

MELBOURNE METRO RAIL PROJECT ENVIRONMENT EFFECTS STATEMENT
INQUIRY AND ADVISORY COMMITTEE

MMRA TECHNICAL NOTE

TECHNICAL NOTE NUMBER: 055
DATE: 2 September 2016
PRECINCT: Tunnels Precinct
EES/MAP BOOK REFERENCE: Maps 9 of 15 and 12 of 15 (Horizontal Alignment Plans)
SUBJECT: Emergency Access Shafts

NOTE:

1. The Concept Design proposed two sets of alternative locations for Emergency Access Shafts (also referred to as 'Emergency Access Structures' in the EES Map Book) in the Tunnels Precinct in the Domain Parklands and at Fawkner Park:
 - a. Fawkner Park – at either the north-east corner of the park or at the southern Tunnel Boring Machine (**TBM**) launch site location (though the latter option became redundant when this launch site location was abandoned – see Technical Note 016); and
 - b. Linlithgow Avenue – at either the Queen Victoria Gardens or Tom's Block.
2. Following further consultation with the Metropolitan Fire Brigade (**MFB**), it was agreed that the aforementioned Emergency Access Shafts are no longer required at either Fawkner Park or Linlithgow Avenue, due to the provision of design requirements which will be given effect through a Fire Engineering Brief to the PPP Contractor. The design will be required to include:
 - a. Wide access stairs at each of the station ends to facilitate MFB access from the surface to the start of the tunnels;
 - b. Walkways in the tunnels to allow MFB movement from the stations towards the incident location;

- c. Cross-passages between tunnels so that, in case of an incident, the MFB can travel up the non-incident tunnel and then cross into the incident tunnel close to the incident location;
 - d. A tunnel ventilation system that controls smoke flow in the tunnel, allowing the MFB to approach an incident location in clear conditions;
 - e. Regular, closely-spaced hydrant connection points in the tunnels to enable a hose connection close to an incident location; and
 - f. Allowance for emergency rail trolley vehicles at stations to allow the MFB to transfer crews and equipment up the tunnels to an incident location.
3. Although the Emergency Access Shaft is no longer required at Linlithgow Avenue, that site also provided for a potential temporary secondary access to the TBM tunnels if required. It is proposed to retain this location only for a potential shaft to access the TBM if required by the PPP Contractor for temporary purposes during construction. Any impacts are therefore expected to be less than those assessed under the EES.
4. The final determination of whether a temporary shaft is required at this location would be made during the detailed design stage.

CORRESPONDENCE:

No correspondence.

ATTACHMENTS:

No attachments.