Navigating Risk in the New Era of Cost and Carbon Estimating

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Project Controls EXPO London, UK

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Luton Rising
Our airport.
Our community.
Our planet.

Kevin O'Grady
Director

KOGNITIVE
KNOWLEDGE THROUGH THOUGHT & EXPERIENCE

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Who are we?

Luton Rising

Our airport.
Our community.
Our planet.

Owner of London Luton Airport (LLA) and key commercial assets in the area.

LLA is Luton's biggest economic asset, driving jobs and opportunity.

The UK's most socially impactful airport — supporting over 28,000 jobs nationwide.

Planned expansion to create 6,000+ new jobs and boost the local economy by £1 billion.

Committed to sustainable growth and ambitious green initiatives.

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Driving Innovation Through New Digital Tools

Embracing digital transformation to improve cost, time, carbon, and performance outcomes.

Using Sterling to integrate cost, schedule, and carbon in one platform.

Real-time updates and scenario visualisation to support informed decision-making.

Owning our data ensures long-term access, control, and future value.

Enabling smarter, low-carbon, and sustainable growth through innovation.

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Worked on over 200 airports globally

North America and LATAM

US - Chicago Midway, Los Angeles International, Hollywood Burbank, New York
Canada - Toronto Pearson, Toronto - Billie Bishop
Mexico - New Mexico City Airport
Jamaica - Kingston NMIA
Brazil - Congonhas, Guarulhos. Brazil Regional Airports

UK and Europe

UK - Luton, Birmingham, Manchester, EMA, Stansted, London City, Southend, Southampton, Newcastle, Belfast City, Glasgow, Edinburgh, Heathrow, Gatwick Aberdeen
Greece - Athens, Greek Regional Airports
Germany - Frankfurt, Hamburg, Dusseldorf
Portugal - Lisbon
Austria - Vienna
France - Toulouse, Nantes, Nice, Lyon
Belgium - Brussels
Netherlands - Amsterdam, Lelystad
Poland - Warsaw, Poland STH
Denmark - Copenhagen
Italy - Rome, Venice, Bologna
Spain - Madrid, Barcelona

Eastern Europe and Russia

Russia - Moscow (DME, SVO, Samara
Latvia - Riga
Albania - Tirana
Bulgaria - Sofia
Hungary - Budapest
Azerbaijan - Baku greenfield airport
Kazakhstan - Almaty
Turkmenistan - Ashgabat
Uzbekistan - Tashkent
Türkiye - Istanbul, Sabiha Gokcen

Middle East and Africa

UAE - Dubai, Abu Dhabi
Rwanda - Bugesera (Kigali)
Qatar - Hamad International
KSA - Riyadh, Ha'il, Al Qassim, Jeddah, Abha, Red Sea
Gabon - New Libreville Airport
Israel - Eilat
Jordan - Queen Alia International
Nigeria - Lagos, Lekki Epe, Osubi
Angola - New Luanda Airport
Kenya - Nairobi
South Africa - Johannesburg

Asia and Australasia

Singapore – Changi
India - Mumbai, Delhi
Japan - Kansai, Osaka, Fukuoka, Kobe, Hokkaido
China - Shanghai, Hong Kong, Beijing
Philippines - Batam
Australia - Sydney, Melbourne, Brisbane, Adelaide, Hobart
New Zealand - Auckland, Wellington, Christchurch

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Typical Project Data Risks

Inaccurate, inconsistent or outdated data

- Errors introduced through manual entry, assumptions, or outdated data
- Lack of version control - conflicting information across teams

Lack of traceability or audit trail

- Inability to verify changes, updates, or data origins.
- Poor documentation and absence of audit trails causing compliance risk.

Disconnected systems and poor integration

- Disconnected systems creating silos of information.
- Data transfer errors between platforms leading to duplication or loss.

Non-compliance with standards or regulations

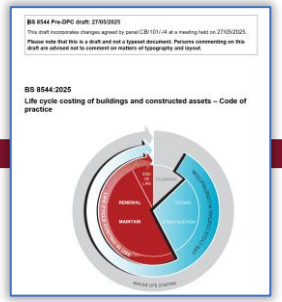
- Misalignment with industry standards, frameworks, or reporting requirements.
- Difficulty demonstrating compliance for ESG, sustainability, or financial audits.

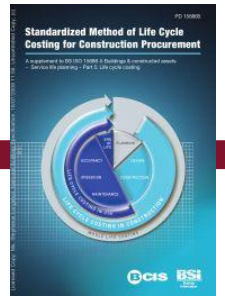
Loss of data control or ownership and security

- Vendors or third parties using or reselling anonymised user data.
- Lack of clarity over where data is stored, who can access it, and how it is used.
- Storage of sensitive data in insecure locations.

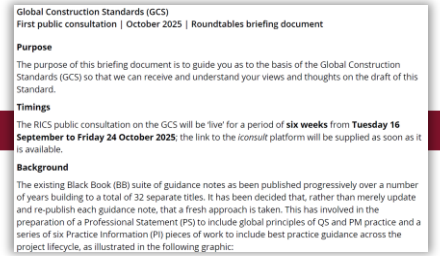
Setting Standard

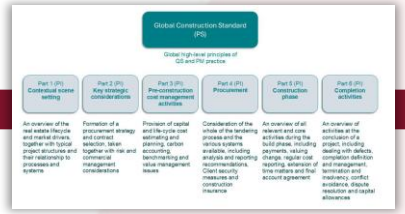
British Standards Institution bsi. Committee Member





RICS® TECH PARTNER





Controls & Skills Authority

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MS/2 Estimating Specification Standard

What is the BSI Estimating Standard?

- A draft specification developed to improve cost estimating practices across UK organisations & institutions.
- Since November 2024, a strong expert network has been formed, influencing top organisations & institutions.
- The draft standard has been developed communicated to stakeholders and is gaining traction.

Key Achievements So Far:

- Formation of a cost estimating expert network.
- Draft Estimating Specification Standard generated.
- Initial communications and engagement with industry and academia.

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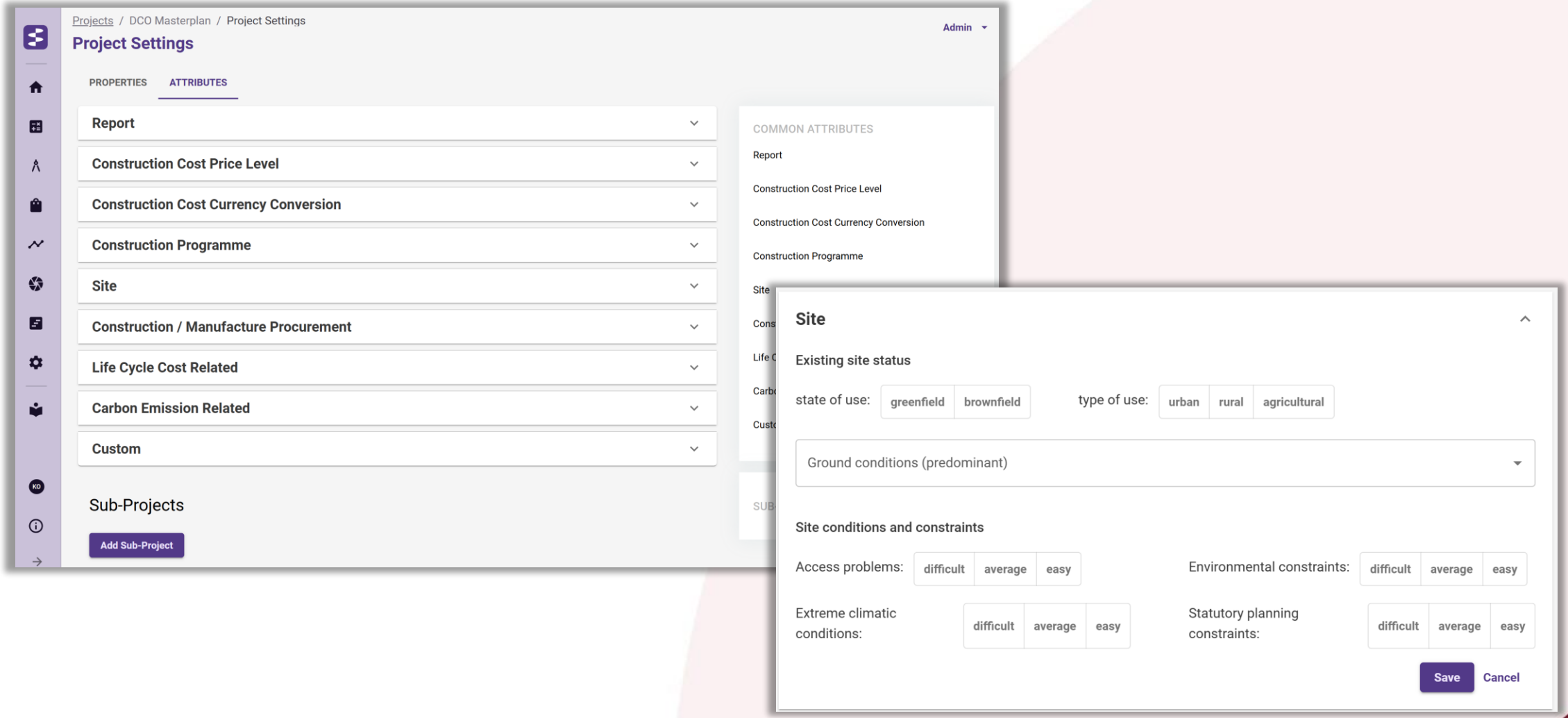
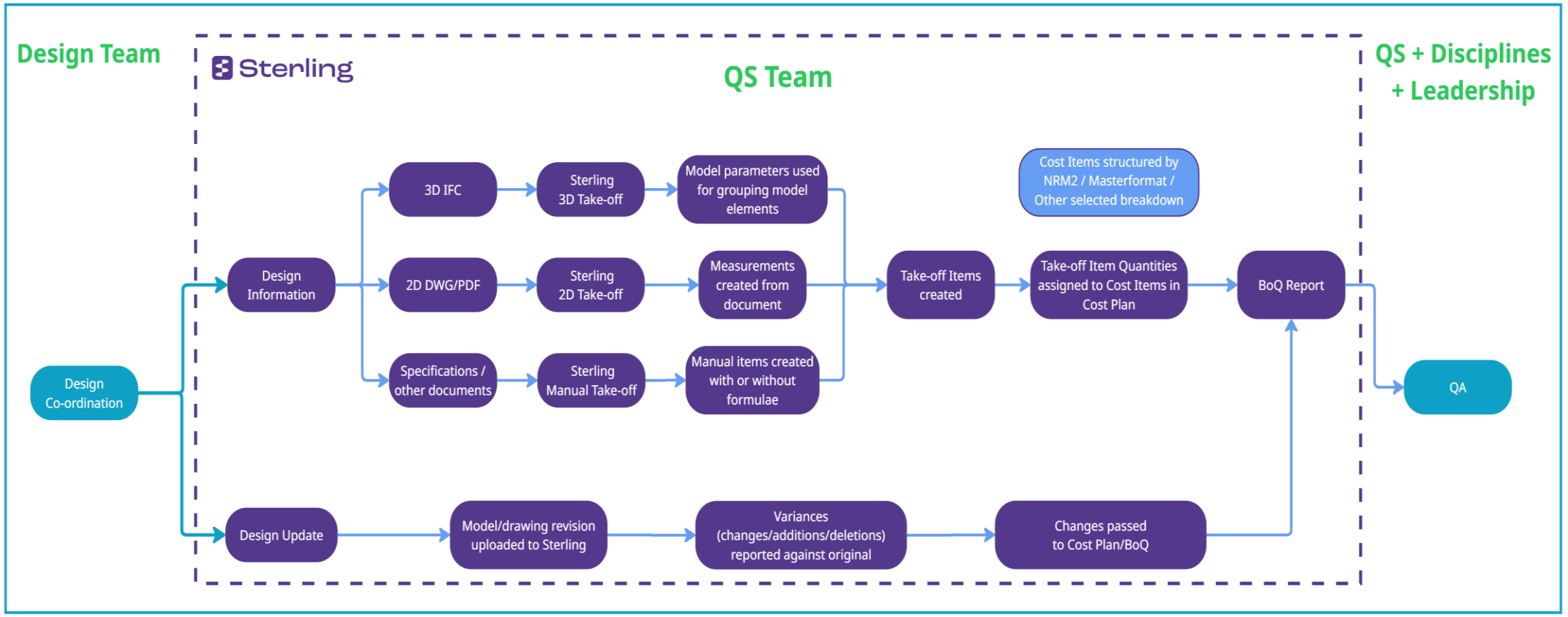
Estimation Standards

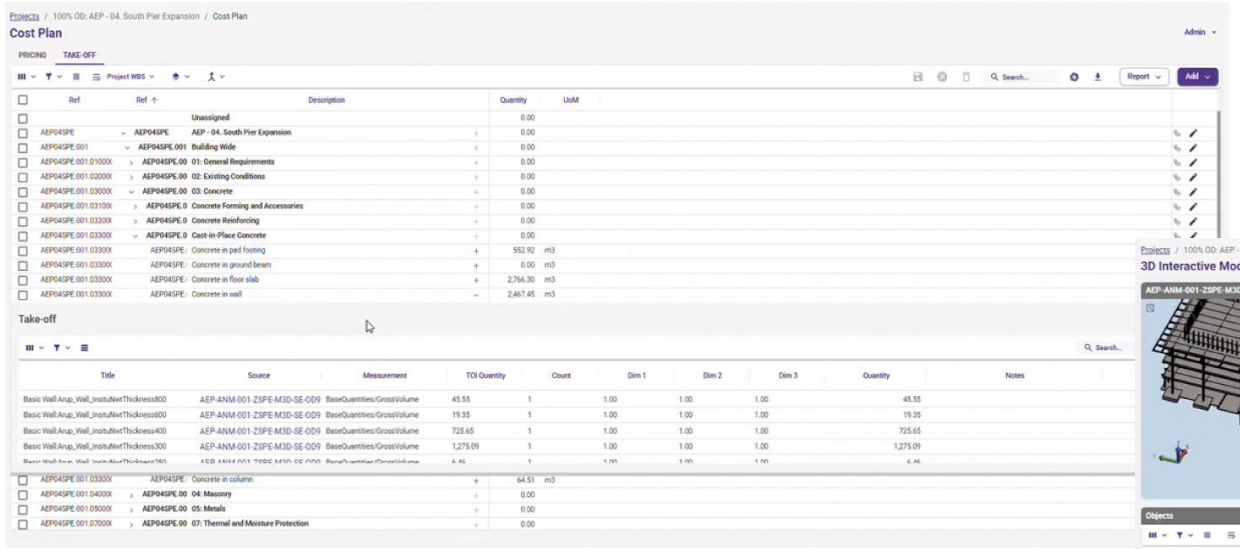


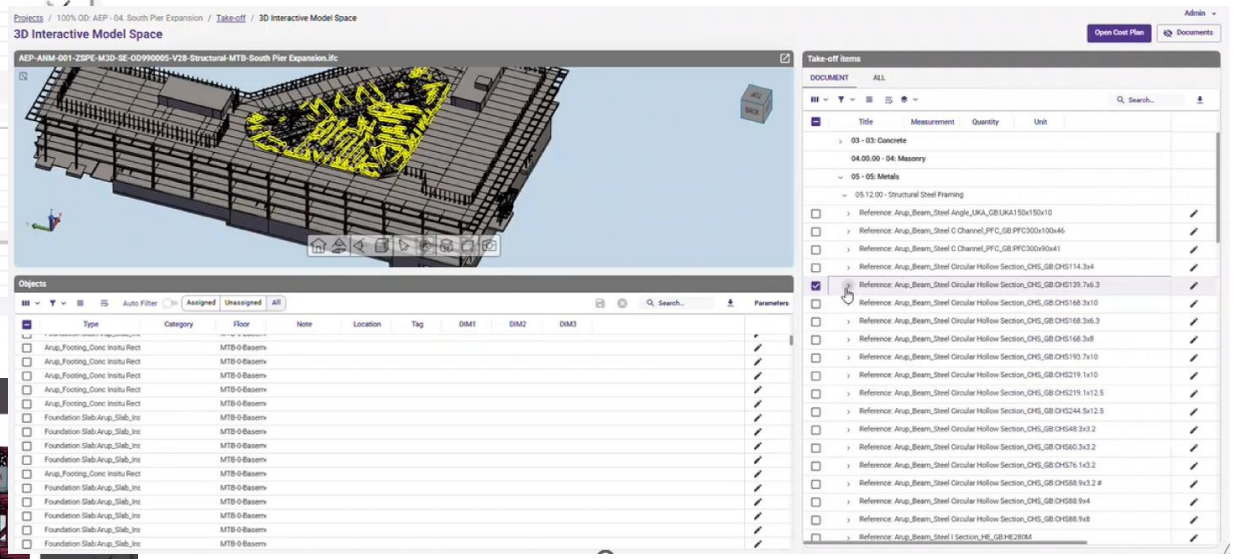
Data structure - Process

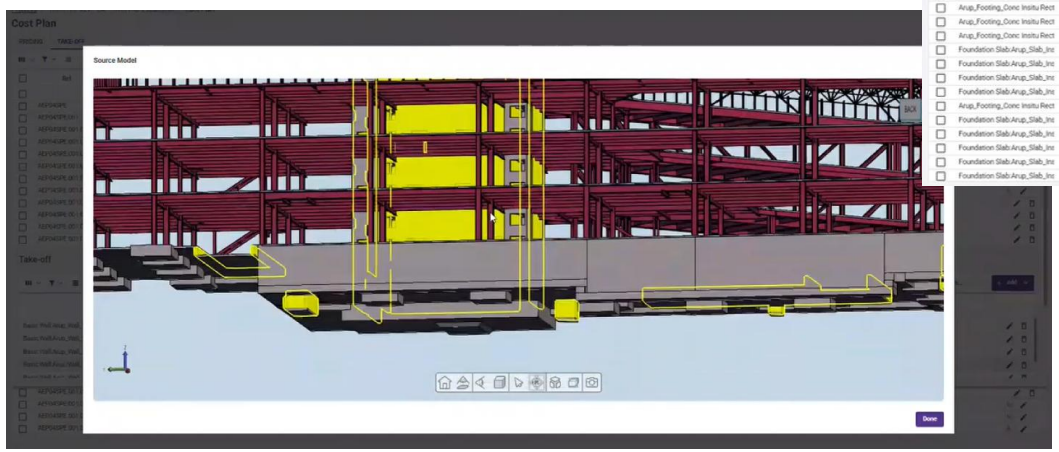


Process flow linking Design within the cost plan

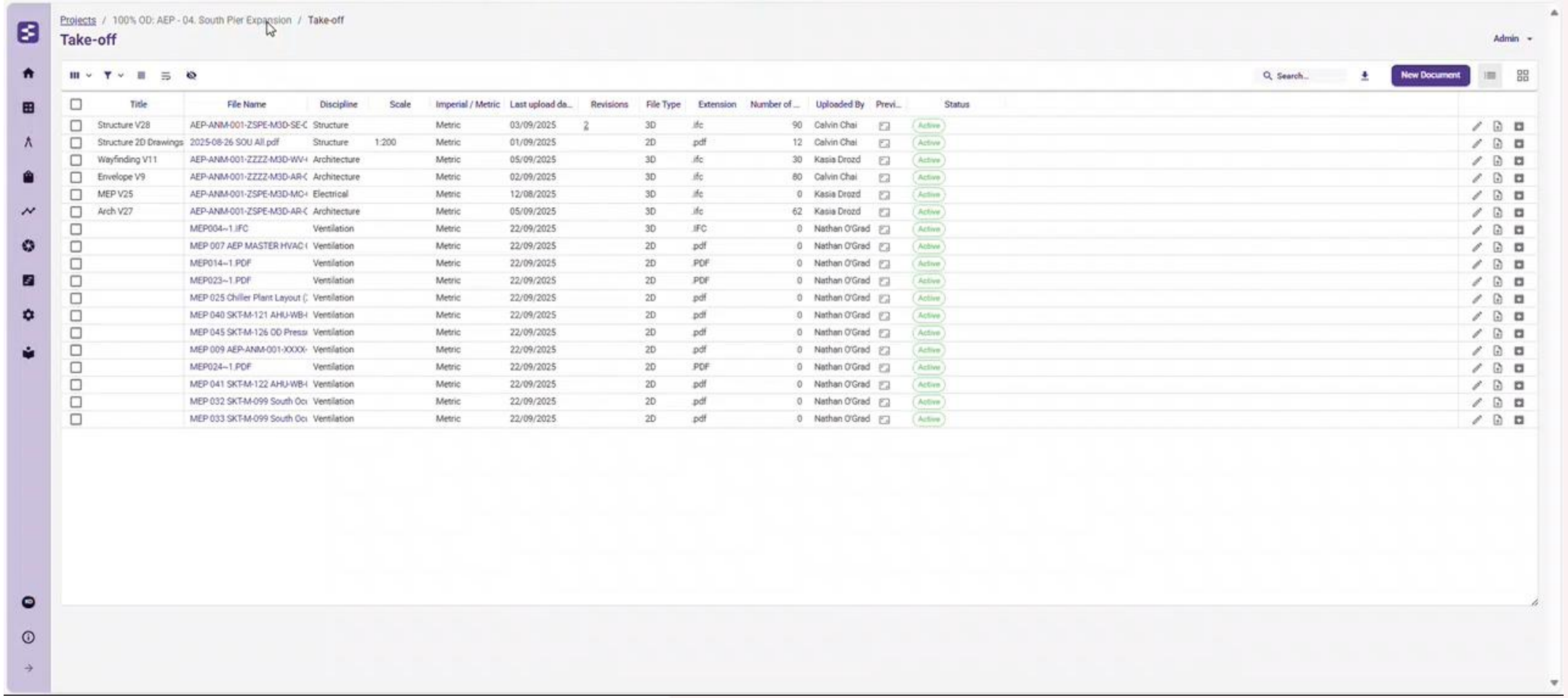
Embracing digital transformation to reduce risk







3D Take-off



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Structure V28	AEP-ANM-001-ZSPE-M3D-SE-(	Structure		Metric	03/09/2025	2	3D	.ifc	90	Calvin Chai		Active
Structure 2D Drawings	2025-08-26 SOU All.pdf	Structure	1:200	Metric	01/09/2025		2D	.pdf	12	Calvin Chai		Active
Wayfinding V11	AEP-ANM-001-ZZZZ-M3D-WV-(	Architecture		Metric	05/09/2025		3D	.ifc	30	Kasia Drozd		Active
Envelope V9	AEP-ANM-001-ZZZZ-M3D-AR-(	Architecture		Metric	02/09/2025		3D	.ifc	80	Calvin Chai		Active
MEP V25	AEP-ANM-001-ZSPE-M3D-MC-(	Electrical		Metric	12/08/2025		3D	.ifc	0	Kasia Drozd		Active
Arch V27	AEP-ANM-001-ZSPE-M3D-AR-(	Architecture		Metric	05/09/2025		3D	.ifc	62	Kasia Drozd		Active
	MEP004~1.IFC	Ventilation		Metric	22/09/2025		3D	.IFC	0	Nathan O'Grad		Active
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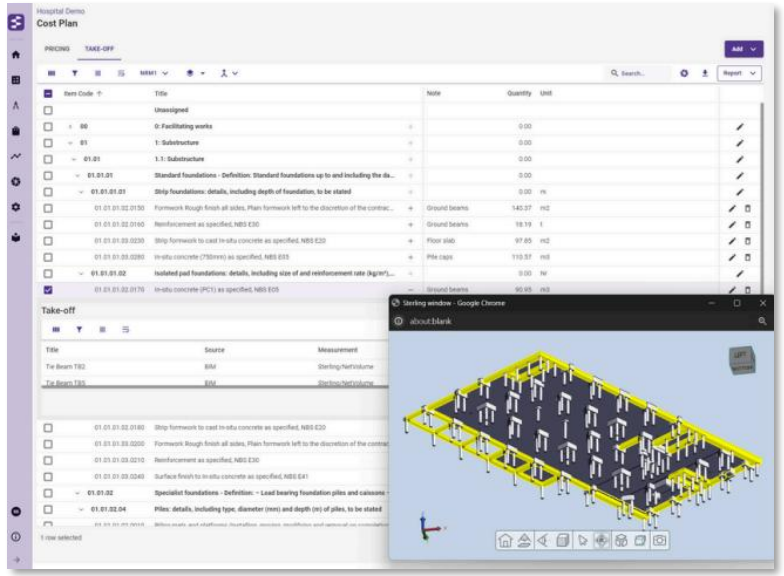
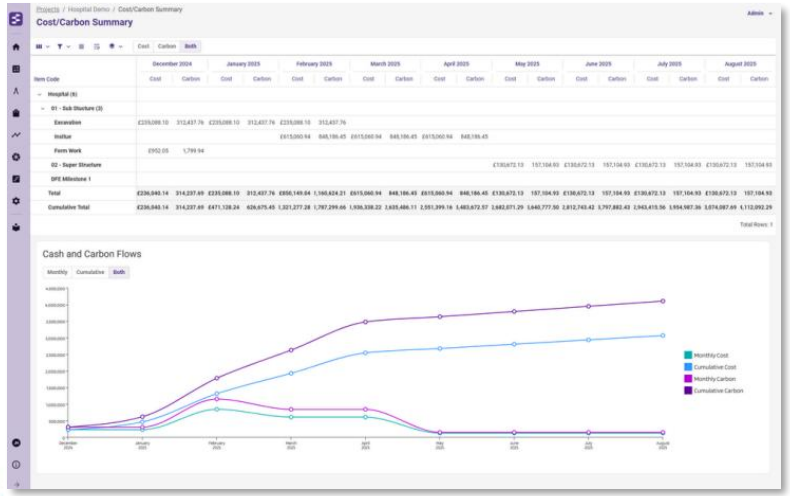
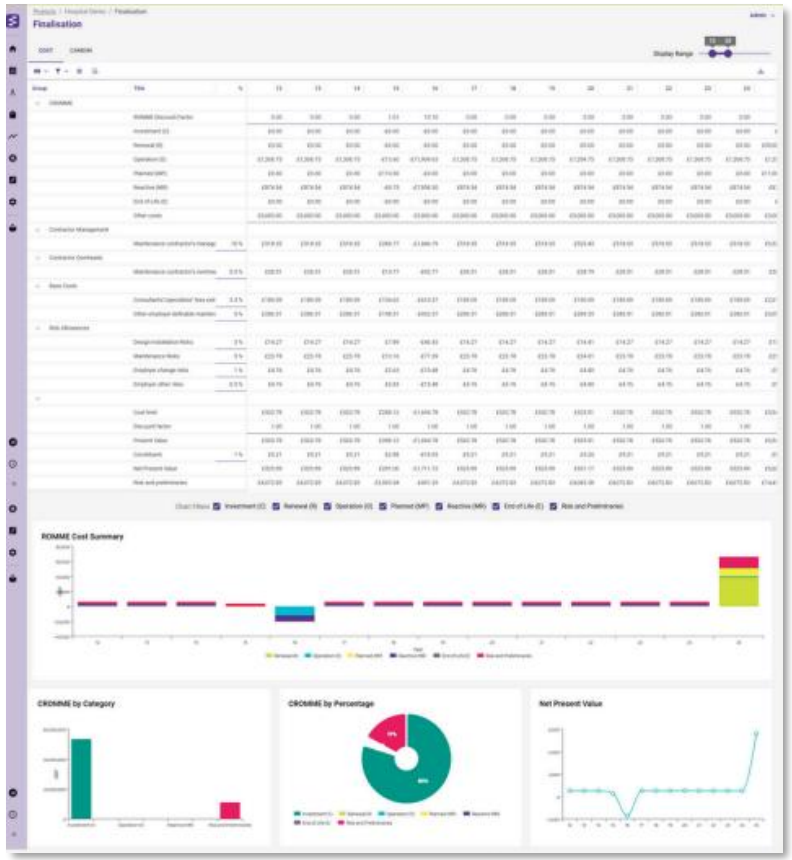
Schedule Integration

Data through the project lifecycle







Data capture from early design to end of life.

Aligning with industry standards like PAS 2080, ISO 15686-5 and EPD data, enabling informed decisions that satisfy both financial and environmental regulations.

Mitigating risks of data siloing and transfer at project stage gates.

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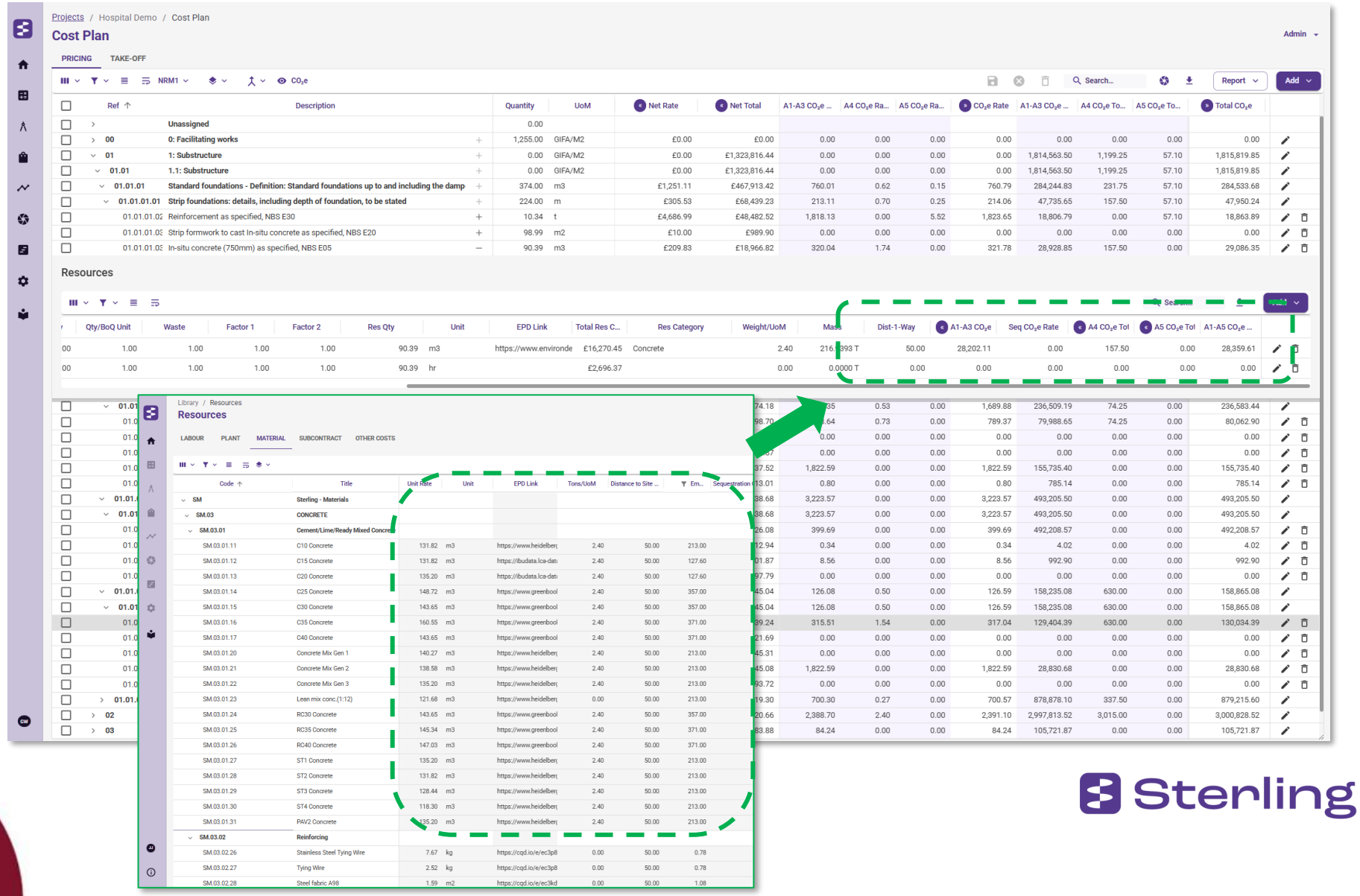
Keeping an eye on the CO_2e



Centralised Library holds Carbon data, including external EPD links for easy assignment to the Cost Plan and standardisation of data.

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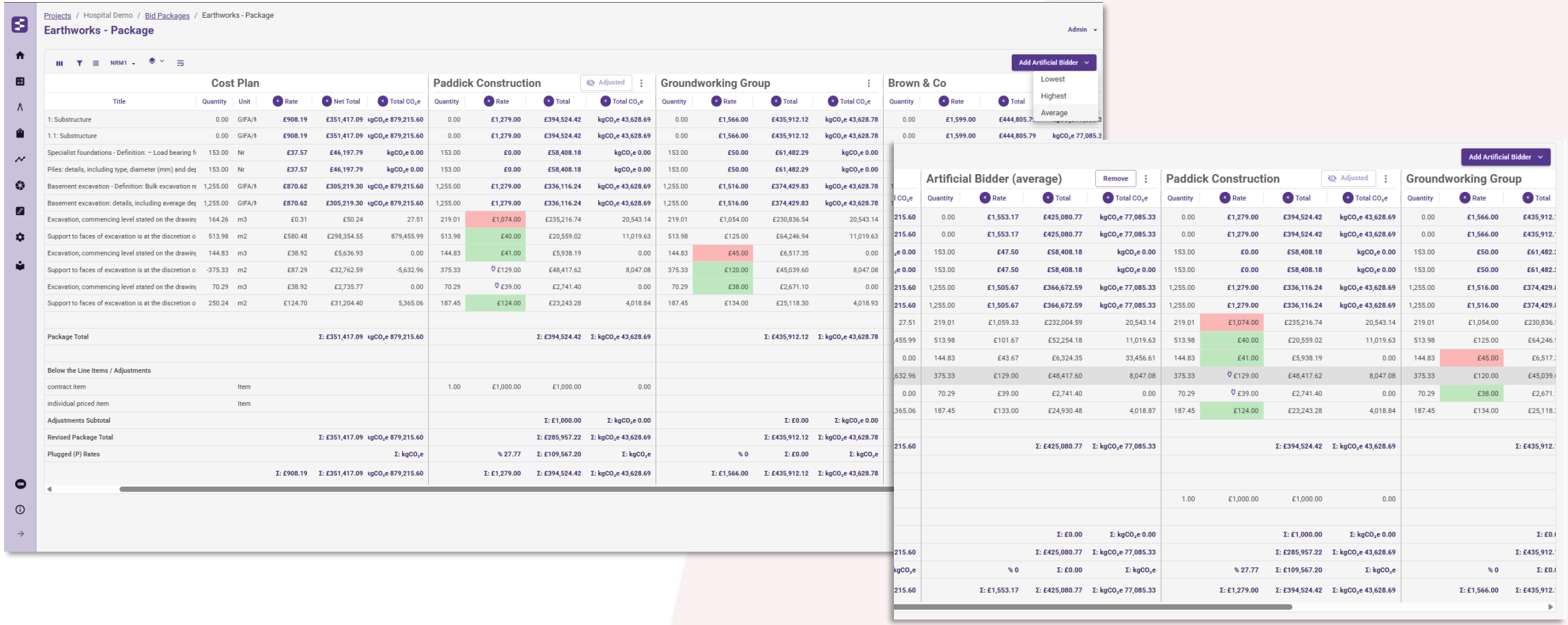
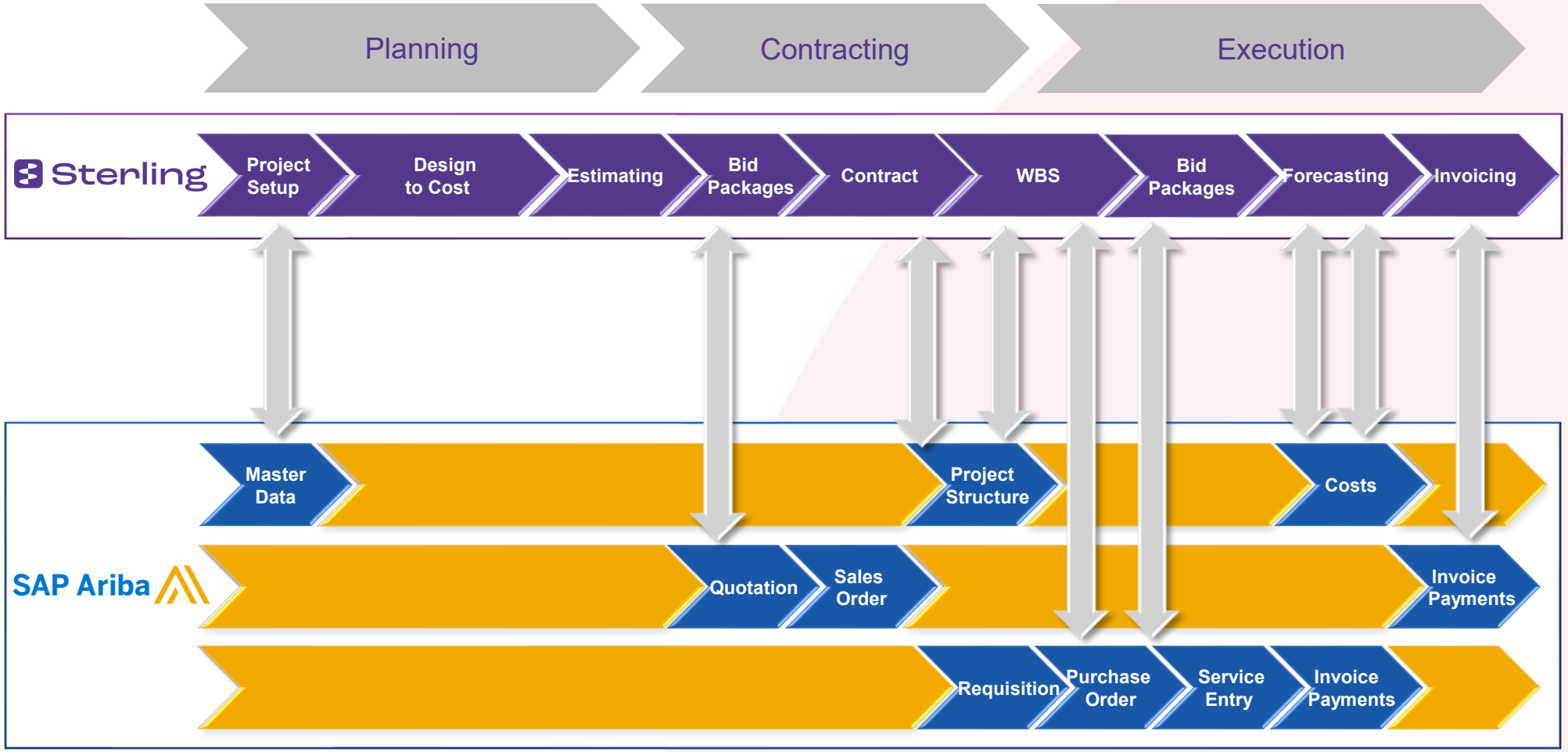
Package manager and Procurement



Sterling tender, procurement, and package management benefits

Integration with ERP



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Thank You