

# Deneholes

## WHAT HAPPENED

During a nightshift on the M25 widening works between junctions 1b – 3 in Jan this year, a ‘hole’ was observed in the verge approximately 1.75m from the edge of the northbound carriageway (MP 12/9). On closer inspection 2 engineers approximated that the ‘hole’ was over 1.5m diameter and in excess of 5m deep. Fortunately this was seen before anyone fell into it.

Following a CCTV survey and the attendance of a Geotechnical Engineer the hole was identified as a ‘Denehole’ and measured to a depth of 10m. Deneholes are manmade excavations carried out in the early 16th and 17th century to enable access to unpolluted buried chalk materials which were then spread on fields as fertiliser. They are particularly prevalent in the Kent and Essex area.

The Hazard:

The small access shaft seen at ground level normally widens out to a cavernous network underground.

A second Denehole has been identified on the

southbound M25 carriageway, at MP 12/0, some 1.2m behind the HA boundary fence. This was exposed when a vehicle crashed through the fence during the night about 18 months ago. A second vehicle stopped and the driver tried to assist the first. The second driver fell into the Denehole and had to be winched out by the fire brigade.

Unfortunately no mapping exists of the locations of these Deneholes and they are only accurately located once they become exposed. There is no visible scarring at ground level and no features identifying their locations.



## LEARNING POINTS / ACTIONS TAKEN

Action Required:

- 1) Increased level of vigilance when working off carriageway, particularly in the South East.
- 2) Any suspect areas of ground should be probed for soft areas prior to walking on them or otherwise avoided.

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**LOCATION:** ON-HIGHWAY  
**ACTIVITY:** ACCESS & EGRESS & WORKING AT HEIGHT  
**SUB ACTIVITY:** N/A

**ALERT STATUS:** Normal  
**DATE ISSUED:** 23/03/2009  
**INCIDENT No:** 00219