

SPECIALISTS
IN COMPLEX
URBAN CIVILS
& FOUNDATIONS



We share a common goal of working with all stakeholders on your project to bring the highest level of ability and commitment to providing upfront engineered solutions and detailed planning to all aspects of our work. This helps ensure that the works will be carried out safely, efficiently and with a quality outcome.

Eddie Shanley
General Manager
AnewX

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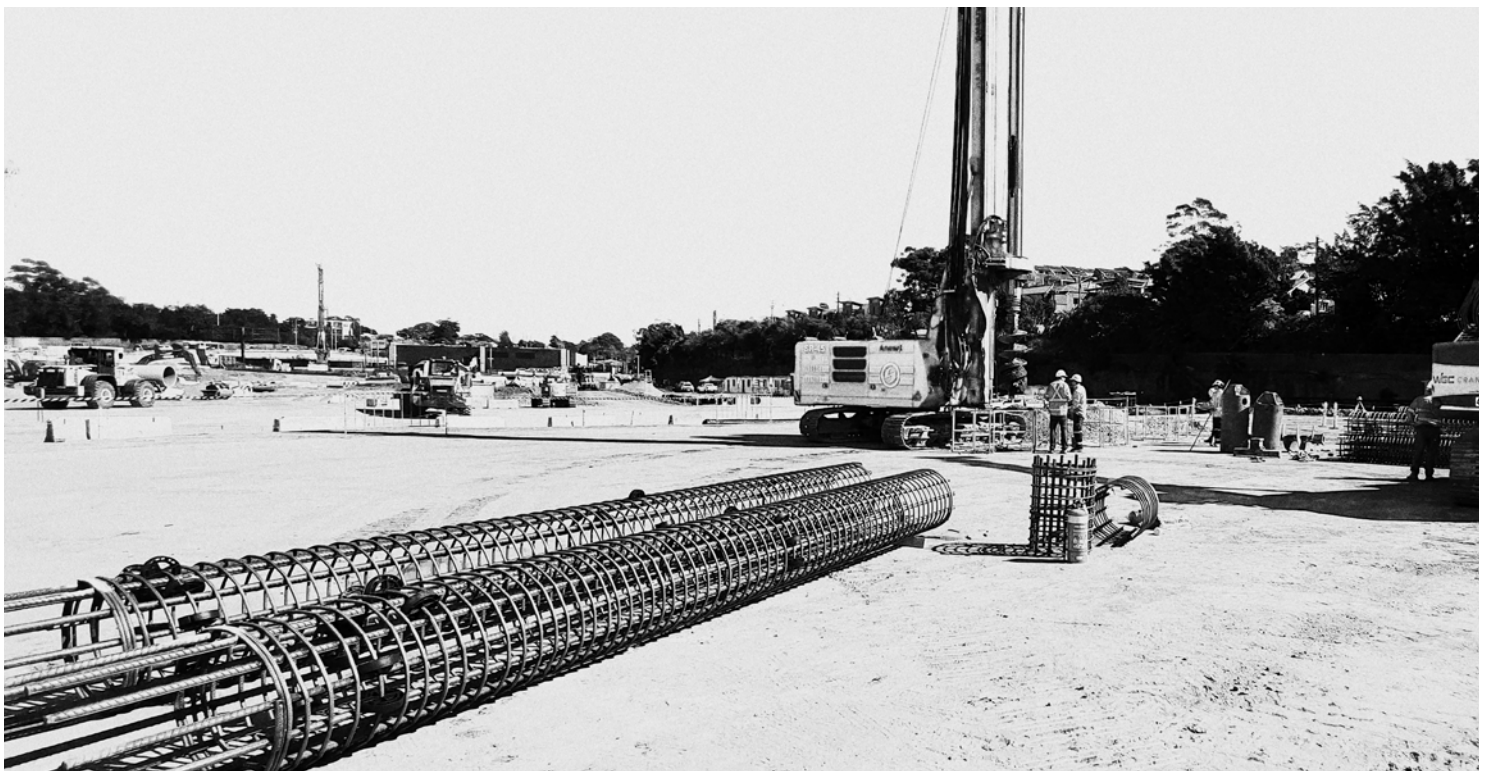
CHALLENGE IT'S

FOR US

AnewX has been founded with a vision to provide superior civil and foundation solutions that optimise the cost and program outcomes for our clients and deliver against stakeholder objectives.

Our collaborative nature ensures we can integrate safety and community drivers across the most complex of projects using the deep experience of the core AnewX team and its expert industry consultants.

With a commitment to minimising the environmental and community impact of our work, AnewX operates as one team united in a strategically planned manner to be safe, with a focus on consistently delivering high quality outcomes across the many challenging activities we perform.





DEEP

EXPERTISE

Foundation Piling Bored, CFA & Driven

At AnewX, we'll design and or construct foundation solutions including:

- Bored piles, up to 1500mm in diameter, in all their applications of different soil strata and foundation zones
- CFA (Contiguous Flight Auger) piles up to 1000mm in diameter, 20 metres in depth. Our equipment utilises the Jean Lutz system for quality monitoring
- Driven piles, steel and or timber.

Piling Retention Systems

AnewX is capable of providing cost effective design and construct retention solutions, which are specifically designed to match the loading and geology requirements of a Project. They can include:

- Soldier pier solutions, suitable for stable ground conditions
- Contiguous piled solutions
- Secant piled solutions
- Steel sheet pile solutions, temporary or permanent.

Low Head Room Piling & Logistical Access Piling

AnewX owns a fleet of specialised low head room (LHR) equipment and tools to install foundations, typically designed by us to the unique site topography and geology, to be able to support or retain infrastructure.

The machines and the support systems can operate in heights of 2800mm to 8500mm.

Generally, we'd plan and engineer a methodology for each restricted site to optimise the foundation system.

Design & Construct Services

AnewX carries out the design of foundations and any required temporary works using internal resources, supported by external industry experts. This service provides:

- Optimised cost and time outcomes for the selected foundation system
- Environmentally optimised foundation solutions
- Foundations suitable to be built in restricted and or low head room conditions
- Allows the civil cost of the foundation works to be integrated into the design at an early stage.

Complex Civil Works

With our deep engineering experience in broader civil construction, we're able to provide more than just foundation works. Our civil services includes:

- Provision of combined packages of civil works with their associated foundation systems
- Integrated temporary and permanent foundation systems designed by AnewX to construct the works
- Ability to stage works to keep access to various stakeholders
- A capability to integrate near shore works with adjoining civil works
- An ability to integrate environmental remediation works into the civil works
- An ability to work in low headroom or restricted areas.

Noise Wall Construction

We've developed temporary works methods to install steel posts to accurate tolerances to enable the construction of noise walls adjoining green and brownfield road and rail infrastructure.



ROCK

SOLID

Peter Longstaff

Director

Peter has had a distinguished 40-year career in the civil, marine and foundation construction markets, and he brings a unique combination of leadership and management roles in both civil and marine contracting and specialist foundation construction.

He also has a passion for smart, innovative solutions that are delivered safely.

From a broader industry perspective, he continues to provide support to the industry body having been a past president of the Piling Federation (PSFA), and is current chair of the Safety Committee as well as a serving Director.

Eddie Shanley

General Manager/Director

Eddie commenced his career 25 years ago in the field as a foundation labourer and has worked his way through the roles of Supervisor and Operations Manager to become the General Manager and Director for AnewX.

His tremendous knowledge of people and industry equipment ensures we deliver great solutions, and his long-standing relationships and passion to get the best from our people reaffirms his collaborative approach to projects.

Jack Longstaff

Operations Manager

Jack commenced his career in the foundation industry in 2010 and has vast experience with major infrastructure projects across NSW.

His earlier role, prior to establishing AnewX, was as the Section Manager on the complex and demanding W2B Pacific Highway Upgrade in northern NSW.

Jack takes pride in the planning process with our clients and has a driven focus on detail to ensure the safe and quality delivery of all our Projects, whilst maintaining strong and lasting relationships which guarantees success for the business into the future.

TEAM



EQUIPPED

Our Equipment

The AnewX fleet of new specialised equipment, with the latest technologies suited to the urban environment, includes European machines from GEAX and SOILMEC, capable of working in tight limited access sites, producing Bored, CFA, Displacement and Jet grouted foundations.



SR45 (45T)



SR35 (37T)



EK60 (19T)

FOR

THE

GEAX XD9's are extremely compact and lightweight drilling machines, capable of working in 2800mm headroom. They can be simply craned or tracked into position, being 5T in weight. We have designed a set of special heavy duty rock augers to typically drill 300/450/600mm bored piles up to 11 metres in depth. They can also operate on a 15 degree slope.

GEAX EK60's are medium size bored pile and CFA machines, weighing 18T. They have a compact Hitachi base, and can also be craned into basements as required. For their size and when combined with specialist drilling tools they are exceptional drilling machines.

SOILMEC SR35 is the modern updated version of the R312 H, which was a champion of the Australian foundation market. It is a medium sized foundation machine suitable for bored pile and CFA applications.

SOILMEC SR45 and SR45 LHR are slightly larger machines than the SR35, with a rope crowd system. When in LHR configuration it can operate under 8500mm and drill to 21 metres. The SR45 in its normal configuration can execute foundations of a large variety of diameters and depth.

All the machines are fitted with the latest industry safety features and Panolin biodegradable hydraulic oil. They are all maintained by the OEM supplier and each machine has an independent annual PileSAFE inspection.

We support our foundation machines with a range of Hitachi excavators and concrete line pumps.



EK60 LHR (19T)



SR45 LHR (45T)



XD9 LHR (5T)

CHALLENGE

DESIGNED



TO EXCEED

At AnewX, we're always implementing new ways of developing our employees, managing our equipment fleet, and using low cost cloud based systems to support the whole project life cycle—all in the name of creating greater effectiveness and efficiencies for our clients.

QSE Accreditation

Since its inception in 2017, AnewX has managed all aspects of its business through a third party accredited IMS (Integrated Management System) for Health, Safety, Environment and Quality. The IMS is accredited to the following Australian Standards: ISO 45001: 2018, ISO 14001: 2015 and ISO 9001: 2015.



QMS Certification Services



QMS Certification Services



QMS Certification Services



Sustainability Goals

Our future in our hands—as we continue to work collaboratively with our Clients and suppliers to contribute to the United Nation's Sustainable Development Goals.

We're committed to minimising the environmental and community impact of our activities, increasing the diversity of our workforce and supporting local Indigenous businesses.

- Educating our workforce with Indigenous cultural awareness training and supporting Indigenous owned construction suppliers
- Our foundation machines are modern, low emission and carry the latest engine management systems to optimise fuel consumption and consequently minimise emissions
- Biodegradable Panolin hydraulic oil is installed in all our foundation machines, providing positive reduction in emissions and greatly reduced impact from any hydraulic spills
- We're always challenging solutions to minimise concrete usage and classify and recycle materials where possible
- Work experience placements and mentoring for the next generation of engineers, including sponsorship of Engineers Australia programs to attract more women into construction.

AnewX & Comply Flow Digital

AnewX has formed a partnership with Comply Flow to deliver end-to-end software solutions for compliance management and supply chain assurance. The cloud-based system provides real time visibility and control to the AnewX management of complex operations, simplifying supplier engagement, pre-qualification and compliance processes across the entire risk lifecycle.

From our smart phone, site based operatives we are able to manage in real time:

- Workforce management, including currency of competencies and training
- Plant inspections and management of maintenance
- Subcontractor management and compliance on our Projects
- Workplace inspections, and equipment compliance control.

The use of this evolving technology has:

- Lowered the cost of our operation
- Increased the ability for our site based teams to manage their compliance
- Improved the effectiveness of our subcontractor management chain.



OVERVIEW

Sydney Metro City & Southwest extends the new metro network from the end of Sydney Metro Northwest at Chatswood, under Sydney Harbour, through new railway stations in the CBD and west to Bankstown – a total of 66 kilometers of metro rail.

JHCPBG joint venture (John Holland CPB Ghella), was awarded the \$2.81 billion contract to deliver the Stage 2 Tunnel and Station Excavation (TSE) Works.

AnewX was awarded piling works for a number of complex underground station boxes across the alignment. A key feature of our proposals was the compact nature of our machinery, which enabled smaller work platforms and safer productive work in very congested Sydney work sites.

SCOPE

- Works included bored piles to station boxes at Victoria Cross and Pitt Street station boxes
- Temporary works and bored piles for McMahon's Point, forming a shaft for TBM extraction and return to Barangaroo
- Enabling works piles to Chatswood and Sydenham
- Specialist restricted access piles within Barangaroo station box with our light weight and compact GEAX foundation machine craned in.



OVERVIEW

The original gasworks operated between 1879 and 1970, and the historical operations contaminated soil and groundwater at the site.

The remediation involved the ex-situ stabilisation and treatment of around 8,000m³ of contaminated soil. Works began at the site in November 2018 with all remediation work completed in late 2019. All remaining environmental investigations were completed successfully with the independent Site Auditor issuing the Site Audit Statement for the former gasworks confirming the remediation was successfully completed.

AnewX was engaged by EnviroPacific to undertake design and construct foundation works including the permanent low permeability secant pile cutoff wall, CFA piles to protect buildings of heritage significance and the temporary staged sheet pile box design and construct to enable removal, treatment and replacement of contaminated ground at the old gas works site.

An innovative feature of the sheet pile design was the provision of an external steel capping waler with associated adjustable props. This feature ensured the excavator could access all of the soil against the sheet pile for treatment.

SCOPE

- Complete design construct package for both temporary and permanent retaining structures
- Permeability assessments and recommendations for the work
- Design for external waler system to improve production in the cell remediation excavation
- Development and implementation of all safe work methods collaboratively with EnviroPacific to ensure the safety of the workforce and adjoining public.



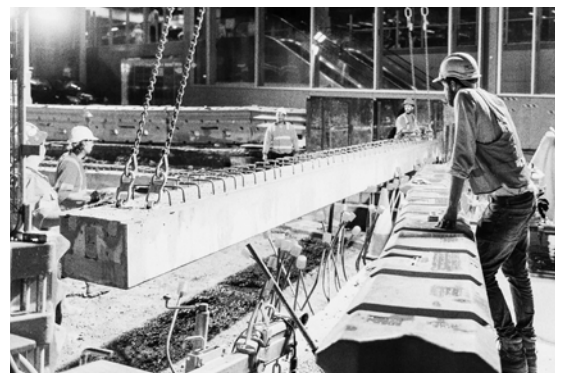
OVERVIEW

Our client, Built Corporation, in conjunction with their client Walker Corporation, Parramatta City Council and Property NSW broke ground in December 2017 on the 4 Parramatta Square project, signalling the start of construction on the first instalment in the \$2.4 billion Parramatta Square development.

AnewX was awarded the contract to construct the complex civil dive structure at Parramatta 4P, adjacent to the live Parramatta rail station. The key to the projects success was the detailed staging planning which used compact piling machines, and when combined with precast bridge techniques, maintained 24/7 access to adjoining stakeholders. In a collaborative manner, AnewX and Built developed the staging plans and precast methodology to ensure 24/7 access to both Parramatta rail station and the adjoining basement carpark to one of NSW's most critical infrastructure providers. AnewX undertook all elements of the dive structure, including service relocations and contamination disposal. One of the innovative strategies employed was the utilisation of a truck turntable at the site access, so that all materials entering and leaving the very restricted site area could always enter and exit in a forward motion.

SCOPE

- Traffic management works (TMPs) including work staging plans
- Design and installation of truck turntable for safe entry and exit to site
- Weekly site co-ordination meetings with all affected stakeholders
- Bored piles and shotcrete retention elements to dive structure
- Bulk excavation and disposal, including contaminated materials and relocation and co-ordination of services
- Precast bridge planks including capping beams and parapet walls
- Final traffic hardware to new intersection, including associated line marking.



RESTRICTED ACCESS— CENTRAL STATION & PARRAMATTA WHARF

anewx.com.au

OVERVIEW

These two Projects were awarded to AnewX based on our specialist foundation alternative designs, integrated into a foundation product that would be constructed using our small and unique XD9 foundation machines.

The size and weight of the machine (< than 5T) allowed the XD-9 low head room machines to install foundation piles in both restricted areas in both plan and height.

At the Parramatta wharf upgrade, the conforming sheet pile design was challenging to install in LHR conditions and would have likely caused vibration damage to an adjacent live critical 600mm sewer. AnewX redesigned a temporary steel tube solution, screwed into place to retain soil, to enable the new revetment works to proceed. This design incorporated a bespoke screw pile joint to enable installation of the steel pile in limited head room.

When tendering for the works on the working platforms at Central Station, AnewX designers recognised the opportunity to redesign existing piles to enable installation by our compact LHR XD-9 foundation machines. In a collaborative environment working with the head contractor, we were able to implement this restricted low head room foundation solution, saving considerable time and money across the project.

SCOPE

- AnewX alternative pile designs to match unique low head room foundation machinery
- Foundation LHR XD9 machines utilise special drilling tools, designed for medium strength rock
- Parramatta wharf involved the low vibration installation of special segmental liners
- Central Station piles installed under existing canopy, in a live Sydney rail station, without the need for any structural modification.

