

Optimizing Profiling and Grinding to meet Specifications



Sarah Sanders, P.E.
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Colorado Specification

- Mean Roughness Index (MRI)
- 1/10th mile segments < 82 in/mi for Interstates
- Exclude 25 ft each side of any structure within the pavement
- 3/16" tolerance across a 10' straightedge

Know the Segments

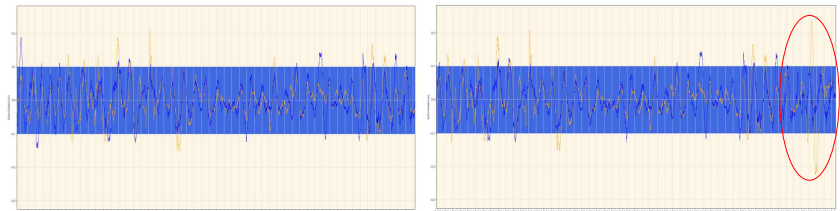
- Generate 1/10th mile segment locations before profiling
- Don't forget exclusions
- Moving a segment a few feet will change the MRI

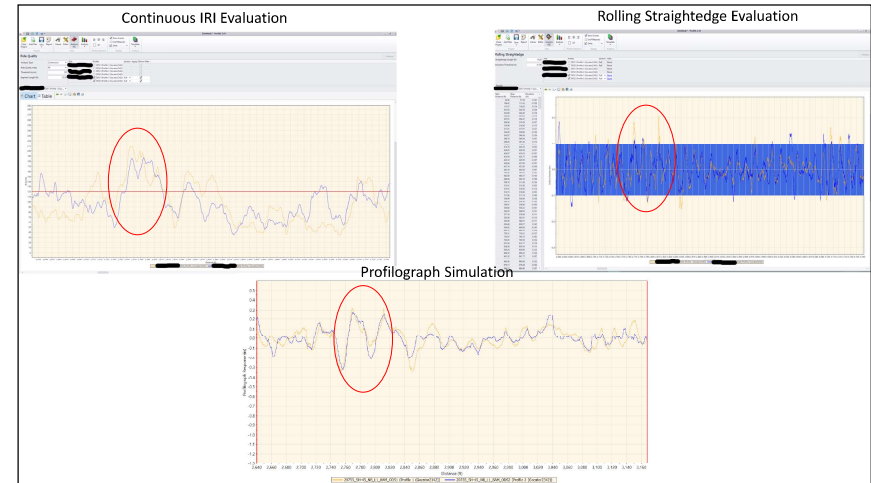
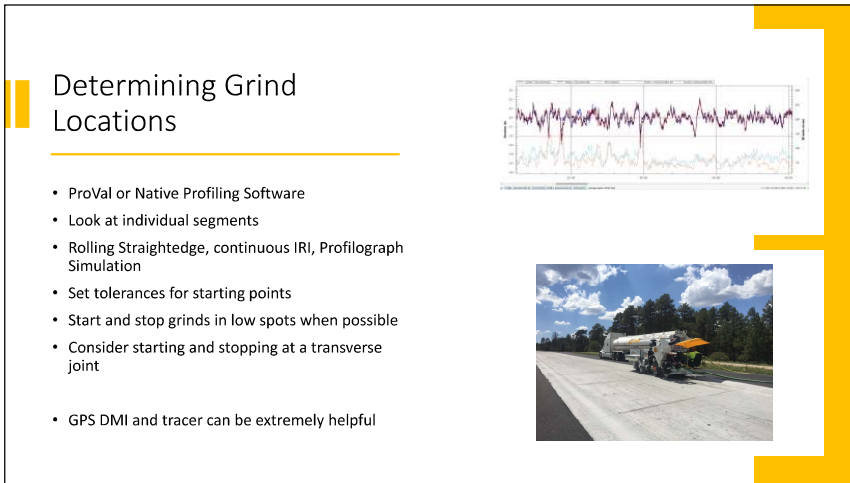
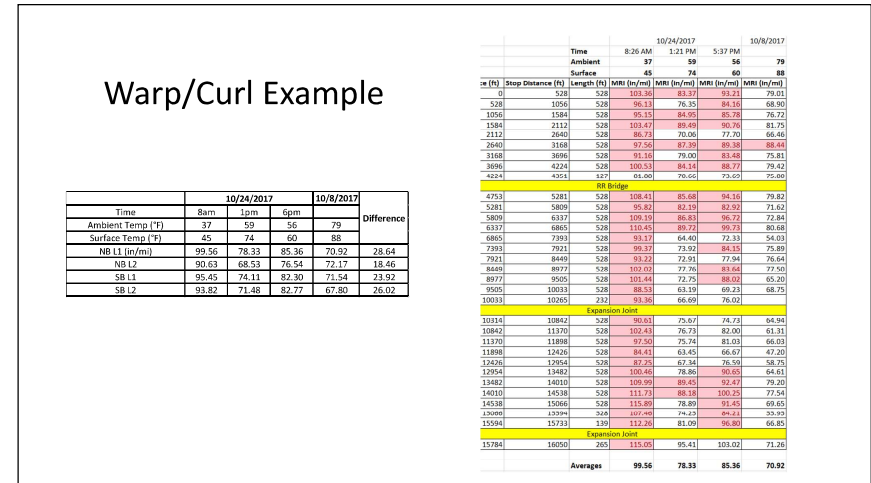
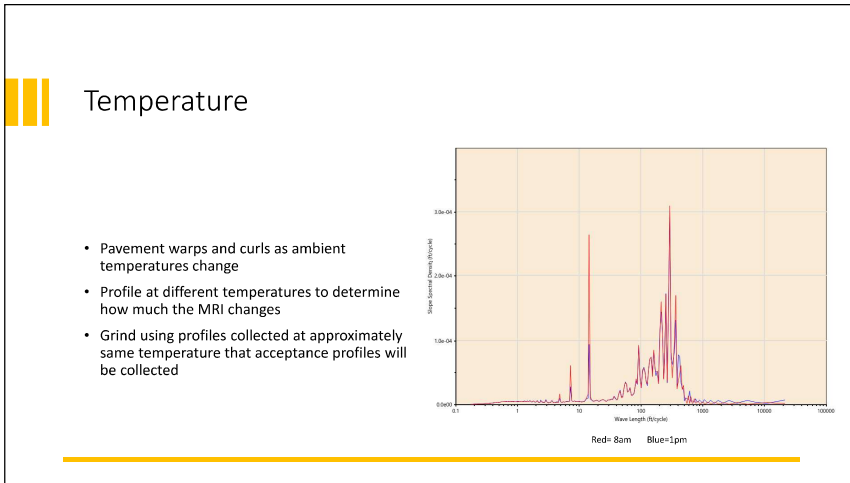
Segment Start Station	Segment End Station	Segment Length	Pre-Grind MRI (in/mi)	Post-Grind MRI (in/mi)	Short Segment Corrective Action Limit
0776+00	0781+88	528			
0781+88	0787+16	528			N/A
0787+16	0792+44	528			N/A
0792+44	0797+72	528			N/A
0797+72	0803+00	528			N/A
0803+00	0808+28	528			N/A
0808+28	0813+78	528			N/A
0813+78	0819+06	528			N/A
0819+06	0824+34	528			N/A
0824+34	0829+62	528			N/A
0829+62	0834+90	528			N/A
0834+90	0840+18	528			N/A
0840+18	0845+46	528			N/A
0845+46	0846+45	99			137.07
Toll Loop Exclusion					
0847+00	0852+28	528			N/A
0852+28	0857+56	528			N/A
0857+56	0862+84	528			N/A
0862+84	0868+12	528			N/A
0868+12	0873+40	528			N/A
0873+40	0878+68	528			N/A
0878+68	0883+96	528			N/A
0883+96	0889+24	528			N/A
0889+24	0894+52	528			N/A
0894+52	0899+80	528			N/A
0899+80	0904+08	528			N/A
0904+08	0906+45	137			133.96
Bridge 1 Exclusion					
0909+55	0914+83	528			N/A
0914+83	0920+11	528			N/A
0920+11	0925+39	528			N/A
0925+39	0930+67	528			N/A
0930+67	0935+95	528			N/A
0935+95	0941+23	528			N/A
0941+23	0946+51	528			N/A
0946+51	0949+45	294			101.13
Bridge 2 Exclusion					
0951+25	0956+53	528			N/A

Accuracy Matters

Original Segment: MRI= 93 in/mi

Moved 50': MRI=105 in/mi





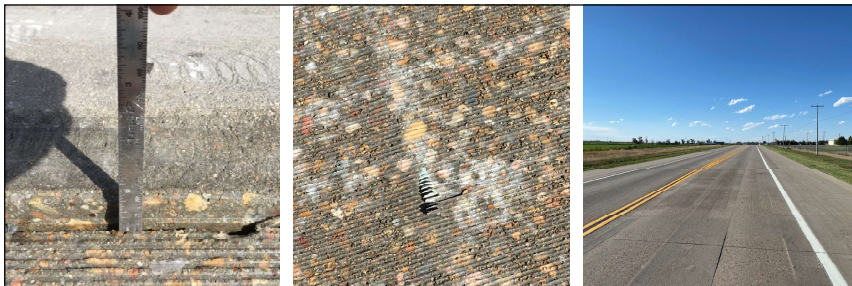
During Grinding



- Be onsite to re-profile during grinding
- Look for low spots where the grinding head isn't touching
 - Some grinds may need to be done twice
 - Gives insight into paver or finishing issues
- Check for proper feathering at start and stop locations
- Track Grind Locations



Segment Start Station	Segment End Station	Segment Length	Pre-Grind MMR (in/m)	Post-Grind MMR (in/m)	Short Segment Corrective Action Limit
0774+60	0781+58	528			
0781+58	0787+56	528			N/A
0787+56	0792+44	528			N/A
0792+44	0797+72	528			N/A
0797+72	0803+00	528			N/A
0803+00	0808+28	528			N/A
0808+28	0813+78	528	101.34		72.34
0813+78	0819+05	528	111.84		79.13
0819+05	0824+34	528	113		81.34
0824+34	0829+62	528	107.88		74.64
0829+62	0834+90	528	91.3		64.34
0834+90	0840+18	528	127.74		73.88
0840+18	0845+45	528	99.43		77.33
0845+45	0846+45	99	85.23		85.97
Toll Loop Exclusion					
0847+00	0852+28	528	74.23		74
0852+28	0857+55	528	70.88		71.22
0857+55	0862+84	528	75.88		75.8
0862+84	0868+12	528	96.75		63.48
0868+12	0873+40	528	86.4		80.54
0873+40	0878+68	528	70.51		77.32
0878+68	0883+96	528	85.91		75.11
0883+96	0889+24	528	95.08		72.9
0889+24	0894+52	528	100.68		76.52
0894+52	0899+80	528	104.88		81
0899+80	0905+08	528	102.52		79.41
0905+08	0906+45	137	147.13		113.96
Bridge Exclusion					
0909+55	0914+83	528	113.4		76.52
0914+83	0920+11	528	110.88		72.48
0920+11	0925+39	528	67.46		
0925+39	0930+67	528	60.02		
0930+67	0935+95	528			
0935+95	0941+23	528			
0941+23	0946+51	528			
0946+51	0949+45	294			101.13
Bridge Exclusion					
0951+25	0956+53	528			



Tips

- 3' grinding head is ideal for bump grinding
- Don't Leave short areas between grinds
- Don't Grind only wheel paths
- Keep thickness in mind

Thank You!



Sarah Sanders, P.E.
ssanders@pavement.com

