



mainroads
WESTERN AUSTRALIA

*We're working for
Western Australia.*

Heavy Lift Tow Truck Period Permit Operating Conditions

Printed copies are uncontrolled unless marked otherwise.
Refer to the Main Roads Website for current version.

D23#269678
September 2025

Contents

DEFINITIONS	6
1 APPLICATION	9
1.1 Approved Vehicles and Operations	9
1.2 Accreditation Requirements	10
1.3 Operating in Conjunction with another Permit or Order	10
2 LICENSING REQUIREMENTS	10
2.1 Tow Truck Licence	10
2.2 Licence Conditions	10
3 TELEMATICS MONITORING REQUIREMENTS	10
3.1 Device Requirements	10
3.2 Monitoring and Reporting Requirements	10
4 LOADING CONTROLS	11
4.1 Loading Controls for 21t Tandem Drive and 23.5t Tri Drive HLTT Permits	11
4.2 Loading Controls for 23t Tandem Drive and 27t Tri Drive HLTT Permits	11
5 MALFUNCTIONS, TAMPERING AND CALIBRATION	11
6 CAMERA REQUIREMENTS	12
6.1 Device Requirements	12
6.2 Recording Requirements	12
7 WARNING DEVICES	12
7.1 Warning Lights	12
7.2 Warning Signs	13
8 TOWING RESTRICTIONS	13
8.1 Vehicle Integrity	13
8.2 Control of Towed Vehicles Braking System	13
8.3 Direct Towing of Trailers	13
8.4 Heavy Restricted Access Vehicles	14
8.5 Towing Dangerous Goods Vehicles	14
9 DIMENSION REQUIREMENTS	14
9.1 Rear Overhang	14
9.2 Length Limits	14
9.3 Width Limits	14
9.4 Towing an Oversize Vehicle	14
10 MASS REQUIREMENTS	15
10.1 General Requirements	15
10.2 HLTT Maximum Mass Limits	15
10.3 Minimum Steer Axle Mass	15
10.4 Minimum Drive Axle Group Mass for Gradeability	15
10.5 Towing an Overmass Vehicle	16
11 TOWED VEHICLE COUPLING REQUIREMENTS	16

11.1	Checking Tow Coupling D-Ratings	16
11.2	Minimum Tow Coupling D-Ratings.....	16
11.3	Vehicle Combinations Not Meeting Minimum D-Rating Requirements	16
12	ACCESS REQUIREMENTS	16
12.1	Route Assessment.....	16
12.2	Freeway Access	16
12.3	Restricted Bridges	17
12.4	Crossing Restricted Bridges.....	17
12.5	Crossing Non-Restricted Bridges	17
12.6	Approved Roads & Conditions when Operating within Statutory Mass Limits	17
12.7	Approved Roads & Conditions when Towing Concessional Loaded Vehicles	18
12.8	Approved Roads & Conditions When Towing Over-Width Vehicles	18
12.9	Railway Crossing Stacking Distances	18
12.10	Optional Heavy Vehicle Pilots	19
13	SPEED RESTRICTIONS	19
13.1	General Speed Restrictions	19
13.2	Speed Reductions for Combinations with Low Rollover Threshold.....	19
14	COMPULSORY HEAVY VEHICLE INCIDENT REPORTING	19
15	AMENDMENTS TO OPERATING CONDITIONS & ACCESS	20
15.1	Access Approval Suspension & Revocation.....	20
15.2	Amendments & Notifications	20
	Appendix 1 – Central Zones.....	21
	Appendix 2 – Mass Guide for D-Rating Calculations.....	23
	Appendix 3 – Common RAV Configurations	24

Document Control

Owner	Main Roads Heavy Vehicle Services
Custodian	Manager Heavy Vehicle Road Network Access
Document Number	D23#269678
Issue Date	3 July 2023
Review Frequency	As Required

Amendments

Revision Number	Revision Date	Description of Key Changes	Section / Clause
1	03/07/2023	Removed requirement for DoT approval, added trailer towing restrictions	1.2.2, 2.2, 9.3
2	12/07/2023	Added provisions to allow towing under direction of WA Police and ability to not meet minimum steer axle mass requirement under specific scenarios.	1.1, 11.3
3	18/07/2023	Amendments to allow empty / light rigid trucks to be towed on the Freeway and over 60km/h.	13.2, 14
4	21/07/2023	Added DFES to paragraph 1.1.2(b).	1.1
5	06/05/2024	Amendments to allow any unladen motor vehicle to be towed to and from a place of repair or auction yard, allow direction from any Authorised Person, introduce loading control requirements based on the GVM of towed vehicle(s), allow any unladen heavy vehicle to be towed without brakes connected subject to GVM ratings, allow trailers to be towed in accordance with an approved Safe Work Method Statement, allow oversize loads to be towed up to 3.5 metres in width, introduce the use of IRS vehicles and concessions to pilot requirements in central zones, allow 3 metre wide loads to be towed at night with additional lighting requirements, expand the speed restriction requirements.	1.1, 4, 5.1, 9.2, 9.3, 10.4, 11.3, 13.6, 13.7, 13.8, 14
6	30/09/2024	Clarified approval to tow empty prime mover for swap-out. Clarify accreditation requirements and except HLTTs operating under the Statutory Mass permit.	1.1, 4
7	31/03/2025	Implementation of numerous changes requested by HLTT industry representatives.	1.1, 2.1, 3.1, 3.2, 4, 8.2, 10.2, 10.3, 10.4, 12.3, 13.3, 13.4

8	21/07/2025	Amended definition of Heavy Lift Tow Truck to include overlift tow truck. Included provisions to allow a Special Purpose Vehicle (SPV) to be towed. Included provision for option Pilots. Amended speed restrictions.	Definitions, cl. 8.4.2, 12.3.2, 12.1, 13.1.
9	23/07/2025	Corrected omission from speed restrictions.	13.1
10	11/08/2025	Clarified OBM reporting requirements.	4.2
11	3/09/2025	Corrected mass requirement specified in Clause 12.3.1(b).	12.3

REFERENCES AND RELATED DOCUMENTS

The following documents relate to these Operating Conditions and are available on the Main Roads website:

Document Name	Location
Bridge Crossing Application Form	Available on the Oversize Overmass (OSOM) page on the Main Roads website: https://www.mainroads.wa.gov.au/globalassets/heavy-vehicles/getting-a-permit/osom/permit-form-bridge-crossing-permit-application.pdf
D-Rating Calculator	Available on the Permits and Orders page on the Main Roads website: https://www.mainroads.wa.gov.au/heavy-vehicles/permit-order-scheme/
Heavy Lift Tow Truck Restricted Structures Lists	Available on the Heavy Lift Tow Trucks page and on the RAV Mapping Tool on the Main Roads website: https://www.mainroads.wa.gov.au/heavy-vehicles/permit-order-scheme/heavy-lift-tow-trucks/
Oversize Vehicle & Pilot Vehicle General Requirements	Available on the Oversize Overmass (OSOM) page on the Main Roads website: https://www.mainroads.wa.gov.au/globalassets/heavy-vehicles/getting-a-permit/osom/oversize-vehicle-and-pilot-vehicle-general-requirements.pdf?v=49f806
Prime Mover Trailer Combinations Operating Conditions	Available on the Orders page on the Main Roads website: www.mainroads.wa.gov.au/heavy-vehicles/permit-order-scheme/orders/ .
RAV Mapping Tool	https://mrwebapps.mainroads.wa.gov.au/hvsnetworkmap

DEFINITIONS

The following are definitions for terms used in these Operating Conditions. Refer to the definitions in the *Road Traffic (Administration) Act 2008* and the *Road Traffic (Vehicles) Act 2012* and any subsidiary legislation to these Acts for the meanings of any terms not defined in this section. If a definition in the relevant Acts or the subsidiary legislation conflicts with a definition in this section, the definition in this section prevails for the purpose of these Operating Conditions.

Term	Definition
Approved Network	The Approved Network specified in the permit or order applicable to the towed vehicle or vehicle combination.
Authorised Person	A person authorised under legislation to direct the towing of a vehicle, such as a member of the WA Police, Department of Fire and Emergency Services, Sheriff's Office, or Local Government Ranger.
Central Zones	The area within and including the boundaries of the Perth and Fremantle Central Zones as depicted in Appendix 1 .
Coupling Rear Overhang	The distance between the rear overhang line and the coupling point between the HLTT and the towed vehicle.
Disabled (with reference to a vehicle)	Disabled due to a mechanical or electrical fault, or due to being involved in an accident, and unable to operate under its own motive power.

Term	Definition
Flat Tow	A method of towing a disabled vehicle using a rigid drawbar, where the tow truck assumes the function of a block truck. All wheels of the towed vehicle remain on the ground and the steering of the towed vehicle is controlled by a competent person.
GVM	Stands for “Gross Vehicle Mass” and means the maximum loaded mass of the vehicle: (a) as specified by the manufacturer; or (b) as specified by the relevant authority if — (i) the manufacturer has not specified a maximum loaded mass; or (ii) the manufacturer cannot be identified; or (iii) the vehicle has been modified to the extent that the manufacturer’s specification is no longer appropriate.
Heavy Lift Tow Truck	A motor vehicle equipped with a crane used or intended to be used for the lifting, salvaging or towing of heavy vehicles, including an underlift tow truck and an overlift tow truck fitted with a fifth wheel coupling near the centre of the drive axle group and complying with Australian Standard AS 2174.1-2006 and AS/NZS 4968.2:2003.
Heavy Lift Tow Truck Period Permit	Includes the following HLTT Permits: - Heavy Lift Tow Truck – 23.5t Tri Drive Over Mass – Period Permit - Heavy Lift Tow Truck – 27t Tri Drive Over Mass – Period Permit - Heavy Lift Tow Truck – 21t Tandem Drive Over Mass – Period Permit - Heavy Lift Tow Truck – 23t Tandem Drive Over Mass – Period Permit - Heavy Lift Tow Truck – Statutory Mass – Period Permit
HLTT	Heavy Lift Tow Truck
HVS	Main Roads Heavy Vehicle Services and where there is a requirement to provide information or obtain approval, means via hvsnetworkaccess@mainroads.wa.gov.au .
Main Roads Website	www.mainroads.wa.gov.au
Overmass Vehicle	A vehicle operating under an overmass permit, such as a <i>Single Trip Overmass Permit</i> or an <i>Overmass Low Loader Period Permit</i> .
Oversize Vehicle	A vehicle operating under an oversize permit, such as a <i>Class 1 RAV Oversize Period Permit</i> or a <i>Single Trip Oversize Permit</i> .
Order	The Order that is published in the Gazette subject to these Operating Conditions, under the provisions of Part 4 of the <i>Road Traffic (Vehicles) Act 2012</i> , which these Operating Conditions form part of.
Partial Lift Tow	A method of towing a disabled vehicle where the front wheels of the towed vehicle are only lifted the minimal amount necessary to enable the towed vehicle to be steered without transferring excess mass onto the drive axle group of the towed vehicle.
Permit	Means a permit issued under Part 4 of the <i>Road Traffic (Vehicles) Act 2012</i> , which these Operating Conditions form part of.
Permit Holder	The Operator to whom the permit is issued.
Pilot Vehicle	A vehicle driven by a licenced Heavy Vehicle Pilot and meeting the requirements specified in the <i>Oversize Vehicle & Pilot Vehicle General Requirements</i> .

Term	Definition
Prime Mover	A motor vehicle built primarily to tow a semi-trailer but does not include a truck or modified prime mover built primarily to carry a load or carry out a function other than towing a semi-trailer.
Rear Overhang Line	The centre of the tandem or tri axle group at the rear of the vehicle.
Rear Overhang	The distance between the rear overhang line and the rearmost part of the vehicle or the load.
Heavy Lift Tow Truck 21t Tandem Drive Restricted Structures (HLTT1)	Heavy Lift Tow Truck 21t Tandem Drive Restricted Structures (HLTT1) are published in the form of a Restricted Structure List or are available on the RAV Mapping Tool on the Main Roads website.
Heavy Lift Tow Truck 23t Tandem Drive Restricted Structures (HLTT2)	Heavy Lift Tow Truck 23t Tandem Drive Restricted Structures (HLTT2) are published in the form of Restricted Structure List or are available on the RAV Mapping Tool on the Main Roads website.
Heavy Lift Tow Truck 23.5t Tr-Drive Restricted Structures (HLTT3)	Heavy Lift Tow Truck 23.5t Tr-Drive Restricted Structures (HLTT3) are published in the form of Restricted Structure List or are available on the RAV Mapping Tool on the Main Roads website.
Heavy Lift Tow Truck 27t Tri-Drive Restricted Structures (HLTT4)	Heavy Lift Tow Truck 27t Tri-Drive Restricted Structures (HLTT4) are published in the form of Restricted Structure List or are available on the RAV Mapping Tool on the Main Roads website.
Rigid Truck	A motor vehicle designed primarily for the carriage of goods directly upon it, and does not include a prime mover, unless it is fitted with a block for use as a block truck, or has been modified to the extent where its primary function is no longer to tow a semi-trailer.
Safe Work Method Statement	A document detailing the work practice and clearly demonstrating how the associated risks are mitigated. This document can be developed by an individual operator or by an industry group.
Speed Limit	The speed limit applicable under the <i>Road Traffic Code 2000</i> .
Statutory Dimension Limits	The dimension requirements prescribed in Part 8 of the <i>Road Traffic (Vehicles) Regulations 2014</i> .
Statutory Mass Limits	The mass requirements prescribed in Part 8 of the <i>Road Traffic (Vehicles) Regulations 2014</i> .
Tandem Drive	A drive axle group consisting of two drive axles with equal torque distribution.
Tandem Drive Network 1	The Tandem Drive Network 1 prohibited roads are published in the form of Road Tables or are available on the RAV Mapping Tool on the Main Roads website.
TCA	Transport Certification Australia
Tridem	A drive axle group consisting of 3 axles with only two drive axles.
Tri Drive	A drive axle group consisting of three drive axles with equal torque distribution or 50:25:25 torque distribution.

1 APPLICATION

1.1 Approved Vehicles and Operations

1.1.1 The *Heavy Lift Tow Truck Period Permit* applies to a HLTT, as described below, when towing a disabled heavy vehicle or vehicle combination, from a location on the public road network.

Category	Vehicle Description
1	Single Steer, Tandem Drive HLTT  A side-view illustration of a heavy lift tow truck with a single front steering axle and two rear drive axles. It features a large towing boom and a winch system.
2	Twin Steer, Tandem Drive HLTT  A side-view illustration of a heavy lift tow truck with two front steering axles and two rear drive axles. It features a large towing boom and a winch system.
3	Single Steer, Tri Drive / Tridem HLTT  A side-view illustration of a heavy lift tow truck with a single front steering axle and three rear drive axles. It features a large towing boom and a winch system.
4	Twin Steer, Tri Drive / Tridem HLTT  A side-view illustration of a heavy lift tow truck with two front steering axles and three rear drive axles. It features a large towing boom and a winch system.

- 1.1.2 The *Heavy Lift Tow Truck Period Permit* also applies in the following scenarios:
- (a) to a HLTT towing an unladen prime mover to the location of a disabled prime mover for the purpose of swapping out the disabled prime mover.
 - (b) to a HLTT towing an unladen motor vehicle or unladen damaged trailer to and from a place of repair or an auction yard.
 - (c) to a HLTT towing a heavy vehicle or vehicle combination under the direction of an Authorised Person.

- 1.1.3** The *Heavy Lift Tow Truck Period Permit* only applies to a HLTT complying with the telematics monitoring requirements specified under section 3.
- 1.1.4** The *Heavy Lift Tow Truck Period Permit* only applies to a permit holder and HLTT with loading controls in place that conform with section 4 of these Operating Conditions.
- 1.1.5** Despite clauses 1.1.3 and 1.1.4, sections 3, 4 and 6 do not apply to the HLTT if it only operates under a *Heavy Lift Tow Truck – Statutory Mass – Period Permit*.
- 1.1.6** The *Heavy Lift Tow Truck Period Permit* only applies to a HLTT fitted with dual tyres on all axles, except the front steer axle / axle group.

1.2 Accreditation Requirements

The *Heavy Lift Tow Truck Period Permit* only applies to a vehicle operated by a permit holder who is currently accredited under the Western Australian Heavy Vehicle Accreditation Scheme.

1.3 Operating in Conjunction with another Permit or Order

The *Heavy Lift Tow Truck Period Permit* cannot be used in conjunction with another permit or order.

2 LICENSING REQUIREMENTS

2.1 Tow Truck Licence

The HLTT must be licensed in Western Australia as a tow truck.

2.2 Licence Conditions

The HLTT must be driven in accordance with any conditions of the vehicle's licence, as imposed by the Department of Transport (DoT), unless the contrary intention appears within these operating conditions.

3 TELEMATICS MONITORING REQUIREMENTS

3.1 Device Requirements

The HLTT must be installed with an in-vehicle telematics unit approved by Main Roads Heavy Vehicle Services.

3.2 Monitoring and Reporting Requirements

- 3.2.1** The HLTT must either be enrolled in the TMA Tow Truck Monitoring Scheme (WA) administered by TCA, or Main Roads Heavy Vehicle Services must be provided continuous direct access to the permit holder's telematics monitoring system, with the ability to:
 - (a) Identify the position and speed of the HLTT, with position records updated every 30 seconds as a minimum; and
 - (b) View data no more than one week old and up to 12 months old.
- 3.2.2** When operating under the *Heavy Lift Tow Truck Period Permit*, the permit holder is required to inform the driver that the vehicle is being monitored for the purposes of compliance by Main Roads WA.

4 LOADING CONTROLS

4.1 Loading Controls for 21t Tandem Drive and 23.5t Tri Drive HLTT Permits

4.1.1 The permit holder, must:

- (a) Be accredited under the Western Australian Heavy Vehicle Accreditation Scheme Mass Management Module; and
- (b) Operate the HLTT in accordance with a loading plan approved by Main Roads Heavy Vehicle Services, demonstrating how the mass on the steer axle(s) and drive axles will be managed and document the process for ongoing calibration and verification of the On-board Mass Management system, in accordance with the Recognised Loading Control Method – On Board Mass Management; and
- (c) Maintain auditable mass and dimension records of each tow, in accordance with the Western Australian Heavy Vehicle Accreditation Scheme requirements and produce the records upon request to Main Roads Heavy Vehicle Services.

4.1.2 The drive axle group of the HLTT must be installed with an On-Board Mass Management (OBM) system, approved by Main Roads Heavy Vehicle Services, that displays the mass of the drive axle group on a digital gauge on the vehicle.

4.2 Loading Controls for 23t Tandem Drive and 27t Tri Drive HLTT Permits

4.2.1 The HLTT must be installed with an approved on-board mass management (OBM) system, monitored via a TCA approved service provider.

4.2.2 Main Roads Heavy Vehicle Services must be provided with one of the following:

- (a) Access to the mass data via the TMA Tow Truck Monitoring Scheme (WA) administered by TCA.
- (b) Continuous direct access to the OBM system, with the ability to:
 - i. Download automated mass reports, showing the mass of each individual axle group of the HLTT, including location, date and time of the recording. Data transfer must be at least once every 30 minutes; and
 - ii. View data no more than one week old and up to 12 months old.
- (c) A mass report directly from the service provider upon request, showing the mass of each individual axle group of the HLTT, including location, date and time of the recording, at a maximum of 30-minute intervals. Data must remain available for reporting purposes for a minimum of 12 months.

5 MALFUNCTIONS, TAMPERING AND CALIBRATION

5.1.1 This permit may be suspended or cancelled if:

- (a) the driver or permit holder tampers with or manipulates the in-vehicle telematics device or OBM system; or
- (b) the driver or permit holder fails to report a malfunction with the in-vehicle telematics device or OBM system; or
- (c) the permit holder fails to calibrate the OBM system in accordance with the manufacturer's specifications.

- 5.1.2** An in-vehicle telematics device or OBM system malfunctions if:
- (a) it ceases to work at all, or works only intermittently; or
 - (b) it performs a function in such a way that the results of it doing so are inaccurate or unreliable (including intermittently inaccurate or unreliable).
- 5.1.3** A person tampers with or manipulates an in-vehicle telematics device or OBM system if he or she engages in conduct that has the result that:
- (a) the device or system is altered; or
 - (b) the device or system is installed or used in a way that is not in accordance with the conditions of its approval by Main Roads WA; and
 - (c) the device or system does not perform as intended in terms of accuracy, timeliness, reliability, verifiability or any other performance parameter.

6 CAMERA REQUIREMENTS

6.1 Device Requirements

- 6.1.1** The HLTT must be fitted with a rear facing camera.
- 6.1.2** The rear facing camera must be mounted on the vehicle so that the camera records a clear field of vision of any vehicle being towed.
- 6.1.3** The camera must be maintained in good working order.

6.2 Recording Requirements

- 6.2.1** The camera must record while simultaneously overlaying the date and time on the image.
- 6.2.2** The camera must be recording whenever the HLTT is operating under the *Heavy Lift Tow Truck Period Permit*.
- 6.2.3** The image recorded from the rear facing camera must be of such reasonable quality to enable a clear view of any vehicle being towed.
- 6.2.4** All recorded footage must be retained by the permit holder for a minimum period of one (1) month.
- 6.2.5** The permit holder is required to submit recorded footage of the HLTT, when requested by Main Roads.

7 WARNING DEVICES

7.1 Warning Lights

- 7.1.1** The HLTT must display an amber flashing warning light on the front and rear of the combination, when towing any of the following vehicles:
- (a) a rigid vehicle over 12.5 metres in length;
 - (b) an articulated bus;
 - (c) a vehicle combination.
- 7.1.2** A warning light must comply with the requirements in the *Oversize Vehicle & Pilot Vehicle General Requirements*.

7.2 Warning Signs

- 7.2.1 The HLTT towing a vehicle with a width of ≤ 2.5 metres must clearly display an “Under Tow” warning sign on the rear of the combination.
- 7.2.2 The “Under Tow” warning sign must comply with the requirements in the *Oversize Vehicle & Pilot Vehicle General Requirements* applying to an “Oversize” warning sign, with the word “Oversize” replaced with “Under Tow”.
- 7.2.3 The HLTT towing a vehicle with a width in excess of 2.5 metres must clearly display an “Oversize” warning sign on the front and rear of the combination. An “Under Tow” warning sign is not required.
- 7.2.4 A “Oversize” warning sign must comply with the requirements in the *Oversize Vehicle & Pilot Vehicle General Requirements*.

8 TOWING RESTRICTIONS

8.1 Vehicle Integrity

- 8.1.1 The HLTT must only tow a heavy vehicle or vehicle combination if it is structurally sound and it is safe to tow.
- 8.1.2 If a vehicle’s structural integrity has been compromised, the HLTT must only tow the vehicle to a location far enough off the road, so the vehicle no longer constitutes a hazard to traffic.

8.2 Control of Towed Vehicles Braking System

- 8.2.1 The HLTT must not tow a heavy vehicle or a vehicle combination, unless the HLTT driver has control of the towed vehicle’s braking system, or the brakes are being operated from the driving position of the towed vehicle.
- 8.2.2 The HLTT must not tow a vehicle that is damaged in a manner than prevents the operation of the braking system.
- 8.2.3 Where the vehicle is damaged in a manner than prevents the operation of the braking system, the HLTT must only tow the vehicle to a location far enough off the road, so the vehicle no longer constitutes a hazard to traffic.
- 8.2.4 Subclause 8.2.1 does not apply to a HLTT towing a heavy vehicle, provided the combined mass of the HLTT and the heavy vehicle does not exceed the GVM of the HLTT.

8.3 Direct Towing of Trailers

- 8.3.1 The HLTT must only tow a trailer from the front of the trailer.
- 8.3.2 The HLTT must only Flat Tow a dog trailer.
- 8.3.3 The HLTT must only tow a semi-trailer with a fifth wheel coupling that complies with the requirements in Australian Standard AS 2174.1-2006 and AS/NZS 4968.2:2003.
- 8.3.4 Where it is not practicable to comply with this clause, the HLTT may tow a trailer in accordance with a Safe Work Procedure approved by HVS, or to a location far enough off the road, so the vehicle no longer constitutes a hazard to traffic.

8.4 Heavy Restricted Access Vehicles

- 8.4.1 A Category 7 RAV and higher category RAV, as defined in the *Prime Mover Combinations Operating Conditions*, must only be Partial Lift Towed or Flat Towed.
- 8.4.2 An overmass Special Purpose Vehicle (SPV) that is not a truck mounted SPV, such as an All-Terrain Crane, must only be flat towed.

8.5 Towing Dangerous Goods Vehicles

- 8.5.1 The HLTT must only tow a heavy vehicle or vehicle combination loaded with dangerous goods for the minimum distance necessary, to the next available parking area, so the vehicle no longer constitutes a hazard to traffic.
- 8.5.2 For the purpose of this clause, the *Dangerous Goods Safety Act 2004* and any associated Codes must be taken into account when determining a suitable location to disconnect the heavy vehicle or vehicle combination.

9 DIMENSION REQUIREMENTS

The HLTT is required to comply with statutory dimension limits, unless otherwise specified in this section.

9.1 Rear Overhang

The HLTT may exceed statutory rear overhang and coupling rear overhang limits when towing a heavy vehicle or a vehicle combination.

9.2 Length Limits

The HLTT may exceed the statutory length limit for a vehicle combination when towing a heavy vehicle or a vehicle combination.

9.3 Width Limits

- 9.3.1 The HLTT may exceed the statutory width limit when towing a vehicle that has been damaged in a manner that has resulted in it exceeding 2.5 metres in width, up to 3.5 metres in width, provided the vehicle is safe to tow.
- 9.3.2 The HLTT may exceed the statutory width limit when towing an over-width rigid motor vehicle, provided the rigid motor vehicle is not overmass and the HLTT and rigid motor vehicle are within the width limits allowed for the rigid motor vehicle.

9.4 Towing an Oversize Vehicle

The HLTT must not tow a vehicle carrying an oversize load in excess of 3.5 metres.

Note: A Single Trip Permit must be obtained from Main Roads Heavy Vehicle Services to tow a vehicle carrying an oversize load in excess of this width limit. If an emergency permit is required after-hours, contact the Main Roads Customer Information Centre on 138 138 who will make direct contact with the on-call after-hours officer.

10 MASS REQUIREMENTS

10.1 General Requirements

- 10.1.1** It is the responsibility of the HLTT driver and operator to, so far as reasonably practicable, ensure they are aware of the maximum mass of the towed heavy vehicle or vehicle combination.
- 10.1.2** The mass on the HLTT or any of its components must not exceed the manufacturer's rating.
- 10.1.3** Underlift connections and chains must be sufficiently rated for the mass being towed.

10.2 HLTT Maximum Mass Limits

The HLTT must not exceed the lesser of:

- (a) The mass limits specified on the *Heavy Lift Tow Truck Period Permit*; or
- (b) The mass limits specified in the following table:

Axle Group	Mass Limit
Single Steer Axle with tyres <375mm	6.5 tonnes
Single Steer Axle with tyres ≥375mm	7.1 tonnes
Twin Steer Axle Group with non-load sharing suspension	10 tonnes
Twin Steer Axle Group with load sharing suspension and tyres <375mm	11 tonnes
Twin Steer Axle Group with load sharing suspension and tyres ≥375mm	12 tonnes
Tandem Drive Axle Group	As per permit
Tri Drive or Tridem Axle Group	As per permit

10.3 Minimum Steer Axle Mass

- 10.3.1** The steer axle mass must not be less than 20% of the total mass of the laden HLTT.
- 10.3.2** Subclause 10.3.1 does not apply where:
- (a) The HLTT complies with the Safe Working Loads (SWL) formulas under Vehicle Standard Bulletin 6 (VSB6) Modification Code T2; and
 - (b) Appropriate steer tyre friction demand assessments and stability assessments have been conducted by an NHVR approved PBS Assessor to verify the HLTT can be controlled safely while towing a heavy vehicle under all road conditions and the HLTT maintains sufficient front axle load to provide adequate steering control, as per the VSB6 requirements; and
 - (c) The assessments have been provided to HVS and the *Heavy Lift Tow Truck Period Permit* specifies the minimum steer axles mass as determined by the assessments.

10.4 Minimum Drive Axle Group Mass for Gradeability

- 10.4.1** Where the heavy vehicle or vehicle combination is being Partial Lift Towed or Flat Towed, the HLTT must have a minimum of 14 tonnes on a tandem drive axle group or 17 tonnes on a tri drive or tridem axle group.
- 10.4.2** Sub-clause 10.4.1 does not apply when Flat Towing:
- (a) a motor vehicle, provided a competent person is controlling the steering and brakes of the towed vehicle; or
 - (b) a damaged empty dog trailer; or

- (c) for the purpose of moving a disabled vehicle the minimum distance necessary from a hazardous situation to the next available parking area, so the vehicle no longer constitutes a hazard to traffic; or
- (d) Where the gross mass and route have been assessed using the Main Roads [RAV Grade Calculator](#) and the HLTT has the minimum drive axle group mass stipulated in the calculator.

10.5 Towing an Overmass Vehicle

The HLTT must not tow an overmass vehicle.

Note: *A Single Trip Permit must be obtained from Main Roads Heavy Vehicle Services to tow an overmass vehicle. If an emergency permit is required after-hours, contact the Main Roads Customer Information Centre on 138 138 who will make direct contact with the on-call after-hours officer.*

11 TOWED VEHICLE COUPLING REQUIREMENTS

11.1 Checking Tow Coupling D-Ratings

11.1.1 The tow couplings fitted to the towed vehicle combination must be sufficiently rated.

11.1.2 The driver of the HLTT must be aware that the tow coupling rating requirements increase when the vehicle combination is connected to a HLTT and the critical coupling position changes.

11.1.3 The driver of the HLTT must ensure all tow couplings throughout the vehicle combination are sufficiently rated before towing the vehicle combination.

11.2 Minimum Tow Coupling D-Ratings

The driver or operator must use the relevant D-Rating Calculator, available on the Main Roads website, to determine the minimum D-Rating for each coupling in the vehicle combination, including fifth wheel couplings and pin type couplings.

Note: *The mass of the HLTT must be included in the D-Rating calculations. A guide to the mass information required when using the D-Rating Calculator is available in [Appendix 2](#).*

11.3 Vehicle Combinations Not Meeting Minimum D-Rating Requirements

Where a vehicle combination does not meet one or more coupling D-Rating requirements, the HLTT must only tow the vehicle combination the minimum distance necessary, to the next available parking area, so the vehicle no longer constitutes a hazard to traffic.

12 ACCESS REQUIREMENTS

12.1 Route Assessment

Prior to towing a vehicle, the driver or operator of the HLTT must assess the route of travel to ensure that it is suitable for use and that it can be driven along without contravening these Operating Conditions.

12.2 Freeway Access

12.2.1 The HLTT must not tow an articulated vehicle or vehicle combination on a Freeway, unless removing a disabled vehicle from the Freeway.

- 12.2.2** When removing a disabled articulated vehicle or vehicle combination from a Freeway, the HLTT must exit via the nearest off-ramp that provides access to an approved road for the type of vehicle being towed.
- 12.2.3** The HLTT must not Partial Lift Tow or Flat Tow on a Freeway, unless removing a disabled vehicle from the Freeway.
- 12.2.4** When Partial Lift Towing or Flat Towing on a Freeway, the HLTT must exit via the nearest off-ramp that provides access to an approved road for the type of vehicle being towed.

12.3 Restricted Bridges

- 12.3.1** Except in accordance with clause 12.4, the HLTT must not cross a bridge specified in the relevant *Heavy Lift Tow Truck Restricted Structures List*, as specified below:
- (a) HLTT within statutory mass limits – as per relevant *Approved Network*.
 - (b) HLTT >16.5t but ≤21t on tandem drive axle group – *Heavy Lift Tow Truck 21t Tandem Drive Restricted Structures (HLTT1)*.
 - (c) HLTT >21t but ≤23t on tandem drive axle group – *Heavy Lift Tow Truck 23t Tandem Drive Restricted Structures (HLTT2)*.
 - (d) HLTT >20t but ≤23.5t on tri-drive axle group – *Heavy Lift Tow Truck 23.5t Tri-Drive Restricted Structures (HLTT3)*.
 - (e) HLTT >23.5t but ≤27t on tri-drive axle group – *Heavy Lift Tow Truck 27t Tri-Drive Restricted Structures (HLTT4)*.
- 12.3.2** Except in accordance with clause 12.4, the HLTT must not tow an overmass Special Purpose Vehicle (SPV) across a bridge that is specified as a restricted bridge on the SPV's permit.

12.4 Crossing Restricted Bridges

If the HLTT needs to cross a bridge specified in the *Heavy Lift Tow Truck Restricted Structures List*, a *Bridge Crossing Permit* must be obtained. An application for a *Bridge Crossing Permit* can be made by submitting a [Bridge Crossing Permit Application form](#), available on the Main Roads website.

12.5 Crossing Non-Restricted Bridges

When towing a heavy vehicle or a vehicle combination over a non-restricted bridge, the HLTT must be driven in the centre of the traffic lane, or where there are multiple lanes, in the centre of those lanes in the direction of travel.

12.6 Approved Roads & Conditions when Operating within Statutory Mass Limits

- 12.6.1** The approvals under this clause are subject to clause 12.3 and apply to a towed vehicle loaded to statutory mass limits only.
- 12.6.2** The HLTT may tow a motor vehicle on any road in WA, except the prohibited bridges in Tandem Drive Network 1, provided the overall combination length does not exceed 20 metres.
- 12.6.3** The HLTT may tow a rigid truck and trailer with a combination length up to 20 metres, on any road in WA, except the prohibited roads and bridges in Tandem Drive Network 1.
- 12.6.4** The HLTT may tow a prime mover and semi-trailer with a combination length up to 19 metres, on any road in WA, except the prohibited roads and bridges in Tandem Drive Network 1.

- 12.6.5** The HLTT must be accompanied by at least one (1) pilot vehicle, or a Main Roads Incident Response vehicle, to manage traffic when towing a bus exceeding 12.5 metres in length within a Central Zone.
- 12.6.6** Subclause 12.6.5 does not apply when towing a vehicle within a Central Zone between 11pm and 5am, Sunday to Thursday.
- 12.6.7** The HLTT may tow a vehicle combination not already mentioned, provided it is only towed on the Approved Network specified in the permit or order applicable to that vehicle combination. The Approved Networks for Common RAV Configurations are shown in [Appendix 3](#).
- 12.6.8** When towing a vehicle combination mentioned in subclause 12.6.7, the driver of the HLTT must make themselves aware of the permit or order the vehicle combination is operating under to determine the appropriate Approved Network.
- 12.6.9** The HLTT must be operated in accordance with any conditions specified for a particular road in the Approved Network.

12.7 Approved Roads & Conditions when Towing Concessional Loaded Vehicles

- 12.7.1** The approvals under this clause are subject to clause 12.3.
- 12.7.2** The HLTT may tow a vehicle or vehicle combination loaded to concessional mass limits, provided it is only towed on the Approved Network specified in the permit or order applicable to that vehicle combination. The Approved Networks for Common RAV Configurations are shown in [Appendix 3](#).
- 12.7.3** When towing a vehicle or vehicle combination mentioned in subclause 12.7.2, the driver of the HLTT must make themselves aware of the permit or order the vehicle combination is operating under to determine the appropriate Approved Network.
- 12.7.4** The HLTT must be operated in accordance with any conditions specified for a particular road in the Approved Network.

12.8 Approved Roads & Conditions When Towing Over-Width Vehicles

- 12.8.1** The approvals under this clause are subject to clause 12.3.
- 12.8.2** The HLTT may tow a vehicle that is over-width, as a result of damage, on the roads specified under clauses 12.6 and 12.7, provided the overall width does not exceed 3 metres at night, or 3.5 metres during the day.
- 12.8.3** When towing a vehicle in excess of 2.5 metres in width at night, flood lights must be attached to the HLTT or towed vehicle, directed upward at the extremities of the towed vehicle in a manner so as to clearly illuminate the over-width part of the vehicle and not dazzle any driver.
- 12.8.4** The HLTT may tow an over-width rigid motor vehicle on the approved roads specified in the permit or order applicable to that rigid motor vehicle.
- 12.8.5** When towing an over-width rigid motor vehicle in accordance with subclause 12.8.4, any pilot vehicle requirements applicable to the rigid motor vehicle are applicable to the HLTT.

12.9 Railway Crossing Stacking Distances

The HLTT must not cross a railway level crossing, unless there is sufficient clearance on the other side of the railway line to accommodate the length of the HLTT and towed vehicle, without any part of the vehicle being within 3.5 metres of the railway line.

12.10 Optional Heavy Vehicle Pilots

When towing a heavy vehicle or heavy vehicle combination, the HLTT may be accompanied by Licensed Heavy Vehicle Pilots if deemed necessary to improve the safety of the movement.

13 SPEED RESTRICTIONS

13.1 General Speed Restrictions

13.1.1 The HLTT towing a heavy vehicle must not travel at a speed exceeding:

- (a) The speed limit applicable to the road, where the speed limit is $\leq 60\text{km/h}$; or
- (b) 10 km/h below the speed limit applicable to the road, where the speed limit is $> 60\text{ km/h}$; or
- (c) A safe speed appropriate to the road conditions.

13.1.2 The HLTT towing a vehicle combination must not travel at a speed exceeding the lesser of:

- (a) 80km/h; or
- (b) 10 km/h below the speed limit applicable to the road, where the speed limit is $> 60\text{ km/h}$; or
- (c) The maximum speed specified as a condition for a particular road in an Approved Network;
or
- (d) A safe speed appropriate to the road conditions.

13.2 Speed Reductions for Combinations with Low Rollover Threshold

13.2.1 If the HLTT is towing a vehicle combination listed below, additional safety precautions must be taken by the driver:

- (a) A rigid truck and dog trailer combination; or
- (b) An A-double combination ≤ 27.5 metres in length.

13.2.2 Additional safety precautions include:

- (a) Avoiding sudden or sharp steering at speeds above 60km/h;
- (b) Avoiding hard braking or sudden acceleration when cornering;
- (c) Reducing speed to no more than 60km/h when negotiating curves, including highway on-ramps and off-ramps;
- (d) Negotiating roundabouts at low speed;
- (e) Reducing speed to no more than 60km/h when conducting lane change manoeuvres; and
- (f) Conducting lane change manoeuvres smoothly and gradually.

14 COMPULSORY HEAVY VEHICLE INCIDENT REPORTING

All on-road incidents involving the HLTT must be reported to Main Roads Heavy Vehicle Services by the permit holder. The Heavy Vehicle Incident Reporting form is available on the Incident Reporting page on the Main Roads website and it must be submitted within 48 hours of the incident occurring.

15 AMENDMENTS TO OPERATING CONDITIONS & ACCESS

15.1 Access Approval Suspension & Revocation

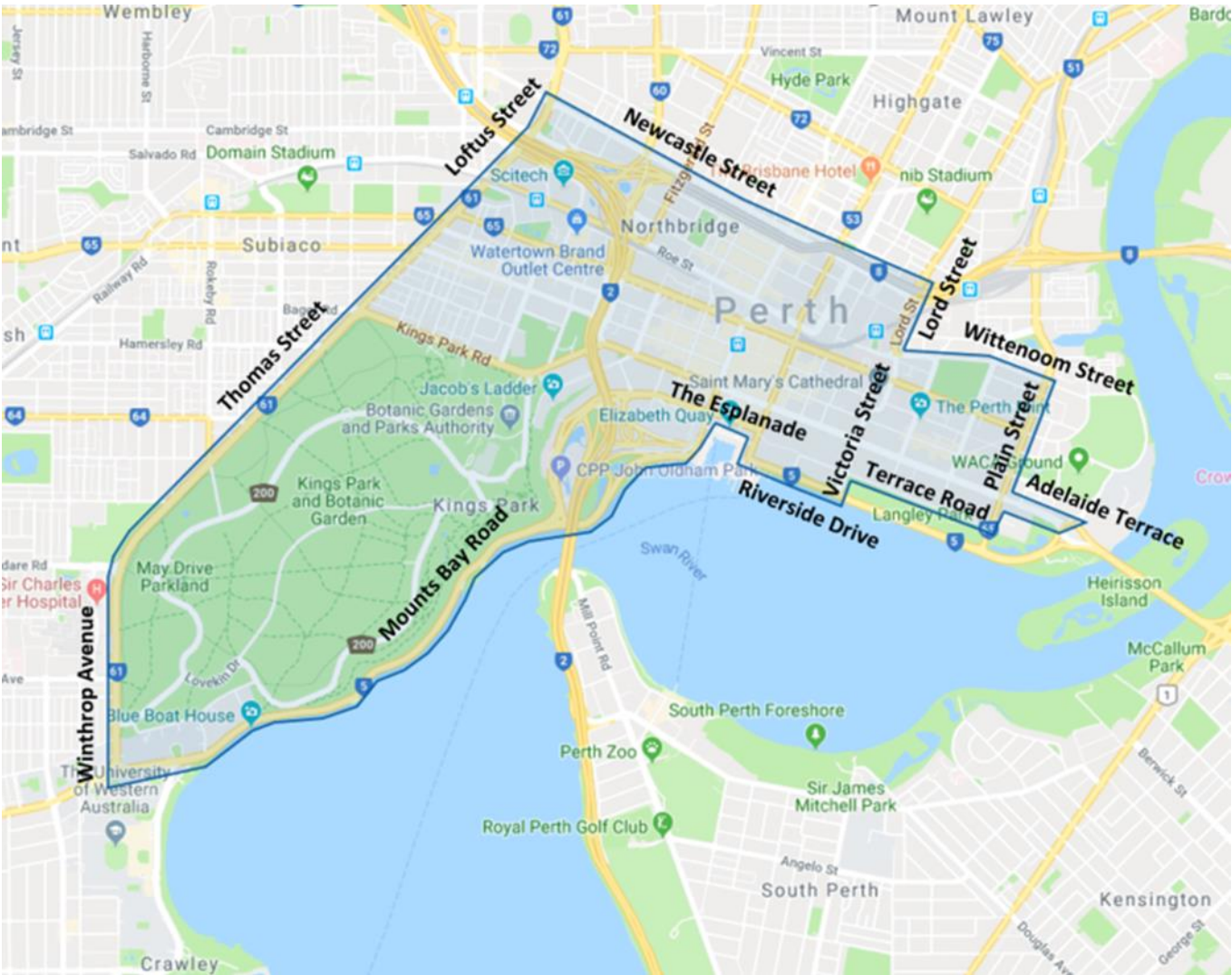
- 15.1.1** Approval to operate the HLTT may be suspended when road and/or traffic conditions are considered unsuitable. Main Roads personnel, WA Police or Traffic Escort Wardens, may make verbal notification of such suspension.
- 15.1.2** Approval to operate the HLTT may be suspended or revoked if the permit holder or vehicle combination fails to comply with any of the requirements specified in these Operating Conditions.

15.2 Amendments & Notifications

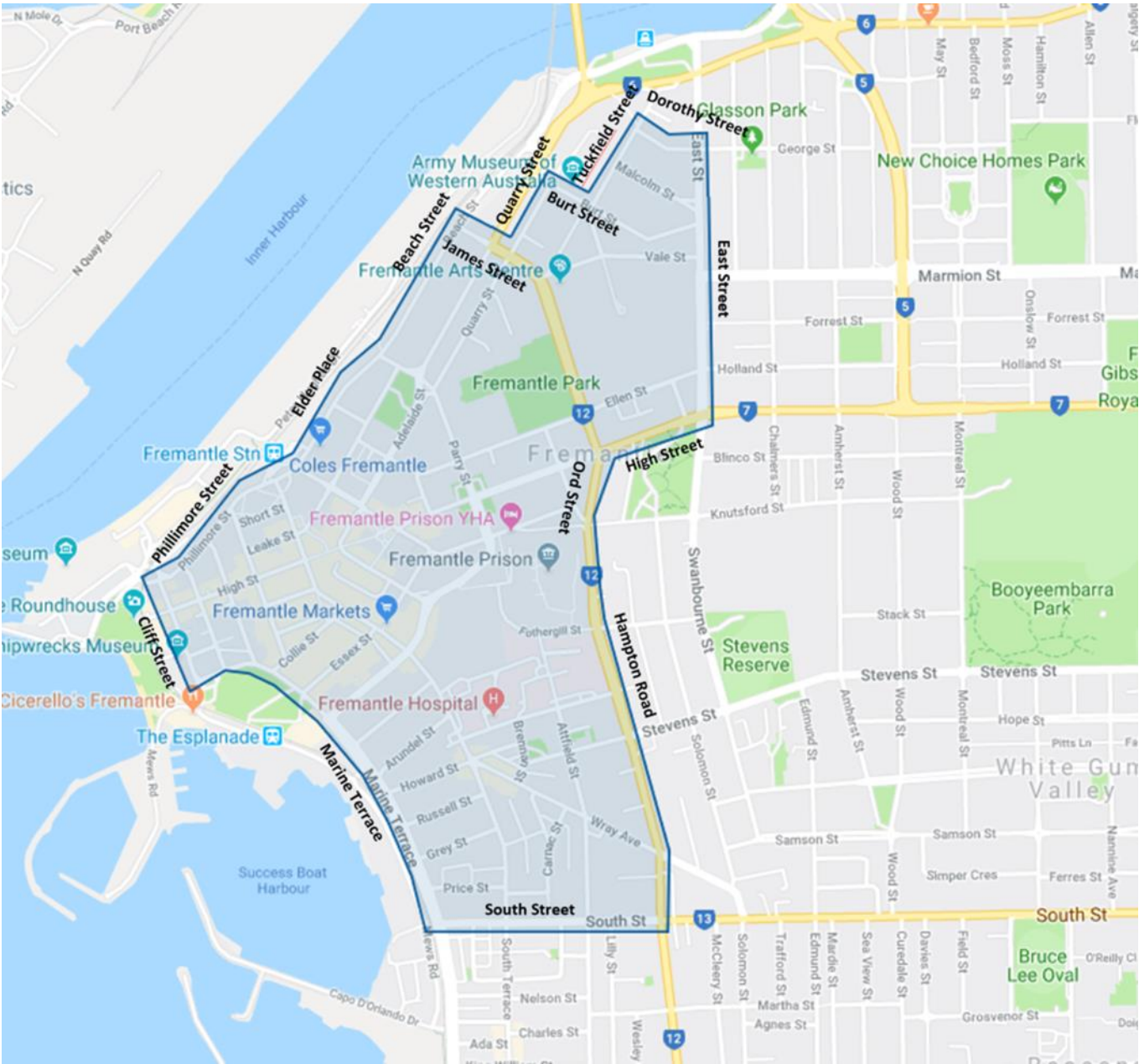
- 15.2.1** These Operating Conditions are subject to occasional amendments. If amendments are made that impact the permit holder, they will be published as an “HVS Update” on the Main Roads website on the first working day of the month. Permit holders and drivers are required to ensure that they are operating vehicles on the public road network in accordance with the current and up to date Operating Conditions.
- 15.2.2** The RAV Networks and Restricted Bridge lists are subject to periodic amendments, which include additional roads or restricted bridges being included in the lists, roads or restricted bridges being removed from the lists, or amendments being made to a condition relating to a particular road in the lists. RAV Network and Restricted Bridge list updates will be effective from the Wednesday following the amendment and the RAV Networks and Restricted Bridge lists are maintained in the RAV Mapping Tool on the Main Roads website. Permit Holders and drivers are required to ensure they are operating vehicles on the public road network in accordance with the current and up to date RAV Networks and Restricted Bridge lists.
- 15.2.3** Heavy Vehicle Travel Impacts are published when road conditions may impede the movement of heavy vehicles. Permit holders and drivers are required to check the Heavy Vehicle Travel Impacts in the RAV Mapping Tool on the Main Roads website immediately prior to operating the vehicle on the public road network to ensure that there is no relevant information that will impede their vehicle operating on the WA road network.
- 15.2.4** All conditions stipulated in HVS Updates or Heavy Vehicle Travel Impacts must be adhered to.

Appendix 1 – Central Zones

Perth Central Zone



Fremantle Central Zone



Appendix 2 – Mass Guide for D-Rating Calculations

Vehicle Type	Typical Tare Mass
Prime Mover	8-12t
Semi-Trailer	6-8t
Converter Dolly	2-3t

Note: If unsure, use a lesser tare mass for a more conservative result.



Note: If unsure, use a higher axle group mass for a more conservative result.

Appendix 3 – Common RAV Configurations

Vehicle Configuration	Common Name	Maximum Length	Maximum Statutory Mass	Maximum Mass under AMMS 1	Maximum Mass under AMMS 2	Maximum Mass under AMMS 3
			Approved Network	Approved Network	Approved Network	Approved Network
	PBS Prime Mover & Quad Axle Semi-trailer	≤ 20.0m	48.5t	53.0t	56.0t	58.0t
			PBS Q1.1	PBS Q1.1	PBS Q1.2	PBS Q1.3
	Truck & Dog	≤ 25.0m	68.5t	72.0t	74.0t	76.5t
			Tandem Drive N2	Tandem Drive N2.1	Tandem Drive N2.2	Tandem Drive N2.3
	B-Double	≤ 27.5m	68.5t	72.0t	74.0t	76.5t
			Tandem Drive N2	Tandem Drive N2.1	Tandem Drive N2.2	Tandem Drive N2.3
	A-Double	≤ 27.5m	88.5t	93.5t	96.5t	100.0t
			Tandem Drive N4	Tandem Drive N4.1	Tandem Drive N4.2	Tandem Drive N4.3
	PBS A-Double	≤ 30.0m	88.5t	93.5t	96.5t	100.0t
			PBS 2B.1	PBS 2B.1	PBS 2B.2	PBS 2B.3
	PBS Quad Axle A-Double	≤ 32.0m	92.0t	103.0t	111.0t	116.0t
			PBS 2B 32m Endorsement	PBS 2B 32m Endorsement	PBS 2B 32m Endorsement	PBS 2B 32m Endorsement
	A-Double	≤ 36.5m	88.5t	93.5t	96.5t	100.0t
			Tandem Drive N6	Tandem Drive N6.1	Tandem Drive N6.2	Tandem Drive N6.3
	B-Triple	≤ 36.5m	88.5t	93.5t	96.5t	100.0t
			Tandem Drive N6	Tandem Drive N6.1	Tandem Drive N6.2	Tandem Drive N6.3
	AB-Triple	≤ 36.5m	108.5t	115.0t	119.0t	123.5t
			Tandem Drive N7	Tandem Drive N7.1	Tandem Drive N7.2	Tandem Drive N7.3
	BA-Triple	≤ 36.5m	108.5t	115.0t	119.0t	123.5t
			Tandem Drive N7	Tandem Drive N7.1	Tandem Drive N7.2	Tandem Drive N7.3
	Truck & 2 Dogs	≤ 36.5m	108.5t	115.0t	119.0t	123.5t
			Tandem Drive N7	Tandem Drive N7.1	Tandem Drive N7.2	Tandem Drive N7.3
	PBS A-Triple	≤ 42.0m	132.0t	141.0t	147.0t	153.0t
			PBS TD3B.1	PBS TD3B.1	PBS TD3B.2	PBS TD3B.3
	A-Triple	≤ 53.5m	128.5t	136.5t	141.5t	147.0t
			Tandem Drive N10	Tandem Drive N10.1	Tandem Drive N10.2	Tandem Drive N10.3
	PBS Quad Axle A-Triple	≤ 53.5m	132.0t	148.5t	160.5t	168.0t
			PBS TDQ4.1	PBS TDQ4.1	PBS TDQ4.2	PBS TDQ4.3
	AAB-Quad	≤ 53.5m	148.5t	158.0t	164.0t	170.5t
			Tandem Drive N10	Tandem Drive N10.1	Tandem Drive N10.2	Tandem Drive N10.3
	PBS A-Quad	≤ 60.0m	172.0t	184.0t	192.0t	200.0t
			PBS TD4B.1	PBS TD4B.1	PBS TD4B.2	PBS TD4B.3
	PBS Quad Axle BAA-Quad	≤ 60.0m	152.0t	175.0t	192.0t	201.5t
			PBS TDQ4B.1	PBS TDQ4B.1	PBS TDQ4B.2	PBS TDQ4B.3
	PBS Quad Axle A-Quad	≤ 60.0m	172.0t	194.0t	210.0t	220.0t
			PBS TDQ4B.1	PBS TDQ4B.1	PBS TDQ4B.2	PBS TDQ4B.3