

murphy

SURVEYS

GLOBAL CONSULTING SURVEYORS

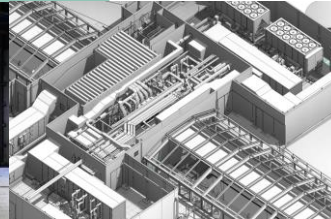
CITA
Construction IT Alliance

12th Jan 2018

Technology Integration for Complete BIM Implementation

JP Kelly

Principal Client Manager





Who are Murphy Surveys?

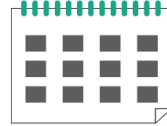
30+ specialised survey services



7 offices in Ireland & the UK



35 years in business



€12,000,000 Professional Indemnity Cover



100% accident free



200+ experienced & highly trained staff

96% masters, degree or diploma qualified



500+ BIM models produced



1st for laser scanning in Ireland



250,000+ man-hours completed



20,000+ surveys completed

Some of our clients

AECOM

Arcadia

Ardmore

ARUP

bam

B
BALLYMORE

Balfour Beatty

BPP
CONSTRUCTION
CONSULTANTS

**British
Waterways**

BORD GÁIS

**BUROHAPPOLD
ENGINEERING**

**CANARY WHARF
GROUP PLC**

CBRE

CH2MHILL

CLUTTONS

Crossrail

**CUSHMAN &
WAKEFIELD®**

daa
Dublin Airport Authority

HE

intel®

JACOBS

JLL™

KIER

**Knight
Frank**

M&P

MERCURY

NetworkRail

NHS

UNDERGROUND

savills

**BUILDERS
SISK
CONTRACTORS**

**Thames
Water**

T.K.maxx



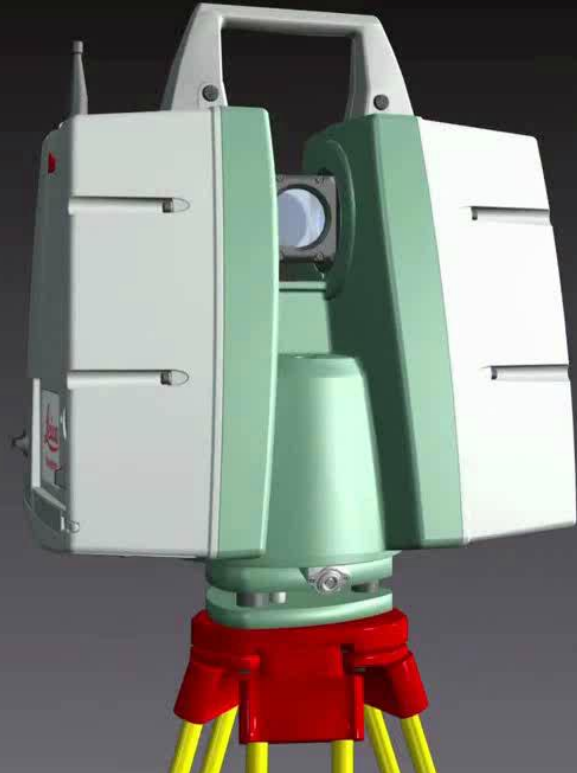
First we must choose the right way to capture your data....



Data Capture

- Aerial/ Drone Survey grade capture
- Laser scan and Total Station Surface capture
- Ground Penetration radar and Sub surface capture



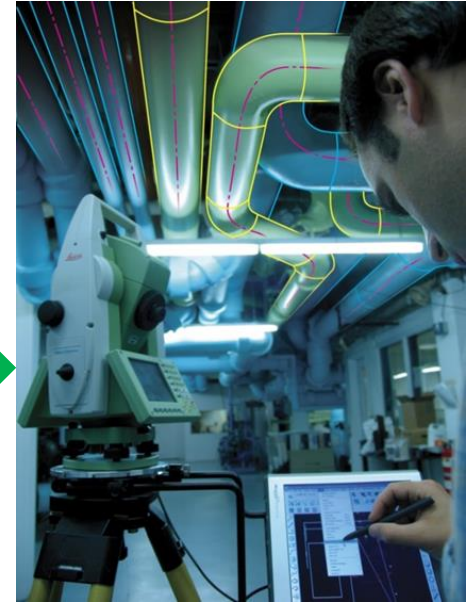
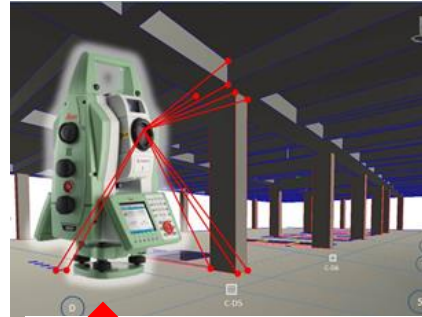


- Aerial, Surface and Sub surface Digital 3D Data Capture
- Rapid collection of Survey Data using the most suitable equipment for the task
- Accurate to Defined Tolerances
- Scalable
- Flexible/ tailored deliverables

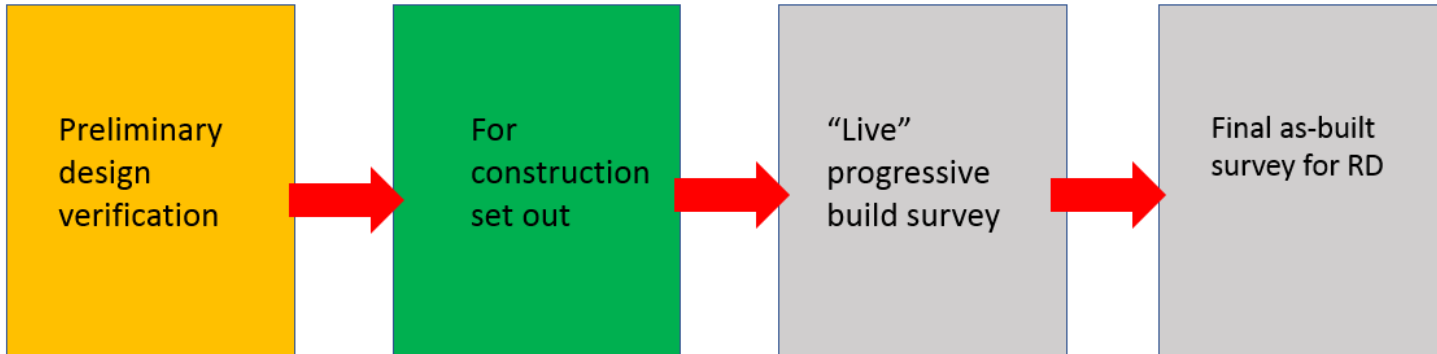


BIM to Field

- Bring model or design file to site and build with confidence and accuracy
- “Live” on site checking as you build
- Immediate model check & update
- Produce instant isometric drawings

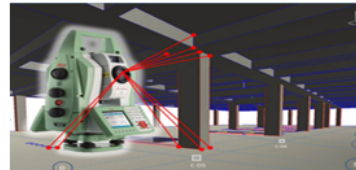


BIM Validation workflow



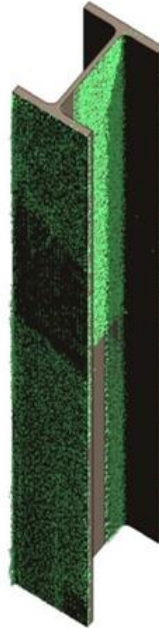
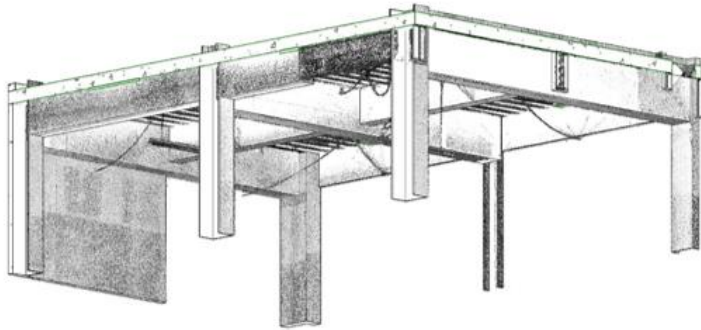
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SYSTEM ID	ELEVATION		
E:	DATE	SURVEYOR	
N:	SCOPE		
DO NOT REMOVE			

M5L Point Ref:			
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E:	DATE	SURVEYOR	
N:	SCOPE		
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BIM Validation

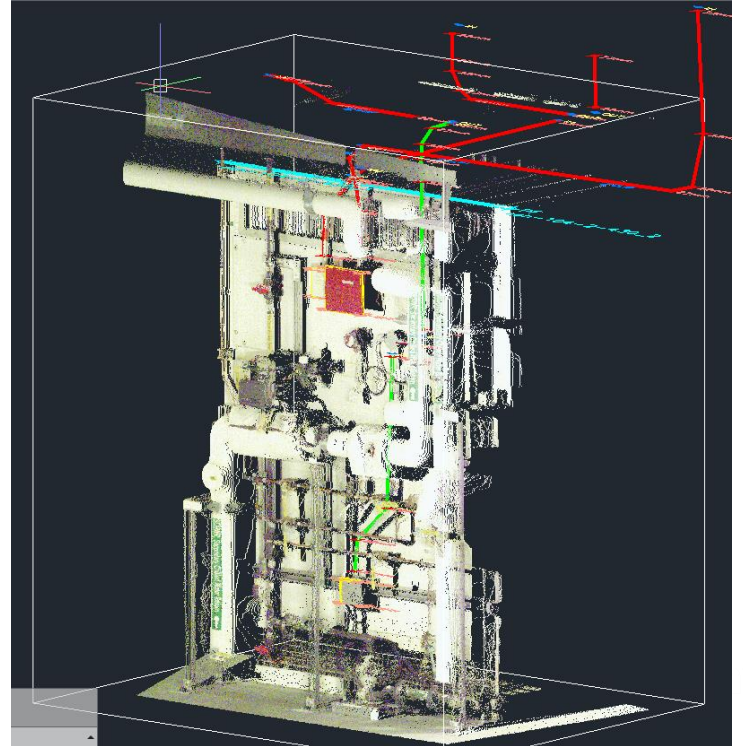
- Visual Clarity and Understanding for complex projects
- Fit Struct/MEP objects to Point Cloud automatically.
- Structural Analysis.



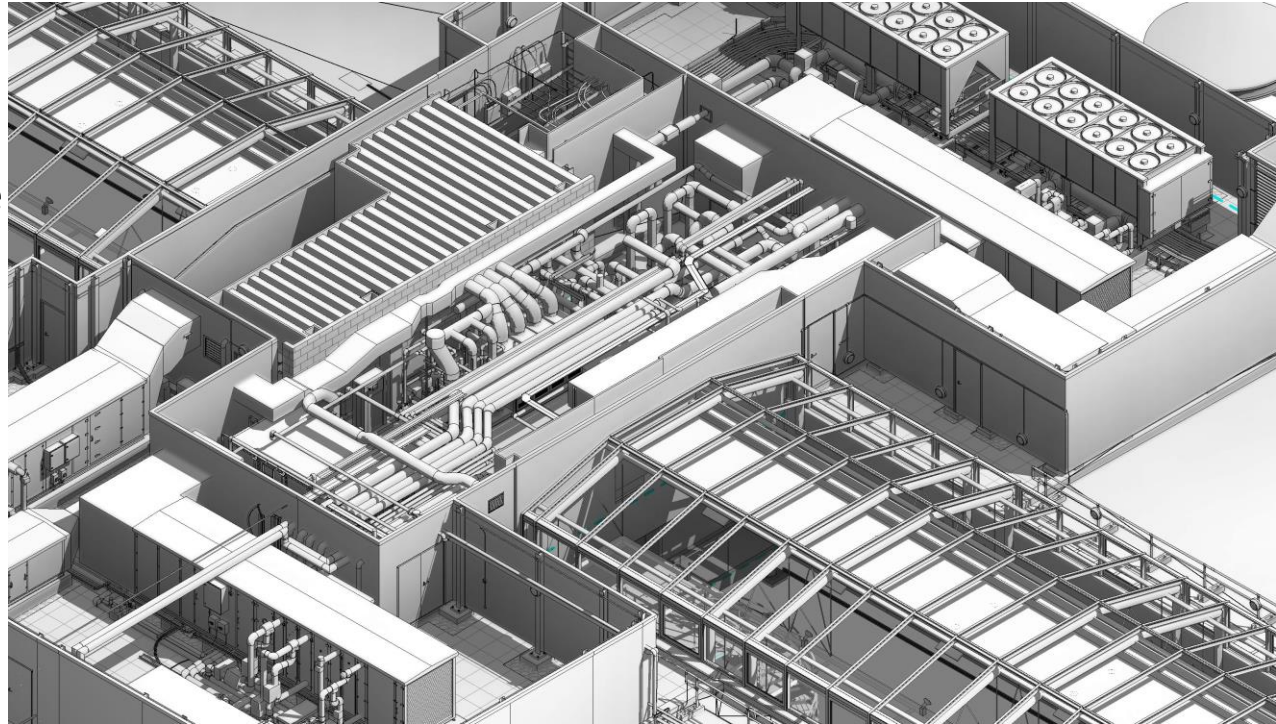
Field to BIM

- Fast & Accurate as-built with reduced processing time
- Quick delivery and upload to BIM
- Smaller, easy to handle CAD files
- More focussed and efficient survey
- Office based modellers receive clear and concise data quickly
- Reduced modelling hours

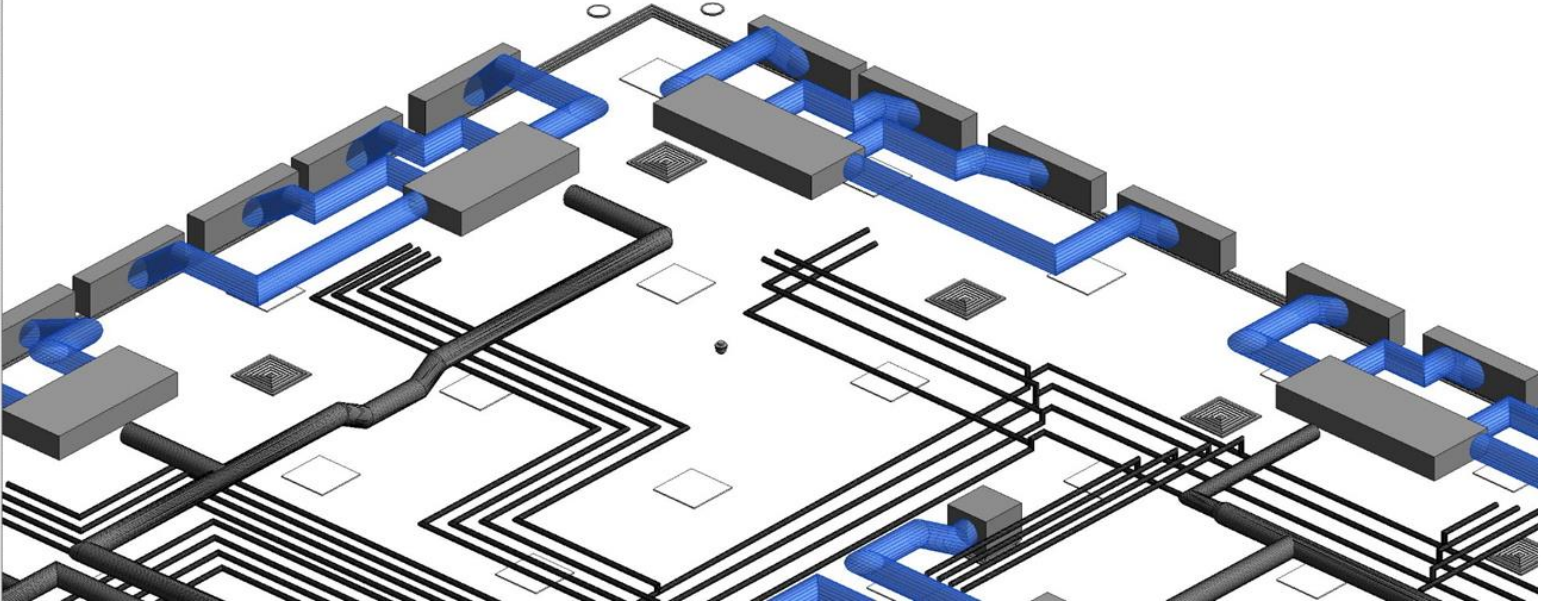
Hybrid Survey Technology



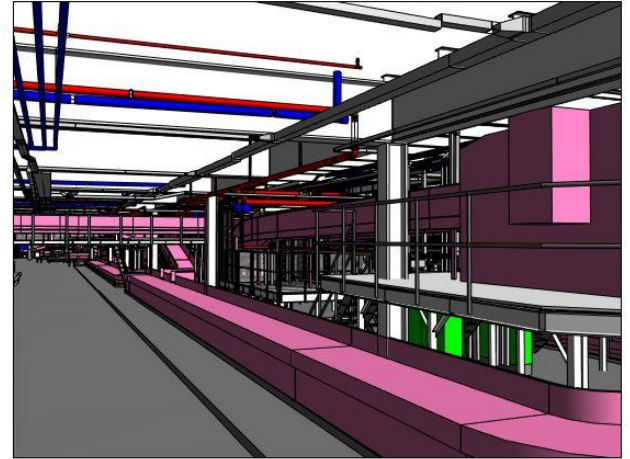
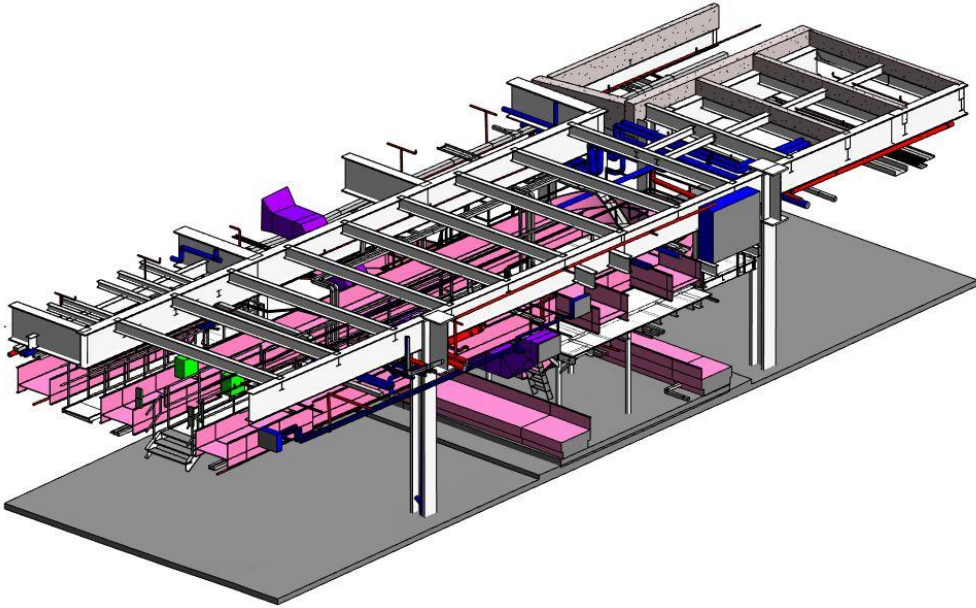
- Recent example of LOD 500 survey
- Utilisation of various survey methods: Terrestrial and Mobile Laser Scanning, UAV, Topographical, Utility and BIM Meta data



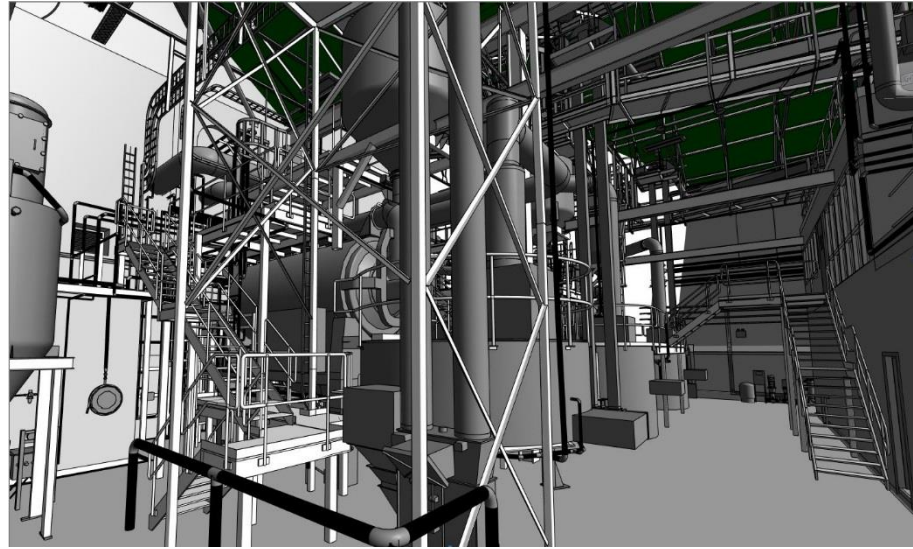
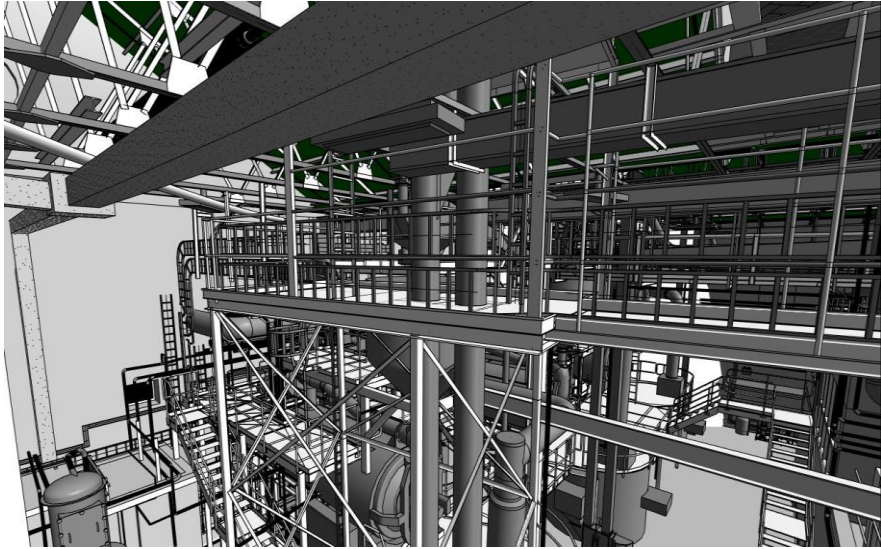
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Mechanical Equipment	Edit Type
Constraints	
Level	2 Second Level
Host	Level / 2 Second L...
Offset	2987.1
Moves With Near...	<input type="checkbox"/>
Electrical - Loads	
Panel	
Circuit Number	
Mechanical	
System Classifica...	
System Name	
Identity Data	
Image	
Comments	
Mark	1317
01. Asset_Descri...	Flexi Vent 2nd L...
02. Skanska_FS_...	
03. Asset_Type	Duct
04. System_Type	Mechanical
05. Parent Asset	
06. System_Name	Air Conditioner
07. Location_Buil...	Maple Cross Ho...
08. Location_Floor	Second Level
09. Location_Roo...	Above Ceiling
10. Model_Numbe...	
11. Serial Number	
12. Barcode Num...	
13. Manufacturer	
14. Condition (a...	
15. Warranty_Exp...	
16. Model_Befere...	
17. Asset_Design...	
18. Supplier	
19. Commissioni...	
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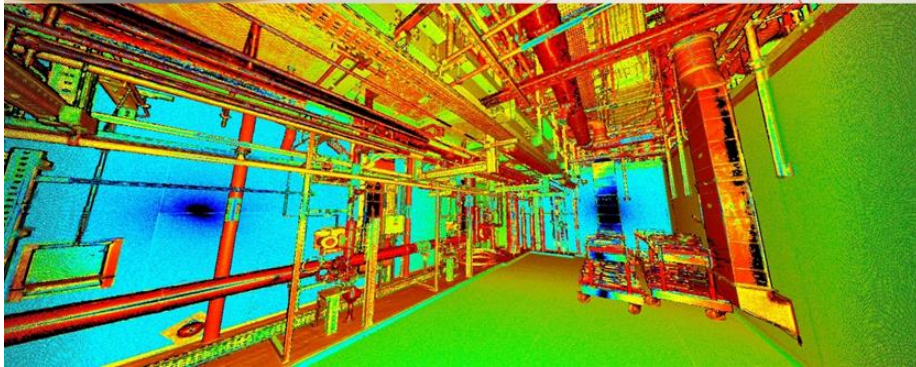
Sample projects



Sample projects



Sample projects





Sample projects

Recent Pharma projects- 2x videos

- **Site control networks**
- **Setting out works**
- **3D Model and data coordination**
- **Placement of BIM/ Revit/ MEP Modellers**
- **MEP validation surveys**
- **Aerial/ drone surveys- inspections, volume analysis, cut/fill reports**
- **High definition Tank scanning**



Underground
Utility

Laser
Scanning

Specialist
Inspection

Hydrographic

Surveying &
Engineering

GPR

Consulting

Monitoring

Property
Services

UAV

BIM

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