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Design–Build Explained

David E.L. Janssens

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Preface

For some thirty years I have been involved in Design–Build contracting, in one form or another, starting with my first job as an indentured civil engineer on an oil storage installation in Purfleet in Essex. The site was run by engineers and as is common on civil engineering projects no one wanted to look after the buildings. After just a few months on site, the site agent, a fearsome individual to me at least, called me into his office and told me that, from then on, I would be in charge of the buildings. I could not have managed but for the assistance of the foreman carpenter whose name, I remember, was Cecil. As a site engineer, come assistant agent, I went on from there to two or three other building sites, and it was during this period that I developed my interest in building work, as opposed to civil engineering. It was a Design–Build contract and I enjoyed the open relationship with the design team: we were working to the same goals.

At another stage in my career, I hasten to add *before* I joined my present employer, I was the project manager on a large project under the traditional UK form of contract. The programme was tight, and we had made a number of mistakes in the tender. As I remember it, we had priced for some five 22RB mobile cranes for about six months, but had forgotten to price in the drivers, and we had done the same with four hoists. We had omitted to allow for chainmen to work for the six site engineers. All-in-all, these and other omissions not only wiped out our potential profit, but also they could have involved us in a substantial loss.

The remedy, not open to a Design–Build contractor, was to throw up an immediate smoke screen, and ‘use’ the Contract. When I say that we finished the contract some nine months late, without incurring damages for delay, but on the contrary succeeding with a claim which not only restored the tendered profit but enhanced it considerably, you will realise how effectively, in a Traditional Contract, a contractor can make use of shortcomings of the employer’s consultants to overcome the effect of his own mistakes.

Whilst I obtained a degree of satisfaction from this experience and achievement, it was not my style. For me the team approach was the way to get real job satisfaction from contracting, and I am not alone in this.

I come now to the reasons why I decided to give up virtually every

week-end, and most of my holiday periods, for a year, to devote the time to write this book.

There were two distinct and separate reasons; one arose from a conversation with an unknown student at Wolverhampton Polytechnic, and the other came out of sheer frustration and annoyance with both the technical and lay press with its coverage of design-build issues: their ignorance has troubled me.

To enlarge upon this, I cite the instance of phase 1 of the BBC headquarters at the White City in London. The architectural, and largely the building industry's press, deplored the idea that the proposed headquarters should be built under a Design-Build form of contract. It was reported, and is probably true, that the Royal Fine Arts Commission condemned the idea.

But I ask, what business is it of the press or the Royal Fine Arts Commission to condemn a form of contracting *which has no bearing whatever on the final design and appearance of the building*, but which goes a long way to ensure that the risk of cost escalation, delay and claims for extension of time, and loss and expense, by the contractor are minimised, so saving the license fee, and tax-payers' money?

What these bodies fail to appreciate is, that the BBC headquarters was designed in shape, form, layout and appearance by architects employed by the BBC themselves. They could have commissioned any designer in the world to do it for them.

In fact, if the BBC had so wished, they could have issued documents in the form of room schedules, spatial relationships and performance criteria to selected Design-Build contractors teamed-up with distinguished architects inviting proposals from them. This would have been, in effect, a *costed* design competition.

So, it was not the form of contract which determined the design of that building, but the employer's architect, and so the debate has nothing whatever to do with Design-Build. It is about the merits of the building design itself. This book has been written for those, among others, who do not understand this point.

The other occurrence that spurred me to write this book came, as I said, from an unknown student at Wolverhampton Polytechnic. After I gave a talk at the Polytechnic on Design-Build, concentrating on how it actually works in practice, this student told me that he had access to commentaries on the standard forms of contract, practice notes and various other academic works and contractors' brochures, but none quite gave the information in the way that my talk was structured. He asked me for a copy of my notes. That was impractical, as they were too brief, not to say unintelligible, but I did recognise from his request the need among the students of our industry for as much practical help and guidance as

possible to enable them to understand the context in which they will be working when they leave college.

The standard of the practical side of technical teaching has come a long way since the days when I was at university. My course was so academic, that when I started work after graduating, I was ignorant of such basics as the standard size of a brick, how to detail and schedule reinforcement, what a setting out profile was, and many other such examples. We studied some basics of law as an extra subject, but had no tuition on building or civil engineering forms of contract.

We, who work in the industry can help our students still further, and I hope by this work I have made some contribution to this cause.

As a footnote, I add that any views or opinions expressed in this book are my own, and not those of my employer.

David E. L. Janssens

Acknowledgements

There are so many associates, colleagues and ex-colleagues who have helped me over the years in the development of my knowledge and understanding of Design–Build contracting, that it would be invidious, if not impossible to single out a few to mention, so I thank them collectively. Those who have been closest to me know who they are, and I thank them most sincerely.

There are a number of other special people who have helped me, either directly or indirectly, in writing this book, and I shall mention them by name.

My son Mark, who is a chartered quantity surveyor in private practice, graduated, with honours from Trent Polytechnic, and it was through him, when he was a student there, that my first talk to students on Design–Build was arranged. He has also helped me in a more direct way with the book, both in his comments and contributions and as a sounding board for ideas.

My son Stephen, with his honours degree in Latin, has helped me with the considerable problems that I have experienced with my rusty English grammar.

Dominic, my other son, also an honours graduate (in civil engineering), now turned banker, must have a mention. He has been away until recently and so could not help directly, but I know that he has been with me in spirit and that is enough for me.

Tamara and Teresa, my two daughters, are a great source of joy and fun. They have certainly prevented me from becoming pompous. Without the humour about the house it would have been impossible to remain sane, spending so much time at the word-processor. And, incidentally, I thank them for not yawning or showing boredom, no matter how they must have felt, every time I mentioned *The Book*.

Then, and most important of all, there is my dear wife, Marge. I cannot say enough to thank her, not just for the tea and coffee on demand, and at the right time a little aperitif, but also for her forbearance with unorthodox meal-times, for taking over much of the administration of household affairs which I have temporarily relinquished and for being, this year, the master gardener and labourer in the continued creation of the garden of our recently, self-design-built house.