

# UltraCrete improving road safety near Shrewsbury



UltraCrete has joined forces with Highway Workforce to repair and replace a failed carriageway frame and cover on a busy road near Shrewsbury.

CONTRACTOR: HIGHWAY WORKFORCE

MATERIALS USED: MORTAR BUOY

Highway Workforce, specialist contractors working on behalf of Telent, have utilised UltraCrete's market-leading highway maintenance materials to repair a defective carriageway 2 frame and cover.

Despite the rural location, the A49 in Little Lyth is an extremely busy thoroughfare for HGVs. This meant that extended road closures would not be an option.

What's more, the carriageway frame was partially buried by the grass verge and over the years, rain and washout had filled the lifting holes and chamber with dirt and silt, adding another element to the repair.

To assess the full extent of the damage, Highway Workforce began by cutting away the grass verge to reveal the full frame and cover. The silt was then removed to reveal the brickwork chamber.

A standard hammer test was carried out to check for brickwork damage with Highway Workforce quickly establishing that the substrate was sound and the frame and cover just needed to be replaced.

The area was marked up and broken out in line with the SROH, the old frame and cover removed, and the area swept clean of any spoil. Once the frame and cover had been lowered into position, the frame



was levelled with the existing road surface using a string line and Install Plus levelling feet with external shuttering placed to retain the flowable mortar 50mm beyond the flange edge. To further reinforce the shuttering and prevent any seepage, a sand bund was applied behind the shuttering. Once in place, a carriageway 2 Mortar Buoy® was inflated to seal the chamber top and frame ahead of the mortar pour.

UltraCrete Envirobed® CD534 Flowable Red was mixed and poured to fully encapsulate the frame flange. Just 12 minutes after the application of Envirobed®, the Mortar Buoy® and shuttering was removed, and the area prepared to receive Enviro Mastic® rubber modified mastic asphalt.



UltraCrete Enviro Mastic® was applied by the contractors in standard layers and stone chippings added to the final wearing course. To complete the project, the reinstatement was overbanded to seal the old and new surfaces and road markings replaced using Instaline in white.

The entire installation took a little over 4 hours to complete. So in no time at all the road was reopened, allowing all commuters and HGV drivers to safely carry on with their day.

What's more, utilising Enviro Mastic® significantly contributes to Highway Workforce's environmental goals, saving approximately 168kg of CO<sub>2</sub>e compared to traditional asphalt.