



Maxibor's setup for 10 km of HDD as part of an NBN project in Toronto, NSW.

NAVIGATING THE MAZE OF AN HDD PROJECT

Integrated strategic and project management is helping to optimise outcomes for stakeholders working with HDD provider Maxibor. This article explores how contractors can proactively take steps to ensure they are aligned with the project and strategic objectives of project stakeholders, with the ultimate goal of achieving optimised outcomes for all.

The journey through the maze of a project can be equally frustrating and rewarding for all stakeholders.

The alignment of stakeholder objectives needs to be combined with good practices around planning, delivery, financial and commercial management, social outcomes, business development and broader corporate strategies. This makes progress through the project much easier and provides outcomes that are broader than just economics.

ALIGNED OBJECTIVES

Successful projects are not undertaken by stakeholders in isolation. Asset owners, customers, principal contractors, subcontractors, materials suppliers, government, local community and interest groups all need to work together to optimise success.

All parties' objectives need to be respected, considered and where possible aligned. While the economic and physical results of an infrastructure project are important, economic and social outcomes beyond the project can be just as valuable.

Maxibor Australia strives to understand the project and broader strategic objectives of all key stakeholders in a project. The company's approach takes a view beyond the bore hole.

Wherever possible, Maxibor engages with other stakeholders to help inform them of the

benefits of HDD and identify other projects where the trenchless method can be applied. The company also looks to achieve broader strategic and social outcomes, such as local employment, training and attempts to find ways to increase the value of assets through HDD and other solutions within and beyond the project.

Maxibor has found key stakeholders in projects, including those other than asset owners and principal contractors, are increasingly taking this broader view. The process recognises the untapped opportunity that exists through properly engaging with the wider group of stakeholders to get better outcomes.

Good practice HDD providers, if allowed "into" the project, are demonstrating they can make a valuable contribution to achieving outcomes aligned to broader objectives.

A prime example of this is the assistance Maxibor provides to Indigenous civil contractors to help them participate in projects such as the West Gate Tunnel and Inland Rail.

PLANNING

HDD activity on major projects is an area of higher inherent risk. Informed planning helps to mitigate the risks, while at the same time helping to realise the opportunities that can arise from the involvement of a quality

and collaborative HDD provider.

Maxibor proactively works with other stakeholders to provide access to its wealth of HDD knowledge to better manage project risk. Asset owners and principal contractors are increasingly taking the company up on its offer to conduct an education session for their management and project people.

These sessions are not 'boring' and in fact add significant value to projects and the broader business assets of stakeholders.

The company also helps asset owners and principal contractors better understand ground conditions, the biggest unknown on large HDD projects. Maxibor encourages geotechnical investigation along and below the full length of the designed bore route to help confirm if the design route provides the best outcome in terms of cost, time and capability to complete.

This reduces the need to factor uncertainty into price and ensures the contractor has the skills and resources to drill in the prevailing ground conditions.

In addition to ground conditions, bore designs need to account for factors including existing services and required clearance, safety, spatial, impacted environment including vegetation and cultural and heritage items, easements, intended use of the bore, entry and exit inclination and the bend radius of the pipe and drill rods. A design process



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covering all these factors prevents delays during the approval, construction or payment stages.

Allowing early access for site establishment activities, surveying and even pipe welding helps with the scheduling of the mobilisation of rigs as well as maximising the available hours and days for drilling, ultimately reducing the time and cost of a project.

This approach is being applied to Maxibor's work with principal contractors Visionstream and Downer on the NBN and Williamtown Airforce Base projects, respectively.

DELIVERY

Safety and protection of the environment needs to be at the forefront of any project. Maxibor considers the practical application and culture of the business as the critical prerequisites for good outcomes in these spaces.

Maxibor is prepared to reject a design if the company believes it is not achievable or safe for people or the environment.

On site, HDD and other personnel need to be alert, knowledgeable and collaborative when challenging situations arise such as steep grades, coordination of materials deliveries, cranes, compliance inspections, traffic, surveyors, other subcontractors, upper management and politician visits, accelerated completion dates and climatic events.

Drilling fluid management is a critical element of HDD delivery and Maxibor has developed a long-term relationship with AMC, its drilling fluid provider. The company engages with the provider early in the development of a project so a mud plan can be established as soon as geotechnicians are available.

Increased monitoring by environmental authorities is being applied to the civil construction and waste management sectors

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— DAVID TURNER

to ensure waste is being disposed at licenced facilities. Along with other stakeholders, Maxibor is examining strategic options around waste disposal, including the establishment of commercially licenced mud recycling facilities.

Just packing up and going home adds no value to future projects. The company strives to share learnings from projects across stakeholders.

More coordinated knowledge sharing will help navigate through the maze of future projects and provide better long-term outcomes for all parties.

COMMERCIAL AND FINANCIAL MANAGEMENT

A 120-page contract is a maze in itself. The legal detail is designed to reduce risk in the key areas of liquidated damages, variations, retentions, warranty, delays, claim approval and payment terms.

However, the contractual terms – especially those with draconian head contracts – may not be aligned to obtaining best outcomes from a project, as the focus is directed away

from the highest risks and best opportunities. This can cause behaviours that are not conducive to good outcomes for all stakeholders.

Wherever possible, Maxibor directs the commercial focus back to risk and opportunity as this is where the value is.

The timing of securing a major contract is an important negotiating tool when dealing with financial institutions. A signed contract can lead to securing finance to upgrade plant, hiring more skilled staff and undertaking social impact initiatives.

Accelerating the issuing of a contract facilitates the full financing benefits of a contract flowing to the project.

Pricing is usually the prime area of the negotiation as completion of the formal bid process is not always the end of the pricing process. Design changes, reduced budgets and updated information all impact on price negotiations over several months.

In this period, the focus is usually on cost rather than overall outcomes.

Better outcomes will be achieved by selecting the HDD provider after a first

round of fairly evaluated bids, based on economic and non-economic factors aligned to the objectives of the asset owner and other key stakeholders. The negotiation process with the HDD provider can then focus on outcomes aligned to the wider objectives of the project.

An extended competitive commercial approach focused on price will not optimise economic or social outcomes.

SOCIAL OUTCOMES

Pleasingly, the project maze is being extended by an increased focus on delivering social outcomes from projects. Whether this is Indigenous engagement, local employment, community engagement or emissions reductions, it is all about providing improved outcomes.

HDD providers are more than capable of contributing to these broader outcomes. Like Maxibor, they can go out of their way to assist smaller or Indigenous contractors better participate in the civil construction sector or to look for better recycling outcomes for drilling fluids.

BUSINESS DEVELOPMENT

Commercial participation in any project provides an opportunity for each stakeholder to obtain further business from other stakeholders and potentially their wider network. For an HDD provider, business development will be enhanced if there is a closer connection between the asset owners and a wider group of project management, technical and procurement personnel within the principal contractor.

Access to a wider range of stakeholders will generate a larger pipeline of projects and strengthen the capacity to deliver better services for the benefit of all stakeholders. Keeping the HDD provider lost within the business development maze will not optimise outcomes for all stakeholders.

There is something interesting about being able to put infrastructure in big holes under rivers, lakes, out into the ocean or through very hard rock over a long distance.

“Stakeholders can benefit from working closely with the HDD provider to help publicise these unusual aspects of their project as Maxibor has done with its projects with the support of *Trenchless Australasia*,” says Maxibor Business Development Manager David Turner.

According to Maxibor, contribution to ASTT forums and publications such as *Trenchless Australasia* are an important part of the wider communication process. The more HDD providers participating in the process, the better for the industry and other stakeholders. **T**

ABOUT MAXIBOR AUSTRALIA
 Maxibor Australia is an Australian owned company based in the Hunter Valley, New South Wales. Established in 2013, the company is now regarded as one of the leading HDD providers on larger projects in Australia.
 For more information visit www.maxibor.com.au or www.maxienergy.com.au



LEADING THE WAY

Maxibor is using its network of experience to deliver better project outcomes to asset owners and principal contractors alike.



- Quality and collaborative service without the pain
- Expertise to advise at the right time in the project delivery cycle
- Water and sewer, rail, road, power, gas, telecommunications, mining, residential development and renewables
- Large diameter and long bore specialists in hard rock and difficult conditions
- Build a future we all look forward to

If you need help with a project contact us on 02 4937 5500 or admin@maxibor.com.au.
 For more information visit www.maxibor.com.au or www.maxienergy.com.au and follow us on LinkedIn, Facebook and Twitter.