Geotechnical engineering, innovative solutions to

Retain Cross Protect Strengthen

GEOQUEST

Geoquest Hong Kong

geoquest_group

Geoquest Group

www.geoquest-group.com.hk/

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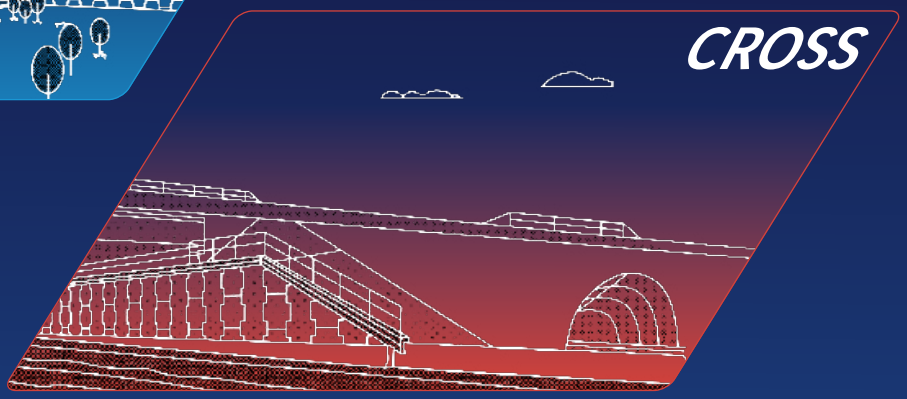
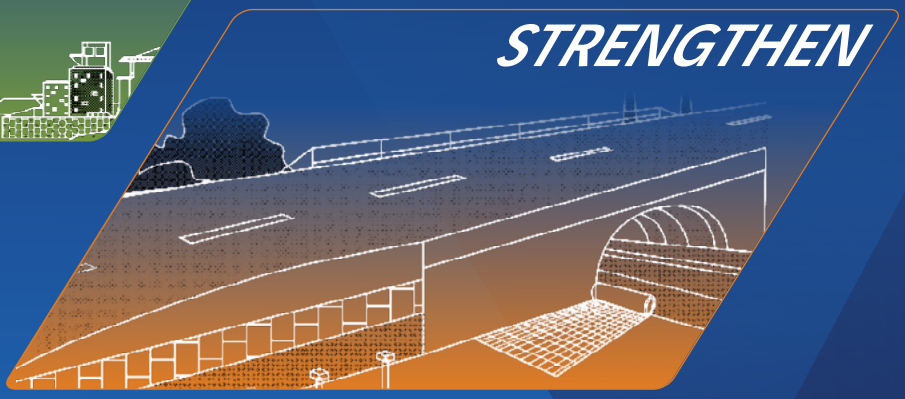
GEOQUEST





New **name**
Proven **expertise**
Diverse **solutions**

A legacy of innovation since 1963

Our story began when **Henri Vidal** invented Reinforced Earth, a breakthrough that reshaped geotechnical engineering and sparked an entrepreneurial journey across five continents. Over six decades, we have expanded, diversified, and continuously innovated to meet the needs of increasingly complex infrastructure projects.

Building on our heritage, shaping the future

Geoquest moves beyond Reinforced Earth while remaining true to the iconic, proven solutions trusted by our clients over 60 years. Backed by our global expertise and delivered by our local teams, we develop new applications, address tomorrow's challenges, and provide optimized, durable solutions for projects of every scale.

New name, proven expertise, diverse solutions

Geoquest marks a new chapter in our history — a unified identity that reflects the full breadth of our geotechnical expertise and the evolution of our solutions. It brings clarity to a diversified offer spanning across Reinforced Earth and corrugated steel structures, geosynthetics, precast and geohazard solutions.

Shared values that unite us

Our culture is built on strong, shared values that shape the way we work every day. **Safety** is embedded in everything we do. **Innovation** fuels our progress. **Excellence** drives our engineering. **Client care** guides our decisions. **Diversity and equality** strengthen our teams.

World's tallest Reinforced Earth structure in Tindharia, India

Innovation: anticipating tomorrow's challenges

Innovation is at the core of Geoquest's identity. Our Innovation Department drives research and development to anticipate tomorrow's challenges and support our teams worldwide. We continuously expand our portfolio of solutions and enhance performance, durability, and sustainability across all projects.

From the invention of Reinforced Earth in 1963 to today's advanced geosynthetics, precast and geohazard solutions, our innovations have shaped the industry for more than six decades. We develop new materials, test full scale prototypes, and collaborate with universities and research centers to push the boundaries of soil structure interaction.

Backed by global expertise and local insight, our R&D teams explore new applications, improve existing technologies, and design solutions that meet the evolving demands of infrastructure and climate resilience.

100
major inventions, covered by patents registered worldwide

60+
years of continuous innovation

102.8 m
world's tallest Reinforced Earth structure

Full-cycle project expertise, **from design to installation**

Since 1963, Geoquest brings unmatched experience in soil-structure interaction, geotechnical engineering, and infrastructure design. Our teams combine decades of accumulated knowledge with advanced engineering expertise to deliver reliable, durable, and cost-effective solutions across a wide range of project types—from the simplest to the most exceptional.

One integrated partner

Engineering

We provide high-level engineering capabilities covering feasibility studies, detailed design, and optimization for complex projects and challenging terrains. Our teams bring decades of experience in soil-structure interaction, seismic design, hydrological constraints, and difficult geotechnical conditions. This expertise enables us to deliver safe, durable, and cost-efficient solutions for both standard and exceptional structures.

Integrated materials supply

We deliver an integrated supply of materials, combining our own manufactured products with selected partner sourced products to ensure consistent quality and reliable delivery. Our portfolio covers reinforcements, facings, precast elements, geosynthetics, drainage and erosion control solutions, and other specialized solutions tailored to each project. This integrated distribution model guarantees full compatibility between design and materials.

On-site services

We support contractors throughout installation with training, technical assistance, field expertise, and we can also carry out installation with our own teams when and where applicable. Our specialists ensure that structures are built in full compliance with stringent design and quality standards, bearing safe constructability in mind. This close integration between design, materials, and installation strengthens performance and reduces project risks.

100,000
projects designed

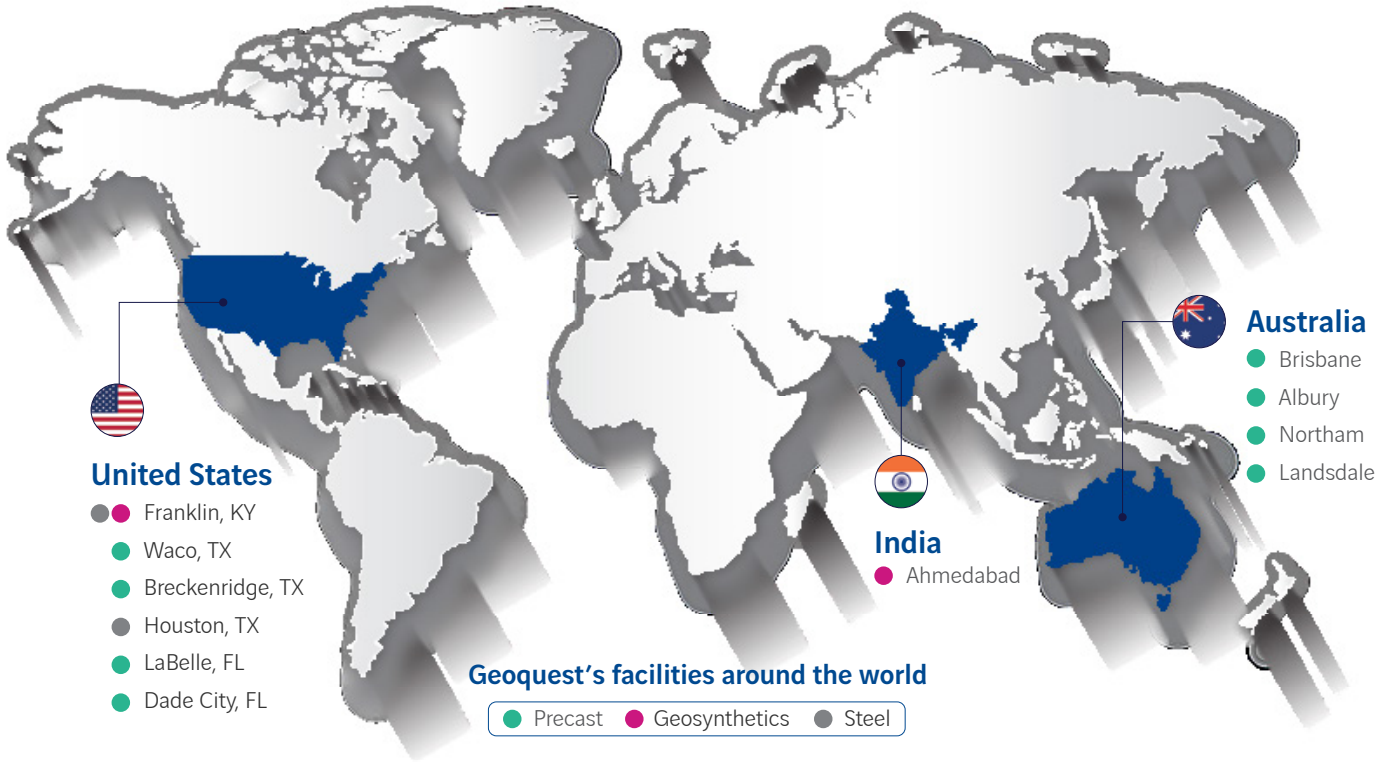
80+
Mn m² structures built worldwide

An **integrated industrial model** that **strengthens our solutions**

Our industrial capabilities ensure that every Geoquest solution is engineered, produced, and delivered with the same level of excellence that has defined our company for more than 60 years. This integrated model ensures our clients a single accountable partner, certified materials, and a secure supply chain from concept to completion.

Integrated production, clear benefits

- **Enhanced safety** and reduced on site risks
- **Consistent, certified quality** through controlled factory environments
- **Resilient and responsive** supply chain
- A **single accountable partner** from design to supply
- **Customer centric service** throughout the project lifecycle



A culture **built on safety**

Safety: anticipating risks, acting in the field, learning to improve

Safety is a core value shared across all Geoquest business units. Our ambition is clear: eliminate incidents by proactively managing risks and staying closely connected to our operations.

We embed safety at every stage: from design to construction and plant activities, by focusing on what matters most in the field.

WORK HOME SAFE

Our approach is driven by **four key principles:**

1 Anticipating risks

Integrate safety considerations early, from tendering and design to construction.

2 Staying close to operations

Maintain strong managerial presence in the field through site visits, audits and safety observations.

3 Learning and sharing

Drive continuous improvement by sharing operational experience, lessons learned and best practices across the Group.

4 Strengthening capabilities

Develop innovative and digital tools, including AI-based image recognition and virtual reality training.

Powered **by People**

A community of experts

Geoquest capitalizes on a worldwide community of engineers who share knowledge, operational excellence, and technical expertise. Our collaborative model ensures that local teams can rely on the Group's global experience, whether for complex geotechnical challenges, innovative design approaches, or project delivery in demanding environments.

This international network is strengthened by diverse backgrounds, perspectives, and cultures — a key driver of creativity, problem-solving, and collective intelligence across the Group. It allows us to mobilize expertise rapidly, support cross-regional collaboration, and guarantee the same high standards of quality and safety on all our projects.

Geoquest around the world

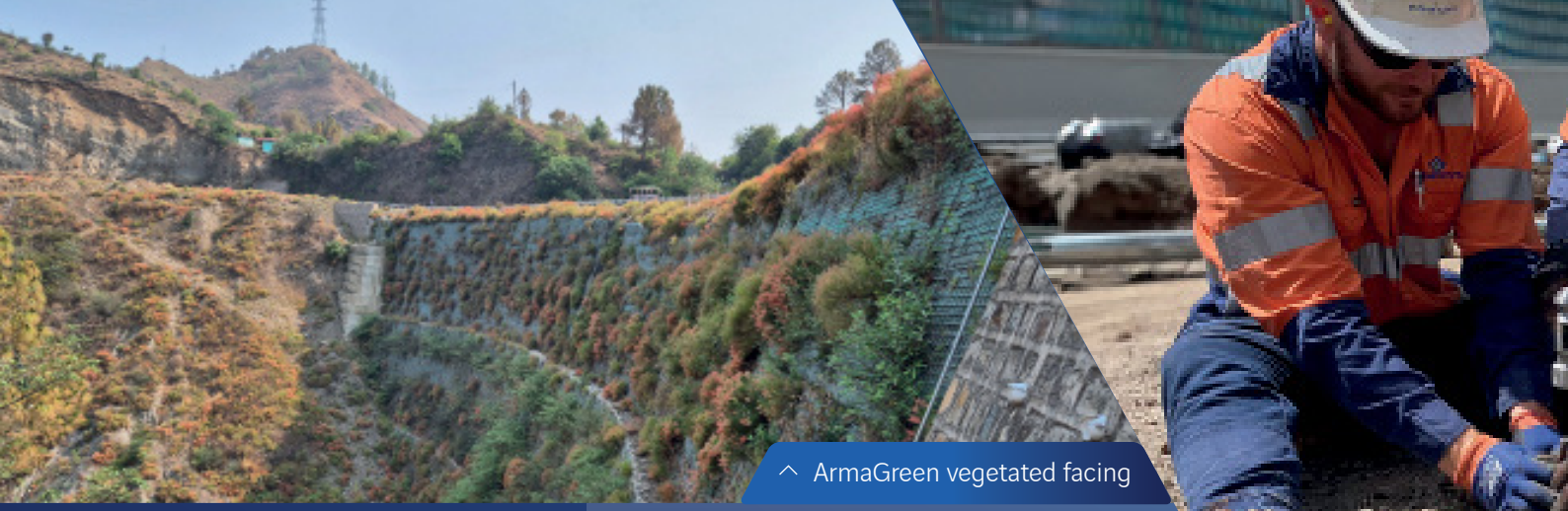
Growing talent, building the future

We invest continuously in developing our people, supporting both professional development and long-term career growth. Training programs, mentoring, and cross-regional collaboration help our teams expand their skills and stay at the forefront of latest innovations.

We are committed to creating an equitable and inclusive environment where every employee can grow, contribute, and thrive.

1100
employees

30
countries



ArmaGreen vegetated facing

Engineering a **more sustainable future**

Sustainability is embedded from early project discussions through bidding and design, supported by teams trained to integrate environmental performance at every step.

Sustainability by design

Geoquest solutions are inherently material-efficient, with structural principles that require significantly less concrete and natural resources than conventional cast-in-place construction methods: **up to 90% less concrete for walls**.

1 Key impacts

- Our Reinforced Earth solutions (ArmaStone, ArmaGreen) reduce CO_2 emissions by 75-80% compared to conventional retaining walls*.

2 Nature-inclusive design

- With mineral or vegetated facings, ArmaStone and ArmaGreen enable structures to blend into natural or urban and peri-urban landscapes.
- Wildlife crossings help safeguard biodiversity and reduce habitat fragmentation.

Low-carbon concrete project

Wildlife crossing

EcoStrap sustainable reinforcements

Low-carbon concrete panels

Sustainability by materials

Our teams **develop low-carbon materials and implement resource efficient production practices** that reduce embodied emissions and support more sustainable use of resources.

1 Low-carbon concrete

Replacing up to 60% of cement with low-carbon binders such as blast furnace slag, a waste of the steel industry which dramatically reduces embodied carbon without compromising strength or durability. Meanwhile, we are constantly on the lookout for low-carbon alternatives to traditional cement.

2 Low-carbon reinforcements

GeoStrap provide a corrosion free, low carbon solution. Our steel reinforcements are increasingly made of recycled steel.

3 Geosynthetics

- Our solutions ArmaLynk, ArmaFlow and TerraGreen reduce CO_2 emissions by 70-85% compared to conventional methods using granular material*.
- Our Fabric Formed Concrete Mattress reduces CO_2 emissions by up to 25% compared to rip-rap method*.

4 Circular economy

- Use of recycled aggregates or site-won soils for engineered backfills, when applicable.
- Use of recycled plastic for our connectors.

5 Resource efficient production

- ArmaStone steep slopes facings use 50% less mineral filling than gabion facings.
- Solar panels power some of our plants in India, reducing reliance on conventional energy and lowering embodied emissions.
- Process water is recycled or treated before being released into the environment.

Sustainability by performance

Durability is a major driver of sustainability. **Geoquest structures are designed for long service life, reduced maintenance, and resilience in aggressive environments.** Their longevity is confirmed through rigorous long term simulations and performance assessments, ensuring service lives of up to 120 years.

* Calculations have been done on specific cases, results may vary.

Our **16 Environmental Product Declarations (EPDs)**

give clients reliable, independently verified data to ensure full transparency on our environmental performance.

Engineering solutions for today's challenges while shaping the infrastructure of tomorrow, across a wide range of sectors.

Our solutions

Reinforced Earth	Reinforced Earth walls | Reinforced Earth slopes | TerraLink
Precast	T-Wall | TechWall | TechSpan | TechBox
Geosynthetics	ArmaGrid | ArmaWeb | ArmaForce | TerraGreen ArmaLynk | FFCM | ArmaFlow
Geohazards	Nets | Barriers
Corrugated Steel	Bolted | Helical

Complete documentation available here

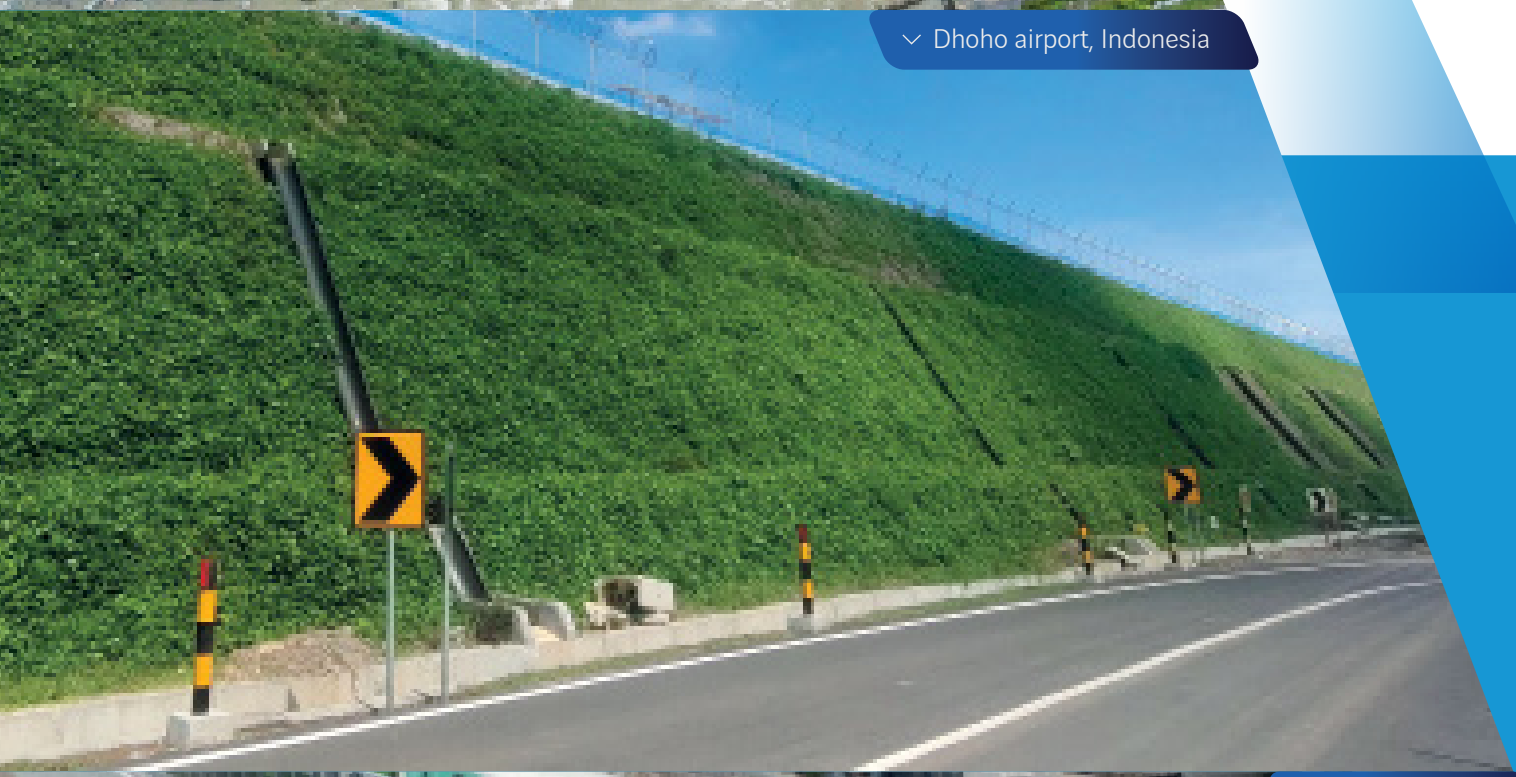
Our sectors

Airports
Housing & Residential
Energy
Industry
Military
Mining
Oil & Gas
Functional Facilities
Commercial & Logistics
Ports & Harbors
Railways
Rivers & Waterways
Roads & Motorways
Sports & Leisure
Waste Management
Water Management
Coastal

Discover how our solutions come together to **retain, cross, protect** and **strengthen** infrastructure worldwide.

Our applications

Z-Morh, India



Dhoho airport, Indonesia

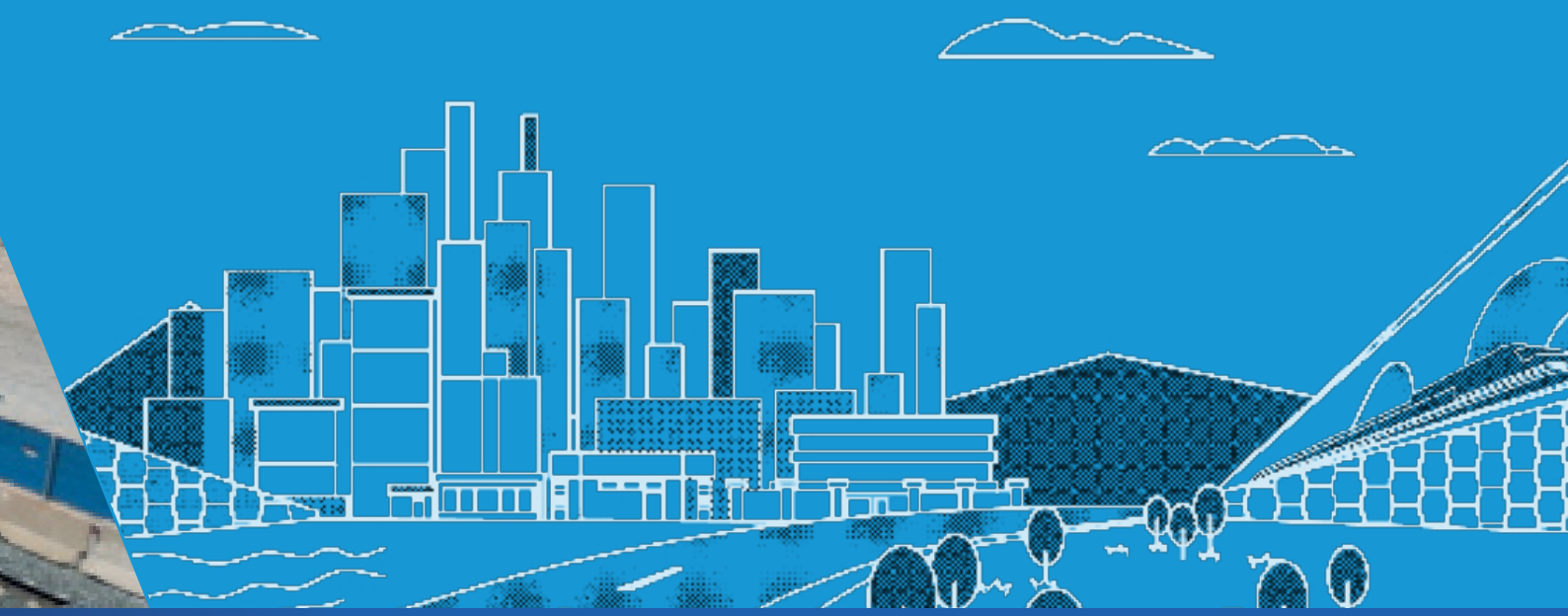
Toronto, Canada

RETAIN

Geoquest is a **global leader in retaining structures**, building on **unrivalled expertise in reinforced backfill and soil structure interaction**. As the **pioneers and inventors of Reinforced Earth technique**, we have shaped the way retaining walls and reinforced embankments are designed and built worldwide. Our solutions combine **vertical retaining walls** and **reinforced soil slopes** to deliver **durable, adaptable, and cost efficient structures** suited to all types of terrain and architectural requirements. From road and motorway widening projects to rail platforms, industrial sites, our retaining structures ensure **long term stability** while **optimizing material use and construction time**.

Our solutions

Reinforced Earth	Reinforced Earth walls | Reinforced Earth slopes | TerraLink
Precast	T-Wall | TechWall

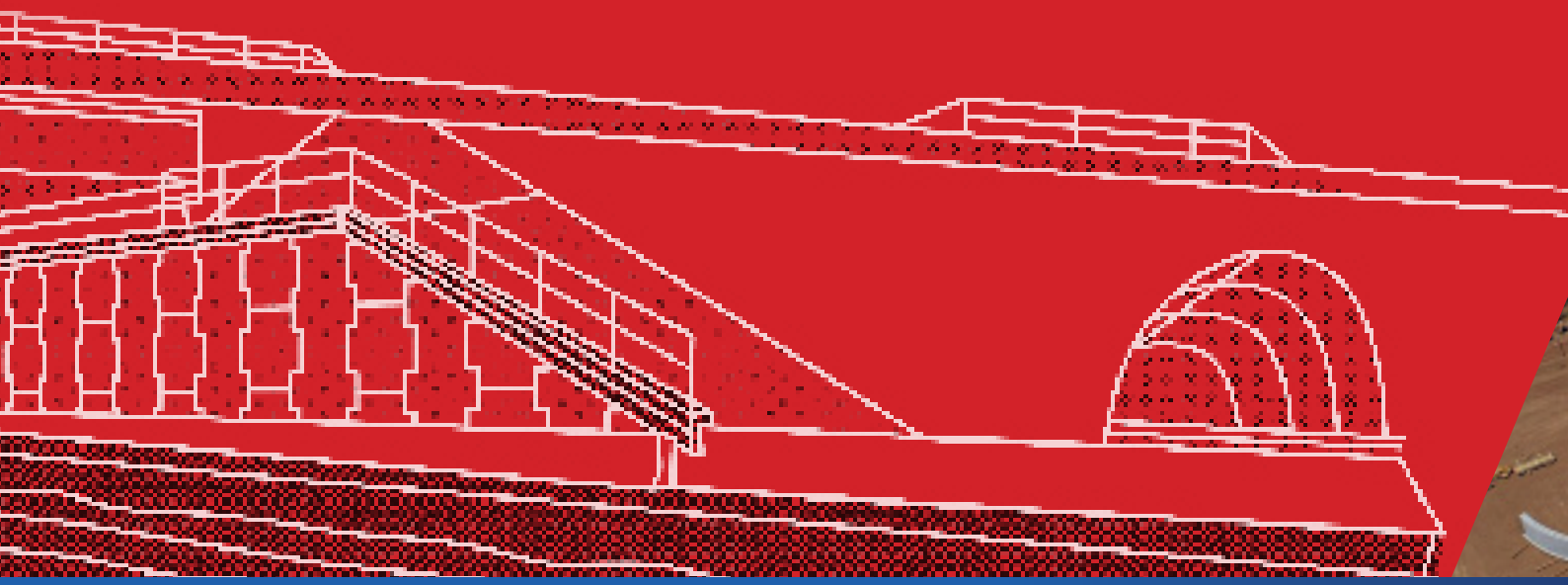


CROSS

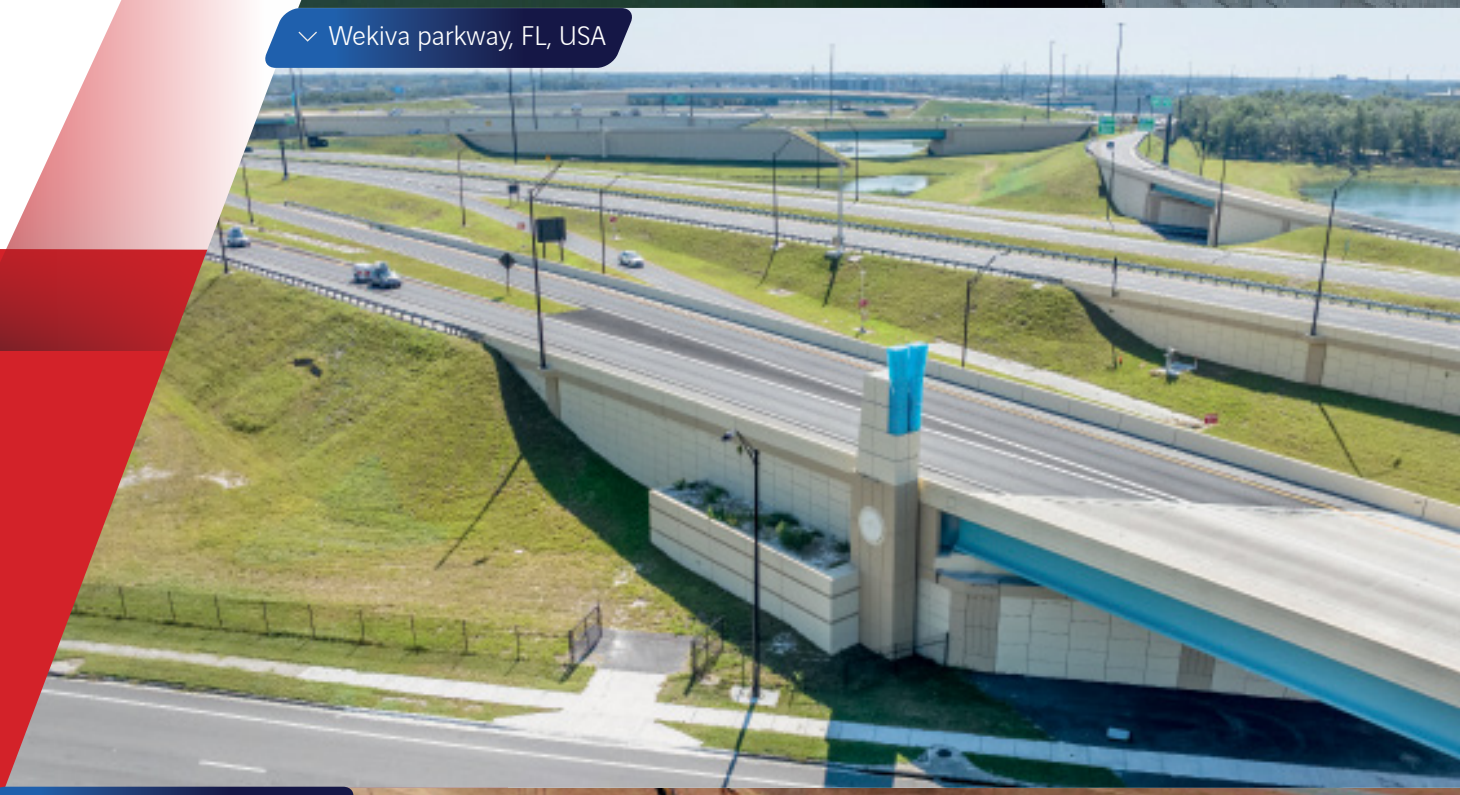
Geoquest designs and supplies crossing structures that provide for a **safe and efficient passage over or under natural and man made obstacles**. Our solutions include **Reinforced Earth bridge abutments, cut and cover tunnels, underpasses, culverts**, and our signature **precast solutions such as TechSpan and TechBox**. These solutions offer **exceptional adaptability to complex environments**—whether spanning valleys and watercourses or integrating into dense urban and transport corridors. By combining **advanced engineering** with **modular, high performance components**, Geoquest delivers crossing structures that are **fast to build, resilient**, and **seamlessly integrated** into their surroundings, supporting mobility and **long term infrastructure performance**.

Our solutions

Reinforced Earth	Reinforced Earth abutments
Precast	TechSpan | TechBox
Corrugated Steel	Arches | Culverts

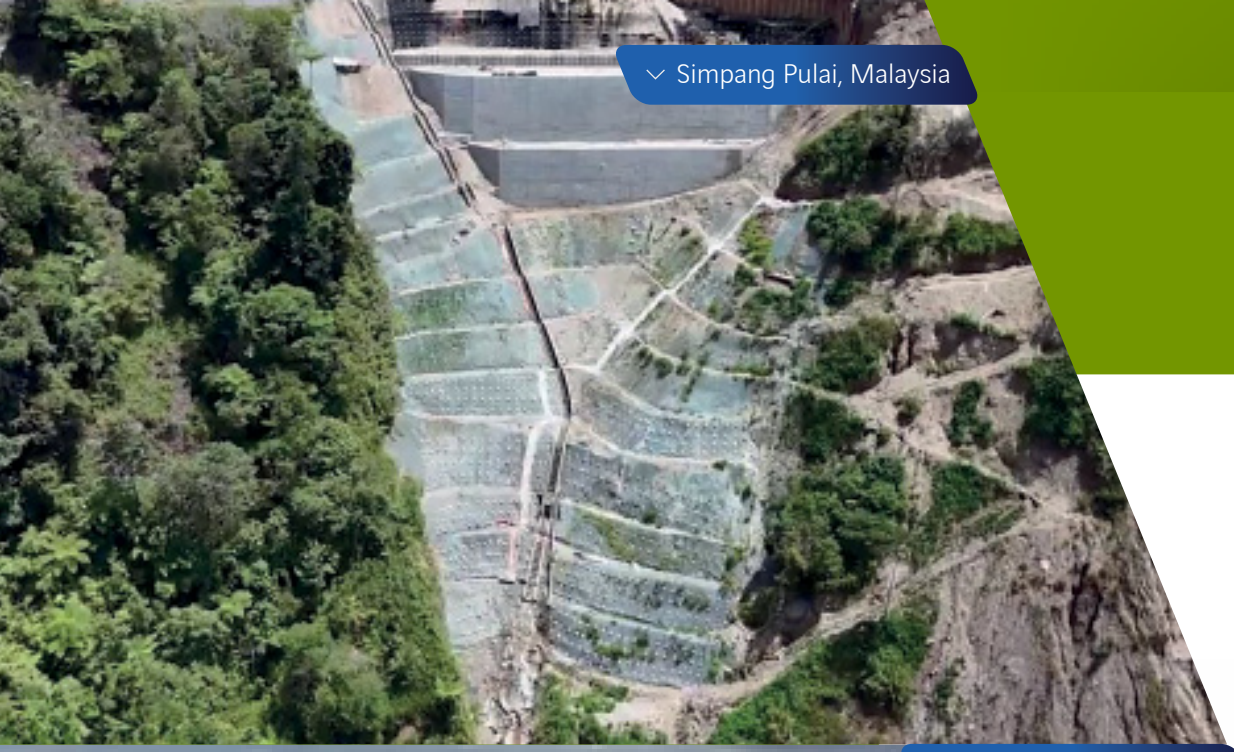


Siniya Island, UAE



Wekiva parkway, FL, USA

Boddington, WA, Australia



Simpang Pulai, Malaysia

Newman, WA, Australia

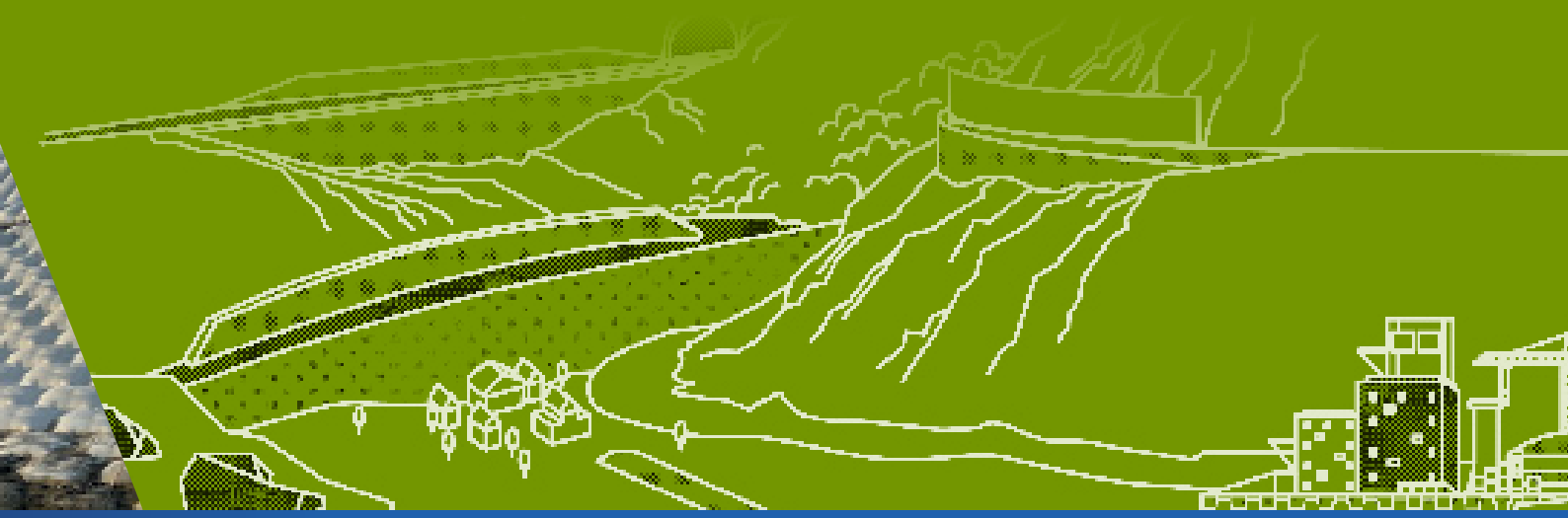
Maheshkhali, Bangladesh

PROTECT

Geoquest protective structures safeguard people, infrastructure, and the environment from natural and industrial hazards. Our solutions mitigate the impacts of avalanches, landslides, rockfalls, flooding, and industrial risks such as noise, explosions or spill containment failures. **Reinforced Earth solutions offer outstanding resilience and energy absorption**, while **TechSpan arches provide robust protection** for vulnerable road and rail sections. Geoquest also delivers **solutions dealing with natural risks such as erosion control mattresses** ensuring **long lasting protection** in areas exposed to scour and hydraulic forces. Drainage challenges are faced by our solution ArmaFlow which integrates 4 configurations from multilinear geocomposite to geonets. Across all contexts, Geoquest combines **geotechnical expertise** with **proven technologies** to deliver **durable, reliable protection** tailored to each site-specific risk profile.

Our solutions

Reinforced Earth	Reinforced Earth walls | Reinforced Earth slopes | TerraLink
Precast	T-Wall | TechWall | TechSpan | TechBox
Geosynthetics	FFCM | TerraGreen | ArmaFlow
Geohazards	Nets | Barriers



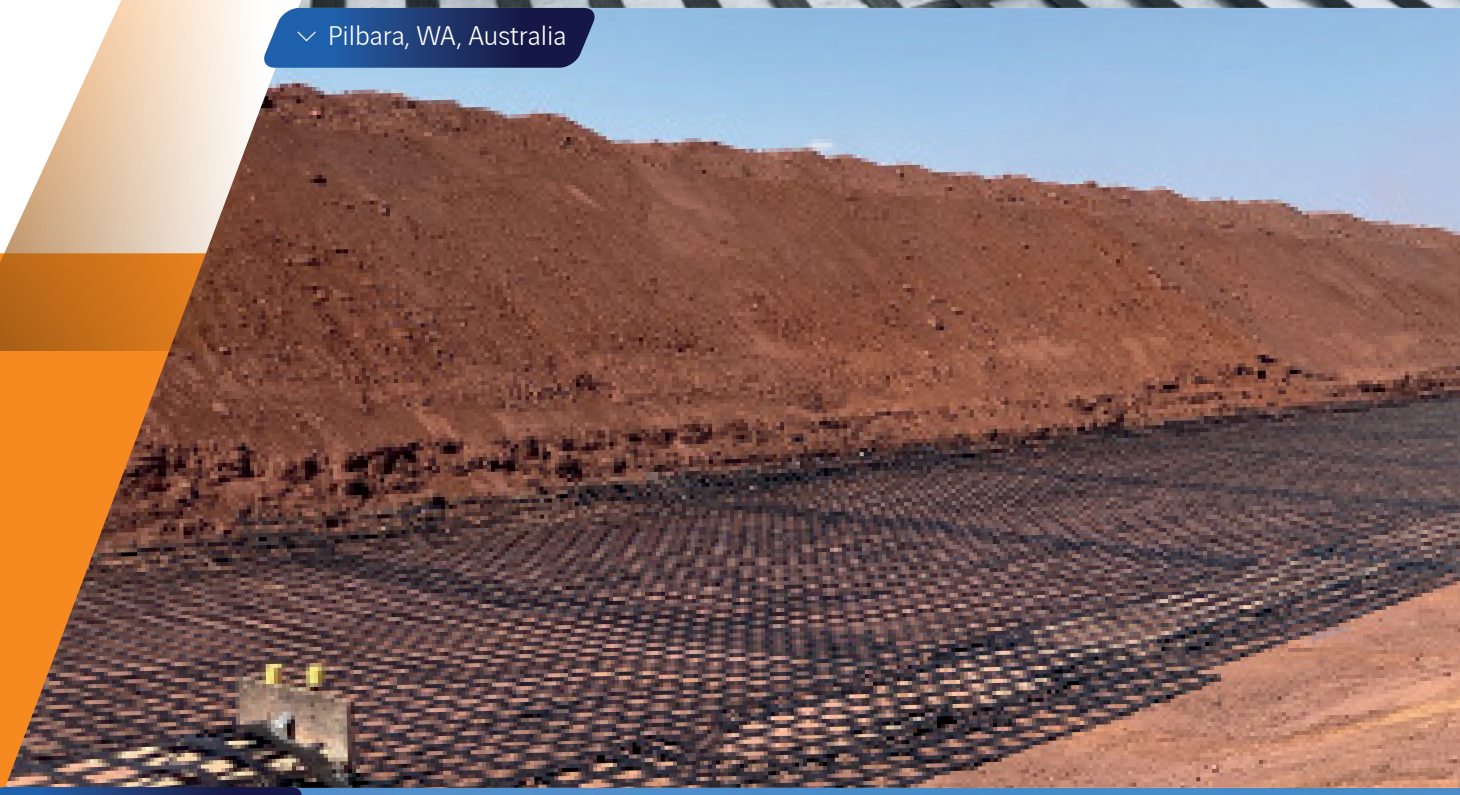
STRENGTHEN

Geoquest provides **engineered strengthening solutions** for **soft soils, voids, embankments**, and **ground stabilization challenges**. Our portfolio includes **high performance geosynthetics** such as **ArmaLynk, ArmaGrid**, and **ArmaWeb**, enabling efficient **load transfer, basal reinforcement, and soil confinement**. These solutions are used in applications ranging from **embankments over soft ground to piled embankments, void bridging, and subgrade stabilization**. By combining advanced materials with **deep geotechnical expertise**, Geoquest delivers strengthening solutions that **enhance safety, durability, and constructability** ensuring the infrastructure performs **reliably throughout its lifecycle**.

Our solutions

Geosynthetics | ArmaLynk | ArmaGrid | ArmaWeb | ArmaForce | ArmaFlow

Bulgaria



Pilbara, WA, Australia

Ayer Hitam, Malaysia