Information Sheet

Victoria’s HPFV Networks for 30 metre and 36.5 metre 85.5 tonne A-Doubles

This document provides information on the Victorian road access policies for operation of Performance Based Standard (PBS) 30m and 36.5m A-Doubles up to 85.5 tonnes on Victoria’s High Productivity Freight Vehicle (HPFV) A-Double network.

What is the difference between current B-Doubles and HPFV 30m and 36.5m A-Doubles?

B-Doubles are up to 26 metres long and have a Gross Combination Mass (GCM) up to 68.5 tonne. In Victoria, a HPFV is a heavy vehicle combination that exceeds 26 metres and/or has a gross combination mass (GCM) in excess of 68.5 tonnes. These different vehicles also have different operating conditions (refer to page 3 of this information sheet).

What is the difference between the North West Road Train Network and the HPFV 30m and 36.5m A-Double networks?

Victoria’s HPFV 30m and 36.5m A-Double networks will extend across all HPFV routes and will not be limited to the North West. Consistent with Victoria’s HPFV access requirements, A-Doubles up to 30 metres at 85.5 tonnes and A-Doubles up to 36.5 metres and 85.5 tonnes will be required to meet Performance Based Standards (PBS) at Level 2 and Level 3 respectively, to access their respective HPFV A-Double network.

Can existing North West Road Trains access the HPFV 30m and 36.5m A-Double networks?

Road Trains currently approved to operate in the North West will be required to meet the relevant PBS standards and will be required to obtain PBS approval to obtain access to the HPFV 30m and 36.5m A-Double networks.

What roads can be accessed by HPFVs?

The Victorian HPFV network is being developed with a focus on providing access to primary freight routes connecting with Victorian Ports, interstate links and key industries.

VicRoads is progressively assessing more freight routes to continue to expand the HPFV A-Double network. The maps and details of Victoria’s HPFV A-Double network are available on VicRoads website via https://www.vicroads.vic.gov.au/business-and-industry/heavy-vehicle-industry/heavy-vehicle-map-networks-in-victoria

Why are the 30m and 36.5m HPFV A-Double networks different to Victoria’s current B-Double network?

Not all roads and road infrastructure can safely provide access to HPFVs that are longer and heavier than 68.5 tonne B-Doubles. This can be as a result of bridges that have not been built to cater for the heavier HPFVs or the road geometry is not suitable for vehicles longer than 26 metres.

Why are there five HPFV A-Double reference design vehicles and networks?

Depending on the freight task, one of the HPFV A-Double reference vehicle designs will be more suited than the others. Each design has a different impact on the bridges on the networks resulting in a higher approved GCM over some structures depending on the effects of the chosen reference vehicle design. The 36.5m designs also have a different network aligning to their additional length. The mapped network for each reference vehicle is available via the VicRoads website at https://www.vicroads.vic.gov.au/business-and-industry/heavy-vehicle-industry/heavy-vehicle-map-networks-in-victoria

What do the different coloured roads stand for on the HPFV A-Double networks?

To help distinguish the HPFV access status of different roads, the following colours have been used:

- Green = approved for HPFV at full mass
- Orange = approved for HPFV at reduced mass
- Blue = approved for HPFV at full mass following highway upgrade
- Red = restricted to 68.5 tonnes
- Purple = currently under assessment
What do the different symbols stand for on the HPFV 36.5m A-Double networks?

Given the added length of the HPFV 36.5m A-Double and the increased Low Speed Swept Path (LSSP), which can be up to 10.6m under PBS Level 3, the following map symbols have been introduced:

- Intersections where turns do not provide LSSP access up to 10.6m
- Rest areas that provide entry, egress and parking for HPFVs up to 36.5m

Mass Limits

The mass limits for HPFV A-Doubles operating on the HPFV network are as follows:

<table>
<thead>
<tr>
<th>Mass Limit</th>
<th>Approved Mass (HML)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steer axle</td>
<td>6.0t</td>
</tr>
<tr>
<td>Steer axle*</td>
<td>6.5t</td>
</tr>
<tr>
<td>Drive Axle or Tandem Axle Group (Dolly)</td>
<td>17.0t</td>
</tr>
<tr>
<td>Triaxle Dolly</td>
<td>17.0t</td>
</tr>
<tr>
<td>Triaxle Group</td>
<td>22.5t</td>
</tr>
<tr>
<td>Gross Combination Mass (GCM)</td>
<td>85.5t</td>
</tr>
</tbody>
</table>

*Provided the complying steer axle requirement as set out in the Heavy Vehicle (Mass, Dimension and Loading) National Regulation are met by the prime mover.

Why are HPFV 36.5m A-Double Tri-Axle Dolly’s limited to 17 tonne?

This is to provide operators options to utilise triaxle dollies (which are common in other jurisdictions), whilst further work is undertaken to assess HPFV access above 85.5 tonne GCM.

Axle Spacings

In relation to axle spacings, the combination must meet the following minimum and maximum axle spacings to safely cross all the structures on the network.

Combinations that do not comply with the minimum and maximum axle spacings noted below for the HPFV A-Double reference vehicles will require a bridge assessment on the nominated route.

Note – for all reference vehicles, all axle spacing dimensions are in metres.
HPFV 36.5m A-Double Reference Vehicle 1

A-Double up to 85.5 tonnes and 36.5 metres – 5.2 metre ‘central trailer spacing’ and 6.2 metre trailer axle spacing.

Operating conditions on the HPFV network

The following conditions apply to operate A-Doubles on the HPFV A-Double networks:
- HPFV 30m A-Doubles satisfy Level 2 Performance Based Standards
- HPFV 36.5m A-Doubles satisfy Level 3 Performance Based Standards
- HPFV A-Doubles are fitted with a GPS device accredited under the Intelligent Access Program (IAP)
- Fitment of a certified On Board Mass (OBM) system that can be integrated with IAP*
- The HPFV A-Double (prime mover and trailers) is accredited under the Mass Management module of the National Heavy Vehicle Accreditation Scheme
- The HPFV A-Double has an anti-lock braking system fitted on all axles
- Certified Road Friendly Suspension (RFS) is fitted to the HPFV A-Double
- The A-Double does not exceed a speed of 90 km/h or any lower speed limit applying to the route
- HPFV 30m A-Doubles display a “long vehicle” warning sign at the front and rear.
- HPFV 36.5m A-Doubles display a “road train” warning sign at the front and rear.

* While fitment of an approved OBM system has been specified as an access condition, it is recognised that such systems are not currently available. Accordingly, this requirement is waived until such time as when advice is provided by VicRoads that an OBM system must be fitted to the combination in accordance with the specifications and standards set by Transport Certification Australia.

Figure 4: HPFV 36.5m A-Double Reference Vehicle 1

HPFV 36.5m A-Double Reference Vehicle 2

A-Double up to 85.5 tonnes and 36.5 metres – 5.2 metre ‘central trailer spacing’ and 6.2 metre trailer axle spacing.

Figure 5: HPFV 36.5m A-Double Reference Vehicle 2

Dimension Limits

The dimension limits for HPFV A-Doubles operating on the HPFV network are as follows:

Table 2: Dimension limits

<table>
<thead>
<tr>
<th></th>
<th>Approved Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Length*</td>
<td>30.0 metres</td>
</tr>
<tr>
<td>(for 30m A-Double Reference Vehicles 1 – 3)</td>
<td></td>
</tr>
<tr>
<td>Maximum Length</td>
<td>36.5 metres</td>
</tr>
<tr>
<td>(for 36.5m A-Double Reference Vehicles 1 – 2)</td>
<td></td>
</tr>
<tr>
<td>Maximum Height</td>
<td>4.3 metres</td>
</tr>
<tr>
<td>Maximum Width</td>
<td>2.5 metres</td>
</tr>
</tbody>
</table>

* The maximum length of the combination can exceed 30 metres provided the extreme axle spacing does not exceed 28.8 metres and all other PBS Level 2 requirements are met.

Rail Level Crossings on the network

In line with the Transport (Compliance and Miscellaneous) Act 1983, heavy vehicles that exceed 26.0 metres in length require a permit before they are allowed to cross a rail level crossing.

Consequently, prior to operating the combination, the registered owner must obtain a permit from the Over Dimension Load team as part of the Department of Economic Development, Jobs, Transport and Resources. Applications stating the length of the Road-Train and the time of day(s) of the journey must be sent to odlpermit@ecodev.vic.gov.au. Please be aware that applications can take up to five days to process.

For more information please contact the following number – (03) 9655 6134. More information can also be found at the Department’s website at http://economicdevelopment.vic.gov.au/transport/over-dimensional-load-permits-for-travel-across-railways-and-tramways.
How do I obtain approval to operate an A-Double on the HPFV network?

A PBS vehicle approval must be obtained to operate a 30m or 36.5m HPFV A-Double on the HPFV 30m and 36.5m A-Double networks respectively. Information on PBS and the PBS process is located on the NHVR website via https://www.nhvr.gov.au/road-access/performance-based-standards

A permit will be required to operate on the networks. Information on PBS vehicle access permits is located on the NHVR website via https://www.nhvr.gov.au/road-access/access-management/applications/performance-based-standards-vehicle-access-permit

Please note:
The NHVR will only accept applications for Tier 3 masses that comply with the reference vehicles listed in this document.

First and Last Mile Access

In addition to approval to operate on the HPFV networks, VicRoads will also consider use of other roads connecting to the HPFV networks for first and last mile access. These additional roads will be subject to a route assessment and, if required, a bridge assessment.

Further information

For further information and to view the Victorian HPFV A-Double network maps, please refer to the VicRoads website:


How do I apply?

To apply for a new permit:

1. Go to https://www.service.nhvr.gov.au and if not already registered, follow the prompts to set up an account.
2. Once registered, from the home screen, click on the ‘Permit Applications’ tile in the centre of the top row.
3. Click on the ‘New Application’ button (on the right) and enter a permit name or reference for your application.
4. Click on the green ‘Select Configuration’ button and then click on the heading ‘Performance Based Standards (PBS)’.
5. Select the generic PBS image (PBS Vehicle).
6. Enter the ‘PBS details’ information.
7. On the ‘PBS Route details’ page, click the applicable bridge assessment tier (your PBS Approval document will specify this) and the ‘PBS Network’ radio button.
8. Under the ‘PBS Mass Access Level’ section select the required masses under the applicable access level.
9. Under the ‘Route / area details’ section select the applicable state (“VIC”).
10. Click on ‘Roads’ and add “Victorian HPFV Network” to the ‘Notes’ for the VicRoads ‘PBS Network’
11. On the ‘Period’ page, you will be prompted to enter the required permit period.
12. Follow the prompts to confirm your contact details and complete application payment

For more information:

Subscribe: www.nhvr.gov.au/subscribe
Visit: www.nhvr.gov.au
Phone: 1300 MYNHVR* (1300 696 487)
Email: info@nhvr.gov.au

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