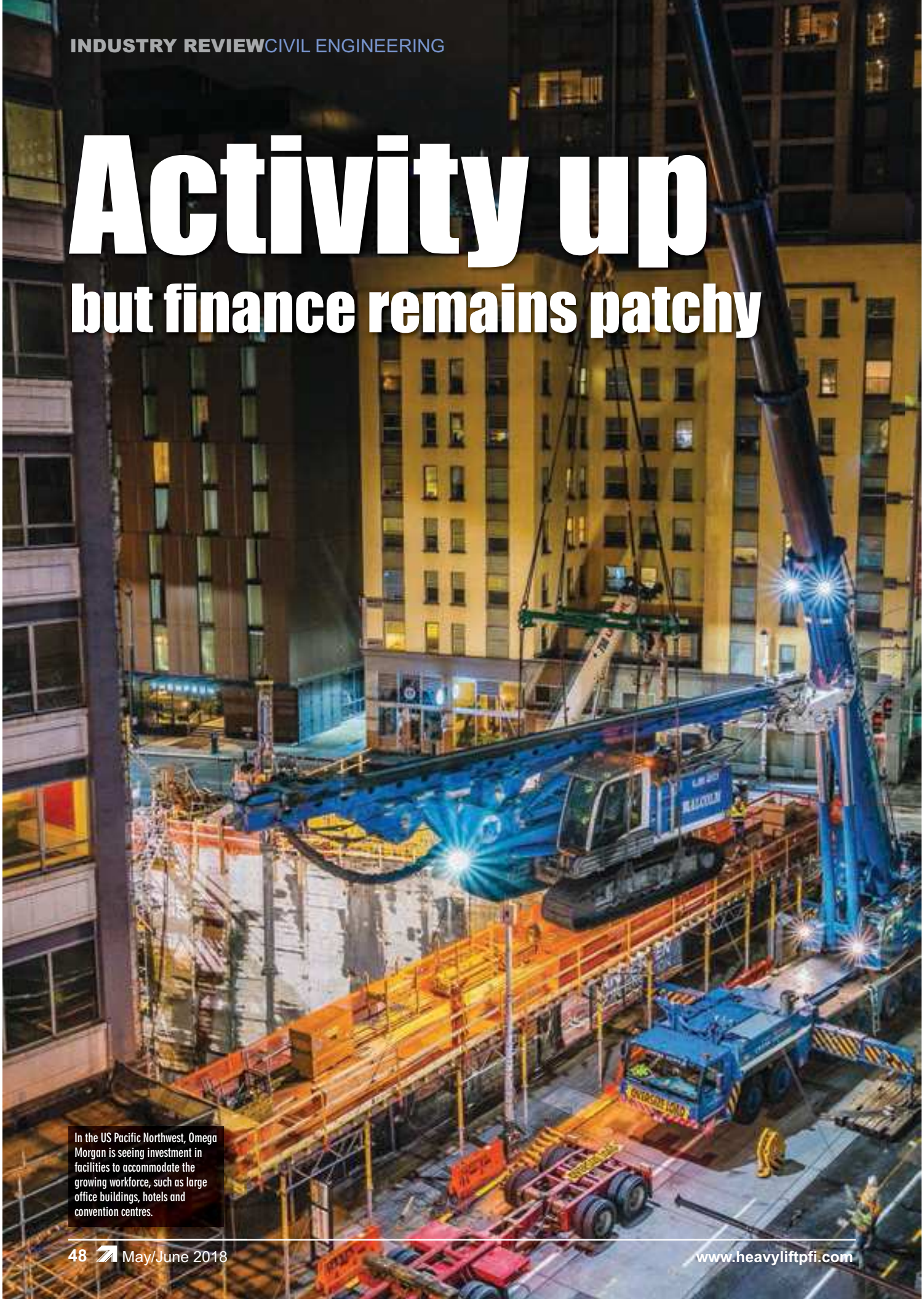
Activity up

but finance remains patchy



In the US Pacific Northwest, Omega Morgan is seeing investment in facilities to accommodate the growing workforce, such as large office buildings, hotels and convention centres.

Global civil engineering companies reported a positive 2017 and expect 2018 onwards to follow suit. The supporting project logistics sector has received a welcome boost, although regional variations and project financing continue to hold back the market. Phil Hastings reports.

Recently published 2017 results statements from global construction companies paint a picture of generally increased civil engineering activity and an anticipated continuation of that trend through 2018 and beyond.

Hochtief, for example, reported a "strong outlook supported by 23 percent growth in new orders" and a "strong tender pipeline" in its core markets of the USA, Canada, Asia Pacific and Europe; Skanska commented that "the overall construction market outlook continues to be positive".

The actual strength of that future market will be strongly influenced by the number of government-backed regional and national infrastructure projects that secure the necessary financing. While the recent improvement in global economic performance should help generally in that respect, the consensus is that private sector capital will increasingly be required to support government investment.

The upturn in civil engineering work was confirmed by major heavy lift and project forwarding companies servicing the market, although they also reported considerable regional variations and, in many cases around the world, continuing problems securing funding for planned projects.

Improving prospects

Javier Martinez, executive director for ALE, a UK-headquartered worldwide provider of heavy lifting, transport, installation and other services, agreed the civil engineering market had picked up during 2017 and is set to see further improvement this year.

"Globally, the overall level of project activity in that sector generally does not change that much from year to year. Trends only become apparent over a period of three or four years. Right now, though, there is definitely an increase in demand for heavy lift and forwarding services to support projects in both the basic infrastructure and commercial sectors," he continued.

ALE, for example, has this year completed major projects in both categories. The first saw the installation of a 100 m-long linkspan bridge in Gujarat, India, making use of its newly launched hydraulic floatover jacks. The second project involved the installation of the roof for the Olympic Parque Roca swimming pool in Buenos Aries, Argentina – a project that included the lifting and positioning of six sections, each weighing up to 50 tonnes.

Right now, though, there is definitely an increase in demand for heavy lift and forwarding services to support projects in both the basic infrastructure and commercial sectors.

– Javier Martinez, ALE

However, while confirming that overall global civil engineering sector project activity is up, Martinez also reported significant regional variations. Activity levels in Europe, for instance, are basically steady, with no significant increases apparent.

However, the picture was rather different in North America "where in terms of infrastructure-related civil engineering projects, we are coming up to an important time" (see page 55).

Other parts of the world are also seeing an increase in new bridge construction, continued Martinez. "One example is Africa. A lot of the existing bridges there are small and very basic. Now, the region is seeing an increasing number of projects involving the construction of larger and more sophisticated bridges. In the past,

there might have been one or two such projects a year; now there are more like five or ten. That is still not many for such a big continent but it is a significant increase."

The current mixed picture regarding worldwide civil engineering industry activity, and the resulting heavy lift and forwarding work, was confirmed by Joerg Roehl, chief executive Europe for UK-headquartered international logistics group Trans Global Projects (TGP).

"Geographically speaking, the increase in the number of civil engineering projects being sanctioned is patchy. Activity is currently particularly buoyant in the Middle East, including Turkey [where TGP recently opened a new office in Istanbul]. There are also signs of life returning to that market in Australia and the UK," he commented.

"Within the overall civil engineering market, the industry sectors seeing the most activity and the biggest projects are transport and other infrastructure, which tend to be government-backed and in response to national productivity improvements."

ALE installed the roof for the Olympic Parque Roca swimming pool in Buenos Aires, Argentina.

Feeling the benefits

Roehl went on to suggest that those positive trends are now starting to be felt in TGP's own business activities. "Over the last five years our involvement in civil engineering projects has been limited, largely as a result of a relative dearth of worthwhile projects in that market. However, with a definite uptick detectable in the number of such projects being sanctioned in some of the geographical areas we specialise in, we are definitely noticing more demand."

Sarens, a Belgium-based worldwide provider of crane rental, heavy lifting and engineered transport services, is primarily active in two civil engineering sectors – bridge replacement/installation and the steel assembly/installation of roof structures for sports stadiums and industrial buildings.

"If you look at bridge projects, the market in Europe continues to be fairly steady, Australia is slowly speeding up and the USA is set to see substantial growth in the coming years. However, general infrastructure work in Asia is still limited with no real signs of any pick-up on the way," explained Gert Hendrickx, sales director projects for Sarens.

The other main sector of Sarens' civil engineering project business, lifting and installing roof structures for new football stadiums and other sports facilities, remains steady, according to Hendrickx.

"There is always somewhere in the world where new sports stadia are being built – for example, we are currently involved in the construction of Hungary's new national football stadium in Budapest [a 68,000-seat facility due to open in 2019]," he stated.

Within the overall civil engineering market, the industry sectors seeing the most activity and the biggest projects are transport and other infrastructure, which tend to be government-backed and in response to national productivity improvements.

– Joerg Roehl, TGP

Further evidence of the still rather patchy nature of civil engineering project logistics business growth was provided by Erik Zander, director of sales for Omega Morgan, a rigging and heavy haulage service company operating in the USA's Pacific Northwest and Western Canada regions.

Demand for quotes

He reported that while Omega Morgan, which has in the past undertaken heavy lift work for several North American bridge construction and demolition projects, has yet to see any general increase in current civil engineering sector work, "we are starting to see a greater volume of requests for quotes relating to work in 2019".

Expanding on those points, Zander said that while the US Pacific Northwest, for example, is seeing investment in facilities to accommodate its growing workforce, such as large office buildings, hotels, convention centres and airport expansion, "unfortunately, the heavy infrastructure projects and utility work are not in the queue for 2018".

Meanwhile, he continued, Western Canada is seeing some large civil engineering projects moving forward "but it seems like the trend across the board is for projects to take longer to get the go-ahead and sometimes not be able to get

off the ground even if the funding is in place".

More generally, while global civil engineering industry activity appears to be picking up, many planned projects around the world are still being delayed or even cancelled due to problems securing the necessary finance.

That issue was highlighted by Bill Kimball, account manager for Mammoet USA North, which provides engineered heavy lifting and transport services for infrastructure and other civil engineering projects across northeastern USA.

"Right now, the feedback from customers in that industry is generally positive. There is a tremendous amount of work being planned and slowly we are seeing some of those plans evolve into funded projects and at least getting to the detailed engineering stage," he stated.

"In many cases, though, the actual kick-offs are still being delayed. A lot of the planned projects we looked at a year-and-a-half ago have been cancelled or are still pending capital funding."

With such issues also apparent in many other countries, there is a growing worldwide focus on trying to boost investment in major national and regional infrastructure projects through greater use of public-private partnership (PPP) financing.

Competitive PPP market

In the case of the USA, Skanska suggested in its 2017 review that regarding infrastructure development, "the PPP market is strong, albeit with considerable competition". However, Mammoet's Kimball said that while PPP financing of civil engineering projects is apparent in the USA, some of the earlier enthusiasm for that approach might have waned.

"I am not sure that PPP is as popular now as it was a couple of years ago. There was a boom in partnership investment but it appears not all of it has been that successful because there has been a fair amount of turnover in terms of project financing. I do not know why that has been the case, but maybe investors have not realised the sort of returns they were looking for," he commented.

Generally speaking, this business has certainly not got any easier.

– Bill Kimball, Mammoet USA North

Whatever the source of the finance, Omega Morgan's Zander suggested any increase in the use of private sector capital to support major infrastructure civil engineering projects is probably unlikely to have much impact on logistics providers. "I think such projects will be run by similar companies, if not the same ones, to those we have dealt with in the past," he stated.

In summary, Kimball said the USA's civil engineering project logistics market has become very challenging and the same appears to be the case globally. "Generally speaking, this business has certainly not got any easier," he concluded. HLPFI

Sarens used SPMTs to manoeuvre a 3,000-tonne bridge section into place as part of a major upgrade to the Darlington Bridge in Adelaide, Australia, in just 22 hours.

Suppliers pressured from all directions

Leading construction and civil engineering companies may be reporting an upturn in business volumes but they are also experiencing continuing pressure on costs and margins, reports Phil Hastings.

Cost pressures in the civil engineering field are being passed on to logistics companies servicing the sector, which is adding to the already extensive range of cost and operational issues they have to contend with.

"Regardless of the number of projects that might be under way, civil engineering is dealing with several challenges – costs are under ever greater pressure and revenues and profits are down," confirmed Bill Kimball, account manager for Mammoet USA North.

"At the same time, lead times for our sort of involvement are decreasing, meaning there is a lot of pressure to meet both front-end and execution demands. All these elements mean that there is an ever-increasing focus on project efficiency and the need for innovative approaches that minimise disruption and costs while maximising safety."

Gert Hendrickx, sales director projects for Sarens, said that suppliers to civil engineering projects are increasingly being squeezed: "Contractors are taking longer to plan projects. They are going into budgeting and pricing in a lot more detail and squeezing prices for suppliers such as logistics providers. That trend is being exacerbated by the fact that, with the downturn in oil and gas industry projects worldwide over the last few years, there are a lot more resources available to do the work," he explained.

Contractors are taking longer to plan projects. They are going into budgeting and pricing in a lot more detail and squeezing prices for suppliers such as logistics providers.

– Gert Hendrickx, Sarens

Falling rates

In fact, claimed Hendrickx, the general market rates for deploying cranes and SPMTs on civil engineering projects has not really increased for 15 years, "and in the last three or four years they have actually dropped a little". Concurrently, "the buying prices for that equipment and labour costs have gone up. As a result, there is more and more pressure on the margins for such work."

Similar points were made by Erik Zander, director of sales for Omega Morgan, who agreed that the pressure on business costs reported by major global construction companies is also being felt by providers of heavy lift and transportation services to that industry.

"The over-dimensional freight market in general is continuing to see tremendous cost pressures. I believe that is a direct result of overcapacity brought on by the decline in project work across the oil and gas sector," he suggested.

Defined budgets

Javier Martinez, executive director for ALE, added that operators must focus on getting all project specifications and budgeting clearly defined from the outset of a project.

"There is always a budget for a civil engineering project but usually the construction company that wins the contract does so with a bid which is 10, 15 or even 20 percent lower than the budget price. Then, all the parties that participate also have to cut their costs," he explained.

In the past, continued Martinez, design details were not always fully defined, even when a project started, so the construction company involved could sometimes secure additional revenue by undertaking extra work that was not fully covered in the original contract.

"Nowadays, though, everything is more clearly defined at the start and it is difficult to secure any extra money over and above that budgeted for. The final costs remain very close to the original contract value which, following the bidding process, is at least 10-20 percent lower than it should have been. So everybody has to work to very tight figures," he stated.

Civil engineering is dealing with several challenges – costs are under ever greater pressure and revenues and profits are down.

– Bill Kimball, Mammoet USA North

Coupled with those cost pressures is a growing requirement for heavy lift and installation service providers supporting civil engineering projects to reduce the time taken to complete such work in order to minimise disruption to the public and businesses.

That trend was confirmed by Mammoet's Kimball, who said: "In the USA, there are several Federal Highway Administration-funded (FHWA) construction programmes in place now that require the use of innovative methodologies aimed at improving project schedules – in fact, the bulk of our heavy lift business opportunities in civil construction are coming from that.

"We are also seeing an increase in demand for fast lifting and installation services, while not compromising safety, in other sectors of civil engineering. Some of that is down to the architecture and design for buildings becoming more complex."

One example of that, continued Kimball, was a pedestrian bridge used to link two buildings, a hotel and a parking structure, which was fabricated offsite and then lifted into position in a very short timeframe to minimise the impact on the public. "That operation also enabled the fabricator to put the bridge together offsite in controlled conditions."

Bridge replacements

The growing requirement for fast lifting and installation operations in civil engineering projects was further highlighted by Sarens, which focuses particularly on accelerated bridge replacement projects. It will often use SPMTs to help lift new and replacement bridges into place, either overnight or within a couple of days, to reduce the disruption to related transport links.

"In Europe, where we are currently averaging at least one large bridge project a month, sometimes more, that [installation] concept has been used for many years and it is now increasingly being adopted in other parts of the world," commented Hendrickx.

One prominent example of this, he said, was in Australia. Late last year Sarens used SPMTs to manoeuvre a 3,000-tonne bridge section into place as part of a major upgrade to the Darlington Bridge in Adelaide, in just 22 hours (see picture on page 53). A second bridge being built as part of the same regional transport infrastructure project is due to be installed this year using the same method.