



Leak Sealing & Waterproofing • Concrete Repairs • Crack Injection • Pressure Pointing & Grouting • Structure Condition Surveys • Protective Coatings • Joint Sealing
Diamond Drilling & Sawing • Concrete Bursting & Crunching • Robotic Demolition

Scheme: **Haweswater Aqueduct Maintenance**
Problem: **Lack of access into Aqueduct Tunnel**
Solution: **Diamond Drilling and Wire Sawing**
Client: **Land and Marine**

As part of a major commitment to the HA Maintenance scheme, Ram Services Limited provided teams of concrete cutting specialists to create new large access openings at strategic locations to enable labour, plant and materials to get into the tunnel and travel to the work locations needed.

Working in conjunction with Land and Marine’s personnel, the tunnel roof was supported by a grillage of steel beams erected above and resting on the surrounding structure, before sections of the tunnel roof were cut away using diamond wire sawing techniques. As each section was released it was lifted away and replaced with temporary fabricated covers for the duration of the job.

Access openings were required at multiple locations to meet the scheme requirements.

Additional work undertaken included drilling large diameter holes in the tunnel roof to provide connections to tunnel ventilation equipment.

