

THE JCT CONTRACTS UPDATE FOR THE CONSTRUCTION PROFESSIONAL

TAFF VALE REDEVELOPMENT, PONTYPRIDD

Due to be completed in Spring 2020, the Taff Vale redevelopment scheme is the start of a major new regeneration project for Pontypridd. A JCT Design and Build Contract provides the solution for two new office blocks and a statement community building.

In recent years the decline of development in Pontypridd, South Wales has in part been the result of a neighbouring city's own success; the regeneration projects in nearby Cardiff have resulted in business and employment opportunities moving away from the local area. Rhondda Cynon Taff County Borough Council has commissioned Willmott Dixon to develop an ambitious project to kickstart Pontypridd's resurgence, providing much needed space for employment and for the community.

The new development comprises three buildings - two office blocks and a flagship community building, containing community facilities, a library, council offices, leisure and fitness centre, retail unit, and café. All three buildings share the same reinforced concrete basement and podium design. The two office buildings are similarly designed 5-storey, steel-framed blocks. The office-led scheme will lead to the creation of more jobs and increase footfall to Pontypridd town centre, with the knock-on effect of making the town more attractive for potential retailers.

The main community building is an architectural



Taff Vale Redevelopment

feature and is correspondingly more complex. It is constructed using steel, in-situ cast reinforced concrete, brick, glass, prefab timber cladding units, and individually sized and shaped zinc cladding panels. The roof structure is particularly visually striking. Its semi-monocogue design curves in two directions via a steel frame which connects to the reinforced concrete core. The frame supports prefabricated timber cassettes

that are bolted back to the steel. Thin timber planks are used to form the curves of the facade and individual zinc shingle panels (6,345 in total) are fixed using a clamp to form the outer face.

Overcoming challenges

Creating a project with unique design features comes with its own set of challenges and, on this project, it started with the foundations. For

Continues on page 2 >>>

Chairman's Letter: Australia Sweeps Test Series

The Big Question: Can you Pay Now and Argue Later?

Hazel Boland-Shanahan

Do the Different Tiers of Building Contract Really Need to be Back to Back?

Alexandra Reid -Winckworth Sherwood

The Fluctuating Fortunes of Brexit

Peter Hibberd

The Impact of Digitalisation on Claims, Disputes and their Avoidance

Charlie Woodley - HKA

JCT Interviews... Sion Evans

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2

the piling, supporting a 375mm thick slab at podium level, with concrete columns on a 6.5-7.5m grid, required 680 CFA piles at 650mm in diameter, stretching 25m deep. A 130-tonne rig was used to install the piles, requiring night-time road closures and monitoring of the main bridge into town.

Unsurprisingly the construction of the façade is one of the project's most difficult elements. Due to its curvature, the façade splays out in places, creating a 2m overhang from the base of the building. The design means there are areas where the windows are almost tilting back on themselves. The importance of getting drainage right has been a particular consideration. Glazed curtain walling completes the exterior of the main community building at ground-floor level. This is also installed at a splayed angle that falls back on itself. Only robust engineered timber beams around the base of the zinc cladding and the top of the curtain wall prevent any damage.

An additional challenge was the brickwork. Despite the futuristic look and innovative design, it was decided to use traditional brickwork rather than pre-cast concrete. However, to add individuality to the design, a Danish standard brick was chosen, which, at 228 x 108 x 54mm, is longer, wider, and shallower than the UK standard. The project team had to purchase the bricks in advance to guard against any potential disruption caused by Brexit. The size of the brick resulted in different setting-out; half-bricks in unexpected locations and tighter tolerances.

Sustainable and a community benefit

Sustainable construction, including the use of materials and construction methods have been designed into the project as an important part of achieving a BREEAM rating of Excellent. The elements include photovoltaic panels on the roof of the two office buildings, rainwater harvesting tanks in the plant rooms and the use of a number of prefabricated, modular elements, for example the timber cassettes forming the community building façade. The project team has also made use of BIM in order to track and measure its progress towards achieving its BREEAM target.

As well as the sustainable construction elements, the project team has placed an emphasis on the wider community benefit of the construction phase, including the delivery of training and job opportunities. The programme includes partnering with the University of South Wales to offer work experience and training for students, and appointing a community liaison officer to provide mentoring and experience for the unemployed and those not in training or education.

The JCT Design and Build Contract facilitates collaboration between the client and main contractor and is especially useful where there are a number of complex design elements, where the contractor is to carry out the design of the works. With a dependable, flexible contract to facilitate smooth operation of the works, The Taff Vale Redevelopment is able to focus on its main goal – delivering real benefit to the town of Pontypridd.

PROJECT DETAILS

Client:Rhondda Cynon Taff County

Borough Council

Contractor:Willmott Dixon

Architect: DarntonB3 Architecture

Piling Contractor: DWestpile

Timber specialist: Constructional Timber

Cost:....£40m

Contract:.....JCT Design and Build Contract

Start Date:March 2018 Completion:Spring 2020





mages: WillmotDixon



3

AUSTRALIA SWEEPS TEST SERIES

Chairman's Letter



Richard Saxon CBE

No, this isn't about cricket. It's about learning from Australia how to deliver buildings that perform as specified. In October 2017 I wrote about the 'Soft Landings' concept as a way for designers and builders to incorporate facility management needs into their process and ensure that buildings perform properly. This tool is part of the Government's version of BIM Level 2, but not widely understood or used beyond that. We remain a country with published aspirations to achieve high physical performance in buildings but with a woeful record of underachievement. Why is this?

The UK uses Building Regulations Part L, BREEAM (the BRE Environmental Assessment Method) and EPCs (Energy Performance Certificates) to motivate and deliver good energy performance. But they don't seem to deliver much. We are focusing on compliance, not on achievement. Measuring actual performance in buildings with EPCs from A to G reveals that some low-scoring buildings work better than some high-rated ones. There is hardly any pattern relating design intent to performance delivered, due to inept value engineering, weak supervision of construction and commissioning and poor training of operators. At one stage there was a plan to make building owners put certificates of actual annual energy use on their lobby walls, alongside the EPC. It was killed off, possibly because it could have been very embarrassing.

The Better Buildings Partnership (BBP), a group of 31 UK developers (including Australian firm Lend Lease) determined to produce more effective assets. They discovered that in Australia commercial buildings were achieving high measured performance on several sustainability indicators and doing so beyond regulations. Since 2002, Melbourne new-builds have decreased energy use by 80%. This is due to the introduction of a standard for results to be achieved, not characteristics to be incorporated. The public sector published an approach, without which it would not occupy rentable space. The development community picked up on it and now competes to produce the best outcomes possible. The base-build (the developer's shell and core) is targeted

separately to the tenants' fitout. Good simulation at design stage is followed by strong teamwork, outside review, fine tuning at handover and early use, with verification and disclosure of results. Feedback reveals how to improve. Encouragingly, the higher performance is not causing higher capital costs, but simplifying design. These better buildings are also healthier and more attractive to staff: a far bigger payback than energy savings. The approach seemed so sensible to the visiting Brits that they report it as like 'hearing from a higher civilization'.

The British Council for Offices has joined with the Better Buildings Partnership to develop a UK version of the National Australian Built Environment Rating Scheme (NABERS). The UK edition is being called 'Design for Performance', considering the different characteristics of the UK market. Six pilot projects are now being run by members of the BBP. The BCO Specification for 2019 will incorporate Design for Performance, with activities listed at RIBA Plan of Work stages. Factors the UK needs to include are our weak maintenance culture and our rising use of sensors and analytics. Maintenance here is often a matter of ticking off listed activities, avoiding finding problems as they will cost the maintainer money to fix. Condition-based maintenance gives the maintainer an incentive to lower future operating costs by sharing in savings. Smart technology and the Asset Information Model provide far better data to run buildings efficiently and to do pre-emptive maintenance to avert breakdowns. But the BCO/BBP team recognise that the changes needed are cultural rather than just technical.

This is Soft Landings with a commercial edge; far more likely to be taken up here. There is a procurement aspect too. Early contractor involvement is needed, plus early engagement of the specialist services subcontractor and facility manager. This collaborative trend follows the pattern encouraged by the use of BIM.

The witty choice of the acronym for the Aussie scheme must be one reason for its success; after all, 'everybody needs good NABERS'. www.nabers.gov.au





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4

THE BIG QUESTION: CAN YOU PAY NOW AND ARGUE LATER?

HAZEL BOLAND-SHANAHAN - GOODMAN DERRICK

A top judge came out of retirement to help decide a crucial question around interim payments and adjudications, as Hazel Boland-Shanahan explains.

Confusing case law on interim payments led to the rise of smash-and-grab adjudications.

The Court of Appeal judgement in S&T (UK) Limited v Grove Developments provides reasoned clarity as well as other helpful guidance.

Just because the sum stated in a payment certificate or default payment notice has become due, does not mean that it represents the true value of the works. So if the client missed its chance to issue a pay less notice, tough luck: it has to pay the amount certified. However, after the client has paid, it can dispute the true value of the works at the time of the certificate or notice by referring it to another adjudication.

Background to the case

The saga between S&T (UK) and Grove Developments – regarding interim payments and true valuations – went from serial adjudications to the Technology and Construction Court.

Grove engaged S&T to design and construct a hotel at Heathrow under an amended JCT Design and Build Contract 2011. Works duly commenced but were delayed. Grove served a non-completion notice to S&T on the contractual completion date and practical completion was achieved five months later than the contractual date.

After practical completion, S&T sent an interim application for payment to Grove for just under $\mathfrak{L}40m$. Grove valued the works at around $\mathfrak{L}26m$, which would leave only $\mathfrak{L}1.4m$ to pay. Grove sent a payment notice to S&T but it was eight days late.

Five days after the late payment notice, Grove sent S&T a pay less notice, which also notified S&T of Grove's right to withhold liquidated damages. The same afternoon, Grove notified S&T that it may require payment of and/or withhold or deduct liquidated damages.

A few seconds later, Grove sent a liquidated damages deduction notice to S&T. Relying on these notices, Grove did not pay S&T anything for the interim application.

Adjudications and claims

Adjudications followed regarding contract terms, S&T's entitlement to an extension of time and the validity of Grove's pay less notice.

Grove was unhappy with the adjudicator's decision and so made a Part 8 Claim to the TCC for declarations that

a) its pay less notice was valid and b) it was entitled to commence an adjudication for the true sum due to S&T.

S&T counterclaimed that Grove was not entitled to liquidated damages because it had not complied with the notice procedure. S&T also brought another claim in the TCC to enforce the third adjudicator's decision.

The first instance judge, Mr Justice Coulson, found that Grove's pay less notice was valid, that Grove was entitled to commence an adjudication to determine the true value of S&T's interim application, and that Grove had complied with the notice requirements under the contract for liquidated damages. As a consequence, the same judge also declined to enforce the third adjudicator's award.

Out of retirement for the appeal

S&T was dissatisfied with the findings of the TCC at first instance and so appealed. Sir Rupert Jackson (who came out of retirement to hear the appeal) agreed with the first instance judge, Mr Justice Coulson, on all three issues.

Among the bottom lines was that Grove's pay less notice sent in response to the interim application complied with the contractual requirements.

In its pay less notice, Grove referred to a separate document to show its calculation previously provided to S&T but was not attached to or enclosed with the pay less notice.

The court emphasised that the question was how a reasonable recipient would have understood the notice. It is common to refer to a detailed calculation set out in another document. However, there is no strict rule on this. Reference to other documents may or may not be permissible in other cases.

Grove was entitled to pursue a claim in adjudication to determine the correct value of the works on the date of the interim application.

Previous confusing case law made construction professionals wonder whether they had the right to refer a dispute about the true value of an interim application, if an adjudicator had already decided the same interim application in dispute had to be paid.

The court confirmed you can argue later. Just because a sum became due does not mean it is the true sum. Once you pay the sum due, you can refer the valuation to adjudication. The key is you must pay first.

Grove complied with the contractual requirements in order to maintain its claim for liquidated damages.

There were no timing requirements for the liquidated damages' notices in the contract. Notices just needed to

be in a particular order. As no timing requirements were specified, it did not matter how close together Grove sent its notices, even if it was just a few seconds.

The big question we wanted answered was whether you can refer an interim valuation adjudication after an adjudicator has already decided the same interim application/payment in dispute must be paid.

The answer is yes, but only after the interim valuation is paid.

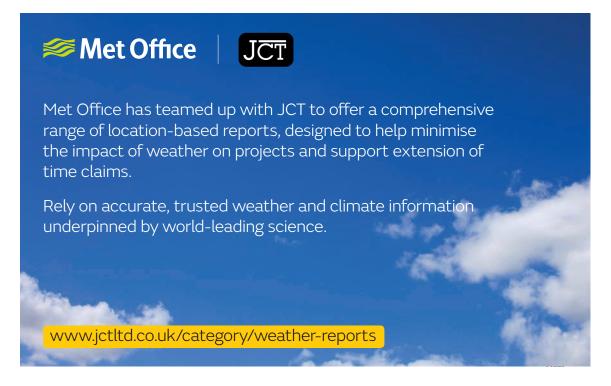
Other takeaways

- Adjudication is not a final and binding process unless your contract states otherwise. Both parties have the right to go to the court for a final judgement.
- It seems you may refer to other clearly specified documents in a notice, but this is not a definitive rule. It will depend on the wording of your contract. It would be better to provide any document you refer to and rely on with your notice as a precaution.
- If an adjudicator has just decided either that you must pay an interim application for payment, or that you

are not entitled to payment of the whole amount of an interim payment because there is a valid pay less notice withholding all or some of the payment, then you may still adjudicate the true value of the works up until the date of the interim application. However, payment of the first adjudicator's decision must be made before embarking on a second adjudication regarding the true valuation.

- If there are signs that the contractor is becoming insolvent, it is up to the employer to ensure it sends its payment notices and/or pay less notices on time and in accordance with the contract to protect its position. Otherwise the employer could end up paying the first adjudicator's decision, commence a valuation adjudication and the contractor goes bust in the meantime.
- Finally, if your contract does not contain timing provisions and there is no sensible specific period that could be implied, the courts will not imply timing provisions for you.

Hazel Boland-Shanahan is an associate in the construction team at Goodman Derrick





6

DO THE DIFFERENT TIERS OF BUILDING CONTRACT REALLY NEED TO BE BACK TO BACK?

ALEXANDRA REID - SENIOR ASSOCIATE, WINCKWORTH SHERWOOD

The main JCT contracts specify that where this is 'considered appropriate' the contractor should engage its sub-contractors using the relevant version of the JCT sub-contract which sits beneath the main contract in question.

JCT contracts are therefore drafted in such a way that 'back to back' obligations are ensured. So what can this mean for contractors?

A short answer is that the JCT has satisfied itself that its own sub-contracts have been carefully drafted to ensure that their key contractual terms - such as works obligations, payment provisions, termination clauses and relevant events granting the contractor/sub-contractor an extension of time - all sit neatly back to back with the main contract i.e. the terms do not conflict in any way.

But clients and contractors are not always willing to follow JCT's advice. More often than not, they have spent years perfecting their own bespoke form of sub-contract, so that the contract maximises the client/contractor's protection by (a) shifting the risk allocation to the sub-contractor; and (b) containing all of the key terms that the client/contractor, as an organisation, has decided it must have in its contracts.

Bespoke sub-contracts - are they the be all and end all?

If drafted properly and adapted as necessary to take into consideration the main contract in question, bespoke contracts can be an optimum solution since they contain all the perfect clauses the company has carefully selected but also, by transposing the key contractual terms, adequately protect the contractor as against its liabilities to the employer under the main contract.

However, the problem with bespoke subcontracts is that without careful review and consideration to the project in question they could at best leave the contractor exposed to the employer if it hasn't agreed comparable obligations with its sub-contractors and at worst make absolutely no sense at all because the terminology, and thus obligations, between the two contracts are completely different. Contractors, and equally employers under development agreements in respect of their liabilities to owners/developers, often end up promising obligations under a main contract in order to win work only to find that they cannot quarantee the same from their sub-contractors. These mistakes can have severe financial penalties on the contractor or employer up the chain. For example, the contractor may have agreed in the main contract to provide the employer with collateral warranties from all of the sub-contractors it appoints and indeed agree not to be paid until it does so. However, it may not have placed similar financial penalties in its bespoke sub-contracts against its subcontractors for not providing the warranty. The contractor unwittingly finds itself out of pocket.

What about bespoke amendments to the JCT standard forms?

Problems ensue as well when standard forms are amended at one level of the supply chain but not another. Clients frequently spend considerable time amending their main JCT contracts but then do not insist that their contractors do the same at the sub-contractor level. For example, the employer may have narrowed the number of relevant events entitling the contractor to an extension of time but, conversely, the contractor may not have done the same as against its sub-contractors.

The effect of this is that the contractor may expose itself to having to pay delay damages under the main contract for delay beyond the agreed completion date because the contractor cannot claim for a relevant event. Conversely, it will not be entitled to claim delay damages from its sub-contractor under the sub-contract because the relevant event has not been

restricted and, therefore, the completion date has validly been extended.

Thus an equally imperfect situation arises because the main JCT contract is amended but the subcontract is not.

The question then that we are often asked is, if amending contracts (incorrectly) has such profound implications, are the parties better off, therefore, not to amend them at all?

Potentially, depending on the facts in question, the answer to this is yes, particularly looked at from the perspective of the contractor, or, potentially indeed, the project at large. From the employer's perspective, it is of little concern if the contractor negotiates itself a bad deal with its sub-contractors as long the employer has protected itself under the main contract (this is particularly the case in a design and build scenario and so long as the contractor is of good financial standing itself). However, for the perspective of the contractor and potentially the project at large, if the main contract is severely restricted but the sub-contract is not at all, this could put the contractor and project under considerable financial and commercial risk; potentially, to the extent that, at best, the project becomes less or even unprofitable, and, at worst, if the contractor's financial standing is imperfect, it may significantly impact upon the contractor's ability to complete the works.

Therefore, whatever form of contract is chosen the advice is clear: proper consideration should be taken to amending all standard forms of contract – if you amend a provision in one contract, you must make changes to the other; no contract can be considered in isolation if you want to avoid the financial penalties of failing to do so.

For further information e-mail Alexandra Reid, Winckworth Sherwood: areid@wslaw.co.uk or visit Web: www.wslaw.co.uk

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7

THE FLUCTUATING FORTUNES OF BREXIT

PETER HIBBERD



Just over two years ago I suggested that it was time to brush up on the use and operation of the fluctuation provisions in building contracts. A suggestion spurred by the advent of Brexit and its ambient uncertainty; an uncertainty plain to see. The risk of having entered into contracts that span the Brexit leaving date, without adequate protection from fluctuations, could leave parties in a precarious situation. One can still act to mitigate potential loss but the situation is far more problematic. For those currently entering a building contract a proper risk assessment should be undertaken, with serious consideration being given to incorporating the relevant fluctuation provisions.

It seems that the end game (if there is to be one) regarding Brexit is still some way off despite the real possibility (at the time of writing) of a Withdrawal Agreement. That is because there will still be trade deals to negotiate with the EU and others. The impact of the concept of Brexit has also created volatility in the currency markets and this may continue for some time. One only need look at the wide variations in the rates of the pound to the euro and to US dollar over the past three years or so to appreciate the risk that currency movements pose. Brexit clearly requires consideration to be given to material and labour price movements. Additionally it brings into the play possible supply problems that not only affect price but cause delay which raises the further question as to how it should be dealt with.

Brexit also brings with it associated political risk which could spring a General Election with its concomitant risk. Because we have no way of knowing the nature of the resolution of current events and their timing significant risks are in play. Even a No Brexit outcome would not necessarily improve predictability of cost because it would impact on the pound and which might also create a short-term uplift in activity sufficient to increases prices.

It is not only Brexit and UK political risk that one needs to consider because there is wider political turmoil in many parts of the world, including trade wars and sanctions. Although political turmoil is often prevalent it is apparent that currently it is far more acute than is generally the case. This position can be evidenced by the various economic policy uncertainty indices for the UK and global economy. When viewed against the backdrop of all those other risks one needs to raise one's guard. The situation is made even more hazardous when one sees that some economists are predicting that a worldwide recession is not far away while others are suggesting that the UK is on the cusp of an economic surge. Furthermore the predictions on interest rates not only differ in quantum but also as to direction.

Applying risk management to such risks is extremely difficult and on any reasonable view a contractor is likely to include a significant risk premium if it is to carry such risks. Doing this could lead to inflated tender prices or create post contract problems where the premium is still inadequate. Consequently it is unrealistic for a contractor to price all such risks and although price increases are probably more likely than decreases it is not impossible should certain scenarios materialise to see some prices reduce. In such circumstances it is not unreasonable for building contracts to provide for fluctuations, in fact, it is both sensible and fair to both contractor and client.

So how does one deal with fluctuations under a traditional standard building contract?

JCT 2016 editions of SBC and DB contracts provide three approaches, namely Options A (Contribution, levy and tax fluctuations), B (Labour and materials cost and tax fluctuations) and C (Formula adjustment). However, Option A is the only one with its text in the printed contract; the other options are available from the JCT website. This also applies to the digital version of those contracts.

The choice of fluctuation provisions should always be determined by the application of proper risk assessment, that is, which party is better able to quantify, manage and bear such risks; however frequently this is not the case. For practitioners not to do so could amount to negligence particularly now that the RICS has published its Guidance Note on Fluctuations.

Fluctuations will always be present but current events have the potential for creating unpredictable variations in material prices and labour costs: this requires more consideration be given than when dealing with general levels of inflation which generally remain fairly subdued. This means that Option B where specific materials are identified for adjustment and Option C using Work Categories (not Work Groups) are more relevant for current conditions. Where Formula adjustment is used particular attention is required to clause C.2 which deals with articles manufactured outside the United Kingdom.

Delays in the supply of materials and labour are risks generally borne by the contractor – following the simple application of risk management principles. However the present difficulty is that possible delays are not manageable. Whether the contractor would be able to secure relief through e.g. SBC clause 2.29.13 (exercise of statutory power by UK Government) or clause 2.29.15 (force majeure) is another question: one worthy of consideration prior to contract.



8

THE IMPACT OF DIGITALISATION ON CLAIMS, DISPUTES AND THEIR AVOIDANCE

CHARLIE WOODLEY - HKA

Research from HKA unveils the true complexity of causation and provides thought-provoking insight that illustrates how digitalisation can achieve dispute avoidance by proxy or reduce their severity and prevalence.

Information technology is critical to our ability to manage complexity, inform decision-making, improve productivity, and reduce uncertainty, thereby mitigating risk.

But technology alone will not suffice and broader digitalisation and transformation of organisations, supply chains or industry require investment in people, process as well as technology. Each must be considered equally, and recognition given that change management is a critical and often overlooked component of transformation.

Disputes can be a litmus test of the health of the industry. HKA analyses causation on major capital projects as part of its integrated research programme, CRUX. The first CRUX *Insight* report debunks the simplicity myth perpetuated by those who chose to focus only on headline causes, and exposes the true complexity of causation with an average of 13 interrelated causation factors per commission, with an eye-watering maximum of 39 on a single project.

HKA Director and CRUX programme lead Charlie Woodley considers digitalisation and causation providing insight into how organisations can ensure digitalisation has a positive impact.

Root out contract ambiguity

Parties rely on the contract to obtain relief or remedy when claims or disputes arise. The irony is that the CRUX causation data shows the failure to ensure ambiguity is absent in contract documentation is a significant cause of claims or disputes, and a strong indicator of poor drafting.

Digitalisation is both a risk and opportunity for contractual due diligence. It affords parties the opportunity for machine-assisted interrogation of digital formats, which can root out ambiguity and completeness or adequacy of appended documents. Building Information Modelling (BIM) improves collaboration and the increased information transparency and interaction between supply chain members is expected to flush out ambiguity.

However, without a suitably equipped office (people, process and technology) the opportunity can quickly metamorphize into significant foreseeable risk. This can result in an unreasonable allocation of risk between parties, contributing to adversarial behaviour and impacting on commercial outcomes.

Improve contract compliance

As organisations rely more on technology to assist with the management of projects, contractual compliance will improve and the prevalence of disputes will reduce, accelerating should 'smart contracts' gain traction.

In the short term, the inability to properly administer the contract is a good indicator that there are underlying problems, be that information overload, poor communication, or indeed a different interpretation of the contract - commonly cited secondary claim or dispute causation factors in the CRUX data.

As organisations digitally mature, the burden of administering contracts will reduce. The improvement in people, process and technology will help eliminate resource driven noncompliance such as the failure to issue notices or to timeously report the impact of change. Digitalisation will free up skilled resources to focus on project delivery and provide a route to reduce overheads and improve margins.

Be wary of the 'illusion of control'

It is easy for those focused on delivery to simply assume that the existence of controls directly translates into being in control. HKA's forensic analysis of projects all too often exposes an illusion of control with flawed record-keeping and situational awareness compromised by poor information flow.

It impacts on the parties' interpretation of events and contributes to differing or biased interpretations. The resulting entrenchment is what crystallises disputes when no common ground can be agreed. The illusion obscures the interconnection between issues manifesting as an underestimation of causation complexity and overconfidence in the quality and value of available records.

Revisit project controls

Avoidance of the illusion of control and embedding digital ways of working requires the root and branch fitness for purpose evaluation of project controls. Delivery professionals must undergo a data epiphany or risk being replaced by technologically savvy peers.

The quality, format and fitness for purpose of project records are a good measure of both project control and organisational understanding of the flow and purpose of data — poorly conceived or onerous controls are ineffective for managing risk, obscure inefficiency and erode margin.

By first understanding the flow of information, organisations come to understand the transformative nature of 'information

liquidity' — the ease with which records, and the data they contain, can be converted into knowledge, the kernel of the data epiphany.

Stakeholders understand how to better define information requirements from the supply chain in what is a highly fragmented industry. The objective is to streamline reporting and improve flow of data between parties whilst eliminating the wasteful repeated transformation of records or data currently seen.

This allows informed decisions to be made, reducing the number of disagreements and improving the prospect of settlement in commercial negotiation – in turn reducing the number of disputes.

Evidencing claims and disputes (data not just documents!)

The mantra 'records, records, records' is as relevant as ever for informed decision-making, dispute avoidance and resolution. Digitally adverse professionals can compromise supply chain relationships, contractual and legal prospects, and profit margins.

Poor information liquidity, an underutilised risk indicator, often has its roots in past practice where the form, function and intent of paper processes have not been reviewed in a digital context. Suitably structured enables data from disparate sources to be searched, aggregated and analysed in near real time - dramatically reduce the latency in decision-making.

Those issuing or receiving information requests should first look to understand the organisation's information architecture. It is only by understanding the flow of data through an organisation that the totality of records, both data and documents, can be considered. This understanding allows administrative burden of record-keeping and legal discovery to be reduced.

Achieve dispute avoidance by proxy

The aggregated impact of digitalisation will be dispute avoidance by proxy. The rationale being:

 Most causation factors will benefit from the improved situational awareness and information liquidity that digitalisation brings.

- Armed with all the relevant data, an organisation knows which battles to fight and which to retreat from to fight another day.
- Information liquidity addresses multiple causation factors and increases the speed at which change can be processed and informed decisions can be made, as opposed to gut decisions.
- Digitalisation facilitates better collaboration and shifts away from adversarial relationships.

Reduce the prevalence and severity of claims and disputes

Digitalisation will have a positive impact on claims and disputes. The rationale being:

- Information liquidity and on-demand access to project data will reduce the likelihood or need for global claims.
- SMEs will utilise technology to improve record-keeping, enhance claim submissions, and reduce write-offs.
- The ability to better evidence or rebut claims with readily accessible data will increase the number of commercial settlements.
- Data-driven decisions will reduce the likelihood of disagreement escalating through formal proceedings.
- Machine-readable formats improve and expedite discovery.
- More structured data will reduce the time and cost of preparing records for analysis.
- Digitalisation enables the coordination of numerous records into a single medium to improve understanding and presentation of complex issues.
- Directly connecting dispute resolvers with data removes the burden of information requests.

Further information

To download the full CRUX *Insight* report 'Claims and Dispute Causation: A Digital Perspective', visit **www.hka.com/download-crux-digital**.

Charlie Woodley, HKA Director and CRUX Programme Lead, is a construction informatics specialist with a focus on strategic digital advisory and maximising the value of project records on complex claims and disputes.



10

JCT INTERVIEWS... SION EVANS



BSc (Hons) MRICS
Member, JCT Council, LGA
representative
Member, JCT BIM Working Group

Design and construction manager, Denbighshire County Council

In this series we shed some light on some of the key people who are involved with or give their time to support JCT, to ensure that all areas of the construction industry are represented and can contribute to the development of our contracts. We will look at how our interviewees contribute to JCT specifically, and gain their views on JCT's wider role within the industry.

Sion is Denbighshire County Council's design and construction manager who has worked in the public sector for over 25 years. He began his career as a civil engineer before moving over to the quantity surveying section and gained Chartered status in 2006.

Since 2011, Sion has led the Council's in-house design consultancy team who are responsible for the design, procurement and management of all building construction projects for the authority from £50k refurbishment projects to £25m new build high schools.

Prior to his current role, Sion has worked as project quantity surveyor, contract administrator, employer's agent and project manager on numerous construction projects covering education, regeneration, housing, leisure, and conservation projects.

An active member of the regional North Wales Design Group, Sion is also the current chair of CLAW (Consortium of Local Authorities in Wales), an organisation that represents the professional property divisions of the 22 Welsh local authorities.

JCT: Sion, how did you first come to be involved with JCT? Why do you think it is important to be involved?

SE: I initially became involved with JCT in 2009 through the SCQS (Society of Construction and Quantity Surveyors), an organisation that represent local authority quantity surveyors. Dr Andrew Flood, a recently retired member of JCT approached the SCQS to enquire if there were members who would be interested in joining the Client's College representing the LGA. Having been a user of JCT contracts for many years I felt it was an excellent opportunity and one that I was extremely pleased to accept.

As an LGA member I feel it is important that the public sector's views and priorities are represented within the standard contracts. Being a part of the JCT Council and various working groups allows the public sector's voice to be heard and helps shape the contracts going forward.

JCT: Can you tell us about any specific work you're currently doing with JCT?

SE: As well as a council member, I have also been a member of several working groups over the years.

66 33

I'm currently sitting on the BIM Working Group which is tasked with ensuring that JCT's suite of contracts is structured in such a way that enables BIM to be seamlessly integrated into projects. BIM is increasingly gathering momentum and becoming more important to the building process. Having the facility to incorporate BIM into standard forms with ease is crucial to its successful integration into building projects.

JCT: Do you have any personal career highlights?

SE: Working in local authority for over 25 years, I've been fortunate enough to be part of a wide range of different building projects (new building and refurbishment) varying from education, housing, leisure and heritage schemes, to major civil engineering projects. However one significant project that stands out is the development of the first North Wales Construction Framework which was established in 2013 to deliver the Welsh Government's 21st Century Schools Programme. The brief was to establish a regional collaborative procurement vehicle to facilitate the delivery of the Welsh Educational Building Programme. I was appointed as the technical lead responsible for setting up this collaborative framework between the six North Wales Authorities, which, once established, saw over £270m worth of building projects procured. Interestingly the majority of projects procured utilised a JCT standard form. The North Wales Framework went on to win the Constructing Excellence Wales Award for collaboration in 2016 and has now paved the way for the second generation of the framework.

JCT: What are you most proud of about the construction industry as a whole and where do you think it most needs to improve?

SE: During my time in the industry I've witnessed many changes, especially in terms of improved relationships between parties. Whilst it's important to ensure we have clear robust contracts in place, a collaborative partnering approach to project delivery, in my opinion, can't be underestimated, and often



11

contributes towards the success of a project. The industry is embracing this approach however I feel we can still do much more.

JCT: What do you see as the main challenges for the construction industry over the next five years?

SE: Who can say what the next five years will bring especially with the uncertainty surrounding Brexit, however there is certainly an immediate need to plug the skills gap that exists in the industry both in terms of construction trades and the professional services sector.

In Wales one of our priorities is to ensure our capital projects deliver community benefits and ensure that every pound spent on construction is inwardly invested to maximise positive impact to the communities and region especially in terms of supporting employment and training needs.

One of my priorities as the chair of CLAW (Consortium of Local Authorities in Wales) is to work with colleagues across local authorities to consider what role property departments within local authorities can play in increasing interest in construction related careers and dealing with the current skills gap.

JCT: Does JCT have a wider role to play in the industry beyond producing contracts?

SE: Yes I believe it does, the JCT is a well-respected and established organisation.

The structure of the JCT is unique, in that it provides a voice for all sections of the construction industry in the development of its contracts. This collaborative approach to producing contract documents should in itself be seen as an excellent example of partnership working.

Promoting good practice within the industry is something that JCT does well and should continue to do, whether that be through training events, preparing best practice documents, education or promoting construction as a career choice. JCT has certainly got a wider role to play in the industry than simply producing contracts.



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