

## Case Study

### Hindhead Tunnel with Hardwired Road Studs



## Clearview Intelligence Hardwired Bi-Directional Studs installed in the Hindhead Tunnel

### Background

The A3 trunk road is a major highway between London and Portsmouth on England's south coast with an average of 28,400 vehicles passing through the road each day. To ease congestion and enhance road safety on this busy route, the Highways Agency implemented a 6.5km dual two-lane highway scheme at Hindhead in Surrey.

The scheme, costing £371 million, includes a 1.8km twin-bore tunnel which removes the trunk road from Hindhead village and from the Devil's Punchbowl.

The Devil's Punchbowl is a famous National Trust preservation site of natural beauty, which will benefit from the closure thanks to reduced pollution and noise levels.

The project intends to make journeys quicker and safer and also aims to remove much of the present peak time 'rat-race' traffic from country roads around Hindhead. The project commenced in 2007 with the tunnel being dug the following year.

### Solution

In October 2010, Clearview successfully installed 868 Hardwired Bi-Directional studs split equally between the 2 tunnel bores.

Each bore has 2 lanes and there are 64 independent strings and 36 controllers. The Bi-Directional road studs have been developed with a shallower profile and are positioned every 4.5 metres between the white central line markings.

On July 27th 2011, Transport Secretary Philip Hammond set the wheels in motion when he declared the tunnel officially open. Motorists benefit from ultra bright adaptive lights, emitting a full 360 degrees of illumination when switched from Uni-

Directional to Bi-Directional delineation when in contra-flow mode.

### Key Benefits

- Quicker, smoother journeys
- Reduced congestion, road rage, and collision potential
- Brighter, more clearly defined path of light guiding motorists through the tunnel
- Preserving Devil's Punchbowl - a famous National Trust preservation site and Areas Of Natural Beauty (AONB)
- Road studs provide full 360 degrees of illumination

*This new road will transform journeys on the A3 - improving journey times by around 20 minutes or more at busy periods - and will deliver a threefold return on investment for the economy*

**Philip Hammond**  
Transport Secretary