

## SUMMARY OF EXPERIENCE

With over 50 years of experience in civil engineering and construction, the Company has developed its expertise in specialised solutions for water related projects.

Our involvement in watercourse maintenance and restoration sector dates back to when the company was formed over 30 years ago. One of our regular Clients needed a machine that could carry out some watercourse restoration works, and we converted our first machine to long reach configuration to do the job. We learned quickly and developed our expertise into providing solutions for our Clients, understanding legislation, the importance of managing the work, considering the safety and environmental risks associated with water. We now have one of the largest fleets of long reach excavators in the UK, complimented with floating plant and equipment for work on water, with a workforce experienced in working on high profile sites with heritage and environmental importance.

The Company was recognised in 2017 for its commitment to the industry and working with the younger generation to inspire and mentor others. Our Director, Damian McGettrick, received a special award at the ICE (Institution of Civil Engineers) Awards for his efforts over 15 years. The company's engineering innovation and engagement with the community was recognised in a further Community Award the same year. Quality achieved in our safe and effective delivery of heritage and environmental restoration projects, has been recognised over several years with awards including:

- (i) ICE (Institution of Civil Engineers) Merit Awards 2019– Team Achievement Award
- (ii) ICE Presidential Award 2019 – Awarded to director Damian McGettrick for his services to the region
- (iii) ICE Special Award 2017 – Awarded by West Midlands Chairman for business achievement and commitment to the region
- (iv) ICE South West Engineering Excellence Awards 2017– Community Award Winner
- (v) ICE Engineering Excellence Awards 2013 – Sustainability & Environment Winner
- (vi) GE (Ground Engineering) Awards 2012 – Winner (Project under £1m)
- (vii) ICE West Midlands Awards 2012 – Small Project Award
- (viii) GE Awards 2011 – Highly Commended
- (ix) ICE West Midlands Awards 2010 – Project Award Winner

These awards demonstrate our commitment to achieving excellent results through good working relationships. Our portfolio demonstrates repeat work, with Clients such as The National Trust and English Heritage - employing us since 2005 and 2007 respectively, up to the present day. We have worked with Hart District Council at Fleet Pond, a SSSI and Nature Reserve that includes ongoing work that started in 2012.

Detailed below is a summary of our experience, working in and around water, on environmentally and ecological sensitive and historic sites.

### **1. Regency Restoration Project - National Botanic Garden of Wales (ongoing)**

Years in the planning this scheme involved the restoration of on the finest Regency waterparks in Britain, Paxton's necklace of 7 lakes, cascades, falls and weirs created more than 200 years ago. Scope of works included the reconstruction of 2 earthwork dams, restoration of 3 lakes, installation of 6 bridges, the repair and maintenance of several listed structures e.g. weirs as well as historic paths and the heritage landscape. The scheme is in its second phase of works now and nearing completion expected late 2019

**2. Wightwick Manor – National Trust**

This project involved the installation of new footpaths and access improvements to this historic house and garden site, working closely with the estate team in keeping the gardens open during the works. Of particular significance was completion of the successful new external hardstanding for the plant sales area with minimal interruption. Works were completed in July 2019.

**3. River Avon Fish Refuge – Environment Agency (Fisheries)**

Working with the Environment Agency this project involved the construction of a new fish refuge in an existing natural depression adjacent to the River Avon. Located near the village of Wasperton, this provided a sheltered fish habitat for spawning and juvenile fish and macro invertebrates to grow. As well as enhanced floodwater storage, woody debris (root plates) were anchored within the fry refuge. Specialist permits ensured these sensitive works considered the nearby valuable marsh area.

**4. River Leam Fishing Platform – Environment Agency (Fisheries)**

This project involved the creation of a new fishing platform to enhance the local leisure amenities on a stretch of the River Leam adjacent to Victoria Park in Leamington, very popular with anglers. Funded and managed by the environment Agency this has proved most popular as a platform to spot the new otters that have returned to the river.

**5. Abbeydale Weir – Wyre Forest District Council**

The removal of this reinforced concrete structure in a live river (River Arrow) required detailed liaison with local stakeholders and the innovative use of the AquaDam to manage the water flows. Silt containment measures proved most effective in mitigating any silt pollution downstream. The project also required close working with the Environment Agency Fisheries team to carry out a fish rescue in the works area. Works were completed in June 2019.

**6. Half Mile Lake Desilting Project – Longleat Safari Park**

Working for the Longleat Estate, the dredging of the famous lake was one of the most challenging projects to date involving the removal of over 22000m<sup>3</sup> of silt. The successful outcome of the project was down to great teamwork and planning to ensure the wide range of safety and environmental risks were managed. The material was pumped almost 2km and routed to minimise any disturbance to the daily operation of the safari park.

Live and potentially deadly hippos, the ever playful sealions, regular boat trips around the lake with strict animal welfare protocols, ecological issues and the need to move the large volume over such a distance was always a challenge – great teamwork was key to such an achievement. Works also included the management of a geotechnical investigation on the dam structures, repairs to bank edges and access paths and the construction of a temporary route for the pipeline including a road crossing.

Works were completed July 2018.

**7. Weir Modification – River Stour, SouthStaffordshire**

The Client for the works was the Severn Rivers Trust working in partnership with the EA for the River Stour Catchment Restoration. Its long-term vision to aid fish migration through the Stour Catchment embarked on a programme to remove physical barriers as the primary focus. The two-stage works included the creation of a notch in the centre of the existing weir to allow improved fish passage with reprofiling of the river banks to increase flood capacity and reduce bank erosion up and downstream of the weir.

WM Longreach used specialist equipment and installed silt prevention measures to remove the concrete from the weir. Landscaping works were completed using a grading bucket to

reprofile the river banks – close working with the landowner ensured that the project was successfully completed.

#### **8. River Brue Vegetation Maintenance, Somerset – SRA & Somerset Drainage Boards**

Working for the Somerset Drainage Boards consortium on behalf of the SRA, long reach equipment was brought in to help maintain a 3km stretch of the River Brue and mitigate flood risk with an important vegetation management programme involving the removal of tree branches and any vegetation from within this flood risk zone of the river.

Work was carried out from a floating platform - the vegetation cut using powered tools, transported by barge and offloaded by a 15-tonne long reach excavator with rotating grab. Working closely with the client team, with regular monitoring of ecology and wildlife issues, together with heavy tidal flows and a flood control gate were successfully managed.

Works were completed March 2018.

#### **9. Tortworth Lake Restoration, Gloucestershire – Tortworth Estate Company**

The valley was dammed to the north of Tortworth Court to produce the lake and the slopes around the lake were planted with trees over 150 years ago. Used during World War II in the winter of 1943/44 as a test site for amphibious vehicles to be used in the 'D' day invasions, this involved restoration of an important heritage asset. Removal of silt and the re-profiling of the watercourses and lake island ensured that the lake remained in good order. Desilting was undertaken of the upper end of Tortworth Lake and a silt curtain installed to protect fish stock, while a geotextile Nico span barrier was installed to extend the island and contain silt.

Works were completed May 2018.

#### **10. Highfields Park Lake Restoration, Nottingham – Nottingham LEP (on behalf Nottingham City Council)**

This project saw the restoration of the Lake in Grade II listed Highfields park, also included in the English Heritage's Register of Parks and Gardens of Special Historic Interest. With many parties engaged, years in the planning, this HLF funded project required early involvement by WM Longreach. The redevelopment works comprised lake restoration, fish rescue, temporary works, haul roads, silt removal, earthworks, gates, railings, ironwork, paths, services, building refurbishment, civil engineering works including ornamental bridge restoration, resurfacing and disposal of silt after drying out period (to be done as phase 2), landscaping and site reinstatement.

WM Longreach's innovative solution to pump and store dredged contaminated silt in geotextile bags in the restricted space on site, minimised the impact on the environment. Working sensitively and to schedule despite challenges of public access, flood risk, health and safety issues of working around water and challenges of disposing the silt, together with good co-ordination of the different teams involved in the project was key to its success.

Phase 2 works were completed October 2018.

#### **11. Shugborough Car Park Extension & Drainage, Staffordshire – National Trust**

Acting as principal contractor WM Longreach's scope of works included: extension of existing car park (removal of all grass areas and subsoil), installation of timber kerb edging, laying of foundations for ticket office, tarmac resurfacing works to existing paths/car park areas, installation of service ducts, drainage works and associated landscaping. A works programme was developed to ensure close working with the archaeologists on the archaeological watching brief was strictly adhered to and special protection employed for trees in the Grade 1 listed parkland.

**12. Cockington Lakes Restoration, Devon – Torbay Countryside Trust**

Funded by the HLF with management support from Torbay Development Agency, this project saw the three historic lakes in Cockington Park in Devon restored in the most challenging location. Situated in a narrow steep sided valley with only single track access, the method was key to carrying out the works. WM Longreach used an innovative pumping system to move over 6000 tonnes of silt a distance of 500m with a vertical climb over 30m. Working with volunteer groups to relocate the fish and clear areas of vegetation proved a real success and the public engagement realised a future legacy.

**13. Historic Croome Landscape Park Watercourse Project – National Trust**

As part of ongoing maintenance to the Croome River, one of Capability Browns first landscape projects, the company used a range of specialist equipment to remove vegetation. From the smallest 4 tonne long reach to navigate the narrow channels to the low ground pressure (LGP) 13 tonne machine in the wider river section, this LGP machine sat on the river bed when the pontoon solution would not work due to low water levels. The latest works were completed in 2017.

**14. Crystal Palace Dinosaur Park Lake Works – London Borough of Bromley**

Working with conservation specialists Skillingtons on the Grade 1 listed watercourses and gardens at Crystal Palace, the main project involved the renovation of the world famous (the worlds first) Dinosaur Statues. WM Longreach provided floating equipment to access the lake islands and build a new water level control structure. Innovation here included the use of the AquaDam to provide a dry works area and minimise any disturbance to the historic landscape. Additional works were completed in 2019.

**15. Fleet Pond Environmental Enhancements, Hampshire – Fleet Pond Society**

With a grant received from Thames Water, the Fleet Pond Society (Patron Chris Packham) were able to proceed with a long-awaited project that would reduce pollution from the sewer system in flood conditions. This would offer long term protection for the SSSI and ecologically sensitive site, home to many rare species in the Local Nature Reserve.

**16. Chinese Bridge – Croome River, Croome Landscape Park Worcestershire**

After many years of fundraising the recreation of William Halfpenny's 'Chinese Bridge' dating back to the 1740s finally became reality. The Capability Brown designed Croome River had to be drained for the bridge construction, which would be detrimental to the Park. An innovative 'AquaDam' solution allowed the area local to the new bridge to be drained with minimal disturbance, located in front of the historic Croome Court. No material was required as the dam is water filled and designed to retain up to 1.8m of water.

Working with the Green Oak Carpentry Company, the bridge was safely installed ahead of schedule.

**17. River Parrett Maintenance Dredging, Somerset Levels – Parrett IDB**

Funded by the Somerset Rivers Authority, these were a continuation of important maintenance dredging works, for flood risk reduction on the Somerset Levels and Moors. 2.2km of the Parrett were dredged, with the EA granting special Agency Powers to the IDB for working on the main river. The dredging was undertaken in two main phases: phase 1 working mainly from the banks with silt placed on the bankside; phase 2 with a machine mobilised onto a floating pontoon, loading barges in the river with the silt deployed into nearby fields.

Despite challenges from the weather over the winter period including periods of heavy rain with high water levels, strong winds hindering the mobilisation and movement of floating plant on the river, together with high river flows, the works were successfully completed in March 2016. Determination and hard work of the team resulted in over 20,000m<sup>3</sup> of silt

being dredged from the river in 15 weeks.

#### **18. Restoration of Spetchley Park Gardens – Spetchley Charitable Trust**

Funded by the Heritage Lottery Fund, this important project saw the restoration of the historic lake at Spetchley in Worcestershire with the scope of works including lake dredging, stone walling, landscaping, specialist ironwork gates and fencing. The lake edge had become eroded over time and was reconstructed with coir rolls and lined with puddle clay. Works were completed on time and under budget in November 2015.

#### **19. Dredging of the historic lakes at Fonthill, Wiltshire – Fonthill Estate**

The lakes were originally built over 250 years ago when a dam was constructed across the valley. A restoration project was on the cards for over 20 years and finally got underway in 2015 when we worked with their team to devise a solution and involve the key stakeholders. Due to the scale of the project, moving over 30,000 m<sup>3</sup> of silt, a fleet of long reach excavators and large dump trucks were used and completed the works at an average rate of 1000m<sup>3</sup> of silt per day. A mobile plant permit together with deployment license was obtained from the Environment Agency.

The initial phase was completed October 2015 and a second phase is being planned for 2019.

#### **20. Dredging and flood defence improvements, Hampshire – Hart District Council**

Cricket Hill Pond near Yateley is a key feature to the local residents providing a leisure amenity together with essential flood storage. The pond had become overgrown and the bank eroded, causing the pond to leak at the outflow. WM Longreach installed a silt retaining structure and then dredged the silt, clearing the vegetation and improving the integrity of the outfall. This had to be carried out at short notice due to heavy rainfall in early 2016. This project is one of many carried out for this client since 2012.

#### **21. Dredging and restoration of Stoneydelph Pond – Tamworth Borough Council**

Working directly for the local authority, over 3500m<sup>3</sup> of silt was to be removed from this important balancing pond, for both flood prevention and environmental benefit together with community support. Undertaken in the winter months had its challenges, but the work was completed on time and silt taken to a temporary storage area and subsequently removed from site. Works were completed in summer 2015.

#### **22. Fleet Pond Restoration Project, Hampshire – Hart District Council**

As the largest freshwater lake in Hampshire, the restoration required the use of floating plant and equipment and an innovative proposal for the removed silt. WM Longreach proposed a 'Nicospan' solution to retain the silt and form artificial islands, which would also provide benefit for the wildlife and ecology of the SSSI site. Commencing in 2012, the works are still ongoing, demonstrating the Company's commitment to repeat work and long term relationships. The project won the prestigious ICE Engineering Excellence Sustainability and the Environment Award in 2013. Phase 3 was completed in 2014 involving the construction of more lake islands using silt build up from the lake, with further projects (2015 & 2016) to improve the resilience of Fleet Pond, with the construction of pollution prevention and flood attenuation ponds.

#### **23. River Perry Maintenance Works – River Perry Group & Shropshire Wildlife Trust**

Following flood events in the area from local river catchments, the Shropshire Wildlife Trust supported the removal of vegetation and silt, forming phase 1 of a self-delivery by the local River Group comprising landowners affected by the flooding. After discussion and permissions with the Environment Agency, Phase 2 was agreed enabling much needed removal of silt previously dredged over 30 years ago. The river length to be maintained was over 8 km and the silt was placed locally to the watercourse. The embankments were

reprofiled and compacted as required. Regular progress reviews with the EA ensured compliance with the methodology and volumes to be removed.

Phase 3 was completed in Summer 2016 with further works (6km section) in 2018.

#### **24. Croome Park Wetland Restoration, Worcestershire – National Trust**

This project involved the desilting and vegetation management of a wetland constructed as part of a mitigation strategy for the larger watercourse restoration works. Using hydrographic survey data the excavation was carried out underwater referenced to the silt depth recorded on the survey. The silt was spread locally on the adjacent land. Plant and equipment was carefully selected to account for the sensitive nature of the site.

#### **25. Loch Leven Wetland Creation Project – Scottish Natural Heritage**

This challenging project on the remote St Serf Island in Loch Leven looked to improve the biodiversity with ecological and wildlife enhancements through the creation of a series of ponds to create a wetland. Access had to use a lightweight pontoon to transport the excavator to the site, using bio-oils and an experienced Operator.

#### **26. Restoration of Old Park Water, Wrest Park, Bedfordshire – English Heritage**

The works involved the removal of silt and the reinstatement of this historical watercourse to improve the hydrology at one of Capability Browns creations. As main contractor, the silt was spread locally and subsequently landscaped into the adjacent fields. The lake edges were reinforced using natural materials and reinstated. A follow-on scheme involved the restoration of over 4000 metres of drainage within the historical woodlands, which was undertaken using compact excavators.

#### **27. Clearance and restoration works, River Severn, Shrewsbury**

Recent flood events had deposited material along the main river channel used by the Rowing Club and the River Cruises boat, creating a safety hazard. These emergency works for Shrewsbury & Atcham Borough Council involved WM Longreach as main Contractor to level the material and restore the bank edges. From experience, the right plant was selected – a special ‘walking excavator’ machine that could move the material efficiently and safely in a time critical window in the river, completing the works successfully.

#### **28. Wyrley Essington Branch Canal, Staffordshire**

This project formed part of an environmental improvement scheme for this branch canal, formerly part of the main canal network, involving vegetation and silt removal to enhance the area for wildlife and ecology. Now under ownership of South Staffordshire Council, the limited access proved a challenge requiring both temporary roadways and the use of floating plant. This scheme won a prestigious environmental award on completion on the remaining phase. As main Contractor, WM Longreach completed the works ahead of programme to the satisfaction of the Client on both occasions (2008 to 2010).

#### **29. Queens Park Lake Restoration, Crewe, Cheshire – Cheshire East Council**

The desilting of the lake formed an essential part of the restoration works, with over 8,000m<sup>3</sup> of silt to be removed. This was made more challenging by the location of the Valley Brook culvert running under the lake and the need to demolish two lake bridges. WM Longreach agreed a methodology of draining the lake with the EA to avoid silt pollution and a new method for treating the silt to avoid the wet material lying on fields in the park. By treating the silt in excavated 'cells' the spreading of silt was omitted with a huge saving on programme time. The cells were backfilled and the adjacent fields reinstated. The safety of the public was paramount, with secure fencing erected and patrols carried out to ensure no unauthorised access was gained into the work area.

### **30. Wrest Park, Bedfordshire – English Heritage**

This project required the investigation of the old weir structure for archaeological importance. A temporary dam was constructed and the weir de-watered for inspection by a team of archaeologists. By using a 'borrow pit' on site and re-useable bags the dam was installed efficiently with a saving on cost and programme. A driver and banksman were used to carefully excavate the material without disturbing the weir. When fully inspected, a geotextile membrane was installed to protect the weir structure, the weir backfilled, the dam removed and the area made good.

### **31. Croome Landscape Park, Worcestershire**

This contract comprised the removal of 25,000m<sup>3</sup> of silt from the artificial Croome 'River' and spreading on adjacent fields for landscaping. This park was 'Capability' Brown's first landscape project that inspired the English country garden style throughout Europe. Working direct for the National Trust and consulting with the Client team on the historical and archaeological issues, the methodology was agreed to mitigate any impacts and record any significant finds. Great care had to be taken to avoid any disturbance to the Park and the lake edging features. Close liaison with the Environment Agency enabled an exemption to be obtained for the dredged material and a plan to be delivered for the management of wildlife and ecology. The project was completed ahead of time within the agreed budget.

### **32. Shugborough Hall River, Staffordshire**

This project included the re-profiling of the river to improve the flow capacity and the installation of a 'soft' engineering revetment to stabilise the riverbank, promoted by the Environment Agency for allowing wildlife and vegetation to colonise. As part of a trial project, the dredged material was spread out to dry and subsequently re-used in the works. The use of low ground pressure tracks on the excavator and the extended reach enabled it to work effectively in soft ground and minimise disturbance to the banks.

### **33. Coalbrookdale Watercourse Restoration, Shropshire**

The company was involved during all three phases of the watercourse improvements being carried out for Telford & Wrekin Borough Council. Employed by Mowlem, our expertise and long reach plant were used to complete the vegetation clearance and lake de-silting works of these historic furnace pools and associated watercourses. Originally used as the water feeds for the blast furnaces for the Coalbrookdale and Ironbridge industries, this lottery funded project involved extensive restoration in a sensitive location. The success can be attributed to the team working of all parties and the discussions with the Environment Agency and English Nature. This project was runner up in the ICE Midlands awards in 2007.

### **34. Midlands Safari Park, Worcestershire**

Working directly for the Safari Park, this involved the removal of silt from the animal pool area. The excavated material was transported to an area of the site to be landscaped. The management of the animals was a key issue together with safety of the public, mainly staff during the closedown period. Low ground pressure plant ensured that any disturbance to the landscaping was minimised. Due to the inability to drain the pool a larger long reach excavator with 24 metres of reach was used to work from the one bank side to avoid entering the base of the pool. A second phase used

The Company was also involved in the second dredging operation some 10 years later, where an excavator mounted on a floating pontoon was used. This demonstrates nicely the repeat business we strive for.