



Project Title:	Fawley Tunnel
Client:	Highways England
Date of Work:	Jun 2008

Project description

The original scope of works given by the client was to repair areas of bulging masonry in the portal wall. Following the erection of the independently tied scaffolding the true state of the portal was revealed. The masonry had bulged to the point of collapse and the top half of the portal required renewal in brickwork. It was agreed that the reason for the bulging was due to ingress of ground water into the head of the portal from the rock cutting above.

The solution was to carefully dismantle the bulging and spalled masonry. A 1 and ½ brick thick portal was constructed with weepholes. On completion of the brickwork, an in-situ concrete beam was cast along the top of the portal to act as protection from water ingress. The voids behind the brickwork were backfilled with clean drainage stone. To provide a feature and to be sympathetic to the structure, the original masonry stringer course was reinstated.

The outcome is a structure that poses no safety risks to surveyors or members of the public that will require minimal maintenance for the coming years.

Project Constraints

- Poor condition of structure.
- 3rd party negotiations (landowners).
- High Level access.
- Plant and Materials delivery logistics.
- Site Security.
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