PAPA Regional Technical Meeting

(Cranberry Twp. or State College or Allentown)

March 19, 2020 District 6-0

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2019 Bituminous Testing

Testing:

- #267 Lots- Mixture Acceptance by box sample
- #243 Lots Density Acceptance by pavement core

Failure:

- #3 AC failures
- #0 Gradation failure
- #2 Density failures



2019 Percent Within Tolerance (PWL)

	PWT SUMMARY				
Year	2016	2017	2018	2019	
Number of PWL Projects	6	25	18	15	
Number HOLA	1	14	6	8	
Number LTS	5	11	12	7	
Average Pay Factors (%)					
Asphalt	98.13	101.99	101.23	101.63	
PCS	104	101.4	100.16	101.24	
#200 Screen	104	102.72	100.55	102.12	
Density	104	102.94	102.97	103.49	
Average Density	95.2	94.6	94.6	94.5	
Average Overall Lot Pay Factor (%)	1.02	1.02	1.02	1.03	
Bonus (\$)	\$18,811	\$889,407	\$922,128	\$592,051	
Penalty (\$)	-\$4,547	-\$84,092	-\$180,162	-\$54,753	

2019 Longitudinal Joint Density Performance

	Longitudinal Joint Density Summary				
Year	2016	2017	2018	2019	
Lots Tested	329	354	394	371	
% Density Range	77.9-98.4	85.7-98.5	82.9-98	81.9-99	
% Average Density	92.8	92.8	92.8	92.8	
Total \$ for Incentive Lots	1,342,870	1,229,450	1,698,808	969,434	
Total \$ for Disincentive Lots	(27,474)	(59,060)	(49,120)	(29,461)	
Delta (Incentive - Disincentive)	1,315,396	1,170,390	1,649,688	939,973	

REF: Section 405 Evaluation of Bituminous Pavement Longitudinal Joint Density and Payment of Incentive/Disincentive



2019 Longitudinal Joint Density Performance

	Longitudinal Joint Density Summary				
Year	2016	2017	2018	2019	
Lots Tested	12	32	6	1	
% Density Range	87.4-95.5	88.2-95.6	88.0-94.1	91.4-95.8	
% Average Density	85.1-95.8	87.5-96.2	88-93.7	94.3	
Incentive Lots	92.2	91.7	92.24	94.3	
Zero Lots					
Disincentive Lots					
Total \$ for Incentive Lots	\$31,000	\$97,100	\$13,750	\$5000	
Total \$ for Disincentive Lots			\$1,600		
Delta (Incentive - Disincentive)	\$31,000	\$97,100	\$12,150	\$5000	

REF: Section 405 Evaluation of Bituminous Pavement Longitudinal Joint Density and Payment of Incentive/Disincentive



2019 Longitudinal Joint Density Performance

- Longitudinal Joint Type
 - Which joint type is being utilized most?
 - Vertical
 - Tapered
 - Which joint type is producing better density?
 Tapered!
 - Are you having any longitudinal joint issues?
 - If so, please explain.
 - Need to add to Contract
 - Try J-Band --- Pilot 309/PM1 E86923 Next slide



J - Band

Field Test Site 5

Engineering District, County: 6-0, Montgomery County

Construction Project, ECMS # SR 309 PM1, ECMS #86923

SR, Segment and Offset: (1) 309, From SEG 61 OFF 0633 to SEG 101 OFF 2462

(2) 309, From SEG 61 OFF 0633 to SEG 81 OFF 0972

Experimental Feature Location: (1) Southbound Shoulder Joint – Offset 34' LT of CL

(2) Southbound Lane Joint – Offset 22.0' LT of CL

Experimental Feature Quantity: (1) 13,000.00 LF (2) 5,300.00 LF

Experimental Feature Units: 1.26 Lbs/ft

Unit Cost: \$3.50 per gallon or LF

Proposed Construction Dates: September 2020 to November 2024

Experimental Feature Item # Special provision number or contract work order

Control Feature Item # pavement numbers

Contractor: James D. Morrissey, Inc. Kyle Flanagan (kflanagan@jdm-inc.com)



2020 Planned Construction Projects

- List Projects With > 1000 tons of WMA Paving
 - E59434, Let Date 3/26/20, Sec SRT, Chest, 22K Tons
 - E113931, Date 4/23/20, Sec B10, Bucks, 50K Tons
 - E113933, Date 4/23/20 Sec C10, Chester, 72K Tons
 - E113958, Date 4/23/20 Sec MD9, Mont, 85K Tons
 - E104988, Date 4/23/20 Sec P10, Phila, 53K Tons
 - E63486, Date 5/21/20 Sr202/61S, Mont, 47K Tons
 - E109080, Date 5/21/20 SR 73, Mont, \$1.1 Mil
 - E109082, Date 5/21/20 SR 1011, Mont, \$1 Mil
 - E109083, Date 5/21/20 SR 2018, Mont, \$1.5 Mil



2020 Planned Construction Projects

- List Projects With > 1000 tons of WMA Paving
 - E108095, Let Date 7/23/20, Sec 108, Phila, 28K Tons
 - E93445, Date 9/17/20, Sr 1/RC2, Bucks, \$132 Mil
 - E88400, Date 11/5/20 Sr 1/PM1, Del, \$15 Mil
 - E79912, Date 11/5/20 Sr 95/AF2, Phila, \$40 Mil
 - E80014, Date 12/10/20 Sr 95/CP3, Phila, \$60 Mil
 - E14541, Date 6/4/20 Sr 1/HO2, Chest, 6k Tons



District Innovations & Best Practices

- Have you tried a 6.33 mm Thin Lift project yet?
 - If no, will you be trying one in 2020? NO Not likely
 - If yes, please discuss project.
- Do you utilize SMA on all Interstate Highways?
 - Why? No first project on SR 422 / 12k tons
 - Why not? \$150
- Are you still having tack coat issues? What tack coat type do you predominantly specify? Why?
- Non Tracking Tack. Bit on top of Concrete pennsylvania

District Innovations & Best Practices

- Have your maintenance forces completed a 19.0 mm for Low Volume Roads mix project yet?
 - If so, please discuss your observations. NO
- Will your maintenance forces being piloting 9.5 mm for Low Volume Roads mix project?
 - If so, please provide location and information. NO
- Have you bid and/or completed any crack and seat projects/rublization/asphalt structural overlay in the past few years?
 - If so, please briefly discuss project and any take-aways?

pennsylvania

District Innovations & Best Practices

 Please discuss any Innovations/Best Practices that you have piloted or recommend.



2020 District Changes - Direction

 Please discuss any changes to policy, specifications, special provisions, staff, etc. that are relevant to the asphalt paving industry.



Questions/Comments???



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