

SECTION 11.1

ASPHALT PLANT TICKETS

11.1.1 PURPOSE

This procedure establishes guidelines to control asphalt plant tickets related to the daily measurement and documentation of bituminous quantities.

11.1.2 AUTHORITY

[Sections 20.23\(3\) \(a\) and 334.048\(3\)](#), Florida Statutes (F.S.)

11.1.3 GENERAL

[Specifications Section 320](#) includes the requirements for asphalt plant operations. All asphalt plants shall have electronic weigh systems with automatic ticket printouts.

11.1.4 ASPHALT PRINTED TICKETS

Requirements/submittals:

- (a) There must be an original and at least one (1) legible copy. The original is retained by the Plant Verification Technician and becomes part of the [LetOT](#) Submittal Package, and one copy goes to the Roadway Verification Technician. See **Attachment 11-1-1** for example of an asphalt ticket.
- (b) Printed tickets shall be bound in sets for each day's production run. A cover sheet (**Form 700-050-72**) shall be prepared for each set ([see Attachment 11-1-2a](#)) showing the Financial Project ID Number, pay item numbers, date, book number, mix design number, type of material, ticket numbers included, and total quantity. Material of different types, pay items, waste, or private work for each day's production run shall be identified. These packets shall be available for review by the Plant Verification Technician one day after production and shall become part of the [LetOT](#) Submittal Package. [See Attachments 11-1-2 and 11-1-2a thru 11-1-2d.](#)

Note: The cover sheet is used for Conventional and Lump Sum (LS)/ Design Build (DB) projects. For LS/DB Projects, show the pay item for the asphalt quantity to which the pay adjustment (if applicable, per Specifications) will be applied.

- (c) The **original weight tickets** (white tickets), that are part of the LOT Submittal Packages shall be scanned into the Electronic Document Management System (EDMS with the contents of the LOT Submittal Package. The hard copies will be destroyed.

11.1.5 ASPHALT PLANT OPERATIONS

All plant operations will be in accordance with ***Specifications Section 320***.

11.1.6 ATTACHMENTS

Attachment 11-1-1	Automatic Printer Ticket	Page 11-1-3
Attachment 11-1-2	LOT Submittal Package	Page 11-1-4
Attachment 11-1-2a	Asphalt Packet Ticket Cover	Page 11-1-5
Attachment 11-1-2b	Pay Factor Worksheet	Page 11-1-6
Attachment 11-1-2c	Asphalt Roadway Verification Report....		Page 11-1-7
Attachment 11-1-2d	Asphalt Roadway Daily Report of QC ...		Page 11-1-8

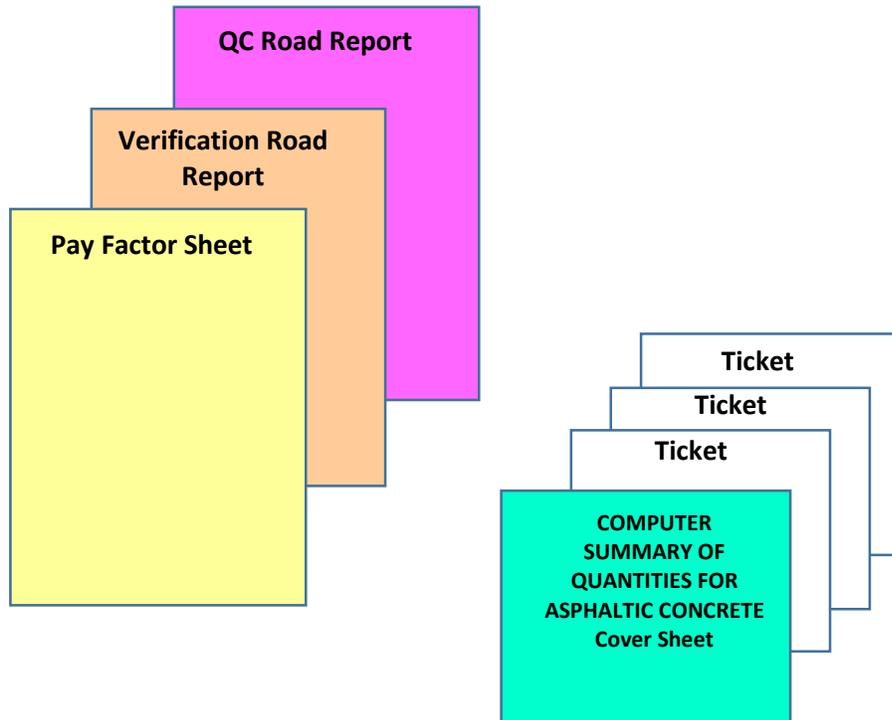
ATTACHMENT 11-1-1 Automatic Printer Ticket

EAGLE ASPHALT COMPANY SOMEWHERE FL 1-800-555-5555				
Sold to: FIN Project ID: 123456-1-52-01 Design No. SP 10-8280A				
ACCOUNT	MIX	TRUCK	TONS	
15	Super Pave	573	22.46	
GROSS <u>Tons</u> 35.75				
TARE 13.29				
NET 22.46				
MIX TEMPERATURE: 325°				
LOAD NO.: 10				
ACC. TOTAL: 196.11 TONS				
DATE/TIME: 01/01/2016 12:00 PM				
<hr/> Received by				

ATTACHMENT 11-1-2

Lot Submittal Package

To be compiled by Roadway or Plant Verification Technician at the end of each LOT and Submitted to the Engineer



ATTACHMENT 11-1-2a ASPHALT PACKAGE TICKET COVER SHEET Form 700-050-72

COMPUTER SUMMARY OF QUANTITIES FOR ASPHALTIC CONCRETE				
Fin. Project ID: _____		Date: _____		
Design Mix #: _____		Type of Material: _____		
Total No. of Invoices for this bundle: _____		Total No. of Tons/MTs for this bundle: _____		
<u>Basis of Payment</u>				
Sample No.:	Pay Item No.:	Lot:	Tons / MT:	Waste:
_____	_____	_____	_____	_____
Sample No.:	Pay Item No.:	Lot:	Tons / MT:	Waste:
_____	_____	_____	_____	_____
Sample No.:	Pay Item No.:	Lot:	Tons / MT:	Waste:
_____	_____	_____	_____	_____
Sample No.:	Pay Item No.:	Lot:	Tons / MT:	Waste:
_____	_____	_____	_____	_____
			Total: _____	Total: _____
Plant Inspector: _____		<div style="text-align: center;">MATERIAL DISPOSITION</div> Rejected: _____ Waste: _____ No Pay: _____ Total @ No Pay: _____		
Remarks: _____				

ATTACHMENT 11-1.2b PAY FACTOR WORKSHEET

Florida Department of Transportation						675-030-22 MATERIALS APW: 07/10
Asphalt Plant - Lot Verification and Pay Factor Worksheet for Superpave Mixtures						
Specification Version(s) 7/05	Project Information					
Contractor: P&S PAVING				Fin. Project ID: 21042735201		
Mix Type: SP-12.5	Design No.: SP 10-8347B	Plant No.: A0712		Reported By: J. TULLY		
LOT #: 3	Intended Tons: 2000	Actual Tons: 188.37		Date Reported: 10/1/2010		
Verification Sublot: 1	Start Date: 8/13/2010	End Date: 9/28/2010	Tons in this lot requiring no density: 188.37 100.0%			
Proj. Description: A1A SUMMER HAVEN						
Lot Verification						
Property	P _s	P _{.200}	P _b	Rice G _{mm}	Lab G _{mb}	
QC	38.82	5.84	4.73	2.523	2.427	
Verification	37.17	5.87	4.69	2.529	2.417	
Tolerance	IN	IN	IN	IN	IN	
Property	Core 1 G _{mb}	Core 2 G _{mb}	Core 3 G _{mb}	Core 4 G _{mb}	Core 5 G _{mb}	
QC						
Verification						
Tolerance						
Lot Pay Factor Calculations						
Property	P _s	P _{.200}	P _b	V _a	Density	
Sublot 1	38.82	5.84	4.73	3.80		
Sublot 2						
Sublot 3						
Sublot 4						
Target	42.00	4.80	4.90	4.0	92.0	
n=	1.00	1.00	1.00	1.00		
Mean	38.82	5.84	4.73	3.80		
SD						
Q _u						
P _u						
Q _i						
P _i						
PWL						
PF	1.00	1.00	1.05	1.05	1.00	
Note: Sublot values which appear in RED are outside of the Master Production Range as specified in Table 334-5, refer to 334-5.1.4.4.				Composite Pay Factor		1.03

The Composite Pay Factor Worksheet is used to input the Contractor's test results for AC content, gradation, air voids and density for each subplot.

The Plant Verification Technician will test one predetermined subplot and input results. If verified, the composite pay factor will be used for the entire verified lot. If the subplot does not verify the whole lot goes to resolution.

The composite pay factor provided by the Plant Verification Technician, once verified by the PA, will be paid on the following Progress Estimate as a Line Item Adjustment.

ATTACHMENT 11-1-2d ASPHALT ROADWAY – DAILY REPORT OF QUALITY CONTROL

State of Florida Department of Transportation															Update Workbook		Clear EVERYTHING		075-030-25A CONSTRUCTION 04/09/2015																																																																		
Asphalt Roadway - Daily Report of Quality Control															Show Bit Cert Page		Import from file		Email Form Feedback to: CD-AsphaltForms@dot.state.fl.us																																																																		
(FIN & Contract #): 431089-3-52-01 Contractor: 2000 tons Intended Lot Size: 2000 tons Lot # : 23 Mix Design #: SPM13-11976A Reload Clear Data Gsb: 2.415															View Plan Quantity Sheet		remove last lot		Show Reports																																																																		
<input type="checkbox"/> Lot Closed <input type="checkbox"/> Static Only															LIMS Import: Pay Item #'s		Assign Pay Item #'s		BASE ONLY																																																																		
#	Day or Night	Chim ID	Sub Lot	Truck Load #'s	Intended Use	Density ?	MTV	Lan -	Desc.	Lift # of #	Start Paving at Station	End Paving at Station	Length (FT)	Width (FT)	Area Paved (SY)	Quantity (TN)	Individual Lift Thickness (in)	Actual Spread Rate (LBSY)	Target Spread Rate (LBSY)	Total Thickness (in)	Prorated Base (SY)																																																																
6	Night	1	1	3	FC-5 76-22	N		RT	R-1	1 1	135+25.00	137+40.00	215	13.10	312.34	12.40	0.75	79.25	73																																																																		
7	Night	1	1	4-5	FC-5 76-22	N		RT	R-1	1 1	137+40.00	148+70.00	1130	13.30	1563.89	63.84	0.75	76.46	73																																																																		
8	Night	1	1	7-10	FC-5 76-22	N		RT	R-1	1 1	148+70.00	163+60.00	1490	13.20	2185.33	85.80	0.75	78.52	73																																																																		
9	Night	1	1	11-12	FC-5 76-22	N		RT	R-1	1 1	163+60.00	171+10.00	750	13.10	1031.67	42.95	0.75	78.69	73																																																																		
10	Night	1	1	13	FC-5 76-22	N		RT	R-1	1 1	171+10.00	172+75.00	165	13.10	240.37	9.40	0.75	78.28	73																																																																		
11	Night	1	1	13-15	FC-5 76-22	N		RT	R-1	1 1	174+05.00	183+30.00	985	13.30	1455.61	54.93	0.75	75.47	73																																																																		
12	Night	1	1		Waste										0.00	0.00																																																																					
13	->4 TIN: B66091652-000 DAILY TOTALS: 269.32 Total Tons 0.00 Tons Not in Lot 269.32 net tons (0.00 tons Require Density 269.32 tons Non-Density)																																																																																				
Box:															<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Intended Use</th> <th>Pay Item #</th> <th>Previous Total (Tons)</th> <th>LOT Total (Tons)</th> <th>Cumulative Total (Tons)</th> <th>Previous Total (SY) as of ATFB</th> <th>LOT Total (SY) as of ATFB</th> <th>Cumulative Total (SY) as of ATFB</th> </tr> </thead> <tbody> <tr> <td>SP TL-D</td> <td>334 114</td> <td>852.65</td> <td>0.00</td> <td>852.65</td> <td>11,006.63</td> <td>0.00</td> <td>11,006.63</td> </tr> <tr> <td>SP TL-D 76-22</td> <td>334 124</td> <td>27,553.87</td> <td>0.00</td> <td>27,553.87</td> <td>345,214.43</td> <td>0.00</td> <td>345,214.43</td> </tr> <tr> <td>SP TL-C</td> <td>334 113</td> <td>1,192.43</td> <td>0.00</td> <td>1,192.43</td> <td>21,788.06</td> <td>0.00</td> <td>21,788.06</td> </tr> <tr> <td>SP TL-C 76-22</td> <td>334 123</td> <td>6,432.89</td> <td>0.00</td> <td>6,432.89</td> <td>99,120.44</td> <td>0.00</td> <td>99,120.44</td> </tr> <tr> <td>FC-5 76-22</td> <td>337 722</td> <td>4,000.00</td> <td>269.32</td> <td>4,269.32</td> <td>104,051.62</td> <td>6,955.61</td> <td>111,007.23</td> </tr> <tr> <td>Straightedge Corrections</td> <td></td> <td>1,605.19</td> <td>0.00</td> <td>1,605.19</td> <td>19,325.83</td> <td>0.00</td> <td>19,325.83</td> </tr> <tr> <td>Waste</td> <td></td> <td>755.34</td> <td>0.00</td> <td>755.34</td> <td>0.00</td> <td>0.00</td> <td>0.00</td> </tr> </tbody> </table>							Intended Use	Pay Item #	Previous Total (Tons)	LOT Total (Tons)	Cumulative Total (Tons)	Previous Total (SY) as of ATFB	LOT Total (SY) as of ATFB	Cumulative Total (SY) as of ATFB	SP TL-D	334 114	852.65	0.00	852.65	11,006.63	0.00	11,006.63	SP TL-D 76-22	334 124	27,553.87	0.00	27,553.87	345,214.43	0.00	345,214.43	SP TL-C	334 113	1,192.43	0.00	1,192.43	21,788.06	0.00	21,788.06	SP TL-C 76-22	334 123	6,432.89	0.00	6,432.89	99,120.44	0.00	99,120.44	FC-5 76-22	337 722	4,000.00	269.32	4,269.32	104,051.62	6,955.61	111,007.23	Straightedge Corrections		1,605.19	0.00	1,605.19	19,325.83	0.00	19,325.83	Waste		755.34	0.00	755.34	0.00	0.00	0.00
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SP TL-C	334 113	1,192.43	0.00	1,192.43	21,788.06	0.00	21,788.06																																																																														
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The Daily Report of Quality Control is used to calculate spread rates and record asphalt and tack quantities.