CitA
BIM GATHERING

Building Capabilities in Complex Environments

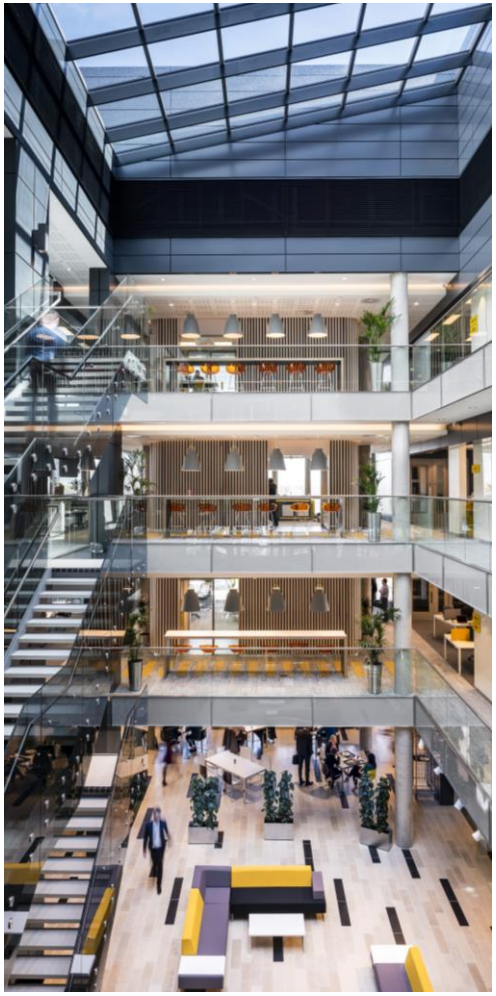
CitA BIM Gathering 2017, Croke Park, November 23rd & 24th, 2017

CitA
BIM GATHERING

Implementing 5D from a PQS Perspective)

KSN

PRESENTATION CONTENT



1. **INTRODUCTION**
   - KSN
   - Cian Clancy
   - BIM & PQS
2. **5D COST CONTROL**
   - Why
   - How
3. **OBSTACLES AND CHALLENGES**
4. **OVERCOMING THE "INSURMOUNTABLE"**
5. **QUICK WINS**
6. **BIM CAPABILITIES**

1. INTRODUCTION – KSN

CitA BIM GATHERING

INTRODUCTION TO KSN

- Irish construction consultancy firm - established 1991
- 140 + Surveyors, Projects Managers & Energy Teams (specialised divisions)
- Directors “hands on” approach – direct involvement in every KSN project
- Actively involved in industry studies incl. BIM, LCC, Contract Law, Value Engineering, Cost Studies
- RLB Euro Alliance – Access to international knowledge; European sharing of data, cost & commercial information
- 60 Surveyors – 7 QS teams – 1 BIM champion per team
- KSN BIM implementation sample projects: Large scale retail, health, schools, high spec commercial developments

KSN construction consultants

KSNPM project management

ksnenergy sustainability in the built environment

RLB Rider Levett Bucknall

Cian Clancy MSCSI MRICS

- Senior Quantity Surveyor with 7+ years PQS Experience
- Joined KSN early 2017
- Working directly with KSN's BIM Lead Paul Brain
- BIM Experience: Large Scale Retail, High Specification Commercial, Universities & Data Centres (UK & Ireland)
- BSc Construction Economics (WIT – 2010)
- BSc (Hons) Quantity Surveying (WIT – 2012)
- Pg.Dip. Construction Law & Adjudication (RGU – 2017)

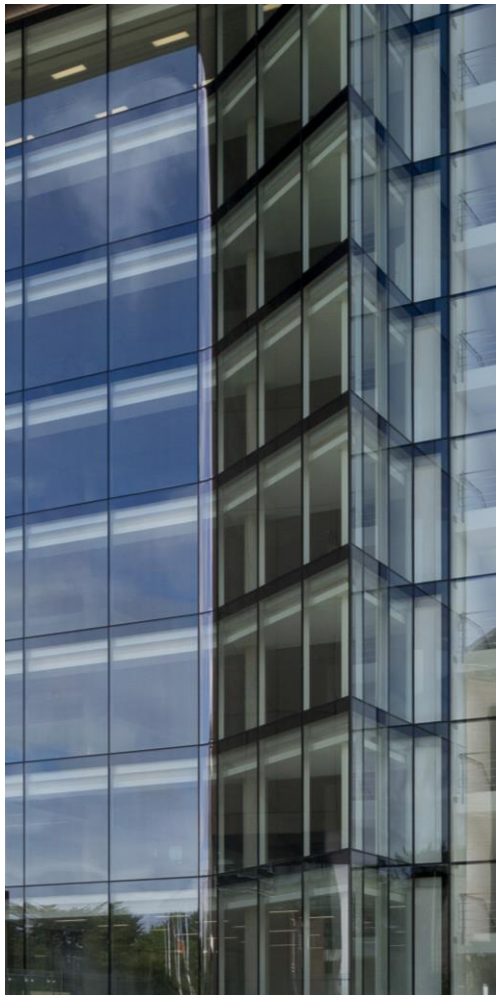
BIM & PQS IMPLEMENTATION – SUMMARY

- Roadblocks: Learning (new skills / software)
- Remedy: Investment – willingness / time / software

RESULT:

INCREASED	DECREASED
Added Value	Quantity Take Off
Efficiency	Time
Accuracy	Cost

2. 5D COST CONTROL – WHY?



WHY DID KSN GET INVOLVED IN BIM?

a) Downturn

b) Shift in industry

c) Benefits

d) Senior Management involved in BIM Working Groups (SCSI, CitA, etc.)

- Guidance Notes
- Working Groups
- CPD Lectures

2. 5D COST CONTROL – HOW?

HOW DID KSN IMPLEMENT BIM?

Project Appointment

(i) Not BIM mandated

(ii) Reciprocal DT agreement to implement BIM due to size, nature & complexity of project

(iii) Merits discussed – Client buy-in

KSN Investment

(i) Software

(ii) 5D Training Courses (T. Woods)

(iii) Back-up Resourcing / Company Time for 5D Validation

Test Run

(i) Prepare BQ on c. €11m Retail Project (2D)

(ii) Ditto via 5D on company time

(iii) Eyes opened

(iv) Practice!!!

- **IMPLEMENTATION (FEASABILITY, COST PLANNING, TENDER BOQ'S)**

3. OBSTACLES AND CHALLENGES

QS INDUSTRY

- Understanding Models
- Expectation (Push Button = Full ARM BQ)
- Faith / Scepticism in Models (Professional Judgement)

WORKFLOW / TRANSITION

- Change in Works Sequencing
- Hybrid of 2D & 5D (not all objects modelled understanding the process)
- Validation (Tangible & Non-Tangible)
- QS set parameters

4. OVERCOMING THE "INSURMOUNTABLE"

CitA BIM GATHERING

KSN

- Willingness
- Trial (Investment in Staff & Time)
- Senior Management Support
- Drive to Promote Efficiency and continuously improve services offered

WISHES

Industry & Education

- DT considerations: QS BIM specific requirements
- Third Level Buy-In (Recruit Industry Experts for Student Demonstration Workshops)

5. QUICK WINS

CitA BIM GATHERING

KSN

- Added Value
- Improved / Additional Services Available
- Fluid Review of Quantities (one location – not flicking through volumes of drawings)
- Efficiency

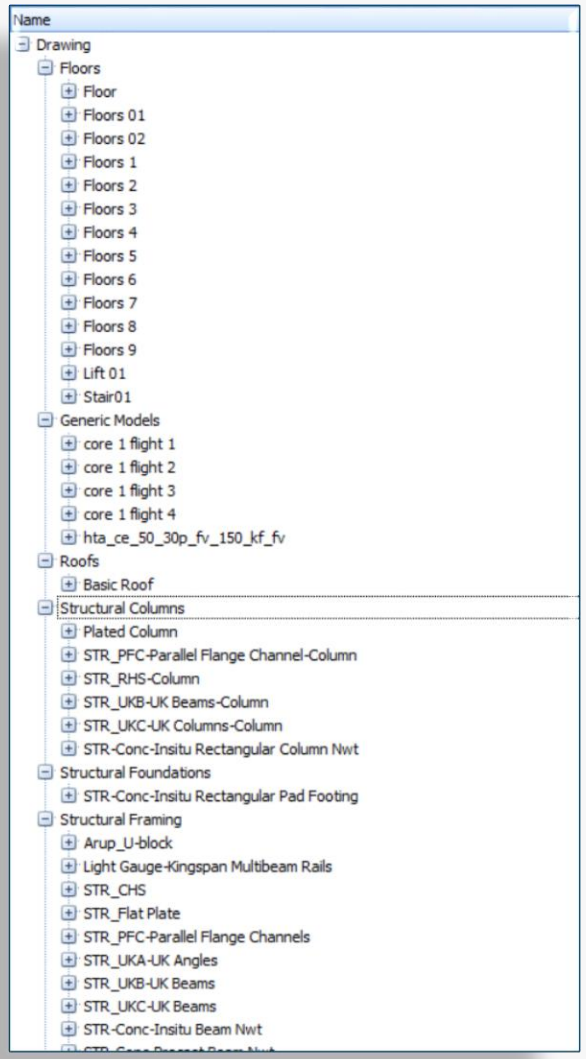
PERSONAL

- Project Ownership (reduced assistance)
- Change in Career Path
- Career Progression
- Increasing interest in BIM

Before:

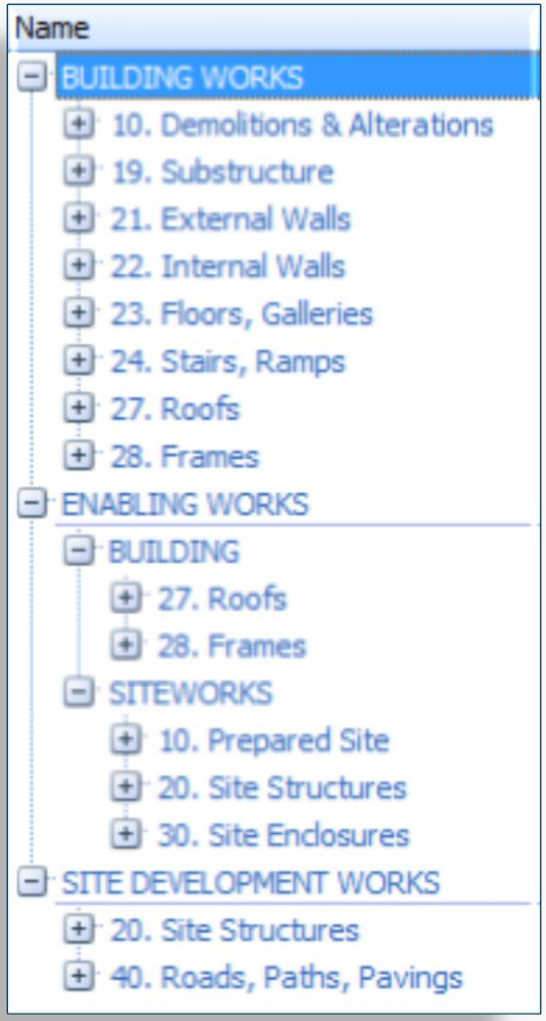
- Designers Model Tree

- Floors incl. Foundations, Beds, Slabs, Roof, etc.



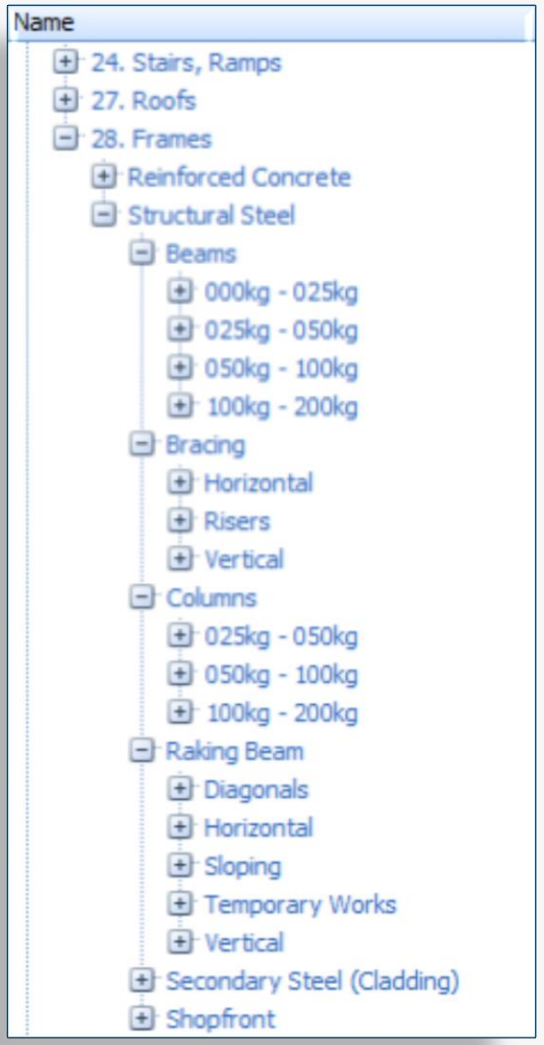
After (i):

- QS Manipulated Model Tree
- Level 1: Coded to NSBE Elements



After (ii):

- QS Manipulated Model Tree
- Level 1: Coded to NSBE Elements
- Level 2: Coded to ARM Categories



CitA
BIM GATHERING

Cian Clancy (KSN Construction Consultants)

THANK YOU

KSN