

North Ealing Car Park – fire and rescue vehicle access requirements

The North Ealing site is located slightly north of North Ealing station, and is accessed by an approximately 55 m long single track road next to a substation. This approach road is a continuation of Station Road, narrowing down from 17 m to approximately 4.5 m at their junction.

Figure 1 below shows the location of the approach road and its measured length. A vehicle would currently be unable to turn at any point on the approach road, until it reached either the car park to the North or Station Road to the South.

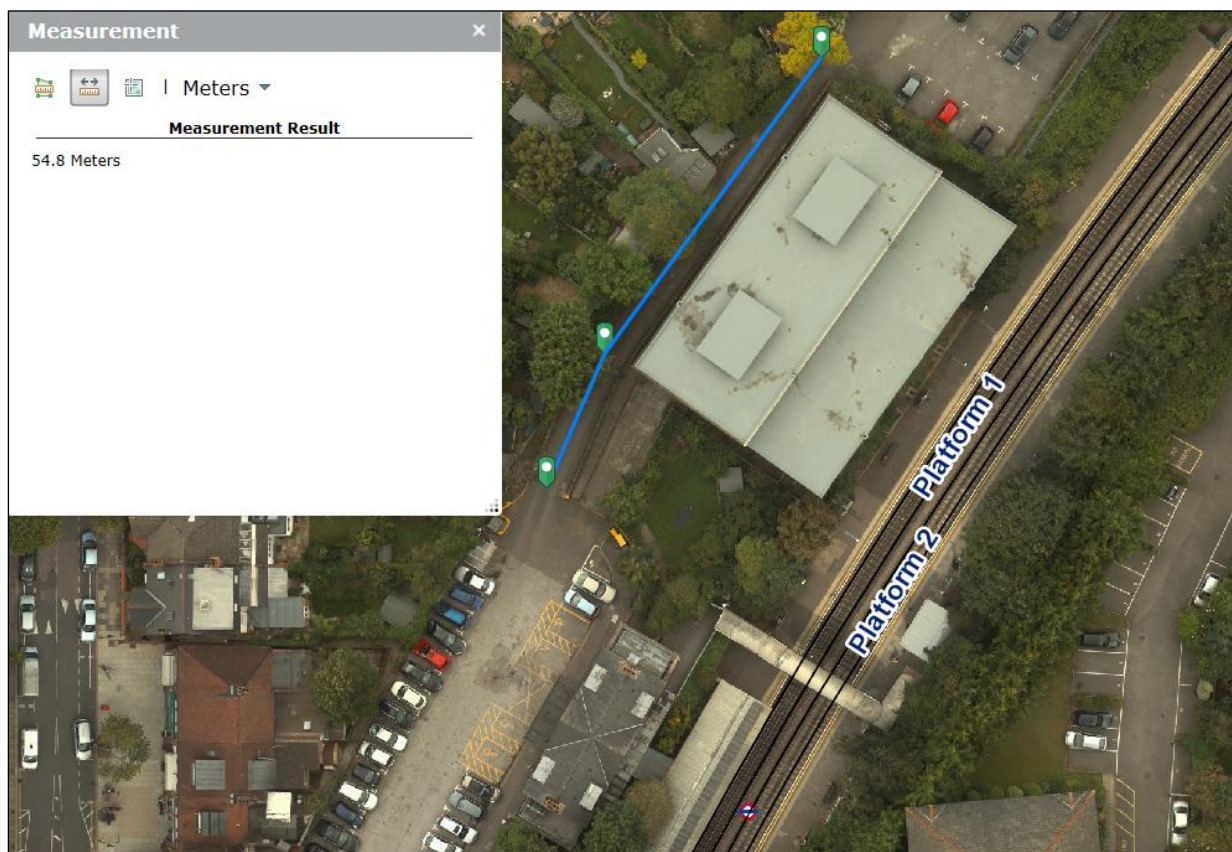


Figure 1: Access Road

Building regulations require that a fire and rescue vehicle should not have to reverse more than 20m from the end of an access road. To comply with this requirement, the proposed design should therefore make a provision for a turning circle or hammerhead junction compliant with the Building Regulations part B – Fire Safety.

Figure 2 overleaf shows an excerpt of the Building Regulations part B and details the required specifications for turning facilities and access routes.

Table 8 Typical fire and rescue service vehicle access route specification

Appliance type	Minimum width of road between kerbs (m)	Minimum width of gateways (m)	Minimum turning circle between kerbs (m)	Minimum turning circle between walls (m)	Minimum clearance height (m)	Minimum carrying capacity (tonnes)
Pump	3.7	3.1	16.8	19.2	3.7	12.5
High reach	3.7	3.1	26.0	29.0	4.0	17.0

Notes:

1. Fire appliances are not standardised. Some fire and rescue services have appliances of greater weight or different size. In consultation with the Fire and Rescue Authority, the Building Control Body may adopt other dimensions in such circumstances.
2. Because the weight of high reach appliances is distributed over a number of axles, it is considered that their infrequent use of a carriageway or route designed to 12.5 tonnes should not cause damage. It would therefore be reasonable to design the roadbase to 12.5 tonnes, although structures such as bridges should have the full 17 tonnes capacity.

Diagram 24 Turning facilities

See para 11.5

Fire and rescue service vehicles should not have to reverse more than 20m from the end of an access road

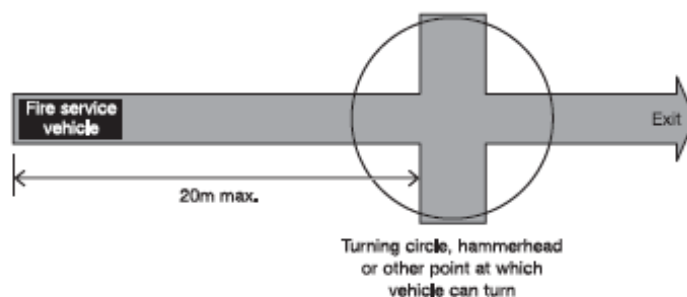


Figure 2: Fire and rescue service vehicle access route and turning facilities specification