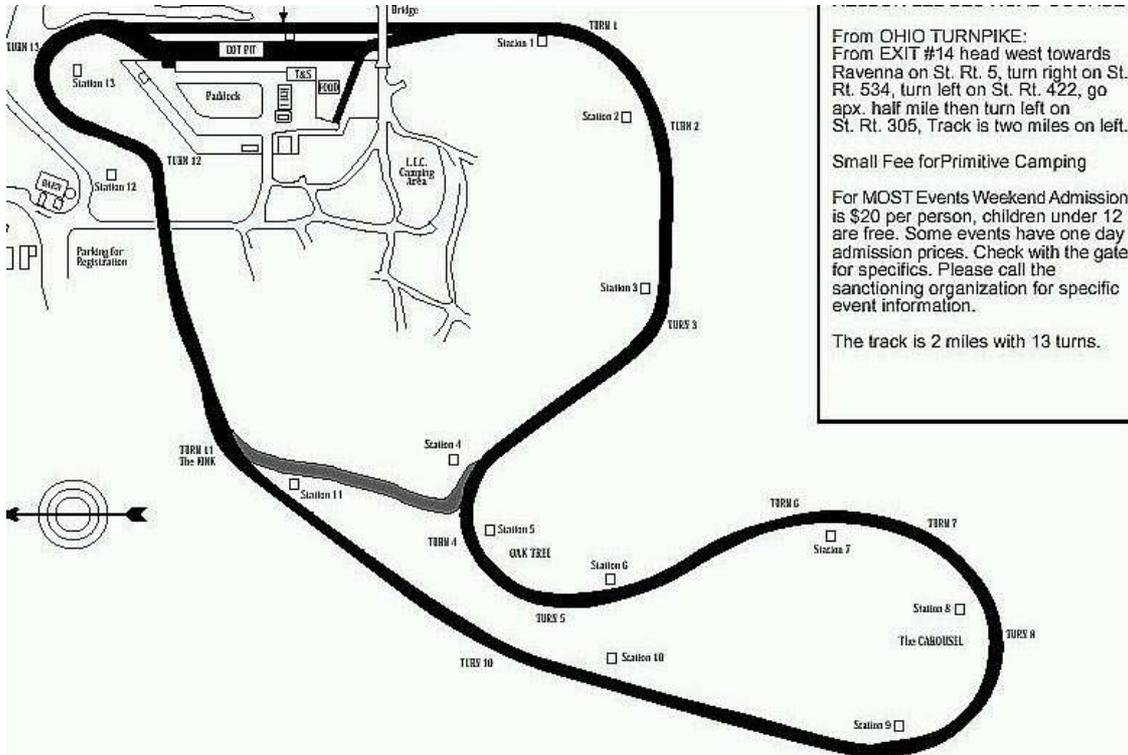


## A Lap of Nelson Ledges

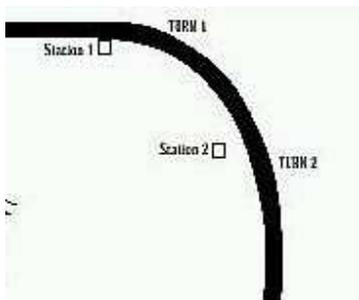


Nelson Ledges is many things. The basic layout of the track suggests it's easily learned. To a point that's true. The track is narrow and bumpy. The surface is as grippy as you will find outside of the starting line of a drag strip. Only one turn can really be described as tight. The result is a surprisingly technical track that rewards very careful car placement – made more difficult by the bumpy surface. The long radius corners result in high lap average speeds of 100mph or more. The creature comforts of Nelson have improved vastly over the two decades I've been coming to this place but are still on the rustic side. None of that will matter once you try to come to terms with the challenge of this track.

Over the years the management of Nelson Ledges has done what they can with the course. We've had a season or two where the track was really quite smooth. From what I understand, the high water table combined with the harsh winter temperatures result in the bumps coming back. Surprisingly, many of the bumps return to about the same place on the track.

They claim that Nelson has 13 turns but its really only 7. I'll talk about it as 7 turns but use the track map descriptions to help as needed.

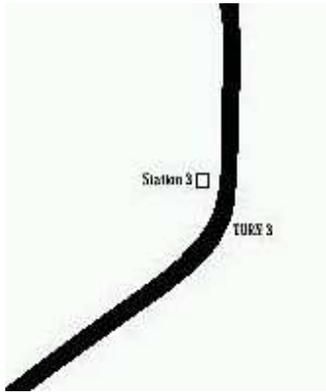
### Turn 1



Turns 1 & 2 on the map are the actual turn 1. There has been a crack across the road for years that I've used to judge my turn in position. I turn in before the crack. I'm really not sure how far it is in feet. Probably 2 car lengths, maybe less. The entry to this turn is visually deceiving. The outside edge of the track is a smooth arc. The inside edge isn't a continuous arc. It has a couple of "points" to it. If you try to drive a "normal" late apex line you tend to want to keep the car away from the first "point"

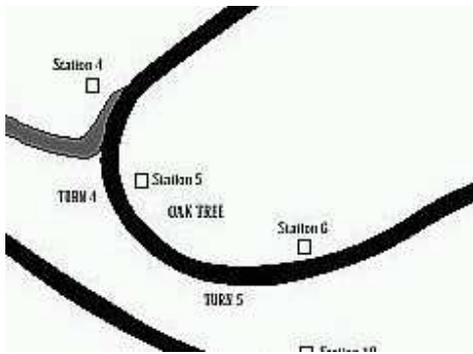
because that makes the line look early. If you stay a couple car widths away there you will find that your line is late and you'll have trouble getting the car to complete the corner. Actually, you want to have the car something like a car width or less off the first "point". After the first point you concentrate on holding the car down for a few more car lengths then the car can track back across to an exit. This turn is pretty smooth and most years doesn't have a bump problem in it at all. The trick is to figure out a line that works and stay with it. In the FV this is taken absolutely flat out. The higher approach speeds of an FST combined with the harder tire make that far more difficult. To be honest, my fastest FST lap at Nelson (race record) included a few car lengths of part throttle to be sure the car was pointing towards the apex.

## Turn 2



Turn 3 on the map is really turn 2 as you drive the place. This one is also very fast. You take a classic line here. It looks tighter than it is because the inside of the track has a bit of a hill that cuts your sight line through the curve. If you take too late of an entry you will hit a bump with your left side wheels that can upset the car (been there, done that, too many times). The exit area of the curve has extra asphalt. In testing I try to stay off of it and use it if I run wide. In a race situation I'll use it and hope I don't get to the grass. There is lots of run off room here but the grass tends to be slippery and can carry the car to the tires near oak tree.

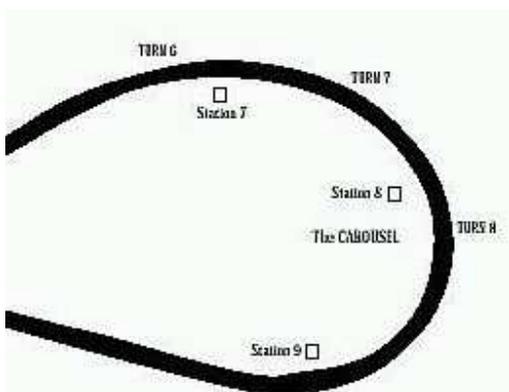
## Turn 3 – Oak Tree



Oak Tree is made up of turns 4 and 5 on the map. The thing to remember about Oak Tree is the road starts flat but starts to camber to help you about a third or a half of the way around. When you're starting you'll probably want to downshift to 3<sup>rd</sup> for this corner. As you speed up you'll notice that you're pulling some serious rev's as you exit. At that point just leave it in 4<sup>th</sup> and concentrate on getting the braking late and the line perfect. I tend to take an early first apex. The car will start to go across the track but the increase in road camber will allow you to hold it from going higher. Be careful in doing this if the track is dirty. If you get too

high you'll find the marbles and have trouble staying on the track. Once the car turns up on the banking, shoot for a late apex. You will see the marks in the dirt where the tin tops apex.

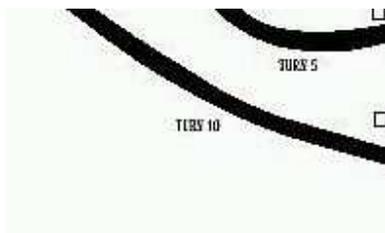
## Turn 4 – The Carousel



This is a long decreasing radius turn. It leads onto the longest high speed section of the course. High exit speed is essential to low lap times. Start into the corner about two thirds or three quarters on the left side of the track. You don't want to find any marbles and really don't need the extra room.

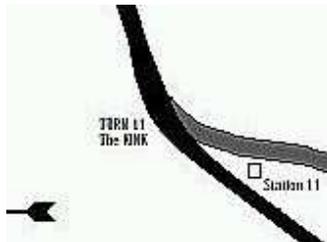
Somewhere around where the diagram says “turn 8” there will be a crack across the track where the pavement changes. Particularly early on you will need to get rid of some speed before you go through the rest of the corner. Complete this before the pavement change. There are little bumps in the track at the pavement change. Basically, you don’t want to have the weight transferred to the front wheels as you go through there. It makes the back end dance. Since you are on the left side of the track there isn’t enough room to catch a big wiggle. Feed in some throttle to settle the car and power through the bumps. That’s the general plan but this corner is a little different every time we go to this place. You have to spend some time varying the line through here to see what the car’s going to like. At times some very odd looking lines have been successful depending on conditions. If the track is wet you need to be particularly careful here. The pavement on the far side of the pavement break is NEVER as grippy as the near side. You need to cross the pavement break further to the right to give you some room to catch the car. Once you get through the pavement break just work the car towards a late apex. You’ll see where the cars have put a wheel in the dirt. Check your RPM at the exit point. Work hard to maximize that exit speed. Prioritize exit speed over carrying speed through the pavement break.

### The Little Kink



There is a little kink in the back straight before the real kink. This one causes trouble from time to time, particularly during testing. In a race you generally approach from the left side of the track but cross over at the kink to cut the distance and then track back to the left. My advice is to NOT do that in testing. Just stay in your “lane” through here. A “winged wonder” formula car will want to get past you here.

### The Big Kink



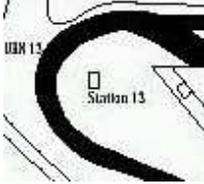
The only issue about this one is you’re going pretty fast. The FST is going much faster here on harder tires than FV. The corner is still taken flat out. Aim for a classic mid-corner apex. Stay out of the grass on the inside. The car would get through just fine but there is almost always some water there and it just makes the apex slippery for the next guy.

### Turn 6



As you approach the sixth turn you need to figure out where you’re going to hit the brakes. The place where the trailers cross the track tends to be a bit bumpy. Hit the brakes before there and work your way towards later braking. Go through this one in 4<sup>th</sup>. At the start use a late apex. It makes the run to the last turn easier. As you speed up allow the apex to get a little earlier. This corner can be very fast but you need to make sure you can set up for the next turn.

## Turn 7



As you exit turn 6 look up across the street outside the track. You'll see a red barn. Drive the car that direction. Overall, this is one of the "slow in and fast out" corners. Brake the car in a straight line and get down to third gear. You'll be about mid track or maybe a little more to the left. Turn in gently, feeding in the throttle. You're looking for a late apex – again where all the cars have been in the dirt. Once you feel like the car is going to make the apex it will typically take full throttle. There is lots of track to the left. You shouldn't need it – but it can come in handy. Track the car out so that it will head right down the left side of the track. With the FST you'll shift up to 4<sup>th</sup> well before the starter stand.