Form 2-6.1 Prepaving Meeting Agenda

PREPAVING MEETING

Date: _____ Location: _____

Project No.:_____ Rte. /Town: _____

Termini: _____

Proj. Eng. /Supvr.: _____ Phone: _____
C.I. /Gen. Supvr.: _____ Phone: _____
Inspector(s): _____

Prime contractor: _____
Supt.: _____ Phone: _____

Paving Contractor: _____
Supt.: _____ Phone: _____
QC/QA Rep.: _____ Phone: _____

Plant(s): Primary: _____ Location: _____
Backup: _____ Location: _____

Milling Contractor: _____ Start Date: _____
Supt.: _____ Phone: _____

Project information: Spec.: _____ Supplement Date: _____

Special Provisions: _____
_____

PAVEMENT STRUCTURE:

	Class/Type/Level	Depth	Start Date	Work hours
Base:				
Level:				
Wedge:				
Binder:				
Top:				

Expected Completion Date of all Paving: _____

Page 1 of 2

Form 2-6.1 Prepaving Meeting Agenda (continued)

PREPAVING MEETING (continued)

CANCELLATION PROCEDURE:

Cancel Time: _____ AM / PM
Contact – DOT: _____ Phone: _____
Contractor: _____ Phone: _____

PRODUCTION/PLACEMENT:

Paving length: _____ No. lanes/passes: _____
Tons/Day: _____ Tons/Hours: _____
Haul time: _____ No. Trucks: _____

Paver: Brand/Model: _____
Special Attachments: _____
Rollers: Breakdown: _____
Intermediate: _____
Finish: _____

Transfer Unit: Yes / No If yes, type: _____

Tack Coat Supplier & Distributor: _____

Compaction Testing by: _____

Cold Weather Paving (Oct. 15 to Apr. 30)
Approval given: Yes / No By whom? _____
Procedure Attached: Yes / No

Notes: _____

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Table 2-6.1 Mat Troubleshooting Guide

Mat Tearing- Full Width of Mat

POSSIBLE CAUSE	CURE
1) Excessive Speed or 2) Unstable mix (temp., aggregate, etc.)	1) Have Quality Control manager paving foreman slow paver 2) Correct at plant
3) Screed lift not fully extended	3) Extend lift
4) Screed plate worn out	4) Replace
5) Cold Screed	5) Check burners-review heating procedures
6) Paving thinner than largest aggregate mix nominal aggregate size	6) Increase mat depth; change to design with smaller maximum
7) Material too cold	7) Correct at plant
8) Excessive moisture in mix	8) Correct at plant
9) Strike-off too low	9) Raise strike-off
10) Strike-off too low or in low position	10) Adjust
11) Strike-off too high or in high position	11) Adjust
12) Pre-strike off too low	12) Adjust
13) Vibrator running too slow	13) Increase Vibration

Mat Tearing-Center (Before Rolling)

POSSIBLE CAUSE	CURE
1) Not enough lead crown	1) Adjust as needed
2) Flow gates closed down too far	2) Adjust gates
3) Worn screed plate	3) Replace screed plate
4) Kick back on augers worn off	4) Replace or repair
5) Segregation in mix	5) Check hauling, dumping procedures & plant operation
6) Cold screed	6) Check burners- review heating procedures
7) Strike-off too low or in low position	7) Adjust
8) Strike-off too high	8) Adjust
9) Pre-strike off too low	9) Adjust

Table 2-6.1 Mat Troubleshooting Guide (continued)

Mat Tearing- Quarter Points

POSSIBLE CAUSE	CURE
1) Cold Screed	1) Check burners-review heating procedures
2) Overloaded Augers	2) Machine adjustment a. Auger speed b. Flow gates
3) Cold material	3) Correct at plant
4) Aggregate larger than mat depth	4) Increase mat depth; change to mix design with smaller nominal maximum aggregate size
5) Extensions incorrectly installed	5) See machine operator's manual
6) Auger worn out	6) Replace augers

Mat Tearing- Edges

POSSIBLE CAUSE	CURE
1) End plate not square	1) Adjust as needed
2) Cold material build-up at end of augers	2) Extend augers
3) Extensions installed incorrectly	3) Reinstall extensions
4) Flow gates closed down too far	4) Adjust gates
5) Pre-strike off too low	5) Adjust

Material Tearing- Outside (Before Rolling)

POSSIBLE CAUSE	CURE
1) Too much lead crown	1) Adjust
2) Cold screed	2) Check burner- review heating procedures
3) Flow gates open too high	3) Adjust gates
4) Paving thinner than largest aggregate	4) Increase mat depth; change to mix design with smaller nominal maximum aggregate size
5) Extensions installed incorrectly	5) Reinstall extensions
6) Cold material building up at end of augers	6) Extend augers
7) Strike-off too low or in low position	7) Adjust
8) Strike-off too high or in high position	8) Adjust
9) Pre-strike off too low	9) Adjust

Table 2-6.1 Mat Troubleshooting Guide (continued)

Mat Tearing- Behind Main Screed with Extensions Retracted

POSSIBLE CAUSE	CURE
1) Extensions too low in front of main screed	1) Adjust up

Loose Streak in Center of Mat

POSSIBLE CAUSE	CURE
1) Insufficient lead crown	1) Adjust as needed
2) Worn augers or kickback paddles	2) Repair or replace
3) Flow gates too low	3) Adjust as needed
4) Augers worn out	4) Replace augers

Screed Rises at Each Take Off

POSSIBLE CAUSE	CURE
1) Overloaded augers	1) Machine adjustment a. Auger speed b. Flow gates
2) Augers worn out	2) Repair or replace augers
3) Waiting too long between loads	3) Have Quality Control properly balance the paving operation
4) Varying mix temperatures	4) Inform Quality Control personnel at plant
5) Grade sensor mounted at tow point	5) Move back on side arm
6) Strike off too high or in high position	6) Adjust

Screed Marks

POSSIBLE CAUSE	CURE
1) Trucks bumping paver	1) Inform Quality Control manager or paving foreman; train truck drivers
2) Waiting too long between loads	2) Have Quality Control properly balance the paving operation
3) Screed lift not fully extended	3) Extend lift
4) Fluctuating head of material	4) Check flow gate openings, auger & conveyor Check flow gate openings,
auger &	conveyor speed, paver
speed	
speed, paver speed	
5) Cold screed	5) Review/check screed heaters & heating procedures.
6) Strike-off too low or in low position	6) Adjust
7) Pre-strike off too low	7) Adjust

Table 2-6.1 Mat Troubleshooting (continued)

Transition Lines Between Screed & Extensions

POSSIBLE CAUSE	CURE
1) Extensions set too high or low	1) Adjust height of extensions

Voids In Extension Area

POSSIBLE CAUSE	CURE
1) Extension starved for material	1) Install additional augers & guards for constant extended width- Use kick-out paddles for variable extended widths

Bright Streak Down Center of Mat

POSSIBLE CAUSE	CURE
1) Too much lead crown	1) Make necessary adjustment
2) Flow gates too high	2) Adjust as needed
3) Augers worn out	3) Repair or replace

Auger Shadows

POSSIBLE CAUSE	CURE
1) Overloaded augers	1) Machine adjustment a. Auger speed b. Flow gates
2) Flow gates too high	2) Adjust as needed
3) Worn augers	3) Repair or replace augers
4) Segregation in mix	4) Check hauling & dumping procedure & plant operation

Table 2-6.1 Mat Troubleshooting Guide (continued)

Ripples

POSSIBLE CAUSE	CURE
1) Fluctuating head of material	1) Check flow gate openings, auger & conveyor speed, paver speed
2) Augers overloaded	2) Machine adjustment a. Auger speed b. Flow gates
3) Electronic control hunting	3) Check electronic controls
4) Flow gates open too high	4) Adjust as needed
5) Paver speed in excess	5) Have Quality Control manager or paving foreman slow paver
6) Loose or worn depth crank assembly	6) Repair, tighten or replace
7) Roller in poor mechanical condition	7) Repair or replace roller
8) Worn augers	8) Repair or replace
9) Unstable mix	9) Correct at plant
10) Too much lead crown	10) Adjust screed
11) Not enough lead crown	11) Adjust screed
12) Trucks holding brakes	12) Inform Quality Control manager or paving foreman; train drivers
13) Screed lift not fully extended	13) Extend lift
14) Temperature of mix varying	14) Inform Quality Control personnel at plant
15) Strike-off too low or in low position	15) Adjust
16) Strike-off too high or in high position	16) Adjust
17) Pre-strike off too low	17) Adjust

Wavy Surface- Long

POSSIBLE CAUSE	CURE
1) Running hopper empty between loads	1) Train operator & adjust paver speed
2) Fluctuating head of material	2) Check flow gate openings, auger & conveyor speed, paver speed
3) Augers overloaded	3) Machine adjustment a. Auger speed b. Flow gates
4) Temperature of mix varying	4) Inform Quality Control personnel at plant
5) Screed lift not fully	5) Extend lift
6) Over-correction of depth cranks	6) Review correct procedures
7) Worn augers	7) Repair or replace

Table 2-6.1 Mat Troubleshooting Guide (continued)

Wavy Surface- Long (continued)

POSSIBLE CAUSE	CURE
8) Flow gates closed down too far	8) Adjust gates
9) Segregation in mix	9) Check hauling & dumping procedure & plant operation
10) Waiting too long between loads	10) Have operator properly balance the paving operation

Wavy Surface- Short

POSSIBLE CAUSE	CURE
1) Electronic control hunting	1) Check electronic controls
2) Fluctuating head of material	2) Flow gate openings, auger & conveyor speed, consistent paver speed
3) Augers overloaded	3) Auger speed; flow gates
4) Temperature of mix varying	4) Inform Quality Control personnel at plant
5) Flow gates closed down too far	5) Adjust gates
6) Unstable mix	6) Correct at plant
7) Trucks holding brakes	7) Inform Quality Control manager or paving foreman; train drivers
8) Loose or worn depth crank assembly	8) Repair, tighten, or replace
9) Worn augers	9) Repair or replace
10) Segregation in mix	10) Check hauling & dumping procedure & plant operation
11) Roller in poor mechanical condition	11) Repair or replace roller

Hair Line Cracks

POSSIBLE CAUSE	CURE
1) Poor rolling procedures	1) Check roller manufacturer recommendations
2) Augers overloaded	2) Auger speed; flow gates
3) Excessive moisture in mix	3) Correct at plant
4) Fluctuating head of material	4) Auger speeds; flow gates; consistent paver speeds
5) Excessive speed	5) Have Quality Control manager or paving foreman slow paver
6) Unstable mix	6) Correct at plant

Table 2-6.1 Mat Troubleshooting Guide (continued)

Poor Longitudinal Joints

POSSIBLE CAUSE	CURE
1) Delay in rolling	1) Improve coordination
2) Over-correction of depth cranks	2) Review correct procedures
3) Overloaded augers	3) Auger speed; flow gates
4) End plate not square	4) Adjust as needed
5) Head of material varying	5) Auger speed; flow gates; consistent paver speed
6) Overlapping joint too much	6) Review correct procedures

Poor Transverse Joints

POSSIBLE CAUSE	CURE
1) Incorrect milling procedure	1) Review and follow proper milling specification
2) Over-correction of depth cranks	2) Review correct procedures
3) Poor rolling operation	3) Review correct procedures
4) Augers overloaded	4) Machine adjustment a. Auger speed b. Flow gates
5) Screed lift not fully extended	5) Extend lift
7) Varying mix temperature	7) Inform Quality Control personnel at plant
8) Cold Screed	8) Check screed heaters & review heating procedures
9) Not rolling joint soon enough	9) Review correct procedures
10) Material too cold	10) Correct at plant
11) Incorrect joint preparation	11) Review recommended procedures
12) Fluctuating head of material	12) Machine adjustment a. Auger speed b. Flow gates c. consistent paver speed

Bleeding

POSSIBLE CAUSE	CURE
1) Excessive moisture in mix	1) Correct at plant
2) Poor rolling operation	2) Review correct procedures
3) Excessive tack coat	3) Correct tack application
4) Vibrator running too fast	4) Reduce vibration
5) Eccentric weights set incorrectly	5) Reset
6) Strike-off too low or in low position	6) Adjust
7) Strike-off too high or in high position	7) Adjust
8) Pre-strike off too low	8) Adjust

Table 2-6.1 Mat Troubleshooting Guide (continued)

Screed Rides Nose Down

POSSIBLE CAUSE	CURE
1) Screed depth crank improperly set	1) Adjust for correct angle of attack
2) Screed depth crank bearings badly worn	2) Replace bearings
3) Forward area of screed plate badly worn	3) Replace screed plate
4) Strike-off too high or in high position	4) Adjust
5) Pre-strike off set too high	5) Make adjustment as outlined in machine operators manual

Unable to Control Screed

POSSIBLE CAUSE	CURE
1) Screed lift not fully extended	1) Extend lift
2) Cold screed	2) Check screed heaters & review heating procedures
3) Paving thinner than largest aggregate	3) Increase mat depth; change to mix design with smaller aggregate
4) Unstable mix	4) Correct at plant
5) Loose or worn depth crank assembly	5) Repair, tighten or replace
6) Strike off too high or in high position	6) Adjust
7) Pre-strike off set too high	7) Make adjustment as outlined in machine operators manual

Pushing Under Roller

POSSIBLE CAUSE	CURE
1) Poor roller operation	1) Review rolling procedures
2) Unstable mix	2) Correct at plant
3) Pre-strike off too low	3) Adjust

Unsatisfactory Compaction

POSSIBLE CAUSE	CURE
1) Poor roller operation	1) Review rolling procedures
2) Vibrator running too slow	2) Increase vibration
3) Eccentric weights set incorrectly	3) Adjust

Example 2-6.1 HMA ADJUSTMENTS:

Adjustments may be applied to bituminous concrete quantities and will be measured for payment using the following formulas"

Yield Factor for adjustment calculation = 0.0575 *tons/sy/inch*
Actual Area = (Measured Length *ft.* x Avg. of width measurements *ft.*)
Actual Thickness (t) = total tons delivered/(Actual Area *sy.* x 0.0575 *tons/sy/inch)*

Project Example

Two lanes road overlay
HMA S 0.5 (with +/_ ¼" tolerance), From Table 2
2" lift
Plan width = 42 *ft.* (2) 12 *ft.* Lanes
(1) 10 *ft.* Shoulder
(1) 8 *ft.* Shoulder

Field Widths = 42.3', 42.6', 42.5', 42.6', 42.4'
Avg. field width ($W_{avg.}$) = 42.48 *ft.*

Field Length (L) = 2,100 *ft.* (measured)

Tons Delivered (no waste) = 1,325.68 *tons*

A) Tons Adjusted for Area (T_A) = [(L x W_{adj})/9] x **(t** *in.***) x 0.0575** *tons*/sy/*inch*

$W_{adj.}$ = (Design width + tolerance) – Avg. field width
= (42' + 2"/12) – 42.48' = -0.31 *ft.*
Actual Thickness (**t**) =
Total tons delivered / (Actual Area *sy.* x 0.0575 *tons/sy/inch*)

Actual Area = (Measured Length *ft.* x Avg. field width *ft.*) / 9
= (2,100' x 42.48') / 9 = 9,912 *sy*

Actual Thickness (t) = 1,325.68 *tons* / (9,912 *sy* x 0.0575 *tons/sy/inch*)
= 2.32 *inch*

Tons Adjusted for Area (T_A) = [(2,100' x -0.31')/9] x 2.32" x 0.0575 *tons/sy/inch*
= - 9.65 *tons*

Example 2-6.1 HMA ADJUSTMENTS:

B) Tons Adjusted for Thickness (T_T) = A x $T_{adj.}$ X 0.0575 *tons.sy/inch*

A = Area = [L x (design width *ft.* + tolerance *ft*)] / 9
= [(2,100'x (42'+2"/12)] / 9 = 9,839.67 *sy*
$T_{adj.}$ = Adjusted thickness = (Dt + tolerance) – Actual thickness
Dt = Design thickness *inch.*
$T_{adj.}$ = (2" + 0.25") – 2.32" = -0.07*inch*

Tons Adjusted for Thickness (T_T) = 9,839.67 *sy* x 0.07 *inch* x 0.0575 *tons/sy/inch*
= -39.60 *tons*

C) Tons Adjusted for Weight (T_W) = GVW – DGW = (-) *tons*

If the quantity of Bituminous Concrete representing the mixture delivered to the project is in excess of the allowable Gross Vehicle Weight (GVW) for each vehicle, an adjustment will be made using the above formula:

Where: DGW = Delivered Gross Weight as shown on the delivery ticket or measured on a certified scale.
For example:
GVW = 21.15 *tons* and DGW = 23.25 *tons*

Tons Adjusted for Weight (T_W) = 21.15 – 23.25
= - 2.1 *tons*

D) Mixture Adjustment:

(1) Marshall Design

Tons Adjusted for Marshall Design (T_{MD}) = M x 0.10

Where: M = Tons of Bituminous Concrete mixture exceeding tolerances in Table 3.
Division of Material testing will provide the amount of Bituminous Concrete mixture to be adjusted

Example: M = 500.0 *tons*

Tons Adjusted for Marshall Design (T_{MD}) = 500.0 x 0.10
= - 50.0 *tons*

Example 2-6.1 HMA ADJUSTMENTS:

(2) Superpave Design

Division of Material testing will provide the amount of HMA to be adjusted for Air Void and Liquid Binder based on Tables 3A and 3B.

Tons Adjusted for Superpave Design (T_{SD}) = (AVa + APb) x Tons

Example:

Tons applied = 525.0 HMA, S0.5, Level 2
Va = 2.8
According to Table 3A,
AVa = -5.0 %

Pb = 5.0 % APb = 0.0 According to Table 3B
APb = 0.0

Tons Adjusted for Superpave Design (T_{SD}) =

= (-5.0% + 0.0) x 525.0 *tons*
= - 26.25 *tons*

E) Density Adjustment

Density will be adjusted for each Lot (non-bridge and bridge) according to Table 4

Tons Adjustment for Density (T_D)

= [(PA_M x 0.40) + (PA_J x 0.60)] x Tons accepted

Example:

Tons accepted = 575.0
Mat Density = 94.5 %, Joint Density = 92.8 %

Tons Adjustment for Density (T_D)

=[(2.5%x 0.40) + (0.0x0.60)]x 575.0 *tons*
= 5.75 *tons*

Total HMA Adjustment

= [T_A+ T_T + T_W + (T_{MD} or T_{SD}) + T_D] x HMA Unit Price
= Est.

Where: Est.=Pay unit represented in dollars representing HMA incentive or disincentive.

TABLE 2-6.2 - Thickness Tolerances

Mixture Designation	Lift Tolerance
Class 4 and HMA S1	+/- 3/8 inch
Class 1, 2 and 12 and HMA S0.25, S0.375, S0.5	+/- ¼ inch

TABLE 2-6.3
TOLERANCES FOR CONSECUTIVE TESTS (MARSHALL)

Classes	Criteria	% Tolerances (+/-)
-	Binder	0.4
1, 2, 4, 5, 5A & 5B	#200	2.0
1, 2, 4	#50	4
1, 2, 5, 5A & 5B	#30	5
1, 2, 4, 5, 5A & 5B	#8	6
1, 2, 4, 5, 5A & 5B	#4	7
1, 2, 4, 5, 5A & 5B	3/8 & ½ inch	8

TABLE 2-6.3A
ADJUSTMENT VALUES FOR AIR VOIDS (SUPERPAVE)

Adjustment Value (AVa) (%)	HMA S0.25, S0.375, S0.5, S1 Air Voids (Va)
+2.5	3.5 - 4.5
0.0	3.0 - 3.4 or 4.6 - 5.0
- 5.0	2.7 - 2.9 or 5.1 - 5.3
- 10.0	2.3 – 2.6 or 5.4 – 5.7
-20.0	$\leq$ 2.2 or $\geq$ 5.8

TABLE 2-6.3B
ADJUSTMENT VALUES FOR LIQUID BINDER (SUPERPAVE)

Adjustment Value(APb) (%)	HMA S0.25, S0.375, S0.5, S1 Pb (refer to Table M.04.03-5)
0.0	Equal to or above the min. liquid content
- 10.0	Below the min. liquid content

TABLE 2-6.(M.04.03– 5) SUPERPAVE MINIMUM BINDER CONTENT BY MIX TYPE & LEVEL.

Mix Type	Level	Binder Content Minimum (1)
S0.25	1*	5.6
S0.25	2	5.5
S0.25	3	5.4
S0.375	1*	5.6
S0.375	2	5.5
S0.375	3	5.4
S0.5	1*	5.0
S0.5	2	4.9
S0.5	3	4.8
S1	1*	4.6
S1	2	4.5
S1	3	4.4

*** NOTE: Level 1 for use by Towns and Municipalities ONLY.**

TABLE 2-6.4
ADJUSTMENT VALUES FOR PAVEMENT DENSITY

Average % Density	% Adjustment for non-bridge lots	% Adjustment for bridge lots
97.1 – 100	-2.5	- 2.5
94.5 – 97.0	+2.5	+2.5
92.0 – 94.4	0.0	0.0
91.0 – 91.9	-2.5	- 10.0
89.1 – 90.9	-15.0	- 30.0
87.0 – 89.0	-30.0	- 50 or Remove and Replace
86.9 or less	Remove and Replace	Remove and Replace

Form 2-6.19 Nuclear Density Tests (Sample)

NUCLEAR DENSITY TESTS - BITUMINOUS CONCRETE (302-06-0736)

BUREAU OF ENGINEERING AND HIGHWAY OPERATIONS

			SENT TO:				LAB NO.:			
PROJECT NO.:	19-93		RTE: 6		DISTRICT: 2		TOWN: Brooklyn			
CONTRACTOR:	Tilcon / Foreman: Ron.				PROJECT ENGINEER:		Mike Wilson			
CLASS:	SP. 12.5. Level 3		MATERIAL FROM:		Tilcon		LOCATION: Wauregan			
SPECIFIC GRAVITY MAXIMUM WEIGHT	*Sp. Gr. x 62.4 = Weight in Pounds* 2.545 x 62.4 = 158.81 lbs.				TEST DATE:		**Thurs. September 22,2005**			
TESTED BY:	Paul Machinski		BASE TYPE:		Bituminous		BASE CONDITION: Good			
GAUGE NO.:	350		TEST MODE:		AC		WEATHER CONDITIONS: Clear 80F.			
AVERAGE % MAT DENSITY:	92.6		AVERAGE JOINT DENSITY:		91.9		RECOMMENDED PAYMENT:			
STANDARD COUNTS:	30 seconds		DENSITY:		22754		MOISTURE: 14628			
DENSITY PERCENT	91.0	90.2	92.1	92.1	94.2	93.8	92.5	92.0	93.0	92.2
AVERAGE PERCENT	90.6		92.1		94.0		92.3		92.6	
STATION:	352+00RT		353+30RT		356+06RT		358+45RT		360+98RT	
TEST LOCATION	Right Shoulder O/S.2 feet left of right edge.		Right Shoulder. O/S. 5 feet left of right edge.		Righ tLane. O/S. 10 feet left of right edge.		Right Shoulder. O/S. 3 feet left of right edge.		Right Lane. O/S. 10 feet left of right edge.	
DENSITY PERCENT	92.9	92.4	93.4	92.9	92.3	93.2	91.2	91.3	93.8	94.6
AVERAGE PERCENT	92.7		93.2		92.8		91.3		94.2	
STATION:	354+07LT		355+52LT		357+58LT		359+73LT		362+19LT	
TEST LOCATION	Left Lane. O/S. 22 feet left of right edge.		Left Lane. O/s. 15 feet left of right edge.		Left Lane. O/S. 20 feet left of right edge.		Left Lane. O/s. 23 feet left of right edge.		Left Lane. O/S. 23 feet left of right edge.	

LONGITUDINAL JOINT COMPACTION TESTS

TEST		TEST LOCATION	TEST		TEST LOCATION	TEST		TEST LOCATION
91.10	90.3	352+00RT	90.4	90.7	353+30RT	94.1	93.5	356+06RT
AVG. =	90.7		AVG. =	90.55		AVG. =	93.8	
92.1	92.5	358+45RT	91	91.3	360+98RT	90.7	90.5	354+07LT
AVG. =	92.3		AVG. =	91.15		AVG. =	90.6	
92.6	92	355+52LT	90.7	89.7	357+58LT	94	93.2	359+73LT
AVG. =	92.3		AVG. =	90.2		AVG. =	93.6	
94.1	93.5	362+19LT				91.9		
AVG. =	93.8							

REMARKS: REQUIRED PASSING DENSITIES: 92 - 97%% (Mat.) Joint (90 - 97%)

Form 2-6.19 Nuclear Density Tests (Sample) (Continued)

PAVER MFG:	CAT 1000B.	PAVER TYPE (WHEEL OR TRACK):	wheel
ROLLER:	TYPE:	WEIGHT:	MANUFACTURER:
NO. 1	Dual steel drum Vibratory	12 ton	Hypac 766C
NO. 2			
NO. 3			
NUMBER OF PAVING LANES:	two	WIDTH OF EACH LANE:	7 - 13 feet
LENGTH OF DAY'S PAVING:	1900+/- feet.	TOTAL LENGTH OF JOB:	
TACK COAT (YES / NO):	Yes	DISTRIBUTION METHOD:	
UNIFORM DISTRIBUTION (YES / NO):	Yes	GRAVITY:	PRESSURIZED:

COMMENTS: Approximately 1200 tons of superpave 12.5 bituminous was placed at a thickness of 2 inches and compacted using one dual steel drum vibratory roller. Contractor could not provide an additional operator for this day. The plant was down for approximately three hours due to the mix was off-test. Method of locating test site. 1500 feet of paving divided by 5 tests/lane = 300 feet X random number.

ROLLING BY ROLLER NO.	NUMBER OF PASSES	COMMENTS
ROLLER NO. 1	6	four in the vibratory mode, two in the static mode.
ROLLER NO. 2		
ROLLER NO. 3		

ACCEPTABLE COMPACTION OBTAINED: YES: X NO:

WAS LAST PART OF EACH LINE PASS SUFFICIENTLY COMPACTED: YES: X NO:

NOTICE: **THIS SECTION TO BE COMPLETED ONLY BY NUCLEAR DENSITY TECHNICIAN.**

ACCEPTABLE COMPACTION WAS NOT OBTAINED BECAUSE OF:

[ ] INSUFFICIENT ROLLING	[ ] INSUFFICIENT NUMBER OF ROLLERS	[ ] OTHER (EXPLAIN)
[ ] WRONG WEIGHT ROLLERS	[ ] MATERIAL COLD, OR ALLOWED TO COOL	
[ ] DEFICIENT BASE	[ ] MIX PROBLEMS	

COMMENTS (EXPLANATION IS MANDATORY IF DENSITY IS LESS THAN SPECIFIED) :

NAME OF NUCLEAR DENSITY TECHNICIAN:	Paul Machinski
SIGNATURE:	Paul Machinski

Form 2-6.25 Final Pavement Evaluation Report

Unit 501-PAT Rev..6/03

Note: This report is required for all projects with a top course of 2,500 tons or more.

FINAL PAVEMENT EVALUATION REPORT

District No._____ Project No._____ Route/Town:_____

Project Engineer: _____Chief Inspector:_____

Pavement Information (Top Course)

Paving Contractor:_____Class:_____ Depth:_____
Date Started: _____ Date Completed: _____
Plant(s) used _____ Drum_____ Silo Used? _____
_____ Batch_____ Silo Used? _____

Dates of evaluation: _____ Reviewer(s): _____

Pavement Rating System: 1= Excellent 2= Good 3=Fair 4= Requires Repair*

	Rating	**Remarks**
A. Pavement Appearance (overall)	1 2 3 4	_____
1) Segregation (Rating of 1 = none or minimal)	1 2 3 4	_____
Check next to type, if present: ____Truck End ____Centerline ____ Joint/Edge ____ Random		
2) Surface Appearance (overall)	1 2 3 4	_____
Check next to type, if present: ____Shadows (center/outside) __ Cracks __Flushing __Rutting ___Roller marks/lines __Screed marks/lines __Fuel/solvent spills ___ Non-uniformity		
3) Joint Construction (overall)- note excessive handwork, bump, cracks, etc.		
Transverse (excessive handwork, bumps, etc)	1 2 3 4	_____
Longitudinal (excessive handwork, cracking, etc)	1 2 3 4	_____
4) Rideability (overall)	1 2 3 4	_____
Transfer Device Used?		

B. Other Problems Encountered – Circle examples

1) Mix condition: Overheated / Cold / Dry / Tender(cracks when rolled) / Bleeding / difficult to compact / Inconsistent-nonuniform
2) Was any paving done during: Rain / Cold (under 40F or 10c) / Surface damp or wet
3) Compaction/Density: Difficult / Easy to achieve
4) Paving Delays due to: Insufficient Equip. / Equip. Breakdown / Plant Breakdown / Traffic / Waiting for Trucks

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- If repairs are required has the contractor been notified?

Page 1

Form 2-6.25 Final Pavement Evaluation Report (con't.)

Unit 501-PAT Rev..6/03

Note: This report is required for all projects with a top course of 2,500 tons or more.

Additional Comments:

Submitted By: _____

Approved By: _____

Cc:

Page 2

Form 2-6.26 Weekly HMA Production Report

Bob Dumas Page 1 5/12/2006

WEEKLY HMA PRODUCTION FOR DISTRICT 2 CONSTRUCTION

Week of Monday: **September 19, 2005** *through* *Sunday* **September 25, 2005**

Date	Project	Producer / Plant	Material	Call in Tons	Tons Used
9/19/2005	19-92	Tilcon, Wauregan	SP. .5(L3)	400	161
9/20/2005	19-92	Tilcon, Wauregan	SP. .5(L3)	1200	1040
9/21/2005	19-92	Tilcon, Wauregan	SP. .5(L3)	1200	970
9/22/2005	19-92	Tilcon, Wauregan	SP. .5(L3)	1200	772
			Subtotal	4000	2943
9/19/2005	19-92	Tilcon, Wauregan	SP. 1.5(L3)	600	558
			Subtotal	600	558
9/19/2005	40-123	American, Jewett City	Class 2	80	86
			Subtotal	80	86
9/21/2005	40-127	Tilcon, Montville	Class 1	20	20
			Subtotal	20	20

TOTALS: **4700** **3607**

Form 2-6.27 Base & Bituminous Concrete Inspection Report (Form CON-136)

Plant Location Silos Used: Y N Paving Contractor	CON-136 REV. 3/97 (302-06-0817) STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION **BASE & BITUMINOUSCONCRETE INSPECTION REPORT**	Project No. Weather Placing Temperatures (High/Low) Air: Surface:

Item No.	Class	Lane	Location Sta. to Sta.	Length	Proposed Width	Area	Factor	Proposed Depth	Theoretical t/Tons
			to						
			to						
			to						
			to						
			to						
			to						

Width Measurements			Depth Measurements			Mix Temperatures		
Station	Plan Width	Field Width	Station	Plan Depth	Field Depth	Time	Ticket No.	Temperature

Item No.	Item Description	Quantity	Sect.	Sub/Contr No.	t/Tons Received	t/Tons Used	Wasted/ Rejected*

Paving Work Force and Equipment		List of Inspection Personnel Assisting in Operation	No. of Tickets by Class
			No. to No.
			No. to No.
			No. to No.
			No. to No.

☐ Information on Reverse ☐ Additional Sheets Attached ☐ Density Report Attached(CON-133) ☐ IR Entered on SM / CMR ☐ IR Accepted	Inspector's Signature: Reviewed by: ☐ Chief Inspector ☐ Project Engineer
Inspector's Hours of Work: Start End	Lane Closures
Contractor's Hours of Work: Start End	Day of Week / Date / I.R.#

Form 2-6.27 Base & Bituminous Concrete Inspection Report (Form CON-136) (continued)

*t/Tons Rejected	Ticket No.	Class	Reason

*Waste: Show computation if over 10 t (10 tons). If material is used elsewhere on project document purpose, reason and item number material was paid under.

Sketch and Theoretical Computations:

Checked by _____

Form 2-6.28 Adjustment Schedule for Bituminous Concrete Form

SEE APPROVED FORMS FOLDER FOR LATEST VERSION

Form 2-6.30 Liquid Asphalt Adjustment Form

ASPHALT ADJUSTMENT

Item No. 0406999A (2/9/04 special provision)

The asphalt price adjustments will be paid on a monthly or semi-monthly basis in accordance with the payment estimate schedule for bituminous concrete pay items.

No adjustment will be made unless the difference between the posted Asphalt Base Price and Asphalt Period Price exceeds $5.00.

Percentage of Performance-Graded Binder (PG%):

1): For HMA mixtures listed as Class 1, and Superpave 12.5mm (0.50 inch), the PG% applied = **5.0**

2): For HMA mixtures listed as Class 2, and Superpave 9.5mm (0.375 inch), and Superpave 6.25mm (0.25 inch) the PG% = **6.0**

3): For HMA mixtures listed as Classes 4 and Superpave 37.5mm (1.5 inch), the PG% = **4.0**

(HMA) : Hot Mix Asphalt - The quantity (tons or metric tons) of accepted HMA measured for payment for the payment estimate period in which an adjustment applies.

(ABP) : Asphalt Base Price- The average selling price per standard ton or metric ton, F.O.B., which is posted by the Department of Transportation and is in effect the Wednesday that is 28 days prior to actual bid opening.

(APP) : Asphalt Period Price- The average selling price per standard ton or metric ton, F.O.B., which is posted by the Department of Transportation, and is in effect on the last day of payment estimate period in which the HMA mixture is subject to adjustment.

Website INTRANET Address for Asphalt Base and Period Prices is at the following link: http://conndot/asphalt/asphalt.aspx

Formula: HMA x {(PG%) /100 }x (Asphalt Period Price - Asphalt Base Price) = $_____

HMA	0.00
PG%	0.0
APP	$0.00
ABP	$0.00

Prepared by :

Total Payment = No Adjustment Necessary

Paid on DWR :

Form 2-6.31 Sample Letter Requesting Load Factor Rating Analysis

STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION
OFFICE OF CONSTRUCTION

Memorandum

subject: Bridge Analysis Request
Office of Construction
Project no. XXXX-XXXX
Project Description, Town

date:

to: Project Designer
Bureau of Engineering and
Construction

from: Project Engineer
Bureau of Engineering and
Construction

Project XXXX-XXXX requires the use of the Material Transfer Vehicle on the project and a Load Factor Rating Analysis is required for all structures that the equipment may be required to traverse over during the paving operation. Please have a Load Factor Rating Analysis performed for the structures listed below and transmit information to this office on whether any restrictions will apply.

Route	Direction	Structure No.	Description	Remarks

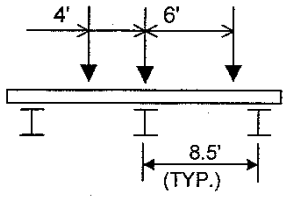
A sample of a loading schematic for transfer vehicle is attached. The loading analysis is using the assumption that the Road Tec Shuttle Buggy SB2500 will be used.

Cc: Lewis S. Cannon – James Connery - Liaison
James Norman – State or CE Unit for Project
Bridge Design Unit for Project
DE-ADE
Project Engineer – Chief Inspector
Terri Thompson - PAT

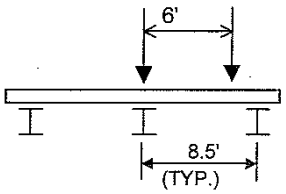
Form 2-6.31 Sample Letter Requesting Load Factor Rating Analysis (continued)

ATTACHMENT- SAMPLE ANALYSIS FOR PROJECT

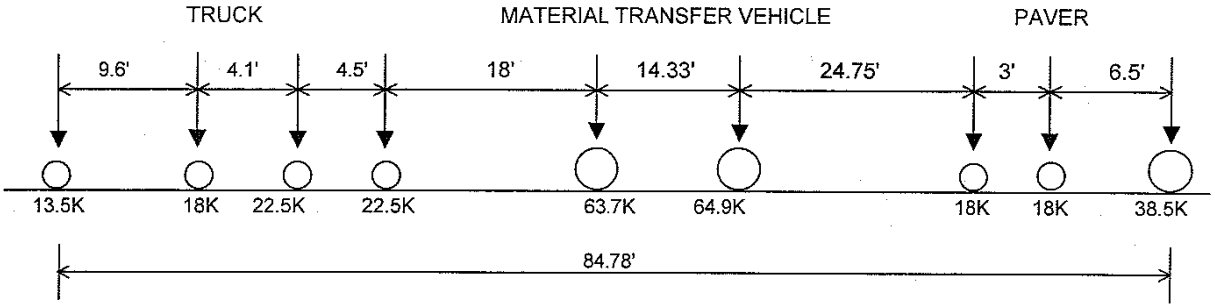
BRIDGE NO. 00186



LOAD FACTOR RATING SUMMARY	
MATERIAL TRANSFER VEHICLE	
OPERATING FACTOR	OPERATING TONS
0.84	117.6



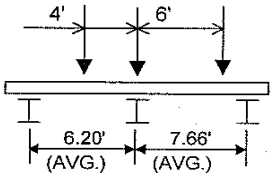
LOAD FACTOR RATING SUMMARY	
MATERIAL TRANSFER VEHICLE	
OPERATING FACTOR	OPERATING TONS
0.88	122.7



Form 2-6.31 Sample Letter Requesting Load Factor Rating Analysis (continued)

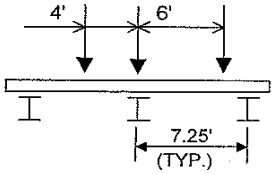
BRIDGE NO. 00188 (SOUTHBOUND)

EXISTING FASCIA BEAM - NOW INTERIOR BEAM (W30x108)



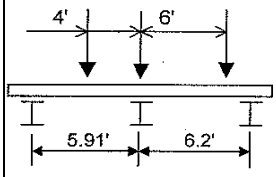
LOAD FACTOR RATING SUMMARY	
MATERIAL TRANSFER VEHICLE	
OPERATING FACTOR	OPERATING TONS
1.29	179.7

EXISTING INTERIOR BEAM (W30x116)



LOAD FACTOR RATING SUMMARY	
MATERIAL TRANSFER VEHICLE	
OPERATING FACTOR	OPERATING TONS
1.33	185.9

NEW INTERIOR BEAM (W30x124)



LOAD FACTOR RATING SUMMARY	
MATERIAL TRANSFER VEHICLE	
OPERATING FACTOR	OPERATING TONS
2.22	309.7