FORMULA SAE®

Dynamic Events Drivers Meeting

May 9, 2013

Michigan International Speedway

Acceleration, Skid-pad, Autocross, Endurance

General Announcements

- Entrance/Exit at Gate 50
- New Practice area location on Oval
  - Separate entrance at Gate 50 (go left at fork in infield road)
- Hot area appropriate behavior and dress
  - Long pants, closed-toe shoes, no running
- Number of team members allowed in hot area
  - 4 with dynamic pass
- How to identify event Captains – pink arm bands
- Weather
  - track condition tire requirements (see next slide)
  - emergency locations – tunnels, listen for announcements

Weather and Tires

Track Weather Condition	Tire Type	
	Dry	Rain
Dry	✓	
Damp	✓	✓
Wet		✓

Note: If Weather Condition Changes during Endurance, see D.3.8.2 for procedure

FORMULA SAE®

General Safety

- Dress/other ID for SCCA volunteers
  - Course marshals wear all white, take direction from them
- Photographer Passes & Etiquette
  - Need the blue vests, register with Suzy Zukowski @ HQ on Wed, Cost on Thurs and Tent outside Dynamic Gate on Fri & Sat
  - Only when team on course; Must have spotter – spotter is there for safety of photographer only!
  - Must stay in designated photographer area.
- Data Logging locations
  - See John or Ed if have data beacons for specific locations to set up

SCCA/SAFETY

Safety Steward: John Lisiecki

Co-Steward: Ed Arthur

SCCA Flags for Acceleration

GREEN -- Enter the course under direction of the starter.

CHECKER -- Your session has been completed

SCCA Flags for Autocross

GREEN -- Enter the course under direction of the starter.

RED -- Come to an immediate safe controlled stop on the course. Follow worker directions.

FORMULA SAE®

SCCA Flags for Endurance

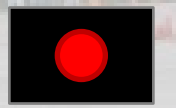
GREEN -- Your session has started, enter the course under direction of the starter.

YELLOW -- Danger, SLOW DOWN, be prepared to take evasive action, NO PASSING unless directed by the corner workers.

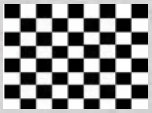
RED -- Come to an immediate safe controlled stop on the course

BLUE -- Pull into the designated passing zone to be passed by a faster competitor.

BLACK -- Pull into the penalty box for discussion with the Chief Marshall/Director of Operations or other official concerning an incident



MECHANICAL BLACK -- Pull into the penalty box for a mechanical inspection of your car



CHECKER -- Your session has been completed

FORMULA SAE®

READ THE RULES

- ALL TEAMS ARE RESPONSIBLE FOR READING AND COMPREHENDING THE RULES PRIOR TO COMPETITION
- If you do not understand one of the rules or have questions, please post them on the Rules Questions and Answers System prior to the competition or find the event Captain before the event starts at competition
- Foreign Teams and Teams with non-English Speaking Members
  - Anyone participating in an event is expected to know the rules including students who do not speak English.
  - If your team has a driver who does not speak English, a colored sticker will be placed on their helmet for identification
  - Teams with drivers who do not speak English must provide a translator who has to stand near race control while the driver is on course
- The Event Captains have final discretion

ACCELERATION

Friday

9:00am – 12:30pm

Captain: Bob Goppold

Captain: Steve Balanecki

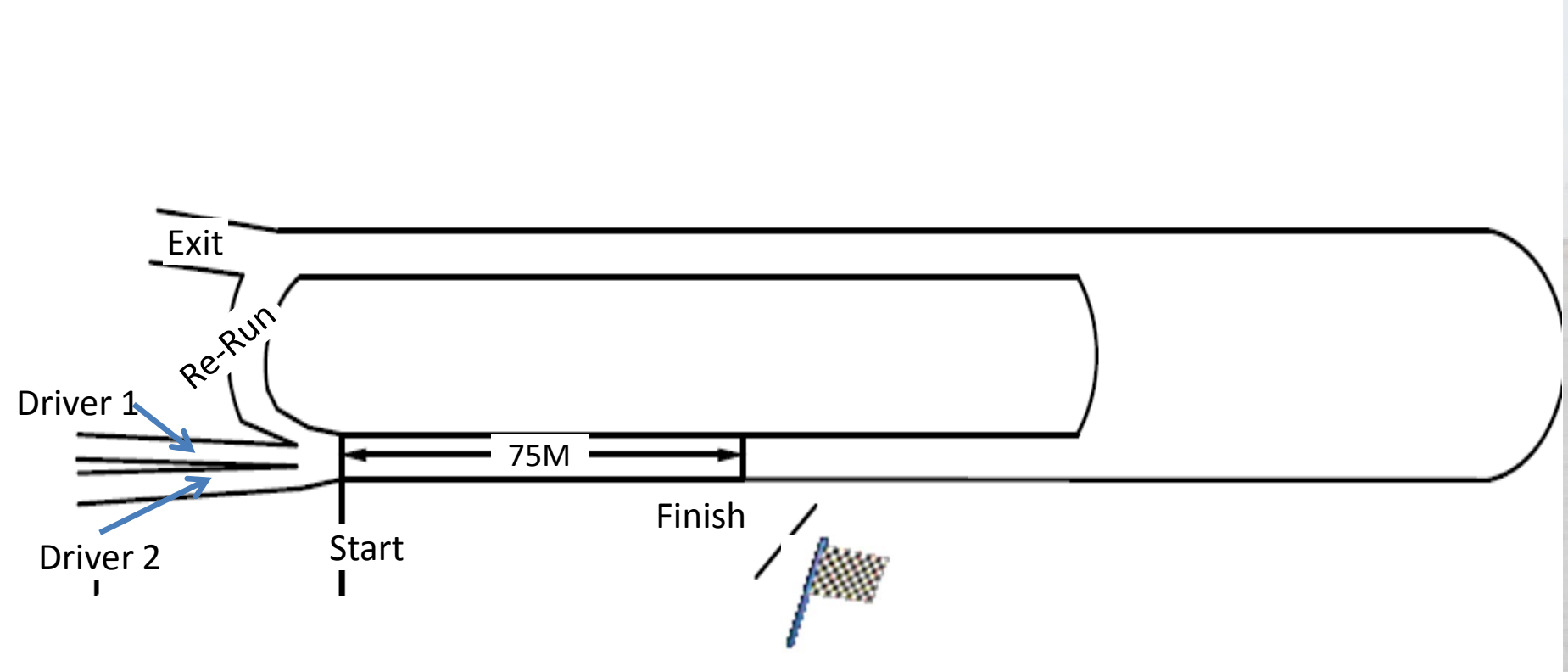
FORMULA SAE®

Acceleration Event

- Key Event Information
  - 75 meters
  - Two drivers, two runs each
  - Can do runs at any order
  - Follow direction of persons staging vehicles
  - ANY cone hit counts as penalty – including cones in run off area
- Ends at 12:30pm sharp

FORMULA SAE®

Acceleration Layout



SKID-PAD

Friday

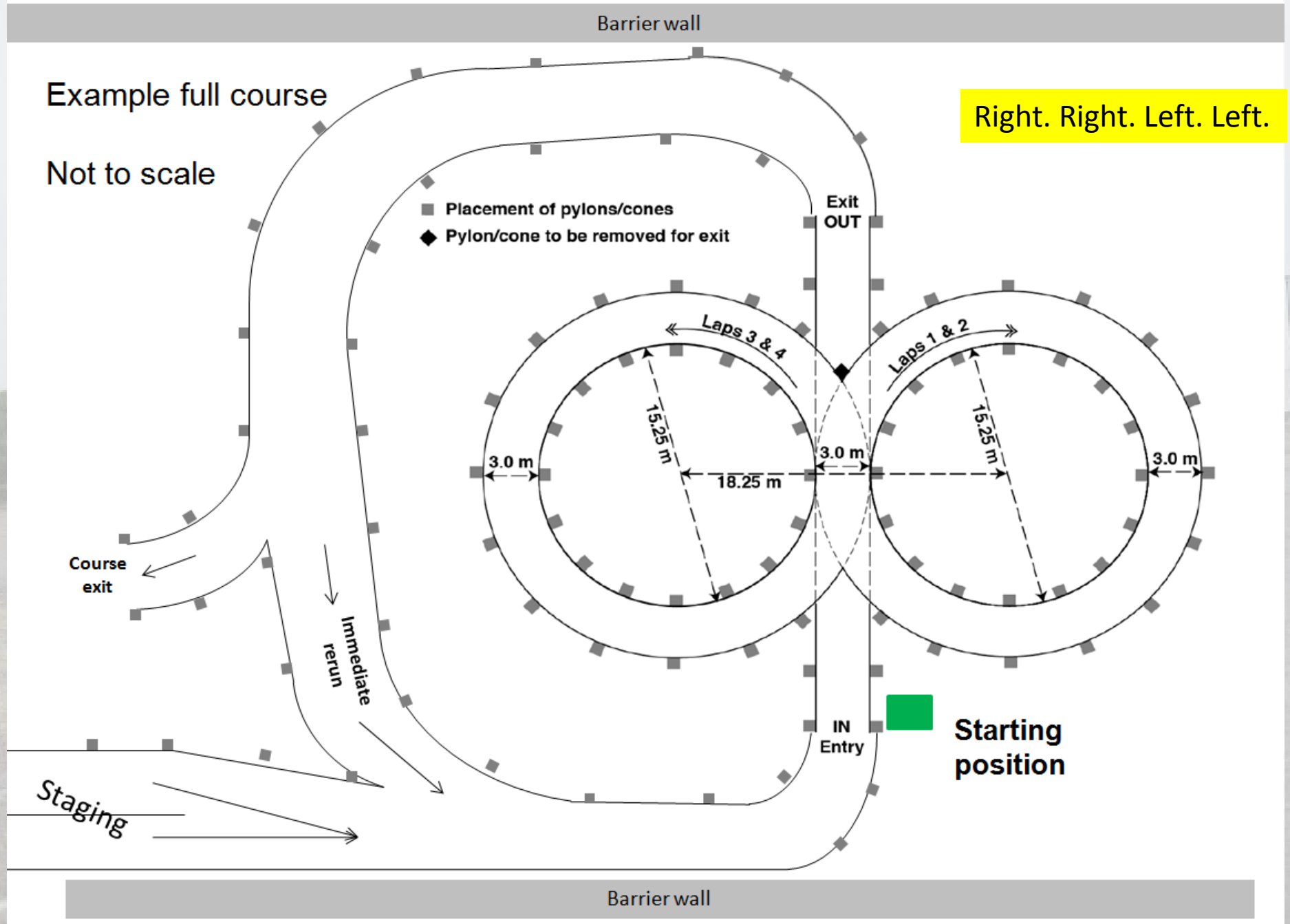
9:00am – 12:30PM

Captain:	Steve Taylor
Assistant Captain:	TBD

FORMULA SAE®

Skid-pad Event Notes

- Key Event Information:
  - 2 drivers per event
  - Each driver can only run on 1 skid-pad (If you have 2 drivers they must run on separate skid-pads. If you only have one driver then that person can run 1 lap on one and the second on the other if they choose to.)
  - 1st 3 cars staged can run engine (driver must be helmeted and harnessed)
  - Starter person has a green flag, they will help stage car at start point and release car
  - Right. Right. Left. Left.
  - Can take second run immediately (other teams can be run in between driver's 1st and 2nd runs)
- Rules/Scoring
  - Second lap of each circle is timed only
  - Score is the average of 2nd lap on each circle
  - Down or out cones are 0.25 second penalty
  - Off course is DNF
  - Incorrect laps is DNF
- Ends at 12:30 with no exceptions.


Barrier wall
Example full course
Not to scale
Right. Right. Left. Left.
Placement of pylons/cones
Pylon/cone to be removed for exit
Exit
OUT
Laps 3 & 4
Laps 1 & 2
15.25 m
15.25 m
3.0 m
3.0 m
3.0 m
18.25 m
Course
exit
Immediate
rerun
IN
Entry
Starting
position
Staging
Barrier wall

Course Walk Schedule

- **COURSE IS DEFINED BY <u>CONES</u>, NOT CHALK**

- Thursday
  - Autocross 2:00-3:30 PM
- Friday
  - Autocross 1:30-1:50 PM (course set up dependant)
  - Endurance After set up depending on time **will be announced**
- Saturday
  - Endurance 7:00-8:00 AM
  - Endurance Lunch (~12:30-1:30PM)

- **Listen to announcements for any time changes**

FORMULA SAE®

AUTOCROSS

Friday

2:00pm – 5:30pm

Captain: Matt Kalmus

Co-Captain: Corry Johnson

FORMULA SAE®

Autocross Event

- Key Event Description
  - Solo Course: ~0.6-0.65mi/lap
  - Two laps per driver; Preference if re-run immediately, return to 1st/2nd driver line if later
  - 3-hour window: 2-5pm: extensions only if late start/track condition
- Track Layout
  - Entry/exit procedure
  - Follow cones, not chalk
- Flags for Autocross
  - Green, Red & Checkered

FORMULA SAE®

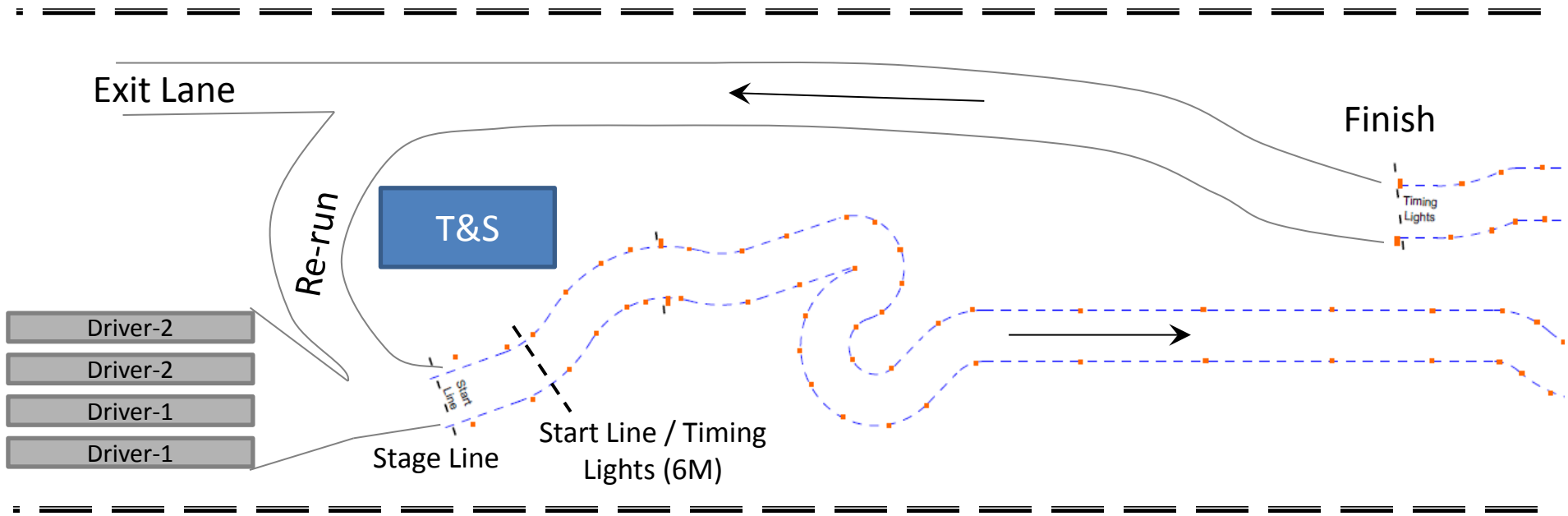
Autocross Layout

Look for map to be posted on website prior to event

Course is subject to change, Map is not to scale

FORMULA SAE®

Autocross Entry/Exit Procedure



Course not representative

T&S = Timing and Scoring

FORMULA SAE®

ENDURANCE

Saturday

9:00am~5:00pm

Captain: Laura Klauser

Co-Captain: Matt Kalmus

FORMULA SAE®

Endurance Event

- Key Event Description
  - 22 km, 11km per driver, 3 minute driver change
  - Only hand tools used to adjust seating position permitted – car must start on its own (only exception is for tire change due to weather)
  - Volunteers guide staging but are not required to give teams run time warning
  - Passing only in passing zones – COURSE TO RIGHT, Pull off to Left
  - If you hit a barrier, you will be towed off the course and will not be permitted back on the track
  - For severe hits, the Ambulance will be called to check the driver before they are allowed to exit the vehicle
  - No outside data for protests – video footage, data logging, etc.
  - Beacons must be placed prior to event opening at SCCA approved location.
- Run Order
  - Only teams who have completed all four areas of tech by 5:30pm on Friday are eligible to participate in Endurance
  - Run order will be slowest to fastest Autocross times
  - Teams who did not participate in any dynamic event prior to Endurance will run first at 9am
  - Morning heat teams MUST run in the morning
  - Afternoon heat teams MUST run in the afternoon

Endurance Event – Weather

- Teams are required to have the appropriate tire for weather condition at the start of their run
- If the weather condition changes while a team is mid run, a tire change may be allowed or required
- See below table for possible weather change scenarios
- SCCA Safety Stewards can require immediate tire changes if conditions create an unsafe environment

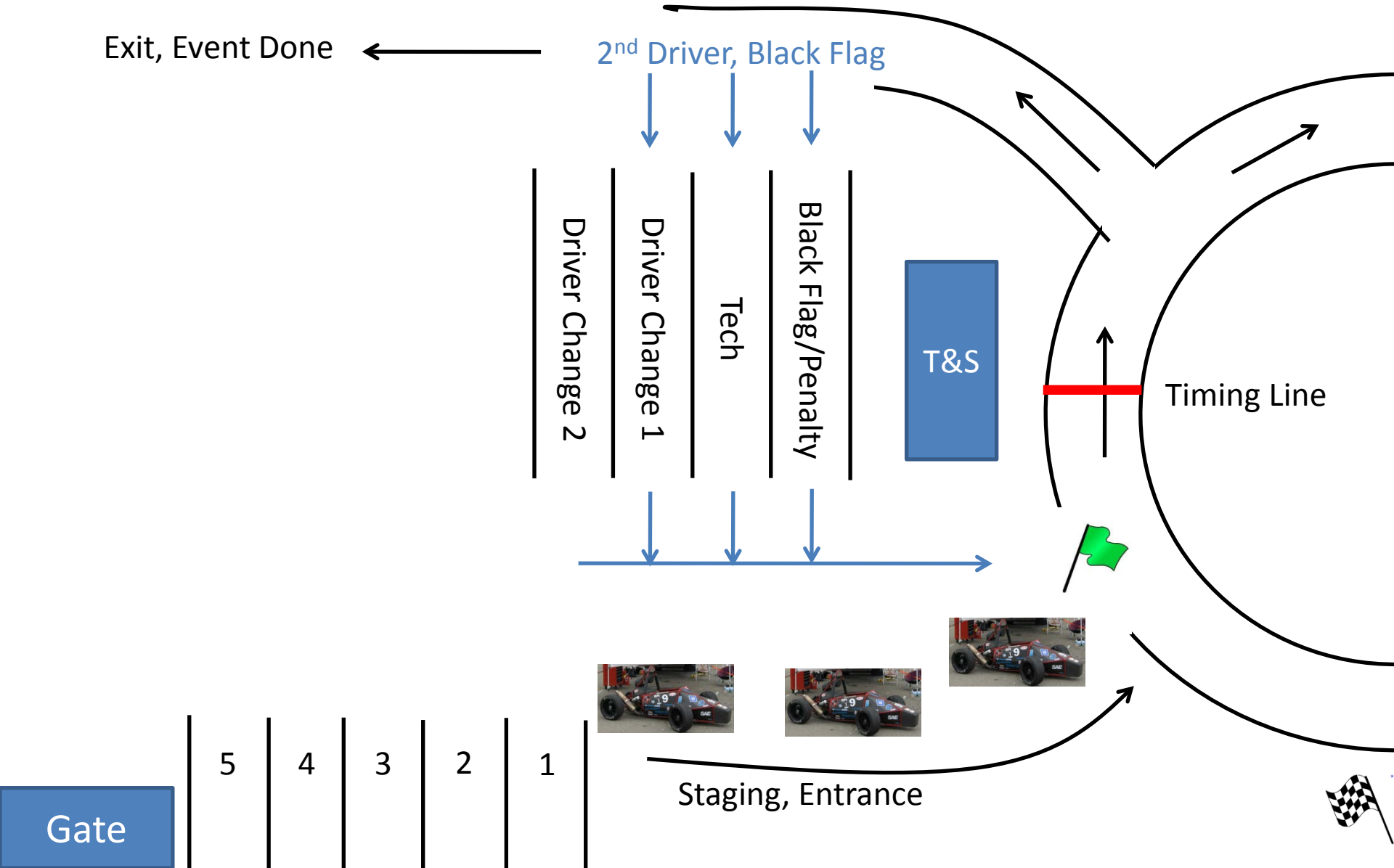
Track Condition at start of run	Team's Current Tire Choice	Mid run Track Condition Change	Tire Change?	Additional Time Granted	Tire Change Allowed at Driver Change?
Dry	Dry	Damp	Optional	10 minutes	Yes
Dry	Dry	Wet	Mandatory	10 minutes	Yes
Damp	Dry	Wet	Mandatory	10 minutes	Yes
Damp	Rain	Wet	---	---	---
Damp	Dry	Dry	---	---	---
Damp	Rain	Dry	Optional	zero	No
Wet	Rain	Damp	Optional	zero	No
Wet	Rain	Dry	Optional	zero	No

Endurance Layout

Look for map to be posted on website prior to event

Course is subject to change, Map is not to scale

Endurance Entry/Exit Procedure



FUEL EFFICIENCY

EVERYONE MUST GET FUEL AFTER FINISHING WITH ENDURANCE!!!

Captain:	Herb Seubert
Assistant Captain:	Mike Thodoroff
Assistant Captain:	Alba Colon

FORMULA SAE®

Fuel Efficiency

- At the end of your Endurance run immediately proceed to fuel
- Cars which did not complete endurance still need to report to fuel to receive points for efficiency score

QUESTIONS?

Please post questions on the Rules Questions and Answers System Prior to Competition

The Event Captains will be available directly after the driver's meeting on Thursday to take any questions or discuss more detail

FORMULA SAE®