

KAYMAC

Marine & Civil Engineering Ltd



Engineering innovation

Above and below the waterline



Delivering beyond
expectations



About KAYMAC



With a commitment to sustainability, innovation, and exceptional service delivery, Kaymac Marine provides award-winning, specialised marine and civil engineering services.

Operating across the UK, we support a wide range of infrastructure needs, from highway and rail projects in tidal waterways to complex assignments at nuclear decommissioning sites.

Our team maintains a rigorous professional development program, staying up-to-date with the latest advancements in engineering and regulatory requirements. This expertise, coupled with our fleet of company-owned equipment, plant and vehicles, enables us to mobilise efficiently, offering our clients flexible and timely solutions.

We're proud of...

At Kaymac, our project management system, supported by external audits and certifications, upholds the highest quality and safety standards.

Our certifications include:

- ③ **ISO 9001:2015**
Quality Management System
- ③ **ISO 14001:2015**
Environmental Management System
- ③ **ISO 45001:2018**
Health & Safety Management System

We prioritise collaborative relationships and strive to exceed client expectations by delivering high-quality, cost-effective engineering solutions for over 45 years.



Contents

About KAYMAC	2
Our services	4
Our sectors	10
Our CSR	15



OUR SERVICES



SEA OUTFALL SLIP LINING

Comprehensive solutions

Civil & Marine Engineering

At Kaymac, we provide comprehensive civil engineering solutions specifically designed for marine environments.

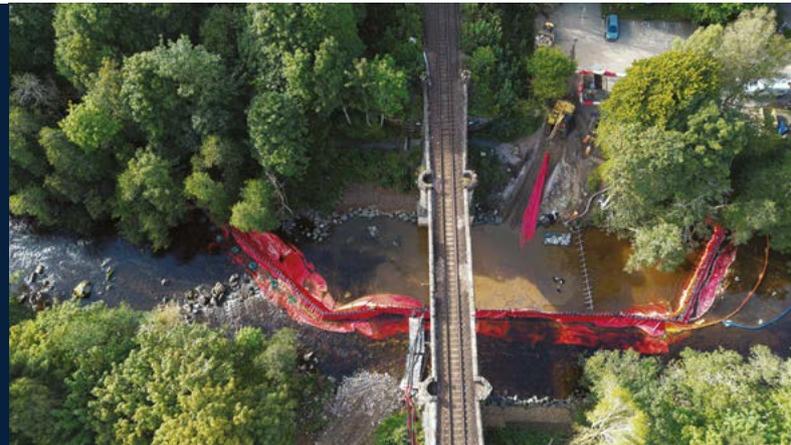
Our in-house capabilities include chartered civil engineers and skilled civils operatives, enabling us to effectively tackle challenges such as coastal erosion, flood management, and rising sea levels. We take pride in our concept and detailed buildable design capabilities, ensuring that every project is executed with precision and care.

Our extensive range of services includes:

- **Bridge repairs and strengthening**
 Reinforcing masonry and timber bridges to enhance their long-term durability.
- **Embankment and revetment stabilisation**
 Enhancing slope stability to protect surrounding areas and infrastructure.
- **Temporary works and access systems**
 Providing secure access solutions for construction in complex environments.
- **Topographic surveys**
 Delivering accurate data to inform project planning and execution.
- **Scour Protection**
 Suitable for extending the life of structures where erosion is aggressive.
- **Structural inspections, maintenance, and repairs**
 Conducting thorough assessments to ensure ongoing structural integrity.
- **Spray concreting**
 Applying protective layers that extend the lifespan of structures.

Quality first

With years of experience and a commitment to quality, our civil engineering expertise allows us to deliver results that not only meet but exceed environmental and regulatory standards.



S
O
U
R
C
E

Commercial diving

At Kaymac, our commercial diving and subsea operations enable our skilled divers to expertly inspect, survey, repair, and install in various marine environments.

We only employ HSE qualified divers unless they come to us on an apprenticeship. Each diver not only possesses essential diving certifications but also has complementary construction skills, including mechanical engineering, stonemasonry, shuttering carpentry, welding, and other trades. This diverse skill set allows us to provide a comprehensive range of turnkey diving services to our clients.

Our teams have gained extensive experience through numerous challenging projects, continuously enhanced by ongoing training at Kaymac. This commitment to professional development has cultivated an excellent reputation for delivering safe and proficient diving and subsea services, ensuring that every commercial diver is fully competent in their role.



An excellent reputation for delivering safe and proficient diving and subsea services.



Confined spaces

In addition to our diving services, we offer specialised confined space services.

From underwater inspections to culvert clearing, repairs, and re-lining, our work is carried out by trained and accredited operatives. Working in confined spaces poses significant hazards, necessitating a thorough understanding of breathing equipment, rescue, and recovery techniques. For your peace of mind, our entire engineering and inspection team is trained to the Confined Space Medium and High Risk level.

All our confined space work adheres to the HSE Confined Space Regulations 1997 Approved Code of Practice. With extensive experience in this field, our teams conduct detailed principal, topographical, and conditional examinations, combining diving and civil operations to provide comprehensive surveys. Your project will be managed by our friendly and experienced team of engineers, ready to offer advice and develop complete solutions tailored to your needs.

Our confined space services include structural inspections, culvert cleaning and de-silting, culvert lining and refurbishment, drain clearance, lock gate inspections and repairs, water jetting, and repointing, all designed to extend the functionality and safety of critical infrastructures.

**Extensive experience
in our field**

Underwater construction

Beyond confined space work, Kaymac Diving Operations encompasses underwater construction, cutting, welding, and burning, concrete placement, structural inspections, lifting operations, dredging, and scour protection installation, ensuring we meet a wide range of project requirements efficiently and safely.



Innovative temporary works

Kaymac specialises in managing water flow in coastal and river environments, providing services from high-capacity river crossings to shallow wading access dams. We ensure safe underwater access for construction, offering permitting, design, fabrication, installation, removal, fish rescue, pumping, and de-watering.

Some of our key temporary works solutions include:

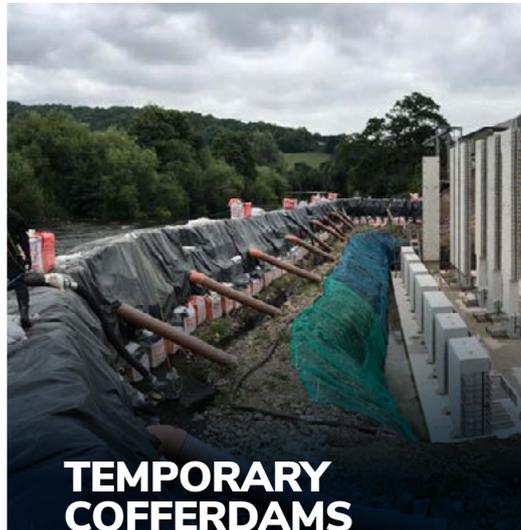


LIMPET DAMS

A limpet dam is a large steel structure placed on a quay wall or dock below the waterline.

By removing water from within, external pressure creates a water-tight seal, enabling repairs in a dry, safe environment.

We have designed, fabricated, and installed limpet dams ranging from 2 to 18.5 meters tall, weighing up to 30 tonnes, as part of larger construction projects.



TEMPORARY COFFERDAMS

Temporary cofferdams isolate submerged work areas, allowing drainage for construction in dry conditions.

Typically made from steel or aluminum frames and waterproof geo-membrane fabric, they create safe working environments.

Additionally, we have experience dewatering areas for long periods using gravel-filled dumpy bags, which can withstand up to 4.5m of water in tidal and river environments.



CONTAINMENT BUNDS

A containment bund retains water and silts generated during construction, preventing sediment discharge into watercourses.

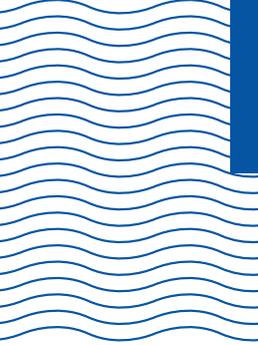
The contained water is treated and recycled throughout the works. This method suits situations where standard frame dams are unsuitable due to water depth or sealing challenges.

Skilled operatives work within the bund, completing permanent works through in-water or diving operations.

Award-winning

Our award-winning Escob West Bridge rehabilitation showcases our innovative approach.

[Learn more here.](#)



TEMPORARY STRUCTURES

Some schemes require urgent temporary works to support structures at risk of collapse.

With extensive experience, we design and install bespoke solutions, often enabling safe installation without operatives working beneath the structure.

This ensures permanent repairs can be completed safely, considering river flow and ecological impacts.



HIGH-CAPACITY FLOW RIVER CROSSINGS

A high-capacity flow river crossing provides safe access to work areas within watercourses.

Kaymac innovatively uses pre-cast concrete culverts or large-diameter pipes to bypass water, ensuring minimal flow restriction and allowing migratory fish and other species to move upstream freely during the works.



PROTECTING THE ENVIRONMENT

Our projects are planned to minimise impact and disruption to surrounding environments.

With extensive experience in environmentally sensitive areas, we maintain strong relationships with local statutory bodies across Wales, England, and Scotland.

Using practical pollution-controlled measures, we promote clear, open communication with statutory bodies during both the planning and delivery stages of a project.



OUR SECTORS

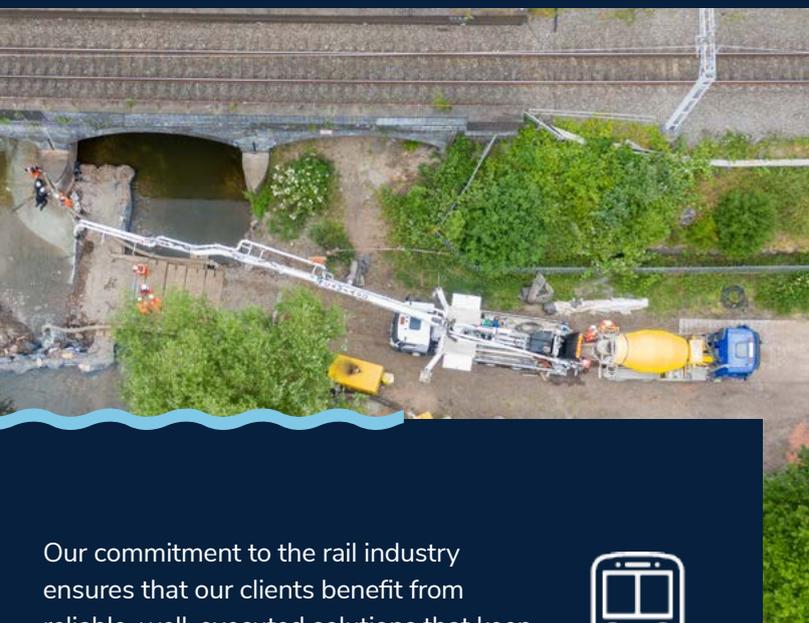
Transport

Since 1989, Kaymac Marine has specialised in complex infrastructure solutions for the rail industry, expertly managing projects that involve challenging marine conditions with minimal disruption to rail services.

We are a RISQS-audited and verified contractor, with all operatives trained in Personal Track Safety (PTS), ensuring compliance with current legislation and safety standards.

Our core services in the transport sector include:

- ⌚ Temporary works and inspection.
- ⌚ Providing safe access for inspection and maintenance of rail structures over water, including culverts and rivers.
- ⌚ Structural survey, repair, and protection.
- ⌚ Rapid mobilisation during rail stoppages.
- ⌚ Scour protection is suitable for extending the life of bridges, piers and abutments, as well as river embankments and tidal estuaries, where erosion can be aggressive.
- ⌚ Kaymac's expertise enables thorough assessments, targeted repairs, and long-term protective solutions for railway infrastructure over water.
- ⌚ Our team specialises in meeting tight deadlines during rail closures, completing critical works with minimal impact on rail schedules.



Our commitment to the rail industry ensures that our clients benefit from reliable, well-executed solutions that keep vital infrastructure safe and operational.



Expert solutions for coastal protection



Coasts & Ports

Kaymac Marine provides comprehensive engineering solutions for coastal, river, and port projects, addressing the unique challenges of these dynamic environments.

We offer end-to-end support, from inspections and planning approvals to project delivery and aftercare.

Our coastal and fluvial engineering services include:

- **Erosion control and flood management**
 Protecting shorelines and managing flood risks through tailored interventions that respect the natural environment.
- **Port and harbour infrastructure**
 Skilled in the construction and maintenance of infrastructure essential to port and harbor operations.
- **Ecologically sensitive solutions**
 Our approach emphasises sustainability, working closely with regulatory bodies to implement pollution controls and safeguard local ecosystems.



Knowledge

Through our extensive knowledge of coastal engineering, we develop solutions that address both immediate project needs and long-term ecological impacts.





Water Infrastructure

Kaymac Marine has been a preferred contractor for water utility projects across the UK, collaborating with companies like Dŵr Cymru/Welsh Water and Wessex Water.

Our expertise covers a range of water infrastructure projects, including:

- ➔ **Reservoir dam spillways and sea outfalls**
We handle everything from initial inspection to repair and full installation of spillways and outfalls, ensuring they meet stringent environmental standards.
- ➔ **Temporary works for pumping stations**
We design and install temporary structures to facilitate work on essential pumping stations, such as Prioress Mill, ensuring continuity and environmental protection throughout the process.
- ➔ **Long sea outfall installation**
We are a leading specialist contractor for the design and installation of long sea outfall infrastructure in the UK. Our experience in water utility projects allows us to deliver high-quality solutions that prioritise sustainability and the longevity of vital water assets.



Preferred Contractor

Project Spotlight: Long sea outfall installation

Critical upgrade in the Severn Estuary

Kaymac Marine & Civil Engineering Ltd completed an £8.4 million replacement of the deteriorated long sea outfall pipeline near Nash, Newport.

This involved installing a 1.4km 560mmØ HDPE pipeline to secure infrastructure integrity within the environmentally sensitive Severn Estuary, a designated Site of Special Scientific Interest (SSSI).

Key challenges and environmental safeguards

- ➔ **Tidal conditions**
Managed the estuary's 12–14m tidal range, the second largest globally.
- ➔ **Environmental protection**
Collaborated with Natural Resources Wales (NRW) to minimise sediment disturbance and maintain water quality.
- ➔ **Permits and planning**
Secured Marine Licence, Environmental Permits, and Planning Permissions, ensuring regulatory compliance.

Design and planning highlights

- ➔ Conducted geophysical surveys to inform site-specific solutions.
- ➔ Partnered with Pebble Engineering Ltd to align construction methods with environmental regulations and seabed conditions.

Pipe installation and innovations

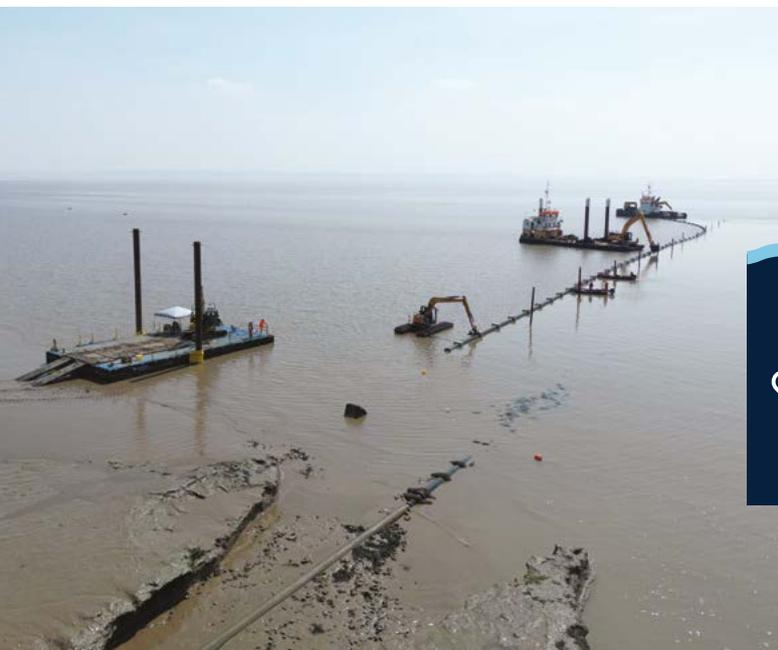
- ➔ **HDPE pipe delivery**
11 sections towed 1,134 nautical miles from Norway.
- ➔ **Stability measures**
Fitted with 260+ bespoke concrete ballast collars to counteract buoyancy.
- ➔ **Specialised equipment**
Amphibious excavators and GPS-equipped dredging vessels handled trenching.
- ➔ **Flotation and submersion**
Installed in 250m sections, precisely submerged during short slack water periods.
Installed in 250m sections in the S-lay sink method precisely submerged during short slack water periods.
- ➔ **Scour protection**
Installed 210 pre-cast articulated concrete mattresses.
Installed 220. No. 8.8-T pre-cast concrete mattresses with the assistance of divers to provide ongoing scour protection.

Inland operations

- ➔ Constructed a temporary cofferdam for safe access.
- ➔ Replaced and upgraded valves within reinforced concrete chambers for long-term maintenance.

Conclusion

- ➔ This project exemplifies innovative marine engineering that respects sensitive ecosystems. Kaymac Marine successfully balanced complex technical demands with stringent environmental protections, ensuring the long-term resilience of Newport's infrastructure.



We're proud to contribute to the development of water infrastructure that supports healthier, more sustainable communities.

Energy & Nuclear



With over 45 years of experience in energy and nuclear infrastructure, Kaymac Marine plays a crucial role in the nuclear decommissioning process, where marine engineering is essential for safely closing and dismantling power plants.

Our services support the safe shutdown of nuclear assets and mitigate environmental risks associated with decommissioning, which involves removing radioactive materials, cooling systems, and preparing sites for future use.

Our Role in Nuclear Decommissioning

Kaymac assists with nuclear cooling systems, which often use seawater to regulate reactor temperatures, ensuring safe discharges back into the environment. Our marine engineers provide essential services to nuclear sites across the UK, including:

- ④ **Berkeley Power Station (2012)**
Created seals for cooling water culverts with in-situ concrete plugs, enabling safe plant decommissioning.
- ④ **Hinkley Point B Power Station (2009)**
Sealed cooling water culverts, supporting secure plant closure.
- ④ **Sizewell A Power Station (2015)**
Conducted detailed surveys of offshore structures, assessing the condition of cooling water culverts.
- ④ **Oldbury Power Station (2019)**
Served as the principal contractor for Magnox, implementing a bespoke shuttering system for a secure sealing process.



Continued expertise

Supporting Active Power Stations

Our expertise extends to operational power facilities. At Pembroke Power Station, Europe's largest gas-fired station, we installed systems to maintain efficient cooling water operations and protect marine life.

Our extensive experience in energy and nuclear projects ensures we meet complex regulatory standards while delivering safe, environmentally responsible engineering solutions.

People

At Kaymac Marine, our people are our greatest asset. We believe in investing heavily in training and development, empowering our team members to grow alongside the company.

As the UK's only fully-funded commercial diving apprenticeship provider, we offer unique opportunities for young people to start their careers in marine engineering.

Our commitment to professional development and safety ensures our employees reach their full potential, equipping them with the skills to perform challenging tasks competently and confidently.

Sustainability

Kaymac is committed to minimising environmental impact through responsible project planning and execution.

Our projects are designed with sustainability at the core, employing pollution-controlled measures and transparent communication with local authorities to protect sensitive environments across Wales, England, and Scotland.

We work proactively with regulatory bodies, ensuring every project aligns with environmental guidelines and leaves a positive legacy. Our approach to sustainability isn't just about compliance; it's about fostering long-term, positive relationships with the communities and ecosystems we work within.

OUR CSR



Employee Highlight

Aaron Williams, a qualified apprentice, exemplifies our values.

"I learned so much through Kaymac's apprenticeship, which helped me transition smoothly from school to work. The hands-on experience was invaluable, and I'm truly grateful for the support I received."



At Kaymac we strive to exceed the expectations of our clients whilst being fully committed to professionalism, Health and Safety, the environment and the wellbeing of our people. That's why when we receive such positive comments it really does mean a lot to us.

Contact the Kaymac team

HQ Swansea

Osprey Business Park
Byng Street, Landore
Swansea SA1 2NR

Bristol

1st Floor, St Andrews House
St Andrews Road, Avonmouth
Bristol BS11 9DQ

Kent

Suite 117, Churchill Square Business Centre
70 Churchill Square, Kings Hill,
West Malling, Kent, ME19 4YU

01792 301 818
enquiries@kaymac ltd.co.uk
kaymacmarine.co.uk

Testimonials

"I find Kaymac Marine & Civil extremely professional, staff are very experienced, approachable with the skill set and problem solving abilities to tackle the most challenging projects. I can't recommend highly enough!"

David Penny
Engineer – NRW

"Kaymac have been an integral part of the project team, their input into problem solving through developing options and temporary works solutions has been valuable in overcoming challenges. The Kaymac team are very knowledgeable when it comes to marine civils, highlighting risks and developing methodologies. When working on site the team from Kaymac are professional, helpful, and positive, and they carry out their works safely and diligently, which have included specific safe systems of work including diving and confined space working. Their quality management & handover processes are also robust and proactive."

Alex Gentleman
Project Manager – Balfour Beatty

"We have used Kaymac for a number of years and they have always been professional, conscientious and adaptable."

Nicolas Ellis
Senior Assistant Engineer – NPTCBC

