



# M20 Smart Motorway GS6 Boom & Instaboom Vehicle Incursion Gate

## Project Breakdown

Client: Kier

Location: M20 Smart Motorway J 3-5

Live dates: June 2018 - March 2020

Product: GS6 Boom and Instaboom



## Project Background

Instaboom is quickly becoming one of the most reliable forms of incursion gate for highway projects. A portable, quickly deployed, solar-powered vehicle incursion gate.

There is also a unique add-on feature – the GS6 Boom, which acts as an over-height warning and asset protection system for highways and railways that physically closes a work lane as a breach is detected.

GS6 Instaboom was developed with the Kier Highways M20 team after they received the coveted Blue Star award for safety implementation using the standard anti-incursion Instaboom product.

An 18KVA overhead power line spanned both carriageways and the active work areas Kier Highways wanted to see a radical improvement of the safety and protection over a standard GS6 pole and cone layout.

Within weeks of the first discussion, the Instaboom team deployed a patented prototype detection systems using an IP68 laser detector mounted on a standard GS6 pole. The sensor was connected to an Instaboom barrier, some 40m down the work lane.

As the set height restriction is breached, the laser triggers the Instaboom to come down, barring further access to the work zone and preventing a cable or over head obstacle strike. An emergency number notice allows the stopped vehicle to request assistance and the site manager to assess if the detected over height vehicle has been reduced and is safe to proceed.

“Instaboom is a very useful innovation and tool for preventing vehicles coming to close to the workforce in busy and challenging environment such as smart motorways. We also trialled the GS6 Boom on the M20 project, which is an add-on that uses a sensor to detect if an over-height vehicle approaches and deploys the barrier. This was ideal for the M20 due to an overhead electricity cable being in the works area. This innovative solution enabled us to protect the workforce from this hazard effectively.”

## John Quarless, Health and Safety Manager for the M20 Smart Motorway Upgrade

