## Driving Road America: America's "National Park of Speed"

Provided by, Road America Instructor Group Road America's High Performance Driving Schools June 2023



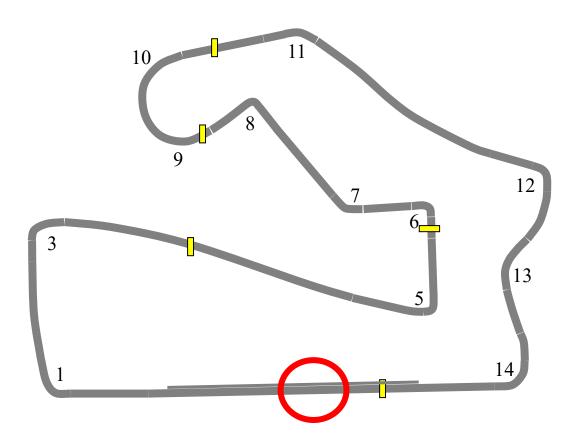
#### **The track Basics:**

The track is 4 miles long with fourteen (14) turns.

The track surface elevation drops 176' from the crest at turn 1 to turn 12 (Canada Corner), and for those in low horsepower cars, it feels like you have to climb all the way up from turn 14 to the crest at turn 1.

The track surface is uphill from 14 to 1, downhill from 1–2–3; downhill continuing into 5; uphill from 5-6; downhill from 6-7 and 7-8; slightly uphill to downhill through 9-10 (Carousel) and through the "Kink"; slightly downhill from the "Kink" to 12 (Canada Corner); uphill from 12-13-13A; and flat through 13A-14

# Getting On Track



#### **False Grid**





Aerial view of transit from West Paddock to False Grid







#### **Getting to the False Grid...**

- A Overview of route from West Paddock \*
- **B** Sign (top left) & Entry to the false grid off the main paddock road headed North

C – End of the False grid – a Grid Corner worker will release you from here to go out on the hot pit area





Do not enter track if Red! Exit at far entrance to Competition Paddock and proceed to your paddock or back to False Grid Return to your paddock

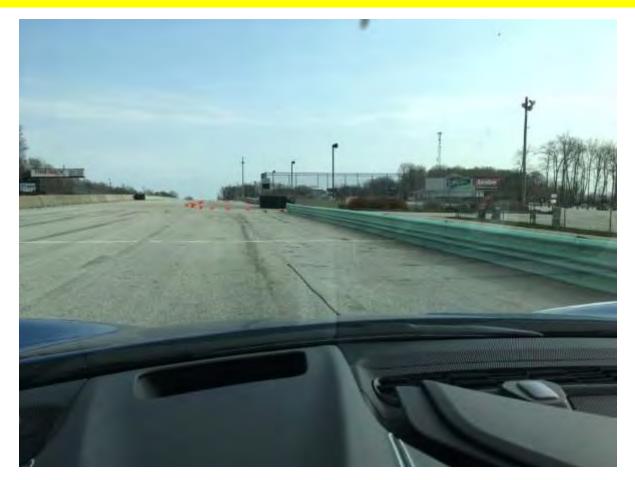
## In the Hot Pits ready to enter the Track

Note: If your group comes in and restarts or your session starts in the Hot Pits rather then the Cold Pits off the False Grid –

Or –

If you have been to Black Flag – you will return to the track from here

This is your view for reentering the track



## **Ready to exit onto the Track @Track Out**

Note: The condition light is *RED*!! Don't exit until Yellow/Green!



## Attention: Pit out – Blend Line



Don't fade left until past the Apex of turn 1!



You are on track and committed – even tho you are right of the blend line CHECK your mirrors for trsffic

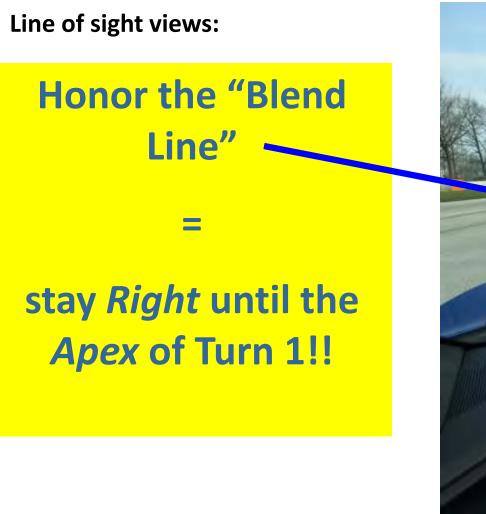


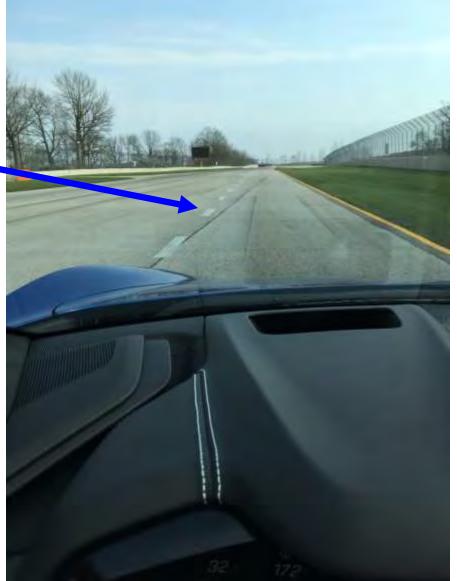


Aerial view of the blend line

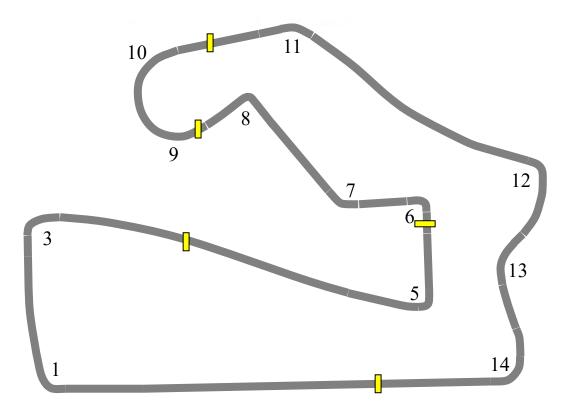


Leaving the Hot Pits





# An Annotated Lap of Road America



# How this Guide is going to be laid out...

First: A Conceptual view to Immediately graphically Visualize each of the turns

Second: References and tips on: Entry

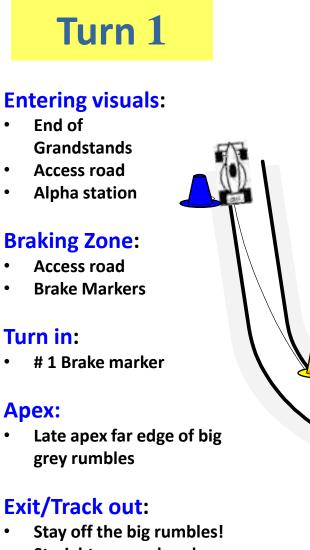
Turn In Braking apex/mid corner Exit

Third: Additional Visual References and detailed images

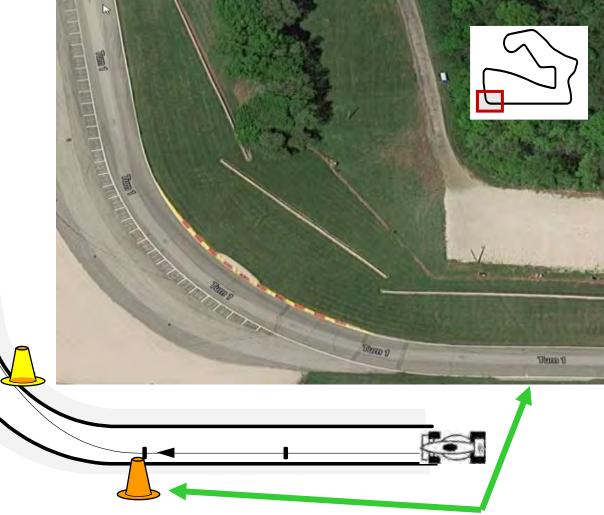
Fourth: A Line of sight view where available

Fifth: Additional tips, Videos, etc.

Finally - -Where are the sections that flow together once you have mastered the individual corners?



- Straighten your hands
- Eyes up!



Number 1 brake marker

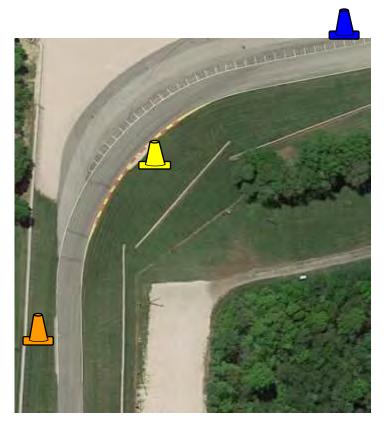
### **Turn 1: Additional Visual References**



Turn-in = #1 brake marker



Start of braking zone = access road



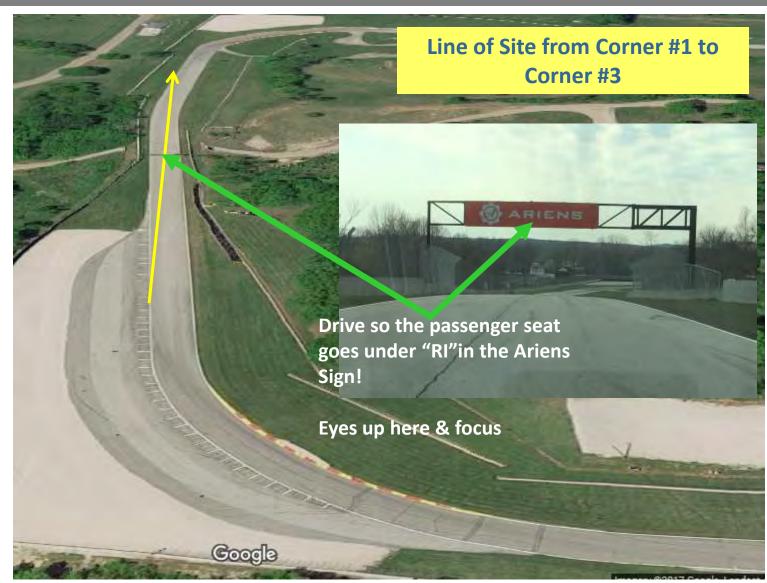
Aerial view – Turn in, Apex & Track out



#### A tip:

Aim for the R- hand door in the building behind sand trap

Eyes up here & focus down track!!



Turn 1-3: Additional Visual Details



Orange edge of second wall & Turn in point



Right hand door on building



Eyes up for the Ariens Sign



Aerial view of entry – eyes up to see all reference points!

## Entering Visuals & reference points:

#### **Braking zone-**

End of the first concrete barrier driver's left (orange edge)

#### Turn in zone-

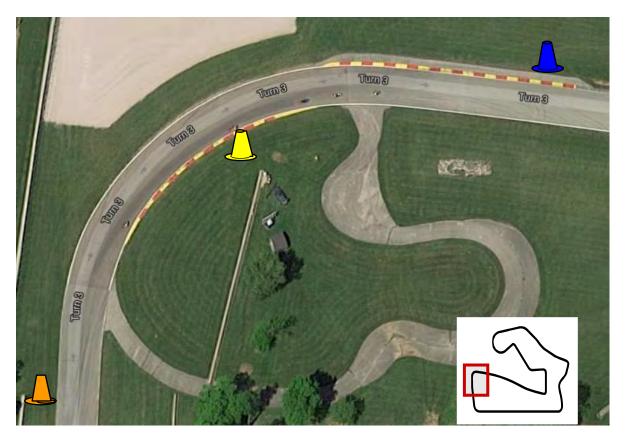
- the end of the 2<sup>nd</sup> concrete barrier
- the seam in the asphalt (orange edge)

#### Apex:

Late near end of inner rumbles

#### Exit:

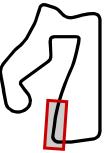
 End of rumble strip drivers left



Turn 3

### **Driving from Turn 3 to Turn 4/5**





Eyes up all the time – Drive under the word "people" on the Sargento Bridge

#### **Note: Be Super Alert!**

Between Turns 3 & 5 and Turns 11 & 12 at road America the "line" moves across the track and back



Is there really a Turn 4??

#### Line of Site: Sargento Bridge to Corner #5

#### **Entry visuals:**

Drive under the Sargento Bridge on driver's right (under the word "People")

Eyes up for the White sign (Chappa) Minimize steering inputs

After the end of the Armco on driver's right start transition to driver's left

You should be on driver's left at the 5 marker when cresting the hill

#### **Braking zone:**

Straight line brake to the rumble strip drivers right. (eyes up – Left edge of farmhouse)



Additional Visual References: Turn 4-5



Left edge of Farmhouse Building – turn in location



Braking Zone?: 400 Brake marker





Eyes up – Drive to left edge of white Chappa sign



Aerial view from Sargento Bridge to Turn 5





05

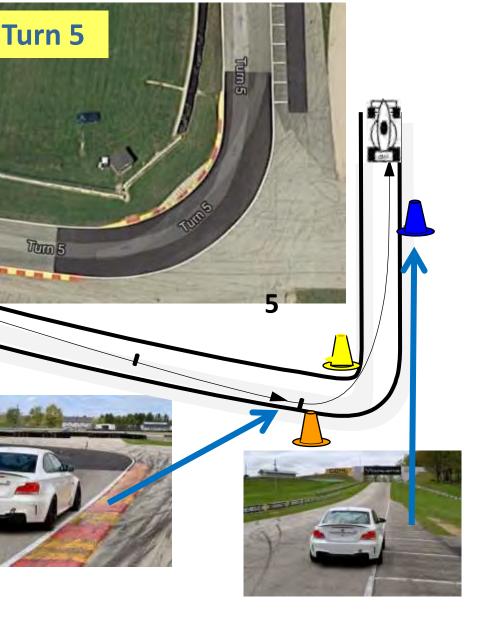
Entry: From the edge of the grass Driver's left

**Braking:** Begin braking on the left side of the track, where the crown aids in braking, and there is room to correct a problem!

Turn In: About a car length from the end of the rumbles Driver's right

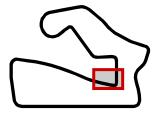
**Apex:** Late apex – far edge of grey rumbles

**Exit: A** Car length or two from the end of the black rumbles driver's right

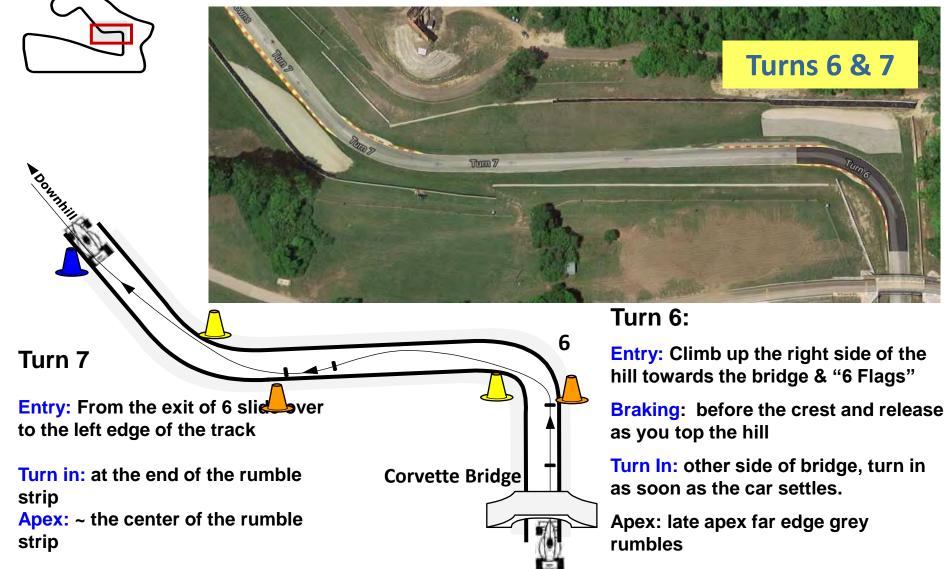


#### **Additional Visual Reference Details for Turn 5**





Aerial views of the approach and entry to Turn 5



**Exit/Track out:** far end of rumbles

Track out: to the end of the rumbles driver's right

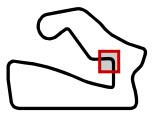
#### **Additional Visual Reference Details for Turn 6**



Apex is visually way around the corner



Fence driver's right gives a visual cue for braking zone before the crest



It's a blind corner (especially for lower open wheel cars), with a late apex under a bridge – what could go wrong!



Aerial view of Turn in, Apex and track out for Turn 6

#### **Additional Visual Reference Details for Turn 7**



Lift to settle Front or just lightly brush the brakes - then back on the power

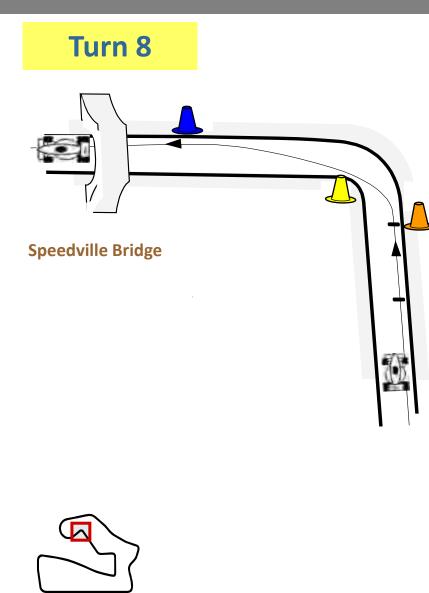
Turn-in cone highlighted above

Apex is almost center of grey rumbles, i.e. geometric apex Track-out (blue cone) at far end of rumbles driver's left – then ease over to driver's right or the entry into Turn 8





Aerial view of Turn In, Apex and Track out at turn 7





**Entry:** Move Driver's right after exiting turn 7 and head for the notch in the Top of the Motorplex building

Braking zone: In the 300/200 brake marker area

Turn In: The end of the rumble strip driver's right is a good reference for the turn in point

Apex: A late apex = far edge of the grey rumbles

#### Track Out/Exit:

At the far edge of the rumbles driver's right...stay off the big rumbles and have the car straight at exit!

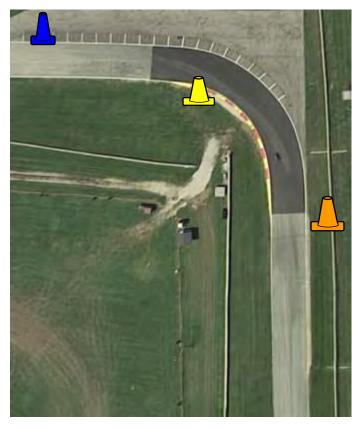
#### **Additional Visual Reference Details for Turn 8**



Turn in is very near the end of the rumble strip driver's right



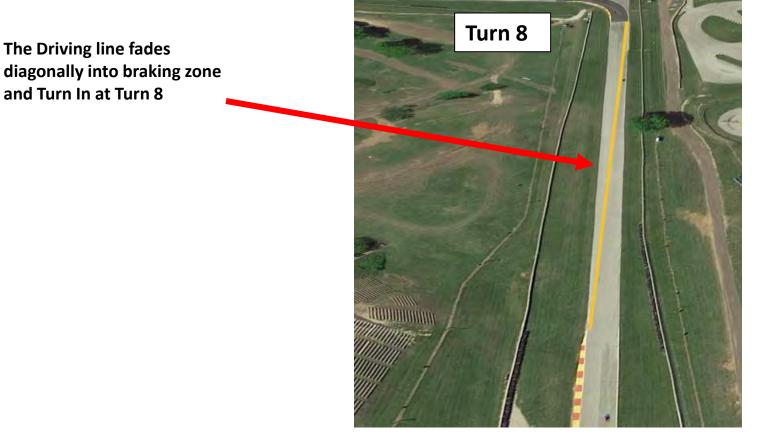
Check for the 300 brke marker in your peripheral vision



Aerial view of Turn in, Apex, & Track Out for Turn 8



#### Line of Site: Approach to Turn 8



Line of sight from track out at Turn 7 – to turn in at Turn 8 (Google Earth)

## Additional Visual Reference Details for the Turn 9 – Carousel Entry



Minimal Braking on entry Enter on the right side of the track and stay there!



Aerial view of entry to the Carousel under the SpeedVille bridge



#### Turns 9 & 10

The "Carousel"

10

#### Entry: IUnder the left side of the 4<sup>th</sup> bratwurst. Braking??:

None – maybe a lift unless you ar in a very high horse power car – but you have to match your entry speed with available grip!

#### Turn In??:

Hug the inside og the carousel all the way around

#### Mid corner:

If you need to rotate the car more lift slightly at the crest (just a bit past mid way through the turn)

Apex: Way late at the grey rumbles Exit: far end of rumbles



Try to keep your right tire about two feet off the edge...Don't go more than half a car width out in the carousel in the dry.

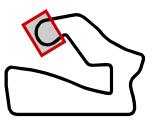
## Additional Visual References in the Carousel



You are actually going up hill for the first half of the carousel – you can lift a bit to rotate the car at the "crest"



Aerial view of the carousel with the entry at the SpeedVille Bridge lower center – stay tight all the way around to the apex way around the turn



## Additional Visual Reference Details for Turn 10 – the Carousel Exit



Super late apex then track out all the way to the far rumbles...

Eyes up for the bridge and stay driver's left for the entry to the Kink

OR

Pull to Driver's right for entry into the braking zone for the "Bend"



Aerial view of the Carousel exit



#### **Additional Visual References for the Entry to The Bend**



Apex the right turn late and unwind the wheel right away to get on the power



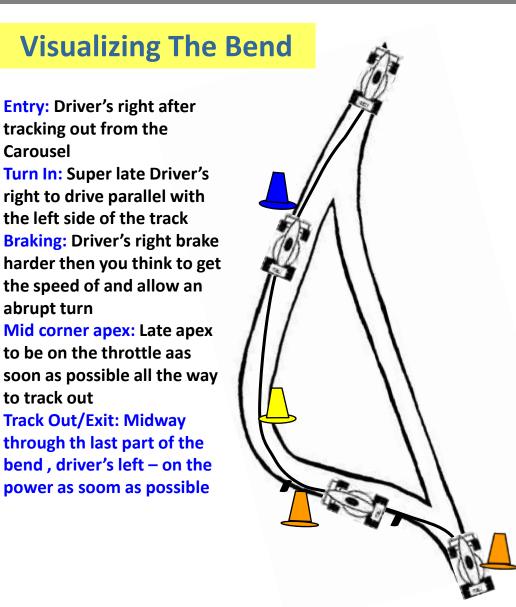
Compromise your exit and stay driver's left down all of this stretch







Aerial view of line through the Bend





#### **Additional Visual References for Exiting The "Bend"**

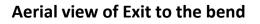


Leaving track out of the Bend and on the power to Turn 12



Track out for the right turn exiting the Bend







#### **Additional Visual References for Turn 11-11A-11B**



Keep the Car on Driver's left at 11B



Secondary apex Driver's right





Exiting the "Kink" or the "Bend"



Aerial view of the exit of the Kink

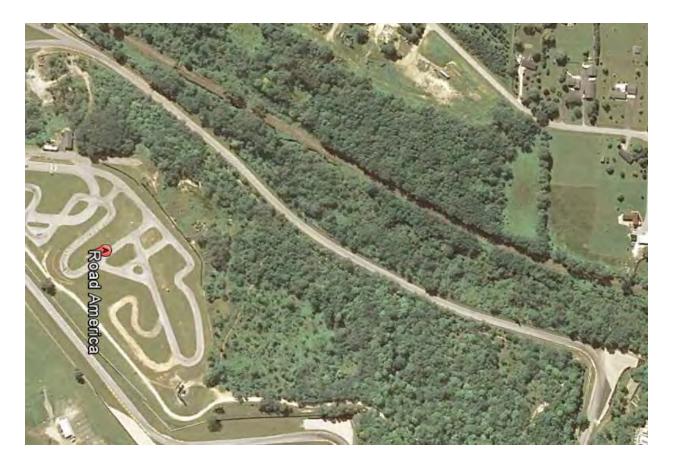
## Additional Notes for Turn 11 to Turn 12

Double Apex bend in track into Corner 12

Set up the turn at the apron on Driver's right

Hold the same arc with the steering wheel to the corner 12 brake zone

Straight line brake into 12



**Turn 12** 

## **Canada Corner**

**Entry:** Fade left from Driver's right on the straight into the braking zone at Turn 12 -

**Braking:** Eyes up – Look for the 400-300 markers – a good place to adjust braking

Turn in: Corner light location drivers left

**Apex:** Late apex at the far edge of the center grey rumbles drivers right –

**Mid Corner:** Turn 12 is banked at apex but flattens as you exit the apex

Track Out/Exit: Stay left at track edge all the way to the end of the rumbles driver's left – keeps you from moving the steering wheel too much at exit



Why is it so difficult to be consistent in this corner?? Braking zone Camber changes thru corner Elevation changes thru corner...

### **Additional Visual References for Turn 12 – Canada Corner**



Turn in at Turn 12



Start of the Braking Zone(400)



Aerial view of Turn 12 Turn In, Apex and Track out



### Exit of Turn 12



Goal is to be parallel to the rumbles driver's right for the turn in of Turn 13



Stay left almost to the end of the rumbles driver's left



Track out for Turn 12



Aerial view of Track out of Turn 12 and approach to turn in of Turn 13

13

## **Turn 13**

**Entry:** Fade driver's right after tracking out for Turn 12 with minimal Steering wheel movement

**Braking:** Lift or brush the brakes

**Turn In:** Four feet before the end of the rumble strip driver's right is a good reference for the turn in point

**Apex :** Just slightly late. Turn 13 is the second fastest corner on the Track after the Kink

Mid Corner: Go to full throttle as soon as you can let the car float/run out to the access road

Track Out/Exit: Don't continue to hold the car in the turn ...unwind the wheel and use all of the room in the access road!!



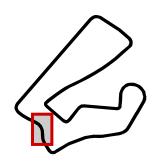
### **Additonal Visual References for Turn 13**



Track Out: Clip both corners of the access road



#### Slightly late apex





Lift gently or very light braking as you are compressed into the hill ..... Turn in about half a car length before the end of the rumble strip



Aerial view of Turn 13 details

### Turn 13-14

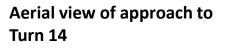


#### 300 brake marker Driver's left



#### Clip both edges of the access road





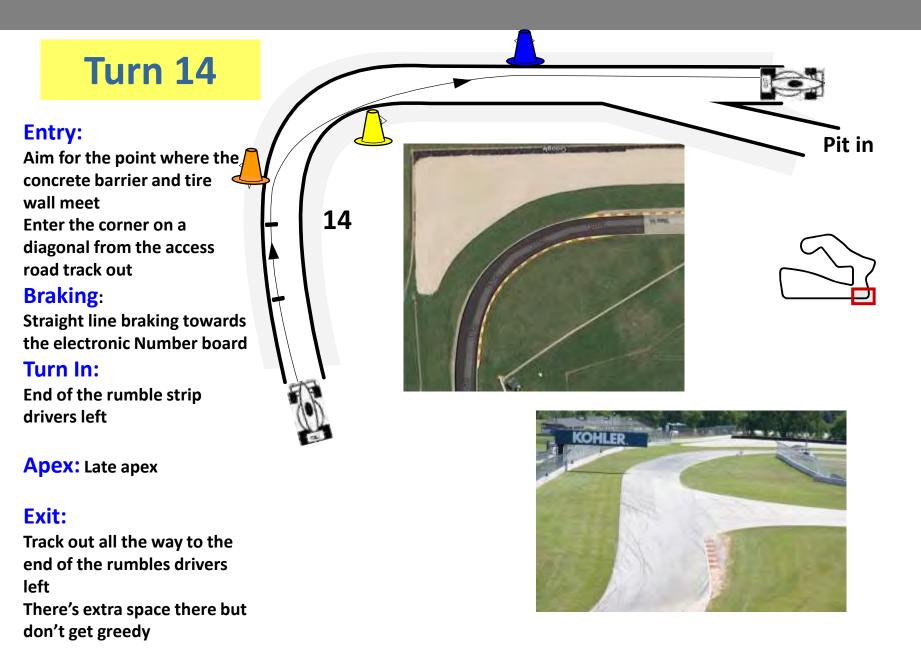


View into Turn 14 from cutting across the access road



## Line of Site from Corner 13 to Corner 14

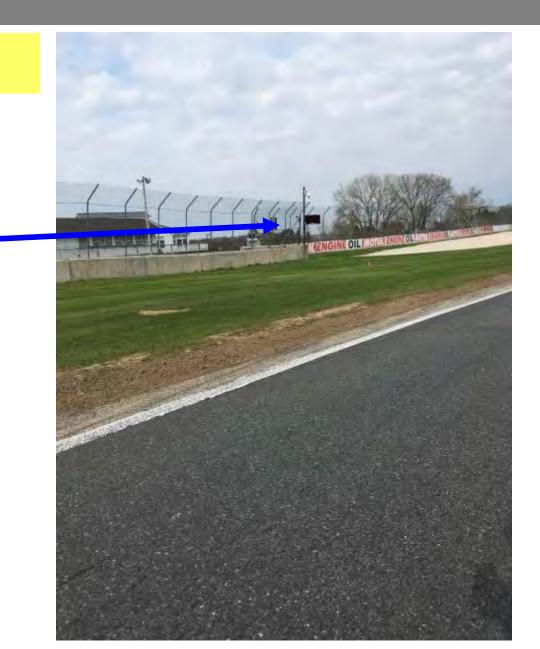




## Eyes up at Turn 14.

Note: Turn 14 has an Electronic Number Board.

Be alert if you see your Number here you have been Black Flagged... come in this time.



### **Additional Visual References for Turn 14**



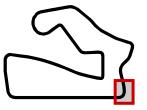
Late apex – Eyes up and scanning towards track out and the Main straightaway



Turn in very near the end of the rumbles Driver's left



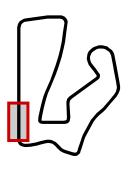
Aerial view of Turn In, Apex, & Track Out



### **Turn 14 – Up the Hill towards Start/Finish**



Eyes up! Keep the car middle to left unless passing





Tracking out at Turn 14 looking up the Hill at your two choices... Exit R into the Pits or continue up under the bridge to Start Finish



Aerial view of this section of track

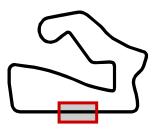
### Start/Finish



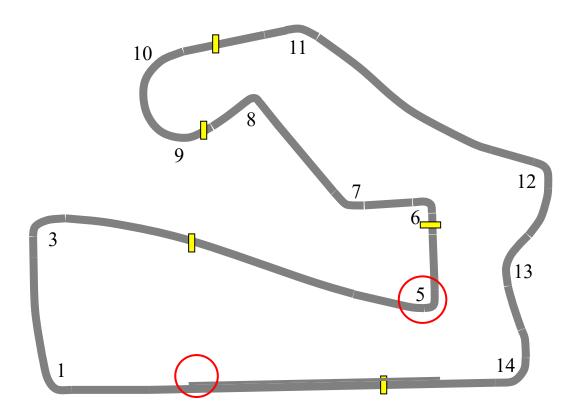
When your session is over you'll see the Checkered Flag waved right here at Start Finish



Aerial view of Start Finish bridge over the Main Straight



# Getting Off Track



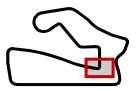
### Exiting at Turn 5

- 1) Keep on line or slightly Left of Center
- 2) Slow to exit the track safely
- 3) A Corner worker at 5 will display "Exit Here" sign
- 4) Slowly & carefully move through the tire barriers
- 5) Do not continue on the crossover!





Aerial view of the Exit at Turn 5, moving through the tire barriers, around the road to the stop sign & back up into the paddock



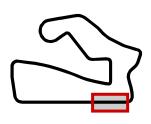
### **Turn 14 – Pit Entry = Coming off track into the Hot Pits**



Be prepared to slow the car to 35 MPH = Hot Pit speed Limit



Off track and heading up into the Hot Pit area





Coming out of Turn 14 get your arm up with a closed fist out the window to signal you are coming off track



Aerial view getting off the Track into the Hot Pits

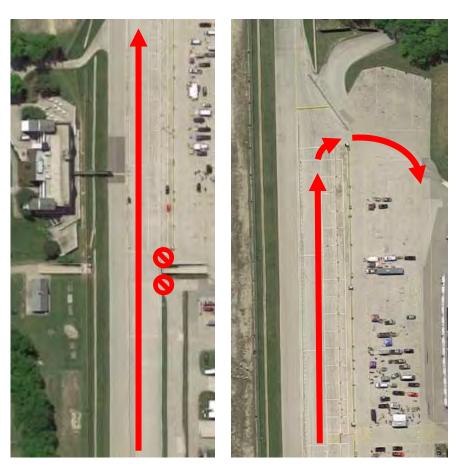
### Pitlane – Pit Exit



Final exit/opening from Hot Pits back into Competition Paddock



Pit lane speed board & exit area from False Grid – do not enter!



Aerial view: travelling through the hot pits

Aerial view: exiting the hot pits and returning to the Competition paddock

### **Black Flag**



Black Flag Stand Location – where you report to discuss issues.





Turn 14 electronic number board & Corner Station (where Black Flag would be displayed)



Aerial view of Black Flag Stand Location in Hot Pits

Enjoy your day at Road America!

- Stay hydrated
- Monitor your tire pressures
- Paddock shop is open today 10 am to 4 pm
- Fuel is available at the track (98 & 110 octane)
  - o Elkhart, 91 octane
  - o Plymouth, 93 octane
- Today is not a race or a competition, there are no trophies for fastest lap or whoever passes the most cars. We have all checked our ego's at the gate and will enjoy everything that makes this, 'America's National Park of Speed.'
- Please feel free to ask the instructors and staff questions anytime, we are here to help you make the most of your day.
- Questions and comments can be sent to trackdays@roadamerica.com