMARKS	END
PA150	<1>	12.12/16	6	RE/FE
PA150	<2>	3'9.13/16	6	RE/FE
PA150	<3>	13/16	6	RE/FE
PA150	<4>	2.3/8	6	RE/FE
PA150	<5>	3.3/8	6	RE/FE
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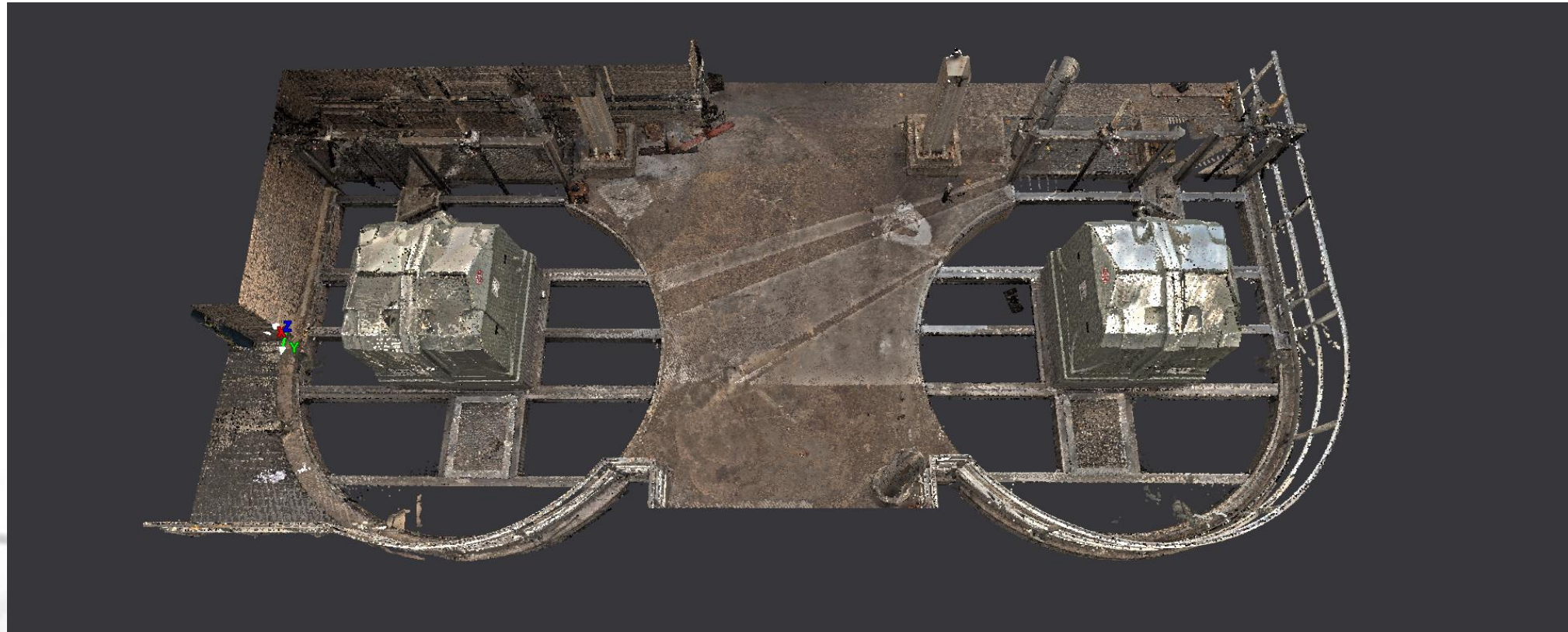
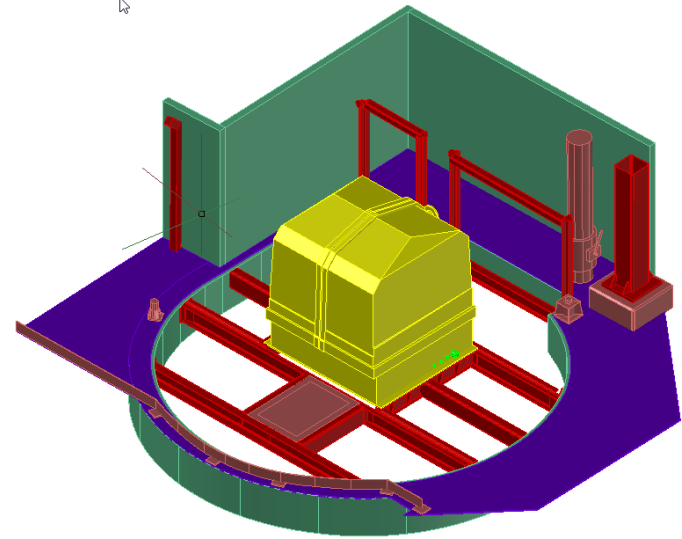
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PIPE				
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2	PIPE SCH40 ANSI 806.10 APFSL GR.B	3	PAR0 32.1'	
FITTINGS				
3	WELL CONC ANSI 816.9 IN ASTM A234-MPB	6 x 3	WCT03ARD 1	
4	ELBOW LR ANSI 816.9 IN ASTM A234-MPB	6	EA150 3	
FLANGES				
5	FLANGE IN ANSI 816.5 #150 RF ASTM A105	6	FA150 5	
ERECTOR MATERIALS				
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY	
GASKETS				
6	GASKET RF 1.5MM ANSI 816.5 #150 SS & ASB	6	GC150 5	
7	3.15/16 STD OR 2 NUTS ASTM A193-87/2H	13/16	SB803.15 24	
VALVES / IN-LINE ITEMS				
8	VALVE 2W200 CW ANSI 816.10 #150 RF ASTM A216-W200	6	V1150 1	
9	VALVE BALL A1510 #150 RF ANSI MODEL OPERATED TOP/SHOWN-BOTTOM ACTN W/3 THEM-10 316 SEAT & SEAL TYPE	6	VALV4 1	
PIPE SPECIALS				
[1] [2] [3] [4]				
CUT PIPE LENGTH				
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PA150	<2>	3.35/16	6	RE/FE
PA150	<3>	3.15/16	6	RE/FE
PA150	<4>	9.1/8	6	RE/FE
PAR0	<5>	32.1.1/8	3	RE/FE
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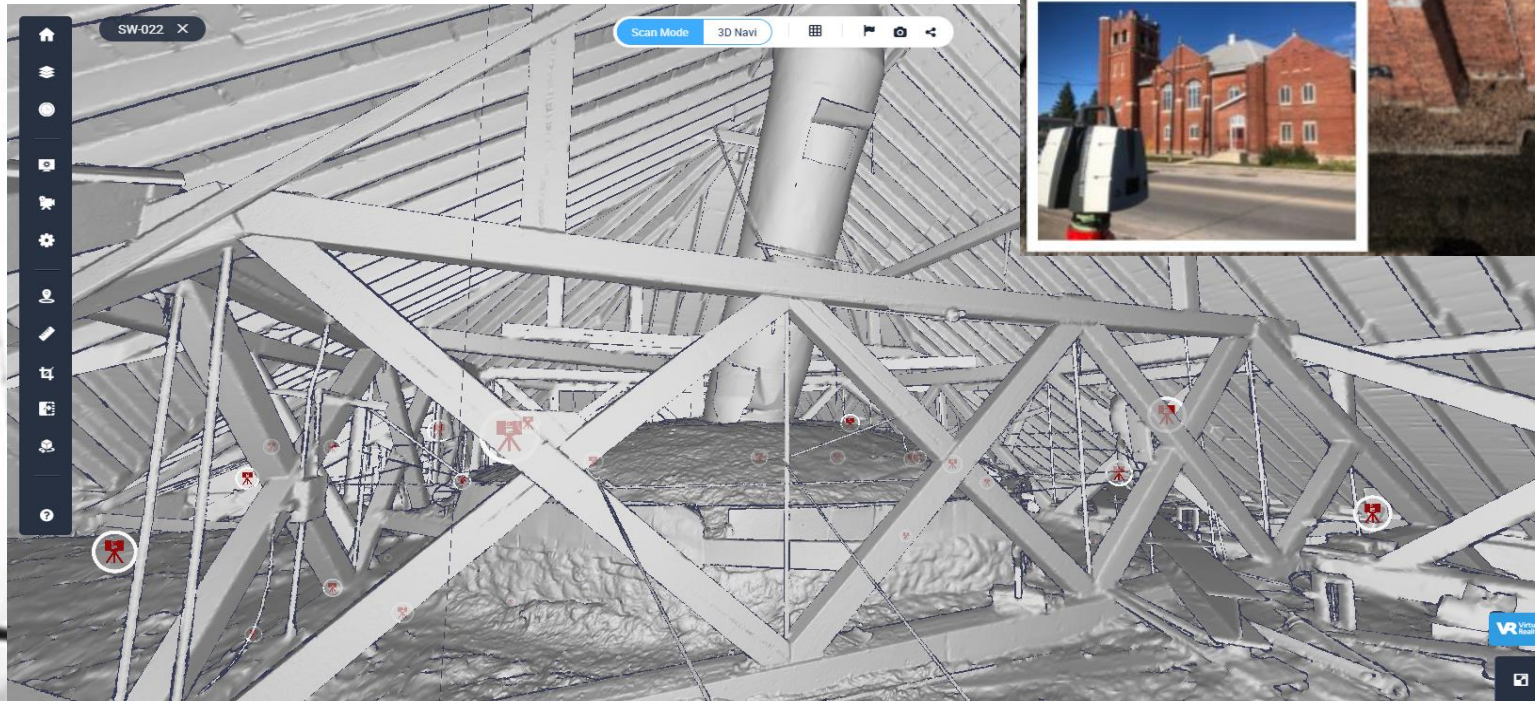
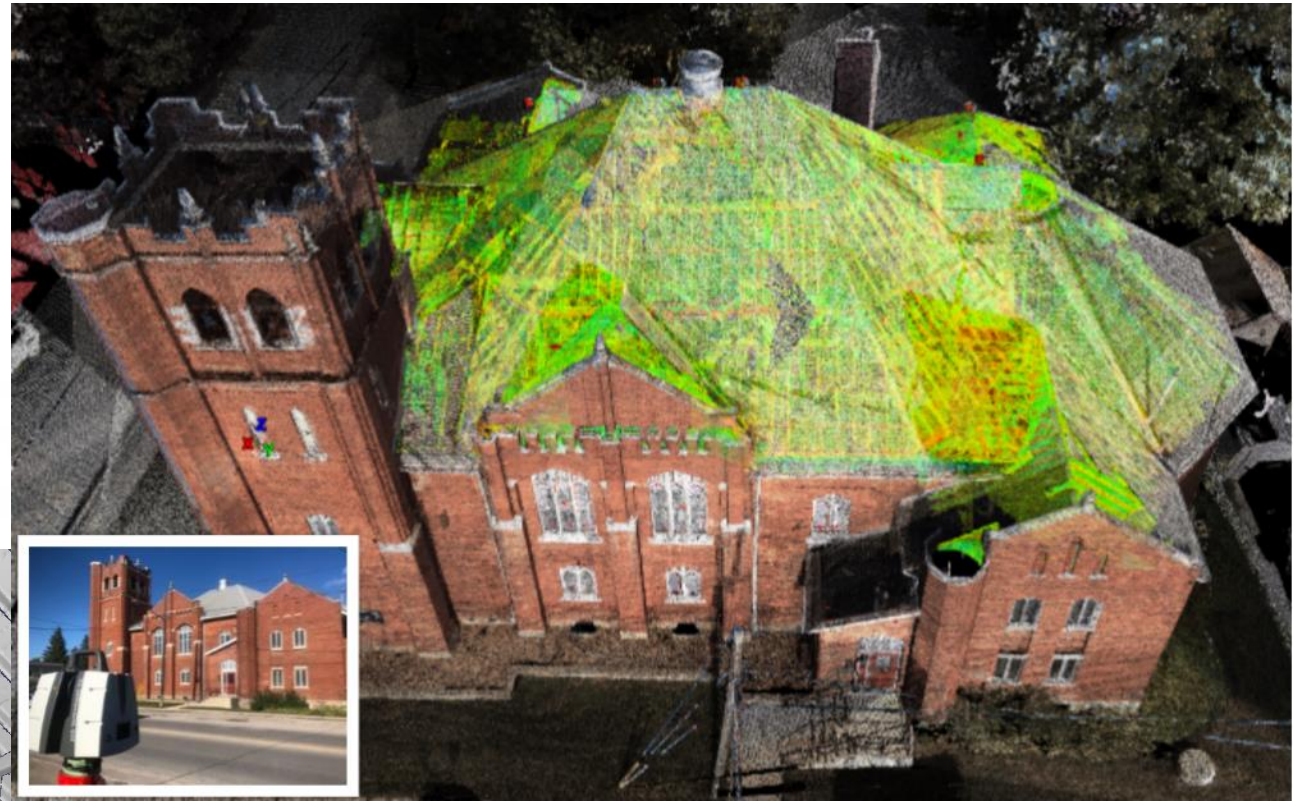
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FITTINGS				
2	TEE ANSI 816.9 IN ASTM A234-MPB	6 x 6	TA150 1	
3	TEE ANSI 816.9 IN ASTM A234-MPB	6 x 3	TA150ARD 1	
4	ELBOW LR ANSI 816.9 IN ASTM A234-MPB	6	EA150 1	
FLANGES				
5	FLANGE IN ANSI 816.5 #150 RF ASTM A105	6	FA150 3	
ERECTOR MATERIALS				
PT NO	COMPONENT DESCRIPTION	N.S. (INS)	ITEM CODE QTY	
FLANGES				
6	FLANGE BLND ANSI 816.5 #150 RF ASTM A105 GR.B	6	RF150 1	
GASKETS				
7	GASKET RF 1.5MM ANSI 816.5 #150 SS & ASB	6	GC150 3	
VALVES / IN-LINE ITEMS				
8	VALVE BALL A1510 #150 RF ANSI MODEL OPERATED TOP/SHOWN-BOTTOM ACTN W/3 THEM-10 316 SEAT & SEAL TYPE	6	VALV4 1	
PIPE SPECIALS				
[1] [2]				
CUT PIPE LENGTH				
ITEM CODE	PIECE NO	CUT LENGTH (INS)	REMARKS	END
PA150	<1>	4.3/8	6	RE/FE
PA150	<2>	3.2.1/4	6	RE/FE
PA150	<3>	3'9.1/2	6	RE/FE
PA150	<4>	3.7/16	6	RE/FE
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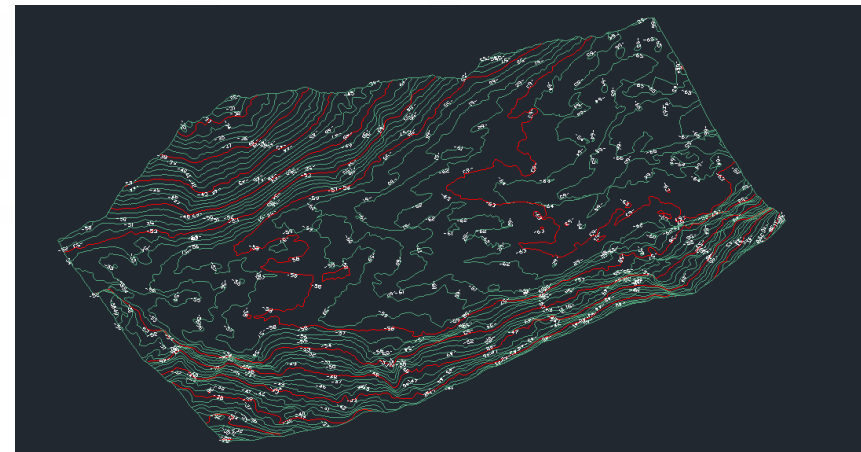
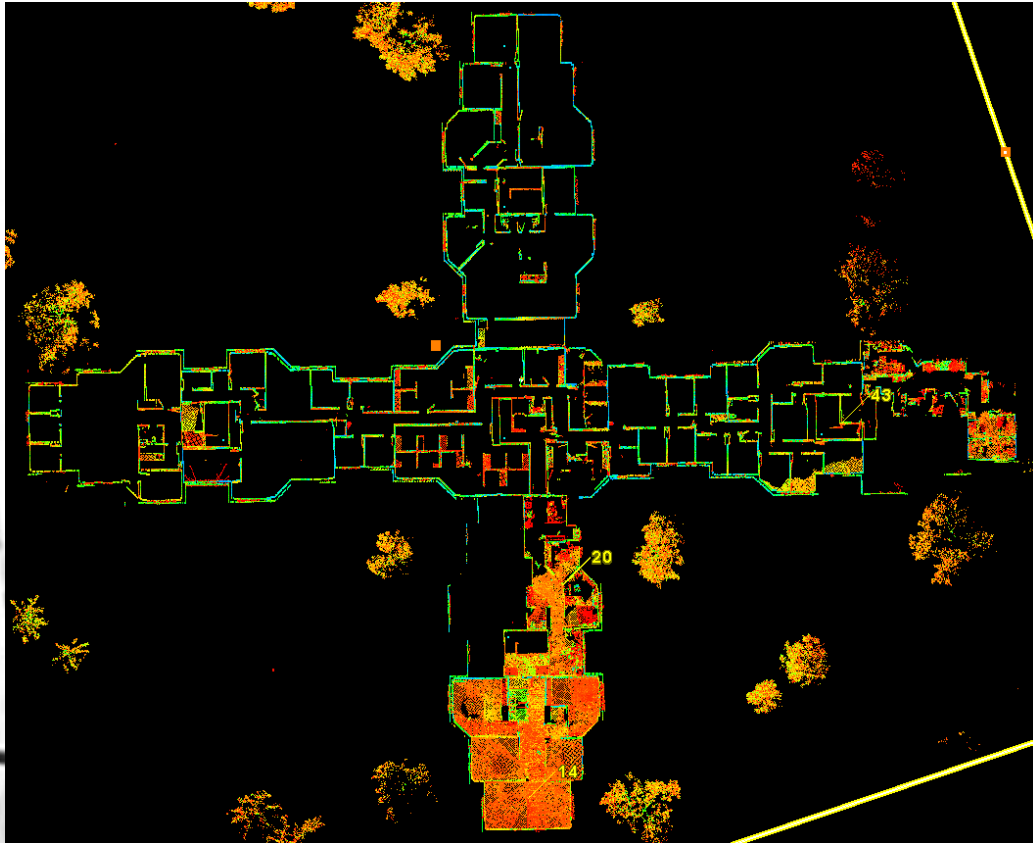
Scan to CAD and 3D Model



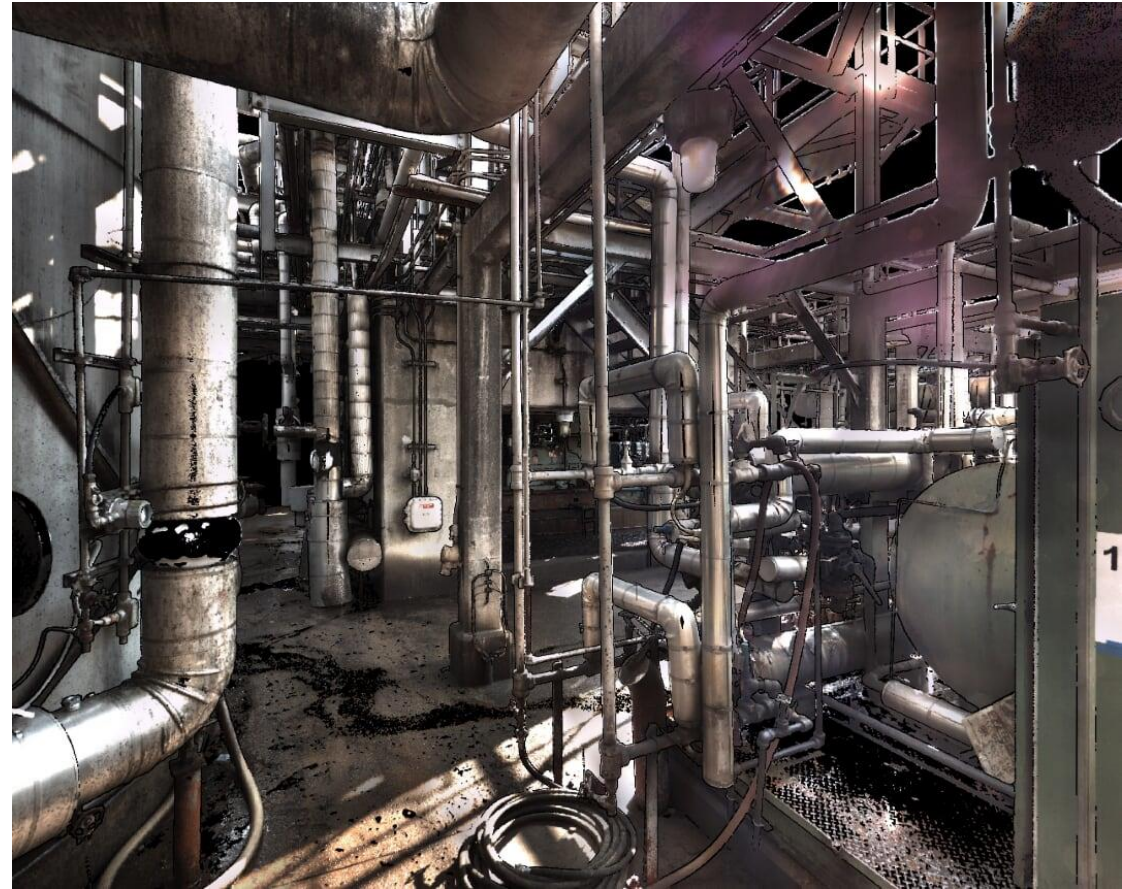
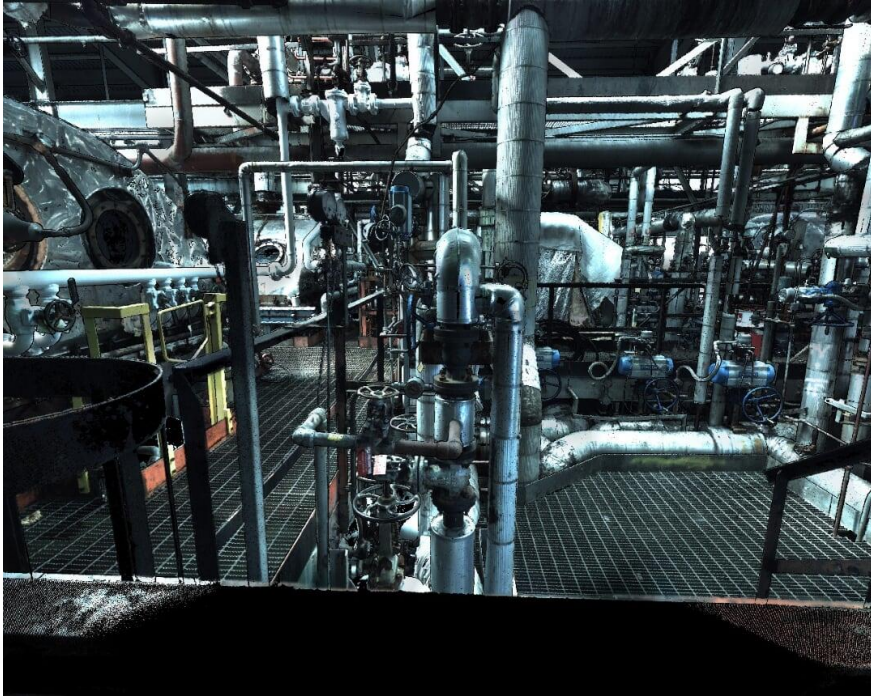
SCAN DIFFICULT AREAS



CONSTRUCTION VERIFICATION AND QUICK MEASUREMENTS



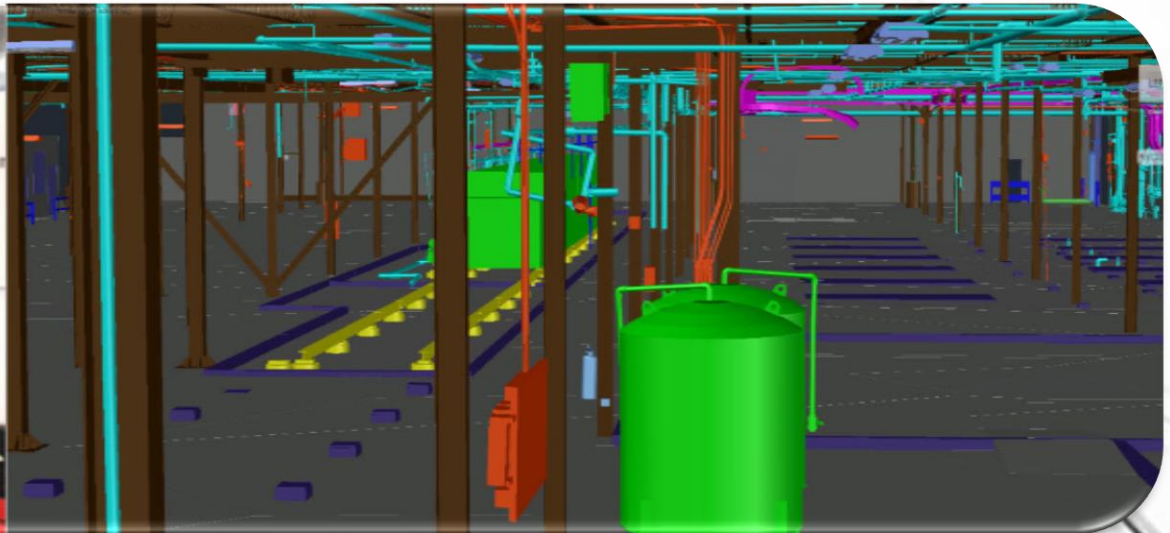
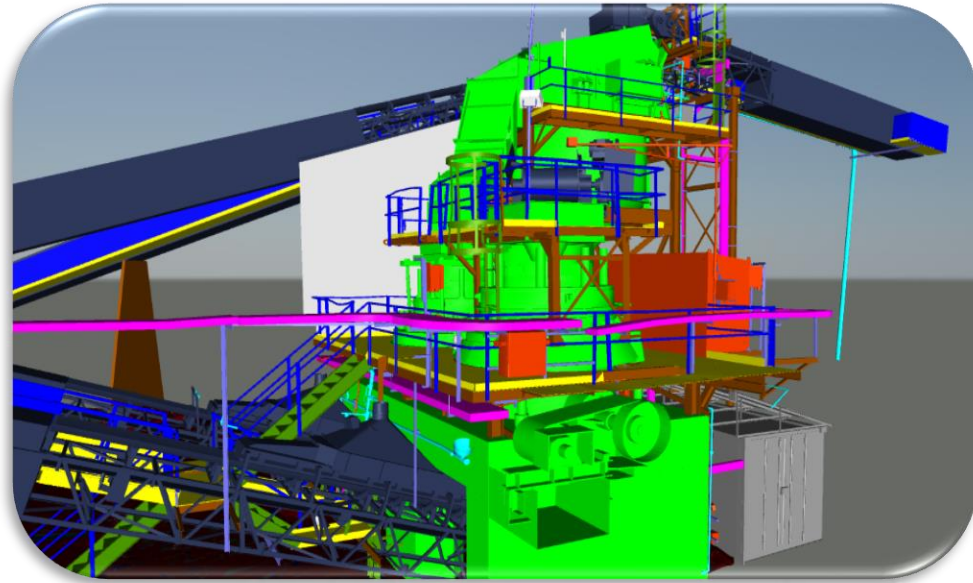
Petrochemical piping



Mezzanine rebuild



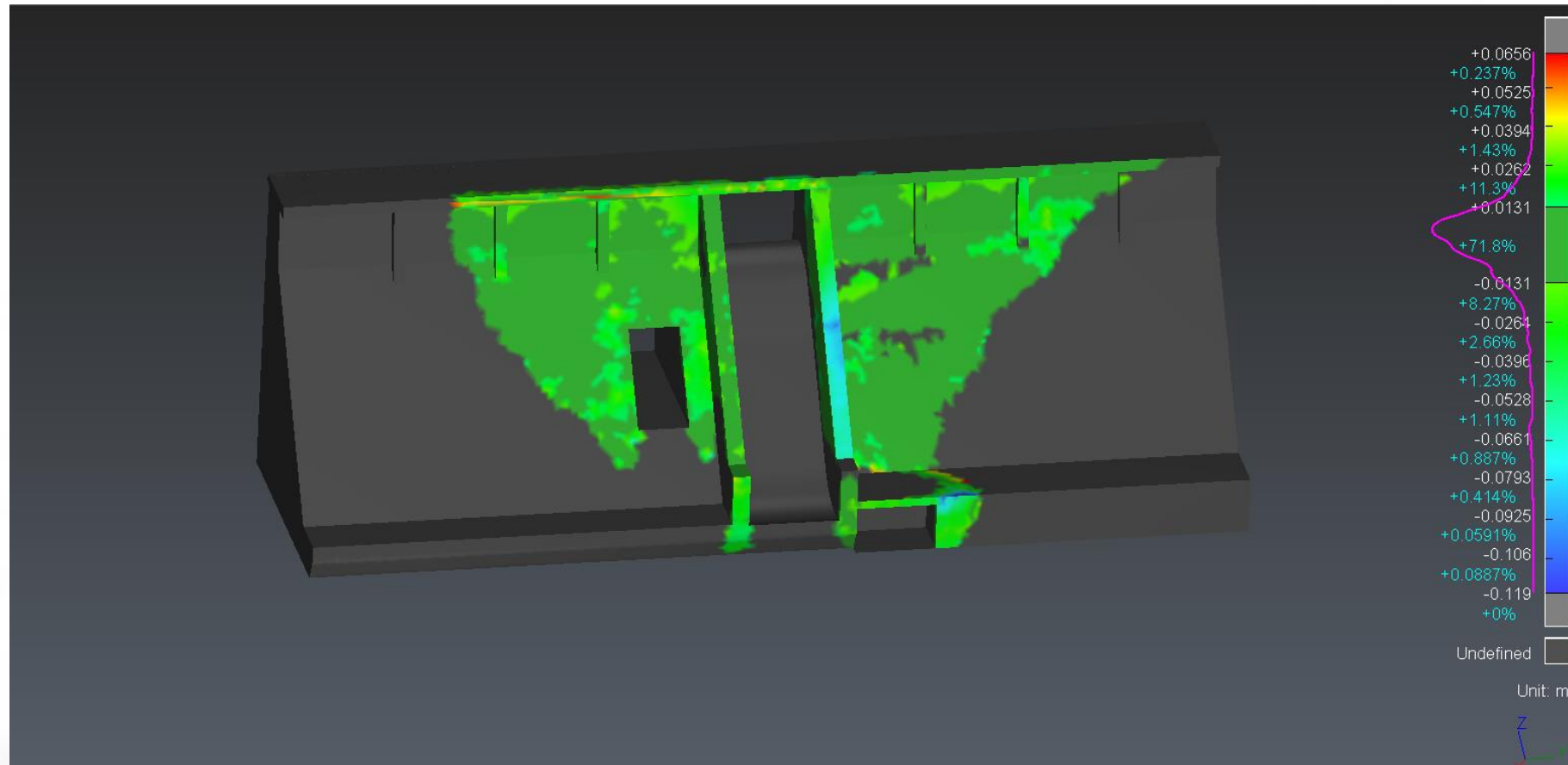
SCAN to AutoCAD



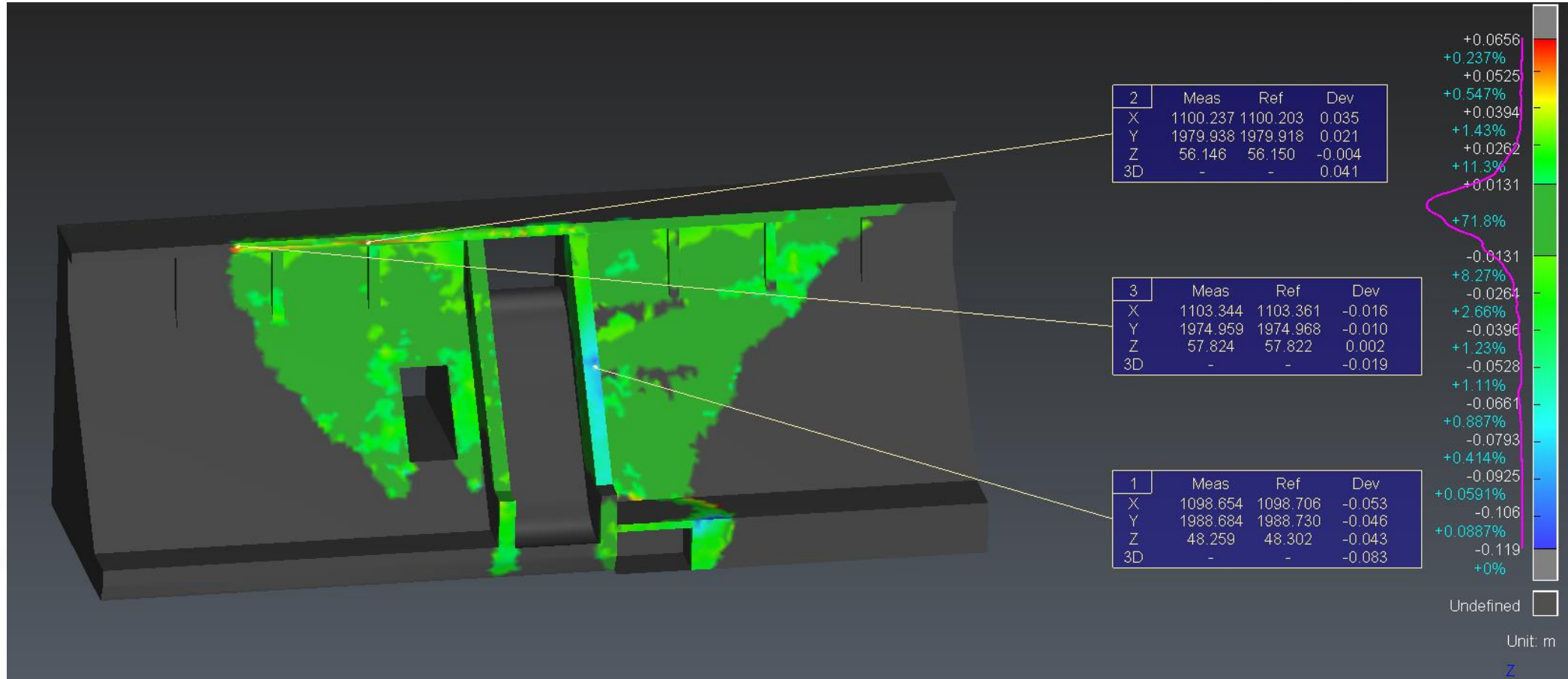
3D Comparison



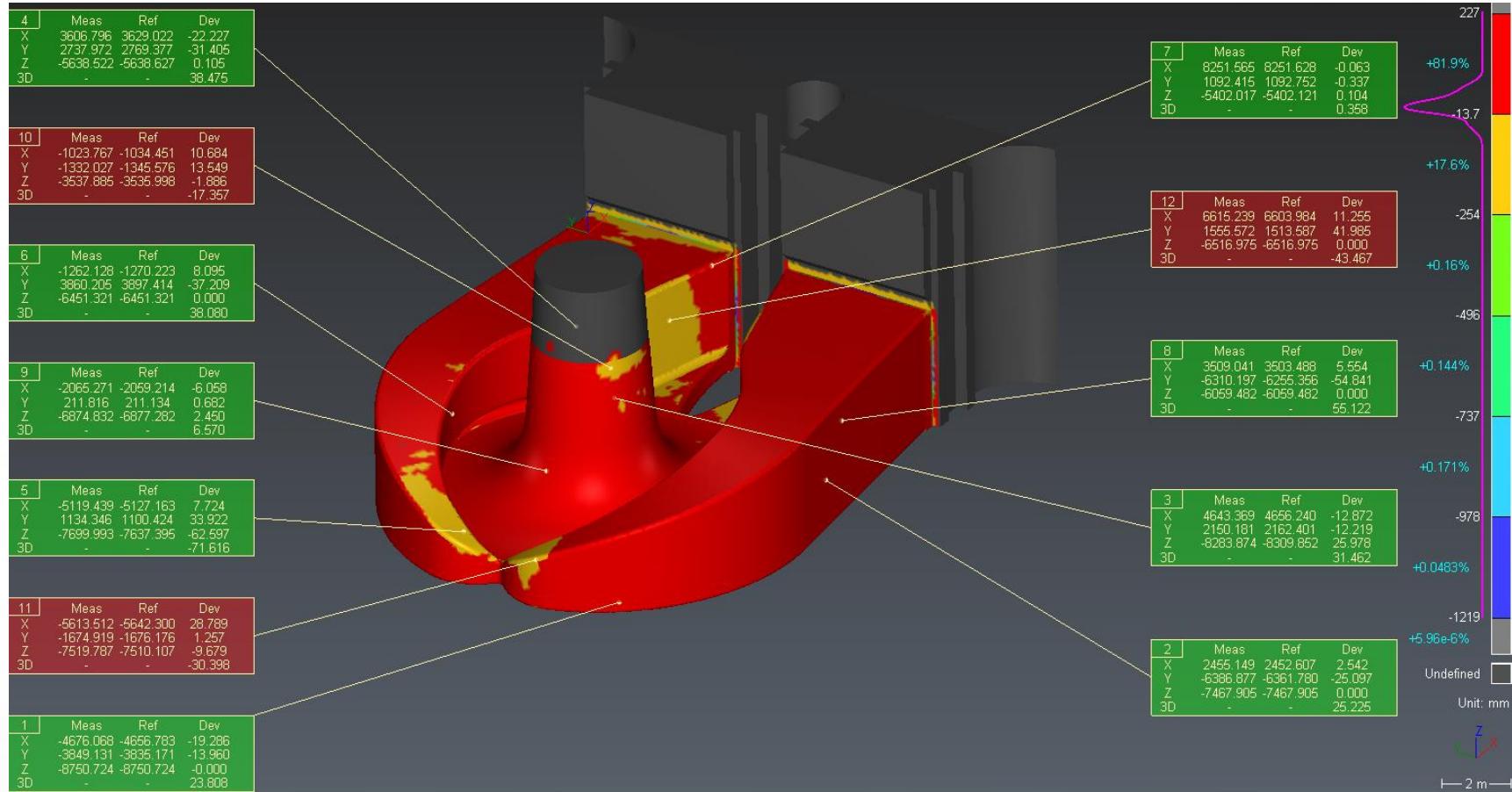
3D Comparison



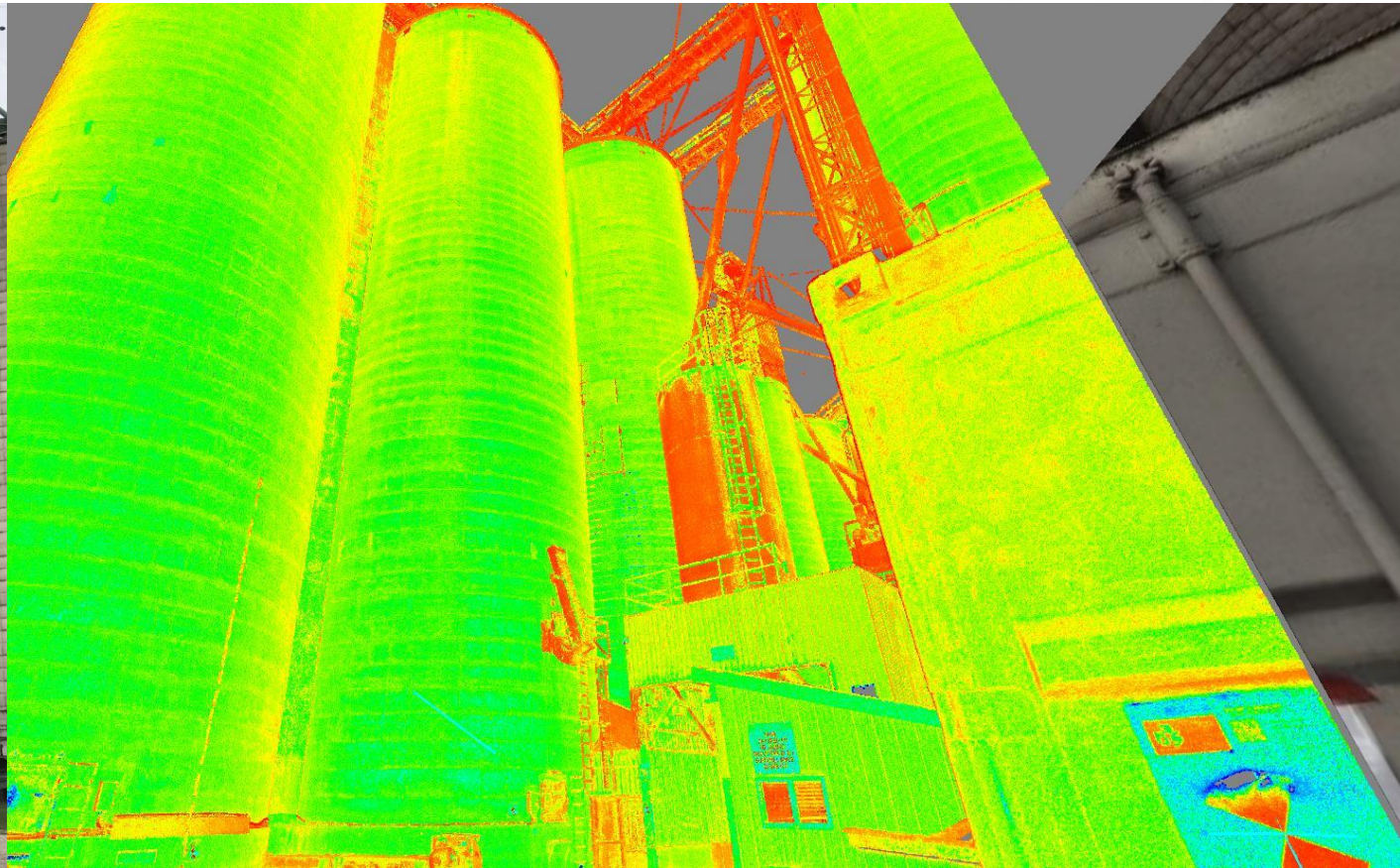
3D Comparison



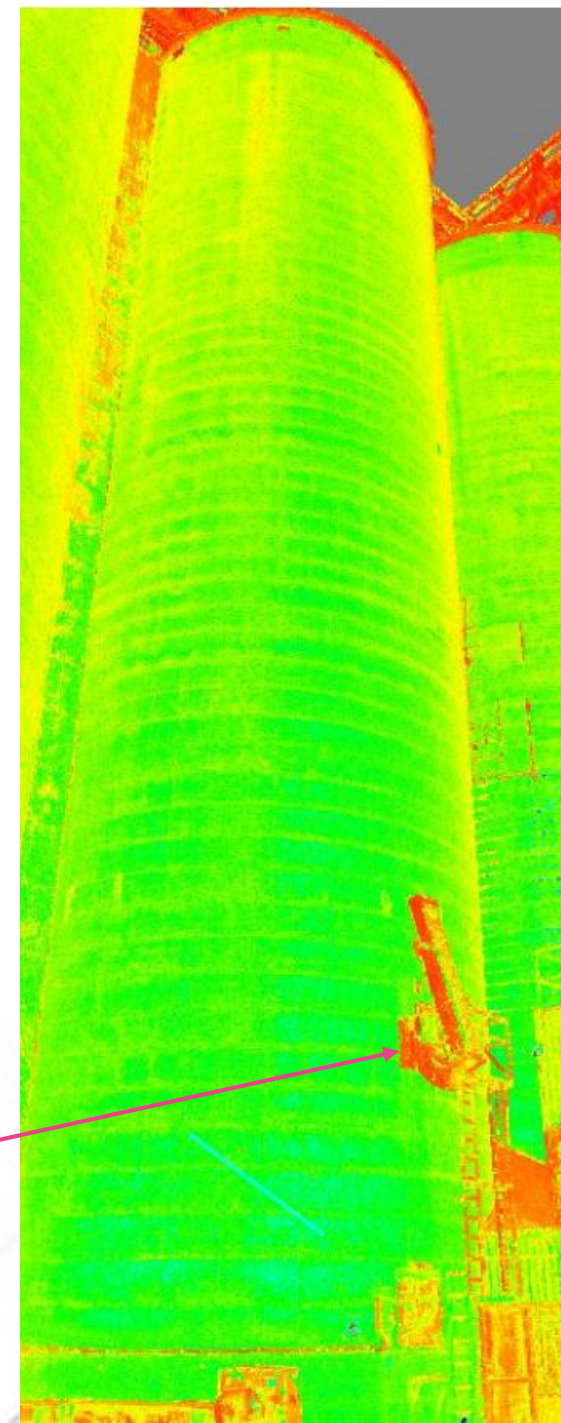
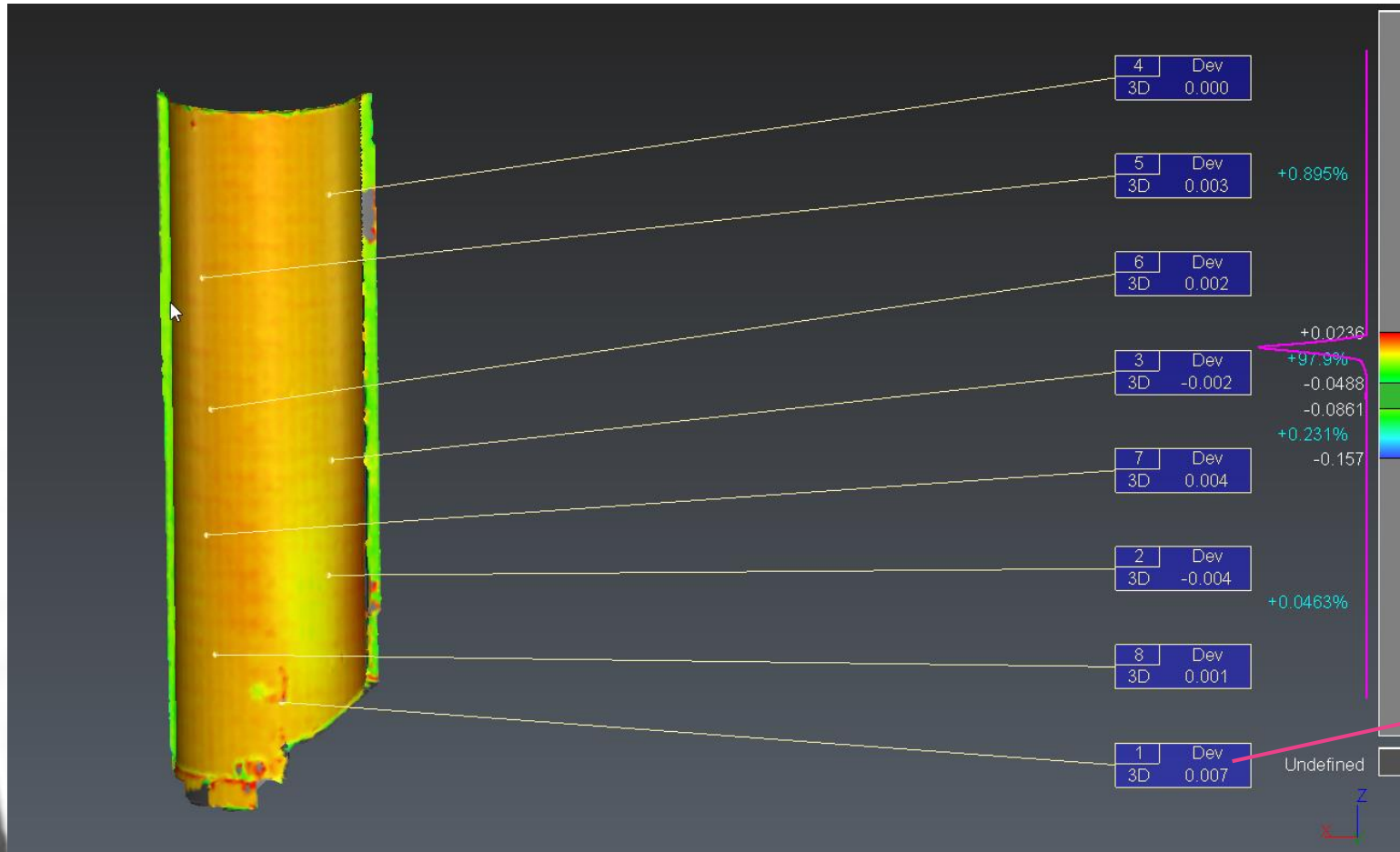
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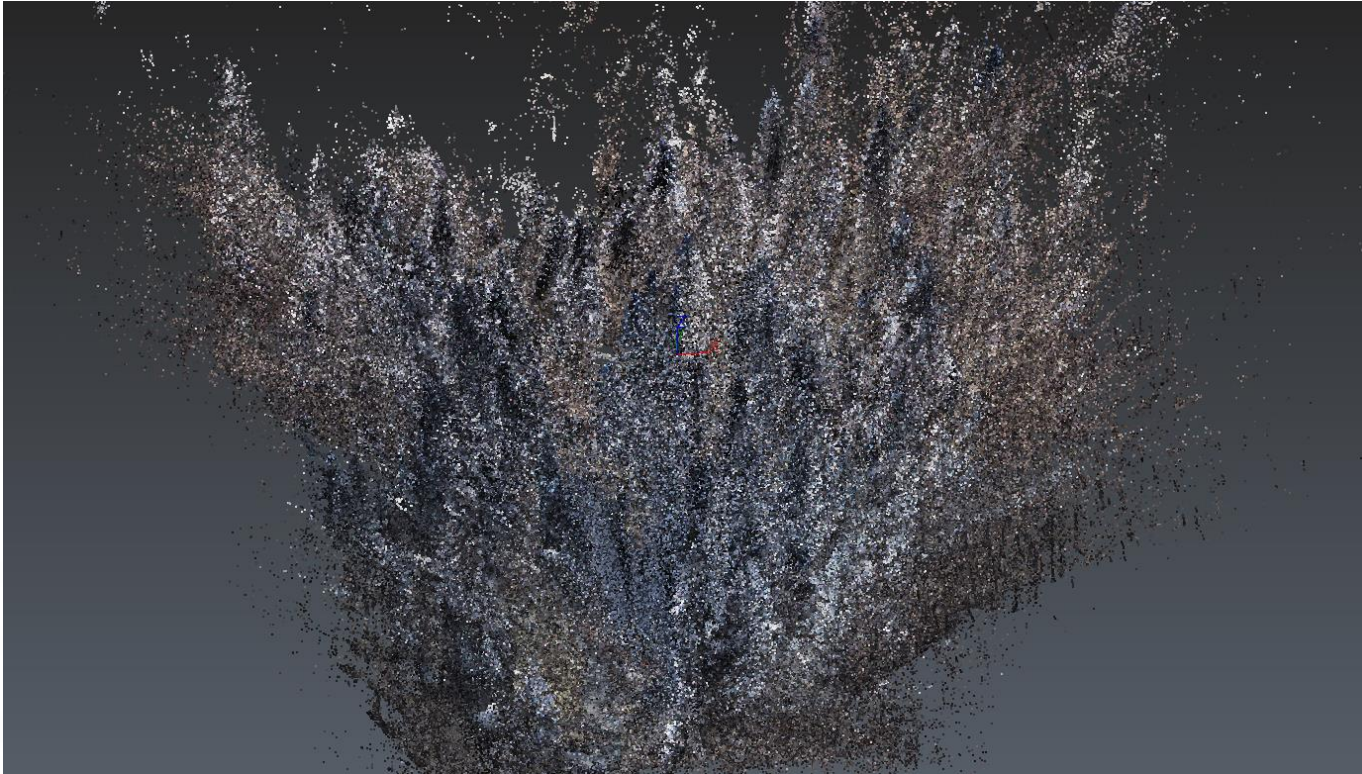
3D Comparison



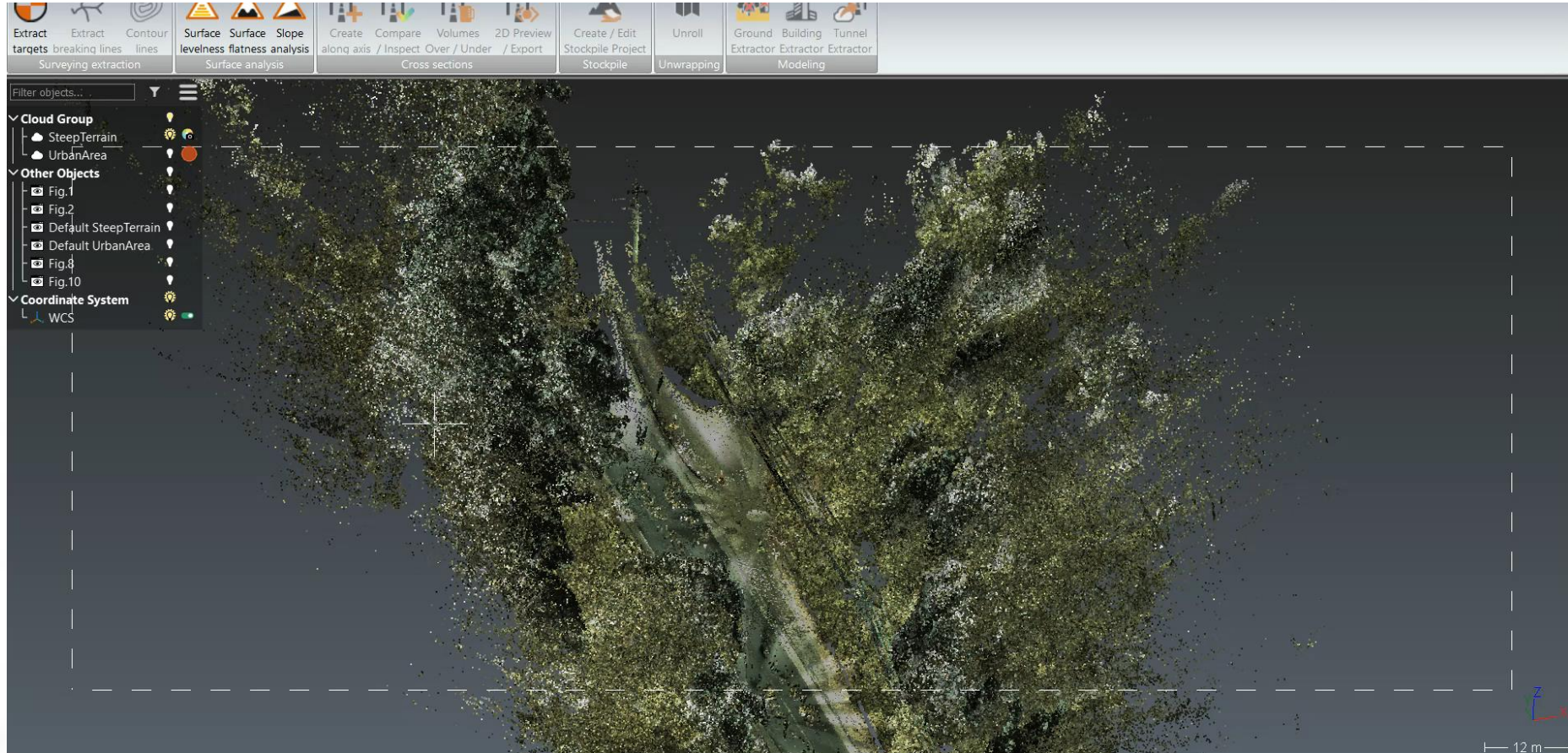
3D Comparison



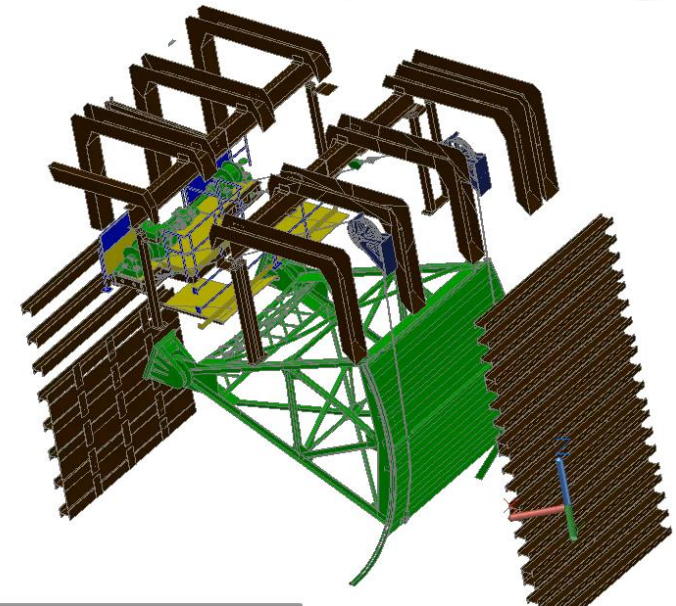
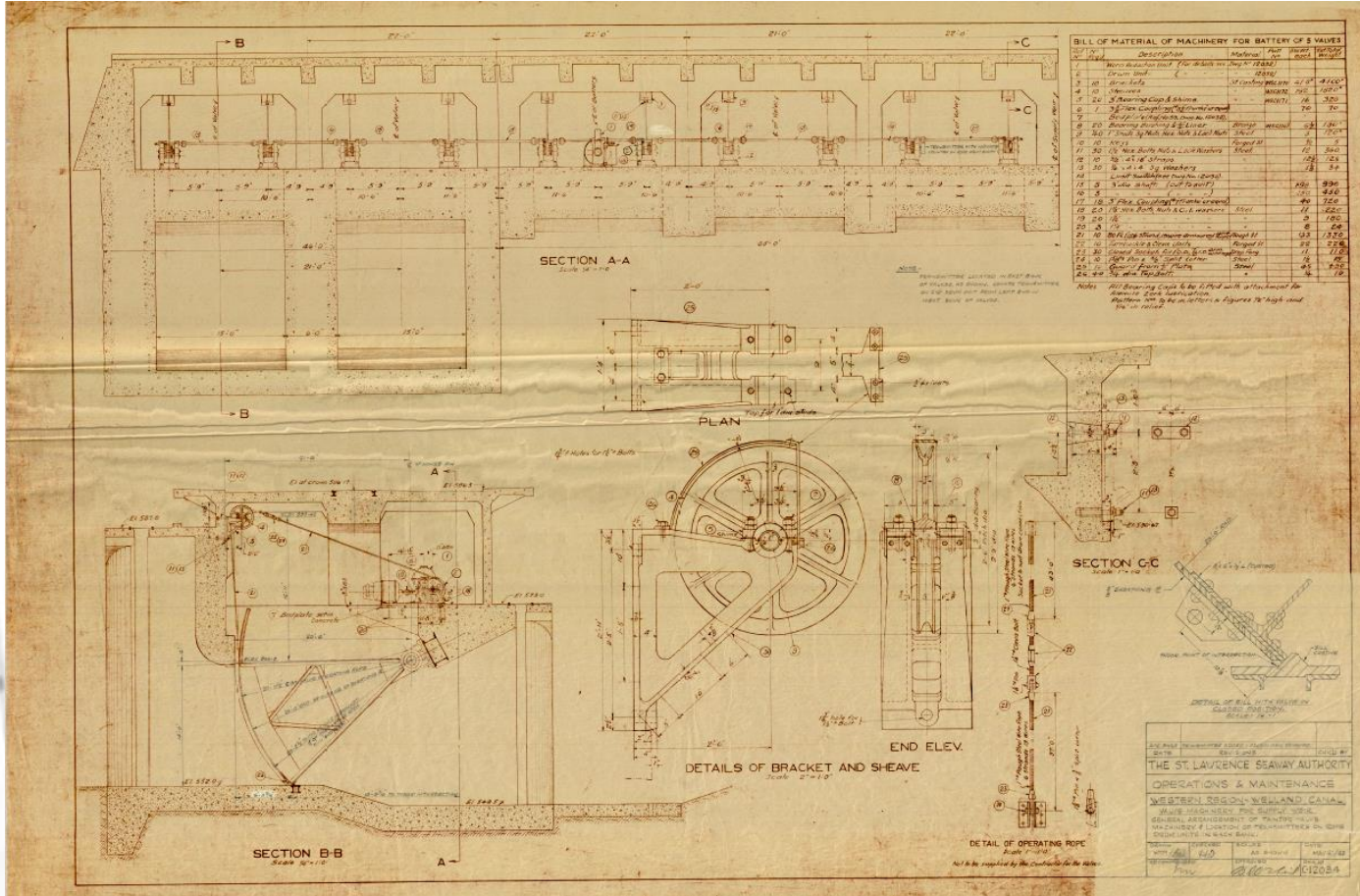
GROUND EXTRACTION AND SURVEY



GROUND EXTRACTION AND SURVEY



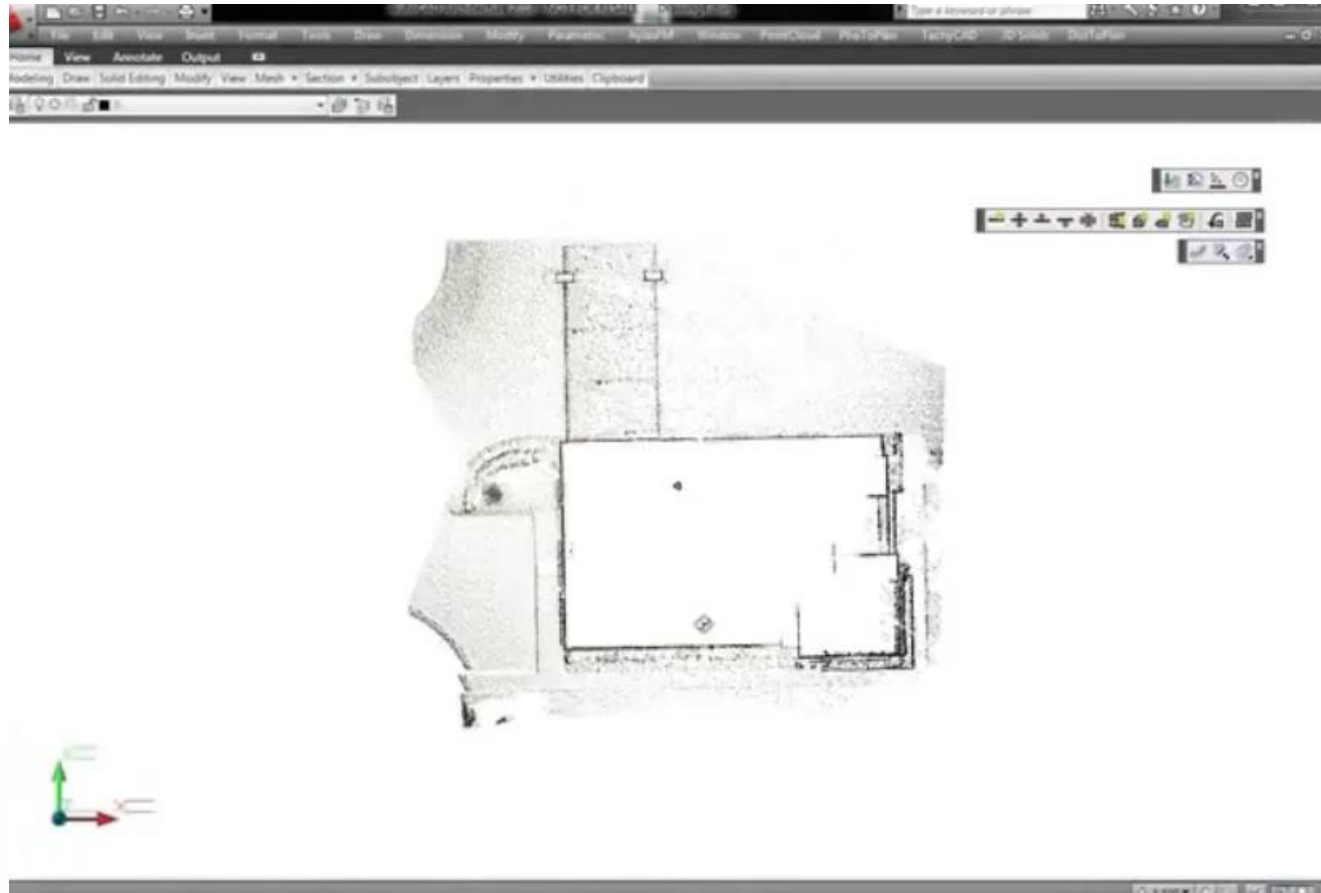
WHEN TO USE LASER SCANNING



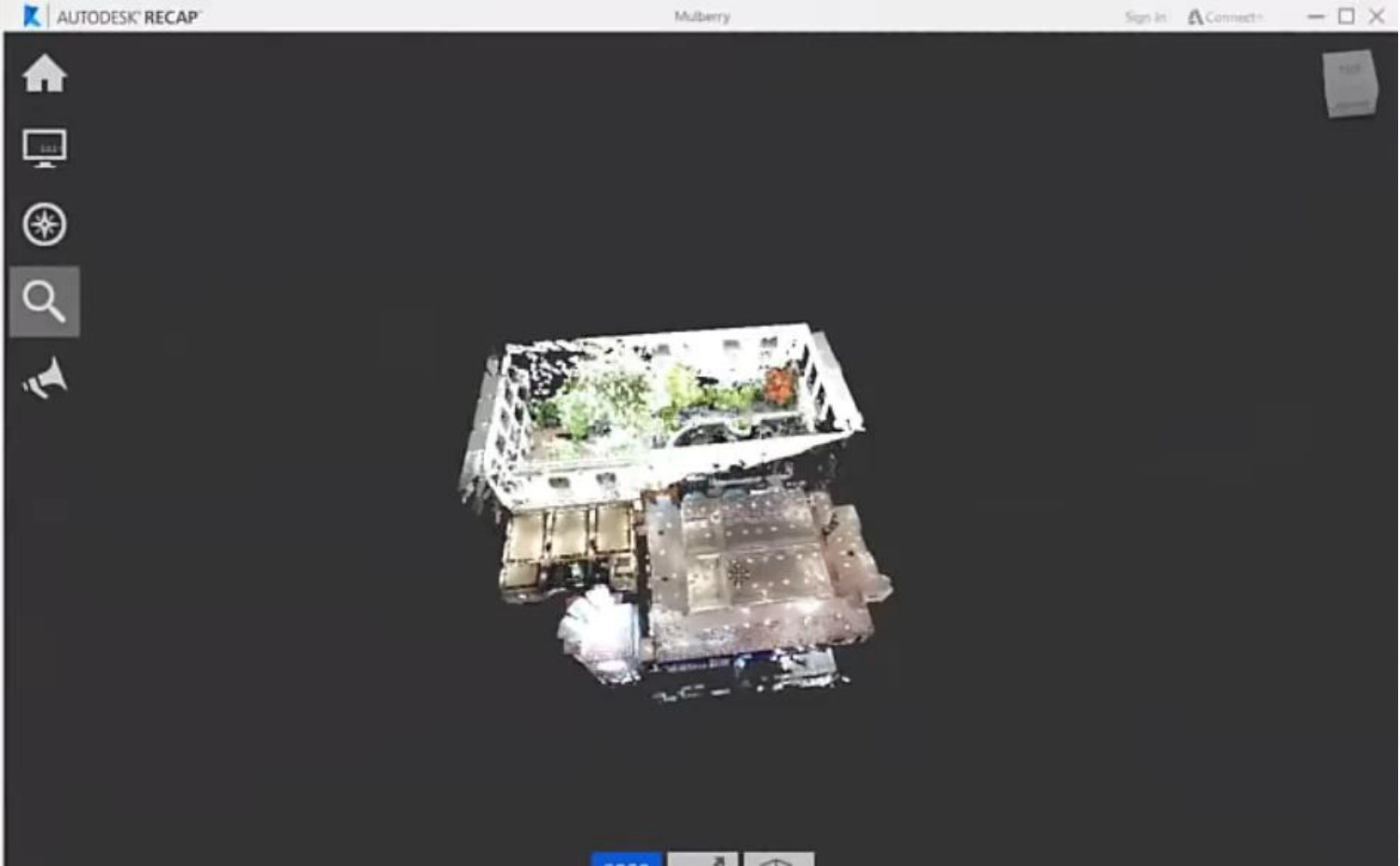
WHEN TO USE LASER SCANNING



POINT CLOUD TO 2D

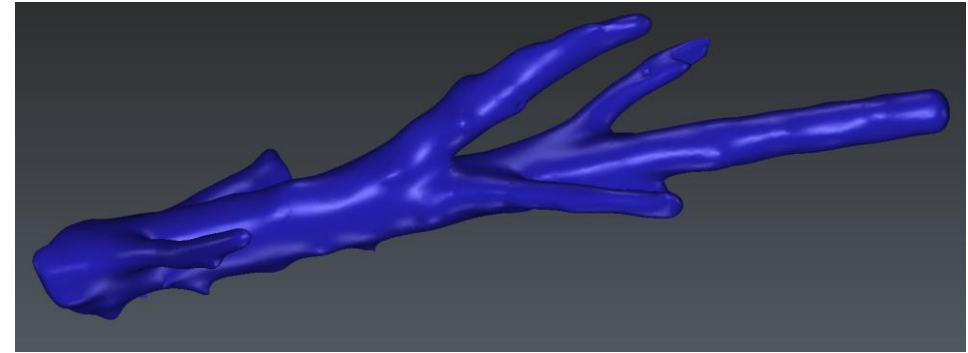


POINT CLOUD IN REVIT



Reverse Engineering

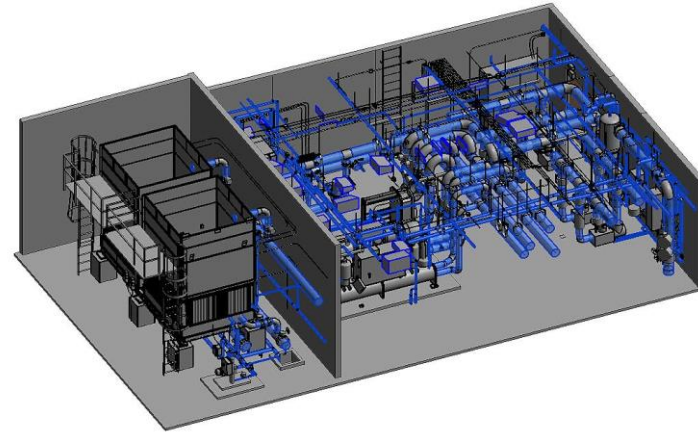
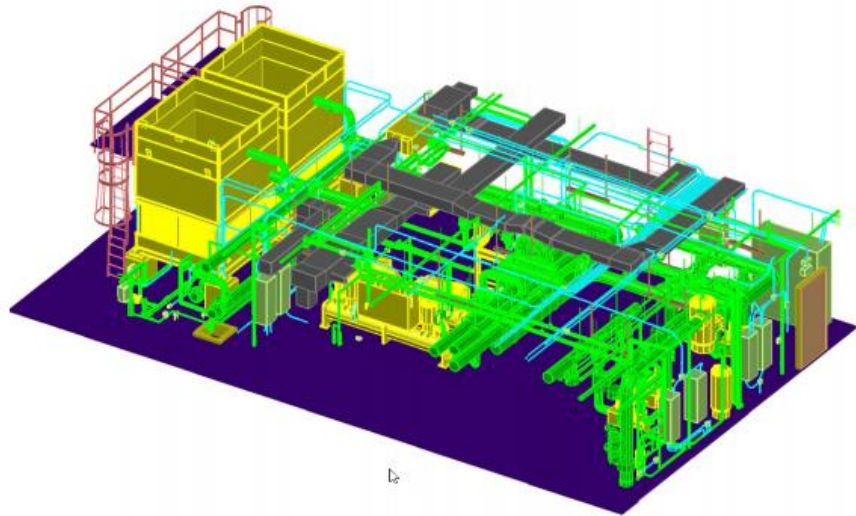
Trees for Childrens Playground



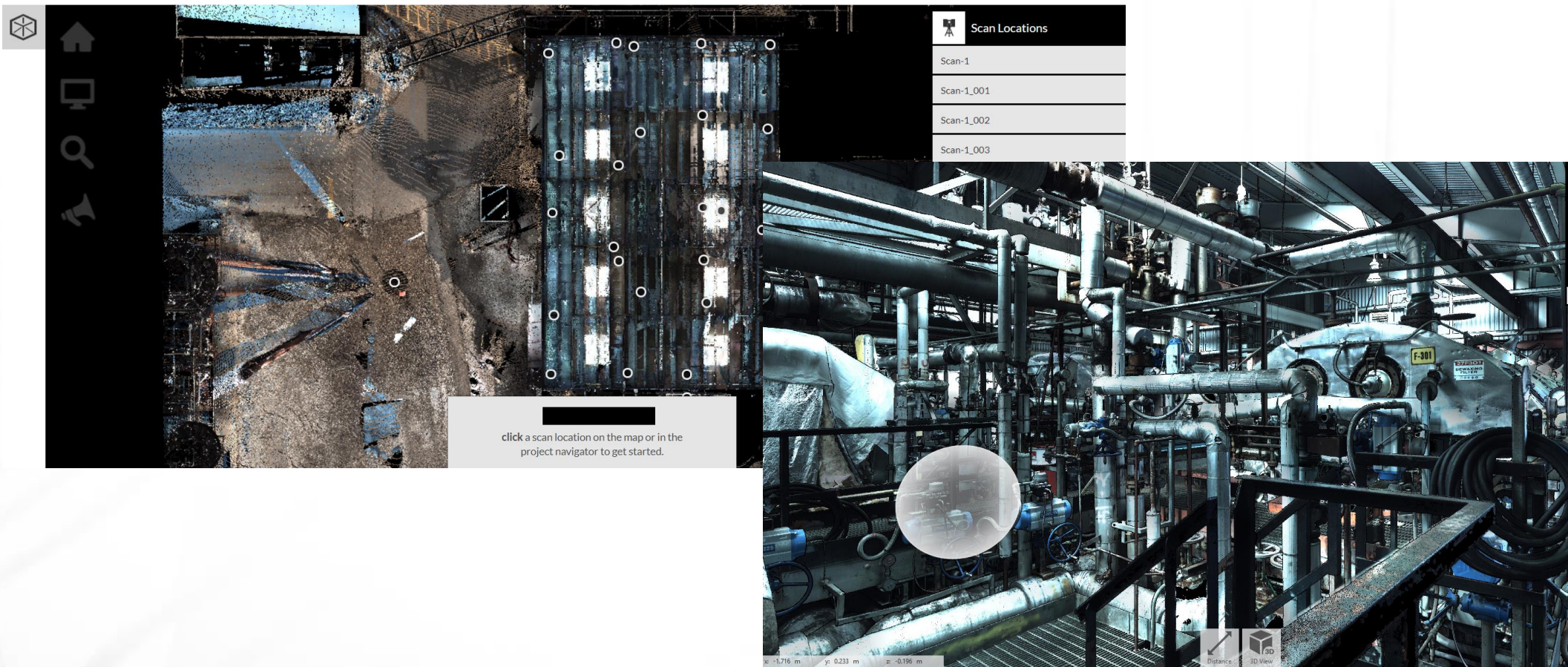
STL File for Solidworks

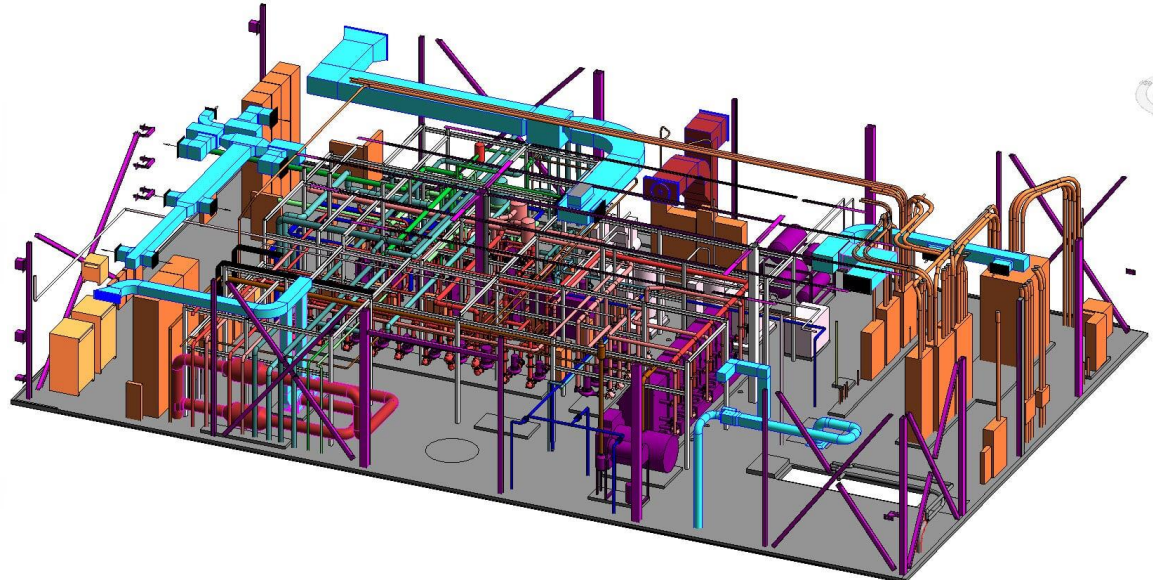
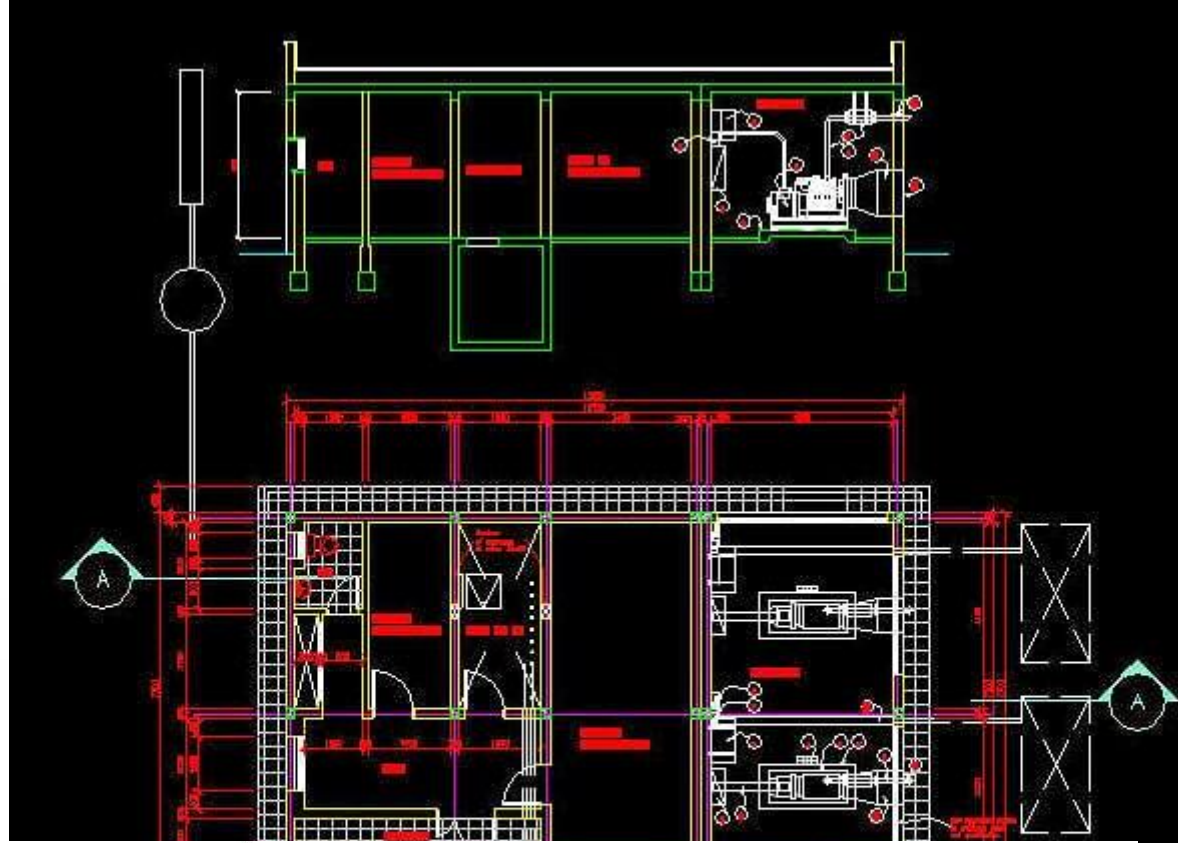
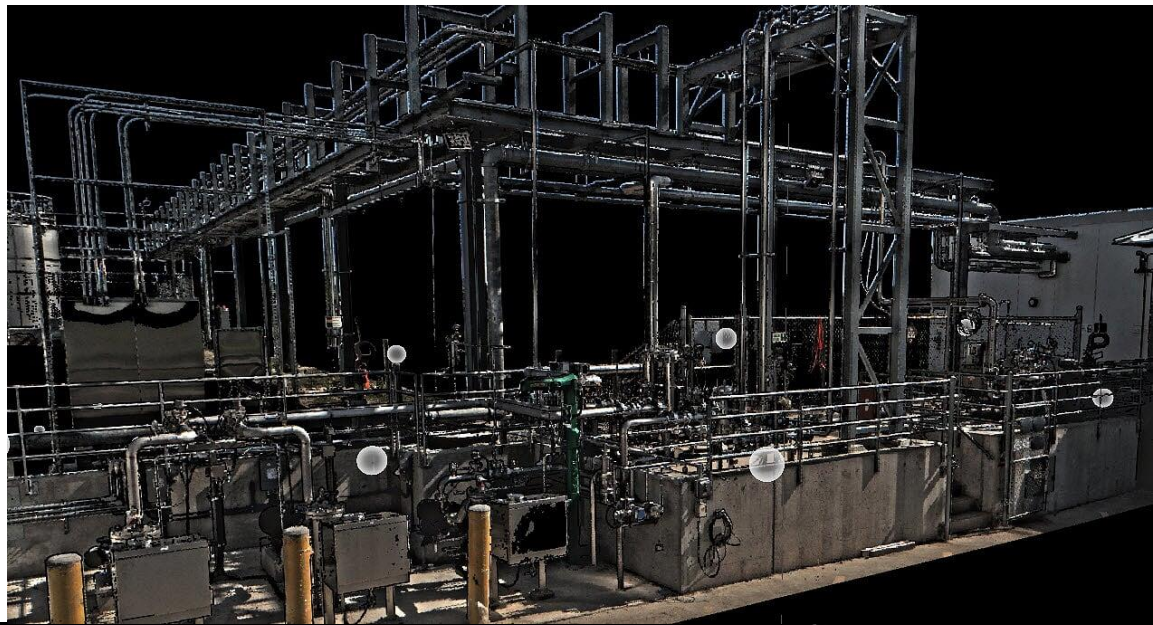


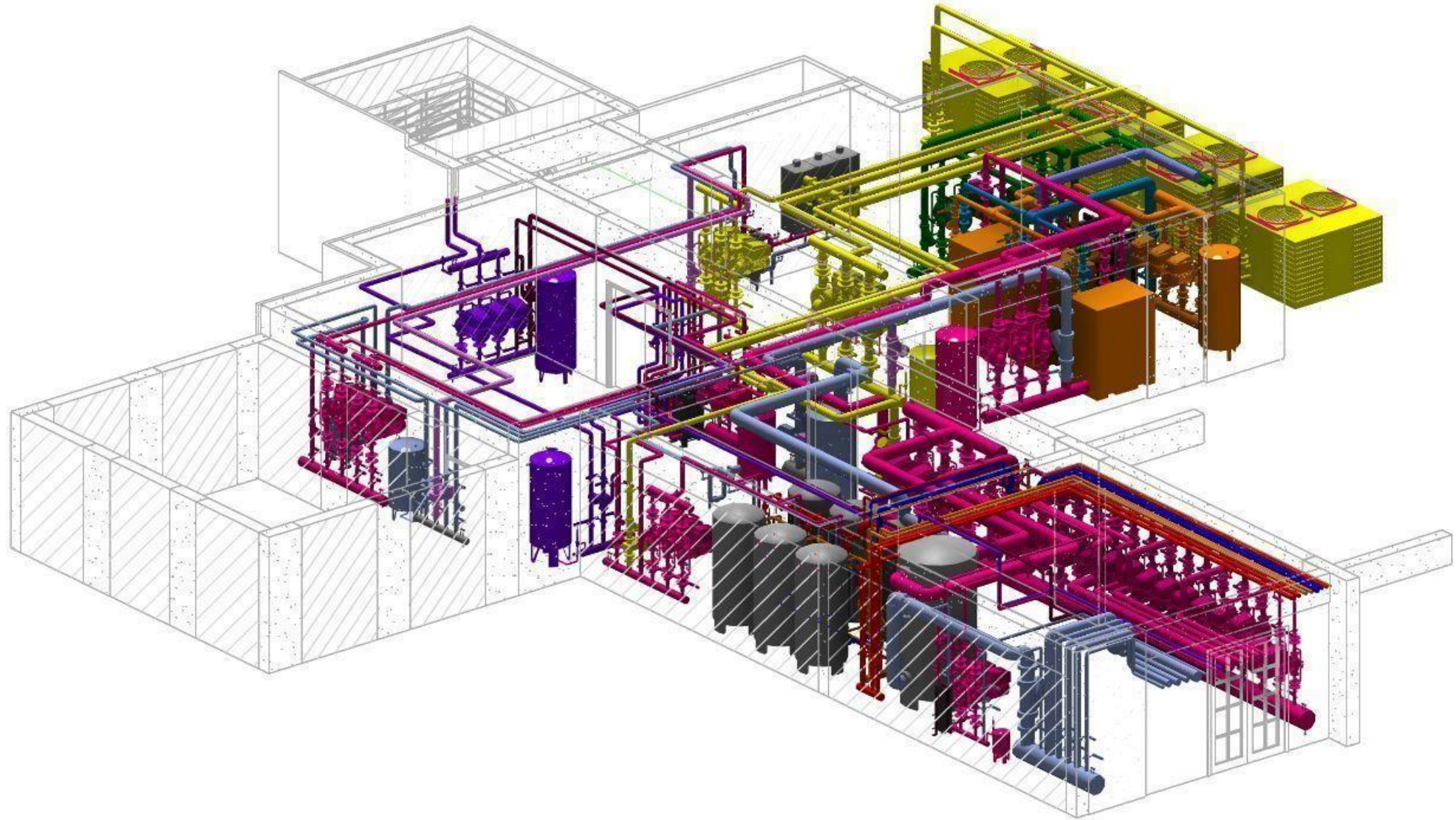
3DS Technologies Inc CASE STUDIES



Autodesk Recap







THANK YOU

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 519 766 5885
 Ontario, Canada

CAPTURE:

- LASER SCANS
- IMAGES



PROCESS:

- Registration and QA/QC
- Create Point Clouds
- Publish to Autodesk Recap



CAD, MODELING
AND DESIGN
PACKAGES

