Building a Super Speedway
Dan Gallagher
Gallagher Asphalt Corp.

- Family run 3rd Generation
- 3 Asphalt Plants
- Located in Thornton, Illinois
Prepare to Bid!!

- Visit Ohio Valley Asphalt – Kentucky Speedway.
- Built 18 deg slope.
- Reviewed equipment.
- Est. cost to modify equipment…. What do you think?
• 1.5 Mile Tri-Oval

11°

18°

5°
Chicagoland Speedway

- $7 million
- 75,000 grandstand seating
- Joliet, Illinois
- NASCAR (stock cars) & IRL (Indy cars)
Lime treated Sub grade

First lift of 2.5” top size Aggregate placed 4” thick

Start placing stone: 7/18/2000

26,000 tons of stone
2nd lift 19,540 tons of 1.5" top size placed 3"
3rd lift 19,540 tons of 1" top size placed 3"
Minimum of 95% compaction

2000/ 8/16
Looking Good! ... What’s so tough about building a speedway?
Paving it!!!
Let’s try it again… Test strip

2, 3, 4!
The team calls a time out to huddle up
Who do you call.....

Chuck Deahl from Compaction America
Thanks APAC!

APAC Missouri Inc.
Kansas City Speedway
Back to the drawing board!

- $P_b = 4.5$
- $V_a = 3.5$
- Sands to 50:50
- Target 44% P8
- 4-Hypac C-350D
- Binder Stone to Chips @ 50:50
- Direction: Forward only
- $>280^\circ F$
- 2 Vibes Forward
- 2 Static Backward
- 1 - Ingersoll Rand DD-190

Team work & Brain Storm
# Base/Inter. Course Mixture

<table>
<thead>
<tr>
<th></th>
<th>JMF</th>
<th>AJMF</th>
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<tbody>
<tr>
<td>1”</td>
<td>100%</td>
<td>1” 100%</td>
</tr>
<tr>
<td>3/4”</td>
<td>95%</td>
<td>3/4” 97%</td>
</tr>
<tr>
<td>½”</td>
<td>80%</td>
<td>½” 83%</td>
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<tr>
<td>#4</td>
<td>38%</td>
<td>#4 44%</td>
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<tr>
<td>#8</td>
<td>24%</td>
<td>#8 27%</td>
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<tr>
<td>#16</td>
<td>18%</td>
<td>#16 21%</td>
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<tr>
<td>#100</td>
<td>7%</td>
<td>#100 6%</td>
</tr>
<tr>
<td>#200</td>
<td>5.2%</td>
<td>#200 5.2%</td>
</tr>
<tr>
<td>PG 76-22</td>
<td>4.5%</td>
<td>PG 76-22 4.5%</td>
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3500 lb. Stability
Back on Track
Increase roller PLI
• 10-15 Feet Per Minute
• 1 Lap Per Day

Play offs
• First Load was placed to heat equipment and get the equipment dialed in.

• Placed in back stretch
Three lifts  6-1/2" Total

- Base  2-1/2"  Compacted
- Intermediate  2-1/2"  Compacted
- Surface  1-1/2"  Compacted
Profilograph index shall be reported as the average of two adjacent test paths. Areas representing high points or low points of 0.3 inches in 25 feet shall be corrected by the contractor. This criteria shall be met regardless of the average index of the 0.1 mile section. The maximum allowable profile index for a 0.1 mile section is 12 inches per mile equivalent over a 0.1 mile stretch for the base and leveling courses, and 8 inches per mile for the wearing course.
Scott Sharp also had a chance to comment on the track after running his first laps. “This place is awesome. The track is really smooth, which is important for Indy cars. It’s extremely fast and the car gets in and out of the corners effortlessly.”
Great job, but how do I get off the track?
Owner said, “Oh, by the way, how do we pave this?”
Gallagher said, “Do this!”
Racetrack Surface

- Air cooled slag - friction
- 85% sand
- PG 82-22
- 7.5% Asphalt (oven aged)
## Surface Course Mixture

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<tr>
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<td>7.5%</td>
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4000 lb. Stability
Super Bowl!
Traffic Jam at Chicagoland Speedway! 7 roller$
Surface

In-Place Density

Test Number

Daily Avg, Pct

91.0
93.0
95.0
97.0
99.0
1 2 3 4 5 6 7 8 9

Test Number

Daily Avg, Pct

91.0
93.0
95.0
97.0
99.0

1 2 3 4 5 6 7 8 9
Touch Down !!
Material Suppliers

- Seneca Petroleum
- Vulcan Materials
- Levy Slag Corp
- Marathon Ashland
Owners Reps /Engineering

• HNTB

• BOVIS

• Bob Harrington - Barrett Paving
Equipment Suppliers

• Blaw-Knox
• Compaction America
• Roadtec
Design Lab & Quality Control

• Chicago Testing Laboratory
• Frankfort Testing Laboratory
• JFG Technical Center
The Roadtec SB2500 conveyor was changed from 24” X 20’ to 12” X 40’ to allow placement of material without trucks riding on the track.
Hey! Whatever works!
Thank you and God Bless America!
PAVING "THE CHICAGOLAND SPEEDWAY"

OCTOBER 1, 2000