



The Power of Autodesk Construction Cloud Assets

CS501742

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Construction Consultant | @JWardWhitleyBay



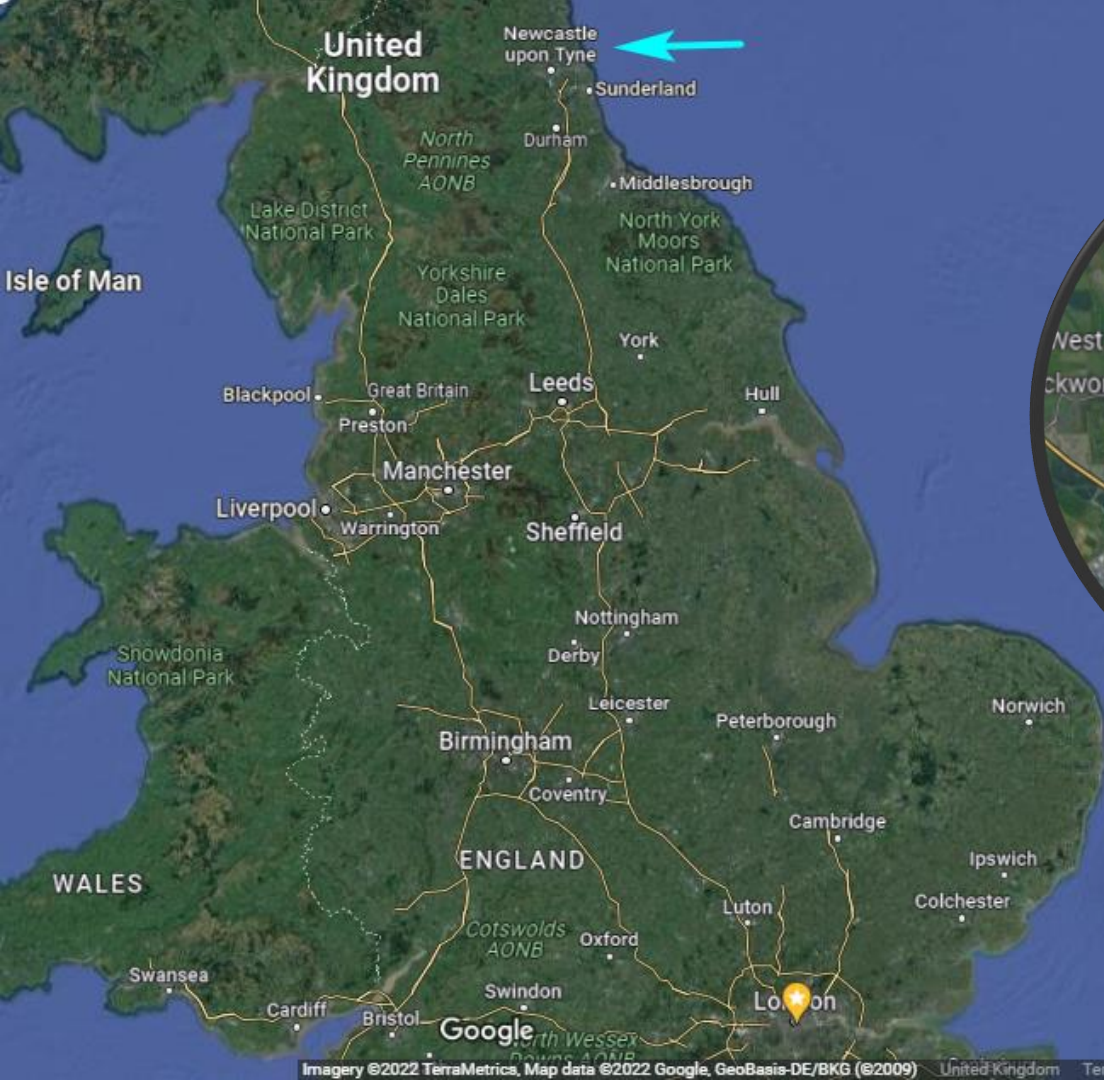
Learning Objectives

- Learn how best to manage assets in Autodesk Construction Cloud.
- See workflows between Revit, Autodesk Construction Cloud, and Power BI.
- See how 360 photo capture can be linked to the Autodesk Construction Cloud platform.
- Learn about site management using Autodesk Construction Cloud Assets.



Johnathan Ward

- Autodesk channel for 22 years
 - Manufacturing
 - Document management
 - AEC space
- 12 years in Industry
 - Construction
 - Manufacturing
 - IT





Bouldering Fanatic

I'd like to be as good as the guy in the picture!!!



0191 276 2174 / info@climbnewcastle.com

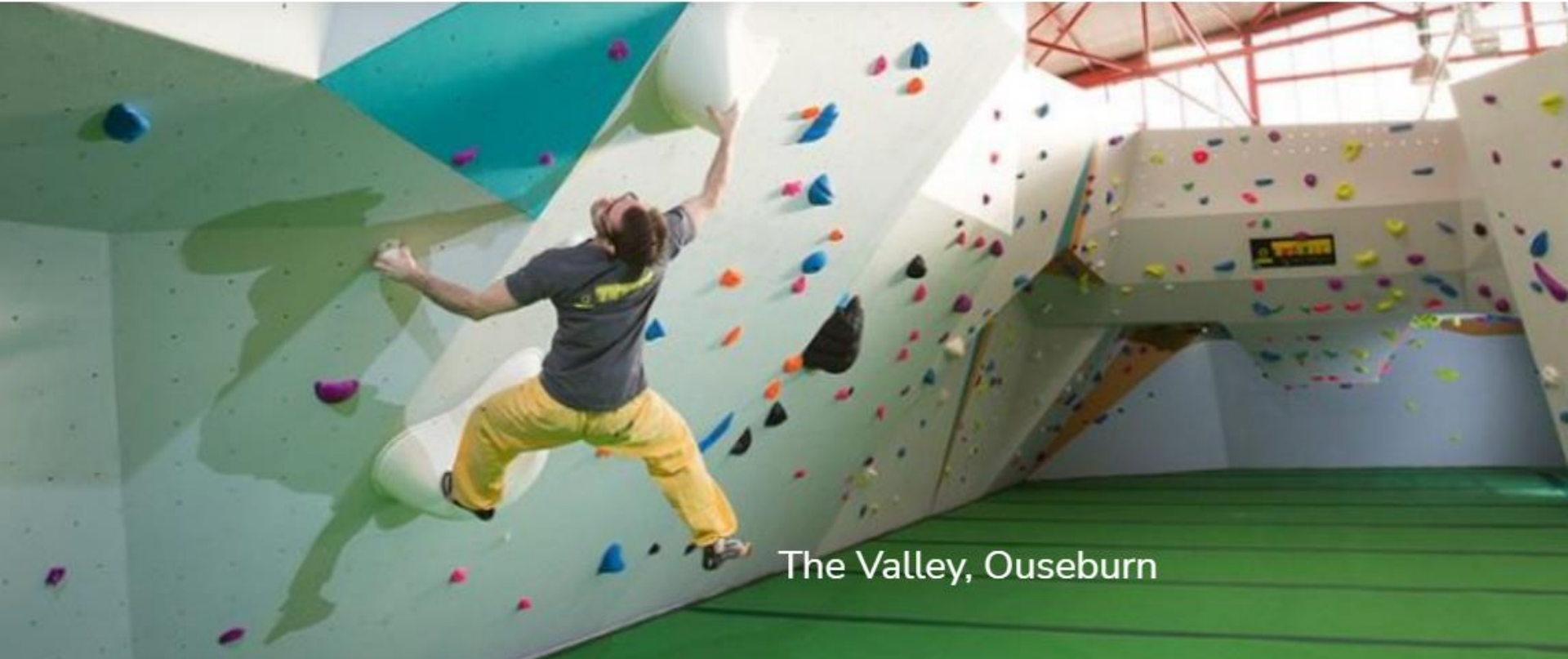
[CENTRES](#)

[CLIMB](#)

[CLASSES](#)

[NEWS](#)

[ACCOUNT](#)



The Valley, Ouseburn



RACE



TIMED



FAMILY



OTHER EVENTS

**BOOK
NOW**

KARTING NORTH EAST

Mad about Kart Racing





Together we are stronger

Addnode

- 2100 Employees
- \$ 500 M Revenue
- 3 sectors
 - Design Management
 - Process Management
 - Lifecycle Management

Symetri + Microdesk

- 750+ Employees
- 100 Developers
- 400+ Consultants
- 200K+ Users
- \$ 300 M Revenue



Platinum Partner

1 Autodesk Solution Provider globally

Why ?

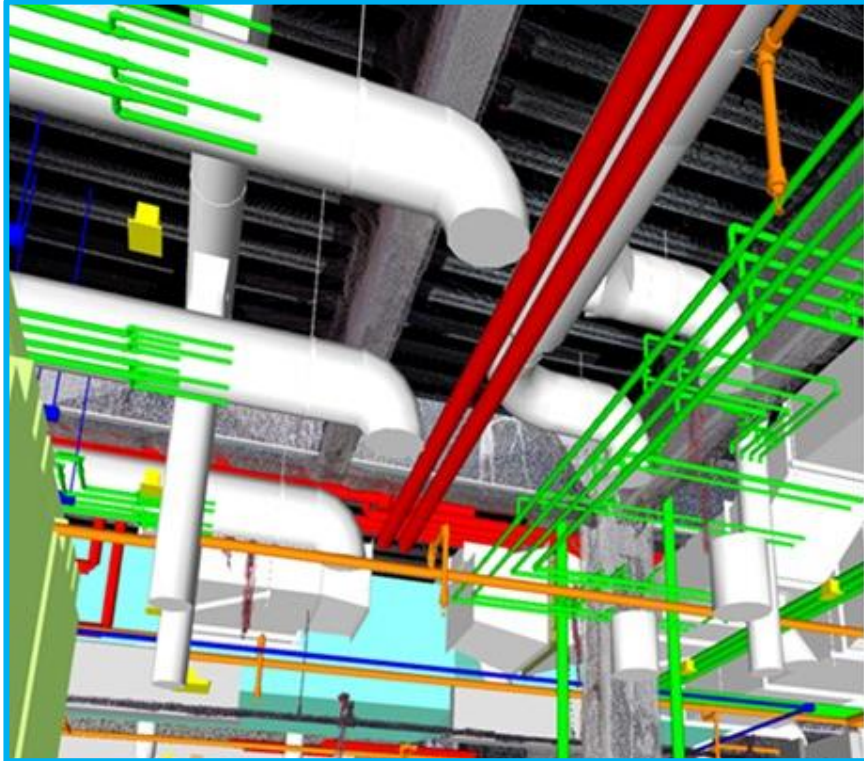
Drivers

Why are doing this?

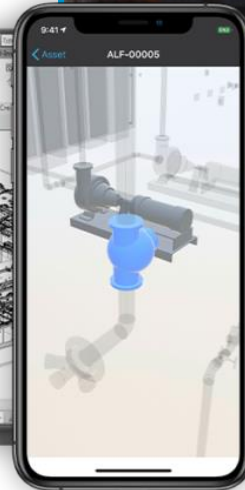
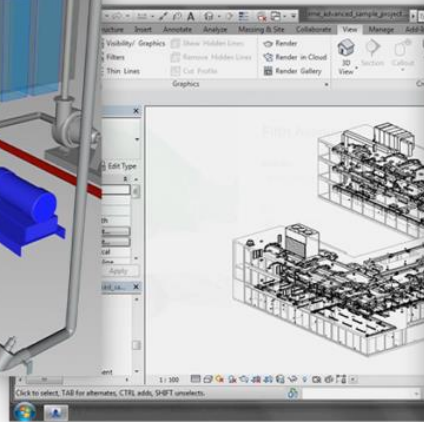
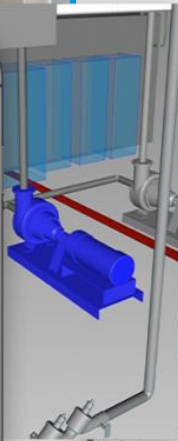
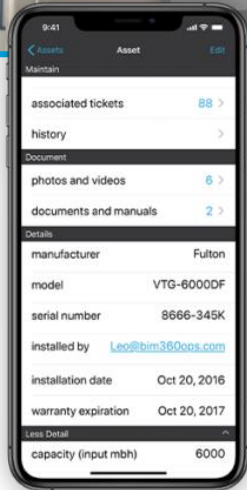
- Client Requirements
 - Maintainable Asset data
 - As Constructed asset model
 - COBie
- Building Safety Act 2022
 - BS 8644-1:2022 - digital management of fire safety information
 - The Golden Thread
 - FIREie

Asset Model

As Constructed



Information Capture COBie



Grenfell

14th of June 2017

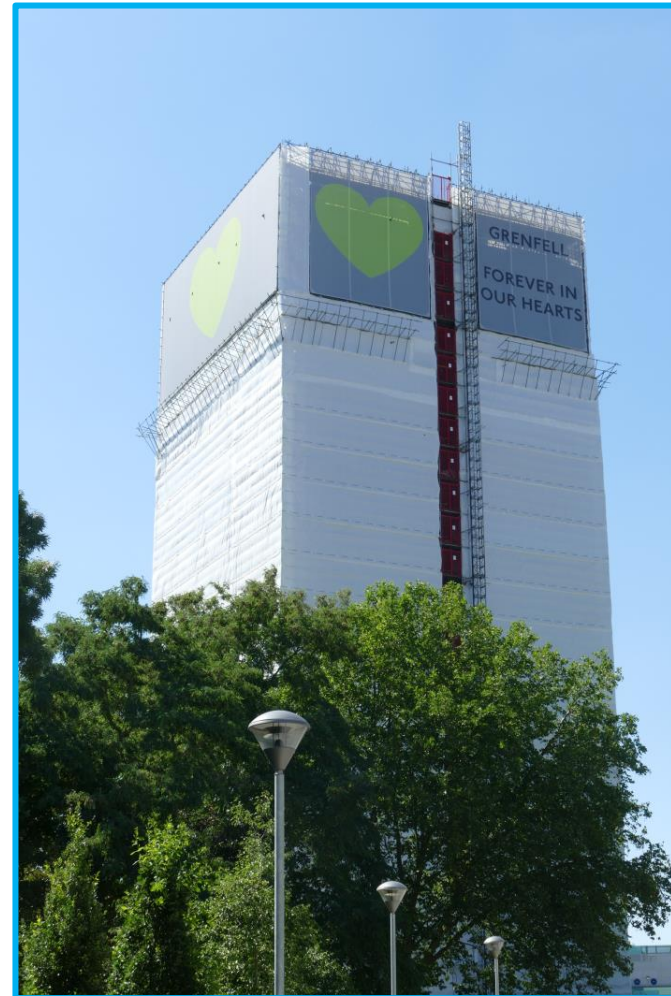
Dec 2018 – Hackitt Report

April 2021 – A New Safety Act

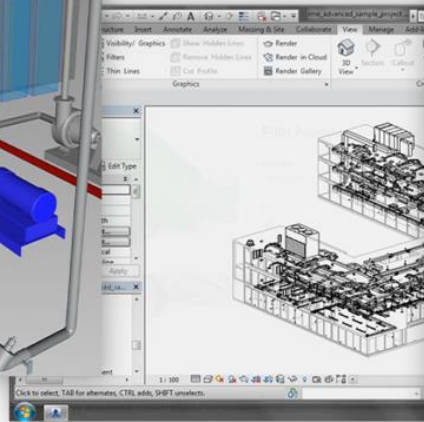
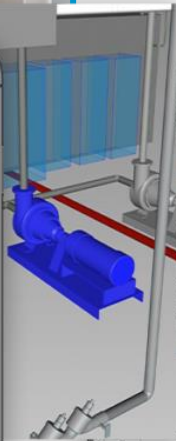
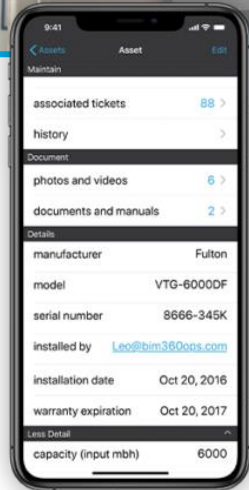
Updated Building Safety Bill

July 2021- Golden Thread Report

BS8644-1 'Digital management of fire safety information'
(Published 17th July 2022)

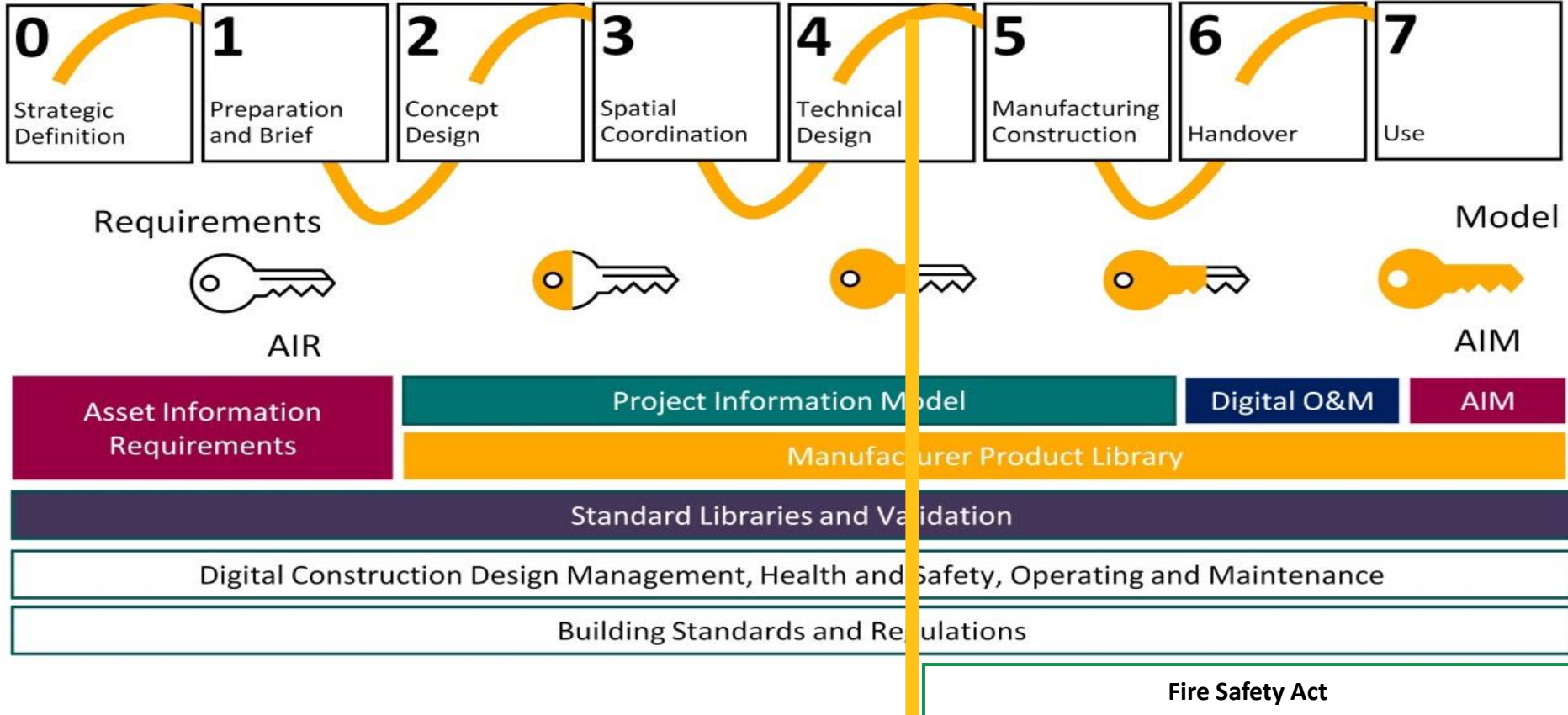


Information Capture COBie and FIREie



Evidence Capture

The Golden Thread



What is ACC Assets ?

Autodesk Build – Assets Overview

Basics

The screenshot displays the Autodesk Build 'Assets' overview page. The left sidebar contains navigation icons for home, assets, documents, checklists, reports, people, and settings. The main content area shows a list of assets under the heading 'Assets'. A 'Create asset' button is visible at the top of the list. The assets are organized into categories: CHW Flushing, CHW Systems, LTHW Flushing, LTHW Systems, and Network Devices. The table lists 11 assets, including CHW-SYS-004 through CHW-SYS-010 and LTHW-SYS-003 through LTHW-SYS-006. The right sidebar provides a detailed view for the selected asset, LTHW-SYS-008, showing its name, description, status, category, location, barcode, and commissioning progress.

Name	Category	Status	Linked references
CHW-SYS-004	CHW Systems	Deliver...	-
CHW-SYS-005	CHW Systems	Deliver...	1 reference
CHW-SYS-006	CHW Systems	Deliver...	-
CHW-SYS-007	CHW Systems	Install...	-
CHW-SYS-008	CHW Systems	Commissioni...	-
CHW-SYS-009	CHW Systems	Commissioni...	-
CHW-SYS-010	CHW Systems	Functional Perfo...	-
LTHW-SYS-003	LTHW Systems	Order...	-
LTHW-SYS-004	LTHW Systems	Order...	-
LTHW-SYS-005	LTHW Systems	Deliver...	-
LTHW-SYS-006	LTHW Systems	Deliver...	-

LTHW-SYS-008 Details:

- Name: LTHW-SYS-008
- Description: SCL 9th floor FCU circuits
- Status: Commissioning
- Category: LTHW Systems
- Location: 9th Floor
- Barcode: Unspecified
- 3-Commissioning Witnessed (%): 0
- 1-Installation Complete (%): 100
- 2-Commissioning Complete (%):

Autodesk Build – Assets Overview

References and Attachments

The screenshot shows the Autodesk Build Construction Cloud interface. The main section is titled "Assets" and displays a list of assets. The left sidebar shows a navigation menu with icons for Home, Assets, Projects, Reports, Settings, and a search bar. The right sidebar shows the details for the selected asset, LTHW-SYS-008, including its references and attachments.

Assets List:

Name	Category	Status	Linked references
LTHW-SYS-005	LTHW Systems	Deliver...	-
LTHW-SYS-006	LTHW Systems	Deliver...	-
LTHW-SYS-007	LTHW Systems	Deliver...	-
LTHW-SYS-008	LTHW Systems	Commissioni...	4 references
LTHW-SYS-009	LTHW Systems	Commissioni...	2 references
CHW-SYS-001	CHW Systems	Functional Perfo...	-
CHW-SYS-002	CHW Systems	Functional Perfo...	-
CHW-SYS-003	CHW Systems	Comple...	4 references
CHW-FLU-004	CHW Flushing	Deliver...	-
CHW-FLU-005	CHW Flushing	Deliver...	-
CHW-FLU-006	CHW Flushing	Commissioni...	-

LTHW-SYS-008 Details:

References: Add references

Files:

- coolflow-ige-pds.pdf
- Goodwater-Telemetry-Features-Benefi...

Forms:

Air System Pre-Commissioning Checklist #10
27 May 2021 | Submitted

Schedule activities:

#48 - Startup and Test HVAC Critical
0% | 05/09/2023 - 05/09/2023 | 1 days
Construction Schedule
Office But... HVAC

Autodesk Build – Assets Overview

Linked to entire CDE

Autodesk Build – Assets Overview

Assets

All Categories

- CHW Flushing
- CHW Systems
- LTHW Flushing
- LTHW Systems
- Network Devices

Assets Table:

Name	Category	Status	Linked references
LTHW-SYS-005	LTHW Systems	Deliver...	-
LTHW-SYS-006	LTHW Systems	Deliver...	-
LTHW-SYS-007	LTHW Systems	Deliver...	-
LTHW-SYS-008	LTHW Systems	Commissioni...	4 references
LTHW-SYS-009	LTHW Systems	Commissioni...	2 references
CHW-SYS-001	CHW Systems	Functional Perfo...	-
CHW-SYS-002	CHW Systems	Functional Perfo...	-
CHW-SYS-003	CHW Systems	Comple...	4 references
CHW-FLU-004	CHW Flushing	Deliver...	-
CHW-FLU-005	CHW Flushing	Deliver...	-
CHW-FLU-006	CHW Flushing	Commissioni...	-

Right Panel: LTHW-SYS-008

Details | **References** | Activity log

References

- Files
 - coolflow-ige
 - Goodwater-T
- Forms
- Air System Pre-Comm
- 27 May 2021 | Subm

Schedule activities

#48 - Startup and Test HVAC Critical

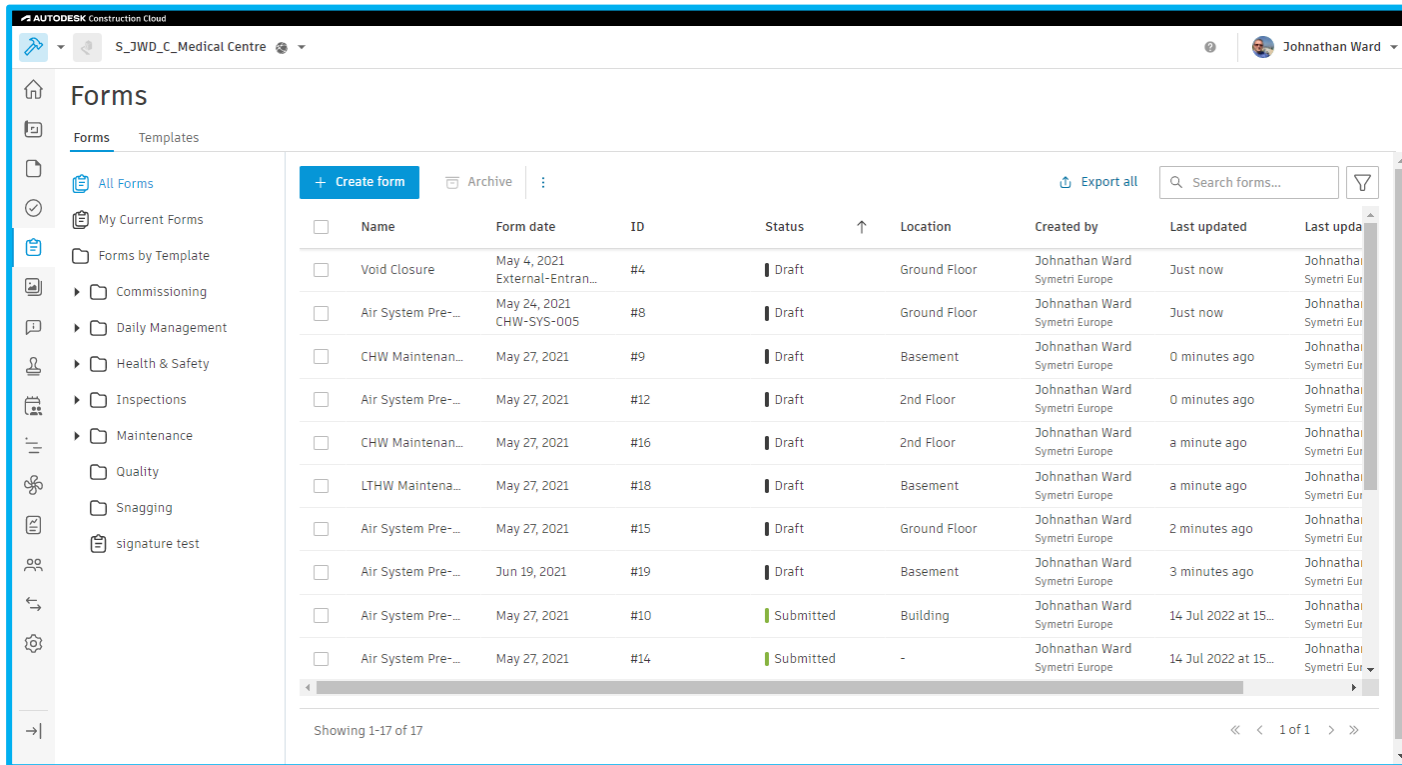
0% | 05/09/2023 - 05/09/2023 | 1 days

Construction Schedule

Office But... HVAC

Autodesk Build – Assets Overview

Forms Linked by Asset Category



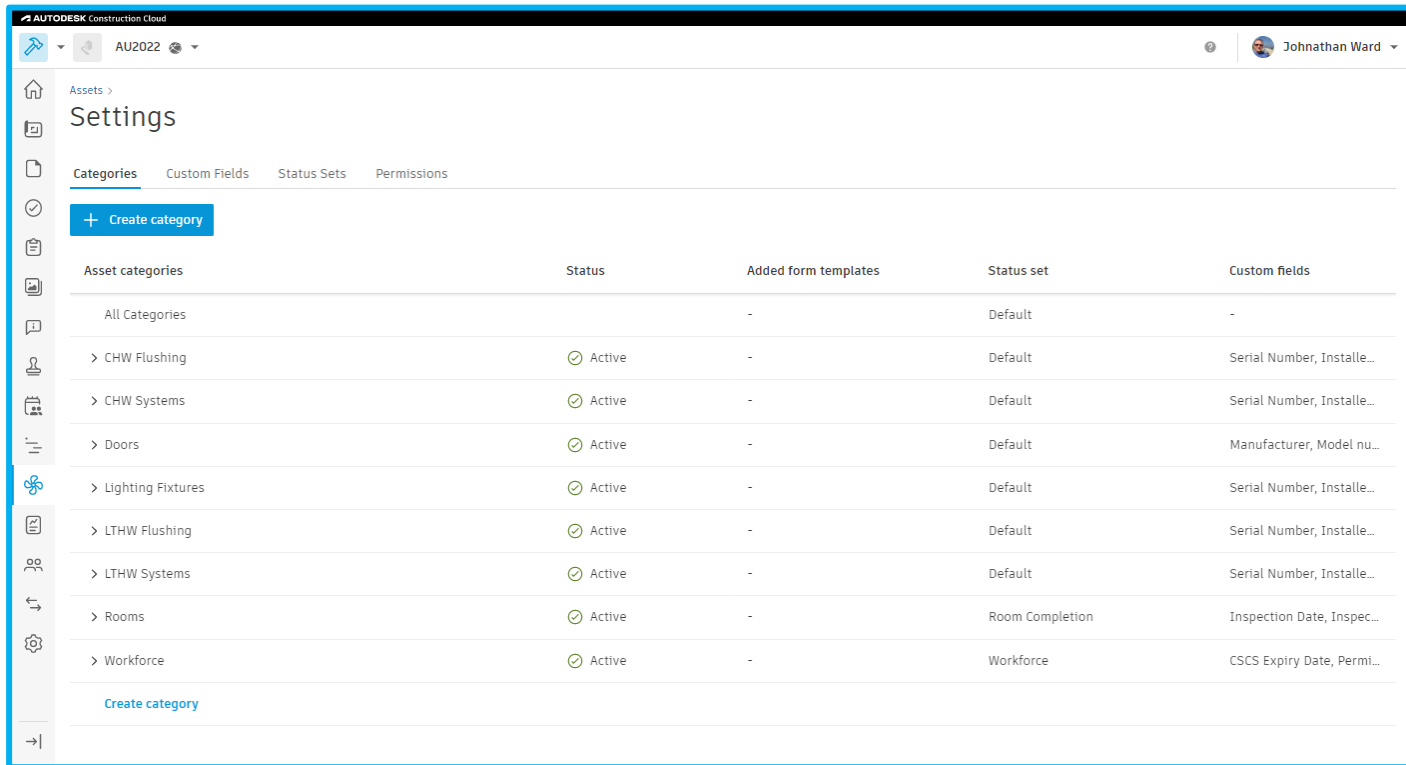
The screenshot displays the Autodesk Construction Cloud interface, specifically the 'Forms' section. The left sidebar shows a navigation menu with icons for Home, Forms, Templates, My Current Forms, Forms by Template, Commissioning, Daily Management, Health & Safety, Inspections, Maintenance, Quality, Snagging, and signature test. The main content area shows a list of forms with columns: Name, Form date, ID, Status, Location, Created by, Last updated, and Last updated. The forms are listed in a table with a search bar and a 'Create form' button at the top. The user 'Johnathan Ward' is logged in.

	Name	Form date	ID	Status	Location	Created by	Last updated	Last updated
<input type="checkbox"/>	Void Closure	May 4, 2021 External-Entran...	#4	Draft	Ground Floor	Johnathan Ward Symetri Europe	Just now	Johnathan Ward Symetri Europe
<input type="checkbox"/>	Air System Pre-	May 24, 2021 CHW-SYS-005	#8	Draft	Ground Floor	Johnathan Ward Symetri Europe	Just now	Johnathan Ward Symetri Europe
<input type="checkbox"/>	CHW Maintenanc...	May 27, 2021	#9	Draft	Basement	Johnathan Ward Symetri Europe	0 minutes ago	Johnathan Ward Symetri Europe
<input type="checkbox"/>	Air System Pre-	May 27, 2021	#12	Draft	2nd Floor	Johnathan Ward Symetri Europe	0 minutes ago	Johnathan Ward Symetri Europe
<input type="checkbox"/>	CHW Maintenanc...	May 27, 2021	#16	Draft	2nd Floor	Johnathan Ward Symetri Europe	a minute ago	Johnathan Ward Symetri Europe
<input type="checkbox"/>	LTHW Maintena...	May 27, 2021	#18	Draft	Basement	Johnathan Ward Symetri Europe	a minute ago	Johnathan Ward Symetri Europe
<input type="checkbox"/>	Air System Pre-	May 27, 2021	#15	Draft	Ground Floor	Johnathan Ward Symetri Europe	2 minutes ago	Johnathan Ward Symetri Europe
<input type="checkbox"/>	Air System Pre-	Jun 19, 2021	#19	Draft	Basement	Johnathan Ward Symetri Europe	3 minutes ago	Johnathan Ward Symetri Europe
<input type="checkbox"/>	Air System Pre-	May 27, 2021	#10	Submitted	Building	Johnathan Ward Symetri Europe	14 Jul 2022 at 15...	Johnathan Ward Symetri Europe
<input type="checkbox"/>	Air System Pre-	May 27, 2021	#14	Submitted	-	Johnathan Ward Symetri Europe	14 Jul 2022 at 15...	Johnathan Ward Symetri Europe

Showing 1-17 of 17

Autodesk Build – Assets Overview

Configuration Options



The screenshot displays the 'Settings' page for 'Assets' in the Autodesk Construction Cloud interface. The page is titled 'Settings' and has tabs for 'Categories', 'Custom Fields', 'Status Sets', and 'Permissions'. The 'Categories' tab is active, showing a list of asset categories. A blue button labeled '+ Create category' is at the top left of the table. The table has five columns: 'Asset categories', 'Status', 'Added form templates', 'Status set', and 'Custom fields'. The categories listed are 'All Categories', 'CHW Flushing', 'CHW Systems', 'Doors', 'Lighting Fixtures', 'LTHW Flushing', 'LTHW Systems', 'Rooms', and 'Workforce'. Each category has a status of 'Active' (indicated by a green checkmark) and a 'Status set' of 'Default' or 'Room Completion' or 'Workforce'. The 'Custom fields' column shows the fields associated with each category, such as 'Serial Number, Instal...' for most categories and 'Inspection Date, Inspec...' for 'Rooms'.

Asset categories	Status	Added form templates	Status set	Custom fields
All Categories		-	Default	-
> CHW Flushing	✓ Active	-	Default	Serial Number, Instal...
> CHW Systems	✓ Active	-	Default	Serial Number, Instal...
> Doors	✓ Active	-	Default	Manufacturer, Model nu...
> Lighting Fixtures	✓ Active	-	Default	Serial Number, Instal...
> LTHW Flushing	✓ Active	-	Default	Serial Number, Instal...
> LTHW Systems	✓ Active	-	Default	Serial Number, Instal...
> Rooms	✓ Active	-	Room Completion	Inspection Date, Inspec...
> Workforce	✓ Active	-	Workforce	CSCS Expiry Date, Permi...

Asset Creation

Spreadsheet

The screenshot displays the Autodesk Construction Cloud interface for managing assets. The left sidebar shows a navigation menu with icons for home, assets, documents, checklists, reports, people, and settings. The main content area is titled "Assets" and includes a "Create asset" button and an "Import assets" button. Below these buttons is a table with columns for Category, Status, Linked reference, Description, Location, Barcode, and Created. The table contains 21 rows of asset data, each with a unique ID and a description. The "Import assets" button is highlighted, and a modal window is open, showing a spreadsheet view of the asset data. The spreadsheet has columns for B3F ID, Name, Category, Description, Location, Status, and Barcode. The data is organized into a table with 21 rows and 7 columns.

	A	B	C	D	E	F	G
	B3F ID	Name	Category	Description	Location	Status	Barcode
1	604d0868-ed05-45e	LIGHTING FIXTURES-1	Lighting Fixtures	2x2 3Lamp		Post-Accepted	20004447657412
2	0b291f35-2b8b-402f	LIGHTING FIXTURES-2	Lighting Fixtures	2x2 3Lamp		Post-Accepted	20004447657413
3	7a1b5df0-d5ea-45dc	LIGHTING FIXTURES-3	Lighting Fixtures	2x2 3Lamp		Post-Accepted	20004447657414
4	abc7c69a-06d1-43cc	LIGHTING FIXTURES-4	Lighting Fixtures	2x2 3Lamp		Post-Accepted	20004447657415
5	1677f8e3-4ad7-44ef	LIGHTING FIXTURES-5	Lighting Fixtures	2x2 3Lamp		Post-Accepted	20004447657416
6	6f2866f7-ea99-4d77	LIGHTING FIXTURES-6	Lighting Fixtures	2x2 3Lamp		Post-Accepted	20004447657417
7	9341644d-87b9-495e	LIGHTING FIXTURES-7	Lighting Fixtures	2x2 3Lamp		Post-Accepted	20004447657418
8	51cdeafd-4d81-42d8	LIGHTING FIXTURES-8	Lighting Fixtures	2x2 3Lamp		Post-Accepted	20004447657419
9	15781fd3-05d5-44ae	LIGHTING FIXTURES-9	Lighting Fixtures	2x2 3Lamp		Post-Accepted	20004447657420
10	71018f36-f1dd-432f	LIGHTING FIXTURES-10	Lighting Fixtures	2x2 3Lamp		Post-Accepted	20004447657421
11	0f85c8f1-9ecf-4e82-f	LIGHTING FIXTURES-11	Lighting Fixtures	2x2 3Lamp		Post-Accepted	20004447657422
12	4f7403c4-8b65-49dt	LIGHTING FIXTURES-12	Lighting Fixtures	2x2 3Lamp		Post-Accepted	20004447657423
13	81c1f5b2-4735-447f	LIGHTING FIXTURES-13	Lighting Fixtures	2x2 3Lamp		Post-Accepted	20004447657424
14	830accd3-e556-4f22	LIGHTING FIXTURES-14	Lighting Fixtures	2x2 3Lamp		Post-Accepted	20004447657425
15	1a3446e3-c9cc-4097	LIGHTING FIXTURES-15	Lighting Fixtures	2x2 3Lamp		Post-Accepted	20004447657426
16	58b52fe1-f59b-41b8	LIGHTING FIXTURES-16	Lighting Fixtures	2x2 3Lamp		Post-Accepted	20004447657427
17	ae97c18d-4e18-4c1c	LIGHTING FIXTURES-17	Lighting Fixtures	2x2 3Lamp		Post-Accepted	20004447657428
18	4e5bc827-c8e6-446f	LIGHTING FIXTURES-18	Lighting Fixtures	2x2 3Lamp		Post-Accepted	20004447657429
19	8383b084-90c3-4d2	LIGHTING FIXTURES-19	Lighting Fixtures	2x2 3Lamp		Post-Accepted	20004447657430
20	e863f64e-3c14-4432	LIGHTING FIXTURES-20	Lighting Fixtures	2x2 3Lamp		Post-Accepted	20004447657431
21	3ed208dd-9935-44b	LIGHTING FIXTURES-21	Lighting Fixtures	2x2 3Lamp		Post-Accepted	20004447657432

Asset Creation

Revit Export (proof of concept)

Assets specified in Revit Model

A	B	C	D	E	F	G	H	I
Type Mark	Mark	Family and Type	Type	Voltage	Number of Poles	Lamp	Maximum Wattage	Manufacturer
	261	Suspended Fluorescent Strip - Non-Heated: Exterior Strip Light 1x6 - 120V Normal Exterior Strip Light 1x6 - 120V Normal	120 V	1	78	64 W		
	262	Suspended Fluorescent Strip - Non-Heated: Exterior Strip Light 1x6 - 120V Normal Exterior Strip Light 1x6 - 120V Normal	120 V	1	78	64 W		
	263	Suspended Fluorescent Strip - Non-Heated: Exterior Strip Light 1x6 - 120V Normal Exterior Strip Light 1x6 - 120V Normal	120 V	1	78	64 W		
	264	Suspended Fluorescent Strip - Non-Heated: Exterior Strip Light 1x6 - 120V Normal Exterior Strip Light 1x6 - 120V Normal	120 V	1	78	64 W		
	265	Suspended Fluorescent Strip - Non-Heated: Exterior Strip Light 1x6 - 120V Normal Exterior Strip Light 1x6 - 120V Normal	120 V	1	78	64 W		
	266	Suspended Fluorescent Strip - Non-Heated: Exterior Strip Light 1x6 - 120V Normal Exterior Strip Light 1x6 - 120V Normal	120 V	1	78	64 W		
	267	Suspended Fluorescent Strip - Non-Heated: Exterior Strip Light 1x6 - 120V Normal Exterior Strip Light 1x6 - 120V Normal	120 V	1	78	64 W		
	268	Suspended Fluorescent Strip - Non-Heated: Exterior Strip Light 1x6 - 120V Normal Exterior Strip Light 1x6 - 120V Normal	120 V	1	78	64 W		
	269	Suspended Fluorescent Strip - Non-Heated: Exterior Strip Light 1x6 - 120V Normal Exterior Strip Light 1x6 - 120V Normal	120 V	1	78	64 W		
	270	Suspended Fluorescent Strip - Non-Heated: Exterior Strip Light 1x6 - 120V Normal Exterior Strip Light 1x6 - 120V Normal	120 V	1	78	64 W		
A1	1	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	2	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	3	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	4	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	5	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	6	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	7	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	8	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	9	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	10	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	11	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	12	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	13	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	14	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	15	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	16	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	17	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	18	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	19	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	20	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	21	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	22	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	23	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	24	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	25	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	26	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	27	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	28	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	29	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	30	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	31	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	32	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	33	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	34	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	
A1	35	Troffer Corner Insert 2x2 3Lamp	2x2 3Lamp	120 V	1	78	93 W	



What is an Asset?





Asset Definition

Cambridge Dictionary definition

asset

noun

UK  /'æ.s.ət/ US  /'æ.s.ət/



C1 [C]

a useful or valuable quality, skill, or person:

- *He'll be a great asset **to** the team.*
- *Her eyes are her **best** asset (= most attractive feature).*
- *Knowledge of languages is a real asset in this sort of work.*



C1 [C usually plural]

something valuable belonging to a person or organization that can be used for the payment of debts:

- *A company's assets can consist of cash, investments, specialist knowledge, or copyright material.*
- ***liquid** assets (= money or things that can easily be changed into money)*

Compare

liabilities (liability)

Asset Definition

Uniclass 2015 tables

Browse the tables

Ac Activities

v1.17, published April 2022

Co Complexes

v1.15, published January 2022

En Entities

v1.24, published April 2022

SL Spaces/ locations

v1.23, published April 2022

EF Elements/ functions

v1.11, published April 2022

Ss Systems

v1.26, published April 2022

Pr Products

v1.26, published April 2022

TE Tools and Equipment

v1.12, published April 2022

PM Project management

v1.16, published April 2022

FI Form of information

v1.4, published January 2021

Ro Roles

v1.5, published April 2021

Zz CAD

v1.1, published January 2022

<https://uniclass.thenbs.com/>

They are all assets

We certainly need to capture and maintain information about them



Industry Examples

How our customers have used assets

Concrete Deck

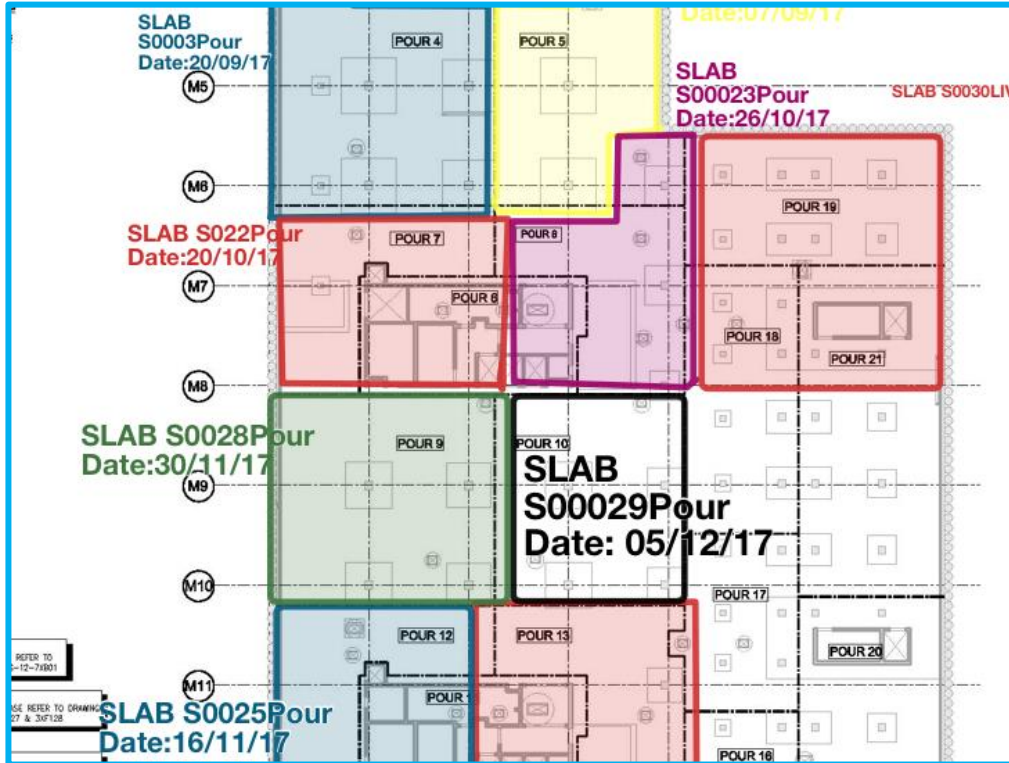
Phased assets



- Engaged with customer to develop check sheets
- Concrete Elements listed as a piece of equipment
- Relevant check sheet appended to relevant concrete asset
- Progress Mark Ups

Concrete Deck

Floor plans populated with progress



Track and Trace

Curtain panels - transit to installation

- Track & Trace
- Barcode Utilisation – Panel Ref & Type
- Logistics Status of Panel and Stillage
- Associated Check Sheets
- Generic & Bespoke Panel Location
- Location Allocation
- Appearance Profile – Utilising Status Code Allocation



Balný list - VÝROBA
Packing Note - Fabrication

123282

8.24.1
W/T-L 12

objedávka v SAPe SAP order	112989	pracovník workplace	JRNY	27000
vytvořil created by	BUŠTA Jaroslav	lokalizace pracovního prac. workplace	EXPEDICE	
z dokumentace documentation no.	V-H0309/WF02/3/12			
směrný termín target time	8.12.2017			
datum tisku print date	14.3.2018 12:01			
posloup. process	JRNY -> EXPEDICE			

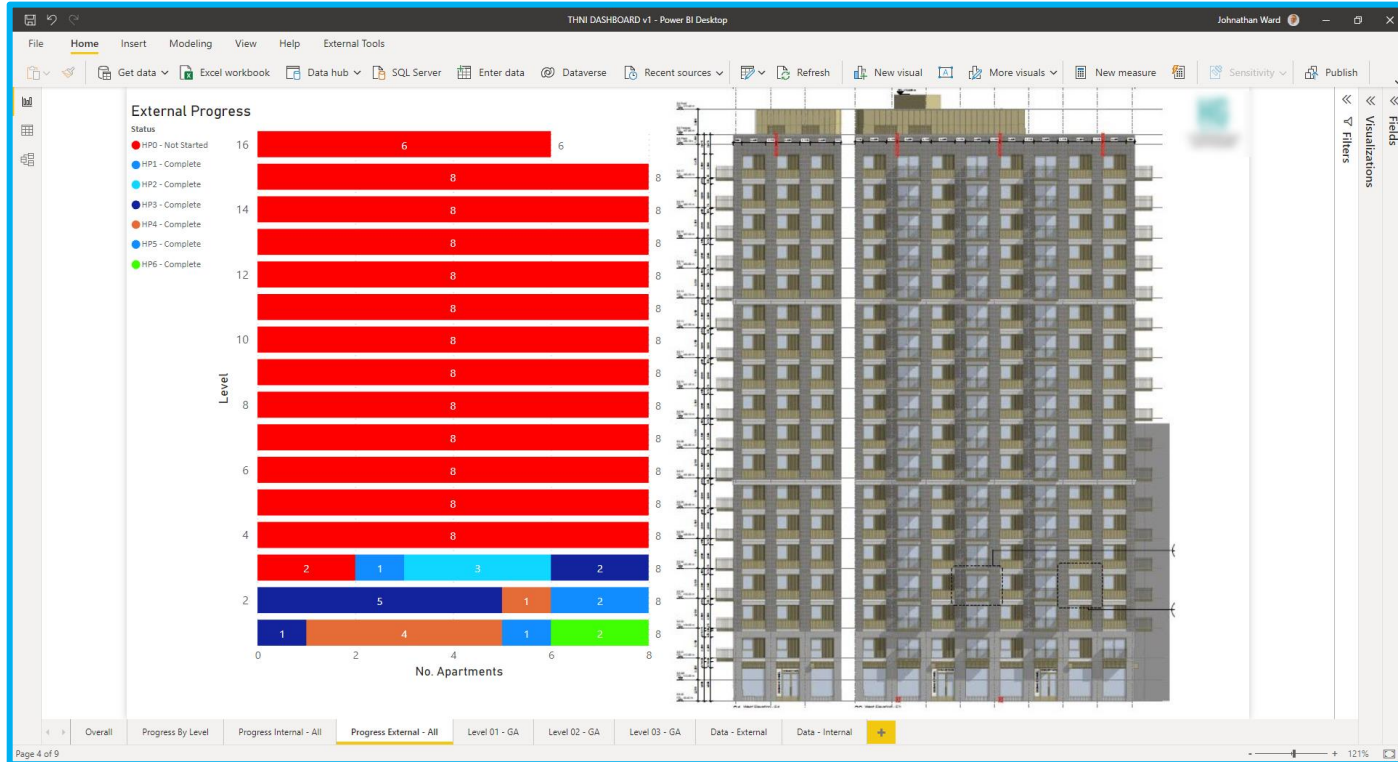
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30602052	210.0309/DS-04209		1	KS
30602053	210.0309/DS-04309		1	KS
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1067951
GLASS_WF02/DS-04009
210 0309 - Warden

1067951
GLASS_WF02/DS-04109
210 0309 - Warden

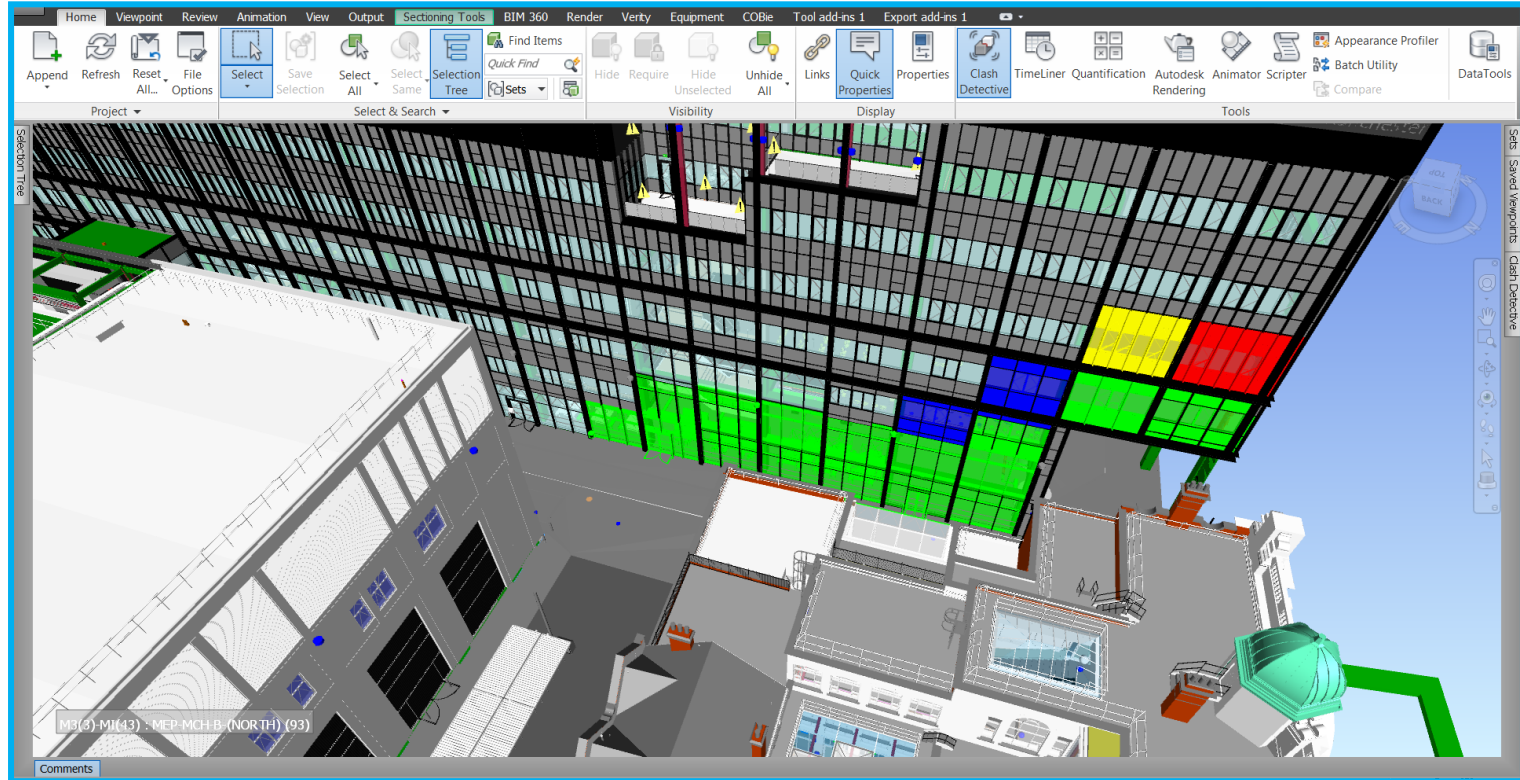
Track and Trace

Elevations populated with façade progress



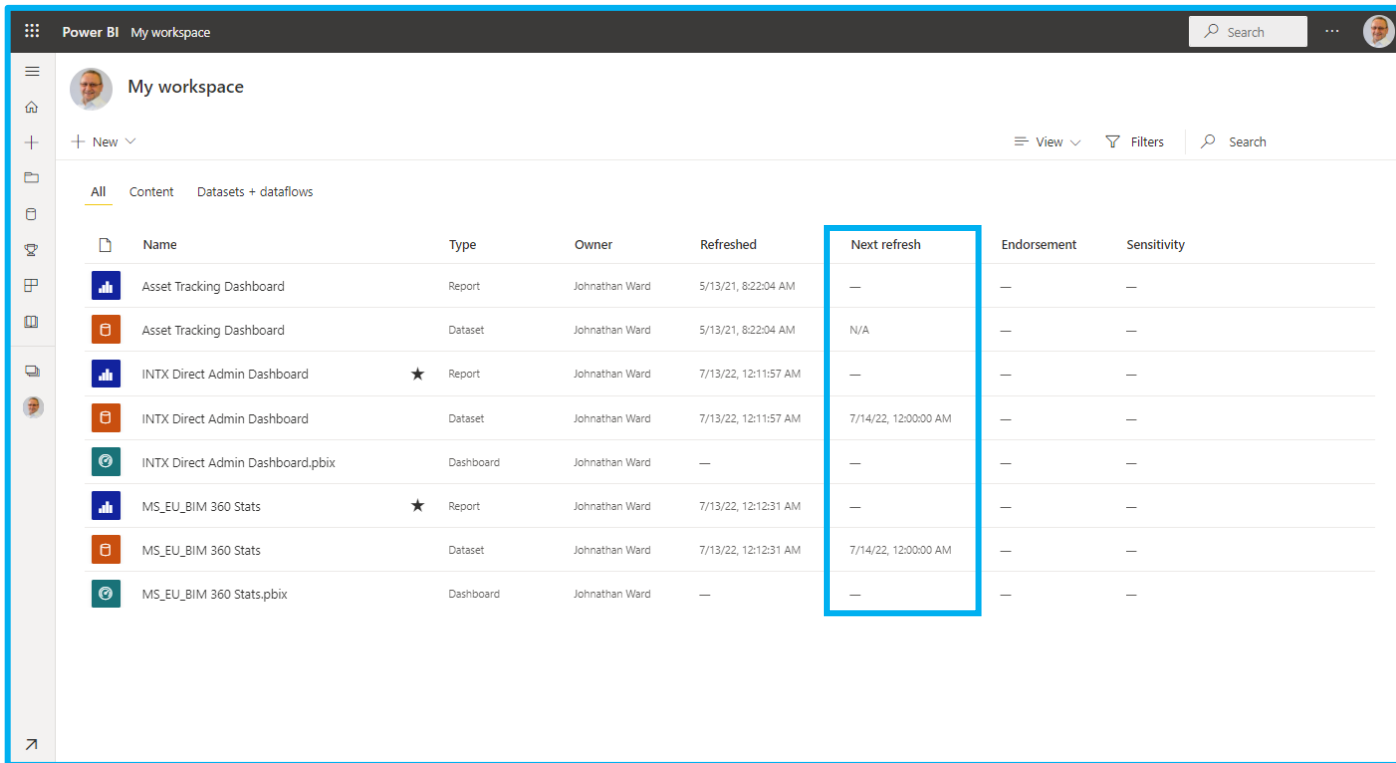
Track and Trace

Navisworks model populated with façade progress



Power BI Dashboards

Scheduled refresh of data

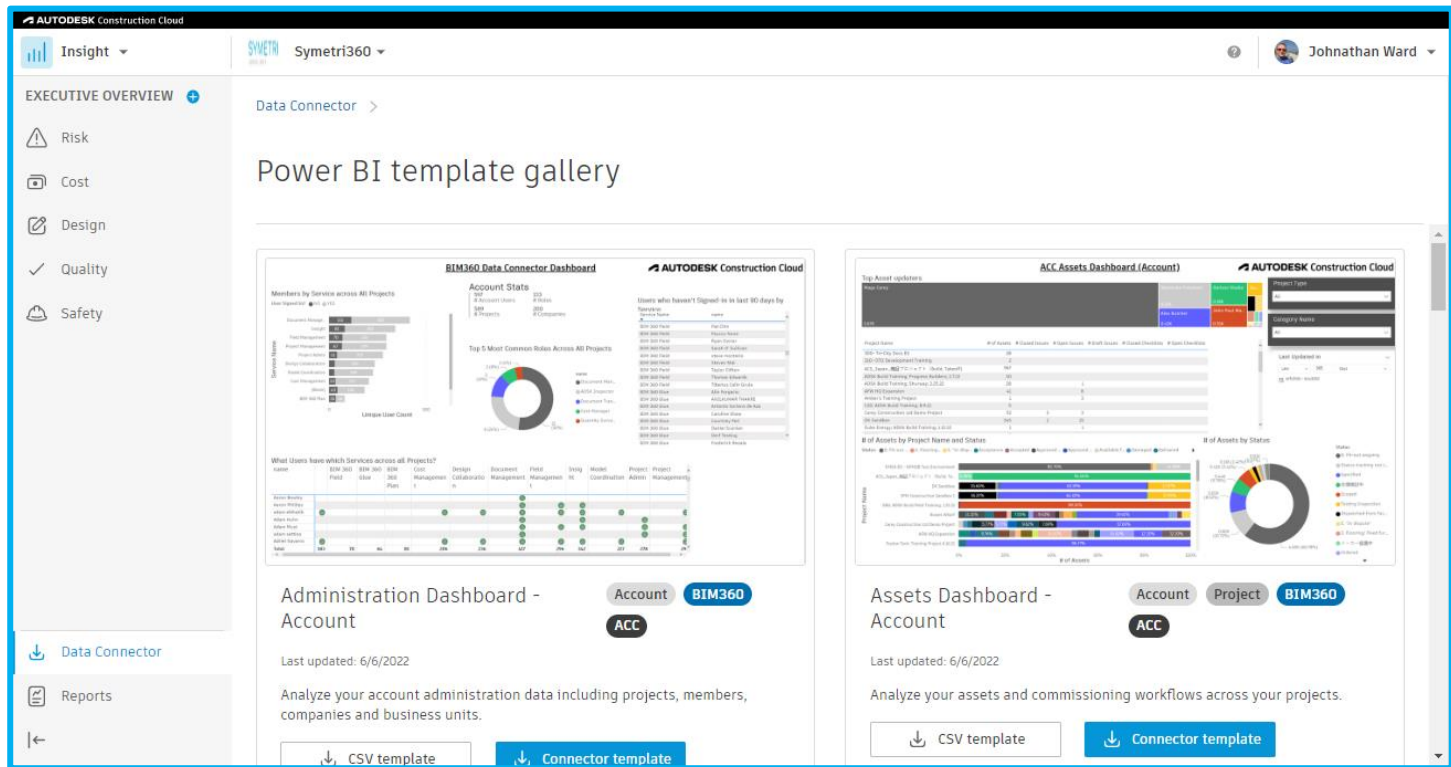


The screenshot shows the Power BI 'My workspace' interface. A table lists various assets, including reports and datasets. The 'Next refresh' column is highlighted with a blue box, showing scheduled refresh times for several assets. The table has columns for Name, Type, Owner, Refreshed, Next refresh, Endorsement, and Sensitivity.

Name	Type	Owner	Refreshed	Next refresh	Endorsement	Sensitivity
Asset Tracking Dashboard	Report	Johnathan Ward	5/13/21, 8:22:04 AM	—	—	—
Asset Tracking Dashboard	Dataset	Johnathan Ward	5/13/21, 8:22:04 AM	N/A	—	—
INTX Direct Admin Dashboard	Report	Johnathan Ward	7/13/22, 12:11:57 AM	—	—	—
INTX Direct Admin Dashboard	Dataset	Johnathan Ward	7/13/22, 12:11:57 AM	7/14/22, 12:00:00 AM	—	—
INTX Direct Admin Dashboard.pbix	Dashboard	Johnathan Ward	—	—	—	—
MS_EU_BIM 360 Stats	Report	Johnathan Ward	7/13/22, 12:12:31 AM	—	—	—
MS_EU_BIM 360 Stats	Dataset	Johnathan Ward	7/13/22, 12:12:31 AM	7/14/22, 12:00:00 AM	—	—
MS_EU_BIM 360 Stats.pbix	Dashboard	Johnathan Ward	—	—	—	—

Power BI Templates

From account insight pages



Site Permits

People as assets



- Waterproof permit on a high visibility armband in order to recognise who the permit has been issued to onsite/space.
- Provides a clear identification of who has been issued the permit on site.
- A manager can carry out a spot check using the QR Code Scanner to ensure the permit is in date and is being used in the correct location.
- Check anyone issued a permit has received adequate training and is considered competent to carry out operation.
- All related check sheets and photos are appended to a particular permit on a daily basis.

Be aware of specific country requirements on personal data protection regulations

Temporary Equipment

Equipment on hire - fault logging



- All mobile & fixed plant items to be allocated an Individual barcode.
- Managing Hired Equipment and Plant.
- Monitor plant duration and avoid missing plant items.

Expanded Plant

Excavator 2 Expanded

CAT320E

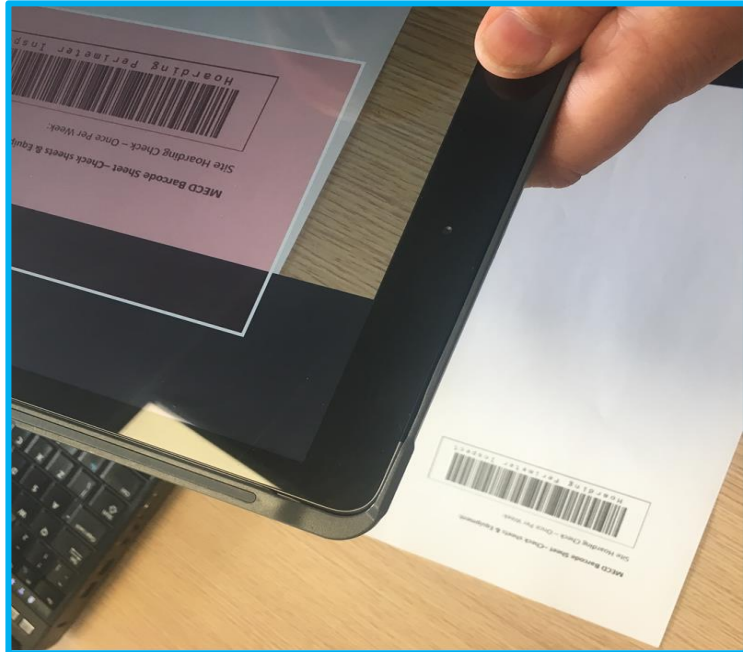
Supplier: SELECT

Plant No: CAT0320ELNAZ00226



Hoarding Inspections

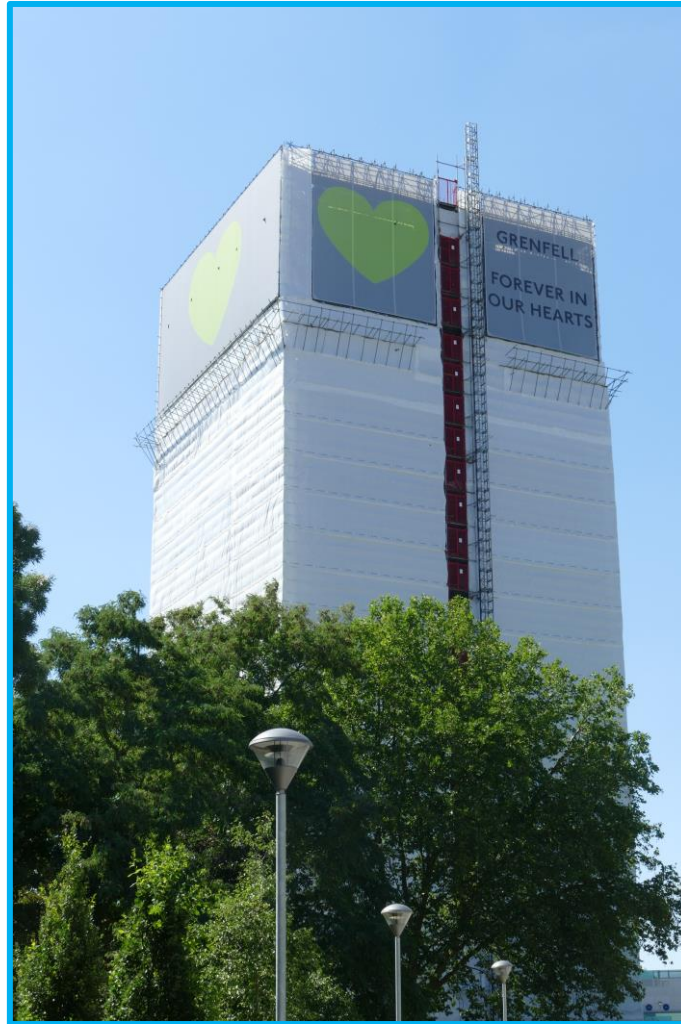
Damage and graffiti inspections



Site Verification

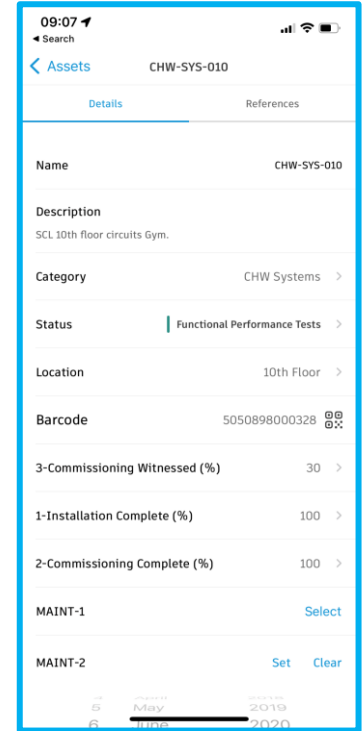
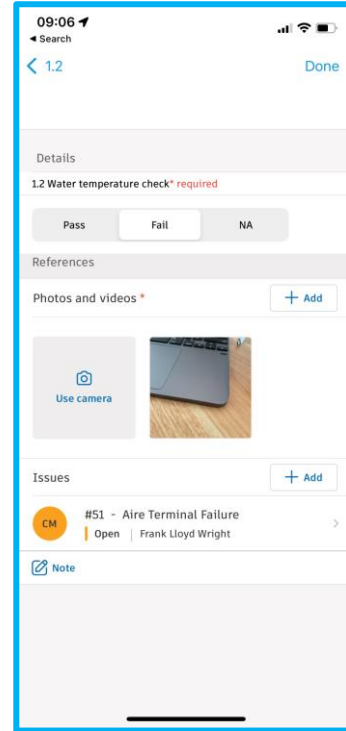
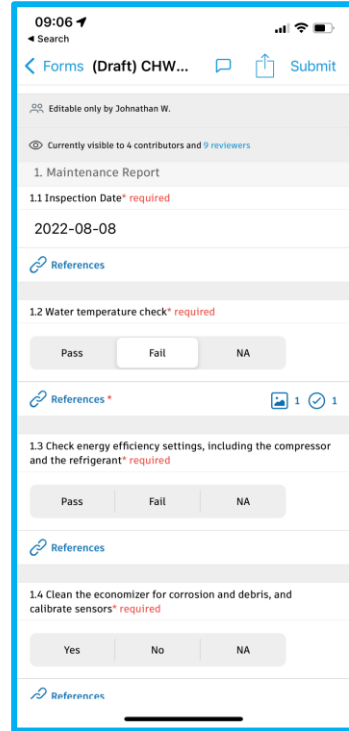
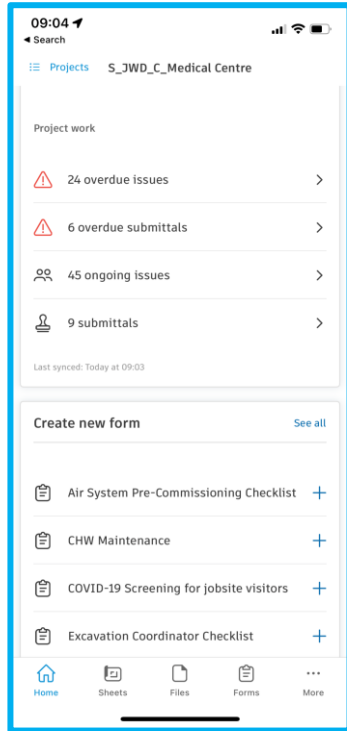
Site Verification

Avoiding issues after completion



Site Verification

Mobile app



OCULO



360 site view mapped to the floorplan...

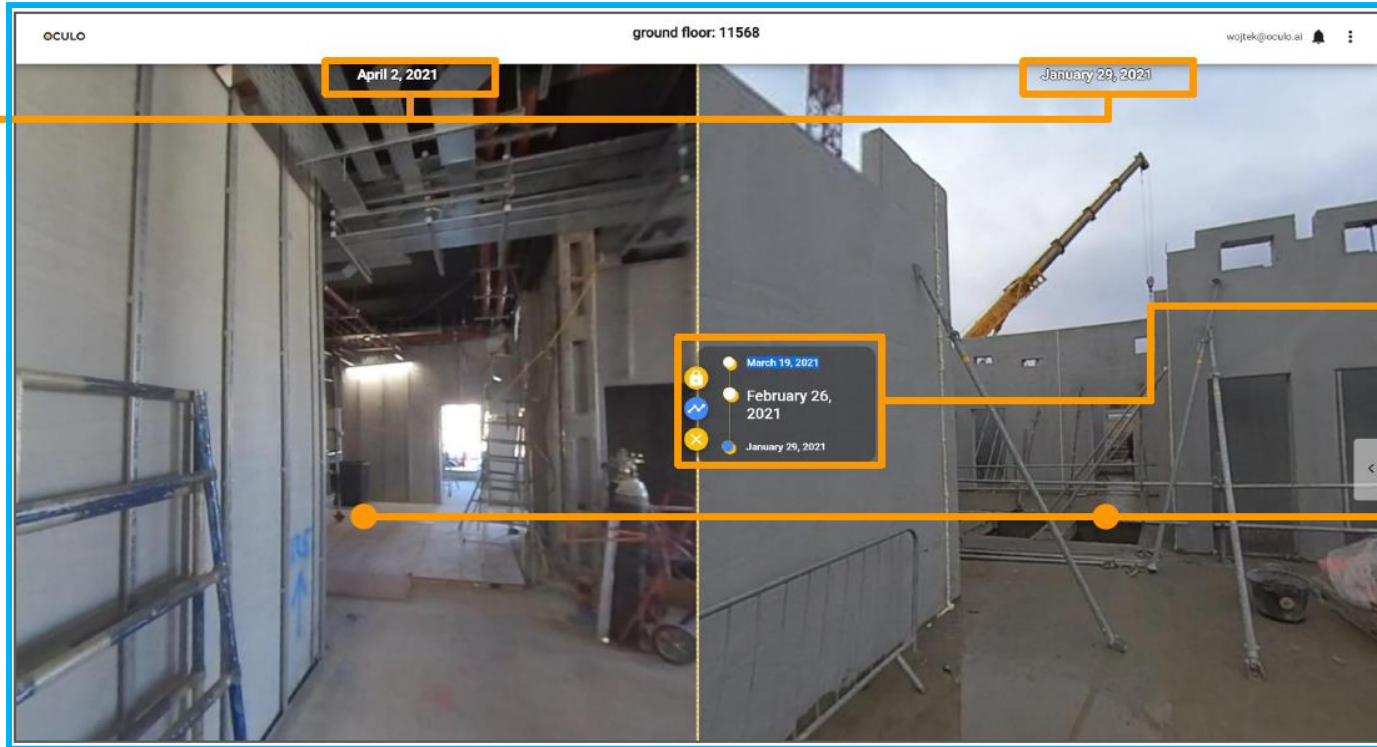


Each of the points on the plan...



...connect to an up to date 360-degree site view

...allowing instant review of progress over time...



Each scene
time-stamped
for evidence
and reference

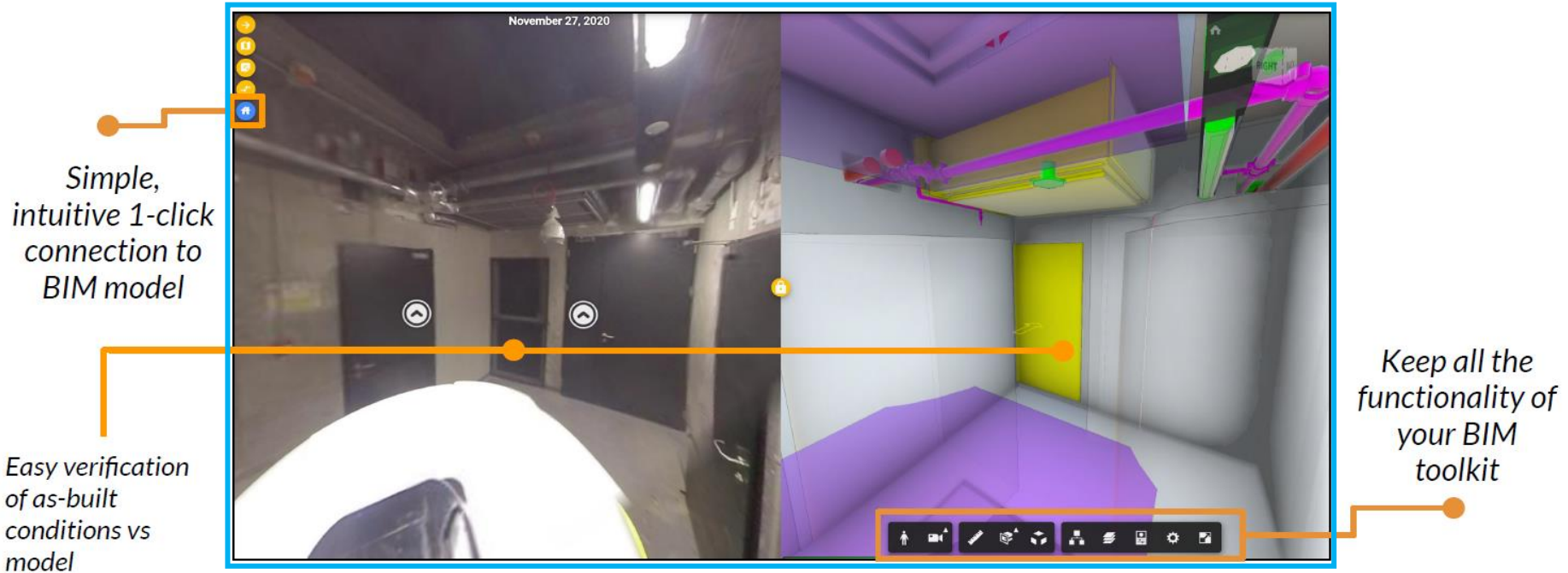
Travel back in
time through
visual history

See changes
over time for
every point of
your site

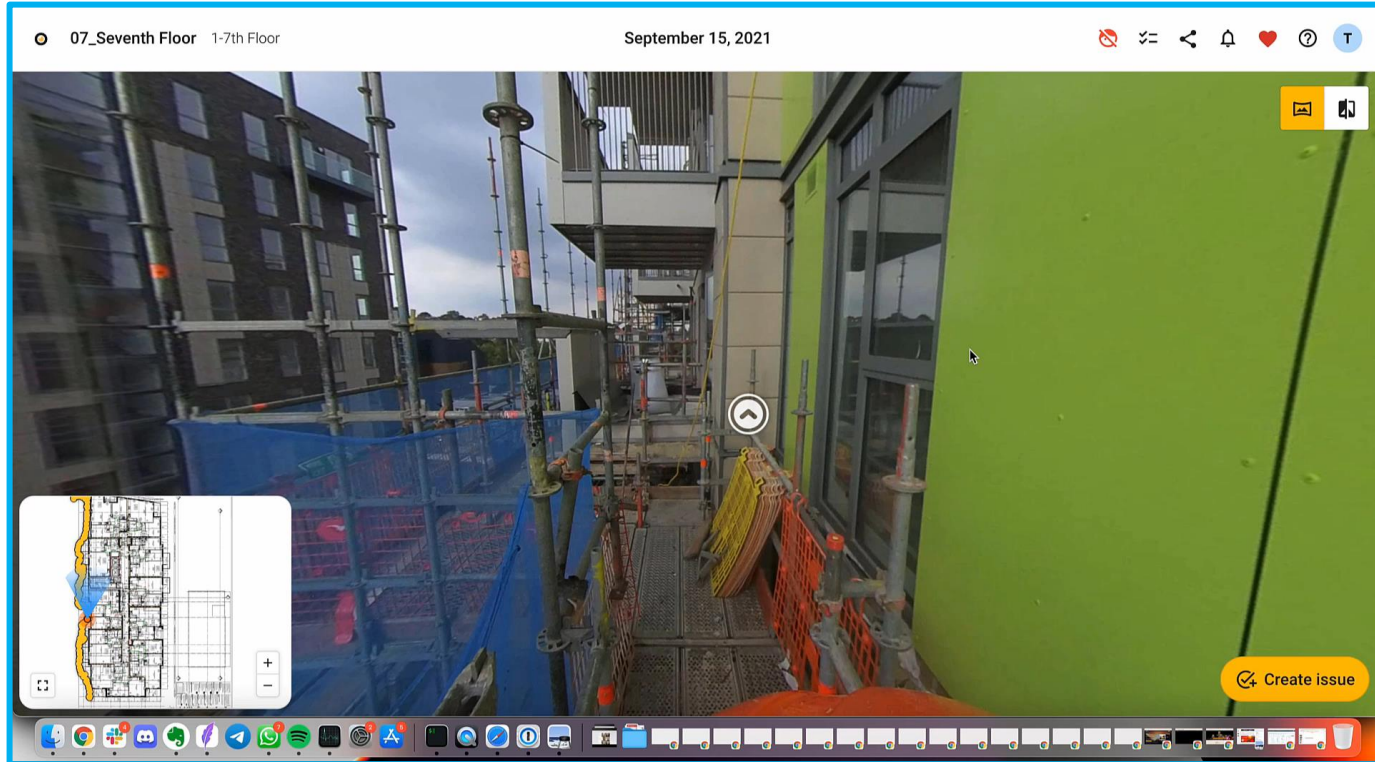
OCULO

AUTODESK UNIVERSITY

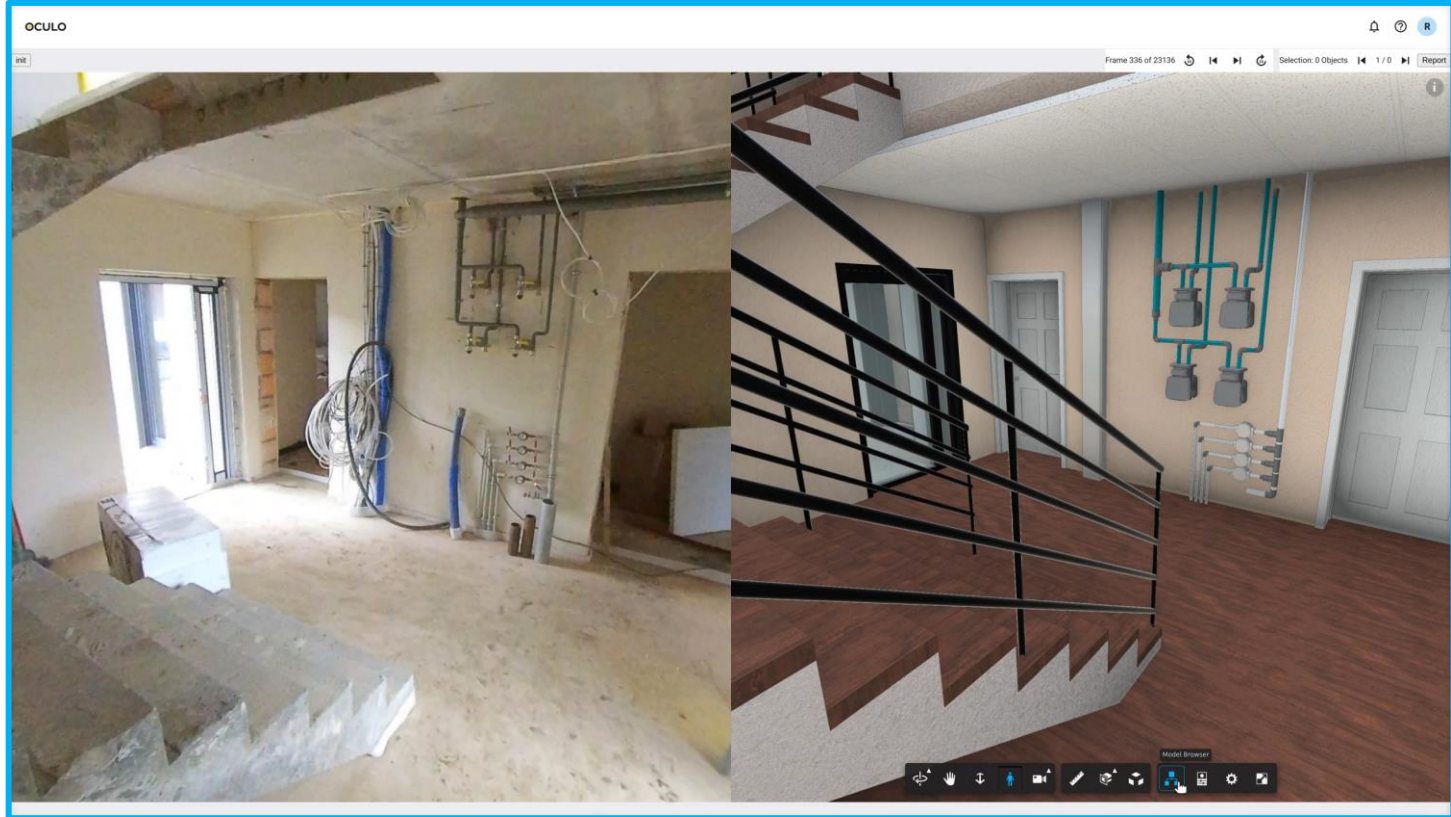
...and against your BIM



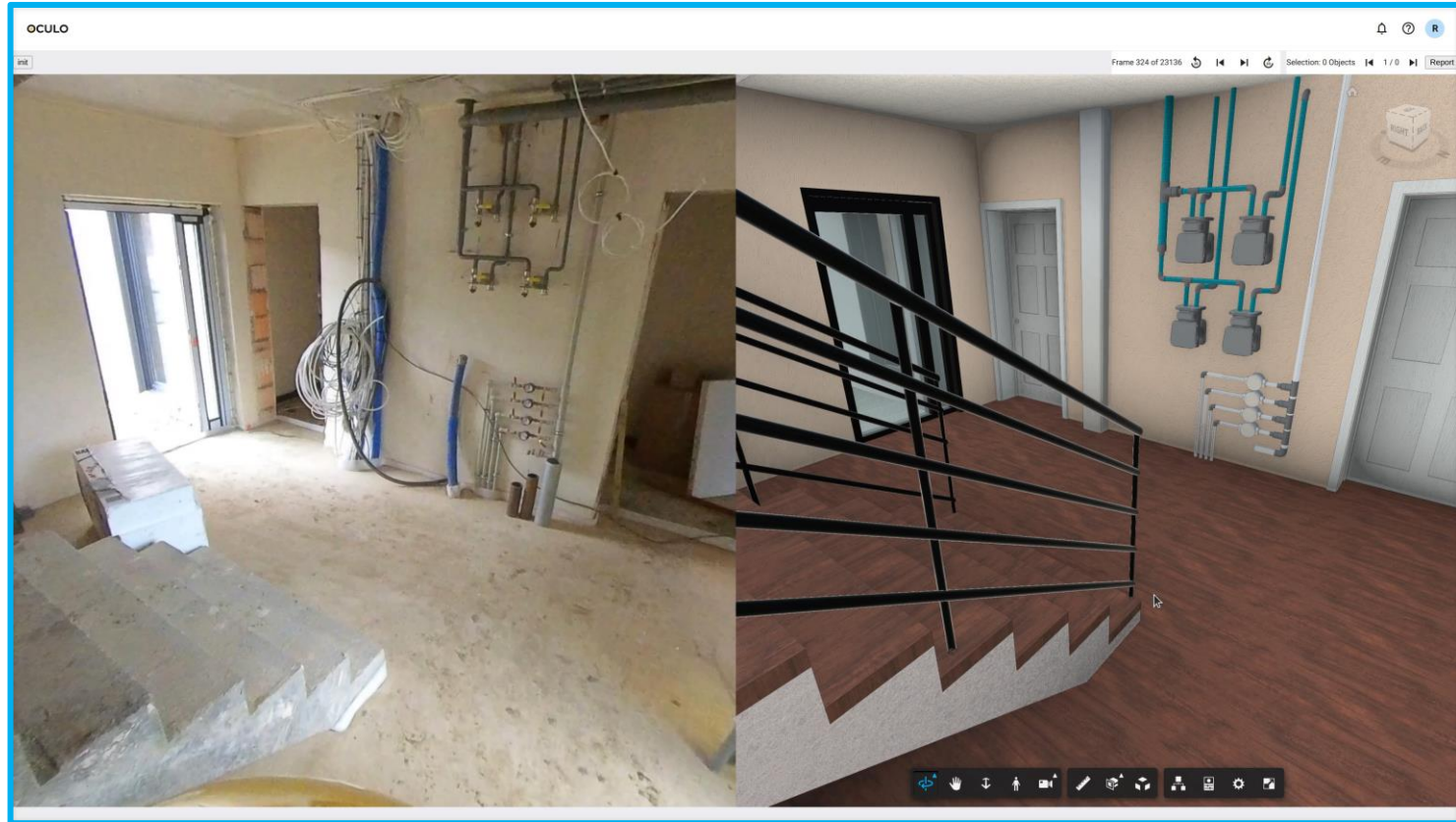
Compare Surveys

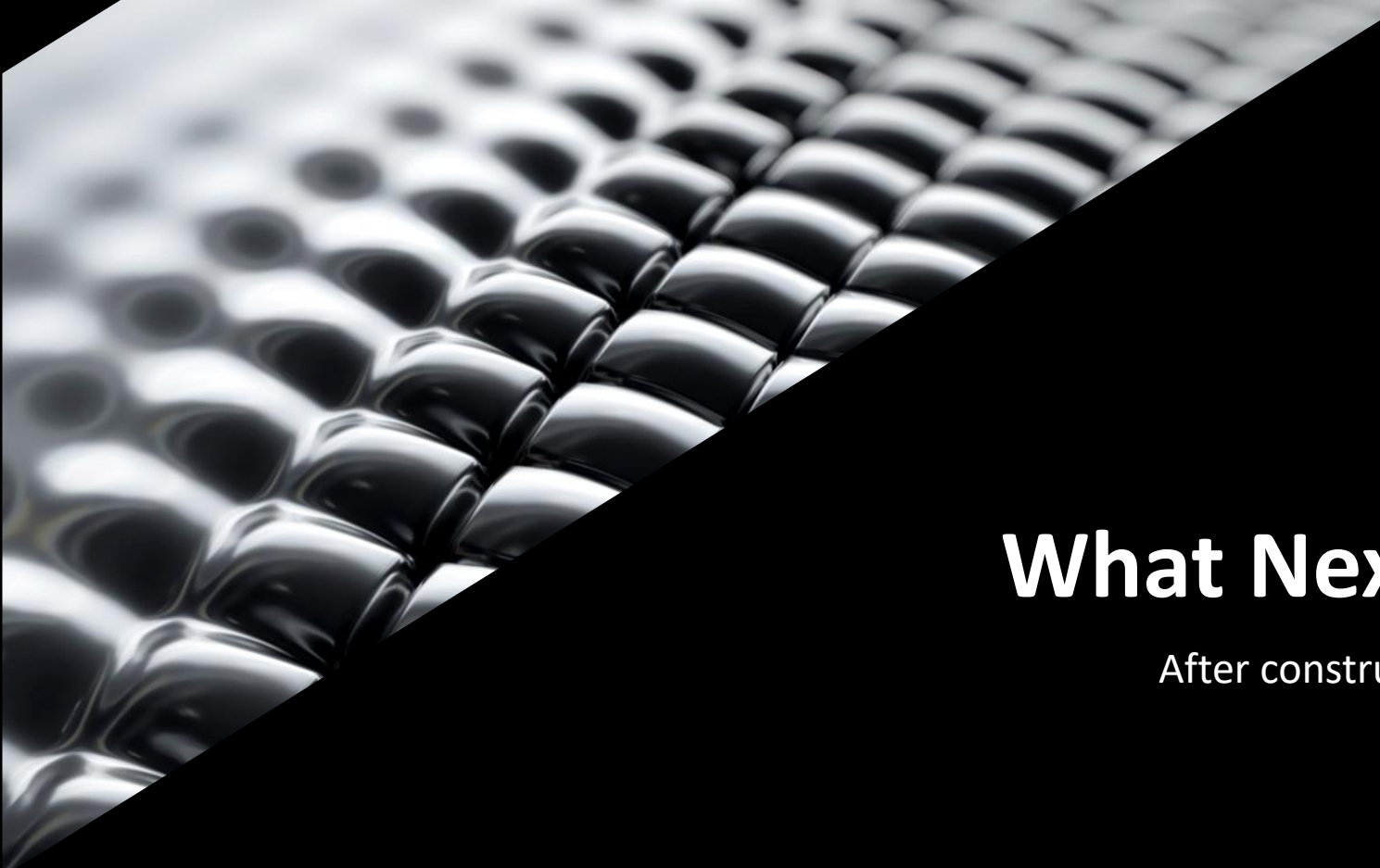


Model Browsing Assets



Asset Report and Progress

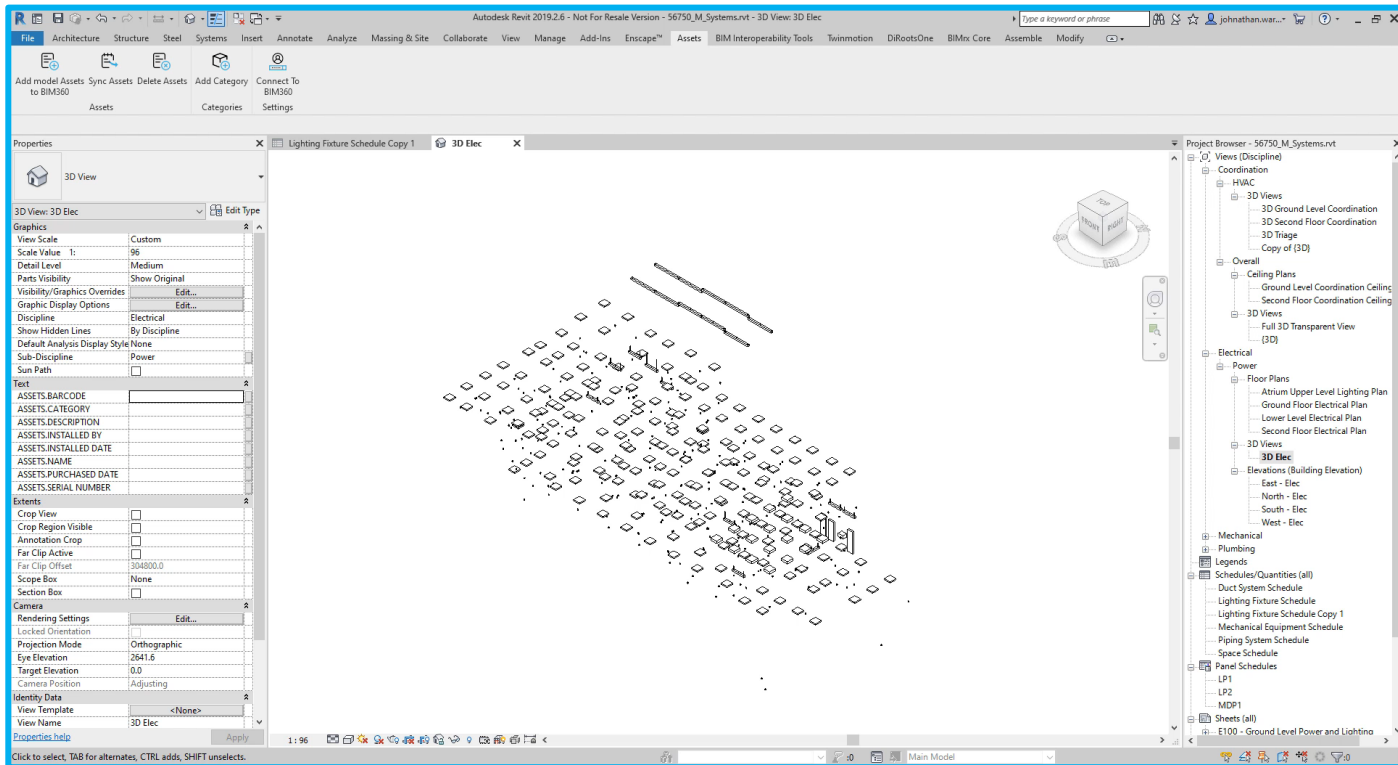




What Next?

After construction

Revit (proof of concept)



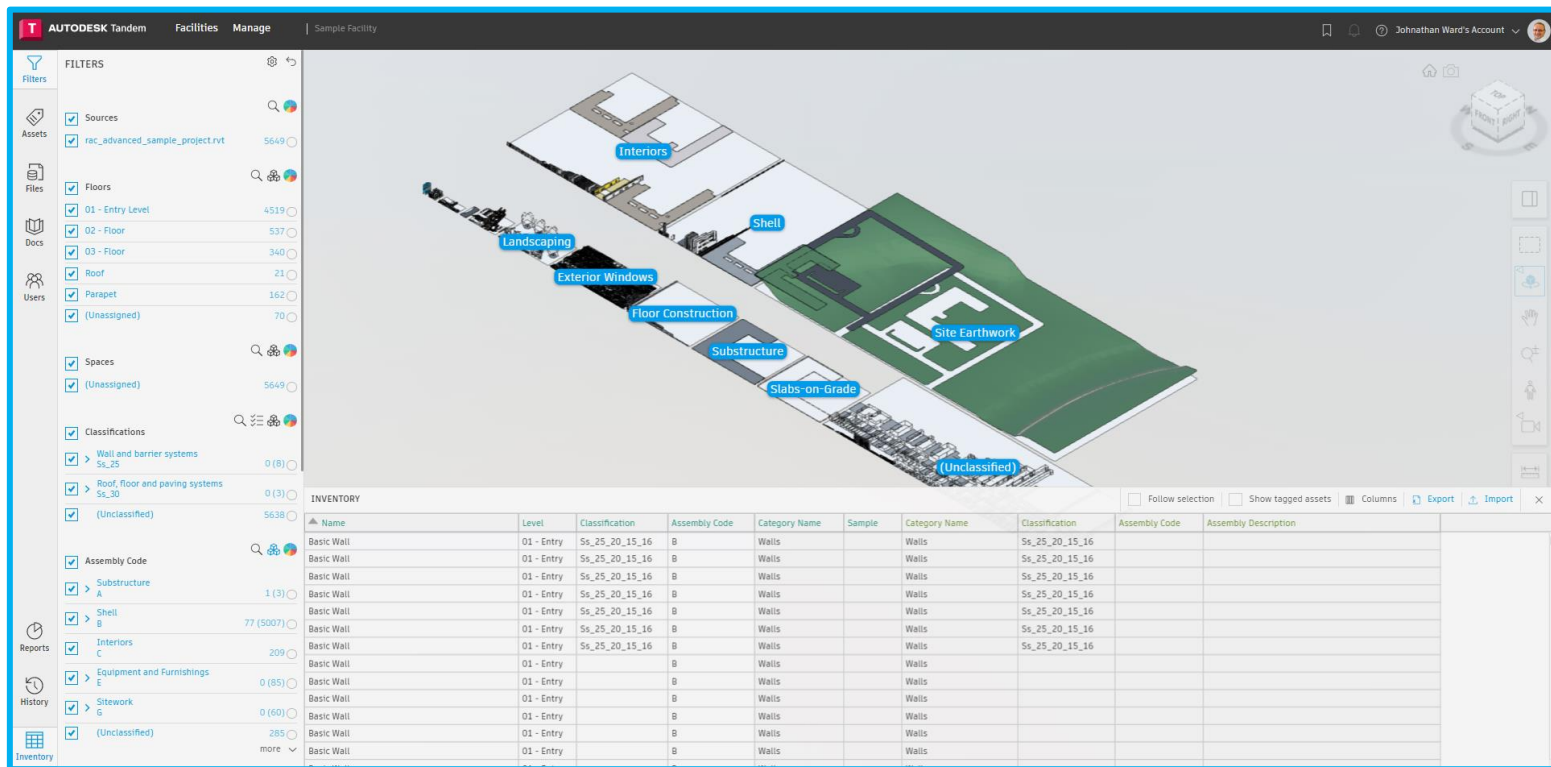
Tandem

Platform overview and highlights

The screenshot displays the Autodesk Tandem interface for a 'Sample Facility'. The left sidebar contains navigation icons for Filters, Assets, Files, Docs, and Users. The 'FILTERS' panel is expanded, showing categories like Sources, Floors, Spaces, and Classifications with their respective counts. The main area features a 3D isometric view of a building on a green hill. The bottom section is an 'INVENTORY' table with columns for Name, Level, Classification, Assembly Code, Category Name, Sample, and Assembly Description. The table lists various building components like stairs, roofs, and walls with their specific codes and descriptions.

Name	Level	Classification	Assembly Code	Category Name	Sample	Category Name	Classification	Assembly Code	Assembly Description
Assembled Stair	01 - Entry		B1080	Stairs		Stairs		C	Interiors
Assembled Stair	01 - Entry		B1080	Stairs		Stairs		C	Interiors
Assembled Stair	01 - Entry		B1080	Stairs		Stairs		C	Interiors
Assembled Stair	01 - Entry		B1080	Stairs		Stairs		C	Interiors
Assembled Stair	01 - Entry		B1080	Stairs		Stairs		C	Interiors
Basic Roof	Roof	Ss_30_10_30_70	B	Roofs		Roofs	Ss_30_10_30_70		
Basic Roof	03 - Floor	Ss_30_12_30	B	Roofs		Roofs	Ss_30_12_30		
Basic Roof	02 - Floor		B1020	Roofs		Roofs		B1020	Roof Construction
Basic Wall	01 - Entry	Ss_25_20_15_16	B	Walls		Walls	Ss_25_20_15_16		
Basic Wall	01 - Entry	Ss_25_20_15_16	B	Walls		Walls	Ss_25_20_15_16		
Basic Wall	01 - Entry	Ss_25_20_15_16	B	Walls		Walls	Ss_25_20_15_16		
Basic Wall	01 - Entry	Ss_25_20_15_16	B	Walls		Walls	Ss_25_20_15_16		
Basic Wall	01 - Entry	Ss_25_20_15_16	B	Walls		Walls	Ss_25_20_15_16		
Basic Wall	01 - Entry	Ss_25_20_15_16	B	Walls		Walls	Ss_25_20_15_16		
Basic Wall	01 - Entry	Ss_25_20_15_16	B	Walls		Walls	Ss_25_20_15_16		

Platform overview and highlights



Tandem

Platform overview and highlights

The screenshot displays the Autodesk Tandem interface for the 'JWD Medical Centre'. The top navigation bar includes 'T AUTODESK Tandem', 'Facilities', 'Manage', and the user profile 'Steve Rudge's Account'. The left sidebar contains navigation icons for Filters, Assets, Files, Docs, Users, Reports, History, and Inventory.

FILTERS

- Sources**
 - ☒ 56750_Arch.rvt (1813)
 - ☒ 56750_MEPrvt (3833)
 - ☒ 56750_Str.rvt (422)
- Floors**
 - ☐ TOP OF FOOTING (122)
 - ☐ Lower Level (399)
 - ☐ LOWER LEVEL (15)
 - ☐ BOTTOM OF STEEL (8)
 - ☐ Ground Floor (23)
- Spaces**
 - ☒ ACCOUNTING 2012 (10)
 - ☒ AV 2008 (6)
 - ☒ BREAK ROOM 2013 (13)
 - ☒ CLEAN LINEN 1514 (15)
 - ☒ CLOSET 2007 (1)
 - ☒ CONFERENCE 2006 (17)
 - ☒ CONSULT 1 1100 (7)
 - ☒ CONSULT 2 1200 (8)
 - ☒ CONSULT 3 1300 (8)
 - ☒ COORIDOR 2002 (37)

3D Model: The central view shows a 3D isometric model of the medical center with various rooms labeled: PHARMACY 1502, DR SCRUB 1506, MEDICAL GASES 1602, RECEPTION 1007, WAITING 1003, STAFF RESTROOM 1011, ELECTRICAL 1601, PATIENT RESTROOM 1006, PUBLIC RESTROOM 1004, and LAB.

INVENTORY

Name	Level	Classificati...	Assembly ...	Category ...	Door tag	Maintenanc...	O&M Data	Fire rating	Base Fini...	Categoriz...	Ceiling Fin...	Comments
Compound Ceilin...	GROUND FLOOR	C3030210	C3030210	Ceilings								
Compound Ceilin...	GROUND FLOOR	C3030210	C3030210	Ceilings								
Compound Ceilin...	GROUND FLOOR	C3030210	C3030210	Ceilings								
Compound Ceilin...	GROUND FLOOR	C3030210	C3030210	Ceilings								
Compound Ceilin...	GROUND FLOOR	C3030210	C3030210	Ceilings								
Compound Ceilin...	GROUND FLOOR	C3030210	C3030210	Ceilings								
Compound Ceilin...	GROUND FLOOR	C3030210	C3030210	Ceilings								
Compound Ceilin...	GROUND FLOOR	C3030210	C3030210	Ceilings								
Compound Ceilin...	GROUND FLOOR	C3030210	C3030210	Ceilings								
Compound Ceilin...	GROUND FLOOR	C3030210	C3030210	Ceilings								

Tandem

Roadmap

<https://intandem.autodesk.com/tandem-roadmap/>

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Tandem Roadmap [+ Submit idea](#)

UNDER CONSIDERATION IN PROGRESS LAUNCHED

CMMS Integration 28

Incorporate operational data and share asset and space definition through integrating with existing CMMS systems.

Facilitate digital handover 21

It's likely the long term ownership of a digital twin is managed within a separate account from the curation of data during design and construction. Providing a simple process to transfer ownership and transition from project closeout into operations is an important workflow to facilitate.

Import parameter sets from Excel 13

In the case you have parameter sets built for Revit or other applications, it would be ideal to import those into Tandem rather than typing them each in.

Expand supported model formats 35

Import additional model formats. If you are interested in support for a specific model format, please vote here and let us know the specific format you'd like to see.

Autodesk Build - Assets integration 46

AUTODESK BUILD

Custom reporting 8

Provide a module dedicated to creating and saving custom reports.

Global search 8

Searching for a value across all attributes could simplify isolating a particular set of assets or spaces. A global search capability should work with our current filtering workflow where the global search would provide a starting point where you could then further refine the filtered dataset as needed.

Improve parameter mapping UI and logic 8

In order to improve the workflow for incorporating model parameters into the managed asset data, it would be ideal if there were a feature where I could manage rules in how values are mapped to the managed asset parameters.

Roadmaps are plans, not promises. We're as excited as you to see new functionality make it into the products, but the development, releases, and timing of any features or functionality remains at our sole discretion. These roadmap updates should not be used to make purchasing decisions.


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Tandem

Roadmap

<https://intandem.autodesk.com/tandem-roadmap/>

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Tandem Roadmap

[+ Submit idea](#)


UNDER CONSIDERATION

IN PROGRESS

LAUNCHED

Revit plugin to interact with Tandem data

28

 **AUTODESK®
REVIT™**


3rd party developer experience

12

Digital twins are an ecosystem of software and hardware integrated together to create a complete solution. The Autodesk Tandem platform will evolve to include APIs and developer tools aimed at creating a thriving ecosystem of integrations, workflows and

Excel plugin to interact with Tandem data

14

 **Excel**


COBie based template

11

Along with ability to create custom templates, it is ideal that Tandem provides a standard set of templates including ones that follow industry requirements, like COBie.

Establish a Space Breakdown System

18



Document management

32

For all assets that will be a part of our digital twin, the collection of associated data often includes documents such as PDF or Excel files. This could


Standard parameter set library

6

In order to allow users to quickly apply standards to their facility template, Tandem will come with a default set of parameter sets that follow various

Support for IFC

38



Roadmaps are plans, not promises. We're as excited as you to see new functionality make it into the products, but the development, releases, and timing of any features or functionality remains at our sole discretion. These roadmap updates should not be used to make purchasing decisions.

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How will you use assets ?

