



2019 BRAZILIAN GRAND PRIX

14 - 17 November 2019

From	The FIA Formula One Race Director	Document	2
To	All Teams, All Officials	Date	14 November 2019
		Time	10:50

Title Race Directors' Event Notes

Description Event Notes

Enclosed 2019 Brazilian Grand Prix Race Directors Event Notes Doc 2.pdf

Michael Masi

The FIA Formula One Race Director

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EVENT NOTES

1) Matters arising from the United States Grand Prix

2) Changes to the circuit

- 2.1 The combination kerb at the apex of Turn 4 has been shortened.
- 2.2 The drainage in the run off area at Turn 4 has been improved.
- 2.3 Additional grooving of the track surface has taken place at Turn 14 to improve drainage.

3) Pit lane map

- 3.1 Safety Car lines.
- 3.2 The location of the pit entry and the pit exit.
- 3.3 Designated garage areas.
- 3.4 Safety Car position for first lap and rest of race.
- 3.5 Blue flag marshal at the pit exit.
- 3.6 Track light panels displaying pit entry status.

4) Pirelli Event Preview

- 4.1 With reference to Article 24.4(a) of the Sporting Regulations see the attached document provided by the official tyre supplier.

5) Weighing and weighing platform

- 5.1 The FIA weighing platform will be available for teams to use at the following times, however, no more than 10 team personnel may be present during any visit. Each visit should last no more than 10 minutes unless no other team is waiting in the pit lane:

- a) From 13:00 on Thursday until 10:00 on Friday.
- b) From 11:30 on Friday until 14:30 on Saturday (between 13:00 and 14:30 each visit will be restricted to five minutes).
- c) From when the cars are returned to the teams after qualifying until 19:30 on Saturday.
- d) From 09:00 until 10:00 and 12:00 until 13:30 on Sunday.

Any team found to be abusing the time limits set out above, which will be enforced by FIA security personnel and our own CCTV, will not be permitted to use the weighbridge again during the Event.

6) Red zones for photographers in the pit lane during practice sessions

6.1 See the attached drawing.

7) Practice starts

7.1 Practice starts may only be carried out on the left-hand side at the pit exit and, for the avoidance of doubt, this includes any time the pit exit is open for the race. Room must always be left on the right for another car to pass if necessary.

There will be marshals on the left behind the guardrail in the pit exit who will wave white flags when a car is stopped for the purpose of carrying out a practice start.

7.2 Due to the nature of the pit exit we do not expect any driver intending to carry out a practice start to carry out any pre-start routines, this will be considered driving unnecessarily slowly in the pit exit and a report will be made to the stewards.

Therefore, and for the avoidance of doubt, any driver intending to carry out a practice start at the pit exit must drive to the allocated place as quickly as possible without slowing to carry out “burn-outs” or any associated pre-start routine.

7.3 Drivers should take no more than five seconds to prepare for their car for a practice start if any cars are waiting behind them.

7.4 For reasons of safety and sporting equity, cars may not stop in the fast lane of the pits at any time the pit exit is open without a justifiable reason (a practice start is not considered a justifiable reason).

8) Lines or bollards at the Pit Entry and Pit Exit

8.1 In accordance with Chapter 4 (Section 5) of Appendix L to the ISC drivers must keep to the left of the solid white line at the pit exit when leaving the pits. No part of any car leaving the pits may cross this line.

8.2 For safety reasons drivers must keep to the left of the solid white line immediately prior to the pit entry when they are entering the pits.

8.3 Except in the cases of force majeure (accepted as such by the Stewards), the crossing by any part of the car, in any direction, of the green white painted area between the pit entry and the track, by a driver who, in the opinion of the Stewards, had committed to entering the pit lane is prohibited.

8.4 There is a small warning light panel on the left-hand side at the pit entry which will be operated if a car is stopped or going slowly around the corner of the pit entry.

9) Observing yellow flags during free practice and qualifying

9.1 Double waved: Any driver passing through a double waved yellow marshalling sector must reduce speed significantly and be prepared to change direction or stop. In order for the stewards to be satisfied that any such driver has complied with these requirements it must be clear that he has not attempted to set a meaningful lap time, for practical purposes this means the driver should abandon the lap (this does not necessarily mean he has to pit as the track could well be clear the following lap).

9.2 Single waved: Drivers should reduce their speed and be prepared to change direction. It must be clear that a driver has reduced speed and, in order for this to be clear, a driver would be expected to have braked earlier and/or discernibly reduced speed in the relevant marshalling sector.

Drivers should not overtake any car in a single waved yellow marshalling sector unless it is clear that a car is slowing with a completely obvious problem, e.g. obvious accident damage or a deflated tyre.

10) Track light panels

10.1 The FIA track light panels have been installed in the positions shown on the circuit map. In accordance with Appendix H to the ISC the light signals have the same meaning as flag signals.

10.2 The light panel on the left in the pit entry relates only to cars in the pit entry (as opposed to cars on the track) and will be used to warn cars entering the pits that a car is either stopped or going slowly in the pit entry. This panel is designated “PE” on the circuit map.

11) Drivers leaving their pit stop position in the pit lane

11.1 For safety reasons, no car should be driven from its pit stop position at any time unless:

- a) It has first been driven into the pit stop position having just entered the pit lane from the track, and;
- b) It is then driven immediately back onto the track from the pit stop position.

12) Fire extinguishers around the circuit

12.1 Where there are white boards with a red letter 'F' on the guardrails or debris fences these are accompanied by a small orange sticker. In these locations' extinguishers are manned.

12.2 Where there are only small orange stickers present there is an extinguisher but it is not manned.

13) Places where drivers may leave the track

13.1 Indicated by fluorescent orange panels on the walls or guardrails.

14) Places to remove cars from the track

14.1 Indicated by fluorescent orange panels on the walls or guardrails.

14.2 If one of your drivers is forced to stop in the pit exit, i.e. between the end of the pit lane and the place where they re-join the track proper, please ask them to stop on the left. There is more space on the left and the car can remain in a safe position.

15) In laps during qualifying and reconnaissance laps

15.1 In order to ensure that cars are not driven unnecessarily slowly on in laps during and after the end of qualifying or during reconnaissance laps when the pit exit is opened for the race, drivers must stay below the maximum time set by the FIA between the Safety Car lines shown on the pit lane map.

You will be informed of the maximum time after the first day of practice.

16) Post qualifying parc fermé

16.1 The cameras should be installed and operated in the same way as usual.

17) Operational personnel curfew

17.1 Boards warning anyone attempting to enter the paddock that the curfew is in operation will be placed immediately before the turnstiles at the appropriate times.

18) Removing cars from the grid

18.1 Through the gate in the pit entry adjacent to grid position 17.

19) Car number light panels for the start

19.1 On the right-hand side of the grid.

20) Track light panel displaying pit entry status

20.1 The light panels indicated on the pit lane map will display a flashing yellow arrow if cars are required to use the pit lane once the Safety Car has been deployed during the race.

20.2 The light panels indicated on the pit lane map will display a flashing red cross if the pit lane is closed at any point during the race.

21) Tyre Blanket Usage during Pit Stops in the Race

21.1 For reasons of safety, tyre blankets are not permitted in the Pit Lane at any time during the race.

22) Lapping during the race

22.1 The ISC requires drivers who are caught by another car about to lap him to allow the faster driver past at the first available opportunity. The F1 Marshalling System has been developed in order to ensure that the point at which a driver is shown blue flags is consistent, rather than trusting the ability of marshals to identify situations that require blue flags.

As it was at the end of last season the system will be set to give a pre-warning when the faster car is within 3.0s of the car about to be lapped, this should be used by the team of the slower car to warn their driver he is soon going to be lapped and that allowing the faster car through should be considered a priority. When the faster car is within 1.2s of the car about to be lapped blue flags will be shown to the slower car (in addition to blue light panels, blue cockpit lights and a message on the timing monitors) and the driver must allow the following driver to overtake at the first available opportunity.

It should be noted that the aim of using F1MS is ensure consistent application of the rules, additional instructions may also be given by race control when necessary.

23) Post race parc fermé

23.1 All cars must enter the pit lane and should proceed directly to the weighing area.

24) Any other business



Michael Mas

FIA Formula One Race Director

Grand Prix of Brazil 15-17/11/2019 (19R20INT)

Compound	FL	FR	RL	RR	Mandatory race tyres
C1	1A1	1A2	1A3	1A4	C1
C2	2B1	2B2	2B3	2B4	C2
C3	3C1	3C2	3C3	3C4	
INTERMEDIATE	33G	35G	37G	39G	Q3 tyre
WET	34F	36F	37F	39F	C3

MINIMUM STARTING PRESSURE, BLISTERING SENSITIVITY, CAMBER LIMIT

	Front (psi)	Rear (psi)
Slicks	24.0	19.5
Intermediate	22.0	19.5
Wet	21.0	18.5

FE EOS Camber limit

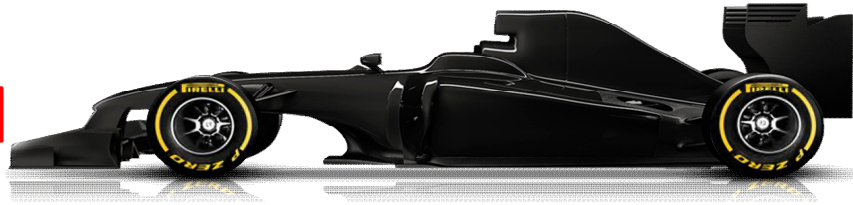
-3.50 °

RE EOS Camber limit

-2.00 °

FE Blistering sensitivity

Medium



RE Blistering sensitivity

Medium

TYRE HEATING STRATEGY (TREAD&SIDEWALL)

Temperature	0	40	60	80	100 (°C)
Slicks (front axle)	storage		max. 3h	max. 2h	(max. temp = 100°C)
Slicks (rear axle)	storage		max. 5h		(max. temp = 80°C)
Intermediate	storage	max. 2h	max. 30'		(max. temp = 80°C)
Wet	storage	max. 2h			(max. temp = 60°C)

(The time limits refer to the period leading up to the start of the session in which the tyres are intended for use).
(The temperatures referred to above apply at all times during the event).

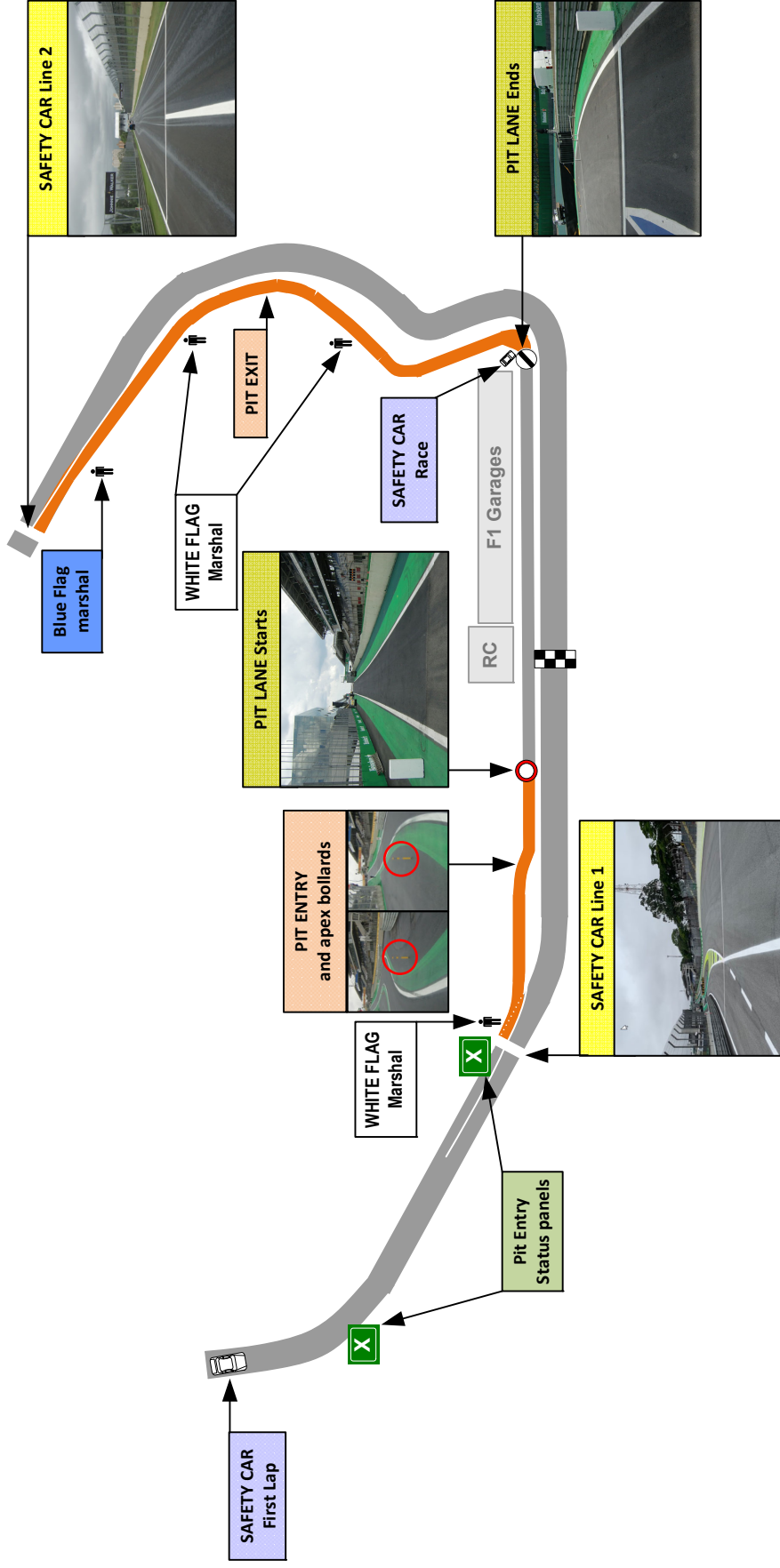
GENERAL NOTES

Teams are kindly reminded that the following parameters will be subjected to FIA checks during the event:

- Starting pressure.
- Camber at maximum speed.
- Maximum blanket temperature.
- Tyre swapping.

Tyre Notes

- Not permitted to switch tyres from their originally allocated position.
- Do not subject tyres to large deformation or heavy impact.
- Do not leave fitted tyres exposed at an air temperature lower than 15°C and/or any UV emission.
- Revised prescriptions could be issued during the race weekend in accordance with TD/007-16.
- All temperature limits apply to the actual tyre surface temperature, measured with the IR gun detailed in TD029-15.
- STORAGE temperature is the recommended temperature the tyre can stay in blankets without time limit.
- BLANKET HEATING TIME for each temperature range to be counted from the moment the blanket control unit is set to reach its targeted temperature within its correspondent interval.



0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
FIA	Mercedes	Mercedes	Ferrari	Ferrari	Red Bull	Red Bull	Renault	Renault	Haas	Haas	McLaren	McLaren	Racing Point	Racing Point	Alfa Romeo	Toro Rosso	Toro Rosso	Williams	Williams	Williams	Pit Stop Position		
Designated Garage Areas	Mercedes	Mercedes	Ferrari	Ferrari	Red Bull	Red Bull	Renault	Renault	Haas	Haas	McLaren	McLaren	Racing Point	Racing Point	Alfa Romeo	Toro Rosso	Toro Rosso	Williams	Williams	Williams			

FAST LANE

FAST LANE

Control Line

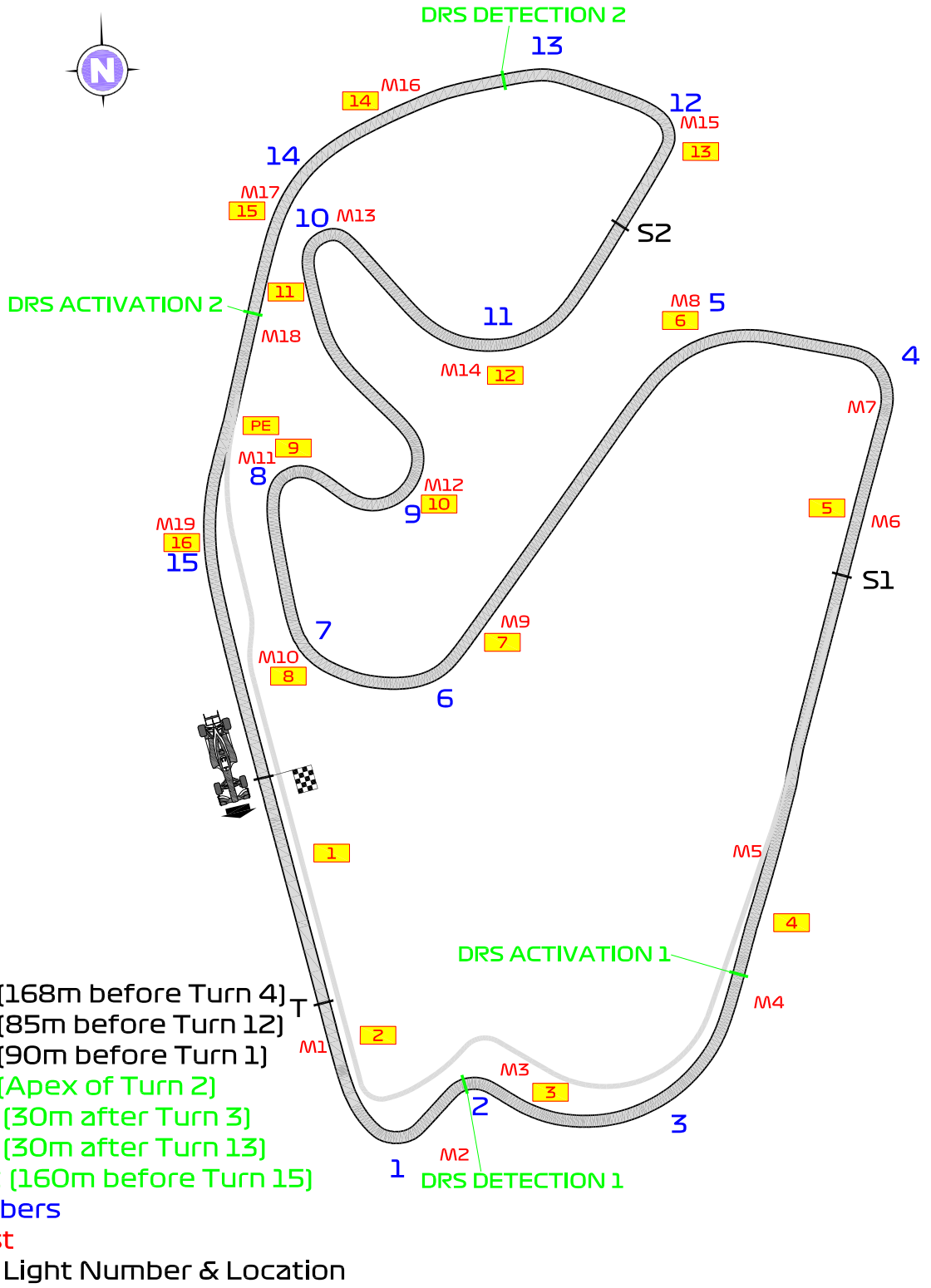
Pole Position



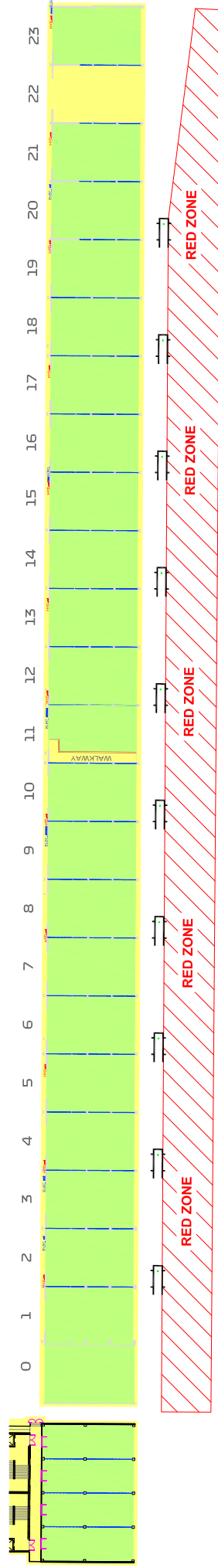
FIA Formula 1 World Championship™

FORMULA 1 HEINEKEN GRANDE PRÊMIO DO BRASIL 2019 - São Paulo

Circuit Map



Circuit Centreline Length = 4.309km



PHOTOGRAPHERS EXCLUSION RED ZONE

FORMULA 1 HEINEKEN GRANDE PRÊMIO DO BRASIL 2019 - Sao Pãulo