



**CONSTRUCTION**  
LAYING THE  
FOUNDATIONS  
OF THE FUTURE



Large-scale infrastructure projects are some of the biggest and most complex physical risks an insurer can underwrite. But long before the first concrete is poured, a construction underwriter is faced with the critical decision whether to underwrite the risk. On what do they base their decision? Liberty Specialty Markets (LSM) explains.

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**H**ow does an underwriting team assess a risk that, to all intents and purposes, does not exist? This is the challenge faced by construction underwriters day in, day out – to insure a vision that has yet to be realised.

At the point at which the broker approaches us, the bridge or tunnel or motorway intersection about to be built only exists in the minds of its designers. It may have been mapped out in design software and committed to paper, but nothing exists for our risk engineers to inspect. The construction site itself may be little more than a brownfield site on the fringes of an Asian city or a shallow river flowing through mudflats in America. Yet for construction to begin, insurance has to be in place – which is why the construction underwriter’s task is so important.

**Shape of the market**

Construction, particularly the major civil infrastructure projects on which Liberty Specialty Markets (LSM) focuses, is

booming. With many countries facing stagnating economies and much of the world impacted by falling oil revenues, governments are investing in infrastructure to keep their economies in reasonable health. According to think-tank McKinsey Global Institute, around \$2.5tn is spent worldwide annually on roads, railways, ports, sewers, telecoms systems and other infrastructure. Oxford Economics’ latest report found that the volume of construction output will grow by 85% to \$15.5 trillion worldwide by 2030, with three countries – China, US and India – leading the way and accounting for 57% of all global growth. So, from a construction underwriter’s point of view, all indicators suggest that the demand for high quality, comprehensive construction cover will remain robust for the foreseeable future.

Construction risks come in all shapes and sizes; one of LSM’s core areas of appetite is for civil engineering projects – public infrastructure projects in locations as diverse as Los Angeles, California for the extension of the Purple Line, to an entirely new metro system and rolling stock for Qatar’s capital city Doha. Our appetite for large and complex projects has seen us taking both lead and supporting positions in port developments, high speed rail and iconic bridge structures. As underwriters we are often asked if we ‘like’ a certain type of project. Our response is that it matters less to us exactly what is being built, and much more exactly who is involved.

## Unknown unknowns

So, how do we respond to a project that only exists on paper and have sufficient confidence to commit LSM's resources to support it? After all, drafting a project plan is relatively straightforward – the question is what degree of substance sits below the plans and the schematics. The answer, perhaps surprisingly for a sector dominated by machinery and technology, is people.

The key is to understand precisely for whom we are working. Is it the owner of the project, the developer, or is it a contractor hired for the job? The 'who' is so important to us because it's really the only tangible fact at this early stage. There's no site to which we can send our risk engineers; there's nothing physical to examine or inspect – but there is a business with a track record and a philosophy. Our Risk Engineering team have all worked in the industries in which they now provide risk management advice, thus establishing the basis for a true partnership with our policyholders.

For us, the ideal starting point for a major project is for the client to present to our team. This gives us the best possible feel for how the project has been set up and the way in which it

### HOW BROKERS CAN HELP LSM'S CONSTRUCTION TEAM

- ▶ Help us to get the right data in the right form. Too much can be just as unhelpful as too little.
- ▶ Be aware how much of a role a meeting with the client plays in our initial decision-making.
- ▶ We will suggest other LSM products for your clients in delivering their long term vision. We believe we are well aligned across our business to offer useful ideas and to leverage our relationships to maximise the value to the client.
- ▶ We are keen to break through the silos that can divide brokers and underwriters. We'll aim to think more holistically for you and your client. Just as importantly, we strive to remove silo-thinking in our own business.

will be managed. It is at a presentation like this that we ask the questions that will give us a truly in-depth understanding of the risk, applying our four pillars methodology. In parallel, we will either use our existing knowledge of the client or conduct research to gather the information we need to reach an informed underwriting decision.

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Our aim is to create a detailed picture of the client's approach to their business. This process can take a matter of hours for a business we know – our focus on repeat business through long-term relationships means many clients have already worked with us – or it can run to weeks. Our broker partners have a vital role to play here, helping the client understand what information we need and in what form. For example, the client's risk register will give us a strong understanding of how the business evaluates and addresses a broad spectrum of risks. From that, we can gain an invaluable insight into their thinking.

At LSM, one of our goals as a company, is to help communities prosper; supporting the infrastructure build that improves lives and supports economic development. This is a practical way in which we can do that. So even when we cannot yet see the developer's ultimate vision, we strive to understand the people behind the vision – and that allows us to turn an idea into a tangible risk we can underwrite.

Brokers, too, are a crucial part of the process. Their knowledge of their client and in-depth understanding of the nature of the risk under consideration is vital to the decision-making process. Their help in building that relationship for us with the client serves as a firm foundation for a lasting partnership. And if there's one thing you can say about construction underwriters, they know the importance of firm foundations.

### HOW LSM UNDERSTANDS A CONSTRUCTION RISK: THE FOUR PILLARS METHODOLOGY

LSM's risk assessments for construction projects are based on a set of criteria that are pertinent to, and most influential in, determining the risk profile associated with a given project. These risk criteria have been developed for the Civil Construction Line and are referred to as the four pillars. Each pillar is affected by a range of factors shown below.

#### Pillar One: Management

We consider this to be the most important and influential of the four pillars. Fundamentally, it focuses on the experience, capabilities and track record of the project's management team and other key personnel. Management's commitment to risk management and relevant procedures are critical factors in this.

#### Pillar Two: Technical

We examine the project's technical requirements and how they meet international design standards and norms. What are the methods of construction and what materials will be used? Will specialist IT systems and software be used? How will the structure be tested and monitored?

#### Pillar Three: Environment

Both natural and human influences are an important part of the assessment. Natural perils, water, ground conditions and physical location all need to be considered. It also includes historical and geological data relating to the site. Does the project involve any temporary or permanent measures to change water flow? How much of an influence are the cultural, social and political environments? Does the possibility exist for disruption, corruption, vandalism and, at the very extreme end of this spectrum, terrorism?

#### Pillar Four: Programme & Budget

How will the project will be delivered in terms of time and money? We need to understand how the value of the project breaks down to establish where money will be spent in relation to high, medium and low risk activities. To confirm if values are reasonable, we benchmark them against other projects and industry data. How the work is scheduled is also a factor: is the sequencing of the works reasonable? Will seasonal weather patterns such as strong winds affect construction?



Our broker partners have a vital role to play here, helping the client understand what information we need and in what form.



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