# CASE STUDY

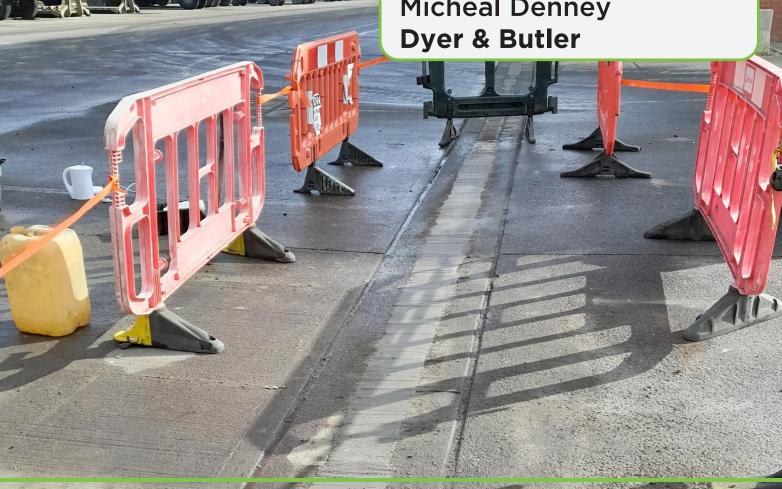


I'm not one for marketing products, but I will give credit where it is due, especially with this emergency repair material we recently used on an Army Tank Garrison where the client has had some ACO drain unit failures in the PQ handstands.

The HardMaster W615 flowable mix was recommended with a 31N/mm<sup>2</sup> in 24 hrs and 50N/ mm<sup>2</sup> at 28 days- to allow traffic with minimal disruption to the Tank movements.

Big thanks to MEON and the team of concrete repair specialists, excellent products and prompt delivery

**Micheal Denney** 



**EMERGENCY REPAIR MATERIAL RESOLVES ACO DRAIN UNIT FAILURES AT ARMY TANK GARRISON** 







#### PROBLEM:

Dyer & Butler have a long history in construction of high-quality projects, within the most challenging defence and aviation sectors. A recent project included the challenge of reparing failing ACO drains, in a very busy tank training garrison with very heavy military equipment traffic. The surface water drain off was starting to affect the surrounding area, the impact of leaving this situation speeds up exponentially and causes more damage in the future. In such a busy heavy military environment, safe and efficient repair was essential.







## SOLUTION:

This emergency repair would require a fast early strength concrete, with the ability to be used at over 200mm depth. It was crucial the repair would be resistant to the impact of heavy military traffic and a have a fast-acting time, with minimal shrinkage. We recommended our MAGMA HardMaster W615 as the most effective solution for the problem at hand, meeting all the requirements for such a repair.



## RESULT:

The MAGMA HardMaster W615 was a highly effective solution, thanks to its excellent early compressive strength and ability to withstand the rigours of the heavy military traffic, in just 90 minutes. The product benefits from continuous strength gain and shrinkage resistance as the product cures, reaching its maximum strength in 24 hours. The product was easily applied without any need for compaction equipment due to the flowing nature of the product, which allowed for minimal disruption of garrison procedures.



# **SYSTEMS USED:**

# HardMaster W615 Rapid Strength Flowable Backfill Concrete



HardMaster W615 is a high-performance rapid set and rapid strength flowable backfill concrete which is designed to complement the HardMaster range of bedding mortars, it can be opened to traffic in 90 minutes after being mixed and placed. It is perfect for any application that requires high early strength gain and a quick return to service time.

# **BENEFITS:**

- · Flowable and self-compacting
- High final strength
- Excellent bond strength
- Shrinkage compensated

# **RECOMMENDED USE:**



Highways







Facilities

# **PROJECT OBJECTIVES:**

## SAFETY



Focused on improved road safety through performance whilst removing high risk operations in support of the industries Zero Carbon goal.

# DURABILITY



For every application, we aim to be able to demonstrate ways to reduce Whole-Life costs through improved system performance.

# SUSTAINABILITY



Supporting central government Decarbonisation strategy with a goal to reach net zero by 2050.