

Menai Science Park



DIGITAL CONSTRUCTION

11th Oct 2018

Jill Guthrie Digital Manager



PROJECT INFORMATION

Client:

M-Sparc
Bangor University

Preconstruction Start:

March 2016

Construction Start:

October 2016

Completion:

February 2018

Value:

£16.2m

Menai Science Park, Anglesey



CUSTOMER REQUIREMENTS

The Science Park will be a major facility in the region that will establish North Wales as a major player in **R&D** and **scientific developments** in the UK.

The site and the building will ensure that the public and in particular children **engage with science, technology and innovation.**

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INTERGRATED SUPPLY CHAIN

£9m spent
within North Wales suppliers

*"Pleasantly surprised at the level of knowledge that we are coming away from the workshop with. Well-presented and great value, **one of the best I've been to**"*

Red Systems; Curtain Walling Contractor

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INTERGRATED SUPPLY CHAIN



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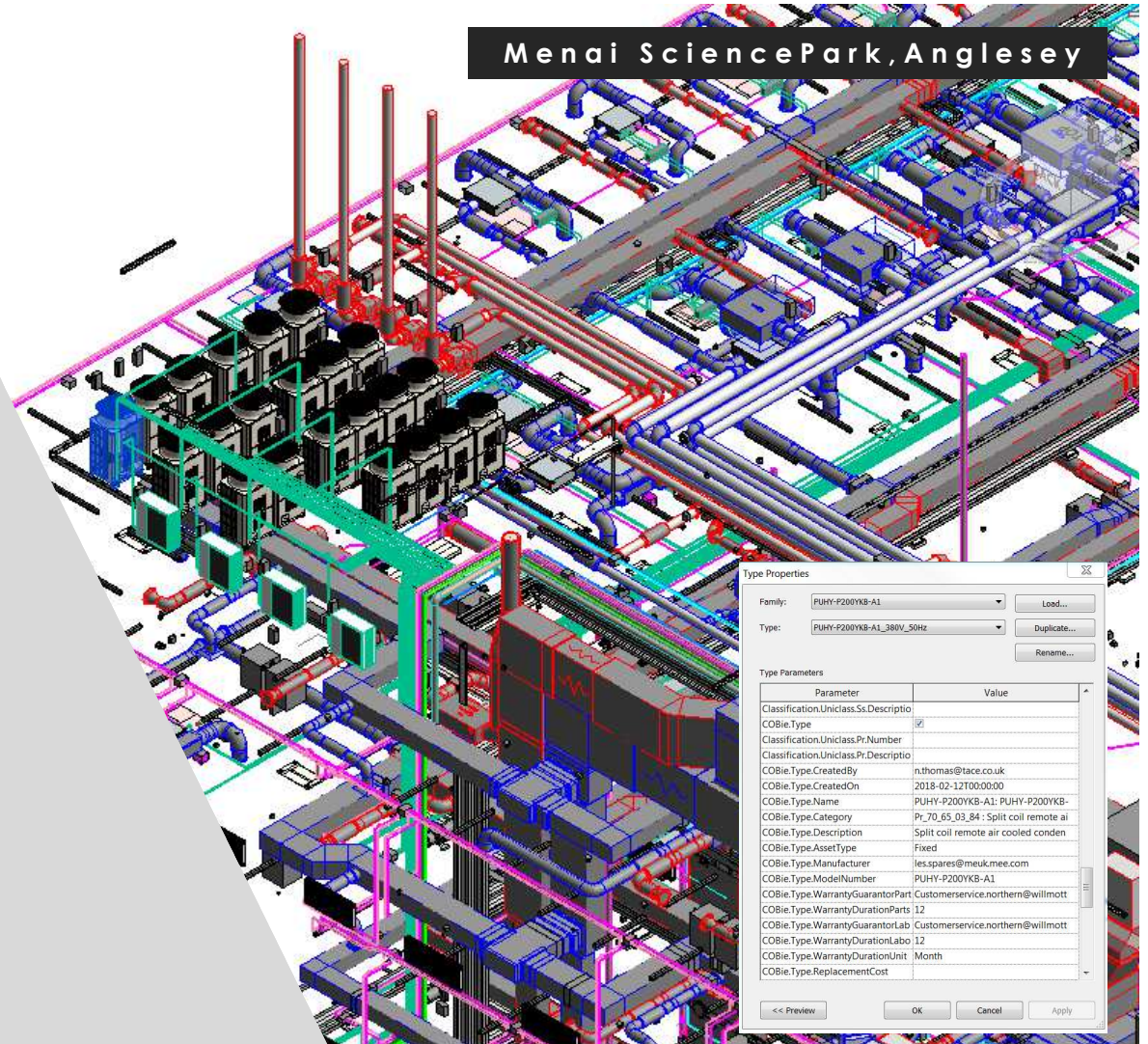


EFFICIENCIES
MADE AS A
RESULT OF BIM

63%↓

reduction of RFIs from a
digital project to traditional
for the M&E package

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EVALUATING OUTCOMES

Digital take-off exercise:

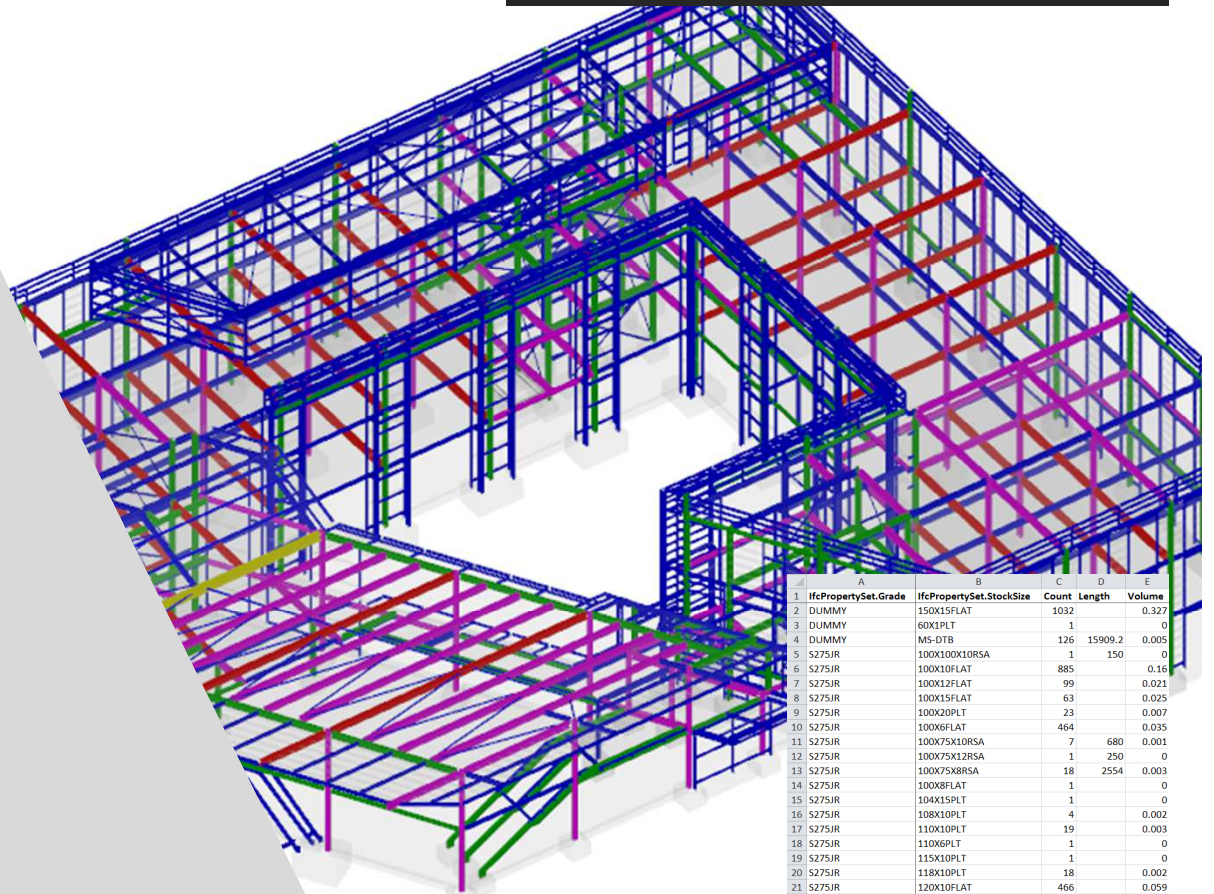
3 HOURS

Manual approach:

The surveyor took

8 DAYS

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	A	B	C	D	E
1	lfePropertySet.Grade	lfePropertySet.StockSize	Count	Length	Volume
2	DUMMY	150X15FLAT	1032		0.327
3	DUMMY	60X1PLT	1		0
4	DUMMY	MS-DTB	126	15909.2	0.005
5	S275JR	100X100X10RSA	1	150	0
6	S275JR	100X10FLAT	885		0.16
7	S275JR	100X12FLAT	99		0.021
8	S275JR	100X15FLAT	63		0.025
9	S275JR	100X20PLT	23		0.007
10	S275JR	100X6FLAT	464		0.035
11	S275JR	100X75X10RSA	7	680	0.001
12	S275JR	100X75X12RSA	1	250	0
13	S275JR	100X75X8RSA	18	2554	0.003
14	S275JR	100X8FLAT	1		0
15	S275JR	104X15PLT	1		0
16	S275JR	108X10PLT	4		0.002
17	S275JR	110X10PLT	19		0.003
18	S275JR	110X6PLT	1		0
19	S275JR	115X10PLT	1		0
20	S275JR	118X10PLT	18		0.002
21	S275JR	120X10FLAT	466		0.059
22	S275JR	120X120X15RSA	25	6020	0.02
23	S275JR	120X15FLAT	1		0
24	S275JR	120X6FLAT	5		0
25	S275JR	123X10PLT	56		0.015
26	S275JR	125X75X10RSA	2	330	0.001
27	S275JR	125X75X8RSA	12	1160	0.003

EVALUATING OUTCOMES

**37% occupancy before
completion: exceeding the
the initial target of 15%**

*“Being able to stand on a building site
and **see the building and the space
come alive** on the Virtual Reality glasses
was quite an experience!”*

**Stephen Edwards, HET Creadigol / Creative –
Tenant**

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TECHNOLOGY & INNOVATION

- Immersive Virtual Reality & Augmented Reality
- Health & Safety symbols within interactive model
- Component data at the touch of the button on screens throughout the building
- Bespoke FM Platform showing energy consumption



SPARC

MENU

BIM

WALK

FUTURE
DEVELOPMENT

FUTURIUM
Technology

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STAKEHOLDER BENEFITS

Workshops with Estates team
covering:

- CAFM provider PlanOn requirements
- Lessons learnt from current buildings
- Planned & preventive maintenance workshops
- Bespoke FM Platform

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PROJECT EXCELLENCE

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PRIFYSGOL
BANGOR
UNIVERSITY



*"This is a complete **game changer** for **innovation** and business's in the region, there's nothing like it. The way the building has been delivered in **close collaboration** with us is an asset."*

Anthony Flint, Bangor University Estates Department



