



Route 30 King William County

DAVID STOWELL

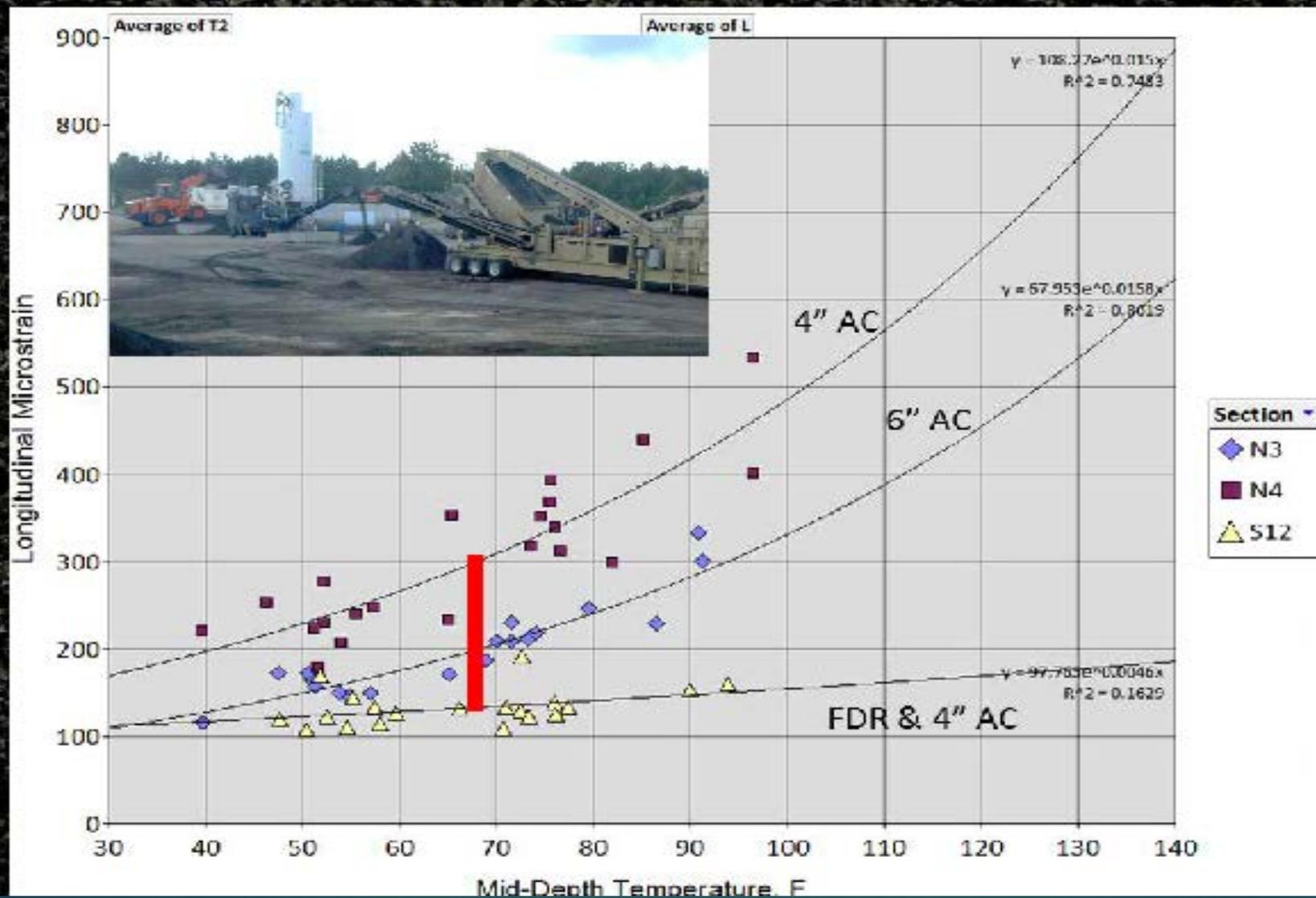
SLURRY PAVERS INC.

2012 NCAT Pavement Test Track

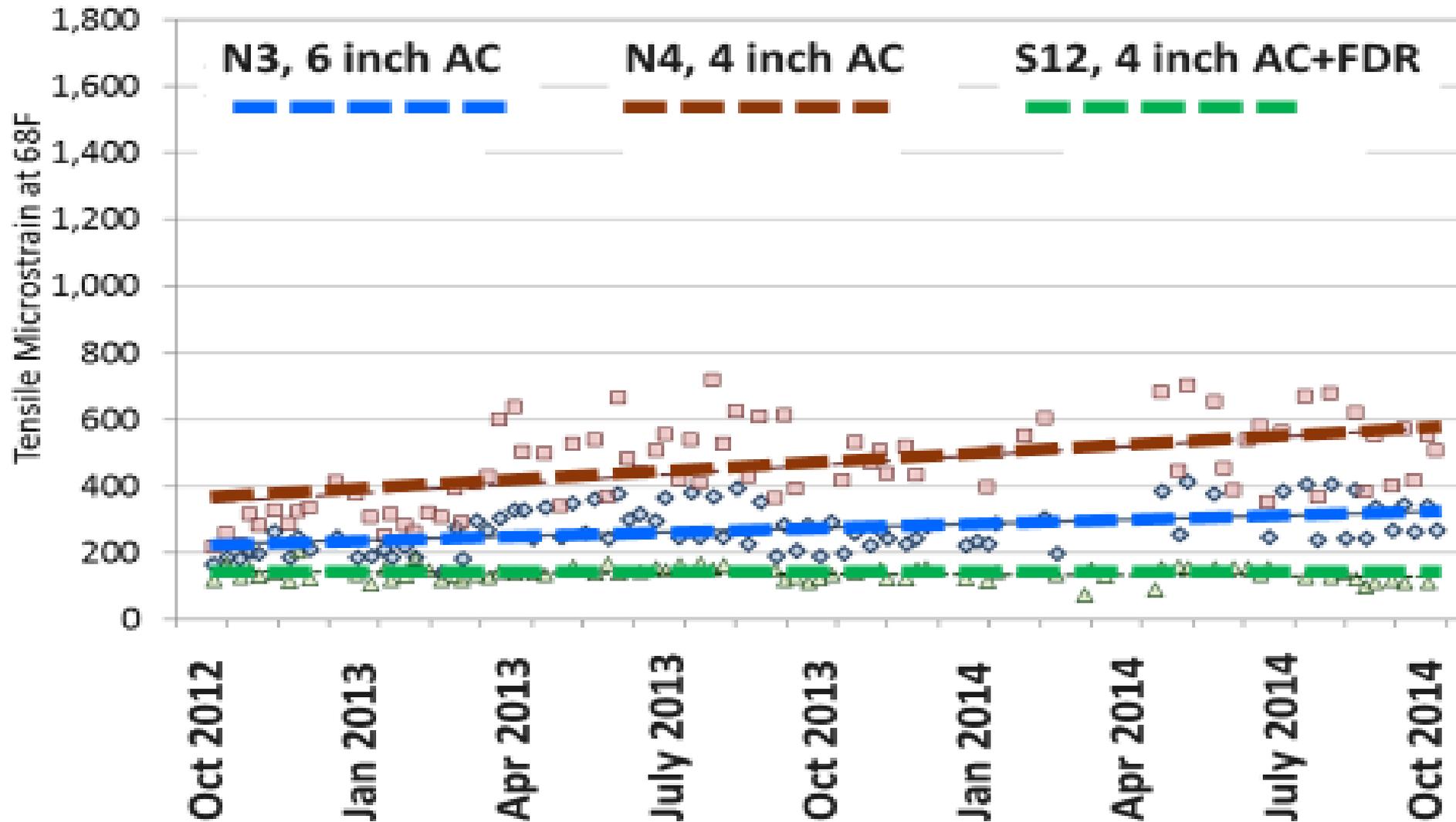


- SC Track Update

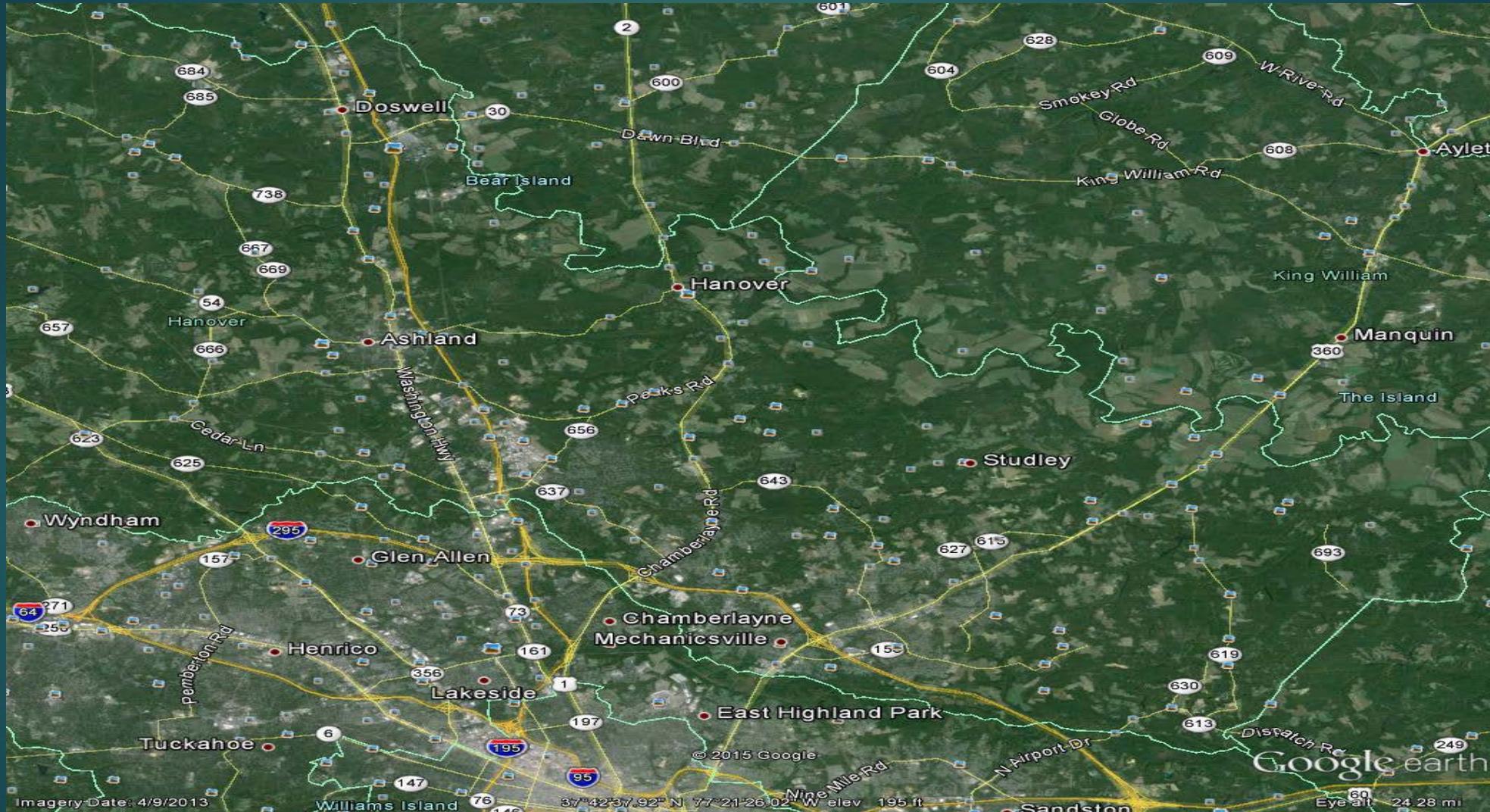
CCPR Base and "FDR" Foundation



Tensile Strain Beneath CCPR Layer at 68F



Location







CONDITION PRIOR TO FDR

Existing pavement section ranged from 7 to 14 inches of full depth

Average of 8.5 inches

Asphalt consisted of multiple overlays with significant stripping to variable depths

12' Lanes with 1' Paved Shoulder

Variable gravel shoulder width beyond paved shoulder

No base aggregate beneath asphalt

Subgrade soil predominantly Silty Sand

Extensive fatigue cracking



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Pavement Design

- Mill 2" AC to lower roadway grade
- Full Depth Reclamation to 12"
- Stabilized with Portland Cement (250 psi in 7 days)
 - Contract assumes 5% cement for bidding purposes. Contractor to provide final mix design
- Stabilized 12' lane with 4' stabilized and paved shoulder
- Finish with 4" Asphalt











FDR vs. Full Depth Patch

One Mile of Roadway

Area: 1 Mile = 14,080 SY

FDR Mix Design		
Depth	Percent Reagent	Reagent
10"	5%	Portland Cement
	42Lbs. / SY	296 Tons

Full Depth Patch		
Patches	SY	% of Area
6	1,408	10%

Pavement Design
10" Soil Cement @ 5%
Overlay 2" SM-9.5A

Cost of FDR with 2" Asphalt Overlay			
Item	Cost per SY	SY	Total
FDR w/ Grading & Compaction	\$ 7.64	14,080	\$ 107,571.20
2" SM-9.5A	\$ 10.25	14,080	\$ 144,320.00
		Job Total	\$ 251,891.20

Cost of Full Depth Patch on 10% of 1 mile			
Item	Cost per SY	SY	Total
Patch 1	\$ 150.00	234.66	\$ 35,199.00
Patch 2	\$ 150.00	234.66	\$ 35,199.00
Patch 3	\$ 150.00	234.66	\$ 35,199.00
Patch 4	\$ 150.00	234.66	\$ 35,199.00
Patch 5	\$ 150.00	234.66	\$ 35,199.00
Patch 6	\$ 150.00	234.66	\$ 35,199.00
		Job Total	\$ 211,194.00

FDR Production		
Total SY	Work Days	SY / Day
14,080	6	2,816

\$ 144,320.00
\$ 355,514.00

Cost Comparison		
FDR & Asphalt Overlay		6 Full Depth Patches
\$ 251,891.20		\$ 355,514.00
	Difference	
	\$ (103,622.80)	
Stronger New Road	vs.	Band-Aid Fix

