MOTORCYCLING AUSTRALIA

TRACK GUIDELINES

Guidelines for the Inspection and Licensing of Tracks

1st Edition – January 2012

The Venue Standards (2006) have been replaced with Track Guidelines v.2 (2011) effective 1 September 2011

These Track Guidelines v.3 (2012) will come into effect 1 January 2012

MSSW MQ MOTORCYCLING QUEENSLAND MSA MOTORCYCLING SOUTH AUSTRALIA INC. MANT MOTORCYCLING TASMANIA MOTORCYCLING VICTORIA MWP MOTORCYCLING WESTERN AUSTRALIA

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Introduction

The Track Guidelines (the Guidelines) have been developed by Motorcycling Australia (MA) to assist MA approved Track Inspectors, to conduct an inspection assessment of motorcycle tracks, to facilitate the provision of insurance for affiliated clubs, participants, Promoters and Track Operators, through the Motorcycling Australia Insurance Limited (MAIL) scheme.

As the governing body for the sport in Australia, MA is committed to promoting safe motor sport, through various education and training initiatives and through the publication of other guideline materials, including The Manual of Motorcycle Sport.

The safe operation and management of tracks and events, remains the responsibility of Track Operators and Event Promoters.

Motorcycling Australia Insurance Limited (MAIL)

Motor sport is a dangerous activity. Access to affordable and appropriate insurance has been a major issue for MA and many other sporting organisations. MA recognises that without the MAIL scheme, many affiliated clubs, participants and Promoters would find it difficult to obtain insurance. To ensure the sport has a viable future, MA has operated the MAIL scheme since 2003.

The MAIL scheme covers personal accident insurance for participants, officials and others. The scheme also provides public liability insurance for Track Operators during events operating under a Permit issued by MA or a Relevant Controlling Body (RCB), at a track that has been inspected and licensed by MA or an RCB, in accordance with these Guidelines.

To access coverage under the MAIL scheme:

- A track must be inspected by a MA Licensed Track Inspector in accordance with these Guidelines
- The Track Inspector must produce a Track Report
- The Track Operator must be approved by MA or the RCB
- An event must be conducted pursuant to a Permit issued by MA or the RCB
- In respect of personal accident insurance for participants, the participants must hold a current MA Competition or Recreation Licence.

Application and Scope of the Guidelines

The Guidelines must be applied in their entirety for a newly constructed track. In the case of existing tracks, where there is identified non-compliance with the Guidelines, a Targeted Risk Assessment (TRA) must be performed by the Track Inspector. Where rectification work is required, MA or the RCB will consult with the Track Operator to develop a scheduled Works Program for the Track Operator to complete.

These Guidelines are not mandatory, however MA or the RCB may refuse to issue a Track Licence for a track where non-compliance with the Guidelines is identified.

A Track Inspector may use reference materials in assessing matters of non-compliance, within the framework of a TRA, such as the Manual of Motorcycle Sport or documents produced by the Federation Internationale de Motorcyclisme (FIM).

For the purposes of obtaining a Track Licence to conduct an international event, additional measures may be required to comply with FIM standards. The FIM publishes information to assist Track Operators to develop their tracks for international competition.

The Role of a Track Inspector

Track Inspectors assess tracks for the purpose of providing a Track Report to MA to facilitate the provision of insurance under the MAIL scheme, as detailed above. Track Inspectors play a valuable role in motor cycle sport in Australia, by assisting MA affiliated clubs and participants to access the MAIL scheme.

Track Inspectors do not provide advice to Track Operators or Promoters in regards to legal or regulatory compliance.

Support Facilities at Tracks

It is the responsibility of Track Operators to ensure compliance with all local, state and territory or federal laws, regulations and codes, regarding the safe design, construction, management and operation of the track and all support facilities.

Disclaimer

The Guidelines are for use only by MA approved Track Inspectors and other persons expressly authorised by MA, to conduct track inspections for insurance purposes. However, these guidelines can be made available to people intending to construct a motorcycle venue. MA and its subsidiaries or related entities, do not accept responsibility for the unauthorised use of information contained in these Guidelines.

MA and/or the RCB will make a decision whether or not to issue a Track Licence, after considering the information in the Track Inspection Report and any other relevant factors. The decision to issue a Track Licence is at the complete discretion of MA and/or the RCB.

A Track Inspection Report and any related documents or information, whether written or oral, produced by or exchanged between, MA (or the RCB) and/or a Track Inspector and/or a Track Operator, for the purpose of obtaining a Track Licence, must not be published, distributed or disseminated to unauthorised persons or third parties. Such documents or information must not be provided to any local, state, territory or federal legal or regulatory agency, authority or department unless required by law.

A Track Licence issued by MA and/or the RCB is only valid for the purpose of accessing insurance coverage under the MAIL scheme, where the event conducted at the relevant track is authorised under a Permit issued by MA or the RCB or where a specific authority has been obtained from MA. For detailed information regarding the issuing of Permits and for full details of the MAIL scheme, contact MA or the RCB.

Any information exchanged between MA (and/or its subsidiaries, affiliates or agents) (and/or the RCB and/or its subsidiaries, affiliates or agents) and a Promoter or Track Operator, arising out of or in connection with a Track Inspection or these Guidelines and/or in relation to the management of risk in motorcycle sport, is for the purpose of facilitating the Track Licence process to assess insurance coverage under the MAIL scheme and must not be relied upon for any other purpose, or construed as advice with regards to legal or regulatory compliance.

It is the responsibility of the Track Operator and/or Promoter to ensure that the track and support facilities comply with any planning, building, environmental, occupational health and safety, public safety or other local, state or territory laws, regulations or codes.

MA does not conduct a business or undertaking to ensure that participants in events or other people attending such events held at tracks licensed by MA are not put at risk. The purpose of these Guidelines and the licensing process, is to facilitate the provision of insurance for affiliated clubs, participants, officials Track Operators, Promoters and others under the MAIL scheme and thereby ensure the continued viability of the sport.

1. DEFINITIONS

1.0 Definitions or interpretations

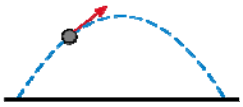
For the purpose of these Guidelines, the following definitions apply:

1.0.1	Audit	A check of the works undertaken at a track against a scheduled Works Program that results from a track inspection and/or Track Inspection Report.
1.0.2	Arena Cross	See “stadium motocross”.
1.0.3	Arrestor Bed	See “Gravel Trap”.
1.0.4	CAMS	Confederation of Australian Motor Sport.
1.0.5	Closed Track	The whole or part of a track only accessible to competition machines.
1.0.6	Competition Area	The area at a motorsport track or venue to which spectators or the general public are not admitted, where vehicles can move at unrestricted speed and including track entry and exit roads.
1.0.7	Conveyor Belt Facing	A strip of conveyor belt attached to the front of at least a row of tyre bundles or other appropriate backing.
1.0.8	Course	Generally understood to be a track that need not start and end at the same point.
1.0.9	Curve	A change in direction through an angle greater than 15 degrees with a radius of less than three hundred (300) metres.
1.0.10	FIA	Federation Internationale Automobile – the international automobile federation.
1.0.11	FIM	Federation Internationale de Motorcyclisme – the international motorcycle federation.
1.0.12	GPS	Global Positioning System.
1.0.13	Gravel Trap	That portion of a run off area of a road racing track (or course) which incorporates a specified type of gravel, designed specifically to slow the progress of a competition vehicle if/when entering the gravel trap.
1.0.14	International Event	A motor cycle event which may be conducted according to international rules and track standards as determined by the FIM and involving competition from more than one Nation.
1.0.15	Jump	An obstacle that would reasonably require that a machine negotiating it would become airborne.

1.0.16	Lighting	i) Lighting must be of a standard that provides clear and even visibility on all racing surfaces, free of shaded areas and be of 200 lux minimum intensity on all parts of the racing track. ii) Particular attention must be paid to the illumination of ramps. iii) Lighting equipment must be carefully placed so that riding directly towards a set of lights does not hinder a competitor's view iv) Lighting is to be measured at the track surface with a lux metre or other measuring device v) Lights must be inspected at least one business day prior to the night meeting.
1.0.17	Lines of Protection	i) First line of protection — The barrier closest to the track which acts to prevent motorcycles and riders from colliding with spectators and officials or prevents them from crossing other parts of the track. ii) Second line of protection — A fence or barrier required to prevent the public entering the racing arena. Note: For some tracks the lay of the land may suffice as a first line of protection.
1.0.18	MA	Motorcycling Australia Limited
1.0.19	MA Track Inspector	An official approved by MA, assigned to undertake inspections of tracks and to report findings as appropriate in a MA Track Inspection Report.
1.0.20	Major Alteration	An alteration to the construction, design or configuration of a track, since the most recent Track Inspection and Report.
1.0.21	Marshal Zone	An area reserved for the exclusive use of authorised personnel, usually event officials.
1.0.22	Motocross	A competition that is held on an outdoor track of natural terrain which may have man-made obstacles.
1.0.23	Multiple Jump	An obstacle that consists of two to a maximum of four jumps within 10 metres of each preceding jump on a straight section of the course. A multiple jump includes any two obstacles that can be cleared in a single action measured from the leading edge.
1.0.24	may	Indicates a recommendation only.
1.0.25	must	A mandatory requirement under these Guidelines. If a requirement or action which must be implemented has not been implemented an appropriate notation must be made on the Track Licence and/or Track Inspection Report.

1.0.26	Natural Terrain	A temporary or permanent outdoor track that is set out using the natural contours of the site and has no man-made obstacles.
1.0.27	Obstacle	i) In Motocross / Supercross / Stadium Motocross: a Jump, Multiple Jump, Whoops Section (1.0.52), Table Top Jump. No other layout obstacle is defined for the purpose of these Guidelines (i.e. other names given to obstacles such as rolling wave etc.). For Enduro and Moto-Trials, an obstacle can be any challenge to a competitor and machine during the course of a competition. *An Obstacle is simply something a rider will ride over* ii) A hazard or object adjacent to the track (trees, sign, culvert, post etc.). A hazard is something a rider will run into. iii) For Enduro and Moto-Trials an obstacle can be any challenge to a competitor and machine during the course of a competition
1.0.28	Neutral Zone	i) An area between the first and second lines of protection that provides a buffer between spectators and machines on the track. ii) An area extending from the edge of the track which must be clear of obstacles or objects which are likely to cause riders to fall from their motorcycles.
1.0.29	Paddock Area / Competition Support Area	Area(s) established for use by competitors and their competition and support vehicles.
1.0.30	Parc Ferme	An area where machines are impounded and access may be restricted in accordance with the regulations for the event.
1.0.31	Promoter	The holder of an event or competition Permit issued by MA or the RCB.
1.0.32	Race Line or Trajectory	The ideal trajectory which is followed by the competitors under competition conditions, which may not correspond to the geometric shape of the track.
1.0.33	Racing Arena	An area including the racing track proper and extending at a minimum to where the "second line of protection" would need to be placed (infield and outfield) behind run-off areas of dimensions calculated for “new tracks” as defined within these Guidelines.

1.0.34	RCB	Relevant Controlling Body. This is the body, either MA or an affiliated State or Territory body , with jurisdiction to issue a Permit for an event or competition or to issue a Track Licence.
1.0.35	Run-Off Area	The area on the outside of curves extending from the track to the first line of protection (or barrier).
1.0.36	Safety Fence	Also known as “the first line of protection” - the barrier closest to the track which acts to prevent motorcycles and riders from colliding with spectators and officials or prevents them from crossing other parts of the track.
1.0.37	Spectator Fence	Also known as “the second line of protection” - A fence or barrier required to prevent the public entering the racing arena.
1.0.38	Speed Diagram	A table or diagram indicating the maximum speeds attainable in the straights and curves of the track calculated in accordance with the data provided in section 3, figures 1, 2 and 4.
1.0.39	Start Gate	The mechanical apparatus behind which motorcycles are assembled to start an event.
1.0.40	Stadium Motocross	A competition held on a temporary or permanent indoor or outdoor track predominantly consisting of manmade obstacles within an arena or stadium.
1.0.41	Start Pad	The area immediately behind the start gate where the motorcycles are lined up ready to commence the competition.
1.0.42	Stutter Section	Two or more obstacles with a maximum height of 1 metre, a minimum distance between peaks of 1 metre and a maximum distance between peaks of 3 metres. Stutter Sections are to be of the same height, spacing and construction and they should be placed after corners or jumps so that a varied entry and riding line is encouraged. Stutter sections should generally be rounded off and made with a very good binding material to avoid rutting out.
1.0.43	Supercross	A competition held on a permanent or temporary indoor or outdoor track predominately constructed of man-made obstacles in an arena.
1.0.44	Table Top Jump	An obstacle with a flat horizontal surface with a minimum length of 3 metres and a maximum length of 18 metres.
1.0.45	Track	A broad term applied to all tracks used for motorcycle sport, capable of being licenced under these Track Guidelines.

		A track can be paved or unpaved or sealed or unsealed. A track can: • begin and end at the same point; or • begin and end at different points; and • can be either temporary or permanent.
1.0.46	Track Inspection	A formal, structured assessment process, undertaken in respect of a prospective or current motorcycle sport track, for the purpose of issuing or renewing a Track Licence and facilitating the provision of insurance under the MAIL scheme.
1.0.47	Track Inspection Report	A report generated by a MA approved Track Inspector following a Track Inspection.
1.0.48	Track Operator	The principal person or body controlling the day-to-day operation of a motor sport track or venue and can include the owner of track.
1.0.49	Trajectory point	The point that a motorcycle is launched while negotiating an obstacle in which the rear wheel becomes airborne. 
1.0.50	Triennial Inspection	A compulsory major inspection of all Tracks, undertaken by an approved MA Track Inspector with other stakeholders, conducted at 3 year intervals. The Triennial Inspection will list a works program. In intervening years, a minor inspection will take place to ensure the track is in the same or similar condition as the Triennial Inspection and the agreed works program is being adhered to.
1.0.51	Verge	The area immediately between the track and the first line of Protection (Road Racing Tracks)
1.0.52	Whoop Section	Two or more rounded obstacles of even spacing, same height and construction, with a maximum height of 0.6 metre, a minimum distance between crests of 3 metres and a maximum distance between crests of 6 metres. The section shall be contained only within the second half of a circuit. It shall not be possible for riders to clear more than one rounded obstacle while negotiating a whoop section.
1.0.53	Works Program	A scheduled and budgeted program of works, negotiated by the RCB and the Track Operator detailing any rectification works necessary to comply with these Guidelines and/or a licensing requirement prescribed by MA and/or the RCB.

2. TRACK INSPECTIONS

2.0 RCB to Inspect Tracks

2.0.1 Tracks Inspected are arranged by the RCB depending on the type of track and configuration.

2.0.2 MA is the RCB and will arrange for the inspection of the following tracks:

- Road Race Circuits
- Tracks holding National Championship Events

2.0.3 The various State and Territory bodies are the RCB's and will arrange for the inspection of following tracks:

- Motocross
- Stadium Motocross
- Supercross
- Speedway
- Track
- Dirt track
- Supermoto
- Temporary Courses
- FMX
- Minikhana

2.1 Track Inspectors

2.1.1 The Track Inspector must be approved by MA and meet any requirements as prescribed by MA or the RCB from time to time.

2.1.2 Track Inspectors assess tracks for the purpose of providing a Track Report to the RCB.

2.1.3 Track Inspectors do not provide advice to Track Operators or Promoters in regards to legal or regulatory compliance.

2.1.4 Track Inspectors must complete and submit a Track Inspection Report to the RCB. The requirements for a Track Inspection are detailed below at 2.2

2.2 Inspections

2.2.1 During the inspection, the Track Inspector must be accompanied by a representative of the Track Operator.

2.2.2 All tracks, excluding temporary tracks, must be inspected annually in accordance with these Guidelines.

2.2.3 A triennial inspection or "major inspection" may identify in a scheduled Works Program, any upgrades or rectification works required must be completed by the Track Operator to maintain a Track Licence.

2.2.4 The Works Program may provide a schedule for the works to be completed over the preceding three (3) year period.

2.2.5 The scheduled works as detailed in the Works Program must be recorded as conditions of the Track Licence.

2.2.6 Annual inspections that take place between triennial inspections will ensure that the Works Program is being completed in accordance with the schedule.

2.2.7 For National Championship and National events, the RCB must arrange a track inspection or re-inspection two (2) months prior to the event.

2.2.8 For other events, the RCB must arrange the inspection or re-inspection fourteen (14) days prior to the event to ensure enough time is available for recommended modifications.

2.2.9 For temporary venues, the inspection timeframes must be arranged with the RCB.

2.2.10 It is the responsibility of the Track Operator to ensure that the inspection occurs within sufficient time to make final alterations to achieve compliance prior to an event.

2.3 Plans

Plans must show all tracks and support facilities

2.3.1 An accurate plan to the scale of 1:1000 of the track, paddock area, amenities, support facilities and installations for the public, with all relevant dimensions indicated, must be made available to the Track Inspector by the Track Operator at the Track Inspection.

2.3.2 If the track venue has more than one track, a Plan of all the tracks at the venue showing their relevant position to each other, must also be provided to the Track Inspector at the Track Inspection.

Plan must be included in Track Inspection Report and attached to Track Licence

2.3.3 The Plan must clearly indicate:

a) The location and number of track marshals points necessary for competition, practice or a ride day to take place. The numbers may vary for competition, practice and a ride day.

b) Obstacles on the track (each one indicated by a number) including approximate height, width and length, marshal posts, first aid units, ambulances, race offices, emergency areas and any other obstacles.

c) The location of medical facilities and the parking position of first aid or ambulance vehicles if they are required.

2.3.4 The length of the track must be recorded in the Plan.

The track must be measured along the centre line of the track (or the defined measurement point), using a measuring wheel or another suitable device.

2.3.5 Each obstacle must be numbered on the Plan. The approximate height, width and length of each obstacle must also be recorded on the Plan.

2.3.6 A copy of the Plan should remain at the track.

2.3.7 Where a re-inspection is necessary, an updated Plan recording any new sections of the track, must be provided to the Track Inspector by the Track Operator. A copy of the updated Plan should also remain at the track. An updated Plan must be included in an updated Track Inspection Report and forwarded to the RCB.

2.4 Application for Track Inspection

2.4.1 A Track Operator, Promoter, MA or RCB affiliated club or responsible delegate can apply for a Track Inspection through the RCB.

2.5 Track Inspection Report

2.5.1 In addition to anything required under each Track Guideline's Module, a Track Inspection Report should include the include the documents, information and/or details listed below:

a) GPS Co-ordinates for the track (see 3.2)
b) Track Venue Plan – accurate plan of 1:1000 (see 2.3)
c) Signage – warning notices and notices to the public (see 4.4)
d) Emergency procedures (see 4.1)
e) Paddock and Track Area
f) Marshalling considerations – Clearly defined line of sight etc.
g) Machine examination or Scrutineering Area
h) Public address system (pits / spectators)
i) Timing facilities - location
j) Medical Centre / first aid room facilities
k) Emergency equipment including fire prevention
l) Emergency access to track and infield
m) Special considerations and/or restrictions

3. LICENSING PROCEDURES

3.0 Track Guideline Modules

3.0.1 The purpose of the Track Guideline Modules (the Modules) is to assist Track Inspectors to inspect and licence tracks as part of the licencing procedures.

3.0.2 Track Guideline Modules are provided for the following tracks:

n) Road Racing
o) Motocross
p) Stadium Motocross
q) Supercross
r) Speedway
s) Track
t) Dirt Track
u) Supermoto
v) Freestyle MX and
w) Temporary Courses

3.0.3 In some states or territories of Australia, various government authorities may also be involved in the inspection or licensing of tracks. Track Operators should ensure that they are familiar with any local, state or territory laws, regulations, codes or procedures that may apply.

3.0.4 These Guidelines apply to and accommodate any form of motorcycle without discrimination as listed in the Manual of Motorcycle Sport, GCR 1.1.0.21

3.0.5 For Guidelines relating to Minikhana, refer to 26.7 of the Manual of Motorcycle Sport (2011).

3.1 Application for Track Licence

3.1.1 A Track Operator, Promoter, MA or RCB affiliated club or responsible delegate can apply for a Track Licence through the RCB.

3.2 GPS co-ordinates

3.2.1 The Application for a Track Licence must include the G.P.S. co-ordinates of the track. The co-ordinates must be listed on the Track Licence. The G.P.S. co-ordinates must identify an approved place for an emergency helicopter to land as provided by the relevant expert.

Other documentation required

3.2.2 The documentation required for an Application for a Track Licence will depend on the track configuration or discipline. The specific requirements for an Application and Licence are set out under the heading for each Module.

3.3 Modifications to Tracks

The RCB must be notified of any alterations or modifications to a track prior to the commencement of works. Failure to notify the RCB may render any Track Licence void and may result in the refusal of a future licence.

3.4 Works Program

Where a track inspection identifies that a track requires maintenance, an upgrade or development, the RCB and the Track Operator will develop and document a budgeted and scheduled "Works Program" to bring the track into compliance with the Track Guidelines to ensure that the track can maintain a Track Licence.

3.5 Track Licence

The Track Licence must state any specific licensing conditions which may be applicable to that track, such as works to be completed under a scheduled Works Program.

4. OPERATIONAL MINIMUM GUIDELINES

4.0 Track and Support Facilities

It is the responsibility of Track Operators to ensure that tracks have adequate support facilities, such as toilet facilities, access to drinking water and facilities to accommodate first aid requirements.

4.1 Emergency Procedures

It is the responsibility of Track Operators and/or Promoters to have appropriate emergency procedures in place.

A written Emergency Management Plan (EMP) must be made available to the Track Inspector during the Track Inspection.

It is not the responsibility of the Track Inspector to review the EMP. The Inspector's role is to ensure that the Track Operator has a written EMP that can be displayed at the track during events.

4.2 Paddock Area & Track Access

4.2.1 The Track Inspector must ensure that all tracks have a Paddock area for participants' vehicles and motorcycles. This should be separate to the parking area or viewing area for non-participants.

4.2.2 The riders' paddock/parc ferme area should be reasonably flat with direct access to the track starting/collecting area, which must be clearly marked and securely fenced.

4.2.3 Where the paddock is immediately adjacent to the course the whole length adjoining the course shall be fenced in an appropriate manner similar to that used to separate spectator enclosures.

4.2.4 Track Inspectors must ensure that the track has appropriate provisions for a clearly marked collecting area for riders to wait before joining the track.

4.2.5 Where a track has more than one circuit, a separate collecting area must be available for each circuit.

4.2.6 Where a track has more than one circuit, there is no requirement under these Guidelines for any additional paddock's or refuelling points.

4.2.7 The track must also have an emergency access route allowing emergency vehicle access to all parts of the circuit.

4.3 Legal and Regulatory Compliance

It is the responsibility of the Track Operator and/or the Promoter to ensure compliance with any local, state and territory or federal laws, regulations or codes regarding the safe management and operation of the track and all support facilities.

4.4 Notices to the Public

All tracks are required to have signage as detailed in Chapter 4 of the Manual of Motorcycle Sport under the heading *"Notices to the public".* These Notices are mandatory.

Track Inspectors must ensure that all Notices are permanently affixed. Where Notices are not permanently fixed, Track Inspectors must ensure that the Notices are available and stored at the track by the Track Operator or Promoter.

Events on public roads must have the warnings placed at the main event control / parc ferme.

4.4.1 Warning to the public that motor sport is dangerous

(550 mm x 450 mm minimum) Warning notices as detailed must be displayed on each side of every entrance to the course, including the entrance to car parks and paddock.

These notices must be prominently displayed and where they can be easily read by the public before any admission charge is paid, or where no admission charge is made, before entry is gained into the venue

Where it is not possible to define the limits of the site and to control admission of the public (e.g. War Department and heath land) warning notices must be displayed in the main event control parc ferme and also in the car parks.

The following standard notice warning the public that motorcycle competition occurs at the venue.

WARNING TO THE PUBLIC
Motor racing is DANGEROUS, and spectators attending this track do so entirely at their own risk. It is a condition of admission that all persons having a connection with the promotion, and/or organisation, and/or conduct of the meeting, including the owners of the land and the riders and owners of vehicles and passengers in the vehicles, are absolved from all liability arising out of the accidents causing damage or personal injury to spectators or ticket holders, except where due care and skill has not been exercised.

4.4.2 Prohibited Area Notice

a) (550 mm x 450 mm) Areas where the public are not permitted, the area must be clearly defined by displaying an adequate number of "Prohibited Area" notices. These notices must also be displayed in any prohibited areas facing the public. Warning Notice (4.4.1) must also be erected in these areas but they must be used in addition and not in place of Prohibited Area Notice 4.4.2).

PROHIBITED AREA
The Public is not permitted in this area.

b) No other form of notice for warning the public generally or for prohibiting access to certain areas shall be displayed.

4.4.3 Warning Notice – Alcoholic beverages

(550mm x 450mm) A sign must be prominently displayed in pit areas warning that the carrying or consumption of alcoholic beverages by all personnel in the area is prohibited.

WARNING The carrying or consumption of alcoholic beverages in the pit area is prohibited. By Order, Motorcycling Australia Ltd

4.4.4 Notice Sign

(550mm x 450mm) At the entrances to any venue a promoter must prominently display the following sign:

NOTICE No Animals Allowed. Guide Dogs Excepted By Order, Motorcycling Australia Ltd

4.4.5 Pit Area

(550mm x 450mm) Pit areas must be clearly defined. A promoter must prominently display the following sign at the entrance to the pit area. In all pit areas the following rule will apply:

The riding of motorcycles in the pit area is only allowed in marked access lanes. By Order, Motorcycling Australia Ltd

No Smoking in Pit Area By Order, Motorcycling Australia Ltd

4.4.6 Directional flow signs must be present on the track.

4.4.7 Emergency route signage must be present at the venue.

4.4.8 Track and Paddock exit and entrance points must be clearly signed.

4.4.9 All venues must have a sign displaying a full site plan, with toilets, track exit and entry points, spectator areas, refuelling points, and emergency ambulance points clearly marked.

4.5 Rider Information Signs

All tracks must have a permanent track map sign displayed in the Paddock area.

This must display the track plan, with emergency access routes, location of First Aid posts, toilets and fire extinguisher points. The sign must have a clear track map showing marshal points and track access and exit points.

4.6 Landline / Mobile Telephones

There must be at least one working telephone connection at the facility/venue at all times. If there is no landline connection, then a nominated individual must have a fully charged mobile telephone with them, preferably with a vehicle charger and/or spare battery and/or power pack. All officials must be aware of the name and location of the nominated individual at all times.

Where a facility is sited outside of the range of mobile telephone network coverage, the operator must make other arrangements via radio links or satellite phone.

All appropriate officials/marshals must ensure they have radio, satellite phone or mobile phone contact with each other.

5 TRACK GUIDELINES – ROAD RACE MODULE

5.0 Scope and Application

This module outlines the track conditions which must be evident during a Track Inspection and recorded in a Track Inspection Report, before the RCB can issue a Track Licence.

Where a track does not comply with the module, a Targeted Risk Assessment (TRA) must be completed and submitted to the RCB, in accordance with the procedures in "Appendix A".

This module must be applied in its entirety to new tracks. For areas of non- compliance at an existing track, a Track Inspector must undertake a TRA. The TRA may result in a scheduled Works Program. Any voluntary modifications or upgrading to a track by the Track Operator must comply with this module and be notified to the RCB in accordance with these Guidelines.

This module applies to permanent, semi-permanent or temporary tracks.

5.1 Procedure for Upgrading of Existing Tracks

5.1.1 Provide Survey Plan

Provide an accurate survey plan of the track and surrounds certified by a Licensed Land Surveyor. Due to the large area involved at most tracks and the number of features within that area, MA considers that aerial surveying will provide the required detail at the most economical rate. Refer to section 2.3 Plans.

5.1.2 Documentation

For road race tracks, an Application for a Track Licence must include sufficient documentation to evidence compliance with this module and the Guidelines. The Application must include an accurate plan of the track, based upon survey by a licensed land surveyor, presented in both paper and digital format to show:

a) the racetrack proper;

b) a diagram of speeds which shows an overlay of the run-off distances on every corner;

c) the location, extent, height and construction type of the first line of protection;

d) the location, extent, height and construction type of the second line of protection;

e) the location, extent and cross section of all kerbing;

f) the location and extent of pit entry / exit roads;

g) the location and type of all braking markers;

h) an accurate representation of the grid markings;

i) the location and extent / size of all marshal points;

j) level information over the area of the racing arena to an accuracy of +/- 200mm;

k) any other features within the racing arena as defined in 5.3 and 5.4 of this module;

l) the location and number of competitor and spectator toilet/shower facilities;

m) the location of first aid rooms/units;

n) the location of Ambulance parking site and entrance to racing arena;

o) the GPS location of the track for emergency evacuation.

Any other relevant information requested by the RCB or the Track Inspector.

5.1.3 Submit Documentation

Documents, drawings and supporting calculations are to be submitted to MA indicating proposed alterations (if any) to track to achieve compliance with the Guidelines. The documentation must include an overall plan of the track to a minimum of 1:1000 scale, plan(s) to 1:500 scale of everything within the "racing arena" and a "Speed Diagram".

5.1.4 Obtain Approval of Documentation

MA will check the documentation and advise of approval or otherwise. If documentation is not approved, MA will provide a written response indicating item requiring attention to facilitate approval.

5.1.5 Construction

Works must not commence until receipt of approved documents from MA.

5.1.6 Inspections

a) All tracks must have approved drawings before an inspection for the purposes of licensing is requested from MA.

b) All documentation (as detailed in Section 5.1.2) must first be submitted to MA for approval and once approved in writing, must be followed by a track inspection to ensure compliance with the approved drawings.

c) Venue Operators must renew their licenses annually, and those venues having approved drawings and no changes to the track from the previous year may request inspections for the purposes of re-licensing.

d) Where alterations have been carried out to a track, amended drawings and documentation must be submitted to the RCB for written approval before an inspection may be requested for the purposes of licensing.

e) Applications for inspections without prior approved drawing and documentation may be requested, however, no license can be issued following this type of inspection until the

drawings and documentation have been approved and a further inspection is held after that time to verify compliance with the drawings and documentation.

f) Alterations to tracks shall not commence until drawings and documentation indicating those alterations are approved by the RCB. Failure to comply with this provision will result in suspension of a track license until such time as documentation for the alterations is approved and the works are inspected and approved.

g) At least one inspection will be required each year for a venue to be licensed.

h) MA may require several inspections for new tracks, including one at the completion of construction to ensure compliance with these Guidelines.

i) Applications for an inspection must be sent to MA and such inspections will be arranged by MA. Motorcycling Australia will charge a fee for this inspection – contact Motorcycling Australia for the current charge.

5.1.7 Venue Licence

If the Inspection verifies that construction has been carried out in accordance with the approved drawings, (including approved alterations to same if applicable) MA will issue a Track Licence. Alternatively, for the purpose of renewing a licence and the track has not been altered from the plans submitted, the track will be inspected to ensure the track is in an acceptable condition for the purpose of conducting motorcycle racing.

5.2 Inspections (Annual)

5.2.1 For a road race track to be licensed by MA, drawings and documentation, as detailed in paragraph 5.1.1 must first be submitted to MA for approval and once approved in writing, must be followed by a track inspection to ensure compliance with the approved drawings.

5.2.2 All tracks must have approved drawings before an inspection for the purposes of licensing is requested from MA.

5.2.3 Track Operators must renew their licenses annually, and those tracks having approved drawings and no changes to the track from the previous year, may request inspections for the purposes of re-licensing.

5.2.4 Where alterations have been carried out to a track, amended drawings and documentation must be submitted to MA for written approval before an inspection is requested.

5.2.5 Applications for inspections without prior approved drawings and documentation may be requested, however, no license can be issued following this type of inspection until the drawings and documentation have been approved and a further inspection is held after that time to verify compliance with the drawings and documentation.

5.2.6 Alterations to tracks shall not commence until drawings and documentation indicating those alterations are approved by MA. Failure to comply with this provision will result in suspension of a track licence until such time that the alterations are approved and inspected.

5.2.7 For the purpose of these Guidelines, the term track includes closed tracks, either permanent, semi-permanent or temporary.

5.2.8 Variations from these Guidelines must be subject to a TRA and receive written approval from MA and be noted on or attached to the Track Licence.

5.3 Track Layout

5.3.1 Speed Diagram

a) A Speed Diagram for the fastest category for which the track will be licensed must be produced for tracks to estimate average speed and lap times to allow initial track classification and design of run-off areas.

b) The Speed Diagram must be produced as a separate drawing with a graphic representation of the run-off distances D1 and D2 at every corner as calculated based upon the formulae in Figure 6 of these Guidelines.

c) Ten (10) degree radials must be indicated at each corner as per Figure 6 of Appendix A.

d) The track edges, the 1st and 2nd line of protection and all obstacles within the racing arena must be clearly indicated on the Speed Diagram drawing.

5.3.2 Track Surface

a) Surfacing: The track surface should be a uniform type over the whole length of the track. If this proves impossible, it is required that no change in surface occurs on or near the ideal racing line within curves or at important changes in longitudinal profile. Resurfacing must not be carried out less than thirty (30) days before an event.

b) Track Plane: Tracks must be maintained so that anywhere on the track there is minimal variation in skid resistance and the surface should not differ more than four (4) mm either from a three (3) metre straight edge laid parallel to the centre line of the track or at right angles to the centre line, except on crowned sections.

5.3.3 Straights

a) Straights are not constrained in length (apart from the starting straight), but must comply with requirements relating to width (see paragraph 5.3.5) and gradient (see paragraph 5.3.6).

b) Where a section of the track deviates but the change in direction is through an angle of less than 15 degrees with a radius of greater than three hundred (300) metres, that section is considered to be a continuation of the straight.

c) The starting straight for all new tracks must be at least 250 metres in length and the minimum distance from the start line to the first curve is 100 metres.

5.3.4 Curves

a) In addition to complying with width requirements, curves which can be taken at a speed in excess of 125 kph should have an increasing or constant radius.

5.3.5 Width

a) The width of the track at any place on the track is dependent on the maximum speed which can be reached at that place.

b) The minimum widths as detailed in Table 1 must be provided:

Speed (kph)	< 180	180 - 200	200 – 250	250 – 300	> 300
Width (m)	8	9	10	11	12

Table 1.

c) The maximum width of a track must be fifteen (15) metres. Wider tracks must be demarcated down to fifteen (15) metres by an anti-skid painted line, or by another device, which does not present a safety hazard.

d) The minimum width of a track at the starting line must be twelve (12) metres. The width must remain constant for at least 100 metres after the starting line.

e) If the track becomes narrower, the change in width must be gradual by a proportion of one (1) metre per 100 metres.

f) If the track becomes wider, the change in width must be gradual and must not exceed a proportion of one (1) metre per twenty (20) metres.

5.3.6 Longitudinal Gradient

a) The maximum longitudinal gradients must be as follows:

i. Uphill 20%

ii. Downhill 10%

b) Any change in grade of greater than 1% must be joined by a parabolic vertical curve designed in accordance with standard Highway Authority principles.

c) Any change of grade must also take into account the visible stopping distance, see also paragraph 5.3.9 on Visibility.

d) The longitudinal gradient of the starting grid must not exceed 2% uphill.

5.3.7 Crossfall

a) A track must have sufficient crossfall on a straight to ensure drainage of surface water.

b) Crossfall may be either one-way or cambered.

c) The minimum crossfall must be 1.5% and the maximum crossfall 3.0%.

5.3.8 Superelevation (banking) in Curves

a) The superelevation (banking) in a curve (the outside of the track is banked in comparison with the inside) is determined upon the basis of the radius at that curve and must not exceed 10%. An exception to this may be made for permanent high-speed tracks.

b) Adverse camber is not generally accepted unless special circumstances prevail and in which case the entry speed to the curve must not exceed 125 kph.

5.3.9 Visibility (Sight distance required)

a) There should be no sight obstruction which would prevent a rider, at an eye height of one (1) metre, from maintaining a clear view of the track in front of him/her for a distance given as S = V (V+40)/200, where S = Sight distance in metres and V = speed in kph at that section of the track.

b) Should this condition not be possible, provision must be made for a signalling system, using either flags or lights to effectively warn approaching competitors of a hazard within the unsighted track length.

5.3.10 Track Edges

a) Both edges of the track must be clearly marked by a continuous line of white anti-skid paint having a width of between 100mm and 200mm for the full length of the track.

b) The track must be bordered on both sides along its length by compacted verges.

c) Where the track surface extends to the first line of protection (for example, adjacent to the pit wall), the delineation between the track proper and the verge area must be clearly distinguishable, and separated by a white line of anti-skid paint having a width of between 100mm and 200mm.

5.3.11 Kerbs

a) Concrete kerbs are recommended on the inside of the curves.

b) Concrete kerbs may be installed on the outside of curves.

Kerbs may be of the following types:

i. Flat concrete kerb, flush with track edge;

ii. Mountable kerb, similar to the CAMS "old style kerb", but with a maximum height above the track edge of 60mm. These kerbs are not to be placed on the outside of corners.

iii. “Valleleunga" type kerb with a maximum height above the track edge of 80mm as required for tracks requiring FIM and/or FIA homologation. For details of this kerb type, refer to Figure 2 herein.

iv. Melbourne’ kerbs.

See 5.7 for Road Racing Appendices

5.3.12 Verge must comply with the following:

d) The minimum width of a verge is five (5) metres. Exceptions to this can be accepted on straights only and where the available space is limited. If this is the case, the minimum width of a verge can be lowered to three (3) metres with the exception where there is a pit wall. In this case, the verge must be at least one (1) metre measured between the edge of the track and the first line of protection.

e) The track must continue without a step into the verge area, and the maximum transition from the track profile to the verge profile must not exceed a radius of fifty (50) metres.

f) Verges must have a flat surface of compacted material.

g) Verges must be kept free of any debris.

h) The surface of a verge must be flush with the edge of the track or the top of the trackside kerb.

5.3.13 Run off area

a) The minimum run-off area dimensions D1 and D2 must be in accordance with the requirements of Figure 6 in these Guidelines. These run-off dimensions must be clearly indicated on the Speed Diagram drawing (Figure 5)

b) The join between the run off area and the track verge must be flush (without any slope). If the run-off area is on sloping ground, the gradient must not be greater than 25% uphill or 3% downhill.

c) Where both the minimum run-off dimensions D1 and D2 cannot be achieved, an arrestor bed of sand or gravel as defined in Section 5.3.14 may be installed where the available run-off distances are no less than 50% of D1 and D2.

d) Where 50% of minimum run-off dimensions D1 and D2 cannot be achieved (between the track edge and 1st line of protection), MA may allow type A Additional Protective Devices as per Section 5.4.2, 5.4.3 and 5.4.4 of these Guidelines to be placed in front of the 1st line of protection subject to:

i. Minimum clear distance from track edge to Type A Barrier of three (3) metres;

ii. Written dispensation from MA.

e) Provision of Additional Protective Devices when installed as per Section 5.4 in the vicinity of “Run off Areas” shall be as follows:

i. If full run-off dimensions equal or exceed the requirements of Section 5.3.13 a) – Types A–E;

ii. If an arrestor is required and the actual distances D1 and / or D2 are greater than the required 50% - Types A–E;

iii. If an arrestor is required and the actual distances D1 and/or D2 are equal to the required 50% - Types A-D.

5.3.14 Arrestor beds (i.e. sand or gravel trap):

a) The run-off area may be reduced in length by up to 50% if an arrestor bed is provided.

b) Sand traps (also referred to as gravel beds) must have the following properties:

i. Must be constructed using round grains of gravel between 5 and 15mm in diameter.

ii. Alternative materials for the sand trap may be approved, subject to inspection and written approval by the RCB.

iii. The depth of the gravel layer must be at least 200mm.

iv. A verge of a minimum of two (2) metres in width must be provided between the edge of the track and the sand trap.

v. A path of at least three (3) metres must be provided between the sand trap and the stopping devices (first line of protection), for emergency vehicles to circulate.

vi. Must not consist of a bed width of less than four (4) metres.

vii. The sand trap surface must be at same level as verge. If it is not possible to sink the bed, a lead-in slope of not greater than 8% uphill must be provided.

viii. The surface of the sand trap must present an even finely raked appearance. Large furrows within the sand trap area are not permissible.

ix. Care must be taken by track operators to prevent growth of vegetation in the sand trap that would cause undesirable binding.

x. Sand traps may be required to be scarified (loosened) before each event, dependent upon an inspection by the Steward of the event and/or an MA Venue Inspector.

xi. Sand traps must be maintained in good condition not be compacted by vehicle traffic nor contain vegetation that would render them ineffective in which case the sand trap must be scarified before an event.

xii. "Additional protective devices" in accordance with Section 5.4 may be required behind the sand trap and in front of the barrier (first line of protection).

5.3.15 Track Drainage

a) Surface Water: The surface of the track must be designed such that water does not pond on the track surface during or after rainfall.

b) Stormwater drainage serving the track, verges and Pit areas must be designed for a minimum of a 5-year ARI storm for the track location in accordance with the principles and rainfall figures contained in the current "Australian Rainfall and Runoff" publication.

c) Stormwater drainage for all other areas of the track must be at the track owner's discretion, or to the requirements of the local Authority having jurisdiction, whichever is the most stringent.

d) If the installation of an open drain between the track edge and the first line of protection is absolutely necessary, it must be built in such a way that there is no bump to the surface of the verge or run-off area. The drain may be covered by a metal grate or perforated plate cover, (with a maximum aperture size of 15mm), the top of which must be finished flush with the surrounding surface. The cover must be capable of withstanding a wheel load of 20 kN anywhere on the cover and must be fixed in such a way that the cover cannot be dislodged. An absorption well or trench may also be used in this situation, however the porous fill/rubble used in these devices must not present a danger to riders.

e) "Side-entry" drainage pits are not permitted at any point on the track edge, or within any area within the first line of protection.

f) Metal grate topped pits are not permitted at any point on the track edge, within the verge or within sand traps, but may be permitted between the verge and first line of protection if they comply with the requirements on paragraph 5.3.15 c) herein.

5.4 Protective Devices

5.4.1 General

a) The aim of protective devices is to offer protection during a competition to spectators, riders, race officials and other operative personnel.

b) As a rule, two lines of protection must be installed:

i. The first line: made of guardrails, walls or other devices (either protected or not) in accordance with paragraph 5.4.3 and 5.4.4.

ii. The second line: made of chain wire mesh of a minimum height of 1200mm or other equivalent approved by the RCB.

5.4.2 Positioning of lines of protection

a) First line of Protection:

i. The first line of protection must be positioned on the outside extremity of the verge, on the outside extremity of run-off areas or on the inside extremity of the line of sight in a curve.

ii. The first line of protection is not required in areas not accessible to the general public, except where protection of other sections of track is required.

iii. Any exposed end of a first line of protection which presents to oncoming riders must be protected by "additional protective devices" as indicated in Section 5.4.

b) Second line of protection:

i. The second line is principally required to hold back the public it must be at least 1.2 m high and it must be positioned a minimum of three (3) metres behind the first line, except where State Legislation dictates a greater distance.

5.4.3 Guardrails

a) Along all straights and on the inside of curves, guardrails can be positioned on the first line of protection without the need for any additional protection as specified in Section 5.5

b) On the outside curves, it may be required that guardrails be protected in accordance with the requirements of Section 5.5 herein (dependent upon run off dimensions provided).

c) The geometric properties of the guardrail used must be:

i. Height of guardrail (Triple only allowable): 1040mm

ii. Posts: NP 120, every 2 metres

iii. Guardrails: Ixx - 1248.7cm4, Iyy - 96.1 cm4.

iv. The maximum free space between the lower edge of the guardrail and the ground must be no more than twenty (20) mm.

v. The maximum free space between any two guardrails must be twenty (20) mm.

vi. The upper edge of the guardrail or supporting posts must be rounded off. The top of the protection to the guardrail and supporting posts must be higher than the top of the guardrails.

d) Where "C" section steel supporting posts are used; the "legs" must face away from the direction of travel.

5.4.4 Concrete walls

a) May be used to constitute the required “first line of protection”.

b) Must be a minimum height of 1.2 metres above ground level.

c) Must present a smooth vertical and continuous surface.

d) Must be designed to withstand the impact of a motorcycle sidecar outfit impacting at 20 degrees to the direction of travel at a height of 400mm.

e) Must be provided with “additional protective devices” unless the run-off distance and/or verge width provided is in excess of that required by these Guidelines.

5.4.5 Compacted Earth / Tyre Barriers

a) May be used to constitute the required “first line of protection”.

b) Must be a minimum height of 1.2 metres above ground level.

c) Truck Tyres:

i. Where this barrier is further from the track edge than the distance required for run-off and or verge width by these Guidelines, earth filled truck tyres of the same size may be used and are to be treated in a manner similar to concrete walls (See 5.4.4).

ii. In the straight they must be faced with conveyor belt to avoid pocketing to create a continuous surface to promote sliding rather than pocketing.

5.5 Additional Protective Devices

5.5.1 General

a) All additional protective devices must be placed against the rigid obstacle (no free space) which is not protected by a first line of protection.

b) Five (5) types of additional protective devices graded "Type A" through to "Type E" are described herein for use in various duties protecting obstacles within the racing arena.

c) All additional protective devices used must be installed in accordance with the manufacturer's recommendations. They must be tethered to adjacent structures at the top and bottom of the sections.

d) For car tyre barriers (Types D & E), the following must apply:

i. Car tyres of the same diameter must be attached to form a homogeneous barrier, of maximum three (3) rows deep (one (1) will suffice in most situations) and at least 1.2 metres high, placed in front of and fixed to a permanent rigid barrier.

ii. Tyre barriers must be restrained in such a manner as to preclude tyres causing nuisance to other riders if struck by a rider or motorcycle, but must be restrained in such a way as to enable the tyres to deform and shift.

5.5.2 Type A Additional Protective Devices

a) Airfence Type I S

b) Airfence IIS and Airfence Bike

c) Alpina Air-Module, Alpina Super Defender and Alpina Super Defender 2

d) Bridgestone Module 1000 and Bridgestone Module 1300

e) PKS Model 1

f) Recticel Safeguard barrier 1 and Recticel Safeguard RR

g) SPM Air Pads

h) Trackcare Hi-Lite and Trackcare Inflatable Barrier

5.5.3 Type B Additional Protective Devices

a) Airfence Type I and Airfence Bike B

b) Alpina Defender Barrier

c) Recticel Safeguard barrier 2

5.5.4 Type C Additional Protective Devices

a) Straw bales wrapped in fire-resistant bag (grey colour recommended)

b) Filling Italian Protection System (ONDA 27/33 – 20/26)

c) Alphina Synthetic bales

d) Authorised foam bales

e) PKS Model 5

f) Recticel Safeguard barrier 3 and safeguard barrier 4

g) Trackcare barrier

5.5.5 Type D Additional Protective Devices

a) Car tyre barrier covered with conveyor belt

5.5.6 Type E Additional Protective Devices

b) Car tyre barriers

5.6 Signals and Marking

5.6.1 Distance Signs (Braking Markers)

a) Sign Positioning: The approach distance before a curve should be indicated by signs which are be positioned at one hundred (100) metre intervals starting from the beginning of the geometrical (circular) curve and extending beyond the point of deceleration.

b) Visibility: Distance signs must be entirely visible from all points on the track at a distance of one hundred (100) metres for approaching riders.

c) Colours: Black or dark blue figures on a white background.

d) Sign Dimensions: Recommended (and maximum) dimensions for distance signs must be 550mm wide x 1500mm high for "vertical" type signs and 1300mm wide x 640mm high for "horizontal" type signs.

e) Sign Content: The only wording on the sign must be the figure indicating the distance from the corner of the sign. No advertising or other markings are permissible on the sign.

f) Figures: Minimum dimensions for the figures on distance signs must be 300mm wide x 400mm high.

g) Material: when distance signs are placed between the track and the first line of protection, the sign and its supports must be constructed from non-flammable polystyrene or other

similar light material. For installations behind the first line of protection, the distance sign may be of masonite, metal or other suitable material and the supports in wood or metal.

h) Installation of Distance Signs: For signs on the track side of the first line of protection, the signs must be installed by burying the base of the sign/support at least 500mm into the ground with the centre of the sign being around one (1) metre above ground, dependant also upon visibility requirements as noted above in paragraph 5.6.1 b). No signs shall be erected within three (3) metres of the track edge.

i) Night Racing: For races taking place at night, signs in reflective material must be installed.

5.6.2 Non-Permanent Advertising Signage

a) Vertical signs of lightweight construction may be erected inside the first line of protection on the inside of curves to within two (2) metres of the track edge provided that no obstruction to rider or marshal's line of sight occurs.

b) Only signs constructed from polyurethane or similar lightweight material and weighing less than five (5) kilograms (including supports) may be erected in run-off areas or within the first line of protection, but may not be erected within three (3)metres of the track edge in the runoff area.

c) Signs will be limited to a maximum height of 1.5 metres.

d) Supports for such signs must be made of semi rigid material such as polyethylene pipe.

5.6.3 Start Lights

a) Start Lights must be installed at venues which host MA permitted events. Start lights are strongly recommended for all other tracks and should follow the FIM specifications.

b) Start Lights Specification: (As per FIM)

c) The start lights installation must consist of two (2) lights, one red and one yellow.

d) The following combinations must be possible:
   i. red light on only
   ii. flashing amber light on only
   iii. both i) and ii) together

5.6.4 Grid Markings

a) Grids for both solo and sidecar machines must be marked in accordance with Chapter 15 of the Manual of Motorcycle Sport.

b) A 'Finish' will be marked at the appropriate place. The finish line will cross the full width of the track and be of a minimum width of 100mm.

5.6.5 Grid Capacity

Prior to or at the time of a track inspection, Track Operators must provide the Track Inspector with a list of fastest track times for the following disciplines.

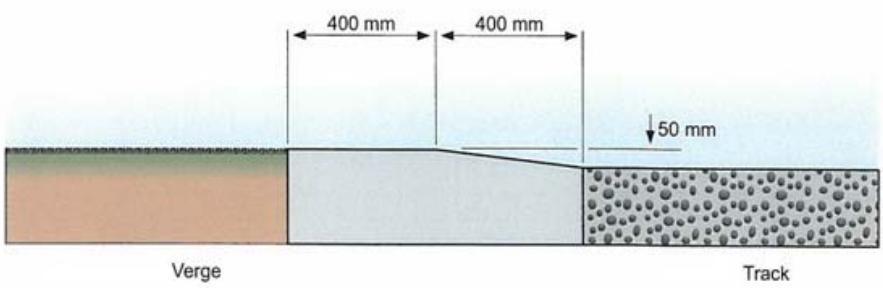
- Superbike
- Supersport
- Superbike 600
- 125 GP
- Classic
- Side Car
- Classic side car

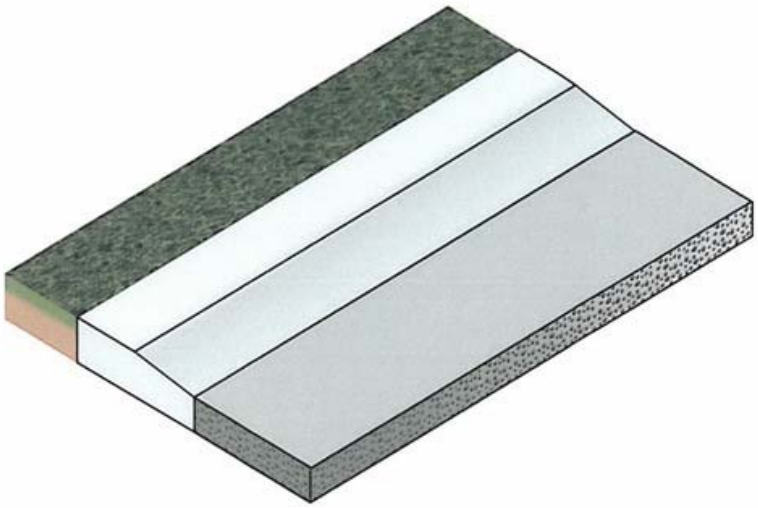
The capacity for Solos and Side cars will be reflected on the Track Licence.

5.7 Road Racing Appendices

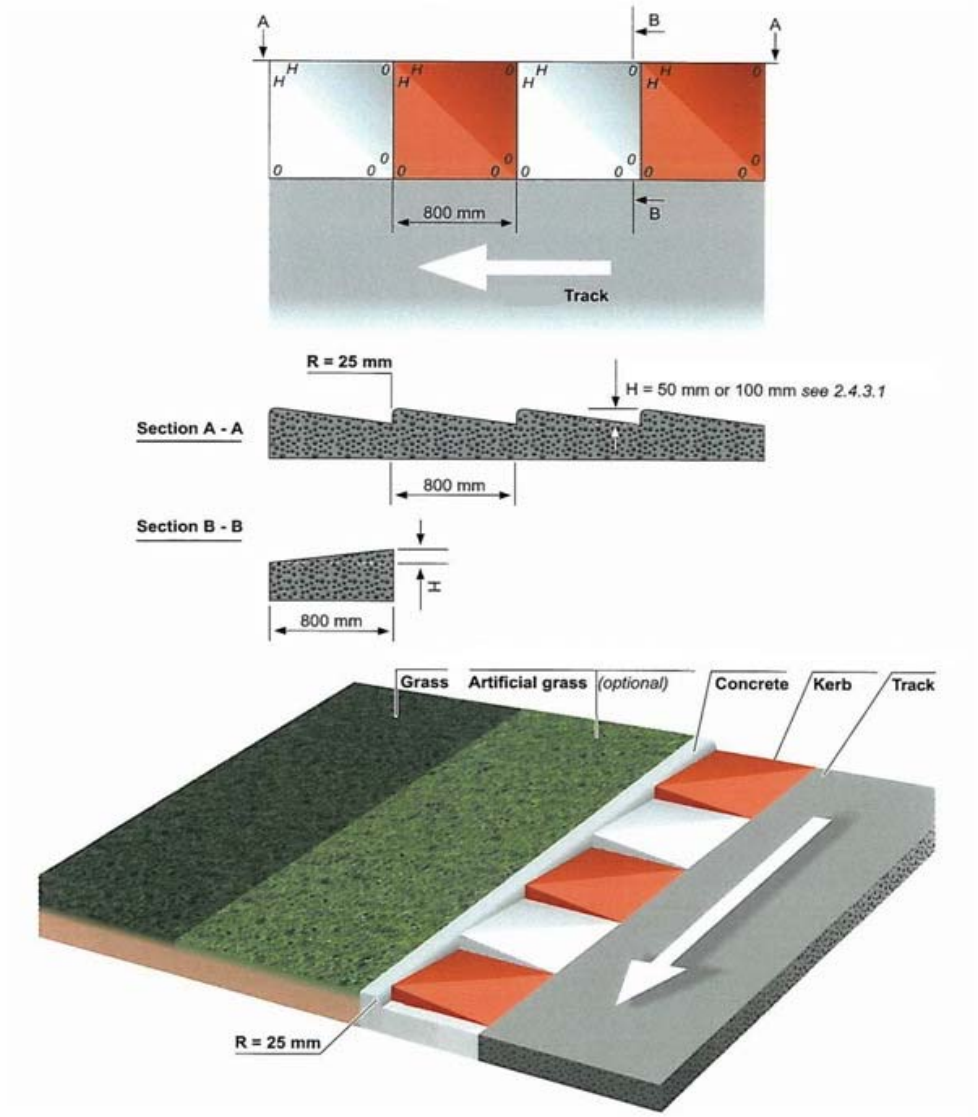
Figure 1	Mountable Kerb “CAMS old style kerb”
Figure 2	Valleleunga
Figure 3	Melbourne Kerb
Figure 4	Acceleration and Deceleration Curves
Figure 5	Maximum Speed reached in a curve
Figure 6	Calculation of the run-off area of the outside of a corner

1. Mountable Kerb (CAMS “old style kerb)

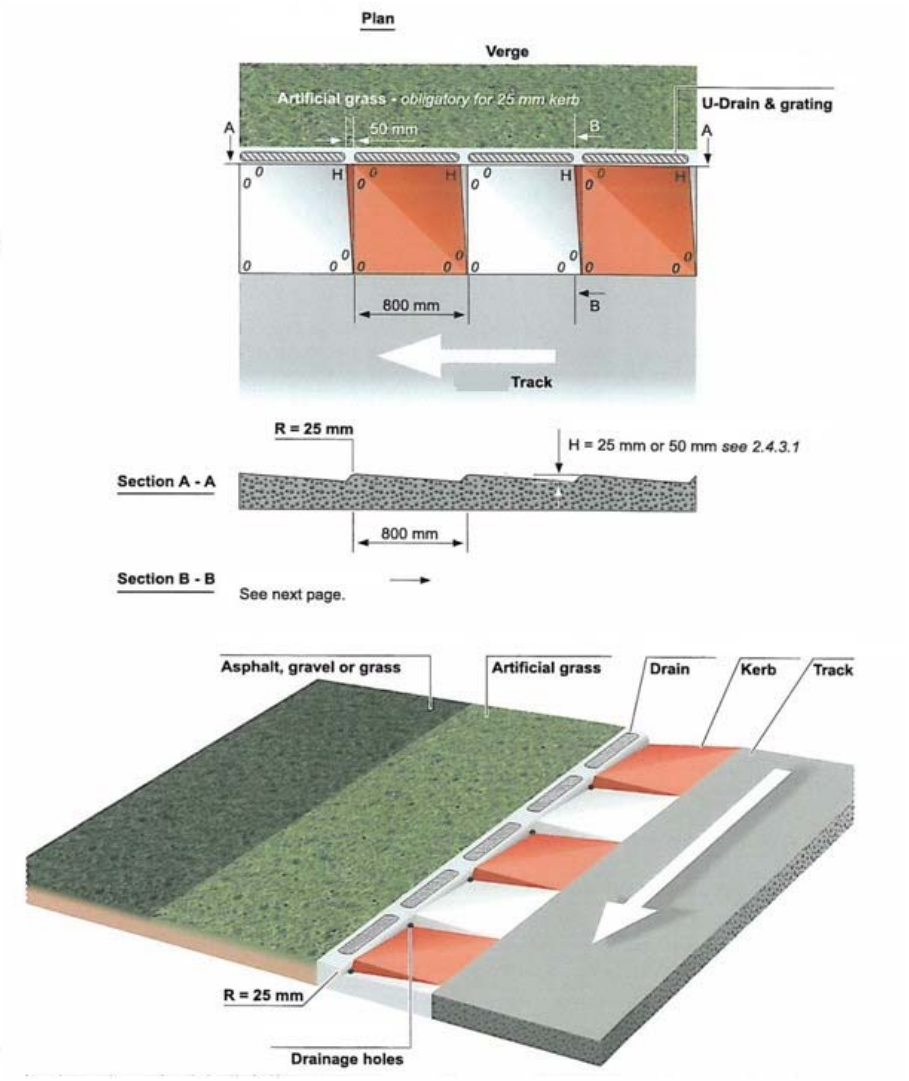




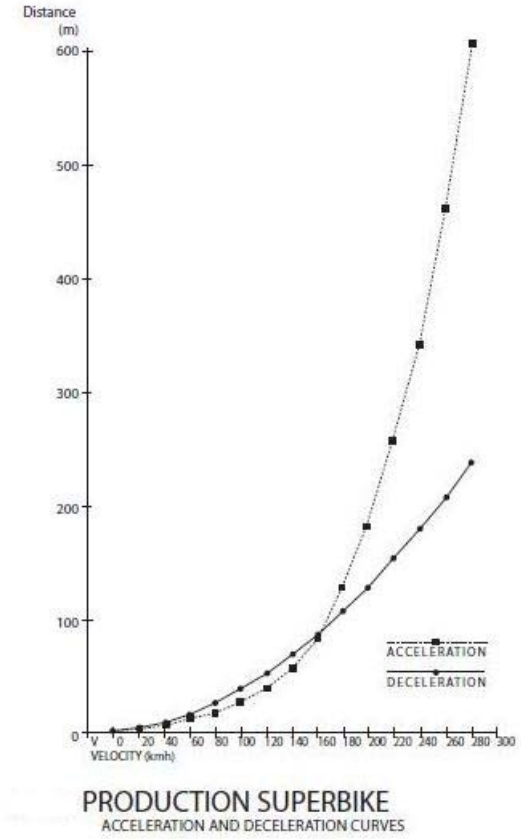
2. Vallelunga Kerb



3. Melbourne Kerb

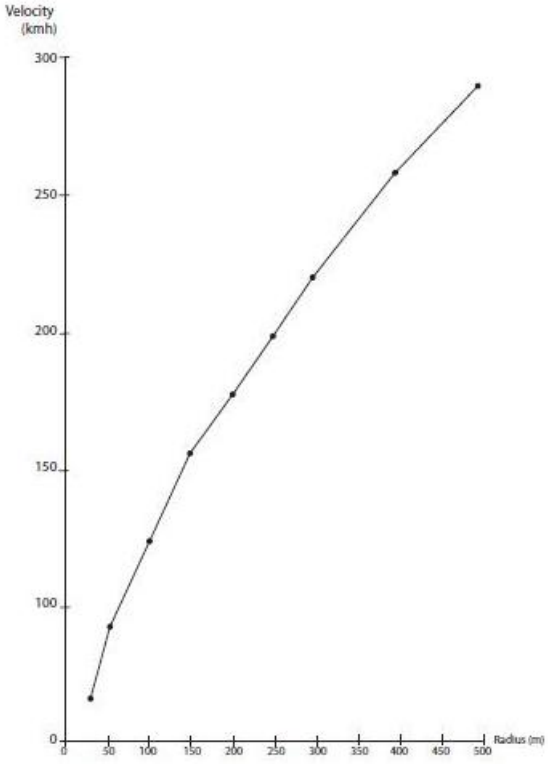


4. Acceleration and Deceleration Curves



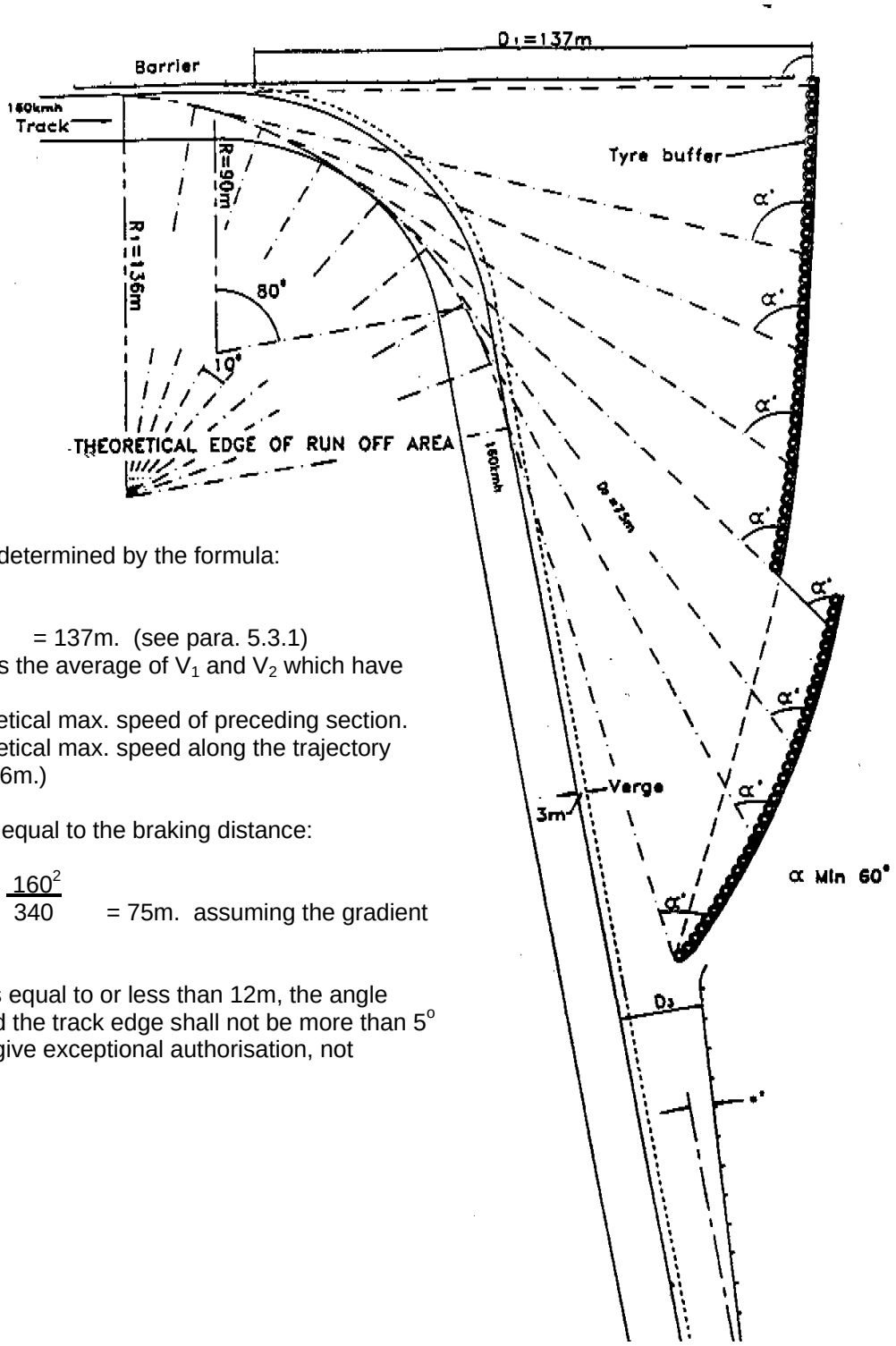
PRODUCTION SUPERBIKE
ACCELERATION AND DECELERATION CURVES

5. Maximum Speed reached in a curve



MAXIMUM SPEED REACHED IN A CURVE
WHICH HAS NO LONGITUDINAL GRADIENT

6. Calculation of the run-off area of the outside of a corner



1. The distance D_1 is determined by the formula:

$\frac{V^2}{300} = \frac{202.5^2}{300}$ = 137m. (see para. 5.3.1)

Where V= 202.5 km/h is the average of V_1 and V_2 which have the following values:

V_1 = 245km/h – hypothetical max. speed of preceding section.

V_2 = 160km/h – hypothetical max. speed along the trajectory in the corner (radius 136m.)

2. The distance D2 is equal to the braking distance:

$\frac{V_2^2}{340 +/- 2.60i} = \frac{160^2}{340}$ = 75m. assuming the gradient i=0

3. If the distance D_3 is equal to or less than 12m, the angle between the barrier and the track edge shall not be more than 5^o (unless the inspectors give exceptional authorisation, not exceeding 10^o)

Figure 4 - Calculation of the run-off area on the outside of a corner

6 TRACK GUIDELINES – MOTOCROSS MODULE

6.0 Scope and Application

This module outlines the track conditions which must be evident during a Track Inspection and recorded in a Track Inspection Report, before the RCB can issue a Track Licence.

Where a track does not comply with the module, a Targeted Risk Assessment (TRA) must be completed and submitted to the RCB, in accordance with the procedures in "Appendix A".

This module must be applied in its entirety to new tracks. For areas of non- compliance at an existing track, a Track Inspector must undertake a TRA. The TRA may result in a scheduled Works Program. Any voluntary modifications or upgrading to a track by the Track Operator, must comply with module and be notified to the RCB in accordance with these Guidelines.

This module applies to permanent, semi-permanent or temporary tracks.

Tracks where Australian Championship or Series Meetings are conducted, must comply with this module and the Guidelines.

6.1 Venue Permit and Inspection

6.1.1 Applications

Applications for licensing of Motocross Tracks must include a drawing (to scale) of the track and surrounds, which must include the following:

a) the racetrack proper;

b) the location, extent, height and construction type of the first line of protection;

c) the location and extent of pit entry / exit roads,

d) the location and extent / size of all marshal points;

e) details of the track watering system;

f) the location and number of competitor and spectator toilet/shower facilities;

g) the location of first aid rooms/units;

h) the location of Ambulance parking site and entrance to racing arena;

i) the GPS location of the track

j) the dimensions and profile of all jumps, whoops and other obstacles on the track, and the distances between obstacles.

k) the street address of the venue.

Applications for inspection of tracks should be sent to the RCB, complete with plans.

Modifications to tracks must not be commenced until approved by the RCB.

6.1.2 Inspections

a) for all tracks: one annual inspection for venue licensing purposes conducted by an accredited venue inspector appointed by the RCB. Note that this includes tracks which are used for 'closed to club' events.

b) any venue which is modified during the course of a year, must be reinspected to ensure compliance with these Guidelines.

c) track inspections shall be arranged by the RCB. Inspectors shall be appointed from the RCB panel of qualified inspectors.

d) venues not approved will be advised of the reasons for non-approval and work schedules will be agreed upon to achieve approval.

e) For inspections of temporary courses, please refer to Stadium MX (Module 7).

6.2 Track Layout

a) Track layout must be initially designed with all grades of riders in mind. Particular attention to the installation, consistency and shape of any jump faces is a priority. The track surface materials used must be exclusively natural. Sawdust or chip from chemically treated timbers must not be used.

b) The safety of riders, officials, spectators and location must be taken into account by an inspector when licensing a track.

c) In general, a track should be designed with minimal stop/start turns. The track should be designed to allow for safe passing.

d) Consideration should be given to drainage in the event of heavy rainfall.

e) Jumps and obstacles should vary in difficulty making it possible for the different levels of riders to demonstrate their skills.

6.2.1 Length

It is recommended that motocross tracks will have a minimum length of 800m and a maximum length of 3km.

All motocross tracks used for State and National Championships must have a minimum length of 1.5km and a maximum length of 3km

6.2.2 Width

The minimum width at any point on the track will be six (6) metres unless the track is designed for more than 30 riders (15 quads or sidecars) in which case the minimum width is seven (7) metres.

6.2.3 Vertical Space

The free space between the track and any obstacle above the ground must be 3.5 metres minimum. (e.g. bridges, bunting etc.). If the obstacle is placed above a jump or table top the clearance must be increased to ensure a free space of 3.5 metres between the highest trajectory point of the rider and the obstacle is maintained

6.2.4 Speed

The track must not contain any high-speed sections (i.e. where speeds exceed 100kph).

Average Speed: The maximum average speed for a lap of the track is to be no greater than 55kph.

The formula to work out the average track speed is:

$$\text{Average Speed (kph)} = \frac{\text{Distance (metres)}}{\text{LapTime (secs)}} \times 3.6$$

Note that the lap time used is to be one achieved by an experienced "Pro" grade rider.

As an example: Track length = 1,750 metres
Lap time = 119 seconds

Therefore:

$$\text{Average Speed (kph)} = \frac{1750 \text{ metres}}{119 \text{ seconds}} \times 3.6$$
$$= 52.94 \text{ kph}$$

Speed is calculated by taking the distance of a lap (in metres) and dividing by the lap time (seconds) the answer is multiplied by 3.6 to give speed in kph.

6.2.5 Obstacles

The following are the only obstacles permitted in motocross. The safety of riders, spectators and officials must be given utmost priority when constructing jumps and obstacles.

6.2.5.1 Jumps

a) Multiple jumps are not allowed in Motocross.

b) Jumps should not exceed 3 metres in height.

c) When approving jumps consideration must be given to the age and ability of competitors.

6.2.5.2 Table Top Jump

6.2.5.3 Whoop Section

Diagram: How to measure an obstacle:

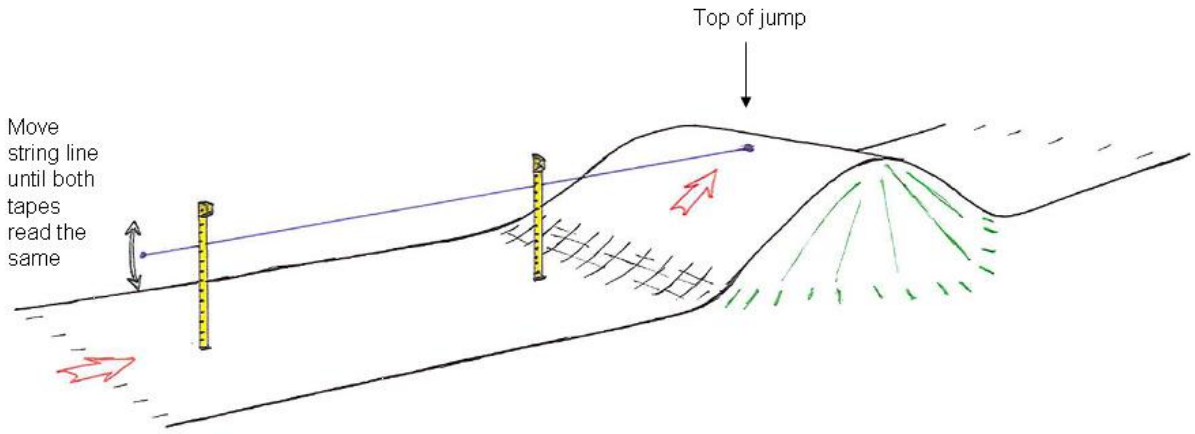
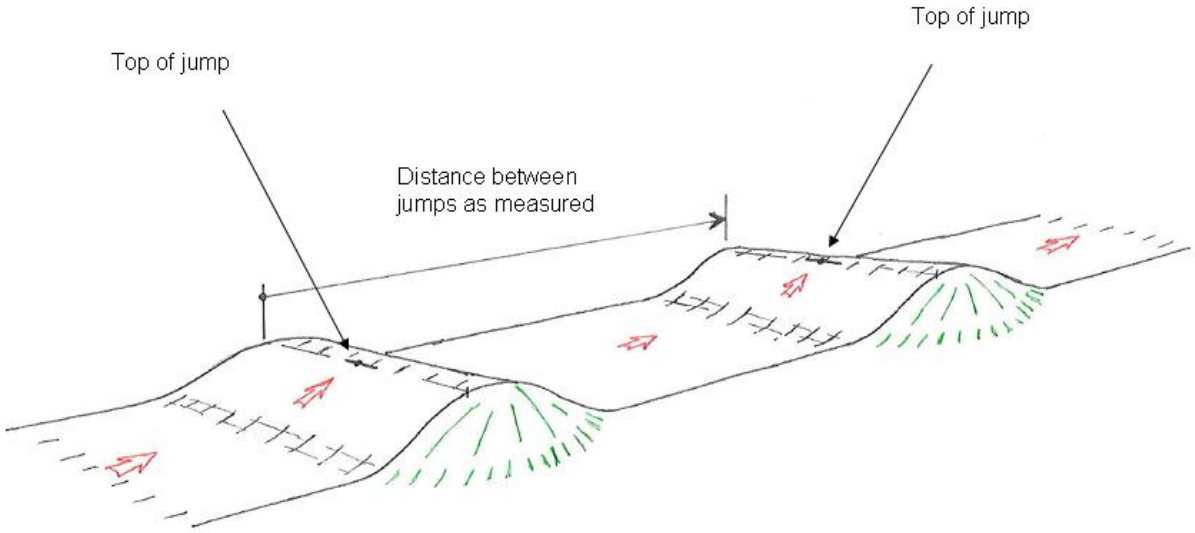


Diagram: How to measure between obstacles:



6.2.6 Flag Marshalling Points

a) There must be a sufficient number of official signalling posts (flag points) all around the course to ensure that from any marshal point there is an unrestricted view to the next marshal point.

b) The posts must be distinctly indicated and the location chosen so that signals given are clearly visible to competitors.

c) Flag marshal points must be located and protected to minimise the risk of injury to officials.

d) The area must be level and hard packed with a minimum flat area of $4m^2$

e) Position must be clearly marked.

f) Marshal points must not be placed at the outside of a corner or an outside exit of a corner.

g) The distance from the track edge should be 3 metres, with the signalling point adjacent to the track in a safe location.

6.2.7 Mechanics Area "Repair and signalling zone"

a) For Australian Championship meetings, a mechanics area must be provided and clearly marked at a suitable place adjacent to the track. It must be clearly marked off with an entrance and exit to the track proper.

b) A mechanics area must not be placed at the outside of a corner or an outside exit of a corner.

6.2.8 Pit Board Area

An area for signalling, which is visible to all riders, may be provided and clearly marked at a suitable place adjacent to the track.

A Pit Board area must have a barrier to protect signallers from oncoming machines and to keep signallers off the track.

A pit board must not be placed at the outside of a corner or an outside exit of a corner.

6.2.9 Watering systems

An efficient watering system or watering vehicle may be provided and should be capable of watering the entire track.

Any watering system installed must not present a hazard to riders. For example watering systems should not be placed permanently in neutral zones unless they are not a hazard to riders.

6.2.10 Protection of obstacles

Straw bales or other shock absorbent materials to protect the riders from danger must be placed to cover all obstacles such as poles, trees, bridges, podium, walls, camera posts, PA system poles etc.

6.3 Protective Devices

6.3.1 Public and Rider Safety

a) Where required by local Regulation there must be two lines of protection between competitors, and their machines, and members of the public, otherwise a single line of protection may be adequate provided a sufficiently wide neutral zone exists between the defined track edge and the spectator fence.

i. The first line of protection shall be in accordance with paragraph 1.0.17 (i)

ii. The second line of protection shall be 1.2 metres high and in accordance with 1.0.17. (ii)

iii. Barbed wire is prohibited.

iv. Ringlock (square sheep type) fencing is preferred as the second line of protection. If star pickets are used in the second line of protection they must be fitted with a plastic top cap.

6.3.2 Neutral Zone

a) The track must have a neutral zone in between the marked edge of the track and the 2nd line of protection for spectators.

b) The minimum width of the neutral zone must be four (4) metres measured perpendicular to the track unless otherwise required by Local or State Legislation.

c) In areas where speeds in excess of 60 kph are achieved the neutral zone shall be a minimum of six (6) metres.

d) A neutral zone of six (6) metres must be provided adjacent to table tops.

e) Adjacent areas of the track must be a minimum of four (4) metres apart unless separated by adequate protection (eg straw bales, tyre wall, or other shock absorbent material).

f) The neutral zone must be smooth and free of obstacles.

6.3.3 Washing zone for Motorcycles

a) Refer to current Local Government Laws as water usage may be prohibited.

b) The washing zone must be designated, with protection of the ground a prime consideration, biodegradable detergents should be used.

c) The area should have adequate surface water drainage.

d) Smoking is prohibited in the washing zone, no smoking signs should be erected at the entrance of this zone.

e) Washing of motorcycles must only be carried out in washing zones.

6.3.4 Bridges and Tunnels

a) A written report or certificate of compliance from a qualified structural engineer must be produced each year signifying the structural integrity of the construction. This report / certificate must be provided to the MA inspector during the inspection process.

Note, the structural engineer may certify the structure (bridge / tunnel) for a period of time (i.e. three years). In this time the structure does not require re-inspection, however the compliance report / certificate must still be provided to the inspector during the inspection process.

b) Suitable barriers must be in place to prevent machines, riders and debris from falling on to the track surface below.

6.4 Starting Area

The starting area will provide for 1 single start row. No second or subsequent start rows are permitted.

6.4.1 Start Gate

a) The starting area should be clearly fenced off to restrict entry.

b) The placement of the start gate must allow for equal chances for all competitors.

c) There must be an individual gate for each rider.

d) The starting gate must be a transverse backward falling device, folding or dropping in operation.

e) The start gate must be of solid and rigid construction.

f) It may be controlled manually or by remote control and the control mechanism must not be visible to the competitors when starting in the race.

g) The start gate must be 500 mm high and allow a minimum one-metre spacing (centre to centre) for each competitor and 1.5 metres for quads.

h) For Australian Championship meetings the start gate must allow for up to 40 competitors (40 metres wide) in one single line with no second row.

i) For meetings other than Australian Championships, a starting mechanism other than gates may be allowed.

j) Where concrete is used to secure the start gate for an earth/dirt starting pad, it should not exceed 600 mm in width.

k) The starting pad immediately behind the start gate maybe of concrete or similar solid construction to allow riders to start on a firm base allowing equally for all participants

l) A rear barrier must be installed at the start gate, in order to prevent riders from moving their machines backwards. The distance between the starting gate (released) and the rear barrier must be three (3) metres.

6.4.2 Start Straight

a) There will be no jumps on the start straight.

b) The length must be measured along the centre of the track (see diagram)

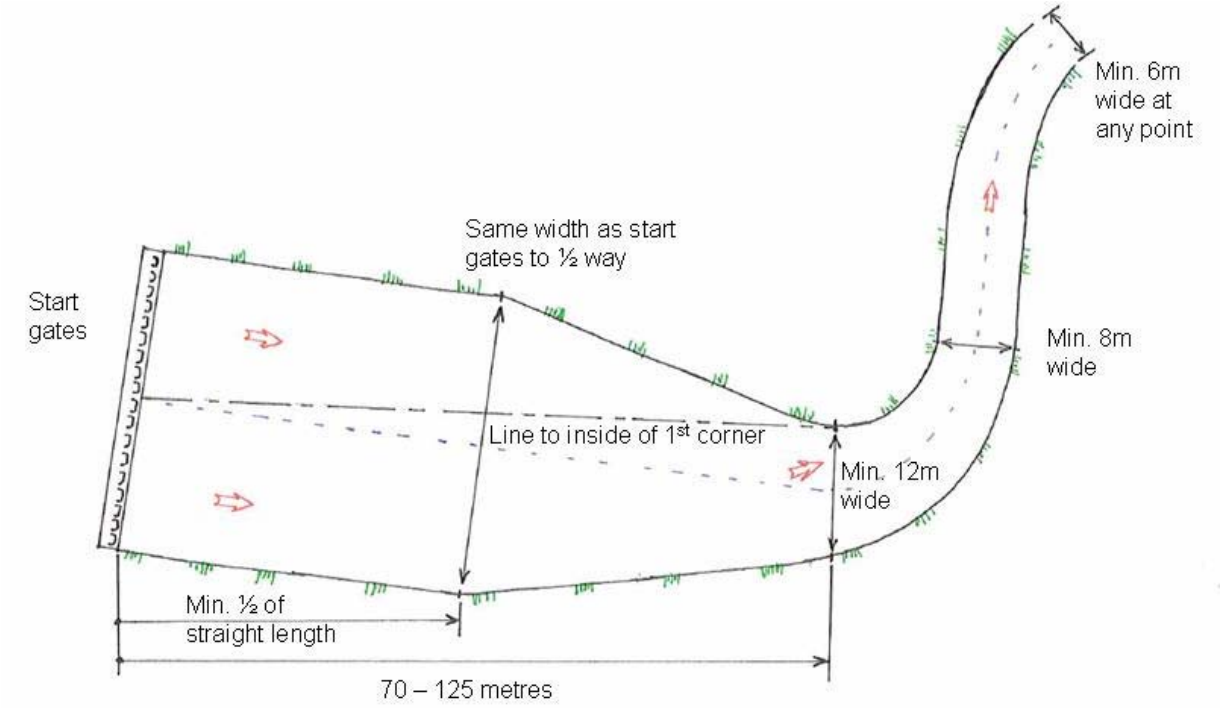
c) The minimum length of the start straight to the inside of the first corner must be at least 70 metres.

d) The maximum length of the start straight to the first corner cannot exceed 125 metres to the inside of the first corner.

e) The start straight must taper to a minimum width of 12 metres at the first corner and must maintain the width of the start gate for the first 50% of its length.

f) The width of 12 metres may taper down to 8m over the length of the first corner.

Diagram: How to measure the width of the track at the start straight:



6.4.3 Waiting Zone

A waiting zone must be provided for all Australian Championship meetings. It must be designed to accommodate 40 machines preferably under cover and should be in close vicinity of the starting area.

6.5 Finish Area

6.5.1 Finishing Line

a) The finishing line must be clearly marked with a flexible post on either side of the track and must be clearly displayed on all track drawings and plans.

b) Timekeeping and lap scoring services must be in line with finishing line.

6.6 Track Markers and fencing

6.6.1 Course Markers

a) The entire length of the track must be clearly defined either continuously or by markers at intervals. The track may also be defined by the lay of the land. Plastic breakable tape may be used.

b) Tyres may be used to mark the inside of a corner. Where tyres are used they must be inter-locked with each other and must not be dug into the ground.

c) Tyres must not exceed 3 tyres in height.

d) Truck or tractor tyres are prohibited.

e) Any marking poles should be flexible and placed at an outward angle from the track.

   i. The use of any rope bunting is banned.

   ii. The use of rigid posts (e.g. iron star pickets) is banned.

   iii. Marking poles should not exceed 500mm above ground level.

i. Coloured plastic cones (as used to mark football fields etc.) can be used provided they are no greater than 300mm in height.

7 TRACK GUIDELINES – STADIUM MOTOCROSS MODULE

7.1 Scope and Application

This module outlines the track conditions which must be evident during a Track Inspection and recorded in a Track Inspection Report, before the RCB can issue a Track Licence.

Where a track does not comply with the module, a Targeted Risk Assessment (TRA) must be completed and submitted to the RCB, in accordance with the procedures in "Appendix A".

This module must be applied in its entirety to new tracks. For areas of non-compliance at an existing track, a Track Inspector must undertake a TRA. The TRA may result in a scheduled Works Program. Any voluntary modifications or upgrading to a track by the Track Operator, must comply with module and be notified to the RCB in accordance with these Guidelines.

This module applies to permanent, semi-permanent or temporary tracks.

Tracks where Australian Championship or Series Meetings are conducted, must comply with this module and the Guidelines.

7.2 Track Licence and Inspection

7.2.1 Applications

Applications for licensing of Stadium Motocross must include a drawing of the track and surrounds (or site map of proposed track and surrounds), which must include the following:

a) an accurate plan of the track or proposed track

b) amenities and installations for the public

c) the location, extent, height and construction type of the first line of protection;

d) the location and extent of pit entry / exit roads,

e) the location and extent / size of all marshal points;

f) details of the track watering system and any other features within the racing arena;

g) the location and number of competitor and spectator toilet/shower facilities;

h) the location of first aid rooms/units;

i) the location of Ambulance parking site and entrance to racing arena;

j) the GPS location of the track

k) the dimensions and profile of all jumps, whoops and other obstacles on the track, and the distances between obstacles.

l) the street address of the venue.

Applications for inspection of tracks must be sent to the RCB, complete with plans showing any modifications since last inspection. Modifications to tracks should not be commenced until approved by the RCB.

If the plan is not sent with the track licence application, it must be made available before the track inspection takes place.

7.2.2 Inspections

7.2.2.1 Permanent and Temporary Tracks:

The inspection should take place at least two weeks before the track is used for competition or practice.

In circumstances where the temporary track is constructed in a few days, the inspection may be limited to a visit carried out 24 hours before practice by an appointed track inspector. If this is not possible the Steward (Referee) of the event accompanied by the Clerk of the Course may undertake the final track inspection.

The opinion of an experienced rider may also be sought when inspecting temporary venues.

7.2.2.2 Permanent Tracks:

a) for all permanent tracks: one annual inspection for venue licensing purposes conducted by an accredited Track Inspector appointed by the RCB. This includes tracks, which are used for 'closed to club' events.

b) any permanent track, which is modified during the course of a year, must be reinspected to ensure compliance with these Guidelines.

c) track inspections shall be arranged by the RCB. Inspectors shall be appointed from the RCB panel of qualified inspectors.

d) tracks not approved will be advised of the reasons for non-approval and a Works Program will be agreed upon to achieve approval.

7.3 Track Layout

a) A course can be permanent or temporary. It can be covered or open. It is normally, but not necessarily within the confines of a showground, sports field, football field, etc.

b) The materials used to construct the course must be natural and consistent (fine organic material, dirt, sand, clay etc.) or any other material with comparable qualities and be malleable.

c) The course must be free of stones, building rubble and the use of concrete is prohibited.

d) For open courses, particular attention must be given to water drainage at the low parts of the course. Consideration should also be given to drainage in the event of heavy rainfall. There must be no areas where water can pool across the width of the track.

e) Track layout must be initially designed with all grades of competing riders in mind; particular attention to the installation, consistency and shape of the jump faces is a priority. The materials used to construct jumps must be exclusively natural (loam, clay, dirt, etc.) and contain no building rubble.

f) Rider, officials and spectator safety along with spectator viewing must be taken into account when licensing a venue.

g) In general a track should be designed to allow the same conditions as motocross with minimal stop/start corners and the track should be designed for safe passing.

h) Jumps and obstacles should vary in difficulty making it possible for the different levels of riders to demonstrate their skills.

i) Jumps and obstacles must be motocross style.

7.3.1 Length

The minimum length of a stadium motocross track should be 400 metres.

7.3.2 Width

a) The width of the usable course should not be less than five (5) metres at any point.

b) The course must not have any sudden narrowing.

c) The width of the course at the landing zone must be wider than at take-off point (1metre extra minimum).

7.3.3 Vertical Space

The free space between the track and any obstacle above the ground must be 3.5 metres minimum. (e.g. bridges, bunting etc.). If the obstacle is placed above a jump or table top the clearance must be increased to ensure a free space of 3.5 metres between the highest trajectory point of the rider and the obstacle is maintained.

7.3.4 Speed

The track must not contain any high-speed sections (i.e. where speeds exceed 100kph).

Average Speed: The maximum average speed for a lap of the track is to be no greater than 55kph.

The formula to work out the average track speed is:

$$\text{Average Speed (kph)} = \frac{\text{Distance (metres)}}{\text{LapTime (secs)}} \times 3.6$$

Note that the lap time used is to be one achieved by an experienced “Pro” grade rider.

As an example: Track length = 1,750 metres
Lap time = 119 seconds

Therefore: Average Speed (kph) = $\frac{1750 \text{ metres}}{119 \text{ seconds}} \times 3.6$

= 52.94 kph

Speed is calculated by taking the distance of a lap (in metres) and dividing by the lap time (seconds) the answer is multiplied by 3.6 to give speed in kph.

7.3.5 Obstacles

The following are the only obstacles permitted in stadium motocross. The safety of riders, spectators and officials must be given utmost priority when constructing jumps and obstacles.

Supercross style obstacles are not permitted for stadium motocross.

7.3.5.1 Jumps

a) There will be no triple Jumps.

b) Double jumps are acceptable, however the second jump should be 400mm lower than the first jump. By not having a landing jump a rider can conceivably be coming off a single and landing flat on the track following the jump. Having a single jump with no landing ramp is far too dangerous, it is safer to have a double which is a jump and a landing jump

c) The length of run-ups to jumps should be limited to avoid high speed jump approaches.

7.3.5.2 Table Top Jump

a) Refer to definitions

b) With special attention given to the take-off and landing ramps.

7.3.5.3 Whoops Section

Refer to definitions

Please see the Motocross Module for measuring related diagrams.

7.3.6 Flag Marshalling Points

a) There must be a sufficient number of official signalling posts (flag points) all around the course.

b) The posts must be distinctly indicated and the location chosen so that signs given are clearly visible to competitors.

c) Flag marshal points must be located and protected to minimise the risk of injury to officials.

d) The area must be level and hard packed with a minimum flat area of $4m^2$

e) Position must be clearly marked.

f) Marshal points must not be placed at the outside of a corner or an outside exit of a corner.

7.3.7 Lighting

a) Lighting must be of a standard that provides clear and even visibility on all racing surfaces, free of shaded areas and be of 200 lux minimum intensity on all parts of the racing track. Lights must be inspected at least one business day prior to the meeting.

b) Particular attention must be paid to the illumination of up ramps and down ramps.

c) Lighting equipment must be carefully placed so that riding directly towards a set of lights does not hinder a competitor's view.

7.3.8 Pit Board Area

There must be no pit board areas. Signalling is not permitted.

7.4 Protective Devices

7.4.1 Public and Rider Safety

a) Where required by local Regulation there must be two lines of protection between competitors and their machines, and members of the public. Otherwise, a single line of protection may be adequate provided a sufficiently wide neutral zone exists:

i. The public must be protected within the vicinity of the course. A neutral zone of eight (8) metres shall exist between the first row of seats and the edge of the track.

If this is not possible, then the necessary rows of seats must be demarcated and remain unoccupied to provide extra safety.

ii. This area shall be demarcated at the public side by the first line of protection which shall be in accordance with paragraph 1.0.17 (i)

iii. The second line of protection shall be 1.2 metres high and in accordance with 1.0.17. (ii)

iv. Barbed wire is prohibited.

v. Ringlock (square sheep type) fencing is preferred as the second line of protection. If star pickets are used in the second line of protection they must be fitted with a plastic top cap.

b) The track must have a neutral zone in between the marked edge of the track and the line of protection for spectators.

c) The minimum width of the neutral zone must be four (4) metres measured perpendicular to the track unless otherwise required by Local or State Legislation.

d) Adjacent areas of the track must be a minimum of four (4) apart unless separated by adequate protection (eg straw bales, tyre wall, or other shock absorbent material).

e) Straw bales or other shock absorbent materials to protect the riders from danger must be placed to cover all obstacles such as poles, bridges, podium, walls, camera posts, PA system poles etc.

f) For events taking place inside, attention must be paid to smoke extraction emitted by the motorcycles, in order not to inconvenience the public.

7.5 Starting Area

7.5.1 Start Gate

Note: The intention is for all starters to manage the first corner safely when arriving as a massed group.

a) The start gate area should be clearly fenced off to restrict entry.

b) The start gate must allow for a maximum of twenty-five (25) competitors with no second row permitted.

c) The placement of the start gate must allow for equal chances for all competitors.

d) There must be an individual gate for each rider.

e) The starting gate must be a transverse backward falling device, folding or dropping in operation.

f) The start gate must be of rigid construction.

g) It may be controlled manually or by remote control and the control mechanism must not be visible to the competitors when starting in the race.

h) The minimum height of the start gate shall be 500 mm and allow a one-metre spacing (centre to centre) for each competitor.

i) Where concrete is used to secure the start gate for an earth/dirt starting pad, it should not exceed 600 mm in width.

j) The starting pad immediately behind the start gate maybe of concrete or similar solid construction to allow riders to start on a firm base allowing equally for all participants. A rear barrier must be installed at the start gate, in order to prevent riders from moving their machines backwards. The distance between the starting gate (released) and the rear barrier must be three (3) metres.

7.5.2 Start Straight

Note: Some tracks are designed for smaller grid numbers and this rule allows for the first corner to match the track density.

a) The surface of the start straight up to a point five (5) metres past the exit of the first corner must be flat and generally smooth.

b) The maximum / minimum length of the start straight to the first corner will be 80 / 30 metres to the inside of the first corner.

c) The first corner must be designed to allow for a maximum of twenty-five (25) starters to manage the corner safely. The minimum width of the first corner shall be nine (9) metres for the maximum allowable density (25). A moveable corner marker is permitted.

7.6 Finish Area

7.6.1 Finishing Line

a) The finishing line must be clearly marked with a flexible post on either side of the track and must be clearly displayed on all track drawings and plans.

b) Timekeeping and lap scoring services must be in line with finishing line.

7.7 Track markers and fencing

7.7.1 Course Markers

a) The entire length of the track must be clearly defined with intermittent marking on the straights.

b) Tyres may be used to mark the inside of a corner.

c) Where tyres are used they must be inter-locked with each other and must not be dug into the ground.

d) Truck or tractor tyres are prohibited.

e) Any marking poles should be flexible and placed at an outward angle from the track.

   i. The use of any rope bunting is banned.

   ii. The use of rigid posts (e.g. iron star pickets) is banned.

   iii. Marking poles should not exceed 500mm above ground level.

f) Coloured plastic cones (as used to mark football fields etc.) can be used provided they are no greater than 300mm in height.

8 TRACK GUIDELINES – SUPERCROSS MODULE

8.0 Scope and Application

This module outlines the track conditions which must be evident during a Track Inspection and recorded in a Track Inspection Report, before the RCB can issue a Track Licence.

Where a track does not comply with the module, a Targeted Risk Assessment (TRA) must be completed and submitted to the RCB, in accordance with the procedures in "Appendix A".

This module must be applied in its entirety to new tracks. For areas of non-compliance at an existing track, a Track Inspector must undertake a TRA. The TRA may result in a scheduled Works Program. Any voluntary modifications or upgrading to a track by the Track Operator, must comply with module and be notified to the RCB in accordance with these Guidelines.

This module applies to permanent, semi-permanent or temporary tracks.

8.1 Track Licence and Inspection

8.1.1 Applications

Applications for a Track Inspection and Track Licence of a Supercross track must include a drawing of the track and surrounds indicating complete compliance with this module and the Guidelines. This drawing must include the following information or details:

a) The racetrack proper.

b) The location, extent, height and construction type of the first line of protection.

c) The location and extent of pit entry / exit roads.

d) The location and extent / size of all marshal points.

e) Details of the track watering system and any other features within the racing arena.

f) The location and number of competitor and spectator toilet/shower facilities.

g) The location of first aid rooms/units.

h) The location of ambulance's parking site and entrance to racing arena.

i) The GPS location of the track.

Applications for inspection of tracks must be sent to the RCB, complete with plans showing any modifications since last inspection. Modifications to tracks should not be commenced until approved by the RCB.

If the plan is not sent with the track licence application, it must be available before the track inspection takes place.

8.1.2 Inspection

8.1.2.1 Temporary Venues:

a) The inspection should take place at least two weeks before the track is used for competition or practice.

b) In circumstances where the temporary track is constructed in a few days, the inspection may be limited to an inspection carried out 24 hours before practice by an appointed Track Inspector. If this is not possible the Steward of the event accompanied by the Clerk of the Course may undertake the final track inspection.

c) The opinion of an experienced rider may also be sought when inspecting temporary venues.

8.1.2.2 Permanent Venues:

a) for all permanent tracks: one annual inspection for venue licensing purposes conducted by an accredited Track Inspector appointed by the RCB. Note that this clause includes tracks, which are used for 'closed to club' events.

b) any permanent venue, which is modified during the course of a year, must be reinspected to ensure compliance with these Guidelines.

c) track inspections shall be arranged by the RCB. Track Inspectors shall be appointed from the RCB panel of qualified inspectors.

d) tracks not approved will be advised of the reasons for non-approval and a Works Program will be agreed upon to achieve approval.

8.1.2.3 Lighting Inspection:

Lights must be inspected and tested at least one clear business day prior to the meeting. Minimum of 200 Lux lighting is required and towers placed so as not to effect the riders' eyesight. For further information, please refer to the definitions.

8.2 Track Layout

a) A track can be permanent or temporary. It can be covered or open. It is normally, but not necessarily within the confines of a showground, sports field, football field, etc.

b) The materials used to construct the course must be natural and consistent (fine organic material, dirt, sand, loam, clay etc.) or any other material with comparable qualities.

c) The track must be free of stones and building rubble and the use of concrete is prohibited.

d) For open courses, particular attention must be given to water drainage at the low parts of the course. Consideration should also be given to drainage in the event of heavy rainfall. There are to be no areas where water can pool across the width of the track.

e) Track layout must be initially designed with all grades of competing riders in mind; particular attention to the installation, consistency and shape of the jump faces is a priority.

f) Rider, officials and spectator safety along with spectator viewing must be taken into account when licensing a track.

g) In general a track should be designed to allow the same conditions as motocross with minimal stop/start corners and the track should be designed for safe passing.

h) An assortment of jumps and obstacles spaced between areas of low to medium speed should be placed strategically within the working space with grand stands, tower lighting and pit access in mind.

i) Jumps and obstacles should vary in difficulty making it possible for the different levels of riders to demonstrate their skills.

8.2.1 Length

a) for outdoor events (open stadiums), the track must not be less than 400m in length with an average lap time not less than 35sec.

b) for indoor events (covered stadiums) the track must not be less than 300m with a lap time not less than 20sec.

c) for Supercross National Championship events, the course must not be less than 400m for covered stadiums and not less than 500m for open stadiums.

8.2.2 Width

a) The minimum track width for an indoor track should not be less than five (5) metres at any point.

b) The minimum track width for an outdoor venue must be six (6) metres at any point.

c) The track must not have any sudden narrowing.

8.2.3 VerticalSpace

The free space between the track and any obstacle above the ground must be 3.5 metres minimum. (e.g. bridges, bunting etc.). If the obstacle is placed above a jump or table top the clearance must be increased to ensure a free space of 3.5 metres between the highest trajectory point of the rider and the obstacle is maintained.

8.2.4 Speed

The track must not contain any high-speed sections (i.e. where speeds exceed 100kph).

Average Speed: The maximum average speed for a lap of the track is to be no greater than 55kph.

The formula to work out the average track speed is:

$$\text{Average Speed (kph)} = \frac{\text{Distance (metres)}}{\text{LapTime (secs)}} \times 3.6$$

Note that the lap time used is to be one achieved by an experienced "Pro" grade rider.

As an example: Track length = 1,750 metres
Lap time = 119 seconds

Therefore:

$$\text{Average Speed (kph)} = \frac{1750 \text{ metres}}{119 \text{ seconds}} \times 3.6$$
$$= 52.94 \text{ kph}$$

Speed is calculated by taking the distance of a lap (in metres) and dividing by the lap time (seconds) the answer is multiplied by 3.6 to give speed in kph.

8.2.5 Obstacles

The following are the only obstacles permitted in supercross. The safety of riders, spectators and officials must be given utmost priority when constructing all jumps and obstacles.

8.2.5.1 Jumps

a) Jumps should not exceed 3 metres in height.

b) When approving jumps consideration must be given to the age and ability of competitors.

c) Straw bales and/or signage are not to be used on jump ramps.

d) Track maintenance (also known as finishing touches) may be done prior to the commencement of racing and during the meeting as required.

8.2.5.2 Table Top Jump

a) With special attention given to the take-off and landing ramps.

8.2.5.3 Whoops Section

Refer to definitions

8.2.5.4 Stutter Section

Refer to definitions

8.2.5.5 Double jumps

a) the take off jump may be of any height with due regard to safety, and a minimum width of 5m. The take off ramp must be smooth and consistent without ruts and ledges forming.

b) the landing ramp must be 1metre wider than the take off ramp and placed in a straight line from the direction of the take off ramp. The landing ramp must be well rounded without a peak top and with a long gentle down ramp for landing.

c) no bales are to be placed on the top sides of the landing ramps.

d) if required the take off and landing ramps must be serviced throughout the event to maintain the above Guidelines.

8.2.5.6 Triple jumps

a) the take off jump may be of any height with due regard to safety, and a minimum width of 5m. It must be smooth and consistent without ruts and ledges forming.

b) triple jumps must be positioned in such a way as to provide competitors with an acceptable length of run up prior to encountering the first take-off ramp.

c) the second and third jumps must be placed in a straight line from the direction of the take off ramp.

d) the second jump must be constructed in the same manner as a double jump, allowing slower and lapped riders to jump safely.

e) the third jump must be a minimum of 1.5m wider that the first jump with twice the top landing space than a double jump.

f) triple jumps must graduate in height with the first jump the highest and the third the lowest.

g) no bales are to be placed within the length of the jumps.

h) if required, the take off and landing ramps must be serviced throughout the event to maintain the above requirements.

i) the third jump must be high enough to be clearly visible to enable the rider to sight it.

8.2.5.7 Table tops:

a) the safety of the riders, spectators and officials must be given utmost priority when constructing tabletop jumps.

b) the take off ramp may be of any height with due regard to safety and a minimum width of 5m. It must be smooth and consistent without ruts and ledges forming.

c) table top jumps must be positioned in such a way as to provide competitors with an acceptable length of run up prior to encountering the take-off ramp.

d) the top of the jump must be smooth and must be lined on both sides with a barrier i.e. hay bales.

e) the landing ramp must be gentle and as long as possible to reduce steepness and allow for rider error.

f) if required the take off and landing ramps must be serviced throughout the event.

8.2.5.8 Bridges

a) a bridge jump is to be treated as a small table top jump.

b) the vertical space between the track and any obstacle above the ground, i.e. the bridge, must be 3.5m minimum (see 8.2.3)

c) the minimum width through, and over, any bridge must be 5m.

d) bridges or underpasses must be positioned so that riders approach the entry at low speed or in a straight line.

e) padding should be used on both entry corners.

8.2.5.9 Construction material

a) the materials used to construct the track must be natural and consistent. i.e. A loamy clay with a binding substance.

b) the material should pack down well to prevent too many ruts on jump up ramps, however it should permeate enough to tolerate watering during construction and the event so that puddles and slick patches are kept to a minimum.

c) the materials used to construct the track must be free from stones, concrete and building waste.

d) when being used to cover hard surfaces, e.g.. boards, concrete, up-ramps or log based stutters, a suitable amount of depth is required to prevent any of the above-mentioned items being exposed during an event.

8.2.6 Flag Marshalling Points

a) There must be a sufficient number of official signalling posts (flag points) all around the course to ensure that from any marshal point there is an unrestricted view to the next marshal point.

b) The posts must be distinctly indicated and the location chosen so that signs given are clearly visible to competitors.

c) Flag marshal points must be located and protected to minimise the risk of injury to officials.

d) The area must be level and hard packed and include a protective barrier for the marshal.

e) Position must be clearly marked.

f) Marshal points must not be placed at the outside of a corner or an outside exit of a corner.

8.2.7 Pit Board Area

Signalling (pit board areas) are prohibited in Supercross

8.2.8 Protection of obstacles

Straw bales or other shock absorbent materials to protect the riders from danger must be placed to cover all obstacles such as poles, bridges, podium, walls, camera posts, PA system poles etc.

8.2.9 Lighting

a) lighting must be of a standard that provides clear and even visibility on all track surfaces, free of shaded areas and be of 200 lux minimum intensity on all parts of the racing track.

b) particular attention must be paid to the illumination of upramps.

c) lighting equipment must be carefully placed so that riding directly towards a set of lights does not hinder a competitor's view.

d) lighting is to be measured at the track surface.

8.3 Protective Devices

8.3.1 Public and Rider Safety

a) Where required by Local Regulation there must be two lines of protection between competitors and their machines, and members of the public, otherwise a single line of protection may be adequate provided a sufficiently wide neutral zone exists:

i. The first line of protection shall be in accordance with paragraph 1.0.17 (i)

ii. The second line of protection shall be in accordance with 1.0.17 (ii).

iii. Barbed wire is prohibited.

iv. Ringlock (square sheep type) fencing is preferred as the second line of protection. If star pickets are used in the second line of protection they must be fitted with a plastic top cap.

8.3.2 Neutral Zone

a) The track must have a neutral zone in between the marked edge of the track and the 2nd line of protection for spectators.

b) The minimum width of the neutral zone must be four (4) metres measured perpendicular to the track unless otherwise required by Local or State Legislation.

c) A neutral zone in areas where speeds in excess 60 kph are achieved the neutral zone shall be a minimum of six (6) metres.

d) A neutral zone of six (6) metres must be provided adjacent to table tops.

e) Adjacent areas of the track must be a minimum of four (4) metres apart unless separated by adequate protection (eg straw bales, tyre wall, or other shock absorbent material).

f) Track maintenance (also known as finishing touches) to jumps or amended jumps may be made - provided a rider with sufficient experience in conjunction with a Track Inspector or

the Steward of the meeting who shall complete a TRA and provide this to the RCB and Promoter.

8.4 Starting Area

8.4.1 Starting gate

a) the starting gate must be constructed in such a way that provides an equal opportunity for each competitor.

b) the starting gate must be a transverse device, individually dropping in operation, and of solid construction.

c) it may be controlled manually or by remote control and the control mechanism must not be visible to the competitors when starting in the race.

d) The minimum height of the start gate shall be 500 mm and allow an one-metre spacing (centre to centre) for each competitor.

e) if material other than concrete is used for the base, the start gate must be well secured to the ground with pegs or by other means, ensuring that it cannot be lifted if false starts occur.

f) A rear barrier must be installed at the start gate, in order to prevent riders from moving their machines backwards. The distance between the starting gate (released) and the rear barrier must be three (3) metres.

g) the start gate must allow for a maximum of 25 riders outdoor and 8 riders indoor with 1m spacing for each machine/rider.

8.4.2 Starting area

The Starting Area must be positioned to allow riders to line up whilst another event is in progress.

8.5 Finish Area

8.5.1 Finish Line

a) All tracks must have a clearly defined finish line where lap scorers can easily determine the winner in a close finish. i.e. 2 poles.

b) If an overhead banner is used for a finish line, there should be a clearance of 3.5 metres.

8.6 Track Markers and fencing

8.6.1 Course Markers

a) Straw bales or other shock absorbent materials must be placed to protect riders from all obstacles. i.e. poles, bridges, walls.

b) The entire length of the track must be clearly defined with intermittent marking on the straights by tape, white line marker or other similar material.

c) Tyres cannot be used

d) Hay bales should not be placed on the top of landing jumps.

e) Lightweight plastic ribbon tape that easily breaks on impact is recommended.

f) Any marking poles must be non-brittle, flexible and placed in an outward angle from the track.

   i. The use of any rope bunting is banned.

   ii. The use of rigid posts (e.g. iron star pickets) is banned.

   iii. Marking poles should not exceed 500mm above ground level.

g) Coloured plastic cones (as used to mark football fields etc.) can be used provided they are no greater than 300mm in height.

9.1 Scope and Application

This module outlines the track conditions which must be evident during a Track Inspection and recorded in a Track Inspection Report, before the RCB can issue a Track Licence.

Where a track does not comply with the module, a Targeted Risk Assessment (TRA) must be completed and submitted to the RCB, in accordance with the procedures in "Appendix A".

This module must be applied in its entirety to new tracks. For areas of non-compliance at an existing tracks, a Track Inspector must undertake a TRA. The TRA may result in a scheduled Works Program. Any voluntary modifications or upgrading to a track by the Track Operator, must comply with module and be notified to the RCB in accordance with these Guidelines.

This module applies to permanent, semi-permanent or temporary tracks.

9.2 Track Licence and Inspection

9.2.1 Applications

Applications for licensing of speedway tracks must include a drawing of the track and surrounds, which must include the following:

a) the racetrack proper,

b) the location, extent, height and construction type of the first line of protection (safety fence),

c) the location, extent, height and construction type of the second line of protection (spectator fence),]

d) the location and extent of pit entry / exit roads,

e) details of the track watering system and any other features within the racing arena,

f) the location and number of competitor and spectator toilet/shower facilities;

g) the location of first aid rooms/units,

h) the location of Ambulance parking site and entrance to racing arena,

i) the GPS location of the track.

Applications for inspection of tracks must be sent to the RCB, complete with plans showing all modifications since last inspection. Modifications to tracks must not be commenced until approved by the RCB.

9.2.2 Inspections

a) An inspection conducted by an accredited Track Inspector appointed by the RCB must take place annually.

b) any track, which is modified during the course of a year, must be reinspected to ensure compliance with these Guidelines.

c) track inspections shall be arranged by the RCB. Track Inspectors must be appointed from the RCB's panel of qualified Track Inspectors.

d) venues not approved for licensing will be advised of the reasons for non-approval and a work schedule will be agreed upon to achieve approval.

9.3 Track Layout

a) Speedway tracks should be as near to level as possible and formed by two straights joined by two semi-circular corners.

b) Track layout must be initially designed with all grades of competing riders in mind.

c) Competitor safety and spectator viewing must both be taken into account when designing and building a speedway track.

d) Consideration should be given to drainage in the event of heavy rainfall.

9.3.1 Length

Track length: (measured one (1) metre from the inside edge of the track)

a) Minimum – 275 metres

b) Maximum – 450 metres

Junior Tracks (125cc):

a) Minimum length 100 metres

b) Maximum length 200 metres

9.3.2 Width

a)	Tracks up to 350 metres:	10 metres on straights	12 metres on bends
b)	Tracks over 350 metres:	10 metres on straights	14 metres on bends
c)	Junior Tracks (125cc):	8 metres on straights	10 metres on bends

9.3.3 Banking

If there is some banking on the track, it must not exceed 5% in the straight or 10% in the bends and must remain constant and grow from the inner edge to the safety fence. If banking is provided, it must remain constant across the full width of the track.

9.3.4 Surface

a) The top surface must be granite, shale, brick granules, or similar unbound material rolled in on the base ground.

b) The grain size of the material used for top dressing must not exceed 7mm in diameter.

c) The depth of the dressing should be not less than 30mm.

9.3.5 Maintenance

To preserve the evenness of the top dressing, it should be graded as necessary between races. Graders should be constructed so that they replace the top dressing on the inside area of the track from the outside where it has been thrown during racing.

9.3.6 Pit Board Area

There must be no pit board areas.

9.3.7 Lighting

Lighting must be of a standard that provides clear and even visibility on all the racing surface. It shall be free of shaded areas and provide a minimum of 200lux. It is to be measured at the track surface.

9.3.8 Referee's Box

An observation box, placed adjacent to the starting area, must be provided for the referee. This box must be sufficiently high in order to give the Referee an unhindered, overall view of the track and starting area.

This observation box must have an adequate roof in order to protect the Referee in case of wet weather. It must be located on the outside of the track, so that the Referee can align themselves with the start line.

The box must be located outside the neutral zone, and be equipped with a switchbox for operating the starting gate, the signal lamps and the warning horn, siren or bell. The referees box must have communication to the starting marshal, pit marshal/Clerk of Course and announcer, and provide ample facilities for writing.

9.3.9 Pit area

At every speedway, there shall be adequate pit facilities approved by the RCB consisting of the following:

a) Each rider must be provided with a minimum of 8 m^2 of space on hard ground.

b) At all tracks, covered accommodation must be available to give protection in case of bad weather.

c) There must be a minimum of one toilet reserved for riders, and placed near the pits.

d) Facilities for collection of rubbish, oil and tyres must be available in the pits.

9.3.10 Washing Zone for Motorcycles

a) Refer to current Local Government Laws as Water usage may be prohibited.

b) The washing zone must be designated, with protection of the ground a prime consideration Biodegradable detergents should be used.

c) The area should have adequate surface water drainage.

d) Smoking is prohibited in the washing zone, No Smoking signs should be erected at the entrance of this zone.

9.4 Protective Devices and Barriers

9.4.1 Public and Rider Safety:

a) There must be two lines of protection between competitors and their machines, and members of the public:

   i. the first line of protection, also known as the Safety Fence shall be in accordance with paragraph 9.4.2

   ii. the second line of protection, also known as the Spectator Fence, shall be in accordance with paragraph 9.4.3.

   iii. a neutral zone, as detailed in paragraph 9.4.5 shall exist between the safety fence and the spectator fence.

9.4.2 Safety Fence (first line of protection)

A safety fence must be constructed to prevent damage or injury to a rider, an official, a spectator or any other person:

a) A vertical safety fence must surround the track and be of a minimum height of 1.2 metres unless otherwise required by Local or State Legislation.

b) The fence may be constructed of wooden planks, other approved board material, plastics, rubber belting, wire-mesh or other protective approved materials approved by the RCB. The material shall be constructed in order to absorb kinetic energy if a rider crashes into it.

c) Round-headed coach bolts must be used for fastening, and replacing “tek screws” (or similar) to increase rider safety.

d) Concrete or steel sheeting can be approved for existing venues only.

e) From 1 January 2014 it is compulsory for Australian Solo National Championships to have an approved energy absorbing barrier on bends (see 9.4.6 - Additional Protection Devices). It is also recommended that all Track Operators consider installing approved energy absorbing barriers on bends.

9.4.2.1 *Wooden Fence*

A fence constructed of wooden planks must:

a) be at least 25mm in thickness,

b) be correctly proofed against rotting and other deterioration,

c) have the planks erected horizontally,

d) must be supported on the outside by suitable stanchions, which are firmly fixed into the ground. Stanchions must not protrude above the top of the fence,

e) have the inside surface of the entire fence painted to clearly contrast with the colour of the track surface.

f) throughout the entire length, be equipped with a securely fixed, smooth, rounded cap. This cap must not overhang on the inside of the fence.

9.4.2.2 Board Material

A fence constructed of other approved board material must:

a) be at least 19mm in thickness,

b) be correctly proofed against rotting and other deterioration,

c) have the planks erected horizontally,

d) be supported on the outside by suitable stanchions, which are firmly fixed into the ground. Stanchions must not protrude above the top of the fence.

e) have the inside surface of the entire fence painted to clearly contrast with the colour of the track surface.

f) throughout the entire length, be equipped with a securely fixed, smooth, rounded cap. This cap must not overhang on the inside of the fence.

9.4.2.3 Wire Mesh

A fence constructed of wire mesh must have the following properties:

a) the wire must be made of steel and have a minimum diameter of 3mm.

b) the width of the mesh must not exceed 50mm.

c) the wire mesh must be carried on the outside by suitable stanchions, which are firmly fixed in the ground.

d) the stanchions must not protrude above the top of the mesh.

e) all wire mesh must be fitted on the track side of stanchions so as to present a smooth, continuous face to competitors.

f) each stanchion must be equipped with one or more coil springs to which the wire mesh is attached.

g) as an alternative to f. above, polystyrene, phenol-formaldehyde foam or similar approved crushable material, which will deform and absorb kinetic energy as necessary, may be employed instead of springs. Such material must extend for the full exposed length of each stanchion.

h) two horizontal strain wires of a minimum diameter of 6mm must support the wire mesh. The upper wire must be located at the top of the mesh, and the lower wire approximately 500mm from the top of the mesh.

i) both strain wires must be securely attached to the stanchions and be kept taut at all times.

j) Throughout the entire length, a wire mesh fence must be equipped with capping fashioned in strong canvas, rubber, plastic or similar flexible material. This capping must be securely fastened to the fence and must extend 50mm down both sides of the mesh.

9.4.2.4 Kick Board

The base of the safety fence, irrespective of the type of construction (other than concrete timber, or rubber belting), must be equipped with a kick board on the track side of the fence, 300 mm in height and constructed of wood, metal or other approved material.

a) in the case of a wood type fence, the kickboard should be firmly fixed to that fence.

b) in the case of a wire mesh fence, fixed to supports firmly located in the ground. These supports must be separated from the fence stanchions.

c) sections of the kickboard must be painted to contrast with the colour of the track surface.

9.4.3 Spectator Fence (second line of protection)

Outside of the safety fence, there must be a suitable barrier to deny access to members of the public and other unauthorised persons. The fence should be constructed of wire mesh and be a minimum of 1.8 metres high and a minimum of 3 metres from the track fence (neutral zone) unless otherwise required by Local or State Legislation.

9.4.4 Access Gates

a) The slot for the starting mechanism, in any type of fence, should be no wider than necessary for the efficient operation of that mechanism.

b) Gates providing access to the track should present no additional hazards to competitors. Gate stanchions must be no higher than the safety fence and be covered in an approved manner with crushable material. Hinges and locks must be fitted towards the outside (in relation to the track) of the stanchions and gate frames. Preferably, no gate should be located at any part of the track where competitors may be expected to ride near the fence.

c) Access gates must be capable of a minimum 2 metre opening width

d) Tracks with starting chutes are permitted for solo racing. Provision must be made for a fence across the chute before any track can be approved for sidecar racing.

9.4.5 Neutral zone

a) A neutral zone, three (3) metres in width, must exist between the first and second lines of protection measured perpendicular to the track unless otherwise required by Local or State Legislation.

b) Obstacles, other than those necessary for the conduct of the meeting, are not permitted in the neutral zone.

c) Lighting posts are not permitted within three (3) metres of the safety fence unless suitably protected.

9.4.6 Additional Protective Devices

FIM CCP licensed additional protective devices for the Speedway corner perimeter fence are available locally and there are several others available overseas. Other National Associations (DMU, SVEMO, BSPA in the UK Etc.) are phasing in compulsory use of Additional Protective Devices due to proved record of saving injury due to riders hitting the perimeter fence in impact zones.

It is understood that not all speedway tracks may be able to afford these fences, but Speedway here, like overseas, needs to be embracing practical, substantial, safety improvements such as these devices offer. Venue Operators should consider these devices for new tracks and making plans for a transition to them for impact zones.

Additional Protective Devices (APD) require an official homologation pursuant to the standards, procedures and specifications for the CCP/FIM Test for APD.

The Homologation is valid only for the tested model/product. New models/products must undergo and obtain a new homologation in accordance with the relevant tests. APD successfully used in FIM World Championship meetings before 2007 can still be used without homologation until 31.12.2010, with the express approval from the CCP/FIM.

If an APD is used permanently or temporarily, it must be erected against a secondary fence on the bends and first part of the two straights only. The secondary fence must be approved by the FIM. There should be no free space between the APD and the secondary fence.

The height of the APD shall not be less than 1.2 m. The APD must be solidly connected to the top and, as solidly as possible, to the bottom of the secondary fence or to the ground in order to avoid a possible rising during impact.

The lower part of each APD must be equipped with a kick board approximately 30 cm high according to Art. 079.4.7 (FIM Guidelines for Track Racing Tracks Edition 2009)

If constructed by the means of modules, these shall be solidly attached and a flap, overlapping and connected to the next module in the direction of racing, has to be provided at the end of each module. The same applies for the kick board.

All the materials composing the APD must be fire resistant.

Contingency ADP must be available in order to be able to quickly replace a punctured or damaged unit.

The co-ordinates of the manufacturers and distributors of homologated Additional Protective Devices are:

Type A (Long Track, Grass Track and Speedway)

- Tony Briggs “No Pain Barrier”, “Catching Air”, “Air Net”
- ADMAR Speedway Air Barrier
- VIV1 “Safety4all Plus”
- FUN4SALE.PL “Safety4all”
- TENT GRUPA “Banda Pneumatyczna Ochronna”, “Safe Speedway Barrier”

Type B (Speedway)

- Airfence Safety Systems (Australia) “Airfence Speedway”, “Airfence Speedway Inflatable”.

9.5 Infield and Advertising

9.5.1 Infield

a) The infield area must be approximately level so that competitors may safely ride on it if forced from the track.
b) Except as provided for in clause c) below, obstacles, except portable advertising signs and structures which serve the organisation of the meeting, are not permitted on the infield.
c) In exceptional circumstances, obstacles, which cannot be removed, may be permitted, provided that they are no closer than four (4) metres to the inside edge of the track. In this

case, the obstacle/s must be encased with straw bales, polystyrene, phenol formaldehyde or similar crushable material to a minimum height of two (2) metres above ground level.

d) Vehicles, other than safety vehicles, are not permitted on the infield during an event.

9.5.2 Infield advertising signs

Any advertising signs used on the infield must be either inflatable or constructed of light materials such as plywood, polystyrene, thin metal or plastic sheets mounted on lightweight frames that will collapse easily if struck. Signs shall not exceed one (1) metre in height, they shall be no nearer than four (4) metres to the inside edge of the track and shall be inclined towards the direction of racing.

9.6 Starting Area

9.6.1 Starting places

The minimum starting space allowed for each machine is 1.5 metres for solo machines; 2.5 metres for sidecar machines, and 2 metres for Quads.

9.6.2 Start Line

a) A continuous, straight starting line (which serves also as the finishing line) at least 5cm wide, must be marked across the full width of the track at a right angle to the inner edge.

b) The starting line should be positioned in the middle of the straight, and if this is not possible then not less than 35 m from the entrance to the first bend.

9.6.3 Starting Gate (starting tape)

a) Vertical stanchions, approximately 3 m in height, must be securely mounted one on the infield and the other outside the safety fence. On the infield it should be placed approximately 1 m from the inner edge line and should be covered in an approved manner with straw bales or cushioning material at least 60 cm in width and 2 m in height towards the direction of racing.
b) Each stanchion must be equipped with 2 sliders, to carry the tapes, with a slider stop at a height of approximately 2.9 m and with a pulley at the top for the elastic cord which raises the slider when it is released.
c) A solenoid-and-pawl, an electro magnet or similar mechanism must retain the slider when it is in the lower position to give the required height of 53 cm for the bottom tape. Two or three tapes must be attached to the sliders of the starting gate with rubber bands at each end which, when not stretched, are no longer than 15 cm and not wider than 2.5 cm.
d) Metal clips, hooks or other forms of metal connections must not be attached to the tapes or bands.
e) The tapes must be made of an easy breakable material.
f) The tapes must be of a contrasting colour with the colour of the track surface.
g) The gate releasing mechanism must only be controlled from the switchboard.
h) Should a starting gate fail to operate properly, the green light or a flag may be used for signalling starts.

9.7 Track Markers

The inside and outer edges of the track must be clearly marked.

9.7.1 Marking of the outer edge

a) If there is no safety fence on the outer-edge of the track, the outer-edge must be marked by a continuous white line or by small cones. The racing track must also be surrounded by a run off zone.
b) The public must be safely protected from the racing by a suitable barrier of protective material as above (see 9.4.2)

9.7.2 Marking of the Inside edge

a) The inside edge must be kept visible throughout the meeting, and marked by a continuous line of a colour that contrasts with the track surface. The line may be indicated by means of white powder or whitewash, not less than 15 cm wide, or by a wood or concrete kerb painted in contrast to the surface and not less than 5 cm wide.

b) A kerb must not protrude above the surface by more than 5 cm and must enable a motorcycle to ride over it safely in an emergency situation. The inside edge may also be indicated by very small cones (no greater than 300mm in height) and, preferably, placed 1 m inside a white inner edge line.

10.0 Scope and Application

This module outlines the track conditions which must be evident during a Track Inspection and recorded in a Track Inspection Report, before the RCB can issue a Track Licence.

Where a track does not comply with the module, a Targeted Risk Assessment (TRA) must be completed and submitted to the RCB, in accordance with the procedures in "Appendix A".

This module must be applied in its entirety to new tracks. For areas of non- compliance at an existing tracks, a Track Inspector must undertake a TRA. The TRA may result in a scheduled Works Program. Any voluntary modifications or upgrading to a track by the Track Operator, must comply with module and be notified to the RCB in accordance with these Guidelines.

This module applies to permanent, semi-permanent or temporary tracks.

10.1 Track Licence and Inspection

10.1.1 Applications

Applications for licensing of Short Tracks and Long Tracks must include a drawing of the track and surrounds, which must include the following:

a) the racetrack proper,

b) the location, extent, height and construction type of the first line of protection (safety fence),

c) the location, extent, height and construction type of the second line of protection (spectator fence),

d) the location and extent of pit entry / exit roads,

e) the location, extent and size of all marshal points,

f) details of the track watering system and any other features within the racing arena,

g) the location and number of competitor and spectator toilet/shower facilities,

h) the location of first aid rooms/units,

i) the location of Ambulance parking site and entrance to racing arena,

j) the GPS location of the track.

10.1.1.1 Applications for inspection of tracks must be sent to the RCB, complete with plans showing all modifications since the last inspection.

10.1.1.2 With the approval of the RCB, a track licensed for speedway, may also be licensed for track racing.

10.1.2 Track Inspections

a) An annual inspection for licensing purposes conducted by an accredited Track Inspector and appointed by the RCB must take place each year.

b) Any track, which is modified during the course of a year, must be reinspected to ensure compliance with these Guidelines.

c) Track inspections shall be arranged by the RCB. Track Inspectors shall be appointed from the RCB's panel of approved personnel.

d) Tracks not approved for licensing will be advised of the reasons for non-approval and a Works Schedule will be agreed upon to achieve approval.

10.2 Track Layout

a) Both short tracks and long tracks are a continuous course having bends all in the same direction.

b) Track layout must be initially designed with all grades of competing riders in mind.

c) Competitor safety and spectator viewing must both be taken into account when designing and building a speedway track.

d) Consideration should be given to drainage in the event of heavy rainfall.

10.2.1 Length

Minimum length 450 metres measured 1 metre from the inside edge of the track.

a) Track length: (measured one (1) metre from inside edge of track)

   i. Minimum length 450 metres.

   ii. Maximum length 1000 metres.

   iii. Minimum width 15 metre corners.

b) Track length: (Junior)

   i. Minimum length 275 metres.

   ii. Maximum length 450 metres

10.2.2 Width

a) Senior: Width 12 metre straights.

b) Junior: Minimum width 10 metres.

10.2.3 Banking

If there is some banking on the track, it must under no circumstances exceed 5% in the straight, 10% in the bends and must remain constant and grow from the inner edge to the safety fence. If banking is provided, it must remain constant across the full width of the track.

10.2.4 Surface

a) The surface shall consist of suitably prepared grass or a suitably prepared, graded, dirt surface.

b) Dirt surfaces must be granite, shale, brick granules, or similar unbound material rolled in on the base ground.

c) The grain size of the material used for top dressing must not exceed 7mm in diameter.

d) The depth of the dressing should be not less than 30mm.

e) See section 11.2.4 for information relating to the oiling of tracks where the track is part of a dirt track

10.2.5 Maintenance

To preserve the racing surface, maintenance should be undertaken as necessary between events.

10.2.6 Flag Marshalling Points:

a) There must be a sufficient number of official signalling posts (flag points) all around the course.

b) The posts must be distinctly indicated and the location chosen so that signs given are clearly visible to competitors.

c) Flag marshal points must be located and protected to minimise the risk of injury to officials.

d) The area must be level and hard packed with a minimum flat area of $4m^2$

e) Position must be clearly marked.

f) Marshal points must not be placed at the outside of a corner or an outside exit of a corner.

10.2.7 Pit Board Area

There must be no pit board areas.

10.2.8 Lighting

Lighting must be of a standard that provides clear and even visibility on all the racing surface. It shall be free of shaded areas and provide a minimum of 200lux. It is to be measured at the track surface. For further information, refer to definitions.

10.2.9 Washing zone for Motorcycles

a) Refer to current Local Government Laws as Water usage may be prohibited.

b) The washing zone must be designated, with protection of the ground a prime consideration Biodegradable detergents should be used.

c) The area should have adequate surface water drainage.

d) Smoking is prohibited in the washing zone, No Smoking signs should be erected at the entrance of this zone.

10.3 Protective Devices and Barriers

10.3.1 Public and Rider Safety:

a) In principle, there must be two lines of protection between competitors and their machines, and members of the public:

i) the first line of protection, also known as the Safety Fence shall be in accordance with paragraph 10.3.2.

ii) the second line of protection, also known as the Spectator Fence, shall be in accordance with paragraph 10.3.3

iii) a neutral zone, as detailed in paragraph 10.3.5 shall exist between the safety fence and the spectator fence.

10.3.2 Safety fence (first line of protection)

A safety fence must be constructed to prevent damage or injury to a rider, an official, a spectator or any other person:

a) A vertical safety fence must surround the track and be of a minimum height of 1.2 metres unless otherwise required by Local or State Legislation. However, the first line of protection is not required in areas not accessible to the general public, except where protection of other sections of track is required.

b) The fence may be constructed of wooden planks, other approved board material, plastics, rubber belting, wire-mesh or other protective approved materials approved by the RCB. The material shall be constructed in order to absorb kinetic energy if a rider crashes into it.

c) Round-headed coach bolts must be used for fastening, and replacing “tek screws” (or similar) to increase rider safety.

d) Concrete or steel sheeting can be approved for existing venues only.

e) From 1 January 2014 all venues must have an approved energy absorbing barrier on bends (see 10.3.6 Additional Protection Devices)

10.3.2.1 *Wooden Fence*

A fence constructed of wooden planks must:

i) be at least 25mm in thickness,

ii) be correctly proofed against rotting and other deterioration,

iii) have the planks erected horizontally,

iv) must be supported on the outside by suitable stanchions, which are firmly fixed into the ground. Stanchions must not protrude above the top of the fence,

v) have the inside surface of the entire fence painted to clearly contrast with the colour of the track surface.

vi) throughout its entire length, be equipped with a securely fixed, smooth, rounded cap. This cap must not overhang on the inside of the fence.

10.3.2.2 *Board Material*

A fence constructed of other approved board material must:

i) be at least 19 mm in thickness,

ii) be correctly proofed against rotting and other deterioration,

iii) have the planks erected horizontally,

iv) be supported on the outside by suitable stanchions, which are firmly fixed into the ground. Stanchions must not protrude above the top of the fence.

v) have the inside surface of the entire fence painted to clearly contrast with the colour of the track surface.

vi) throughout its entire length, be equipped with a securely fixed, smooth, rounded cap. This cap must not overhang on the inside of the fence.

10.3.2.3 *Wire Mesh*

A fence constructed of wire mesh must have the following properties:

i) the wire must be made in steel and have a minimum diameter of 3mm.

ii) the width of the mesh must not exceed 50mm.

iii) the wire mesh must be carried on the outside by suitable stanchions, which are firmly fixed in the ground.

iv) the stanchions must not protrude above the top of the mesh.

v) all wire mesh must be fitted on the track side of stanchions so as to present a smooth, continuous face to competitors.

vi) each stanchion must be equipped with one or more coil springs to which the wire mesh is attached.

vii) as an alternative to vi) above, polystyrene, phenol-formaldehyde foam or similar approved crushable material, which will deform and absorb kinetic energy as necessary, may be employed instead of springs. Such material must extend for the full exposed length of each stanchion.

viii) two horizontal strain wires of a minimum diameter of 6mm must support the wire mesh. The upper wire must be located at the top of the mesh, and the lower wire approximately 500mm from the top of the mesh.

ix) both strain wires must be securely attached to the stanchions and be kept taut at all times.

x) throughout its entire length, a wire mesh fence must be equipped with capping fashioned in strong canvas, rubber, plastic or similar flexible material. This capping must be securely fastened to the fence and must extend 50mm down both sides of the mesh.

10.3.2.4 *Kick Board*

The base of the safety fence, irrespective of the type of construction (other than concrete or rubber belting), must be equipped with a kick board on the track side of the fence, 300 mm in height and constructed of wood, metal or other approved material.

For some types of fence the kick board may not be necessary. Special permission can only be given by the Licensed Venue Inspector and RCB.

i) in the case of a wood type fence, the kickboard should be firmly fixed to that fence with round-headed coach bolts only.

ii) in the case of a wire mesh fence, fixed to supports firmly located in the ground. These supports must be separated from the fence stanchions.

iii) sections of the kickboard must be overlaid in the direction of solo racing, and painted to contrast with the colour of the track surface.

10.3.3 Spectator fence (second line of protection)

Outside of the safety fence, there must be a suitable barrier to deny access to members of the public and other unauthorised persons. The fence should be constructed of wire mesh and be a minimum of 1.8 metres high and a minimum of 3 metres from the track fence (neutral zone) unless otherwise required by Local or State Legislation.

10.3.4 Access Gates

a) The slot for the starting mechanism, in any type of fence, should be no wider than necessary for the efficient operation of that mechanism.

b) Gates providing access to the track should present no additional hazards to competitors. Gate stanchions must be no higher than the safety fence and be covered in an approved manner with crushable material. Hinges and locks must be fitted towards the outside (in relation to the track) of the stanchions and gate frames. Preferably, no gate should be located at any part of the track where competitors may be expected to ride near the fence.

c) Access gates must be capable of a minimum 2 metre opening width.

d) Tracks with starting chutes are permitted for solo racing. Provision must be made for a fence across the chute before any track can be approved for sidecar racing.

10.3.5 Neutral zone

a) A neutral zone, three (3) metres in width, must exist between the first and second lines of protection measured perpendicular to the track unless otherwise required by Local or State Legislation.

b) Obstacles, other than those necessary for the conduct of the meeting, are not permitted in the neutral zone.

c) Lighting posts are not permitted within three (3) metres of the safety fence unless suitably protected.

10.3.6 Additional Protective Devices

FIM CCP licensed additional protective devices for the Speedway corner perimeter fence are available locally and there are several others available overseas. Other National Associations (DMU, SVEMO, BSPA in the UK Etc) are phasing in compulsory use of Additional Protective Devices due to proved record of saving injury due to riders hitting the perimeter fence in impact zones.

It is understood that not all tracks may be able to afford these fences, but Track here, like overseas, needs to be embracing practical, substantial, safety improvements such as these devices offer. Venue Operators should consider these devises for new tracks and making plans for a transition to them for impact zones.

Additional Protective Devices (APD) require an official homologation pursuant to the standards, procedures and specifications for the CCP/FIM Test for APD.

The Homologation is valid only for the tested model/product. New models/products must undergo and obtain a new homologation in accordance with the relevant tests. APD successfully used in FIM World Championship meetings before 2007 can still be used without homologation until 31.12.2010, with the express approval from the CCP/FIM.

If an APD is used permanently or temporarily, it must be erected against a secondary fence on the bends and first part of the two straights only. The secondary fence must be approved by the FIM. There should be no free space between the APD and the secondary fence.

The height of the APD shall not be less than 1.2 m. The APD must be solidly connected to the top and, as solidly as possible, to the bottom of the secondary fence or to the ground in order to avoid a possible rising during impact.

The lower part of each APD must be equipped with a kick board approximately 30 cm high according to Art. 079.4.7 (See FIM Standards for Track Racing Circuits Edition 2009).

If constructed by the means of modules, these shall be solidly attached and a flap, overlapping and connected to the next module in the direction of racing, has to be provided at the end of each module. The same applies for the kick board.

All the materials composing the APD must be fire resistant.

Contingency ADP must be available in order to be able to quickly replace a punctured or damaged unit.

The co-ordinates of the manufacturers and distributors of homologated Additional Protective Devices are:

Type A (Long Track, Grass Track and Speedway)

- Tony Briggs “No Pain Barrier”, “Catching Air”, “Air Net”
- ADMAR Speedway Air Barrier
- VIV1 “Safety4all Plus”
- FUN4SALE.PL “Safety4all”
- TENT GRUPA “Banda Pneumatyczna Ochronna”, “Safe Speedway Barrier” Type B (Speedway)
- Airfence Safety Systems (Australia) “Airfence Speedway”, “Airfence Speedway Inflatable”.

10.4 Infield and Advertising

10.4.1 Infield

a) The infield area must be approximately level so that competitors may safely ride on it if forced from the track.

b) Except as provided for in clause c) below, obstacles, except portable advertising signs and structures which serve the organisation of the meeting, are not permitted on the infield.

c) In exceptional circumstances, obstacles, which cannot be removed, may be permitted, provided that they are no closer than four (4) metres to the inside edge of the track. In this case, the obstacle/s must be encased with straw bales, polystyrene, phenol formaldehyde or similar crushable material to a minimum height of two (2) metres above ground level.

d) Vehicles, other than safety vehicles, are not permitted on the infield during an event.

10.4.2 Infield advertising signs:

Any advertising signs used on the infield must be either inflatable or constructed of light materials such as plywood, polystyrene, thin metal or plastic sheets mounted on lightweight frames that will collapse easily if struck. Signs shall not exceed one (1) metre in height, they shall be no nearer than four (4) metres to the inside edge of the track and shall be inclined towards the direction of racing.

10.5 Starting Area

10.5.1 Starting places

The minimum starting space allowed for each machine is 1.5 metres for solo machines, 2.5 metres for sidecar machines and 1 metres for quads.

10.5.2 Start Line

a) A continuous, straight starting line (which serves also as the finishing line) at least 5cm wide, must be marked across the full width of the track at a right angle to the inner edge.

b) The starting line should be positioned in the middle of the straight, or if this is not possible then not less than 2/5 of the length of the straight before the first bend.

10.5.3 Starting Gate (starting tapes)

a) Vertical stanchions, approximately 3 m in height, must be securely mounted one on the infield and the other outside the safety fence. On the infield it should be placed approximately 1 m from the inner edge line and should be covered in an approved manner with straw bales or cushioning material at least 60 cm in width and 2 m in height towards the direction of racing.

b) Each stanchion must be equipped with 2 sliders, to carry the tapes, with a slider stop at a height of approximately 2.9 m and with a pulley at the top for the elastic cord which raises the slider when it is released.

c) A solenoid-and-pawl, an electro magnet or similar mechanism must retain the slider when it is in the lower position to give the required height of 53 cm for the bottom tape. Two or three tapes must be attached to the sliders of the starting gate with rubber bands at each end which, when not stretched, are no longer than 15 cm and not wider than 2.5 cm.

d) Metal clips, hooks or other forms of metal connections must not be attached to the tapes or bands.

e) The tapes must be made of an easy breakable material.

f) The tapes must be of a contrasting colour with the colour of the track surface.

g) The gate releasing mechanism must only be controlled from the switchboard.

h) Should a starting gate fail to operate properly, the green light or a flag may be used for signalling starts.

10.6 Marking

The inside and outer edges of the track must be clearly marked.

10.6.1 Marking of the outer edge

a) The entire track must be clearly defined.

b) The public must be safely protected from the racing by a suitable barrier of protective material as above (see 10.3.2)

10.6.2 Marking of the Inside edge

a) The inside edge must be kept visible throughout the meeting, and marked by a continuous line of a colour that contrasts with the track surface. The line may be indicated by means of white powder or whitewash, not less than 15 cm wide, or by a wood or concrete kerb painted in contrast to the surface and not less than 5 cm wide.

b) A kerb must not protrude above the surface by more than 5 cm and must enable a motorcycle to ride over it safely in an emergency situation. The inside edge may also be indicated by very small cones (no greater than 300mm in height) and, preferably, placed 1 m inside a white inner edge line.

11.0 Scope and Application

This module outlines the track conditions which must be evident during a Track Inspection and recorded in a Track Inspection Report, before the RCB can issue a Track Licence.

Where a track does not comply with the module, a Targeted Risk Assessment (TRA) must be completed and submitted to the RCB, in accordance with the procedures in "Appendix A".

This module must be applied in its entirety to new tracks. For areas of non- compliance at an existing track, a Track Inspector must undertake a TRA. The TRA may result in a scheduled Works Program. Any voluntary modifications or upgrading to a track by the Track Operator, must comply with module and be notified to the RCB in accordance with these Guidelines.

This module applies to permanent, semi-permanent or temporary tracks.

Tracks where Australian Championship or Series Meetings are conducted, must comply with this module and the Guidelines.

11.1 Track Licence and Inspection

11.1.1 Applications

Applications for licensing of Dirt Tracks must include a drawing of the track and surrounds, which must include the following:

a) the racetrack proper, including drawings of other courses (if any) at the Venue.

b) the location, extent, height and construction type of the first line of protection (safety fence),

c) the location, extent, height and construction type of the second line of protection (spectator fence),

d) the location and extent of pit entry / exit roads,

e) the location, extent and size of all marshal points,

f) details of the track watering system and any other features within the racing arena,

g) the location and number of competitor and spectator toilet/shower facilities,

h) the location of first aid rooms/units,

i) the location of Ambulance parking site and entrance to racing arena,

j) the GPS location of the track.

Applications for inspection of tracks must be sent to the RCB, complete with plans showing all modifications since the last inspection.

11.1.2 Inspections

a) An annual inspection for venue licensing purposes conducted by an accredited Track Inspector appointed by the RCB must take place each year.

b) Any track, which is modified during the course of a year, must be reinspected to ensure compliance with this module and these Guidelines.

c) Track inspections shall be arranged by the RCB. Track Inspectors must be appointed from the RCB's panel of licensed Track Inspectors.

d) Tracks not approved for licensing will be advised of the reasons for non-approval and a Works Program will be agreed upon to achieve approval.

11.2 Track Layout

a) A Dirt Track is a continuous course having left and right bends.

b) In at least one part of the track, the outside edge must deflect and cross the line of the inside edge by at least 4.5 metres.

c) Track layout must be initially designed with all grades of competing riders in mind.

d) Competitor safety and spectator viewing must both be taken into account when designing and building a Dirt Track.

e) Consideration should be given to drainage in the event of heavy rainfall.

11.2.1 Length

Track length: (measured one (1) metre from the inside edge of the track)

Minimum of 450 metres

Maximum of 1,830 metres

11.2.2 Width

Track width: minimum of 10 metres.

11.2.3 Banking

If banking is provided, it must remain constant across the full width of the track.

11.2.4 Surface

a) The surface must be constructed of a suitably prepared, loosely graded, dirt surface with the exception of nominated and licensed oiled venues as at 1.7.2011. The following venues can be rolled and hard packed:

- Temora – Woodlands Speedway
- Taree – Old Bar Roadside
- Macleay/Kempsey – Greenhill Speedway
- Wyalong – Lone Pine Speedway
- Gunnedah – Balcary Park
- Griffith – Pines Speedway
- Far South Coast – Sapphire Speedway

These listed venues should endeavour to provide their surface as loosely graded.

Existing tracks that are oiled can continue to be oiled provided a vegetable based oil is used and the venue does not conflict with Local and/or the relevant Environment Protection Authority.

The above tracks can continue to be oiled provided the venue does not conflict with Local and/or the relevant Environment Protection Authority. The venue operator must provide a copy of such authority from the relevant LGA or EPA.

b) The oiling of tracks other than those listed above at (a) is prohibited from 1 January 2012.

c) The depth of the dressing should be no less than 30mm.

11.2.5 Flag Marshalling Points

a) There must be a sufficient number of official signalling posts (flag points) all around the course.

b) The posts must be distinctly indicated and the location chosen so that signs given are clearly visible to competitors.

c) Flag marshal points must be located and protected to minimise the risk of injury to officials.

d) The area must be level and hard packed with a minimum flat area of $4m^2$

e) Position must be clearly marked.

f) Marshal points must not be placed at the outside of a corner or an outside exit of a corner.

11.2.6 Pit Board Area

There must be no pit board areas.

11.2.7 Lighting

a) Lighting must be of a standard that provides clear and even visibility on all racing surfaces, free of shaded areas and be of 200 lux minimum intensity on all parts of the racing track. Lights must be inspected at least one business day prior to the meeting.

b) Lighting equipment must be carefully placed so that riding directly towards a set of lights does not hinder a competitor's view.

Refer to definitions for further information on lighting

11.2.8 Washing Zone for Motorcycles

a) Refer to current Local Government Laws as water usage may be prohibited.

b) The washing zone must be designated, with protection of the ground a prime consideration, biodegradable detergents should be used.

c) The area should have adequate surface water drainage.

d) Smoking is prohibited in the washing zone, no smoking signs should be erected at the entrance of this zone.

11.3 Protective devices and Barriers

11.3.1 Public and Rider Safety

a) In principle, there must be two lines of protection between competitors, and their machines, and members of the public:

i. the first line of protection, also known as the Safety Fence shall be in accordance with paragraph 11.3.2.

ii. the second line of protection, also known as the Spectator Fence, shall be in accordance with paragraph 11.3.3.

iii. a neutral zone, as detailed in paragraph 11.3.4 shall exist between the safety fence and the spectator fence.

11.3.2 Safety fence (first line of protection)

A safety fence must be constructed to prevent damage or injury to a rider, an official, a spectator or any other person:

a) A vertical safety fence must surround the track and be of a minimum height of 1.2 metres unless otherwise required by Local or State Legislation.

b) The fence may be constructed of tyres*, timber planks, plywood sheeting, industrial rubber belting or other protective approved materials approved by the RCB. The material shall be constructed in order to absorb kinetic energy if a rider crashes into it.

c) Round-headed coach bolts must be used for fastening, and replacing "tek screws" (or similar) to increase rider safety.

d) From 1.1.2012 tyre walls will not be accepted on new tracks.

e) Where any new track is built after 1.1.2012 there must be a run off area of three (3) metres minimum between the edge of the track and any safety fence.

f) From 1 July 2012 tyre walls must be faced with plywood or industrial rubber belting

11.3.2.1 * *Tyre Walls post 1 January 2012*

a) All tyre walls must be faced with plywood or rubber belting to their full height without any protrusions on the surface closest to competition. The top edge of such facing shall be rounded.

b) Tyre walls must be constructed in horizontal layers measuring a minimum of 1200mm high,

c) the lower 200mm shall be earth filled,

d) the entire fence must be tie wired together through each tyre from ground level to the top of the wall,

11.3.2.2 *Timber planked fences*

i. planks shall be a minimum of 25mm thick,

ii. must be constructed in layers and be a minimum of 1200mm high,

iii. planks shall be placed horizontally and butted together,

iv. maximum shrinkage gap must not exceed 20mm between each plank.

v. vertical supports must be of hardwood with a minimum cross section of 125mm x 125mm or of steel construction with a similar strength capability.

vi. vertical supports must be suitably fixed below ground level to adequately support the structure.

vii. The maximum distance between vertical supports shall be 1,200mm.

11.3.2.3 *Plywood fences*

i. plywoods sheets shall be a minimum of 19mm thick,

ii. must be a minimum of 1200mm high,

iii. there shall be no gap between each sheet (an expansion gap of no more than 5mm is permitted),

iv. sheets may be overlapped, but this must be done in the direction of racing. The trailing edge of the sheet shall be bevelled at 45 degrees,

v. there shall be a horizontal top rail support finishing no higher than and preferably flush with the top of the plywood sheeting. This support will be of the same material as the vertical supports and will be on the opposite side of the sheeting to competition,

vi. vertical supports must be of hardwood with a minimum cross section of 125mm x 125mm or of steel construction with a similar strength capability.

vii. vertical supports must be suitably fixed below ground level to adequately support the structure.

viii. The maximum distance between vertical supports shall be 1,200mm.

11.3.2.4 *Industrial rubber belting fences*

Should have a minimum height of 1200mm and be supported by the method stipulated for plywood sheeting in paragraph 11.3.2.3, or in any other suitable manner endorsed by a qualified engineer.

11.3.2.5 *Concrete walls*

Should have a minimum height of 1200mm, a minimum thickness of 100mm, be rated at 20Mpa or higher and be supported in any suitable manner endorsed by a qualified engineer.

11.3.3 Spectator Fence (second line of protection)

If concrete walls are used as the first line of protection, a TRA must be completed and submitted.

Outside of the safety fence, there must be a suitable barrier to deny access to members of the public and other unauthorised persons. The fence should be a minimum of 1.2 metres high and a minimum of 3 metres from the track fence (neutral zone) unless otherwise required by Local or State Legislation.

Note: Areas where the public and competitors are not permitted do not have to be protected by Safety protection provided the outside edge of the track is clearly marked.

11.3.4 Neutral zone

a) A neutral zone, at least three (3) metres in width, must exist between the first and second lines of protection measured perpendicular to the track unless otherwise required by Local or State Legislation.

b) Obstacles, other than those required to serve the organisation of the meeting, are not permitted in the neutral zone.

c) Lighting posts are not permitted within three (3) metres of the safety fence unless suitably protected.

11.3.5 Protection of Obstacles

Straw bales or other shock absorbent materials to protect the riders from danger must be placed to cover all obstacles such as poles, bridges, podium, walls, camera posts, PA system poles etc.

11.4 Infield and Advertising

11.4.1 Infield

a) The infield area must be approximately level so that competitors may safely ride on it if forced from the track.

b) Except as provided for in clause c) below, obstacles, except portable advertising signs and structures which serve the organisation of the meeting, are not permitted on the infield.

c) In exceptional circumstances, obstacles, which cannot be removed, may be permitted, provided that they are no closer than four (4) metres to the inside edge of the track. In this case, the obstacle/s must be encased with straw bales, polystyrene, phenol formaldehyde or similar crushable material to a minimum height of two (2) metres above ground level.

d) Vehicles, other than safety vehicles, are not permitted on the infield during an event.

e) Tyres shall not be used to define the inside edge of the track.

11.4.2 Infield advertising signs

Any advertising signs used on the infield must be either inflatable or constructed of light materials such as plywood, polystyrene, thin metal or plastic sheets mounted on lightweight frames that will collapse easily if struck. Signs shall not exceed one (1) metre in height, they shall be no nearer than four (4) metres to the inside edge of the track and shall be inclined towards the direction of racing.

11.5 Starting Area

11.5.1 Starting places:

The minimum starting space allowed for each machine is 1.0 metres for solo machines, 1.5 metres for sidecar machines and 2 metres for quads.

11.5.2 Pit Area

At every venue, there shall be adequate pit facilities approved by the licencing authority.

11.6 Track Markers

The inside and outer edges of the track must be clearly marked.

11.6.1 Marking of the Inside edge

a) The inside edge must be kept visible throughout the meeting, and marked by a continuous line of a colour that contrasts with the track surface. The line may be indicated by means of white powder or whitewash, not less than 15 cm wide, or by a wood or concrete kerb painted in contrast to the surface and not less than 5 cm wide.

b) A kerb must not protrude above the surface by more than 5 cm and must enable a motorcycle to ride over it safely in an emergency situation. The inside edge may also be indicated by very small cones and, preferably, placed 1 m inside a white inner edge line.

12.0 Scope and Application

This module outlines the track conditions which must be evident during a Track Inspection and recorded in a Track Inspection Report, before the RCB can issue a Track Licence.

Where a track does not comply with the module, a Targeted Risk Assessment (TRA) must be completed and submitted to the RCB, in accordance with the procedures in "Appendix A".

This module must be applied in its entirety to new tracks. For areas of non-compliance at an existing track, a Track Inspector must undertake a TRA. The TRA may result in a scheduled Works Program. Any voluntary modifications or upgrading to a track by the Track Operator, must comply with module and be notified to the RCB in accordance with these Guidelines.

This module applies to permanent, semi-permanent or temporary tracks.

Tracks where Australian Championship or Series Meetings are conducted, must comply with this module and the Guidelines.

12.1 Track Licence and Inspection

12.1.1 Applications

Applications for licensing and inspection of supermoto tracks must include in the licence application a drawing of the track and surrounds which must include the following:

a) The race track proper, including the start and finish line

b) The location, extent, height and construction type of the first line of protection (safety fence);

c) the location, extent, height and construction type of the second line of protection (spectator fence),

d) The location and extent of pit entry / exit roads;

e) The location and extent / size of all marshal points;

f) Details of track watering system and any other features within the racing arena;

g) The location and number of competitor and spectator toilet / shower facilities;

h) The location of first aid rooms / units;

i) The location of first aid vehicle parking and entrance to racing arena.

j) The GPS location of the track

k) The location and boundaries of the pit area, and the pit entry and exit roads, and the method of segregation from spectator access.

l) The method of operation and location of the starting mechanism.

m) The proposed location of Lap Scorers, Judges etc.

n) The location of machine scrutineering areas

o) The location of medical facilities and ambulance access to the track.

p) The proposed method to protect ambulance access into and from the site, e.g., No stopping signs or barriers.

q) The proposed method of communication between Senior Officials and the Flag Marshals and or emergency services.

r) The number and location of fire extinguisher in the pit area and on the track.

Applications for inspection of tracks must be sent to the RCB, complete with plans showing all modifications since last inspection. Modifications to tracks must not be commenced until approved by the RCB.

12.1.2 Inspections

a) Applications for inspection of tracks must be sent to the relevant RCB, complete with plans showing all modifications since the last inspection. Modifications to tracks should not be commenced until approval by the RCB.
b) Track inspections must be arranged by the RCB. Track Inspectors shall be appointed from the RCBs panel of licensed Track Inspectors.
c) Where a track is not approved, the applicant will be advised of the reasons for non-approval and a Works Program will be agreed upon to achieve approval.

12.2 Track Layout

a) In some cases supermoto racing will take place on temporary tracks and at night time so where noted consideration is made for this.

b) There is to be at least one jump or table top included in the dirt section/s.

c) Consideration should be given to drainage in the event of heavy rainfall (No pooling)

d) In the event of adverse weather conditions, an alternative track configuration may be used at the discretion of the clerk of the course

12.2.1 Surface

a) The track construction may consist of both sealed surface and dirt sections. The dirt section or sections may account for ideally at least 20% of the total track length but no more than 33%

b) Where the track surface changes from dirt to sealed or vice versa, the transition is to be smooth and constructed so as to reduce the amount of loose material being transported or flung onto the sealed track.

c) All sealed tracks may be used in the event that a dirt section is not permitted by the track owners or it is not possible to incorporate a dirt section

d) In adverse weather conditions only the sealed part of a track may be used.

12.2.2 Straights

a) No straight is to exceed 300 metres in length.

b) The distance from the start line to the inside of the first corner is to be 60 to 120 metres, and is to be sealed.

12.2.3 Length

a) The track is to be a minimum of 800 metres and a maximum of 3,000 metres long.

b) The length of the course shall be measured along the centre line

12.2.4 Width

a) The track width is to be a minimum of 6 metres at which no more than 20 machines (10 quads) are to be on the track at one time.

b) Where track width is 7.5 meters or wider, a full field is permitted.

c) In the case of a temporary track, a reduced width may be permitted with a corresponding reduction in number of machines allowed on the track at once.

12.2.5 Vertical Space

a) The free space between the track and any obstacle above the ground must be 3.5 metres minimum. (e.g. bridges, bunting etc.).

b) If the obstacle is placed above a jump or table top the clearance must be increased to ensure a free space of 3.5 metres between the highest trajectory point of the rider and the obstacle is maintained.

12.2.6 Track Edges

a) Track edges on the sealed section are to be continuously marked with a non-skid white painted line on each side.

b) The track must continue without a step onto the verge area which is to be flat and compacted.

12.2.7 Verge

There must be at least 2 metres solid verge between the gravel trap and the edge of track.

12.2.8 Run off area

a) Run-off in corners is to comply with road racing module and these Guidelines with due acknowledgement of the lower speeds attained by supermoto bikes

b) Airfence or other protective devices can be used where run-off distance is insufficient

c) Where crash bags filled with empty plastic bottles are used these are to be 2 metres by 1 metre by 1 metre minimum and placed abutting each other

d) Hay bales are also permissible

e) Run-off distances can then be reduced to half of that required.

f) Water barriers may be used in run off areas, provided that they are of the strapped together type, (i.e. Steel cables and pins or metal latch and pins)

12.2.9 Arrestor Beds (gravel or sand trap)

a) Arrestor beds are permissible and are to be on the same level as the verge and the surface raked smooth.

12.2.10 Obstacles

The following are the only obstacles permitted in Supermoto. The safety of riders, spectators and officials must be given utmost priority when constructing jumps and obstacles.

12.2.10.1 Jumps

a) Jumps are to be minimum of 6 metres wide and a maximum of 600mm high.

b) The approach grade is not to exceed 10 degrees.

c) The landing side of all jumps must be of solid (hard) soil without rocks.

d) Distance between two jumps is to be no less than 30 metres.

e) Double jumps, triple jumps or stutters are not permitted.

12.2.10.2 Table Top

a) In the case of a table top the height can be increased to 1.2 metres and the approach ramp can be up to 20 degrees.

12.2.10.3 Metal Ramps.

a) If alloy or steel ramps are used, the lip where the ramp meets the tarmac should be no more than 20mm. The height is restricted to 400mm.

12.2.11 Flag Marshalling Points

a) There must be a sufficient number of official signalling posts (flag points) all around the course.

b) The posts must be distinctly indicated and the location chosen so that signs given are clearly visible to competitors.

c) Flag marshal points must be located and protected to minimise the risk of injury to officials.

d) The area must be level and hard packed with a minimum flat area of $4m^2$

e) Position must be clearly marked.

f) Marshal points must not be placed at the outside of a corner or an outside exit of a corner.

12.2.12 Pit Board Area

a) An area for signalling, which is visible to all riders, may be provided and clearly marked at a suitable place adjacent to the track. If provided it must be clearly marked off with an entrance and exit to the track proper.

b) A Pit Board area must have a barrier to protect signallers from oncoming machines and to keep signallers off the track.

c) A Pit Board area must not be placed at the outside of a corner or an outside exit of a corner.

12.2.13 Lighting

a) Lighting must be of a standard that provides clear and even visibility on all the racing surface. It shall be free of shaded areas and provide a minimum of 200lux. It is to be measured at the track surface.

b) Temporary lighting is to be installed and operating at least one night before the event. If the lighting layout has been recommended by a qualified lighting consultant this rule may be waived.

See definitions for further information

12.2.14 Watering Systems

a) An efficient watering system or watering vehicle may be provided and should be capable of watering the dirt section of the track.

b) Any watering system installed must not present a hazard to riders. For example watering systems should not be placed permanently in neutral zones unless they are not a hazard to riders.

12.2.15 Protection of obstacles

a) No obstacles are to be less than 3 metres from the track edge or above the track surface. If this distance is not achievable, adequate additional barriers must be used and placed on an angle so as not to cause a sudden stop should a machine come into contact with them.

b) No obstacles are to be in any corner's run-off area. All obstacles such as trees, stakes and walls in other areas are to be covered with a shock absorbent material, to a height of two metres or the top of the obstacle, whichever is the lesser.

12.3 Protective Devices and Barriers

12.3.1 Public and Rider Safety

a) Where required by local Regulation there must be two lines of protection between competitors, and their machines, and members of the public, otherwise a single line of protection may be adequate provided a sufficiently wide neutral zone exists:

b) The first line of protection shall be in accordance with paragraph 1.0.17 (i)

c) The second line of protection shall be in accordance with paragraph 1.0.17(ii) and be a minimum of 1.2 metres high and a minimum of 3 metres from the track fence (neutral zone) unless otherwise required by Local or State Legislation.

d) Barbed wire is prohibited.

e) Ringlock (square sheep type) fencing is preferred as the second line of protection. If star pickets are used in the second line of protection they must be fitted with a plastic top cap.

12.3.2 Neutral Zone

a) The track must have a neutral zone in between the marked edge of the track and the 2nd line of protection for spectators.
b) The minimum width of the neutral zone must be four (4) metres measured perpendicular to the track unless otherwise required by Local or State Legislation.
c) A neutral zone in areas where speeds in excess of 60 kph are achieved the neutral zone shall be a minimum of six (6) metres.
d) A neutral zone of six (6) metres must be provided adjacent to table tops.
e) Adjacent areas of the track must be a minimum of four (4) metres apart unless separated by adequate protection (eg straw bales, tyre wall, or other shock absorbent material).
f) Adjacent tracks are to be a minimum of four (4) metres apart unless suitable protection is provided to separate them. Suitable protection would be a tyre or water barrier 1.2 metres in height.

12.3.3 Washing Zone for Motorcycles

a) Refer to current Local Government Laws as water usage may be prohibited.

b) The washing zone must be designated, with protection of the ground a prime consideration, Biodegradable detergents should be used.

c) The area should have adequate surface water drainage.

d) Smoking is prohibited in the washing zone, no smoking signs should be erected at the entrance of this zone.

12.4 Track Markers

12.4.1 Grid Markings

a) Grids for both solo and sidecar machines will be marked in accordance with Chapter 24 of the Manual of Motorcycle sport.

b) A 'Finish' will be marked at the appropriate place. The finish line will cross the full width of the track and be of a minimum width of 100mm.

12.4.2 Marking

a) The entire length of the track must be clearly defined. Plastic breakable tape may be used.

b) Tyres may only be used to mark the inside of a corner. Where tyres are used they must be inter-locked with each other and must not be dug into the ground.

c) Truck or tractor tyres are prohibited.

d) Any marking poles should be flexible and placed at an outward angle from the track.

e) The use of any rope bunting is banned.

f) The use of rigid posts (e.g. iron star pickets) is banned.

g) Marking poles should not exceed 500mm above ground level.

h) Coloured plastic cones (as used to mark football fields etc.) can be used provided they are no greater than 300mm in height.

i) Plastic bollards, breakable wooden pickets leaning away from the direction of traffic, or hay bales are permitted.

j) Wind rows made of uncompacted soil are also permitted.

12.4.3 Non-Permanent Advertising Signage

a) Vertical signs of lightweight construction may be erected inside the first line of protection on the inside of curves to within two (2) metres of the track edge provided that no obstruction to rider or marshal's line of sight occurs.

b) Only signs constructed from polyurethane or similar lightweight material and weighing less than five (5) kilograms (including supports) may be erected in run-off areas or

within the first line of protection, but may not be erected within three (3)metres of the track edge.

c) Signs will be limited to a maximum height of 1.5 metres.

d) Supports for such signs must be made of semi rigid material such as polyethylene pipe.

12.5 Pit Area

a) Pit entry and exit roads must be located so machines using them are not on the racing line when doing so.

b) Pits must include a dummy gird area immediately before the pit exit.

13.0 Scope and Application

This module outlines the track conditions which must be evident during a Track Inspection and recorded in a Track Inspection Report, before the RCB can issue a Track Licence.

Where a track does not comply with the module, a Targeted Risk Assessment (TRA) must be completed and submitted to the RCB, in accordance with the procedures in "Appendix A".

This module must be applied in its entirety to new tracks. For areas of non-compliance at an existing track, a Track Inspector must undertake a TRA. The TRA may result in a scheduled Works Program. Any voluntary modifications or upgrading to a track by the Track Operator, must comply with module and be notified to the RCB in accordance with these Guidelines.

This module applies to permanent, semi-permanent or temporary tracks.

Tracks where Australian Championship or Series Meetings are conducted, must comply with this module and the Guidelines.

A drawing of the course (or proposed course) and site map of facilities and surrounds should be included in an Application for a Track Inspection and Licence.

Permission must be obtained in writing from all of the custodians of the land to be used (eg. Forests Department, private landholders, water authorities, local government, plantation companies etc.). If possible, landholders permission is submitted at time of Permit Application.

A Permit to Conduct a Meeting must not be issued by the RCB unless all conditions required by the landowner/controller have been met.

13.1 Track Licence and Inspection

13.1.1 Applications

Applications for licensing of temporary tracks must include a drawing of the track and surrounds, with regard to the following (if present):

a) the racetrack

b) the location, extent, height and construction type of the first line of protection (safety fence)

c) the location, extent, height and construction type of the second line of protection (spectator fence)

d) the location and extent of pit entry / exit

e) the location and number of competitor and spectator toilet/shower facilities including portable units

f) the location of first aid unit

g) the location of Ambulance parking site

h) the GPS location of the track.

It is understood that it may not be practical to submit an 'accurate plan' for Enduro events and Trials sections at Permit application time, however event organisers should ensure the RCB has been provided with a draft drawing of the track and surroundings.

13.1.2 Inspections

a) The inspection should take place at least two weeks before the track is used for competition or practice.
b) In circumstances where the temporary track is constructed in a few days, the inspection may be limited to a visit carried out 24 hours before practice by an appointed venue inspector. If this is not possible the Steward (Referee) of the event accompanied by the Clerk of the Course may undertake the final track inspection.
c) The opinion of an experienced rider may also be sought when inspecting temporary venues.

13.2 Track Layout

a) Competitor safety and spectator viewing must both be taken into account when designing and building a course.
b) Course layout must be initially designed with all grades of riders in mind.
c) Course should be designed to allow opportunities for passing in areas of tight terrain.
d) Jumps and obstacles should vary in difficulty making it possible for all grades of riders to perform their skills.

13.3 Course Preparation

The following are guidelines for Promoters of these events.

a) An accurate plan of the course should be prepared ahead of the event to enable the necessary approvals to be obtained if required by Local authorities. Special consent is needed for activity on any public land.
b) Land owner / controller permission obtained and granted
c) Neighbour letter drop to inform local neighbours of the activity.
d) Direction signs should be erected to cause minimal damage to the flora
e) Permission from the following authorities if public roads, tracks and/or land are to be used
    i. Local Government and Road Traffic Authority must be notified in writing.
    ii. Local Council / Shire notified in writing
    iii. Regional environmental authority
    iv. Other environmental organisations (if required)
f) Event organisers should pay attention to the placing, direction and volume of any Public Address systems. When planning a starting area, take into account the projection of sound so neighbours are not disturbed and inform them in advance about your event.

g) Ensure designated parking areas are considered in low environmental impact areas or low fire risk areas (Parking on grass may be a fire risk).
h) Ensure adequate waste receptacles are provided for various litter types (i.e. glass, recycled, litter etc.).
i) Ensure any permanent buildings or track features which are not removed immediately after an event have obtained local planning permission.
j) Event organisers should ensure there are adequate toilet facilities.
k) Enviromats should be used for washing areas / refuelling areas.
l) For Enduros the GPS co ordinates of a suitable helicopter landing area (if available) adjacent to the main control area must be included in the application.
m) For Enduro or Trials events which are being held beyond the range of mobile phone communication, the sweep rider should be equipped with a UHF radio to communicate with the main control area, which should be equipped with a satellite phone for use in contacting emergency services.
n) Adequate medical arrangement must be made including notification of the local hospital and ambulance service that the event is taking place. (Well-stocked medical kit, stretcher and access to four-wheel drive vehicle is adequate for enduro competitions.) Refer to Section 4 of the GCR's for medical requirements.

14.0 Scope and Application

This module outlines the track conditions which must be evident during a Track Inspection and recorded in a Track Inspection Report, before the RCB can issue a Track Licence.

Where a track does not comply with the module, a Targeted Risk Assessment (TRA) must be completed and submitted to the RCB, in accordance with the procedures in "Appendix A".

This module must be applied in its entirety to new track. For areas of non- compliance at an existing track, a Track Inspector must undertake a TRA. The TRA may result in a scheduled Works Program. Any voluntary modifications or upgrading to a track by the Track Operator, must comply with module and be notified to the RCB in accordance with these Guidelines.

This module applies to permanent, semi-permanent or temporary tracks.

Tracks where Australian Championship or Series Meetings are conducted, must comply with this module and the Guidelines.

14.1 Track Licence and Inspection

14.1.1 Applications

Applications for licensing of Freestyle Motocross must include a drawing of the track and surrounds (or site map of proposed track and surrounds), which must include the following:

g) an accurate plan of the track or proposed track

h) amenities and installations for the public

i) the location, extent, height and construction type of the first line of protection;

j) the location and extent of pit entry / exit roads,

k) the location and extent / size of all marshal points;

l) details of the track watering system and any other features within the racing arena;

m) the location and number of competitor and spectator toilet/shower facilities;

n) the location of first aid rooms/units;

o) the location of Ambulance parking site and entrance to racing arena;

p) the GPS location of the track

q) the dimensions and profile of all ramps, artificial obstacles and other obstacles on the track, and the distances between obstacles.

r) the street address of the venue.

14.1.1.1 Applications for inspection of tracks shall be sent to the RCB, complete with plans showing any modifications since last inspection. Modifications to tracks should not be commenced until approved by the RCB.

14.1.1.2 If the plan is not sent with the track licence application it must be available before the track inspection takes place.

14.1.2 Inspections

14.1.2.1 Permanent and Temporary venues

a) The inspection should take place at least two weeks before the track is used for competition or practice.

b) In circumstances where the temporary track is constructed in a few days, the inspection may be limited to a visit carried out 24 hours before practice by an appointed venue inspector. If this is not possible the Steward (Referee) of the event accompanied by the Clerk of the Course may undertake the final track inspection.

c) The opinion of an experienced rider may also be sought when inspecting temporary venues.

14.1.2.2 Permanent venues

a) For all permanent tracks: one annual inspection for venue licensing purposes conducted by an accredited venue inspector appointed by the RCB. Note that this clause includes tracks, which are used for 'closed to club' events.

b) Any permanent venue, which is modified during the course of a year, must be reinspected to ensure compliance with these Guidelines.

c) Track inspections shall be arranged by the RCB. Inspectors shall be appointed from the RCB panel of qualified inspectors.

d) Tracks not approved will be advised of the reasons for non approval and work schedules will be agreed upon to achieve approval.

14.2 Track Layout

a) A course can be permanent or temporary.

b) The area used for the course must be on a horizontal, hard standing area

c) For open courses, particular attention must be given to water drainage at the low parts of the course. Consideration should also be given to drainage in the event of heavy rainfall. There are to be no areas where water can pool across the width of the track.

d) Track layout must be initially designed with all grades of competing riders in mind; particular attention to the installation, consistency and shape of the jump faces is a

priority. The materials used must be exclusively natural (loam, clay, dirt, etc.) and contain no building rubble.

e) Rider, officials and spectator safety along with spectator viewing must be taken into account when licensing a venue.

f) Obstacles should vary in difficulty making it possible for the different levels of riders to demonstrate their skills.

14.2.1 Vertical Space

The free space between the track and any obstacle above the ground must be 3.5 metres minimum. (e.g. bridges, bunting etc.). If the obstacle is placed above a jump or table top the clearance must be increased to ensure a free space of 3.5 metres between the highest trajectory point of the rider of the obstacle is maintained.

14.2.2 Flag Marshalling Points

a) A flag marshal post must be situated at the start of the launching zone and in the braking zone and blind spots

b) The posts must be distinctly indicated and the location chosen so that signs given are clearly visible to competitors.

c) Flag marshal points must be located and protected to minimise the risk of injury to officials.

d) The area must be level and hard packed with a minimum flat area of 4m2

e) Position must be clearly marked.

f) Marshal points must not be placed at the outside of a corner or an outside exit of a corner.

14.2.3 Lighting

a) Lighting must be of a standard that provides clear and even visibility on all racing surfaces, free of shaded areas and be of 200 lux minimum intensity on all parts of the racing track. Lights must be inspected at least one business day prior to the meeting.

b) Particular attention must be to the illumination of up ramps and down ramps.

c) Lighting equipment must be carefully placed so that riding directly towards a set of lights does not hinder a competitor's view.

14.2.4 Protection of obstacles

a) Straw bales or other shock absorbent materials to protect the riders from danger must be placed to cover all obstacles such as poles, bridges, podium, walls, camera posts, PA system poles etc.

b) Obstacles (walls, etc.) at the end of a run-off zone should be protected by protective foam device rapped in fire-resistant bags.

14.3 Obstacles

The following are the only obstacles permitted in freestyle activities. The safety of riders, spectators and officials must be given utmost priority when constructing ramps and obstacles.

It is highly recommended before and during the competition that the organisers and officials consult with the riders in configuring the course and ramps. Each rider must determine to their satisfaction that the course design and ramp placements are suitable for them and assume all risk of participation.

The run-ups leading to ramps must be sufficiently long to give an average rider enough speed to clear the jump zone distance easily.

14.3.1 Dirt Jumps

All Dirt jumps on the course must be built as per jumps consistent with a standard Supercross event, and consist of:

a) A smooth, consistent up-ramp and radius.

b) Be at least 4 metres across the face of the up-ramp – from top to bottom.

c) Have at least 15 metres of run-up preceding it and/or between any preceding or following jump – either ramp or dirt.

d) All dirt jumps should be built by a noted and reputable Motocross/Supercross track builder.

14.3.2 Ramps

a) Ramps and artificial obstacles (“Wallrides” and “grind boxes / Fun box”) may be incorporated into the course.

b) Ramps must be metal constructions only; wooden constructions are not permitted.

c) Ramp surfaces may be of wood but must be no-slip and offer sufficient traction.

14.3.3 Portable Landing Ramp

A portable landing ramp must comply with the same dimensions as a dirt landing ramp. Portable landing ramps must also:

a) Be free from any protruding hinges or hard edges that may cause injury to the rider or disrupt the normal course of their machine during landing.

b) Must be fitted with an air bag or foam pads to reduce the impact if a rider was to hit the front side of the portable landing ramp

14.4 Take Offs and Landings

14.4.1 Take Offs

All metal ramps on the course (with the exception of a '120ft ramp') must be produced with an Engineers Certificate and be manufactured according to the Australian Competition Guidelines, being:

a) Base length of: 6.1 metres.

b) Height of 2.7 metres.

c) Transition of a constant radius of 9.1 metres.

d) Riding surface to be covered by:

   i. Plywood with a tractable surface covering such as sand/paint.

   ii. Metal expanded mesh, welded in place and free from any sharp edges.

e) Run-up, take-off areas must be safe and no less than:

   i. 25 Metres (amateur)

   ii. 20 Metres (pro)

f) All metal ramps on the course must be consistent with each other – both in shape and surface.

g) All ramps should be supplied by a noted and reputable specific manufacturer such as; Australian Ramp Design (ARD) or Humps, Bumps and Jumps (Trevor Brookes).

14.4.2 Dirt to Dirt Landing

All Landings for dirt-to-dirt jumps must measure, as a minimum:

a) 4 metres across the face of the 'landing' surface, from top to bottom.

b) A height equivalent to that of its specific take-off jump.

c) A safety deck on top of the 'landing' of 1.2 metres.

d) A run off, braking zone of no less than 20 metres.

14.4.3 Ramp to Dirt Landing

All Landings for ramp-to-dirt jumps must measure, as a minimum:

a) 4-metres across the face of the 'landing' surface, from top to bottom.

b) A height of no less than 3.2-metres, or 600mm above the height of its specific take-off ramp.

c) A safety deck on top of the 'landing' of 2-metres.

d) 6-metres of safe landing area, at an angle no steeper than 45 degrees.

e) A run off, braking zone of no less than 20 metres.

14.5 Jump Measurements

14.5.1 Dirt

Any Dirt-to-Dirt Jump must:

a) Not exceed a distance from take off to landing of 80ft (24 metres).

14.5.2 Metal Ramp

Any Ramp-to-Dirt jump must:

a) Not exceed a distance to landing of 75ft (22.85 metres) for the Pro and Open Class.

b) Not exceed a distance to landing of 65ft (19.8 metres) for any 'Amateur' classes and 'Development' classes.

14.6 Protective Devices

14.6.1 Public and Rider Safety

Where required by local Regulation there must be two lines of protection between competitors, and their machines, and members of the public, otherwise a single line of protection may be adequate provided a sufficiently wide neutral zone exists between the defined track edge and the spectator fence.

v. The first line of protection shall be in accordance with paragraph 1.0.17 (i)

vi. The second line of protection shall be in accordance with 1.0.17. (ii)

vii. Barbed wire is prohibited.

viii. Ringlock (square sheep type) fencing is preferred as the second line of protection. If star pickets are used in the second line of protection they must be fitted with a plastic top cap.

14.6.2 Neutral Zone

a) The track must have a neutral zone in between the marked edge of the track and the line of protection for spectators.

b) The minimum width of the neutral zone must be four (4) metres measured perpendicular to the track unless otherwise required by Local or State Legislation.

c) A neutral zone in areas where speeds of 60 kph are achieved the neutral zone shall be a minimum of six (6) metres.

d) A neutral zone of six (6) metres must be provided adjacent to table tops.

e) Adjacent areas of the track must be a minimum of four (4) metres apart unless separated by adequate protection (eg straw bales, tyre wall, or other shock absorbent material).

f) The neutral zone must be smooth and free of obstacles.

14.6.3 Washing Zone for Motorcycles

a) Refer to current Local Government Laws as water usage may be prohibited.

b) The washing zone must be designated, with protection of the ground a prime consideration, biodegradable detergents should be used.

c) The area should have adequate surface water drainage.

d) Smoking is prohibited in the washing zone, no smoking signs should be erected at the entrance of this zone.

14.7 Starting Area

14.7.1 Starts

a) A 'Green' flag will be used to signal the start of each rider's run, from a designated starting point – a holding area – administered by an official.

b) A 'Yellow' flag will be shown at the 80th second, or as close to this time as possible, signifying 10 seconds remain or approximately one (1) remaining jump for the rider.

c) A 'Chequered' flag will signify the end of the run.

14.7.2 Riders' Paddock

The rider's paddock:

a) Should be on a hard standing area;

b) Should provide for each rider a covered area of minimum 3m X 3m equipped with two chairs. A table and a waste container are recommended;

c) Should be equipped with adequate sanitary facilities;

d) Should also hold the necessary equipment needed to carry out technical controls and repairs;

14.7.3 The Waiting Zone

a) Should be sufficiently large and hard standing

b) Should be located adjacent to the launching zone;

c) Should have an access to allow competitors to enter and leave the course easily.

Risk Management Procedure

Overview

In circumstances where a track does not entirely conform, a risk assessment utilising the process set out in "the risk management process" is undertaken. Inspectors will conduct a Targeted Risk Assessment (TRA) on the hazard to assess if the particular risk is acceptable or whether mitigating action is required.

The subject area of the circuit can be accepted for licensing purposes provided the matter is documented in the inspection report and the methodology of the risk assessment also documented.

In areas which do not comply (documented on the TRA), the track inspector through the RCB will consult with the track operator to develop a process to achieve compliance with the current guidelines.

For an existing track where compliance is impossible due to specific circumstances i.e. geographical, prohibitive cost etc. a targeted risk assessment must be undertaken and documented. This assessment will determine whether the area of non compliance presents an acceptable risk and consequently whether the track can be licenced.

If the assessment determines the risk is unacceptable (i.e. Extreme or High Risk on the TRA form) the track cannot be licenced until the hazard is rectified and the track complies with the guidelines

An "extreme" risk rating is a serious Risk Management issue and may result in a serious risk to the safety of participants, officials or spectators and third parties.

If any part of a track is modified subsequent to the original licensing of the venue the modified section should fully comply with the guidelines.

RCB's inspectors may prescribe a staged process for modifying a track, to be agreed by the venue operator which will establish the process to achieve conformity at an acceptable lesser standard, subject to the risk assessment process being applied, in consultation with the RCB.

This process can also be used in any unexpected situation arises.

In areas of non-compliance with the Guidelines, the Track Inspector will consult with the Track Operator (through the RCB) to develop a process to achieve the following:

- The first priority is to achieve compliance with the Guidelines.

  This may be in the form of an agreed Works Program over a prescribed period of time.

- For an existing track where compliance is *impossible* due to specific circumstances (i.e. geographical, prohibitive cost etc.), a TRA will determine whether the area of non-compliance presents an acceptable risk and consequently whether the track can be licensed.

Risk Management process

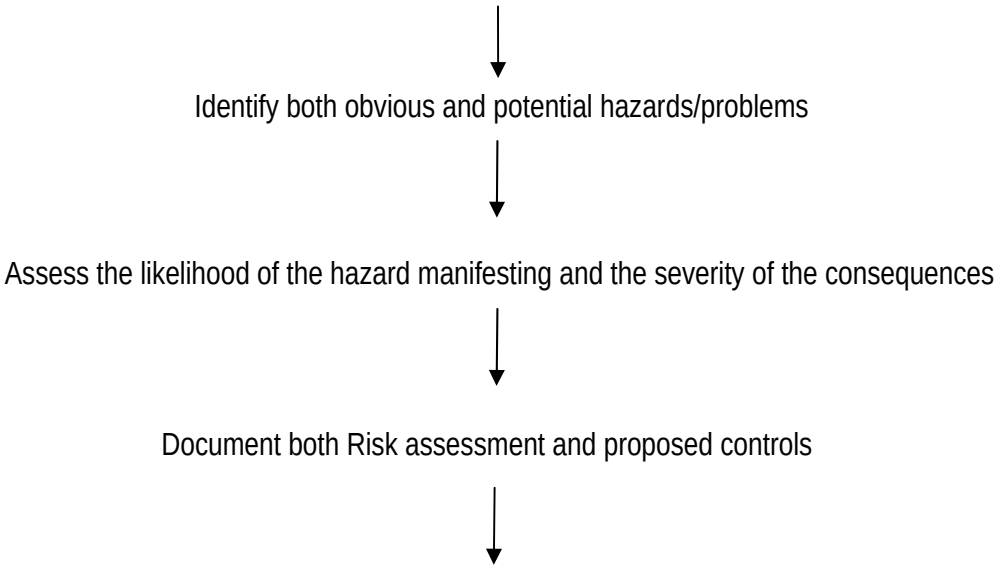
The following process is to be followed when identifying areas of non-compliance and/or hazards, assessing their risks and documenting risk controls during track inspections or prior to event activities. This procedure can be used to prevent accidents from occurring or recurring.

There are four steps taken during the Risk Management process by track inspectors:

1. Hazard Identification (areas which do not comply in their entirety to the guidelines)
2. Risk Assessment
3. Risk Control
4. Document and Report

For the purpose of this procedure – areas of non-compliance to the guidelines will be referred to as 'hazards'.

Identify and analyse the components of the inspection process. i.e. Break up what you are doing into smaller bits.



What are hazards?

A hazard is anything with the potential to harm a rider, spectator, official etc. Hazard identification is the process of identifying all hazards at the track. Finding ways of eliminating hazards or controlling the associated risks associated with the hazard is the best way to reduce injury and illness.

Examples of hazards include:

- A tyre wall collapsing
- Unprotected hazards (such as trees) in close proximity to the Track

- Slippery / worn ladder to the time keeping room
- Slippery marshal area
- Uncapped star picket fence

What is risk?

Risk is the potential outcome of a hazard. It is the possibility of injury, illness, damage or loss occurring as a result of a hazard.

Inspecting a Venue

The inspection is a fact-finding mission to find potential hazards and can take different forms from taking notes of the area, interacting with club representatives, sometimes observing on track activity, taking photos, and taking measurements.

When inspecting venues, RCB approved checklists are a valuable way of capturing necessary information, however they should ensure that:

- important items are not overlooked;
- consistency is achieved if the required activity is being undertaken by several different inspectors; and there is a formal record of efforts made.

During an inspection an important factor to take into account is the effectiveness of any control measures already provided from a previous inspection. It is necessary to consider the possibility of current control measures not being used due to issues such as:

- Cost of implementing control (i.e. cost of new spectator fence)
- failure to replace controls following maintenance or repair work;
- Cost of implementing control;
- difficulty of using or working with controls; and
- complexity of controls.

Undertaking Risk Assessment

Risk assessment is the process of assessing all of the risks associated with each of the hazards or areas of non-compliance identified during the hazard identification process.

Recording data

The hazard identification data must be recorded so that it can be used for risk assessment activities and in determining appropriate control measures.

This process is documented on MA's Targeted Risk Assessment (TRA).

<u>The TRA documents</u>

- that you thought about what could go wrong

- that you thought about who could be affected
- that you thought about how likely it was to happen
- that you thought about what could be done about it
- that all people involved were consulted

Targeted risk assessments involve examining and evaluating the likelihood and possible consequence(s) and severity of the potential outcomes of hazards in order to prioritise risks for control.

There is nothing complicated about risk assessments and we can all do them!

The Risk Management Matrix

The risk management matrix is a simple tool that can be used to assess a risk by evaluating a hazard's likelihood of occurring and its potential consequences. This enables the user to identify the appropriate response and prioritise the implementation of controls.

Below is an example of a risk matrix that has been adopted for MA track inspectors to identify the risk a hazard poses to people. The risk assessment matrix is broken into the following steps:

- The probability or likelihood of an accident occurring is evaluated;
- The potential consequences are calculated or estimated; and
- Based on these two factors, the risks are assigned priority for risk control through the use of a risk rating.

Heat Map	**Likelihood**				
Consequence	**Almost Certain**	**Likely**	**Possible**	**Unlikely**	**Rare**
Catastrophic	**Extreme**	**Extreme**	**Extreme**	**High**	**High**
Major	**Extreme**	**Extreme**	**Extreme**	**High**	**High**
Moderate	**High**	**High**	**Medium**	**Medium**	**Medium**
Minor	**Medium**	**Medium**	**Medium**	**Low**	**Low**
Insignificant	**Medium**	**Low**	**Low**	**Low**	**Low**

When identify the RISK – Look at what is being done and consider what could go wrong.

Likelihood:

The question: how likely is it to happen?

The following table indicates the measures of likelihood:

LIKELIHOOD 2. *How likely is it to happen?*				
Almost certain Will occur	**Likely** Could happen frequently	**Possible** Could happen occasionally	**Unlikely** Could happen but only rarely	**Rare** Could happen, but it is unforeseeable that this will occur

The first step is to determine the likelihood of the hazard occurring. As shown above, the measure of likelihood is split into five elements ranging from hazards that are considered 'Almost Certain' to hazards that would be considered 'Rare'.

Scenario: A straight section of a motocross track is 5.5 metres. It may be determined that the likelihood of this measurement causing injury is 'rare' due to the position in the track, and the nill incident history of that section of track.

Evaluating likelihood

Determining likelihood is often more difficult than deciding on the consequence of the potential harm. Try not to underestimate the likelihood of hazards causing harm.

Consequence

- The question: If it happens how badly could someone get hurt?

The following table indicates the measures of consequence:

Risk Calculator		
CONSEQUENCE 1. *How severely could it hurt someone (employees or public)? And what impact will it have?*		
	PERSONAL INJURY	**ADMINISTRATIVE**
Catastrophic	Life threatening injuries, death or multiple fatalities	Major hardship to organisation. Huge $ loss.
Major	Extensive (Serious) injuries resulting in major medical treatment. Hospital.	Significant hardship to organisation. Major $ loss
Moderate	Moderate injuries - medical treatment required (broken bones). Hospital.	Moderate hardship to organisation. Medium – High $ loss
Minor	First aid injury. No ongoing medical attention.	Some hardship to organisation. Minor $ loss
Insignificant	Minor first aid, if at all.	Localised assessment of affected issue to be considered. 0 – Low $ loss

The second step is to measure the potential consequence should a hazard be identified and its effect on exposed people. As shown above, consequence has been split into five elements varying from a hazard being 'Insignificant' to 'Catastrophic' (fatality) should one or more people be killed. The severity of the injury may be rated as 'major injury' if the potential result is permanent disability of the volunteer, rider or official or a 'first aid injury' if the result of the injury at most would be minor cuts and scratches.

Once the likelihood and consequence of the potential harm have been rated, it is now possible to prioritise the risks based on these two criteria. Prioritising risk is the final step in the risk assessment process.

Risk Score

The third step in assessing a hazard is to combine the likelihood and consequence to identify the appropriate action required. For example you notice that a track does not have a second line of defence (Spectator safety).

The determination of the potential risk of such a hazard would be a combination of the likelihood of a person being exposed, 'Possible' and the potential consequences, 'Major'. By connecting 'Possible' and 'Major' on the matrix indicates that the risk score of the hazard is designated as an Extreme' risk. Immediate Action is required.

Heat Map	Likelihood				
Consequence	**Almost Certain**	**Likely**	**Possible**	**Unlikely**	**Rare**
Catastrophic	**Extreme**	**Extreme**	**Extreme**	**High**	**High**
Major	**Extreme**	**Extreme**	**Extreme**	**High**	**High**
Moderate	**High**	**High**	**Medium**	**Medium**	**Medium**
Minor	**Medium**	**Medium**	**Medium**	**Low**	**Low**
Insignificant	**Medium**	**Low**	**Low**	**Low**	**Low**

Extreme to High Risk:

Any risk score of "Extreme" or "High" on the matrix should be referred to the RCB.

The Risk Matrix indicates that anything extreme or high risk will require control measures or mitigating actions for the purposes of reducing the likelihood and/or severity of the risk.

If in doubt contact the RCB.

The Targeted Risk Assessment will indicate the acceptable level of risk.

The risk ratings determined during risk assessment enable decisions to be taken on the amount of effort to be expended in controlling risks associated with particular hazards.

Any hazard that is 'highly likely' or 'certain/imminent' to cause harm must be attended to and the risk reduced even if the severity is low.

Those hazards identified as not adequately controlled can now be prioritised in a list for action using the risk rating as a guide to those which will require urgent attention, and those which can be listed for action sometime in the future.

Recording results of risk assessment

It is important that the conclusions reached about risks are documented and that any supporting information on how that decision was made is included in associated records. This is not only a legal requirement but is also important for knowledge and also demonstrates how a decision was achieved with regard to investigating a hazard.

The second page of the TRA will allow you to record your assessment.

Description of identified Risks	Consequence (describe word)	Likelihood (describe word)	Risk (describe word)	Controls / Treatment What has been done about it?	Responsible person	Person responsible for review	Who was notified?
1.							
2.							

CONSULTATION REGISTER – Who did you talk to?				
Date	Name	Position	Experience	Signature

Documentation

The TRA must be included in the Track Inspection Report and must outline the hazard, Risk Score, Treatment, Responsible person and the treatment (control).

The Track Inspection Report. must be completed In accordance with these Guidelines and the relevant module.